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STUDENT ENGAGEMENT IN TEACHER EDUCATION AT THE KIGALI INSTITUTE OF EDUCATION IN RWANDA

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A Thesis submitted to the School of Education, Faculty of Humanities, of the University of the Witwatersrand in fulfilment of the requirements for the degree of Doctor of Philosophy in Education

Johannesburg, April 2013

ABSTRACT

Qualitatively and quantitatively, this thesis investigates student engagement and success in post-secondary teacher education. The research is a case study conducted in Rwanda using the Classroom Survey of Student Engagement (CLASSE), interviews, and document analysis techniques. It aims at comparing two groups of teacher education students in terms of how different factors of student engagement affect their performance. The study provides a sound contribution in understanding how students with a professional background effectively engage and succeed in modules/courses of the teacher education programme that are shared with students without such background.

The study claims that student teachers' beliefs brought to teacher education play a vital role in determining the level of student engagement and performance in both professional and non-professional courses rather than their academic background. Findings indicate that these courses were taught and learnt in inappropriate teaching and learning environments. Despite unfavourable conditions, results also indicate that students with professional preparation prior to the post-secondary teacher education programme have positive beliefs about the career, interact with lecturers and peers more frequently, devote much time and effort on educationally purposeful activities, and participate more frequently in engaging activities than students who have just started teacher training. In addition, the study indicates that these factors of student engagement influence performance.

The study also reveals that the former have developed their professional teacher identity which facilitates their social and academic integration and their intrinsic motivation to learning for the career while the latter are struggling learning for the profession in which they are not motivated and interested. Therefore, students with teacher identity perform significantly better than those who are new in teacher training even in non-professional courses in which they have fewer prerequisites.

KEYWORDS: student engagement, performance, teacher education, bachelor of education student, beliefs, teacher identity.

ACKNOWLEDGEMENTS

First and foremost, I thank the Almighty God for his gift of life to me and for the blessings he bestowed upon me throughout the very long education journey up to the PhD level. I also express my gratitude to the Government of Rwanda for funding my studies through the High Education Student Loans Department (HESLD) of the Rwanda Education Board (REB).

In a particular way, I am indebted to Professor Ruksana Osman who, despite her thousands of responsibilities as the Head of the School of Education at Wits University, currently Acting Dean of the Faculty of Humanities at Wits, voluntarily accepted to supervise this work. Professor Osman, with your full engagement and support of all kinds that took me to this most brilliant and highest step in my academic life, please find here my humble and sincere gratitude. Not only your academic calibre is high but also your qualities as a parent are laudable. God bless you and your family.

I am also indebted to Professor Jane Castle, Deputy Director: Academic Staff Development in the Centre for Learning, Teaching and Development of the University of the Witwatersrand, Johannesburg for her rich contribution to the definition of my research topic. I also thank Dr. Devika Naïdoo, my former colleague at the School of Education of the University of Natal, for her constructive advice during the hard times I had at the beginning of this journey at Wits. I also express my gratitude to Ms. Caroline Faulkner, the Coordinator of the Leadership and Management of Teaching and Learning module that I took in the early stage of this journey. My sincere gratitude also goes to Dr. Gaëtan Kabera, Senior Lecturer at the University of Johannesburg for his incomparable inputs in this thesis. Thank you Hilaire, Emmanuel, Epimaque, and Gill for having proofread this thesis.

I would be ungrateful if I do not thank the Kigali Institute of Education (KIE) community, especially its Rector, Professor G. K. Njorogue who allowed me to conduct research in this institution. To lecturers and students who participated in this research as well as administrative staff who kindly provided information that was needed, I say thank you very much.

Last but not least, I would like to thank my family for providing me with emotional support and bearing my very long absence from home during my PhD studies. Particularly, I thank my wife Floride Twayigize, who recently graduated with her Postgraduate Diploma in Education for her support and courage during my absence from home. In a similar way, many

thanks go to my son Yves Alain Twizeyimana, who is pursuing his higher education in Architecture, Hyvon Arsène Twizerimana and Hervé Arnold Tuyizere my teenage sons in secondary schools, and Ursule Yvonne Uwizeye my cherished daughter starting her primary schooling. I thank you very much for your patience, courage, and bravery during my absence. I hope that my PhD work and study experience will inspire you in your well started life-long education.

I finally acknowledge Pierre Sebakwiye's family and the 31 Rwandan students with whom I came to Wits in March 2009 for their moral support. May God bless all those who, in one way or another, contributed to the termination of this long academic journey.

DECLARATION

I, Gabriel Nizeyimana, declare that this thesis is my own unaided work. It is submitted for the degree of PhD in Education at the University of the Witwatersrand, Johannesburg, School of Education. It has not been submitted before for any other degree or examination in any other university.

Signed by

Gabriel Nizeyimana	**Place:**	**Date:**
_____	_____	_____

DEDICATION

To Floride, my beloved spouse,

To my children Yves, Yvon, Hervé, and Ursule,

To Rose, my late mother and Thomas, my father,

To Agathe, my late mother in law and Guillaume, my father in law,

To late Aloys and Anatole,

To my brother and sisters,

To my brothers and sisters in law,

To all friends, this thesis is dedicated.

PUBLICATION EMANATING FROM THIS RESEARCH

First year university student teachers' beliefs about teaching and the teaching profession: The case of Rwanda in *Southern African Review of Education (SARE)*, in press.

LIST OF ACRONYMS AND ABBREVIATIONS

A' Level : Advanced Level

AUSSE : Australian Survey of Student Engagement

B. Ed : Bachelor of Education

BPE : Biology - Physical sport - Education

CAMS : Credit Accumulation and Modular Scheme

CEQ : Course Experience Questionnaire

CLASSE : Classroom Survey of Student Engagement

e.g. : For example

EDP 101 : Introduction to Educational Psychology

Educ. : Education

ELA 101 : Introduction to English Language and Linguistics

Entrepre – : Entrepreneurship – Education

Et al. : et alii (and others)

Etc. : et cetera (and the rest)

F : FisherSnedecor

FED – Eng. : Foundation of Education – English

H.S : High School

H_0 : Null hypothesis

H_1 : Alternative hypothesis

HE : History - Geography - Education

Hist. : History

HRE : History - Religion - Education

i.e. : id est (that is)

KIE : Kigali Institute of Education

Max. : Maximum

MCsE : Mathematics - Computer science - Education

MIN. : Minimum

Mr. : Mister

Ms : The title of a woman regardless of marital status

N : Number

n.d : no date

Non B. Ed : non Bachelor of Education

NSSE : National Survey of Student Engagement

NUR : National University of Rwanda

O' Level : Ordinary Level

Pr : Primary

P : probability

PS : Pre-School

QCTS : Qualified College Teacher Status

QTS : Qualified Teacher Status

REB : Rwanda Education Board

RNEC : Rwanda National Examinations Council

RNQF : Rwandan National Qualifications Framework

S : Senior

SASSE : South African Survey of Student Engagement

Sddv. : Standard deviation

SPSS : Statistical Package for Social Scientists

SRL : Self-Regulated-Learning

TAs : Tutorial Assistants

TTC : Teacher Training College

TVET : Technical, Vocational, Education and Training

Umwalimu SACCO : Teacher Savings and Credit Cooperative

US : United States

USA : United States of America

s_p^2 : pooled variance

σ_1^2 : Sample variance for population 1

σ_2^2 : Sample variance for population 2

μ1 : Mean of population 1

μ2 : Mean of population 2

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 The Research Problem

Over the last decades, the concept of student engagement has attracted scholars' attention. Today, "there is no doubt that engagement is currently a very hot topic in the broad field of school achievement" (Eccles & Wang, 2012: 137).

Student engagement has been defined as "students' psychological investment in and effort directed towards learning, understanding or mastering the knowledge, skills or crafts that academic work is intended to promote" (Newmann, 1992: 12). This definition can be viewed as focusing only on the psychological dimension of the learner in the learning process. The term was defined later as "a psychological process, specifically, the attention, interest, investment, and effort students expend in the work of learning" (Marks, 2000: 154-5). Psychologically defined, it seems also to lack a concrete element that could easily identify an engaged from a dis-engaged student. In this regard, the same author specifies that "engagement implies both affective and behavioural participation in the learning process" (Marks, 2000: 155), thus addressing a concern about observable behaviour in activities of learning. Thereafter, Willms (2003: 8) notes that the term refers to "students' attitudes towards schooling and their participation in school activities" and Chapman (2003) as cited in Zepke and Leach (2010) defines the concept as the students' cognitive investment in, active participation in and emotional commitment to their learning. These definitions are likely to be more practical for educationists and practitioners because people do show their attitudes, to some extent. More recently, student engagement has been defined as the "students' involvement with activities and conditions that are likely to generate high-quality learning" (Radloff, 2011: V). Therefore, this concept is substantially "defined by two key components: first, what students do (the time and energy they devote to educationally purposive activities) and second, what institutions do (the extent to which they employ effective educational practices to induce students to do the right things)" (Strydom & Mentz, 2010: 3; Strydom, Basson, & Mentz, 2012: 3).

In this study, Willms (2003) and Radloff' s (2011) definitions of the concept of student engagement provides a working definition for this study as it links an engaged student

withinparticular learning conditions. Student engagement refers to students' involvement, participation, effort and time devoted to learning activities within the teaching and learning environment, at the classroom level. In this regard, astudent's effort reflects the way he or she goes about learning a particular course. Consequently, engagement tends to lead to success while disengagement tends to lead to failure. In this study, student engagement is taken as an important factor that influences performance.

Teacher education on the other hand "is understood as a professional development continuum that begins in an institutional setting (or in some places with the experience of teaching)" (Avalos, 2000: 460). In the present study, teacher education refers to teacher preparation at tertiary level.

The study on student engagement in teacher education at tertiary level undertaken here borrows the conceptual framework from the concept of student engagement which emerged from the literature in education during the 1990s in the USA. It originated from "efforts to document the conditions that promote learning" (Kuh, 2001a: 12).

In early 1998 when discussions about college ranking in the USA were taking place, "even though they have little to do with learning" (Kuh, 2001a: 12), educational leaders and scholars grouped around Russ Edgerton agreed that an alternative way of measuring college quality for improvement purpose was needed. It is within this context that the idea of annual assessment of the extent to which higher institutions were using good educational practices as identified in the education literature (http://nsse.iub.edu) was agreed on.

A group of nationally known scholars were then charged to develop a survey instrument which focuses on the extent to which students engage in sound educational practices (http://nsse.iub.edu). As a result, a National Survey of Student Engagement (NSSE) instrument consisting of a four point Likert scale was developed for implementation at the end of 1998 indicates the same source. The NSSE was used for the first time in 2000 and surveyed 220 000 students from about 320 institutions (Kuh, 2001a).The report emphasised "the link between effective educational practices and collegiate quality" (Kuh, 2001a: 13), referring to this as student engagement and success.

Students' engagement or investment in learning denotes the efforts they devote to the activity of learning. This effort in turn depends on other factors, such as the student's previous

experiences and the context or the learning environment that is provided by the institution (Prosser & Trigwell, 1999).

It is obvious that the student's way of learning a particular course is largely influenced by what he or she has acquired previously in relation to the subject matter being learnt. It is also influenced by the beliefs brought to the field of study, the motivation to learn it, the teaching and learning environment, as well as the institutional conditions that matter for student's success, among other factors.

On the other hand,Kuh, Kinzie, Buckley, Bridges, and Hayek(2007: 10) note that student success refers to "academic achievement; engagement in educationally purposeful activities; satisfaction; acquisition of desired knowledge, skills, and competencies; persistence; and attainment of educational objectives". In this study, student success is used to refer to academic achievement or performance.

Therefore, as Kuh, Cruce, Shoup, Kinzie, and Gonyea (2008: 542) highlight in their comprehensive study, the present research on student engagement and success in higher education "considers what students do in terms of devoting time and energy to educationally purposeful activities and what institutions do in terms of the extent to which they use effective educational practices which encourage students to engage".

While studies have been conducted on students' learning, little is yet known about student engagement and success and, particularly about "how students are interacting with their universities and with the practices that are most likely to generate productive learning" (Coates, 2005: 26). Moreover, "research on how schools might enhance student engagement in academic work is lacking" (Newmann, 1992: 17).

This domain of inquiry in higher education is relatively new, having started with the NSSE in the USA in 1998 and then being used in Australia in 2007 and in Canada in 2008. In 2009, a South African Survey of Student Engagement (SASSE) based on the NSSE was piloted at national level by the Division of Student Development and Success of the University of the Free State in collaboration with the Council on Higher Education(http://www.sasse.ufs.ac.za). This source indicates that seven institutions of higher learning countrywide participated in the study. These institutions were the University of the Free State, Nelson Mandela Metropolitan University, University of the Witwatersrand, University of Fort Hare, University of Johannesburg, Tshwane University of Technology, and

Cape Peninsula University of Technology. SASSE contributed to systemic and institutional capacity development by providing generic, comparative, and institution specific perspectives on student engagement (http://www.sasse.ufs.ac.za). The SASSE surveyed 13 636 undergraduate students and the report was published in 2010 (Strydom & Mentz, 2010). To my knowledge, it is the first publication on student engagement on the African continent.

Most research studies on student engagement have been carried out at national level in developed countries, and there have been few references to student engagement in developing countries, especially in Africa. Furthermore, none of these research studies has focused on teacher preparation or more specifically on student engagement and success in teacher education.

Unlike previous research of this kind comparing institutions at the national level, the present study focuses on this unexplored area of knowledge at the classroom level, where learning effectively takes place. Since "one of the critical challenges of our time is finding ways for campuses to create an environment that supports student learning even within difficult financial times" (Kezar, 2006: 109-110) as is the case in developing countries like Rwanda, research into student engagement and success that focuses on teacher education can help to address this challenge.

1.2 The Research Context

1.2.1 Brief Overview of the Rwandan Formal Education System

Formal education in Rwanda was introduced by the Catholic Church during the German colonisation (1896 – 1916). Under the period of Belgian colonisation (1916 – 1962), there were very few schools that followed the Belgian curriculum.

During the First Rwandan Republic (July 1962 – July 1973) and the Second Republic (July 1973 – April 1994), the education system was extremely selective. A standardised national examination selected eligible candidates from primary through lower secondary to high school. The same system is used today for boarding, public and subsidised schools although a twelve year basic education is being implemented for all children. In the selection process conducted during the two Republics mentioned above however, an abominable political

discrimination based on so-called ethnic and regional quotas was observed, especially during the Second Republic.

One year after independence (1963), the National University of Rwanda (NUR) opened its doors with the Faculty of Medicine. Good performance at high school level was the entrance criterion though unofficial socio-economic-regional and political factors could intervene as a way of preventing some people from accessing this level of education.

Today, access to boarding, public and subsidised institutions is strictly based on the results of the national examinations which are organised at the end of each cycle, i.e. primary, lower secondary, and high school. Students who are not admitted in these institutions follow the compulsory twelve years of basic education. At each cycle, these two categories of students write the same national exams because they all follow the same curriculum. These national examinations are organised and supervised by the Rwanda National Examinations Council (RNEC) operating under the umbrella of Rwanda Education Board (REB).

Historically, the Rwandan education system has been subjected to many reforms in terms of duration, curricula, and even the medium of instruction. At the beginning of this project (thesis) in 2009, the Rwandan education system operated on a 6-3-3-4/5 system, i.e. 6 years of primary, 3 years of lower secondary, 3 years of high school, and 4 or 5 years for a Bachelor's degree with Honours depending on the selected field.

From January 2010, the system changed to 9-3-4 with the generalisation of nine years basic education. In January 2012, the system changed to 12-4/5 with the introduction of 12 years of basic education. However, the national examinations aiming at selecting the best candidates for the next cycle continue to be administered to supply boarding, public and subsidised institutions. We also have to mention that children aged between 3 and 6 years can go to pre-primary schools for three years before entering primary school. Postgraduate Certificate or Diploma programes and Master Degree programmes started recently in some universities. The structure of the education system which was in place at the time students who constitute the research population for this study were doing their high school is found in table 1 on the next page:

Table 1:Rwandan education system: levels and qualifications

	Educational level	General Primary and Secondary	Technical, Vocational, Education and Training (TVET)	Teacher Education	General Higher Education
Post- Basic Education	Postgraduate			Postgraduate certificate qualifying to teach in HE	Postgraduate (Masters and above)
	A0			Degree with Qualified Teacher Status (QTS) for Upper Secondary	Degree
	A1		College of Technology diploma; TVET Grade 1	Diploma with QTS for Lower Secondary	
Basic Education	A2	A Level certificate (3 years: S4-S6)	TVET Grade 2;A2	Certificate qualifying to teach in Primary	
	Lower secondary	O Level certificate (3 years: S1-S3)	TVET Grade 3		
	Primary	Primary Leaving Certificate (6 years: P1-P6)			
	Pre-primary	3 years (PS1-PS3)			

Source: Adapted from Ministry of Education, (2010), *Education Sector Strategic Plan 2010 – 2015* (p. 13)

Students dealt with in this study, i.e. those promoted in 2008 and 2010entered different streams in high school such as teacher-training, mathematics and physics, biology and chemistry, languages, or humanities. Today, these streams have changed into combinations such as Mathematics – Physics – Chemistry, Mathematics – Biology – Chemistry, Mathematics – Physics – Computer Science, History – Geography – Economics, etc.

The Rwandan education system was reconstructed within the philosophy of the post 1994 Rwandan genocide which has destroyed not only infrastructure in all sectors of the socio-economic and political life, but also human capital. In the field of education, schools and equipment were destroyed, a significant number of students and teachers were killed, others fled to neighbouring countries and others were put in jail for their possible participation in the atrocities.

1.2.2 Current Trends in Rwandan Higher Education

After the 1994 genocide, the Government of Rwanda adopted an educational policy informed by a philosophy of reconstruction. It proceeded with reforms in curriculum design and implementation at all levels of education. The number and levels of enrolments in both public and private institutions of higher learning have increased enormously.

At tertiary level, courses have been organised in modules since 2007. According to the Ministry of Education, "academic study shall be organised into modules" rather than courses and henceforth "the core of the system is a Credit Accumulation and Modular Scheme (CAMS)" (Ministry of Education, 2007b: 3, 6). In January 2009, the language of instruction changed from French and English to English only, except in departments where language modules are taught in French, Swahili, and Kinyarwanda (mother tongue).

The provision of learning opportunities and high quality education is now emphasised. The Ministry of Education stipulated that:

> The Rwandan National Qualifications Framework (RNQF) has been introduced to ensure that all higher education programmes are internationally credible, [and]

> provide students with opportunities to gain competencies and skills as well as subject knowledge that will allow them to reach their full potential (Ministry of Education, 2007a: 1).

It added that:

> The principle of academic integrity, high-quality teaching and learning, providing equal opportunities, seeking excellence and increasing access by developing more opportunities for flexible learning both on and off campus must be central to the planning and delivery of our taught provision (Ministry of Education, 2007b:1).

Despite these reforms, resources for effective educational practice, and opportunities for students to engage and succeed, remain limited. Though the Government has expanded its investment in the education sector, the increasing enrolments in higher education have not yet been matched by an increase in resources and infrastructure which ought to be sufficient to markedly improve student engagement. An example is the National University of Rwanda (NUR) where the rector reported that the institution, the infrastructure of which was originally intended for 2 000 students and staff, now struggles to cater for a student population of over 10 000. Its student: teacher ratio, which ought to be around 25:1 according to international standards, is now much higher in most areas of instruction (NUR: 2009). Nevertheless, by American standards at least, the quality of the education system in Rwanda is considered to be "reasonably high, despite lacking material resources" (USA Embassy: n.d).

1.2.3 Kigali Institute of Education: The Research Site

Kigali Institute of Education (KIE) was established in 1999 by the Government of Rwanda to overcome the national shortage of qualified teachers in Rwandan secondary schools (Grades 7 to 12) after the 1994 genocide. It was legally established under KIE statute law No. 49/2001 of 27/12/2001 with two major missions: "to train high-calibre school teachers and teacher educators to meet local needs" and "to develop the potential of staff to provide stimulating intellectual environment within which students are facilitated to become competent, autonomous and responsible practitioners" (KIE: n.d).

The total number of students enrolled in teacher education at KIE has increased from 400 in 1999 to 4224in 2010of whom 1228 were in the first year of study in 2010. Student: teacher ratios have increased accordingly.

Since its establishment, KIE has admittedstudents directly from high school (Grade 12) in different streams or sections other than education/primary teaching. These students are called "school leavers". From 2001 till 2008, A-level qualified primary school teachers with at least two years of teaching experience from Teacher Training Colleges (TTCs) which replaced the Normal Schools qualified for entry to KIE by passing a mature entrance test. They were called "mature students". They were admitted to the Faculty of science, arts and languages, or social sciences and business studies, and studied together with high school leaver students who had majored in those subjects at high school level.

Due to their experience in teaching, KIE mature students cannot be called pre-service student teachers (Eraut, 2000). At that time (before 2009), the Bachelor of Education programme had not started. Therefore, all graduates were awarded the Bachelor's degree in science, arts and languages, or social science and business studies with education, on successful completion of their studies.

Since 2009, TTC laureates have been admitted to KIE by the Rwanda National Examination Council (RNEC) working today under the Rwanda Education Board (REB). TTC laureates join the Bachelor of Education (B. Ed) programme and are called "B. Ed students", while students from various sections in high school join other programmes. They are thus called non Bachelor of Education (non B. Ed) students. Both categories of students are trained to be secondary school teachers. B. Ed students are awarded a B. Ed with Honours (with Qualified College Teacher Status: QCTS) degree. They are intended to teach education courses and the subjects that they follow at KIE are subjects of interest taught in TTCs. Non B. Ed students are awarded a Bachelor's degree in science, arts and languages, or social sciences and business studies with education (with Qualified Teacher Status: QTS). They are intended to teach their subjects of specialisation at both lower and upper secondary.

Except education courses that are specific to B. Ed students like Methods and Approaches of Primary Teaching, other education courses/modules are studied together with non B. Ed students. In this study, education courses/modules are also called 'pedagogical preparation

modules'. The concept is understood as the various courses that teachers take in areas such as instructional methods, learning theories, foundation of education, and classroom management(Wilson, Floden, & Ferrini-Mundy, 2001).

Common education modules at KIE are, for example, Fundamental Life Skills for Teachers, Theory and Practice of Teaching, Introduction to Educational Psychology, Curriculum Theory and Development, Educational Technology and Information. Subjects of interest chosen by B. Ed students are also studied together with non B. Ed students for whom these subjects are their respective areas of specialisation. Thus, from different education backgrounds before joining KIE, B. Ed and non B. Ed students follow the same curriculum in these modules. This raises the question of their psychological investment and effort directed towards learning these modules.

Both categories of students are on campus full-time and are fully funded by the Government except two private students in this intake (2010).Both groups follow the same curriculum for those modules studied in common. Subjects of interest are chosen by B. Ed students and then studied in other Faculties. For instance, they may choose to study Education with English as their subject of interest, or alternatively Mathematics, and study these subjects together with non B. Ed students who majored in those subjects at high school level.

1.3 Significance of the Study

The goal of any higher education institution is to have all students succeed in the programme. That is why institutions put in place entry requirements which focus on intellectual capabilities. As Kuh (2001a) puts it, the surest way of increasing "successful" students is to admit only well-prepared and academically talented students. This condition is not, however, sufficient. Researchers on student success in collegesuggest a promising area of emphasis: student engagement (Kuh, Kinzie, Schuh, & Whitt, 2005) which is another indicator of student success that has received considerable attention in recent years as Kuh et al. (2007) contend in their comprehensive study. Indeed, these authors affirm thatstudent engagement is an indicator of success. Therefore, the present study is worth doing in Rwanda because, as Strydom, Basson, and Mentz (2012) note, student engagement surveys can be used to enhance the quality of teaching and learning.

Therefore, it is worth highlighting that the present research on student engagement is highly needed. In effect, what students do during college (university) counts more for what they learn and whether they will persist in college / university than who they are (Astin, 1993; Kuh, et al., 2005). Research studies have shown that the time and energy students devote to educationally purposeful activities constitute the best predictor of students' learning and personal development (Pascarella & Terenzini, 1991; Kuh et al., 2005). Thus, there is a need to investigate how student-teachers of different educational backgrounds effectively engage in learning.

In effect, while talking about his engagement, a university student highlighted its importance in these words: "to be engaged with my studies is to ... understand it and enjoy it and feel a connection between myself and what I am studying, rather than just learning" (NSSE, 2006). This is what is emphasised that learning begins with student engagement, which in turn leads to knowledge and understanding(Shulman, 2002; Gratch-Lindauer, 2008).

It is within this spirit that the context of the study described earlier raises a number of questions related to the issue of student engagement and success at classroom level at KIE in Rwanda. The first set of questions concerns the performance of B. Ed students prepared for a teaching career before joining KIE and those students just entering teacher education in terms of both pedagogical preparation and subjects of interest. It also concerns their perceptions of the teaching and learning environment of these modules. The second set of questions concerns the extent to which these two categories of students effectively engage in pedagogical preparation and subjects of interest that they study together.

The study is justified by the researcher's interest, as a lecturer of education courses at KIE since its establishment, in exploring how students with professional preparation prior to higher education engage and perform in courses that are studied together with those without such background in their first year of teacher education at KIE.

As mentioned earlier, student engagement and success has been researched very recently, especially in the developed world and to our knowledge, none of these research studies were carried out specifically in the area of teacher education. Therefore, a study of student engagement and success in teacher education in a developing country and on the African continent is meant firstly to contribute to knowledge in this new field of study and secondly to draw educators' attention to areas of emphasis for the improvement of first year students'

success in both pedagogical preparation and subjects of interest, specifically at KIE. Indeed, "though the NSSE survey does not assess student learning outcomes directly, it does provide the kind of information that every school needs in order to focus its efforts to improve the undergraduate experience" (Kuh, 2001b: 12). This study was carried out at the classroom level too.

This project used the Classroom Survey of Student Engagement (CLASSE) which is a classroom-level adaptation of the NSSE for both students and teachers of the modules for which student engagement was being analysed as well as in depth interviews. CLASSE was used to investigate a single institution, namely KIE, which is currently the only public teacher training institution of higher learning in Rwanda, with its two affiliated Colleges of Education. This study used CLASSE with the intention of contributing to knowledge by pinpointing the pedagogical practices which shape teaching and learning experiences. It also informs KIE faculty members of areas of emphasis for the improvement of student engagement and success within the Rwandan context.

In fact, not only students and lecturers are affected by the change of the language policy in education, they are also affected by the very large class sizes (as high as 700 in some cases such as in the 2008 academic year for first year students) with a correspondingly high student: teacher ratio, and inadequate services and opportunities.

The study should therefore inform student teachers, lecturers and the relevant authorities about teacher education practices and outcomes at KIE, and how a focus on student engagement and success can contribute to improving effective education practices and overall quality of education in Rwanda. In so doing, it will contribute to knowledge of teaching and learning practices and engagement from both student and teacher's perspectives that can be used to identify areas where more research and focused interventions are needed.

In the light of the finding that "research links higher levels of engagement in school with improved performance" (Klem & Connell, 2004: 262), the study investigates students' performance, i.e. what students do, and what the institution does to engage them in activities that matter for their engagement and success. Indeed, engagement predicts success/performance because Eccles and Wang (2012) note that engagement leads to effective learning and consequently, effective learning leads to enhanced performance. Therefore, engagement influences performance.

1.4 Aim of the Study

This study aims at comparing two groups of teacher education students in terms of how different factors of student engagement influence performance, given that student engagement is likely to lead to success and thus to good performance. The study investigates the extent to which B. Ed and non B. Ed student teachers at KIE effectively engage and succeed in common courses, with specific reference to first year students' engagement and success in pedagogical preparation modules and subjects of interest.

1.5 Research Questions

1.5.1 The Main Research Question

How do B. Ed and non B. Ed first year students at Kigali Institute of Education in Rwanda differ in terms of the factors of student engagement (pre-academic preparation, beliefs brought to teacher education, perceptions of teaching and learning environment, interaction with peers and lecturers, time and effort spent on study, and institutional conditions) which influence performance in pedagogical preparation modules and subjects of interest?

1.5.2 Specific Research Questions

1. How does B. Ed and non B. Ed students' academic backgrounds from high school influence their performance in modules which they take in common during their first year of teacher education at KIE?

2. What beliefs do B. Ed and non B. Ed students bring to teacher education and how do these beliefs impact on their performance?

3. How do B. Ed and non B. Ed students perceive the teaching and learning environment of the modules that they take in common, and how this perception influences their performance?

4. To what extent do B. Ed and non B. Ed students interact with lecturers, peers and get involved in educationally purposeful activities in the modules studied and how this affects their performance?

5. How do B. Ed and non B. Ed students devote time and effort to academic activities related to modules that they study together and what are the institutional conditions of student engagement at KIE and how this affects their performance?

6. How do B. Ed and non B. Ed students perceive common modules in the context of emphasising cognitive skills of student engagement which affects their performance?

1.6 Scope and Assumption

- **Scope**

This research is confined to investigating first year B. Ed and non B. Ed students' engagement and success in an institution of higher learning, specifically in teacher education in Rwanda. The study explores how student teachers' academic background, their beliefs and perceptions, the classroom interactions, the time and effort devoted to learning activities, cognitive skills, and institutional conditions influence student engagement and success.

- **Assumption**

In this thesis it is assumed that at the KIE in Rwanda, first year B. Ed students with professional preparation from high school engage and succeed better than non B. Ed students who do not have such background in courses/modules they study together.

1.7 Outline of the Thesis

This thesis is divided into eleven chapters six of which, i.e. from chapter five to chapter ten present the research findings that correspond with the themes suggested by the main and specific research questions.

While Chapter One introduced the entire study, Chapter Two presents an account of relevant literature on the topic under investigation. It starts with an analysis of the concept of student engagement. It also explores the factors that influence student engagement in teacher education at tertiary level. These factors are of two kinds, namely psychological and environmental factors. This chapter also provides the theoretical framework on which the study is based.

Chapter Three theorises the research methodology and design. It presents an account of the research paradigm including the rationale for the use of a nonexperimental research design, as well as the use of both qualitative and quantitative approaches to investigate student

engagement and success in a teacher education institution of higher learning. This chapter accounts for the ways in which the research population and samples were determined as well as the ways in which questionnaires, interviews, and documentary evidence or sources have been conducted to gather relevant data.

Chapter Four explicitly highlights the procedures followed to analyse and interpret both quantitative and qualitative data. It introduces a statistical notion of factor analysis which was used to analyse some engagement activities of the questionnaire/$CLASSE_{STUDENT}$, and then explains how SPSS was used to capture and analyse CLASSE data. This chapter also gives accounts of the ways in which interview data were analysed. Results are presented, analysed, and interpreted from Chapters Five to Ten.

Chapter Five answers the first research question. It explores the impact of mature or B. Ed and school leavers or non B. Ed first year students' academic backgrounds or streams followed in high school on their performance in a pedagogical preparation course and a subject of interest for B. Ed students. Good or bad performance is referred to as a result of high or low engagement respectively.

Chapter Six investigates B. Ed and non B. Ed students' beliefs brought to teacher education and their impact on their performance. It precisely answers the second research question by giving the image of the teaching profession that students had before joining KIE, the image they had during their first year of training at KIE, and the image they had about their future career in the context of Rwanda. Positive or negative beliefs about teaching and the teaching profession are associated with good or bad performance, and hence with high or low engagement.

Chapters Seven, Eight, Nine, and Ten go to the roots of the topic under investigation, which is student engagement at KIE. Chapter Seven particularly focuses on engagement activities within the teaching and learning environment of the selected modules. It explores B. Ed and non B. Ed students' perceptions of the teaching and learning environment of these modules and the perceived impact on student engagement, answering thus the third research question. This chapter also explores the students' evaluation of the quality of teaching and presents accounts of the ways students learn these modules within the classroom context.

Chapter Eight presents student engagement through interactive and collaborative learning in the modules under investigation to answer the fourth research question. It quantitatively

explores the extent to which B. Ed and non B. Ed students interact with lecturers and peers in educationally purposeful activities in the modules identified and presents specific engagement activities.

Chapter Nine answers the fifth research question about how B. Ed and non B. Ed students devote time and effort to learning these modules. It also explores the institutional conditions of student engagement at KIE. The lecturers' voice on how to improve both B. Ed and non B. Ed students' engagement at KIE is also heard.

Chapter Ten presents the items of the CLASSE not yet dealt with in regard to the cognitive skills that the studied modules emphasised. It particularly explores mental activities that are emphasised in learning modules that students study together.

Finally, Chapter Eleven concludes by summarising key findings and suggesting relevant recommendations for further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

While chapter one presented the background to the study, chapter two reviews the relevant literature. It draws on factors of student engagement that research in the field of student engagement has identified as influencing student success, including "demographics and pre-college academic and other experiences; the structural characteristics of institutions such as mission, size, and selectivity; interactions with Faculty and staff members and peers; perceptions of the learning environment; and the quality of effort students devote to educationally purposeful activities" (Kuh et al., 2008: 541) and relates them to teacher education.

This chapter focuses mainly on students' academic backgrounds and motivation to learning, beliefs about teaching and the teaching profession, perceptions of their teaching-learning context, and interactions with lecturers and peers in educationally purposeful activities. Finally, it describes the theoretical framework underpinning this study on student engagement in teacher education. In the present study, debates in the existing literature on student engagement start with an elucidation of this concept.

2.2. Conceptual Analysis of Student Engagement

Student engagement is here discussed in the context of students' learning. However, the study of student engagement is not strictly limited to activities that happen in schools. Willms (2003: 8) notices that, "researchers have recently used the term *engagement* to refer to the extent to which students identify with and value schooling outcomes, and participate in academic and non-academic school activities". According to him, this definition comprises a *psychological* component which refers to the sense of belonging at school and acceptance of school values, and a *behavioural* component referring to the participation in school activities (Willms, 2003). These two aspects are in fact dealt with in the present study.

Firstly, the psychological aspect of an engaged student resides in the fact that students feel accepted and valued by their peers and others at school, having therefore a sense of belonging or attachment to the school on the one hand, and whether or not students value school success

on the other hand (Willms, 2003). An engaged student is psychologically attached to his/her school or institution. He or she is engaged with the learning institution.

Secondly, the behavioural aspect of an engaged student resides in the academic and non-academic activities performed in the learning process. Since learning is an individual activity, it requires an individual involvement in activities both academic and non-academic. In fact, being a psychological process, engagement "implies both affective and behavioural participation in the learning process" (Marks, 2000: 155) because psychology is understood as a study of human behaviour and mental processes. In fact, research studies have identified three dimensions of student engagement: behavioural, emotional, and cognitive engagement (Fredricks, Blumenfeld, & Paris, 2004; Trowler, 2010).

Student engagement as referring to students' investment, participation, effort and time devoted to learningalso takes into account the motivation to learn because there is also the motivational-affective aspect of engagement (Sharan & Tan, 2008). Under normal circumstances, high level of engagement leads to high learning outcomes. Arguing that student engagement is "one of the main indicators of the concept of productive learning", these authors note that a "positive engagement in learning is [...] a cognitive-affective condition in which students want to learn" (Sharan & Tan, 2008: 42).

Analysing the concept of student engagement, Sharan and Tan (2008) found it to be a broader concept encompassing the idea of motivation to learn, student interest, commitment to learning, and investment of energy in learning. These aspects inform the present study. In fact, engagement is conceived as "the interaction or fusion of behaviour, emotion, and cognition in the process of learning" (Fredricks et al., 2004 as cited in Sharan& Tan, 2008: 41). Indeed, Finn and Zimmer (2012) claim that engagement is defined in three ways which are behavioural, emotional, and cognitive engagement. They argue that the behavioural engagement encompasses the idea of participation and includes involvement in the activity. Emotional engagement relates to student attitudes, interest, and values; while cognitive engagement relates to "motivational goals and self-regulated learning" (Sharan & Tan, 2008: 42).An engaged student is therefore recognisable by observing his/her behaviour and is emotionally and intellectually involved in learning activities.

Concretely, an engaged student is today easily identified by looking at two components of engagement, which are behavioural and affective. According to Finn and Zimmer (2012), the

behavioural component or participation includes paying attention to the teacher, responding to his or her questions, completing assignments, doing more than required, attending classes, and interacting with teachers and peers, etc., while the affective component includes the sense of belonging and inclusion to the institution.

It is noted that cognitive engagement "is the expenditure of thoughtful energy needed to comprehend complex ideas in order to go beyond the minimal requirements" (Finn & Zimmer, 2012: 102). Energy pushes to participation in action. Thus, affective, social, and cognitive engagements are "internal states that provide impetus to participate in academic behaviours" (Finn & Zimmer, 2012: 105). While academic engagement refers to behaviours related directly to the learning process, social engagement refers to how students follow rules and regulations, and affective engagement concerns students' feelings of involvement in school (Finn & Zimmer, 2012). These forms of engagement indicate the complexity of the learning process.

To understand deeply what happens in the student's learning process, research has considered self-regulated learning as the most sophisticated form of engagement that students could display in academic activities (Corno & Mandinach, 2004). These authors note also that academic or intellectual work is heavily cognitive and requires the combination of knowledge and reasoning skills. Corno and Mandinach (1983: 95) define self-regulated learning as "a deliberate effort by students to deepen and manipulate the content being covered while concurrently orchestrating and controlling concentration, motivation, and effect". The consequence of this is the efficient way in which students go about learning. In fact, research has shown that "students with mastery goal orientations and performance approach goals appear to be more self-regulated in their approach to learning" (Corno & Mandinach, 1983: 96).

Sharan and Tan's (2008) viewpoint is shared by Corno and Mandinach (2004: 300) who point out that "engagement is partly cognitive, partly conative (having to do with purposive striving), and partly affective (having to do with feelings or emotions)". However, as mentioned above, behaviour, emotion or affectivity, and cognition are three components of the same reality: student engagement since it is a psychological, and therefore a personal or individual way of being invested in learning.

As “there are no clear behavioural manifestations of engagement” (Nystrand & Gamoran, 1991: 263), the assessment instrument of student engagement in research, taken broadly, should be related to behaviours manifested by the student’s participation, emotions viewed through attitudes and interest, and cognition measured by cognitive skills towards learning, which must lead to performance.

In effect, research has also shown that student engagement has a positive effect on academic achievement (Sharan & Tan, 2008; Kuh et al.,2005; Kuh et al., 2007). This influence is however not absolute. Sharan and Tan (2008) show that students’ achievement scores are not a decisive indicator of the importance of learning, or how and what students learn. They argue that the process of teaching and learning precedes and predicts the student outcomes even with the formative assessment which diagnoses weaknesses and strengths at a given time so that the teacher can determine which areas need improvement (Sharan & Tan, 2008). This could lead us to what Corno and Mandinach (2004: 300) call “productive engagement which entails reaching for standards, effortful striving, and a positive affective response”.

Furthermore, Nystrand and Gamoran (1991) distinguish procedural and substantive engagement. On the one hand, procedural engagement concerns classroom rules and regulations. It is about students who “competently go through the motions of school”, [...] “occasionally become engaged in academic problems and issues” (Nystrand & Gamoran, 1991: 262). It can be said that procedurally engaged students do what is requested by the institution. On the other hand, substantive engagement involves sustained commitment to the content and issues of academic study. It requires “sustained commitment to and engagement in the content of schooling” (Nystrand & Gamoran, 1991: 262). These authors also note that student engagement depends not only on student involvement in the schoolwork but also on the quality of the schoolwork in which students invest themselves (Nystrand & Gamoran, 1991).

The current literature on student engagement does not, to my knowledge; focus on the teacher education programme. The present study goes further by drawing on the existing literature in the field to pave the way for student engagement in teacher education. From the analysis of the concept of student engagement and the working definition in this research, it can be noticed that student engagement in teacher education is influenced and determined by factors that can be grouped into two broad categories, and these are psychological and environmental factors.

2.3 Factors Influencing Student Engagement in Tertiary Teacher Education

The factors dealt with in this section do not only influence student engagement in the teacher education programmes but also do the same in every context of learning at a higher level. The emphasis here is put on teacher education which is the focus for this thesis. In effect, although the factors dealt with here are common to any field of study, they are particularly relevant to the problem being addressed and to the research questions being answered.

In this study, factors that influence student engagement in teacher education are drawn from a framework developed by Kuh et al. (2007: 11) and adapted by Strydom and Mentz (2010: 5). They refer to two components of this framework, namely student behaviours (study habit, peer involvement, interaction with staff, time on task, motivation, other) and institutional conditions (first year experience, academic support, campus environment, peer support, teaching and learning, approaches, other) for which student engagement is the intersection as shown on figure 1 on the next page:

Adapted from Kuh et al. (2007: 11) by Strydom and Mentz (2010: 5)

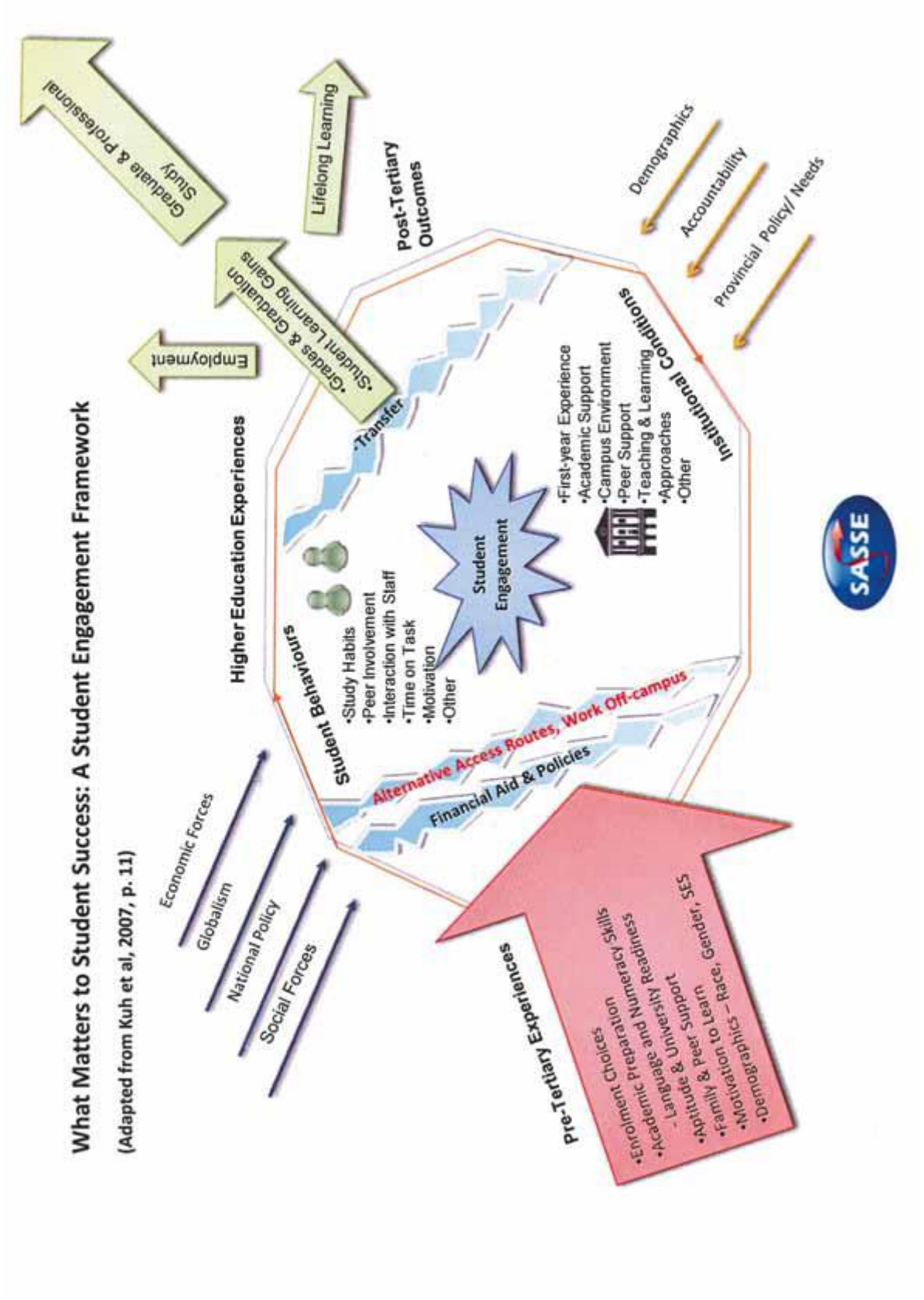

Figure 1: Astudent engagement framework

Drawing from the above components of this framework, the present study maintains that factors influencing student engagement at Kigali Institute of Education are either psychological or environmental. The former are related to the internal and individual students' characteristics while the latter are related to the teaching and learning environment or context at the institutional and classroom levels. Psychological factors that are focused on here are academic background, beliefs about teaching and the teaching profession, and motivation to learn for the career, whilst environmental factors are the teaching and learning environment as well as the students – staff and peer interactions under which teaching and learning activities effectively take place.

2.3.1 Psychological Factors of Student Engagement in Teacher Education

In this study, academic background prior to tertiary teacher education, student teachers' motivation to learning for the teaching profession, and beliefs that they held about the teacher education programme are three psychological factors chosen as the focus of the study. Academic background and beliefs held about teaching and the teaching profession have been chosen because they provide a sound understanding of the phenomena being investigated by the first and the second research questions of this research while students' motivation to learning for the teaching profession has been chosen because motivation is a sine qua none condition for engagement which leads to an effective learning and performance. Indeed, Sharan and Tan (2008) note that student engagement embeds the idea of motivation to learn, interest, commitment, and investment in learning. In addition, this study is comparing students with and those without professional preparation while they study together for the teaching career, their degree of motivation to learn for the career may differ and this has an impact on their performance.

2.3.1.1 Academic Background Prior to Tertiary Teacher Education

It is generally agreed that "student outcomes such as engagement are affected by human, social and cultural capital that students bring to college" (Porter, 2006: 522), including pre-university experiences students enter into higher education with, such as family background, academic preparation, attitudes to university readiness, family and peer support, and motivation to learn (Kuh et al., 2007 as cited in Strydom and Mentz, 2010) and their abilities, beliefs and preconceptions. Indeed, "the most important single factor influencing learning is

what the learner already knows" (Ausubel, 1978 cited in Prosser & Trigwell, 1999: 31) which would impact on subsequent learning and then performance.

Everything else being equal, having strong academic background knowledge in a certain field of study prior to university leads to better performance in similar fields of study. This is very true if the curriculum is vertically organised. A vertical organisation of the curriculum "centres on the concepts of sequence and continuity, is concerned with the longitudinal placement of curriculum elements" (Ornstein & Hunkins, 1993: 236-37) while a "horizontal organisation engages the curriculum worker with the concepts of scope and integration, that is, the side-by-side arrangement of curriculum elements" (Ornstein & Hunkins, 1993: 236).

Curriculum is here understood as the content which refers to what is taught, the pedagogy referring to how it is taught, and evaluation which refers to the methods used to ascertain whether the content has been internalised and understood (Nizeyimana, 2003). As highlighted in Kuh et al. (2007: 34), "the quality of the academic experience and intensity of the high school curriculum affect almost every dimension of success in postsecondary education".

The nature of academic background in the previous years together with the previous academic achievement have a real impact on the student's subsequent learning, especially in the same or similar field of study. As was noted by Lane, Lane,and Kyprianou(2004), previous performance accomplishments are the most powerful source of self-efficacy, which is defined as "the levels of confidence individuals have in their ability to execute certain courses of action, or achieve specific outcomes" (Lane et al., 2004: 147). It therefore suggests a high level of engagement in learning.

Indeed, "the better one is academically prepared (…), the more likely a student was to be engaged at higher levels" (Kuh & Hu, 2002: 569). However, "research findings are mixed, regarding the effect of experience (…) in a subject matter area on subsequent performance in that or another area" (Eskew &Faley, 1988: 138).

On the one hand, in a study focusing on factors that contribute to the understanding of why some students perform better than others in the first College-level financial accounting course and whether pre-college study of accounting affects performance in first College-level in the same field, Eskew and Faley (1988: 139) hypothesised the performance in the first College-level financial accounting course as being function of a "student's (1) academic aptitude, (2) past and present academic performance, (3) effort/motivation, (4) previous exposure to the

same subject matter area, and (5) exposure to more generally related subject matter areas". Their results confirmed this hypothesis.

In effect, studies have revealed that academic experience in high school in a particular subject area is strongly related to academic performance at college level in that subject matter or related subject. In this regard, Smith (1968) found that high school exposure to accounting positively influenced performance in college accounting and reported that students who had experience in accounting at high school could successfully complete college accounting in substantially less time than those who had no experience.

Later on, Jacoby (1975) re-investigated the above idea. He found that this experience facilitated the student's performance only in the early stages of first college-level course while the reverse was possible in the later stages of the course. The length of the experience was also likely to make a difference.

In the same way, Schroeder (1986) did not find any difference in college-level performance of students without prior high school accounting coursework and those with one year; but those with more than one year of pre-college outperform the other two groups. This positive correlation has also been found in the study by Brasfield, Harrison,and McCoy (1993). They found that having taken high school economics was positively and significantly related to students' grades in introductory macro and microeconomics courses. In the same way, Sadler and Tai (2001) found that more rigorous pre-college preparation in physics predicts higher grades with the exception that some students without a high school physics course often do well in college physics because they are more likely to be academically strong. These findings confirm that students with background knowledge in academic subjects perform higher in similar subjects at college, while it is the opposite for those without such background.

By applying the above findings to the teacher education at KIE, which is the context of this research, it could be hypothesised that students with teacher preparation in high school (B. Ed students) would perform better in the 'Introduction to Educational Psychology: EDP 101' module than non B. Ed students who did not experience education courses prior to KIE. Inversely, non B. Ed students who majored in Languages (English and French) in high school would perform better than B. Ed students in the 'Introduction to English Language and Linguistics: ELA 101' module which is a B. Ed student's subject of interest that they study

together and in which they have insufficient prerequisites when compared to non B. Ed students.

On the other hand however, Palmer, Caliner,and Romer (1979) and Reid (1983) have found that students who had completed high school economics courses received significantly lower grades in the college course than those who had not taken high school economics. According to Palmer et al. (1979), this could be explained by the fact that high school courses may confuse or mislead students or lead them into overconfidence. Also, Bergin (1983) found that high school accounting experience had no significant differential effect on performance in the first college-level financial accounting course.

In this regard and in relation to the present study, B. Ed students would perform badly in EDP 101 and better in ELA 101 courses than non B. Ed who would perform better in EDP 101 and worse in ELA 101.

As scholars seem to be relatively divided on the issue, it is worth investigating it further within the KIE context. It is possible that B. Ed and non B. Ed students' levels of engagement and academic performance might differ in terms of deep and surface orientations towards their studies. In fact, Biggs (1987) listed the characteristics of deep and surface approaches to learning as follows:

A student who adopts deep approach:

- Is interested in the academic task and enjoys it;
- Searches for the meaning in the task;
- Personalises the tasks;
- Integrates aspects of the task;
- Theorises/hypothesises about the tasks.

A student who adopts surface approach:

- Sees the task as a demand to be met for qualification for instance;
- Sees the aspects of the task as unrelated;
- Is worried about the time the task is taking;
- Avoids personal or other meanings the task may have;
- Relies on memorisation attempting to reproduce(Biggs, 1987: 15)

Students adopting a deep approach to learning are said to be intrinsically motivated, they focus on understanding, integrate, theorise and hypothesise, while those adopting a surface approach see tasks as externally imposed, seek to meet requirements with minimum effort, and memorise for passing exams (Prosser & Trigwell, 1999; Harper & Kember, 1986; Morgan, Gibbs,& Taylor, 1980). These opposed attitudes towards learning might relate to higher and lower levels of engagement.

For the case being investigated in this study, since students in higher education were selected and admitted in different public institutions by the Rwanda National Examinations Council (RNEC) working today under the Rwanda Education Board (REB) on the basis of their national secondary leaving examination's results, the above findings could be explained by the difference in the students' prior academic background, students' beliefs about teacher education, and the teaching and learning environment which have a decisive influence on the way each individual goes about learning a particular subject / module.

In the teacher education domain, not only academic background in subject matter influences performance but also beliefs about the teacher education programme impact positively or negatively on the way student teachers go about learning, and hence on their performance.

2.3.1.2 Student Teachers' Beliefs about Teacher Education

This research takes into account the term "beliefs" because previous research studies have paid attention to beliefs in the context of teaching and teacher education (Raths & McAninch, 2003; Pajares, 1992; Ashton, 1990; Pintrich, 1990; Markic, Valanides, & Eilks, 2005; Markic & Eilks, 2008).

The current education literature confirms that students come to a domain with prior knowledge and beliefs that influence the way they construct new knowledge in the new learning situation (Joram & Gabriele, 1998; Scheurman, 1996; Fajet, Bello, Leftwich, Mesler,& Shaver, 2005). Moreover, beliefs are considered to be the best indicators of why a person behaves, handles information, and makes decisions in a certain way (Bandura, 1986; Koballa, Graber, Coleman, & Kemp, 2000). This is why a study on student engagement in teacher education must inevitably take into account student teachers' beliefs that they bring to the programme in order to know how they deal with it as teachers-to-be.

Furthermore, students' beliefs which comprise their preconceptions play a vital role in determining their success in post-secondary education. In effect, "who students are and what they do before starting their postsecondary education make a difference in their chances for obtaining a baccalaureate degree or another postsecondary credential" (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007: 21). Therefore, this study requires an investigation on beliefs students bring to the teacher education programme because Bruner (1996) as cited in Joram and Gabriele (1998: 176)notes that "it is essential that teacher educators take prior beliefs into account because any new material taught will have to compete with, replace or otherwise modify the folk theories that already guide both teachers and pupils".

Researchers agree that though it is not easy to define the concept of 'beliefs' in a manner that is acceptable and applicable to all kinds of research studies, the concept as it is in any scientific study, is to be defined with regard to a particular research inquiry. The term 'beliefs' is even given various names that Pajares (1992) called "alias names", which are the following:

> They [the beliefs] travel in disguise and often under alias names – attitudes, values, judgments, axioms, opinions, ideology, perceptions, implicit theories, explicit theories, personal theories, internal mental process, action strategies, rules of practice, practice principles, perspectives, … (Pajares, 1992: 309).

In a case study conducted by Markic and Eilks (2008) on chemistry student teachers' beliefs about chemistry teaching in German, the authors used the term 'beliefs' based on the meaning provided in Markic et al.'s (2005) paper. They used the term 'beliefs' to mean "all mental representations that teachers or student teachers consciously or unconsciously hold in their minds, which influence, to a certain extent, their (potential) behaviour as teachers within their subject" (Markic et al., 2005).

For the purpose of this thesis, we view 'beliefs' "as personal construct influenced by experience, knowledge, and social background" (Markic & Eilks, 2008: 26).In this context, it has the same meaning as preconceptions when we talk about prior beliefs; and perceptions when we talk about the current beliefs about the teaching profession and the way they perceive their future career. In the present study, the terms beliefs, preconceptions, and perceptions are used to mean the ways in which the current teacher education students viewed

the teaching profession before joining the programme and how they view it now in relation to their socio-economic and cultural contexts.

In fact, understanding the beliefs of teachers-to-be is essential for improving their professional preparation and teaching practices (Ashton, 1990 as cited in Pajares, 1992) because the ultimate goal of the teacher education programme should be to form:

> The teacher's professional identity [which] must begin, […], by exploring pre-service teachers' motivations to teach and the perceptions they have of the profession [because] teacher identity is based on the core beliefs one has about teaching and being a teacher, beliefs that are continuously formed and reformed through experience (Chong & Low, 2009: 60).

Similarly, Pintrich (1990) as cited in Pajares (1992) suggests that beliefs will ultimately prove the most valuable psychological construct to teacher education because "people's 'beliefs' are important influences on the ways they conceptualise tasks and learn from experience" (Nespor, 1987 cited in Pajares, 1992). It is therefore imperative to investigate student teachers' beliefs in a contextualisedstudy like this one whereby student engagement in learning shared courses is compared between students who have substantial prerequisites and those who do not.

Investigating beliefs in teacher education is relevant because research has shown that student teachers' attitudes and beliefs affect the way they learn to teach (Feiman-Nemser, 2001; Richardson, 1996) and these beliefs come from their life experiences, school experiences, and their subject and pedagogical knowledge (Richardson, 1996).

Therefore, a study on student teachers' engagement needs to take into consideration the beliefs that they bring to the programme, if teacher education institutions have to prepare teachers to implement and positively change classroom practices. As underlined by Wubbels (1992: 137), theories and skills acquired on campus are not transferred in classrooms because "teacher education programmes fail to influence student teachers' perceptions that they bring to the teacher education programme".

Effectively, research foregrounded that students entering teacher education programmes already have grounded beliefs about teaching and learning (Hollingsworth, 1989: 161; Cabaroglu & Roberts, 2000: 387). Teacher educators should seriously consider pre-service student teachers' beliefs which have been said to be "inflexible" with candidates tending to:

> Use the information provided in coursework to confirm rather than to confront and correct their pre-existing beliefs. Thus, the candidate's personal beliefs and image he/she has of the teaching career determine how much knowledge the candidate acquires from a pre-service programme and how it is interpreted (Kagan, 1992: 154).

Moreover, students' "self-regulation is possible when they can review, assess, and test their personal system of beliefs" (Cabaroglu & Roberts, 2000: 399). In fact, beliefs are important in knowledge acquisition for student teachers.

In his comparison of 16 studies, Pajares (1992) concludes that the perceptions of pre-service teachers play a pivotal role in the way they acquire knowledge during pedagogical training, even to the point of influencing the interpretation of course material. Student teachers have been found to overvalue affective student outcomes and undervalue cognitive student outcomes (Weinstein, 1988 cited in Pajares, 1992: 328), and to conceive teaching primarily as a task involving affective, interpersonal relationships rather than a profession requiring a skilled and knowledgeable practitioner (Minor, Onwuegbuzie, & Witcher, 2000; Witcher, Onwuegbuzie, & Minor, 2001; Fajet et al., 2005).

In believing that a strong knowledge basis in pedagogy is not necessary to become a competent teacher, these students "see little to no reason to study pedagogy" (Bird, Anderson, Sullivan, & Swidler, 1993). Nevertheless, pedagogical preparation courses were found to have positive effects on performance and achievement (Darling-Hammond, 1999). Therefore, by generating new knowledge about B. Ed and non B. Ed students' beliefs about teacher education in the Rwandan context, this study seeks to examine how their beliefs affect their engagement and success.

The two categories of student teachers at KIE underwent different training in their high school and therefore had different experiences and beliefs. Indeed, as Richardson (2003: 2) claims "the beliefs that teacher candidates bring with them into their teacher education programme relate strongly to the form of teaching they have experienced". Moreover, "teacher candidates come into their programmes with strong theories and beliefs about teaching and learning that they have acquired over the years, from their experiences of schooling" (Richardson, 2003: 4-5).

First year student teachers often believe that teaching is about transmitting knowledge. In this regard, Richardson (2003: 2) notes that "many students have an understanding of teaching

that suggests that the role of the teacher is to place knowledge into the heads of their students" because they relate teaching with their school experience. The role of the programme they are now following is to equip them with accurate knowledge of the teaching profession.

Changing this belief for the most appropriate sense of teaching is therefore the business of teacher education institutions. Green (1971) has already noted that teaching is an activity which has to do, among other things, with the modification and formation of belief systems. This is because "there is considerable evidence that the entering beliefs of teacher candidates strongly affect what and how they learn, and eventually how they approach teaching in the classroom" (Richardson, 2003: 9). For this reason, beliefs affect student engagement.

An illustrating example is the study which was conducted in the USA by Ross, Johnson, and Smith (1991) to examine the teacher candidate's perspectives and learning in their teacher education programme at the University of Florida. This study showed that student teachers reported a number of factors that influenced how and what they learned in the pre-service course, and the most important factor was their entering perspectives on teaching and learning.

In addition, not only student teachers' beliefs about teaching and learning affect what and how they learn their courses, but also the image that they have of themselves. Clift, Meng, and Eggerding (1994) found that the student teacher's image of self as a superior student interfered with her communication with the cooperative teacher. Similarly, Calderhead (1988) found that what his students learned from their teaching experience depended on their conceptions of professional learning and their own roles as student teachers.

From the psychological point of view, learning embeds learners' beliefs about what and for which purpose they are learning. Resnick (1989) as cited in Richardson (2003: 4) notes that "learning is an active and meaning-making process that is influenced by an individual's existing understanding, beliefs, attitudes, and preconceptions". Finally, the importance of investigating student teachers' beliefs is highlighted below:

> Firstly, beliefs [...] are thoughts of as the focus of change in the teacher education programme particularly within the more philosophical views. Second, pre-service teacher education candidates bring with them strong and perhaps central beliefs about teaching into their teacher education programmes. Within a constructivist conception of learning, beliefs are thought of

> as critical in terms of what and how the candidates make sense of what they are studying. They are also thought to guide teaching action (Richardson, 2003: 9).

Richardson's view of the role of student teachers' beliefs about their training programme is also shared with other researchers. That is why Markic and Eilks (2008: 25) emphasise that "experiences that student teachers bring with them when entering university seem not only to have a sustained influence on their learning during teacher training, but also on their behaviour as practising teachers in school". This is true because Christensen, Massey, Isaacs, and Synott (1995: 19) noted that "prior beliefs and understanding exert a major influence on the impact of teacher education on students' development as teachers".

In sum, as the role of teacher education is to develop a professional teacher identity in student teachers out of their perceptions and motivation to learning for the profession, special attention must be paid to their beliefs and preconceptions. In fact, Knowles (1992) as cited in Chong and Low (2009: 60) notes that "the concept of professional identity is related to teachers' concepts or perceptions of the profession" because the argument is that "these concepts or perceptions strongly determine the way teachers teach, the way they develop as teachers and their attitudes towards educational change" (Chong & Low, 2009: 60).

2.3.1.3 Student Teachers' Motivation to Learning for the Teaching Profession

Psychologists unanimously agree that without motivation, there is no activity including learning. Indeed, Kuh et al. (2007) cited in Strydom and Mentz (2010) mention the motivation to learn as one of the many pre-university experiences that foster success.Learning will never take place effectively if students are not motivated, whatever capabilities they possess. In this regard, Prosser and Trigwell (1999: 27) argue that the "motivation or intention students have when undertaking subjects is as fundamentally important as, or more important than, the particular skills they have".

By extension then, I believe that the ultimate goal of teacher education should be shaping teacher identity in student teachers. Bulloughm (1997) as cited in Chong and Low (2009: 60) highlights that "what new teachers believe about teaching and learning as a teacher is of vital concern to teacher education; it is the basis for meaning making and decision making". It is therefore very important that any teacher education programme focuses on contributing to the teacher's professional identity.

Apart from their intrinsic motivation, their pre-university academic preparation and great self-reliance as being already prepared for the profession, B. Ed students may also adopt a deep approach towards studying for the teaching career at high level of education, while non B. Ed students could be extrinsically motivated for the above unexpected and less paid profession. The present study will bring new insights on student engagement and success for students taking the same curriculum together in which they have different prerequisites and have different professional orientations prior to postsecondary teacher education.

Wlodkowski (2000: 125) posits that "motivation is inexorably bound to both social construction and individual determination". He enumerates five characteristics that he calls pillars of a motivating instructor. These "pillars" include expertise, empathy, enthusiasm, clarity, and cultural responsiveness; and these pillars are likely to characterise effective teachers.

In a study carried out in Fiji, a developing country like Rwanda, Lingam (2004) explored pre-service teachers' motivations for pursuing a primary teaching career. Student teachers recently admitted (2003 academic year) at Lautoka Teachers' College (LTC) which was the only government primary teacher education institution in Fiji (like KIE in Rwanda for secondary education) were investigated on their reasons for joining the teaching profession. Lingam (2004) found that most of the trainees were motivated because they considered teaching as a valuable role to play in the society. Furthermore, their perceptions were that "teachers have a high status in our society" (Lingam, 2004: 74).

When asked to comment on the two reasons that mostly influenced them to join primary teacher training, some student teachers said that they could not do otherwise, others cited the status offered by the profession. Below are some of their comments on how they perceived being a teacher:

- I had no other choice.
  I had no other option after completing Form 7... I never thought to join LTC.
- Teaching profession has a high status in our society.
  I realised that teaching is regarded as a very well respected job.
- Secure job as we can easily get absorbed into the civil service.
  It is good first to secure a job. Teaching is a secure job.
- Teachers can take up leadership roles in the community. People in the community will look at you and they will respect you.

The above statements show that some students join teacher education as the last alternative; others perceive it as a valued career in the society, while others find in it a secure job that can take you to a higher position and leadership roles. This finding is likely to be similar to the one of Sears, Marshall, and Otis-Wilborn (1994) who found that, individuals' impressions of teaching shape projections of student teachers in their future role as teachers.

In their first year of teacher education in a college or university, student teachers' perceptions of their future career greatly impact on their engagement in learning for the profession. Their psychological involvement and effort directed towards learning pedagogical preparation courses depends largely upon their commitment to teaching. In relation to their commitment to teaching, Sears, Marshall, and Otis-Wilborn (1987) identify four categories of student teachers.

Firstly, these authors identified the traditionalist students. These are student teachers who seriously consider teaching as their career option. They are service oriented. Secondly, they identified the maverick students. These join teacher education not being really motivated but because of other variables such as scholarships. Thirdly, there are convert students. Initially they do not see their career in teaching but once they are selected for teacher education, they show strong commitment to the job. Lastly, there are reservationist students who are undecided whether they must remain in the teaching profession for long or not.

As these authors have noticed, traditionalists and converts express strong desire and commitment to the teaching career on the one hand; while the mavericks and reservationists show weak levels of commitment to teaching. For them, teaching is likely to be seen as a 'stepping stone' to another profession (Book, Freeman, & Brousseau, 1985).

2.3.2Environmental Factors Influencing Student Engagement in Teacher Education

The teaching and learning environment / context and students-lecturers and peer interactions in educationally purposeful activities are two environmental factors of student engagement that have been chosen as the focus of the study. The rational for choosing themis that they provide insights in answering the third and the fourth research questions of the study. In fact, the third research question depicts students' perception of the teaching and learning environment and how this perception influences their performance while the fourth explore students-lecturers and students-students' interactions and how these interactions affect their performance. The quality of the teaching and learning environment as well as of students-

teachers and peer interactions is important for students' learning and these elements are key determinants of student engagement.

2.3.2.1 The Teaching and Learning Environment / Context

A study on student engagement like this one requires investigating the environment in which teaching and learning take place because "institutional environments are important for student learning" (Kuh et al., 2005: 8). The teaching and learning environment or context imbeds all influences that are external to the student and which have a direct or indirect impact on the way the student goes about learning.

The institutional environment including the general classroom atmosphere has undoubtedly a great impact on student engagement and success, because "the way students perceive the institutional environment influences their engagement in learning" (Kuh & Hu, 2002: 270)which goes with students' satisfaction within the environmental institution. In this regard, it is agreed that "the single best predictor of student satisfaction with college is the degree to which students perceive the college environment to be supportive of their academic and social needs" (Kuh et al., 2007: 53).

In effect, "institutional characteristics include the teaching and learning environment, institutional policies, class sizes, and also the time allocated by students to learning activities" (Pike, Kuh,& Gonyea, 2003: 242). Institutional size, or what is known as "institutional density" (Porter, 2006: 529) or opportunities for students to become involved (Pascarella & Terenzini, 1991), is an important aspect to be taken into consideration in a study on student engagement. When institutions become overcrowded, "student outcomes such as engagement and development suffer (...) because the number of opportunities for involvement is dependent on the ratio of people to settings" (Porter, 2006: 529). Moreover, "if student time on task is increased, an increase in student achievement will follow" (Stallings, 1980: 11).

Most studies investigating student perceptions of the teaching-learning context have used the Course Experience Questionnaire (CEQ) – which quantitatively "measures quality of teaching in terms of Good Teaching, Clear Goals and Standards, Appropriate Workload, Appropriate Assessment, and Generic Skills" (Byrne & Flood, 2003: 137) – to collect data. The present study on student engagement qualitatively explores this aspect in more detail.

In this study, students' perceptions of the teaching and learning environment are explored based on environmental factors and not psychological factors of student engagement, because the context is more concerned with environmental or external influence [to the student] than internal [psychological] influences as discussed in 2.3.1 section of this thesis,though I totally acknowledge the importance of the relationship between psychological factors and how a person responds to the environment.

With regard to student teachers' perceptions of their teaching and learning context together with the teaching career, especially in a developing country where teachers are paid lesscompared to their counterparts with the same qualifications, research has shown that "students could be motivated by courses which provide a good preparation for a future career, while also being intrinsically motivated by them" (Kember, 2000: 101). In this sense, if student teachers do not find any future reward in the courses they learn, then there is risk of becoming demotivated to learning for the career.

2.3.2.2 Student-Lecturer and Peer Interactions in Educationally Purposeful Activities

First year student engagement in teacher education inevitably considers interaction between students - lecturers and students - students in activities that occur in and outside the classroom. In effect, the nature and quality of first year students' experiences in the classroom, with faculty and with peers are better predictors of learning outcomes than precollege characteristics (Gerken & Volkwein, 2000) though their influence remains of great importance.

Student – faculty interaction is an important factor of student success (Pascarella & Terenzini, 1991; Kuh et al., 2007). Indeed, effective colleges and universities "are those that channel students' energies towards appropriate activities and engage them at a high level in these activities" (Kuh & Hu, 2002: 555), including those interactions which must characterise the teaching and learning context. In fact, if students feel that the teacher is there for them and facilitates their learning and understanding of the course content, then they will feel motivated and invest themselves in the learning process. These interactions are not only limited within the classroom, they must also be extended after class.

Students should continue interacting with lecturers out-of-class for the enhancement of student engagement. Kuh et al. (2007) give advantages of this kind of interaction arguing that talking with faculty members empowers students by feeling they are full members of the

campus community. They feel more comfortable and become engaged in a variety of activities. Indeed, "students' interactions with Faculty members, and active and collaborative learning, are two important drivers of student engagement" (Kuh, 2001a: 13).

Besides the interactions between students and lecturers, peer interactions play a very important role in student engagement. In fact, Roberts and McNeese (2010: 3) say that "the first step to becoming engaged and involved on college campuses is for students to interact with their peers". Many researchers (Astin, 1999; Kuh, 2001a; Umbach & Wawrzynski, 2005; Ewell, 1997; Porter, 2006) have shown that students' interactions with peers enhance almost all aspects of learning and academic performance. It has been noted that peers are "the single most potent source of influence" (Astin, 1993: 398)that affects all aspects of human development, namely cognitive, affective, psychological, and behavioural. In effect, student – student interactions are very important so as to "positively influence overall academic development, knowledge acquisition, analytical, and problem-solving skills, and self-esteem" (Kuh, 1993, 1995).

Studies have also shown that peer effects operate through students' engagement in learning communities, and that "students participating in learning communities were more engaged, had higher persistence rates, and evidenced greater gains in intellectual and social development compared with peers who did not participate in them" (Zhao & Kuh, 2004: 118; Shapiro & Levine, 1999). At the same time, "learning communities are positively linked with more frequent interactions with Faculty members" (Zhao & Kuh, 2004: 124).

From this perspective, active and collaborative learning is essential for effective student engagement. This is evidenced by Kuh et al. (2007: 94) who note that "active and collaborative learning typically is more effective because students learn more when they are intensely involved in their education and are asked to think about and apply what they are learning in different settings". In other words, the passive lecture dominated by the talk and chalk with students listening is contrary to the principle of an optimal learning environment (Kuh et al., 2007). However, what frames this research?

2.4 Theoretical Framework

This study on student engagement in teacher education emphasising the learning of particular courses is fundamentally based on Astin's (1984) theory of student involvement.In fact, Astin's theory is integrated with student engagement to create a theoretical framework for the

study because engagement is here understood as involvement. Astin (1999) himself defined student involvement as the physical and psychological energy devoted to learning, and this is about student engagement. Therefore, student engagement in learning teacher education courses ipso facto means student involvement in learning these courses.

The present study on student engagement at one institution (KIE) is basically informed by theories that underpinned the NSSE in the USA and which gave birth to the CLASSE, also in the USA. Besides the CLASSE, this study used both interviews and document analysis methods to collect data.

Its conceptual framework is similar but not identical to the one that underpinned the NSSE. It draws on the Astin's (1984) theory of student involvement. This study also draws slightly on the five benchmarks of effective educational practice (Kuh, 2001a) which informed the NSSE, as well as on organisational theory (Bolman & Deal, 1991).

In the original publication of Astin's (1984) theory of student involvement, he specifies that involvement implies a behavioural component which is more emphasised but recognises that motivation is an important aspect of involvement. He states it as follows:

> I am not denying that motivation is an important aspect of involvement, but rather I am emphasising that the behavioural aspects, in my judgment, are critical: It is not so much what the individual thinks or feels, but what the individual does, how he or she behaves, that defines and identifies involvement (Astin, 1999: 519).

In effect, we know an involved person by looking at what he/she does or how he/she behaves. Acknowledging the role of motivation, he says that students' motivation to learning plays an important role, and this is "more than just a psychological state; it connotes the behavioural manifestation of that state" (Astin, 1999: 522).

With regard to involvement, Astin (1999: 519) notes that "involvement is, to me [Astin], an active term" and I totally agree with him. In this thesis, student involvement is understood in the same way but I strongly believe that what a student thinks, believes, or feels dictates his/her attitudes towards the behaviour or act to be manifested including involvement / engagement. Therefore, both psychological and behavioural aspects are taken into account in this research on student engagement in teacher education.

Student engagement represents two critical features. The first is the amount of time and effort students put into their studies and other educationally purposeful activities. The second is how the institution deploys its resources and organises the curriculum, other learning opportunities, and support services to induce students to participate in those activities (Kuh, 2001). In all this, students are devoted to learning which is "strongly influenced by the degree to which an individual is invested in the learning process" (Alexander & Murphy, 1994: 12).

In Astin's (1984) theory which constitutes the basic theoretical framework for this thesis, student involvement is defined as "the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1999: 518). According to him, a highly involved student is the one who, for example, devotes considerable energy to studying, spends much time on campus, participates actively in student organisations, and interacts frequently with Faculty members and other students (Astin, 1999; Hu & Kuh, 2002).

The theory of student involvement is based on "five postulates" (Astin, 1999: 519) summarised below:

1. Involvement refers to the investment of physical and psychological energy in generalised (like student experience) or specific objects (like preparing for a chemistry examination).

2. Involvement occurs along a continuum: different students manifest different degrees of involvement in a given object and the same student manifests different degrees of involvement in different objects at different times.

3. Involvement has both quantitative (how many hours the student spends in studying) and qualitative (whether he/she comprehends) features.

4. The amount of student learning and personal development associated with any educational programme is directly proportional to the quality and quantity of student involvement in that programme.

5. The effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement.

In light of the above postulates, the present study on student engagement in teacher education explores B. Ed and non B. Ed students' levels of engagement both quantitatively and qualitatively due to the nature of the research questions. It is assumed that the more students are engaged, the more their learning is effective and the better they perform because

engagement is seen to lead to high performance. In this study, the low level of engagement can explain a low performance though an individual student can be engaged in learning but not perform well or perform well and not be engaged due to other factors such as conducive or not conducive conditions of examination.

Basing their theory upon premises that "students learn from what they do in college and that institutional policies and practices influence levels of engagement on campus" (Kuh & Pike, 2005: 186; Chickering & Gamson, 1987). Chickering and Gamson (1987)identify seven principles for good practice in undergraduate education, which in fact are the criteria of good teaching in an undergraduate programme. The present study borrows from them.

Those principles assert that good practice in undergraduate education (1) encourages student-faculty contact, (2) encourages cooperation among students, (3) encourages active learning, (4) gives prompt feedback, (5) emphasises time on task, (6) communicates high expectations, and (7) respects diverse talents and ways of learning (Chickering & Gamson, 1987). From these principles, Kuh (2001a: 13) has drawn five benchmarks of effective educational practices which are important to this study, and these are (1) the level of academic challenge; (2) active and collaborative learning; (3) enriching educational experiences; (4) student-staff interaction; and (1) supportive campus environment.

Finally, what an institution does to improve effective student engagement can be theoretically explained by organisational theory which, according to Kuh et al., (2007: 75) "suggests that institutional mission (…) is related to student success". This is true because Berger (2002) found that the organisational structure of an institution has some influence on student learning. Institutional structure refers to components of the university organisation such as policies and procedures, and the size and design of departments and divisions (Bolman & Deal, 1991). In this study, "the assumption is that organisational structure should be tied to meeting the mission and goals of the organisation and enhances performance" (Kezar, 2006: 91).

2.5 Summary of the Chapter

This chapter dealt with a pivotal component of any scientific inquiry. It deepened the understanding of the concept of student engagement which, in fact, is central to this thesis. Student engagement being the students' psychological investment in learning, it has affective,

social, and cognitive components which lead the student to participating in activities of learning, referring therefore to the behavioural component.

This second chapter backed up and grounded the whole study by reviewing scholars' research studies on factors that influence student engagement and success, especially in the teacher education domain. These factors are intended to illuminate the empirical research of this thesis. Psychological factors (such as the student's academic background, beliefs brought to teacher education, perceptions on the teaching and learning environment) and environmental factors (like institutional mission, classroom density, and teaching profession viewed within a particular context) were identified as greatly influencing student teachers' engagement and success.

This chapter ended by providing the foundation of this research which is the theoretical framework. This study on student engagement in teacher education is informed by the theory of student involvement in learning.

The next chapter explicitly theorises the ways through which relevant data for this study were collected before being analysed and interpreted.

CHAPTER THREE

METHODOLOGY AND RESEARCH DESIGN

3.1 Introduction

To clearly understand the topic under investigation, which is student engagement in teacher education, the previous chapter reviewed relevant literature. It elucidated the concept of student engagement and explored factors that influence it in the area of teacher education. It provided a theoretical solid foundation of this research. Chapter Three of this doctoral project brings new insights in the research methodology by using survey methods to describe and understand first year postsecondary pre-service student teachers' engagement at the classroom level in one institution.

In this academic enterprise, attention is focused on pedagogical preparation modules for all first year students and the subjects of interest for B. Ed students, which were studied in common during the first semester of 2010 academic year at KIE in Rwanda. This chapter justifies the methodology selected, presents the research design, and the methods and techniques employed in order to give an account of student engagement and success at KIE. It focuses on the research paradigm, research population and sampling, research tools and their validity and reliability, as well as the data collection techniques. Data analysis procedures will be dealt with in Chapter Four.

3.2 Research Paradigm

The present study follows a nonexperimental research design because it "describes things that have occurred and examines relationships between things without any direct manipulation of conditions that are experienced" (McMillan & Schumacher, 2006: 24). More specifically, this research study is a survey using both quantitative and qualitative paradigms, which are the two broad approaches used in trying to understand the collection and analysis of data for research purposes (Henning, Van Rensburg,& Smit, 2004).

Research approaches are not chosen by the researcher himself but by "the nature of the research questions", as Marshall (1996: 522) observed. In effect, this study investigates the extent to which (quantitative) and how (qualitative) first year B. Ed and non B. Ed students in teacher education at KIE effectively engage in learning and succeed in pedagogical

preparation and subjects of interest modules. In this sense, the study uses a mixed-method design as it includes a quantitative method: designed to collect numbers, and a qualitative method: designed to collect words (Caracelli, 1993). Thus it emphasises both "objectivity and quantification of phenomena" and the "individual lived experience" (McMillan & Schumacher, 2006: 23, 26).

Although both quantitative and qualitative methods are used in the present study, the approach is not a mixed method as it is understood today as being a sequential design. In effect, Ivankova, Creswell, and Stick (2006) argue that in the mixed method, the quantitative method precedes and informs the qualitative methods in the collection and analysis of data and results are then integrated for better understanding. These authors note that these methods are used in two consecutive phases within one study. Creswell (2009: 210) also indicates that quantitative and qualitative methods can be used concurrently in what he calls "concurrent embedded strategy". In this study, these two methods were not connected and necessarily complementing each other as is the case in the mixed-method. The nature of the research questions imposed them and the results were where necessary discussed together for the uniqueness of the study. Though both methods of data collection were used, they were complementary but not sequenced due to the nature of the research.

These two methods(quantitative and qualitative) were used for the sake of enriching insights but also for the purpose of triangulation of information so as to enhance validity and reliability (Osman, 2003). Triangulation aims to seek convergence, corroboration, and correspondence of results across method types used (Caracelli, 1993). It was used in this research in the sense that it is regarded as "the combination of two or more theories, data sources, methods or investigations in one study of a single phenomenon" (Foss & Ellefsen, 2002: 243) to answer specific research questions.

It is worth noting however that previous research studies on student engagement used only a survey of student engagement instrument as a tool for data collection, with the exception of the Australian Survey of Student Engagement (AUSSE) which, later on, also asked twoquestions that generated qualitative data and yet, validity and reliability were ensured. In the AUSSE, apart from the survey instrument, two open-ended questions were asked to students. The first question was asking the best aspects of how their university engages students in learning, and the second was asking what could be done to improve on how their university engages them (AUSSE: n.d).

In the present study, the CLASSE did not ask qualitative questions as the AUSSE had. This was due to the fact that students were not familiar with the concept of student engagement and that this type of study has never been conducted in Rwanda, as described in chapter one. Furthermore, the qualitative approach was adopted by inference of the research questions and not by the survey instrument itself.

Quantitatively, a survey instrument has been used "to describe attitudes, beliefs, opinions and other types of information" (McMillan & Schumacher, 2006: 25) on student engagement, given that the goal of a quantitative research is to describe in order to understand what is happening.

Most of the studies on student engagement have solely used a quantitative approach (Ahlfeldt, Mehta, & Sellnow, 2005; Kuh, 2001a; Kuh & Hu, 2002; Kuh & Pike, 2005; Kuh et al., 2007) and collected data from students on a national level in different institutions by means of the NSSE instrument. But the present study uses a CLASSE, interviews, and document analysis to collect data.

In contrast with NSSE designed only for students, its adaptation at the classroom level 'CLASSE' is made for both students and faculty members who teach the courses for which student engagement is being explored in that particular class.

Qualitative data were collected through semi-structured interviews with participants. They were directed towards understanding participants' perspectives on their everyday lived experience with the phenomenon being explored(McMillan & Schumacher, 2006). The key characteristics of qualitative research that also apply to the present research are the following:

- having an exploratory and descriptive focus of which the outcomes have a deeper understanding of experience from the perspective of the participants;
- inquiries are made in natural settings as researchers are interested in understanding people's experiences in context;
- data is gathered through in-depth interviews, group interviews and relevant documents;
- participant perspectives are continually studied for their meanings;
- [and] results are presented within a rich narrative, sometimes referred to as case study (Maykut & Morehouse, 1994 cited in Osman, 2003: 16).

3.3 Participants

Participants were first year students and faculty members who taught them pedagogical preparation and subjects of interest modules which were studied in common by both B. Ed and non B. Ed students for the 2010 academic year, semester one. Participation in the study was voluntary as was the case in previous studies on student engagement (e.g. Ahlfeldt, et al., 2005).

The target population or universe for the present study were all first year students at KIE during the above-mentioned academic year. Other informants were faculty teaching staff members who taught the modules analysed in this study. Both categories of participants informed the study by means of the CLASSE and through interviews by providing answers to the research questions, which enabled me to meet the research aim.

With regard to all first year students, the total population size was 1228 students of which 174 were B. Ed students while 1054 were non B. Ed students. This figure corresponded to the number of students enrolled for the 2010 academic year at KIE, according to the statistics collected from the Academic Registrar's office (Fieldwork, July 2010).

Among the 1228 total population size, those who actually participated in this research were 1154 students. They included 983 non B. Ed students and 171 B. Ed students. These were students who were effectively evaluated and marked as indicated on the consolidated mark sheets after deliberation by the academic senate. We assumed that students without marks might have been admitted to KIE but did not register or de-registered or suspended their studies throughout the first semester; they were then left out. Therefore, the quantitative data in this study reflected their performance in 'Introduction to Educational Psychology (EDP 101)' and 'Introduction to English Language and Linguistics (ELA 101)' modules/courses. Four Faculty teaching staff members who taught these modules / courses participated in this study. The selection criteria for these two modules / courses are discussed in the sampling procedures provided in the next section.

3.4 The Research Population and Sampling Procedures

3.4.1 The Research Population

This research was conducted at KIE in Rwanda. KIE is an institution of higher learning whose mission is to promote teacher education. It was identified as the research site because it is the only tertiary public teacher education institution in charge of educating secondary school teachers and teacher educators in the country.

With regard to students' marks, the 2010 cohort was taken as a random sample which is representative of the past and subsequent B. Ed and non B. Ed first year student cohorts studying EDP 101 and ELA 101 modules/courses in common. Therefore, the comparison between B. Ed and non B. Ed students' performance in these courses was made in terms of their marks in the 2010 academic year. Consequently, the statistical significance of the difference between these groups was tested by means of t-test during the analysis of data.

The CLASSE was used to collect data on student engagement from a population of 1154 first year students who participated in the study. As said earlier, 1228 first year students have been registered for 2010 academic year, but by the time of data collection (second semester), this level of study had 1154 students who constituted the population for this research.This number was too high for a study of its kind to collect data from. That is why a sample was selected to facilitate data collection, and then data analysis.

As McMillan and Schumacher (2006: 12) pointed out, "the sample and procedures are determined by the level of discourse that refers to how data will be collected and analysed and the types of generalisations and representations derived from the data". In this regard, the sampling procedures followed the quantitative and qualitative approaches, based on their techniques of data collection, namely the questionnaires / CLASSE instrument and the interview guides.

3.4.2 Quantitative Sampling

3.4.2.1 The Selection of Modules and Respondents

3.4.2.1.1 The Selection Procedures

As mentioned above, 1228 first year students constituted the research population for students. Stratified and proportional sampling "based on the percentage of subjects in the population that is present in each stratum" (McMillan & Schumacher, 2006: 122) has been used to determine the sample size for each stratum.

In this regard, the research population was composed of two groups of students, namely B. Ed and non B. Ed students, making therefore two strata. These strata were also divided into substrata on the basis of the respective modules / courses studied in common, either pedagogical preparation or subjects of interest, based on the fixed criteria that are explained later. Hence, students studying a particular module constitute a substratum.

Samples of students were calculated proportionally for each of the substratum in order to obtain a sample which was representative. This proportional sampling was based on the percentage of subjects in the population that was present in each substratum. The advantage of using this sampling procedure is highlighted by McMillan and Schumacher (2006: 122) who argue that "as long as the characteristic used to create the strata is related to the dependent variable, then using a stratified sample will result in less sampling error" and this "allows the researcher to compare subgroup results". From this perspective, the sampling procedures followed two axes that are described in the next paragraphs.

3.4.2.1.2 The Selection of Modules

As the study is investigating student engagement and success in pedagogical preparation and subjects of interest modules studied in common by both B. Ed and non B. Ed students during the first semester of the 2010 academic year, only modules/courses that were credit rated were taken into account, with exception of the module of 'Introduction to Information and Communication Technology' (ICT). This was due to three main reasons:

Firstly, the Academic Regulations at KIE state that students register for credit rated and non-credit rated modules from Level/year one to Level five. Successful completion of the credit rated modules for every level is compulsory to be admitted to the next level and marks appear on the academic transcript. However, a student can be allowed to proceed to level 2 when he/she has failed a non-credit rated module but he/she will not be allowed to proceed to level 3 (first semester of year 3) if he/she has not successfully completed that module. For these two modules, the pass mark is enough for the student to proceed to the next level. First year non-credit rated modules for semester one were French or English, and Community Service. Moreover, students' involvement in learning non-credit rated modules is likely to be very low in terms of engagement compared to the one in modules for which performance score was the determinant to pass from level/year one to level/year two. The level of involvement in these non-credit rated modules is likely to be lower than that of involvement in credit rated

modules due to the low level of students' motivation to learn these courses which are considered as not compulsory to succeed level/year one.

Secondly, this study does not focus on non-credit rated modules because it is assumed that during the first semester, first year students are not yet ready to understand why they should engage themselves in learning non-credit rated modules. They might rather prefer to master the credit rated modules, which are likely to be more valuable for their success, because they enable them to be admitted to the next level. Thus, their engagement in non-credit rated modules, which depends on among other factors their motivation to learn should be investigated in subsequent studies.

Thirdly, thoughthe ICTmodule is credit rated, it was not considered. The reason was that the Ministry of Education policy makes information technology compulsory for all students in all institutions of learning at all levels of education. Thus, this module was neither a subject of interest for B. Ed students nor a pedagogical preparation module. Though it was studied in common, it did not comply with the characteristics of this research whose aim was to investigate student engagement and success in pedagogical and subject of interest modules.

With regard to modules studied in common by all first year students, three modules namely Introduction to Educational Psychology (EDP 101), Introduction to English Language and Linguistics (ELA 101), and Fundamental Mathematics I (MAT 101) were, during the development of the research proposal for this project, identified as responding to the requirements for this study. However, during the research fieldwork, I came to know that MATH 101 module had been divided into two parts for B. Ed students only and was no longer taught in common to both groups in the same classroom as it was usually done previously. It was then left out. Therefore, the study investigated student engagement and success in one pedagogical and one subject of interest modules, which are EDP 101 and ELA 101 respectively.

3.4.2.1.3 The Selection of Student Participants

Not only first year B. Ed and non B. Ed students ofthe 2010 academic year provided data relevant to this study, but also marks obtained in common courses by first year mature and school leaver students of the 2008 academic year were taken into considerationwith reference to students' academic background which was directly related to the combination students were enrolled in at KIE. Mature and school leavers' results were related to those of B. Ed and

non B. Ed students despite the fact that the former were enrolled in science, arts and languages, or social sciences and business studies programmeswhile the latter were enrolled in the B. Ed programme.

Mature and school leaver students' data were included in this study because they share the same characteristics with B. Ed and non B. Ed students as both mature and B. Ed students are professionally prepared while school leavers and non B. Ed students do not have such background prior to KIE. The inclusion of mature and school leaver students in this study was justified by the intention of proving the influence of professional preparation on performance in post-secondary teacher education in two different cohorts of students.

B. Ed and non B. Ed students from whom CLASSE data were collected were unequally represented in terms of the number of students attending these classes / courses or modules. In fact, KIE students who have a certain module/course in common attend it in the department in which the module is prepared.

Students studying English in common are grouped to form a substratum made of students studying 'Introduction to English Language and Linguistics: module. Prior to the 2010 academic year when the research proposal was being developed, all combinations studying English were being taught ELA 101. During the fieldwork, students' marks for this course showed that only four combinations studied it together with B. Ed students. Therefore, the number of non B. Ed students who studied it and did examinations was 221 from the Faculty of Arts and Languages, and were enrolled in English – Drama – Education; Kinyarwanda – English – Education; Swahili – English – Education; and French – English – Education combinations. B. Ed students who studied this course as their subject of interest were 18 in number, from Foundations of Education - English (FED – English) combination of the Faculty of Education (Office of the Registrar at KIE, July 2011).

While ELA 101 was commonly learned by some combinations, the Introduction to Educational Psychology (EDP 101) module was studied by all first year students at KIE. The students who sat for semester one end examination for EDP 101 and whose marks were considered were 1154. Given this large number of students, the sample size was necessary.

It was initially proposed (while developing the research proposal) to use the Sample Size Calculator to determine how many subjects were needed for data collection in order to get results that reflect the target population as precisely as needed. This requires the calculation

of confidence level and confidence intervals. In the present study however, the sample was not systematically selected due to the voluntary dimension of participants, which is a sine qua none condition for this kind of sampling calculation. Moreover, due to the fact that "there is no evidence that the values, beliefs, and attitudes (…) are normally distributed" (Marshall, 1996: 523) for a random sampling, I could not rely on the intervals (Sample Size Calculator: n.d).

Another reason for not having strictly and systematically randomised the sample is that the study is more descriptive than inferential in terms of the nature of the research questions and in terms of the analysis of quantitative data collected by means of the CLASSE research tool. This is the reason why I relied on proportional percentages targeting at least 20% of the population for the substrata mentioned earlier, as described and reflected in the table below. In effect, twenty per cent is assumed to be a reasonable sample size for a given population (Javeau, 1985).

Then, samples were drawn randomly because only those willing to participate did so. However, this does not mean that the study used a random sampling because, as Marshall (1996: 523) asserts, this kind of sample is representative "only if the research characteristics are normally distributed within the population". Or in our case, there is no evidence that the research characteristics were normally distributed within students. Therefore, the population and sample sizes from which data were collected are presented in the table on the next page:

Table 2: Population and Sample Sizes

Category of Students / Modules	Non B. Ed		B. Ed	
	Population	**Sample size**	**Population**	**Sample size**
Introduction to Educational Psychology (EDP 101)	983	197	171	34
Introduction to English Language and Linguistics (ELA 101)	221	44	18	4
Total	**1204**	**241**	**189**	**38**

This table shows the number of students for each category of students, either B. Ed or non B. Ed studying the two modules as indicated in the left column of the table, as well as the corresponding sample sizes calculated in the proportion of 20%.

However, the table shows that the total population of non B. Ed students is 1204while B. Ed students are 241. These numbers largely exceed the real or physical number of students in both categories as indicated earlier. This is due to the fact that most of students attend class in more than one module. Students doing ELA 101 module concurrently do EDP 101, which is common for all first year students irrespective of their respective Faculties or combinations. Therefore, respondents could fill in the $CLASSE_{STUDENT}$ survey for two modules but at different times.

As is shown in the table above, 197 non B. Ed and 34 B. Ed students had to report on their engagement in EDP 101 while 44 non B. Ed and 4 B. Ed students had to report on their

engagement in ELA 101 modules. In total, the sample size for $CLASSE_{STUDENT}$ was 279 of whom 241 were non B. Ed while 38 were B. Ed students. This means that 279 questionnaires ($CLASSE_{STUDENT}$) were to be distributed randomly to volunteer students in both categories of students and in both modules.

Furthermore, for the purpose of achieving representative quality research results, the minimum percentage of respondents required for each module and in each category of students for data analysis was at least 80% of the determined sample size in that particular substratum. For example, if the sample size for non B. Ed students studying ELA 101 was 44, then at least 35 had to fill in the questionnaires.

This measure was taken to ensure a representative and usable sample of data for analysis and to potentially reduce discrepancies in the number of respondents for the two modules. It was anticipated that in case few or no students were volunteers, a second round of data collection would have to be organised during the following academic year, when the same module would be taught again.

Nevertheless, the numbers of students who filled in CLASSE instrument could differ from those of whom marks were examined when the researcher was investigating students' performance in EDP 101 and ELA 101 modules/courses. In fact, students' performance was based on marks obtained in these two modules at the end of the first semester. Only those who did the exam constituted the population from which data (marks) were collected and analysed, given that some students might not have sat for the exams, while others may have suspended their studies, etc.

3.4.2.2 Faculty Teaching Staff Participants

Concerning the faculty teaching staff members who participated in the study, they were selected without a particular sampling technique, because there were only four lecturers who taught the two modules, without including the tutorial assistants. Those lecturers were not a portion of the population for which they were representatives. All four lecturers had to participate in the study by filling in the research instrument ($CLASSE_{FACULTY}$) and being interviewed. Their participation was also voluntary (as it was for students) at the condition being they were at least an Assistant Lecturer on the academic hierarchy.

Two reasons motivated me to exclude Tutorial Assistants from the study. The first was that, under normal circumstances, Tutorial Assistants are not allowed to teach, and therefore they were not qualified for $CLASSE_{FACULTY}$ though they do sometimes teach due to insufficient lecturers. Another reason was that $CLASSE_{FACULTY}$ asks demographic information including teaching experience while, according to the Rwandan higher education policy, Tutorial Assistants are required to go for further studies to read for a Master's degree after two years of experience in an institution of higher learning. Then, once they get a Master's degree, they can be promoted to Assistant Lectureship.

Therefore, the census of respondents for the $CLASSE_{FACULTY}$ gave one lecturer for ELA 101 and three lecturers for EDP 101 modules, making four lecturers in total. Four questionnaires were then distributed to the four faculty staff members.

3.4.3 Qualitative Sampling

3.4.3.1 Basic Concepts

The quantitative sampling tries to get a sample size which is as representative as possible in terms of numbers of respondents. However, for the qualitative sampling which aims at deeply understanding the phenomenon, "an appropriate sample size for a qualitative study is one that adequately answers the research question" (Marshall, 1996: 523). It is not one which is representative in terms of numbers, but one which allows deeper and high quality understanding of the phenomenon being investigated. The representativeness resides in the quality of the information to be obtained that answers the research questions as correctly as possible to attain the research aim.

In the present study, purposeful sampling which is "sometimes called purposive sampling, judgment, or judgmental sampling" (McMillan & Schumacher, 2006: 126) was more appropriate to collect qualitative data that answer specifically the first three research questions described in Chapter One of this thesis. These questions are related to the effect of students' academic background, their beliefs about teacher education and their perceptions about the effect of the teaching and learning environment on student engagement in EDP 101 and ELA 101 courses.

As there are no statistical rules for determining purposeful sample sizes that can range from 1 to 40 or more (McMillan & Schumacher, 2006), a purposeful sampling was used in order to

collect relevant qualitative data. In this purposive sampling, "on the basis of the researcher's knowledge of the population, a judgment is made about which subjects should be selected to provide the best information to address the purpose of the research" (McMillan & Schumacher, 2006: 126) and the researcher searches for "information – rich key informants" (McMillan & Schumacher, 2006: 319). Semi-structured interviews have been conducted with both students and lecturers.

3.4.3.2 Sampling for Students' Interviews

Purposive sampling was used. Students were selected on the basis of being B. Ed or non B. Ed students on the one hand, and for studying EDP 101 or ELA 101 module on the other hand. Volunteers for the interviews submitted their names and cell phone numbers to the researcher for the timeline for interviews purpose.

Considering the qualitative nature of this study investigating B. Ed and non B. Ed students' pre-university educational background, their beliefs about teacher education, and their perception of the teaching and learning situation in relation to the two modules identified, any volunteer to participate in the study was considered as rich-informant. In fact, all those willing to participate were able to provide rich information by answering the research questions though class / combination representatives were initially thought to speak on behalf of their classmates.

Every participant had pre-university academic background, came to university with beliefs or perceptions about the teaching profession, had performed either well or badly, and had his/her own perception of the teaching and learning environment, and these are issues that were dealt with by the interview protocol. Areas of study or sections followed at high school level and the combination being studied at KIE were referred to in collecting data that responded to the above-mentioned queries.

In qualitative sampling, researchers agree to be more flexible but try to get the best informant for the study. With regard to gender balance, interviews took into account the proportionality of one third. Offifteen interviewees, five were females. However, this exercise could not be systematic in practice due to the voluntary dimension of the participants for ethical considerations.

With respect to the principle of volunteerism of participants in the study, the message for interviews was given to all students. A paper was given to students and those who voluntarily accepted to participate in the interviews provided their names and contact numbers, as already said.

ThenI contacted them telephonically to fix the day, time, and venue (the researcher's office at KIE) for interview. In total, fifteen interviews were conducted with students as indicated in the next table:

Table 3: Overview of the Sample for Interviews

Pre-University Academic Background (High School: HS)		**First Year of University Studies (KIE)**		
Option followed in H.S	**Number**	**Faculty**	**Combination**	**Number**
Mathematics & Physics	3	Science	MPE	1
			PCE	1
			MCsE	1
Biology & Chemistry	2	Science	BCE	1
			BPE	1
Arts	3	Arts & Languages	KEE	1
			SEE	1
			ELE	1
Humanities	2	Social Sciences and Business Studies	GEE	2
TTC	5	Education	Math-Educ.	2
			Entrepre - Educ.	1
			FED – Eng	2
Total	**15**			**15**

The table above indicates that, of all students interviewed, three had followed Mathematics & Physics at high school level. They were enrolled in the Faculty of Science studying

respectively Mathematics - Physics - Education (MPE), Physics - Chemistry - Education (PCE), and Mathematics - Computer Science - Education (MCsE) combinations.

Two participants had done Biology and Chemistry in their high school. They were also enrolled in the Faculty of Science studying respectively Biology - Chemistry - Education (BCE) and Biology - Physical sport - Education (BPE) combinations.

Three students who had done languages in their high school were enrolled in the Faculty of Arts and Languages studying respectively Kinyarwanda - English - Education (KEE), Swahili - English - Education (SEE), and English - Literature in English - Education (ELE) combinations.

Two participants had followed Humanities in their high school and were enrolled in the Faculty of Social Sciences and Business Studies studying Geography - Economics - Education (GEE) combination.

Five students had followed Teacher Training College (TTC) in their high school. They were thus enrolled in the Faculty of Education. Two of them were studying Mathematics - Education (Math - Educ.), one was studying Entrepreneurship - Education (Entrepre - Educ.), and two were studying Foundations of Education - English (FED - Eng) combinations. Therefore, fifteen students were interviewed and they included five B. Ed and ten non B. Ed students.

3.4.3.3 Faculty Teaching Staff for Interviews

In order to collect relevant data about institutional conditions that matter for student engagement and success at KIE as well as teachers' perceptions of B. Ed and non B. Ed students' engagement, lecturers have been targeted as key informants.

It was previously assumed that Deans and Heads of Departments who are often module leaders would be part of the interviewees. But the fieldwork revealed that lecturers of the two modules concerned by the study did not occupy any leadership position by the time the modules were being taught. However, one lecturer was promoted to the post of Vice Dean thereafter and was interviewed as being at this position.

As mentioned earlier, the census of the faculty teaching staff members gave four lecturers and all of them were interviewed. It was previously expected, when we were developing the

research proposal, that lecturers to be interviewed would be selected on the basis of their teaching experience in higher education and willingness to participate. All of them voluntarily participated in the interviews and had such experience.

3.5 Development of the Research Instruments

3.5.1 Choice of the Research Tools

There are many research instruments or tools of data collection. The choice of a particular tool depends, among other factors, on the nature of the study, the research questions, and the possibilities and limitations that each instrument conveys. It is advised to select methods and techniques of data collection carefully. In effect, "the method has to be chosen according to the type of answers needed, the availability of sources and the time restrictions" (Apostolopoulou & Vega, 2009: 47).

In the context of the present study on student engagement, it used quantitative and qualitative approaches for data collection. Like in any other scientific inquiry, instruments for data collection were constructed with regard to their appropriateness in answering the research questions.

Instruments for collecting empirical data were mainly the CLASSE designed for collecting quantitative data, and interview guides for the collection of qualitative data, while documentation was used to provide students' marks and additional secondary data. It is worth noting here that both $CLASSE_{STUDENT}$ and $CLASSE_{FACULTY}$ have been adapted to the research context especially with their two last sections' items. Interview guides for both students and teaching staff members were then developed.

3.5.2 Historical Background of the Classroom Survey of Student Engagement

Although the field of student engagement is new in the educational research at higher level, studies carried out in this domain of inquiry compared colleges and universities on a national scale and used the National Survey of Student Engagement(NSSE) to collect data in various institutions. As Strydom and Mentz (2010) note, this instrument was developed in the USA, used by over 1300 North American colleges and universities, adapted and used in 35 universities in Australia and New Zealand; and in 2010, it was being piloted in 23 Chinese higher education institutions.

NSSE has its roots in the efforts to find out the conditions that promote student learning. In 1987, a group of scholars including Arthur W. Chickering (a Distinguished Professor of Higher Education at Memphis State University) and Zelda Gamson (University of Massachussettes-Boston) came up with Seven Principles of Good Practice in Undergraduate Education (Chickering & Gamson, 1987). In 1991, eminent scholars, namely Ernest Pascarella (Illinois University) and Patrick Terenzini (Syracuse University), affirmed these practices (Kuh, 2001a) which aimed at ranking American Universities and Colleges.

In 1998, educational leaders and scholars agreed that an alternative way of measuring college quality (Kuh, 2001a) for improvement purpose other than ranking colleges was needed. The idea of annual assessment of the extent to which institutions were using good educational practices so far identified in the literature (http://nsse.iub.edu) was espoused. Hence,a group of nationally known scholars on the extent to which students engage in good educational practices (Kuh, 2001a) was formed in America using NSSE as an instrument for collecting data countrywide.

By the end of 1998, the instrument was ready and was composed of 40 items. It was used for the first time in 2000. In 2001, NSSE surveyed 220 000 students from about 320 institutions. The report highlights the relationship between effective educational practices and collegiate quality by featuring five benchmarks of effective educational practices. These are the level of academic challenge, active and collaborative learning, student interactions with faculty members, enriching educational experiences, and supportive learning campus environment (Kuh, 2001a).

The NSSE instrument "has been designed to assess student engagement in activities that contribute to learning and success during college" (Pike, 2004: 194). Aimed at comparing universities and colleges, NSSE has its foundation in the "quality of student effort" (Kuh, 2003: 3) and it is based on the theory of involvement (Astin, 1984).

Thereafter, the NSSE instrument was adapted to the classroom level, giving birth to Classroom Survey of Student Engagement (CLASSE) which is used in this study. In effect, Bob Smallwood of the University of Alabama and Judy Ouimet of Indiana University Bloomington in the USA, with the authorisation of NSSE authors, adapted the original NSSE for examining student engagement at the classroom level.

These scholars came up with a CLASSE that was adapted to the context of the present research due to its empirical nature. In effect, the present study was carried out in a single institution (KIE) and on particular modules / courses. It was therefore qualified to use a classroom measure. Moreover, the means of the researcher as well as the nature of the study were limited to the classroom level using the CLASSE.

The original CLASSE is composed of two instruments. The first is $CLASSE_{STUDENT}$ (see Appendix A) which asks students to report on how frequently they engage in various educational practices. In other words, it asks "how frequently these practices occur in that class" (Laird, Smallwood, Niskodé-Dossett, & Garver, 2009: 76) or course. The second is $CLASSE_{FACULTY}$ (see Appendix B) which asks the instructor of that course / class how important various educational practices are in facilitating student success. In other words, it "assesses which engagement practices [the] Faculty particularly values and perceives as important for student success within a designated class" (Laird et al., 2009: 76).

Student and faculty outcomes are then contrasted to identify important and valued educational practices that are occurring less frequently than desired or expected. From CLASSE emerges those educational practices that faculty indicated to be particularly important in a designated class that students report doing very often.

Another advantage of this instrument is that it is not paid for copyright (http://www.nsse.iub.edu/html/classe.cfm). This also motivated the researcher to use it while adapting it to the research context of KIE, especially in its last two sections.

$CLASSE_{STUDENT}$and $CLASSE_{FACULTY}$ as adaptedby Smallwood and Ouimet are composed of 49 items each which are grouped in six sections. Section one is about the engagement activities and comprises nineteen items. Section two is about cognitive skills and is made up of five items. Section three is about other educational practices and is composed of ten items. Section four is about classroom atmosphere and is made up of four items. Section five concerns optional items and consists of eight items. The last section is about demographics and is made up of three items. In the original CLASSE, the optional items of section five are not formulated; they are left to the discretion of the researcher.

3.5.3 Adaptation of the Classroom Survey of Student Engagement to the Context of KIE

When adapting CLASSE to the present research context, the first four sections of the original CLASSE remained as they were because items in these sections were judged equally relevant to the context of Rwanda, more specifically to the KIE's context. However, in its original format, X, Y, and Z letters included in the items were replaced by the specific module code concerned by this study.

The adaptation of the CLASSE instrument focused on the two last sections of the instrument by formulating items for section five and reflecting on section six. This is true because the original CLASSE was designed in a such way that the researcher has, in section five, "the opportunity to add up to eight … items that draw attention to practices or activities he/she believes are importantly related to success in the designated class" and also, "no two CLASSEs are necessarily the same" (http://www.assessment.ua.edu/CLASSE/Overview.htm).

I judged whether items of section six related to demographics would be relevant or not to the context of the study so that contextual items could be formulated. With regard to section five on optional items, I formulated four items for $CLASSE_{STUDENT,}$ and three items for $CLASSE_{FACULTY.}$ These items have been formulated with regard to the specific context of KIE. They specifically deal with the class size, the language of instruction, and the conditions in which the teaching and learning activities effectively take place. The last section is concerned with the demographic aspect. It has been adapted to the context for both $CLASSE_{STUDENT}$ and $CLASSE_{FACULTY}$ respectively. For $CLASSE_{STUDENT,}$ items of the original instrument on the demographic aspect were judged not applicable to the context of KIE because the number of credit hours and the academic major addressed in this instrument are already known, according to the Rwanda National Qualifications Framework (RNQF).

In fact, the RNQF stipulates that students in higher learning institutions should complete 60 credit units each semester making accumulatively 480 credit units at the completion of undergraduate education. In addition, the nomenclatures of various combinations in which students are enrolled highlight the majors referred to in this section. For example, the Mathematics - Physics - Education combination suggests that Mathematics is the major, Physics in the minor, and Education is the pedagogical preparation subject. Therefore, in adapting the survey instrument to the context, I asked students to indicate the gender, the combination, and the language they use fluently.

The gender of the respondent as well as the combinations that students do at KIE could bring insights in the ways they perceive the context. Students were also asked to indicate the language in which they were more comfortable. The language aspect is highlighted here because the new policy (since 2009) makes English the language of instruction at all levels of education when most learners and teachers are not yet fluent in English since they have been using French. Though the Ministry of Education organises training in English for teachers every summer vacation, this training is only meant for primary and secondary school teachers.

For $CLASSE_{FACULTY,}$ four items related to the specific context of KIE have been formulated as optional. One item which is related to the language of instruction has been added to the three demographic items of the original $CLASSE_{FACULTY}$ making them four. However, an item of the original $CLASSE_{FACULTY}$ related to class size was adapted to KIE context of big classes in common modules. Thus, the CLASSE instrument used in the present study is composed of 45 items for both students and faculty (see appendices C and D) in contrast to the original CLASSE which is made up of 49 items (appendices A and B).

CLASSE instrument remained in English for both students and lecturers. It was previously expected to be translated into French but experience in the Rwandan context has shown that people understand more written English than spoken English and the researcher could explain technical concepts if they arose. But also for the sake of the authenticity of the instrument as designed by the authors and in respecting its format, I decided not to present the instrument in both versions, French and English but only in its original language.

3.5.4 Interview Guide

Semi-structured interviews were conducted with students with regard to the three first research questions that aimed at (1) investigating whether and in which context academic background in high school does explain differences of performance in modules which B. Ed and non B. Ed students take in common during their first year of teacher education; (2) exploring B. Ed and non B. Ed students' characteristics or beliefs that they bring to teacher education and how these beliefs affect student engagement; and (3) exploring students' perceptions of the teaching and learning context and investigating how these perceptions influence student engagement.

Even if students' perceptions on the teaching and learning environment has been mostly studied using a quantitative approach (Kreber, 2003; Lyon & Hendry, 2002; Ramsden, 1992; Byrne & Flood 2003) by means of the Course Experience Questionnaire (CEQ), those perceptions are here researched qualitatively using interviews, as did Prosser and Trigwell (1999). The reason is that some items of the CEQ are embedded in the NSSE and thus in CLASSE instrument. Moreover, qualitative data would help in the triangulation of the information and in getting more insights. An interview guide for students was designed (see Appendix E).

Semi-structured interviews were also conducted with Faculty teaching staff members teaching the modules for which student engagement and success were being investigated. Lecturers were asked to provide information on the institutional conditions that matter for student engagement and success and their presence or absence at KIE on the one hand, and about their perceptions of their students' engagement in learning modules taught in common to both B. Ed and non B. Ed students while they do not have similar background from their high school, on the other hand. The interview guide for lecturers is in Appendix F.

Questions in the interview were written in English, but for the sake of free and accurate expression of the interviewees, they were asked to respond in a language of their choice during the interview. The field work has shown that only five interviews out of fifteen were conducted thoroughly in English, while others were conducted predominantly in Kinyarwanda, which is the interviewees' mother tongue. It was often mixed with English and sometimes with French. With lecturers, interviews were conducted predominantly in English but sometimes with a mix of Kinyarwanda and French.

3.6 Validity and Reliability of the Research Instruments and Data Collected

Various techniques were used to enhance validity and reliability of the data collected in this research. The use of both qualitative and quantitative techniques for data collection, triangulation, and member check techniques aimed to ensure validity and reliability of both research instruments and data collected as much as possible.

The aim of this study being to compare two groups of teacher education students in terms of how different factors of student engagement influence performance in common modules, the study used different methods of data collection (in-depth interviews, questionnaires/CLASSE, and document analysis) and different sources of information

(students, lecturers, and documents). This approach has an advantage of data triangulation which contributes to the trustworthiness of data, addressing thus the issues of validity and reliability of the information emanating from such methods (Lincoln & Guba, 1985, cited in Osman, 2003: 36).

In effect, I assumed that interviews could reveal some of the indirect indicators of student engagement from which it is [student engagement] estimated or inferred (Newmann, 1992). These indirect indicators of student engagement are:

> "Such as the amount of participation in academic work (attendance, portion of task completed, amount of time spent on academic work), the intensity of student concentration, the enthusiasm and interest expressed, and the degree of care shown in completing the work" (Newman, 1992: 13).

Therefore, triangulating quantitative data collected by means of the CLASSE with data collected through interviews and document analysis could reveal some of the above indicators of student engagement.

Data collected through $CLASSE_{STUDENT}$ which were student self-reports were esteemed to be valid. In fact, the examination of the validity of self-reports (Lowman & Williams, 1987; Pike, 1989, 1995 as cited in Hu & Kuh, 2002: 557) indicates that they are generally valid under five conditions: if the information requested is known to the respondents; the questions are phrased clearly and unambiguously (Laing, Sawyer, & Noble, 1988); the questions refer to recent activities (Converse & Presser, 1989); the respondents think the questions merit a serious and thoughtful response (Pace, 1985); and answering the questions does not threaten, embarrass, or violate the privacy of the respondent to respond in socially desirable ways (Bradburn & Sudman, 1988; Kuh, 2001a; Kuh, 2001b).

Studies using NSSE instrument indicate that the college student report meet the above five criteria and provides accurate and appropriate data about students' levels of engagement. These criteria are also met with the CLASSE because it isan adapted version of NSSE. In addition, the Cronbach Alpha reliability which is widely believed to indicate the degree to which a set of items measures the same thing is guaranteed because the CLASSE is an internationally recognised research instrument of student engagement.

Validity and reliability of the interview guide was gained through the pilot study. Two interviews were conducted with students on condition that these students would not be part of the interviewees during the effective data collection process. This allowed me to modify the formulation of some of the questions designed for interview when necessary. With lecturers, a pilot interview was conducted with a lecturer of Mathematics who previously was teaching both groups of students together. It was previously thought that he would be part of the study but during the data collection, his course was no longer studied in common by both B. Ed and non B. Ed students as it used to be in the previous years. So being experienced in the issue under investigation, I purposely interviewed him when piloting the research instrument.

To optimise reliability of transcription and translation of the interviews, I proceeded by member check technique (R. Osman, personal communication, April 14, 2011). After interview transcription, I sent back the transcripts to the interviewees so that they could make sure that what was written revealed exactly their views for necessary amendments. The lecturers received their interview transcripts through email and gave feedback to the researcher. I used this feedback to update lecturers' views.

For students, because many of them did not have email addresses and could not easily access the internet, they were individually invited to the researcher's office at KIE between July and August 2011 and were given their transcripts to check whether their views were appearing correctly. This also helped the researcher to update the information. The member check technique was used to increase the level of reliability of the data collected and to reduce the researcher's personal subjectivity which may often occur in qualitative research studies.

3.7 Administration of the Research Instruments

3.7.1 Ethical Considerations

Ethics in researching human beings was followed. I obtained the ethics clearance (see Appendix J) from the Research Ethics committee of the Wits School of Education before data collection could be done. Before collecting data from the field, I wrote a letter requesting authorisation to conduct the research in KIE. This letter was sent to the Rector of KIE and the permission letter was obtained (see Appendix H). In his letter, the Rector informed all concerned people in advance and asked them to assist me in the data collection process.Thus the access to data was ethically granted by the high authority of the institution.

Participation in the study was voluntary. During the administration of the CLASSE, respondents signed the Informed Consent Form (see Appendix I). Both students and faculty staff members who participated in the study signed this document for both quantitative and qualitative data collection. Interviews were tape-recorded with the agreement of the interviewee.

Participants in the interviews were given pseudonyms that correspond to the alphabetical order to ensure anonymity. It was previously thought to give them other names that were different from their own, but because those pseudonym names had to culturally reflect Rwandese names, and given that the entire research population of more than 1200 students was well known in the 2010 academic year, there were many chances for those names wrongly called pseudonyms to coincide with real names of students who were studying at KIE during that period. Therefore, I decided to use alphabetic order to preserve anonymity and confidentiality of participants. Otherwise, the real names could correspond to students who had never participated in the study and this would have been against ethics in researching with human beings.

In this research, anonymity was assured by the use of pseudonyms, participants could withdraw from the study at any stage of the research without prejudice, confidentiality was guaranteed on the Informed Consent Form and individual interviews were conducted in my officeat KIE, all the data collected were locked in my office and after usequestionnaires as well as the interview transcripts were carefully locked in my office to be destroyed five years after the completion of the research.

3.7.2 Collecting Quantitative Data

It is commonly agreed that the research instruments must be piloted before the data collection itself with the aim being that of making sure that all items are well formulated, understood in the same way by the respondents or otherwise had to be revised. However, in this study, the CLASSE being an already designed instrument to be implemented in the context of Rwanda was not piloted.

Data collection was scheduled for May, June, and July 2010. However, it started in July because students' first semester results came out in late June. Since students had to report on their engagement and success in the modules learnt in their first semester which started on 10th January 2010 and ended on 30th April 2010, data gathering had to wait for the results to

be out. It was important to collect data after one semester in a teacher preparation programme because the study was also looking at the level of commitment to the teaching profession at this stage, as did Bontempo and Digman (1985) in their study of student attitudes towards the teaching profession.

Access to the data was guaranteed since the researcher was familiar with the research site having been a lecturer for the past thirteen years. Lecturers were informed in advance of the schedule for data collection in their respective classes. At the time of surveying the class, I started by explaining briefly the purpose of the study, then directives for the exercise were given. CLASSE instrument was distributed together with the Informed Consent Form that students had to sign when filling in the $CLASSE_{STUDENT}$ instrument.

As participation in the study was voluntary, the survey instrument was distributed in the classroom towards the end of the lesson to those willing to participate, based on the sample sizes in that particular substratum. In effect, 211 and 68 CLASSE questionnaires were distributed to non B. Ed students studying EDP 101 and ELA 101 respectively and respondents were free to withdraw from the study at any stage.

While students were filling in the questionnaires, I was counting those who were busy filling in them to make sure that the predetermined sample size was reached for appropriate measures. The number of students who willingly accepted to fill in questionnaires could go beyond the sample size but not far below. The filling in of the questionnaires lasted about 45 minutes. It was arranged that in case the lesson was immediately followed by another class, I would meet that particular class again during their free time.

For very big classes like the one for the EDP 101 module, I was helped by ad hoc assistant researchers who were appointed to distribute and collect the completed questionnaires but in my presence.

It is indicated in the table of the population size and samples that the sample size of B. Ed students for EDP 101 was 35 while the one for non B. Ed students was 211. As for ELA 101, there were 68 non B. Ed students and twelve 12 B. Ed students. However, 40 and 187 completed questionnaires were collected respectively from B. Ed and non B. Ed students for the EDP 101 course while 17 and 46 completed questionnaires were collected from ELA 101. Thereafter, data analysis was done. This means that, for EDP 101 module, the sample size of B. Ed students which was 35 increased to 40 indicating that there were volunteers keen to

participate in the study. However, the sample size of non B. Ed students decreased from 211 to 187, indicating that there was a questionnaire mortality rate of 11.4%. For ELA 101, the sample size of B. Ed students which was initially calculated to twelve increased to seventeenwhile that of non B. Ed, initially calculated to 68, decreased to 46. Data analysis was done based on these numbers.

The $CLASSE_{STUDENT}$ was completed inmy presence due to the great number of respondents and their availability, while $CLASSE_{FACULTY}$ was distributed to individual lecturers and left with them so that they could be filled in at their convenience. I went to collect them two weeks later. This freedom was motivated by the fact that lecturers were few, I knew them, and they were easily reachable in their respective offices.

Other quantitative data collected were the students' marks in the national examinations, data which were data collected by the analysis of documents. It was previously thought to examine students' academic results on their high school leaving certificates. But later I decided to use the weight aggregate that each interviewee obtained at the end of secondary school national examinations, which correspond to the matric examination in the context of South Africa. It is worth noting that weight aggregates differ according to the field of study/section followed in high school and might not be the same in subsequent academic years.

By the time the fieldwork was carried out, students had been admitted by the Rwanda National Examinations Council (RNEC) to various institutions of higher learning based on their performance, choices, and available places in these institutions because they were Government sponsored. The interviewees' respective weight aggregates and their demographics appear in table 6 (the overview of interviewees). As the RNEC explains in the document entitled "Rwanda National Examinations Grading System", the grading system has changed since 2008, from 0 – 100 scales to numerical grades (1 – 9) where 1 is the highest and 9 the lowest. The grades are added to constitute an aggregate. All students admitted to KIE have performed sufficiently well to meet KIE admission requirements.

First year students' performance was looked into after they had entered teacher education training at KIE. First semester results in the two modules under investigation were examined for both B. Ed and non B. Ed students by means of document analysis technique. Statistics were used to analyse these marks.

3.7.3 Collecting Qualitative Data

The research instruments used to collect qualitative data were the interview protocol, a tape-recorder, and paper and pencil. Interview schedules with respondents were drawn in advance, the one with the students and the one with the lecturers. I made appointments with the interviewees. I had to adhere to the availability of the participants. Time and venue were agreed upon.

Given the politico-socio-linguistic context of Rwanda today, interviews were conducted in the languages that suited informants. These languages were English, French, and Kinyarwanda. Often, informants were mixing languages sinceI use all these languages. The use of any language was allowed in order to get more insights and avoid loss of relevant information. In fact, participants were allowed to express their feelings in their mother tongue 'Kinyarwanda'. For this reason, Iused the language in which the interviewee felt most comfortable.

This measure was also taken because it would be useful in the analysisof data for the records on who and how many participants responded in each language, and this might illuminate the research findings. The target was not the language proficiency but rich information.

Qualitative data collection followed the same practical and ethical procedures as those observed when collecting quantitative data. During the interview, I was taking notes as well as tape-recording, but with the agreement of the informants for being tape-recorded. It was assumed prior to the fieldwork that immediately after a particular interview, I would transcribe that interview. The reason for this was to avoid loss of relevant information in case the transcription was done after a long period of time from the date of interview. However, as all the interviews had to be conducted before students started writing their examinations, which are followed by holidays, and given that the fieldwork was delayed by the release of marks, this precautionary measure was not applied and the transcription exercise was done later after all the interviews had been conducted.

Interviews with the students were held in my office and they lasted about an hour each, given the number of themes to be explored. As for interviews with the Faculty teaching staff, they were conducted in their respective offices, lasting about 15 minutes because they were interviewed on two themes only.

An interview guide on which key information was noted throughout the interview was used, while at the same time a tape recorder was turned on, with the agreement of the informant. Participation in the interviews was voluntary for both students and lecturers as mentioned earlier.

After collecting these data, their analysis followed. Data analysis procedures are detailed in chapter four of this thesis, while the research design is summarised in the table on the next page.

3.8 Summary of the Research Design

Table 4: Brief Overview of the Research Design

Specific Aims	**Research Question**	**Type of Question**	**Source of Information / Participants**	**Methods**
To investigate the context in which the academic background in high school explains differences in performance in modules/courses which B. Ed and non B. Ed students take in common during their first year of teacher education at KIE	How does B. Ed and non B. Ed students' academic background in high school influence their performance in modules which they take in common during their first year of teacher education?	Theoretical & Empirical	Literature Review Students Faculty office Office of the Registrar	Documentation In-depth interviews Documents analysis
To explore B. Ed and non B. Ed students' beliefs that they bring to teacher education and how they affect student engagement	What beliefs do B. Ed and non B. Ed students bring to teacher education and how do these beliefs impact on their performance?	Theoretical & Empirical	Literature Review Students	Documentation In-depth interviews

To explore students' perceptions of the teaching and learning environment of the common modules and investigate how this perception influences student engagement.	How do B. Ed and non B. Ed students perceive the teaching and learning environment of the modules that they take in common, and how does this perception influences student engagement?	Empirical	Students	In-depth interviews
To explore the interactions between B. Ed and non B. Ed students and faculty teaching staff in educationally purposeful activities in the modules studied together.	To what extent do B. Ed and non B. Ed students interact with lecturers, peers, and get involved in educationally purposeful activities in the modules studied togetherin relationwith their performance?	Empirical	Students	Classroom Survey of Student Engagement (CLASSE)
To explore B. Ed and non B. Ed students' engagement in terms of time and effort devoted to learning modules studied in common.	How do B. Ed and non B. Ed students devote time and effort to academic activities related to modules that they study together	Empirical	Students	Classroom Survey of Student Engagement (CLASSE)

	and what are the institutional conditions of student engagement at KIEand how these affect their performance?			
To investigate the extent to which students perceive common modules in emphasising mental activities.	How do B. Ed and non B. Ed students perceive common modules in the context of emphasising cognitive skills of student engagement at KIEwith regard to their performance?	Theoretical & Empirical	Literature Review Students Lecturers	Documentation CLASSE In-depth interviews
To explore lecturers' perceptions of their students' engagement in learning common modules	-	-	Lecturers/HoDs/ Deans	In-depth interviews

CHAPTER FOUR

DATA ANALYSIS PROCEDURES OF STUDENT ENGAGEMENT AT THE CLASSROOM LEVEL

4.1 Introduction

While Chapter Three discussed ways data were collected using both quantitative and qualitative methods and techniques, this chapter deals with the ways data were analysed to generate research findings. As it appears in the next sections, data analysis followed the type of data collected, either quantitative or qualitative with reference to the research instrument that were used to collect them. However, for the coherence and uniqueness of the thesis, a cross-referencing of both qualitative and quantitative data was emphasised while reporting the findings.

Quantitative data were of two categories depending on the method used to collect them. Data gathered by means of the CLASSE were analysed separately from data collected on students' performance by documentation. CLASSE data were entered, captured, and descriptively analysed by means of Statistical Package for Social Scientists (SPSS) software. Tables that compare B. Ed and non B. Ed students' responses to the CLASSE instrument as well as bar charts for important variables were produced to highlight visually the key findings.

Besides CLASSE data, other quantitative data are related to students' performance at two different levels. The first level corresponds to students' results in the national examination done at the end of secondary education. The second level corresponds to their performance in the two modules analysed in this study, EDP 101 and ELA 101. These marks were also entered into the computer using SPSS. Data on students' performance at KIE were made from marks obtained in EDP 101 and ELA 101 courses. Then quantitative and qualitative results were analysed and compared to generate new insights and new knowledge in the field.

4.2 The Analysis of the CLASSE Data

4.2.1 $CLASSE_{STUDENT}$ Data Analysis

4.2.1.1 General Procedure

The capturing of the information gathered by means of the $CLASSE_{STUDENT}$ started with the coding process. Due to the large number of items on the research instrument, it

wasimperative to combine items of the first section (engagement activities) of the $CLASSE_{STUDENT}$ into workable scales in order to have a reasonable number of tables and figures. This combination was made by means of a statistical technique called "factor analysis". In fact, a 2009 comprehensive study acknowledges that:

> It is useful to combine individual items into scales that consist of a limited number of conceptually related questions. Scales reduce the number of variables in analytical models, may have better reliability, and ultimately may convey more meaningful information than individual questions (Korkmaz, Lambert, Shoup, & Williams,2009: 38).

As requested by the software that was used, the codification implied defining all the variables on the research instrument. Variables were nothing else than the CLASSE items. Variables were named, and then labelled with their values for each of the identified modules / courses. This was done for both $CLASSE_{STUDENT}$ and $CLASSE_{FACULTY}$.

After the coding process, data were entered in the data view using numbers as already coded. Then data files as well as their variable views were produced. The two courses could not constitute one file because though items were substantially dealing with the same issues, the module codes had to appear on the outputs for every data file where it was needed; therefore making different items even though labels as well as value labels could be identical.

At this level, it is worth remembering the three research questions to be answered by CLASSE data. These are the fourth, fifth, and sixth research questions of this thesis. The fourth question aims at investigating the extent to which B. Ed and non B. Ed students interact with lecturers and peers in educationally purposeful activities in the modules studied together. The fifth investigates how B. Ed and non B. Ed students devote time and effort to academic activities related to modules that they study together, while the sixth investigates how B. Ed and non B. Ed students perceive common modules in terms of emphasising cognitive skills of student engagement at KIE.

It is within this spirit that, using SPSS, the cross-tabulation of both groups of students' (B. Ed and non B. Ed) responses was made, allowing therefore comparison and analysis of their attitudes for each of the variables. Data obtained were then rewritten in excel tables in order to present relevant data and make the tables more readable.

Where it was needed, CLASSE results were compared to students' performance in the course in which student engagement was being investigated, and even with interview data for the sake of cross-referencing and triangulation. This matching was done in reference to the theme being explored to generate new insights about the core knowledge of student engagement and success at the classroom level.

While analysing the tables of frequencies,$CLASSE_{STUDENT}$'s and $CLASSE_{FACULTY}$results were related. In effect, CLASSE instrument is a pair of survey instruments that enables one to compare engagement practices that Faculty particularly value and perceive important in a designated class with how frequently students report these practices occurring in that class (http://assessment.ua.edu/CLASSE/Overview.htm).

4.2.1.2 Factor Analysis of Engagement Activities in EDP 101 and ELA 101 Courses

In order to reduce the number of items/variables on the CLASSE, variables were analysed in terms of relationship using the factor analysis procedure, variables were analysed in terms of relationship using the factor analysis procedure. Factor analysis was done for engagement activities variables of the first section on the questionnaire, especially the first fourteen first variables, leaving aside the other five variables, simply because the first fourteen items had the same value labels (1: never; 2: 1 or 2 times; 3: 3 to 5 times; and 4 for more than 5 times) and could therefore be analysed in the same way.

This statistical analysis of variables gave five factors for both modules being investigated. It is worth noting however that, though five factors were generated, statisticians agree that when a factor has got only one variable, this variable is normally connected to its preceding variable. This is motivated by the fact that it is not possible to calculate an average of one object. In effect, an average of responses was calculated for the new variable given by factor analysis when entering data in the SPSS data file.

In this logic, five factors generated for ELA 101 became four because the fifth had only one item. In the same way, the fourth and fifth factors for EDP 101 had one item each and so four factorsremained. These factors corresponded to the average variables embedding the common concepts or ideas from which those factors, actually new variables were named.

Each factor comprised correlated variables for which average data were entered in the data file for the factor which was presented as an average variable for that category of variables, and it was labelled with the same value labels. Factors for the first 14 items of engagement activities (with their names in brackets) given by factor analysis and their respective items are presented in the next two sections.

4.2.1.2.1 Factors for Introduction to Educational Psychology (EDP 101)Module

Factor 1: Student engagement/involvement with the course

1. Contributed to a class discussion that occurred during EDP 101 class;
2. Put together ideas or concepts from different courses when completing assignments or during class discussions in EDP 101 class;
3. Asked questions during EDP 101 class;
4. Worked on a paper or a project in EDP 101 class that required integrating ideas or information from various sources;
5. Worked with other students on projects during EDP 101 class;
6. Used an electronic medium (chat group, Internet, instant messaging, etc.) to discuss or complete an assignment in EDP 101 class;
7. Tutored or taught other students in EDP 101 class;

Factor 2: Interactive communication

1. Used email to communicate with the teacher of EDP 101 class;
2. Included diverse perspectives (religion, gender, political beliefs, etc.) in class discussions or writing assignments in EDP 101 class.

Factor 3: Effort devoted to academic tasks

1. Prepared two or more drafts of a paper or assignment in EDP 101 class before submitting it;
2. Came to EDP 101 class without having completed readings or assignments.

Factor 4: Collaborative learning

1. Discussed ideas from EDP 101 with others outside the class (students, family members, etc.);
2. Worked with classmates outside EDP 101 class to prepare class assignments.

4.2.1.2.2 Factors for Introduction to English Language and Linguistics (ELA 101)Module

Factor 1: Student engagement/involvement with the course

1. Asked questions during ELA 101 class;
2. Contributed to a class discussion that occurred during ELA 101 class;
3. Prepared two or more drafts of a paper or assignment in ELA 101 class before submitting it;
4. Tutored or taught other students in ELA 101 class;
5. Worked on a paper or a project in ELA 101 class that required integrating ideas or information from various sources.

Factor 2: Searching for ideas to understand the course

1. Discussed ideas from ELA 101 with others (students, family members, etc.) outside the class;
2. Put together ideas or concepts from different courses when completing assignments or during class discussions in ELA 101 class;
3. Used an electronic medium (chat group, Internet, instant messaging, etc.) to discuss or complete an assignment in ELA101 class.

Factor 3: Collaborative learning

1. Worked with classmates outside ELA 101 class to prepare class assignments;
2. Worked with other students on projects during ELA 101 class;
3. Included diverse perspectives (religion, gender, political beliefs, etc.) in class discussions or writing assignments in ELA 101 class.

Factor 4: Student – teachercommunication and commitment to academic work

1. Used email to communicate with the teacher of ELA 101 class;
2. Came to ELA 101 class without having completed readings or assignments.

4.2.1.3 Grouping of Variables for Topics and Subtopics Generating

While organising data, variables were grouped in order to find meaningful topics and subtopics related tothe research questions to be answered. As mentioned earlier in this thesis,

CLASSE was used to collect data on first year B. Ed and non B. Ed student engagement at KIE. These data answered the questions about the extent to which B. Ed and non B. Ed students interact with lecturers and peers in educationally purposeful activities; how B. Ed and non B. Ed students devote time and effort to these activities; and how they perceive modules that emphasise cognitive skills.

In this regard, items or variables were firstly grouped according to the research question being answered for each of the two modules under investigation. A table showing the nature of educational purposeful activity, the variable code or name, its description as well as the page number on the cross-tabled document that indicates B. Ed and non B. Ed students' attitudes on different variables was produced. This step aimed at helping the analysis and the writing up of the research findings.

4.2.1.4 Reporting $CLASSE_{STUDENT}$ Data

As student engagement was being explored on two categories of students with different education background but studying together both courses dealt with in this study, data were collected from both groups for each variable and for each module/course and were entered using SPSS. Then, both groups were cross-tabulated using the same software in order to compare their responses. Tables were produced. Only relevant and meaningful data for the study were retained and rewritten in Microsoft excel and then in Microsoft word.

The reporting was made for each module. For EDP 101, percentages were reported because in both groups, the number of respondents (N) was sufficient, i.e. above 30. For ELA 101, percentages were calculated only for non B. Ed (N being > 30), while results for B. Ed students were reported in a narrative way because of the small size of the sample. In effect, when the size of the sample is less than 30 (N < 30), we do not calculate percentages which would be statistically meaningless. Or in this case, the sample size of B. Ed students studying ELA 101 was only 4. In addition, statistical comparison between B. Ed and non B. Ed students' responses on each factor of the CLASSE was not run because the data sets were too small, especially for ELA 101 modules.

4.2.2 $CLASSE_{FACULTY}$ Data Analysis

Having been administered to only one lecturer of ELA 101 and three lecturers of EDP 101, $CLASSE_{FACULTY}$ did not undergo factor analysis like $CLASSE_{STUDENT}$. Frequencies were

calculated only for lecturers of EDP 101. Data analysis for these three lecturers was done by simply examining the frequencies while for the English lecturer; data analysis was done by looking simply at the raw data. These data were referred to students' data to examining possible relations between educationally purposeful activities that students reported to happen frequently and those that lecturers reported to be important for students to succeed the course.

4.3 Comparative Analysis of Students' Performance

In this thesis, I used the document analysis method to document on B. Ed and non B. Ed students' performance in the two modules studied in common. This analysis was done at two levels: the level of end of secondary school national examination and at the level of students' performance in both modules under study.

Students' performance in high school was given by their aggregates read in a document entitled *"ABANYESHURI BARANGIJE AMASHURI YISUMBUYE MU MWAKA WA 2008, BEMEREWE KWIGA MURI KIE MU MWAKA W'AMASHURI WA 2010"* (Students who completed secondary school studies in 2008 and who were admitted to KIE for 2010 academic year). This document was produced and sent to KIE by the Rwanda National Examinations Council (RNEC). It indicated the names, sections followed in high school, and the weight aggregate obtained in the national examinations.

For confidentiality purposes, this document was not put in the appendices. Even omitting names was not enough because individuals already knew the code of the school they attended and the numbers that they used when writing the national examinations which appear on it.

This document together with a list of first year students at KIE with their registration numbers allowed the matching of individual students with their registration numbers so that individuals can be identified on the anonymous consolidated mark sheet lists for which student engagement was being explored. The two first documents were found in the office of the academic registrar, while EDP 101 and ELA 101 consolidated mark sheets were found in the students' respective Faculties.

Using SPSS software, three SPSS documents were produced. The first document was about ELA 101 marks for B. Ed and non B. Ed students. The second document was about EDP 101 marks for all B. Ed students and non B. Ed students within their respective sub-groups as it was suggested by the analysis of marks, namely science, languages, humanities, and

secretarial studies backgrounds. The last document was about EDP 101 marks for all B. Ed and non B. Ed students. SPSS software was used for further statistical analyses.

Statistics were produced by exploring SPSS functions. For each of the two modules concerned by the study and for each category of students assessed in those modules, important statistical information was generated. This information included the number of students, the mean, standard deviation, and the range. This information allowed me to quantitatively describe an individual interviewee's performance and to relate it with his or her own testimonies provided during interviews, and with reference to his/her own group performance.

The obtained Statistics allowed positioning a particular student's performance par rapport to his/her group mean while examining the influence of the students' prior knowledge on their performance in first year of teacher education at KIE. This was also valuable for the beliefs they brought to teacher education and perceptions of the teaching and learning context. It was therefore easy to compare individual student's performance or marks obtained in a particular module with the group average. At the same time, group comparison was possible with regard to CLASSE results because all data had to be interconnected for the sake of uniqueness of the thesis and for triangulation purposes.

In order to compare students' performance according to their respective groups, I assumed that both groups which were considered as samples that represent previous and subsequent cohorts of students were independent. I posited that the null hypothesis (H_0) was that the 2 population means were equal ($\mu_1 = \mu_2$) while the alternative hypothesis (H_1) was that the 2 population means were different ($\mu_1 \neq \mu_2$).

To test H_0, there are 2 assumptions. The first assumption is that of equal variances: $\sigma_1^2 = \sigma_2^2$. The second assumption is that of unequal variances: $\sigma_1^2 \neq \sigma_2^2$. To compare the variances, we use F-statistic of Fisher Snedecor given by F = s_1^2 / s_2^2 where s_1^2 and s_2^2 are respectively the sample variances for population 1 and population 2. Then we compare F test with the critical value of F with $n_1 - 1$ numerator and $n_2 - 1$ denominator degree of freedom at a signification level α .Alternatively, we look at the p-value which is the probability of rejecting H_0 when it is true. The larger the value of p, the more likely H_0 is true, i.e. do not reject H_0. Because α is often taken as 0.05 where α is the significance level, the rule of

thumb is that, if p ≥ 0.05, we do not reject H_0 and if p < 0.05, we reject it. In the first assumption where $\sigma_1^2 = \sigma_2^2$, we perform a t-test for equality of variances with $t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s_p^2(1/n_1 + 1/n_2)}}$ where $s_p^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$ is the pooled variance. We note that s_p^2 (pooled variance) is the weighted average of s_1^2 and s_2^2 where s_1^2 the sample variance for population 1 is and s_2^2 is likely defined for population 2. When using statistical software package, we just look at the p-value and then apply the rule of thumb described above.

It is worth mentioning that t tests have been only run for both groups of students' marks in order to answer the first research question aiming to see if these two groups really perform differently in the modules studied together. For other research questions about the extent to which students engage in educationally purposeful activities suggesting thus quantitative data by means of the CLASSE, the aim was not to test the significance of the difference between these two groups. This is why the t test was not run for these data.

4.4 Analysis Procedures of Interviews

4.4.1 Creswell Model of Qualitative Data Analysis

Creswell (2009) urged qualitative researchers to look at qualitative data analysis as an exercise that follows six steps. In this thesis, this way that was proposed is called a "model". According Creswell, qualitative data analysis follows a "research tip" (Creswell, 2009: 184) which is a linear, hierarchical approach consisting practically in interactive steps or levels of analysis from the specific to the general as illustrated in the figure on the next page:

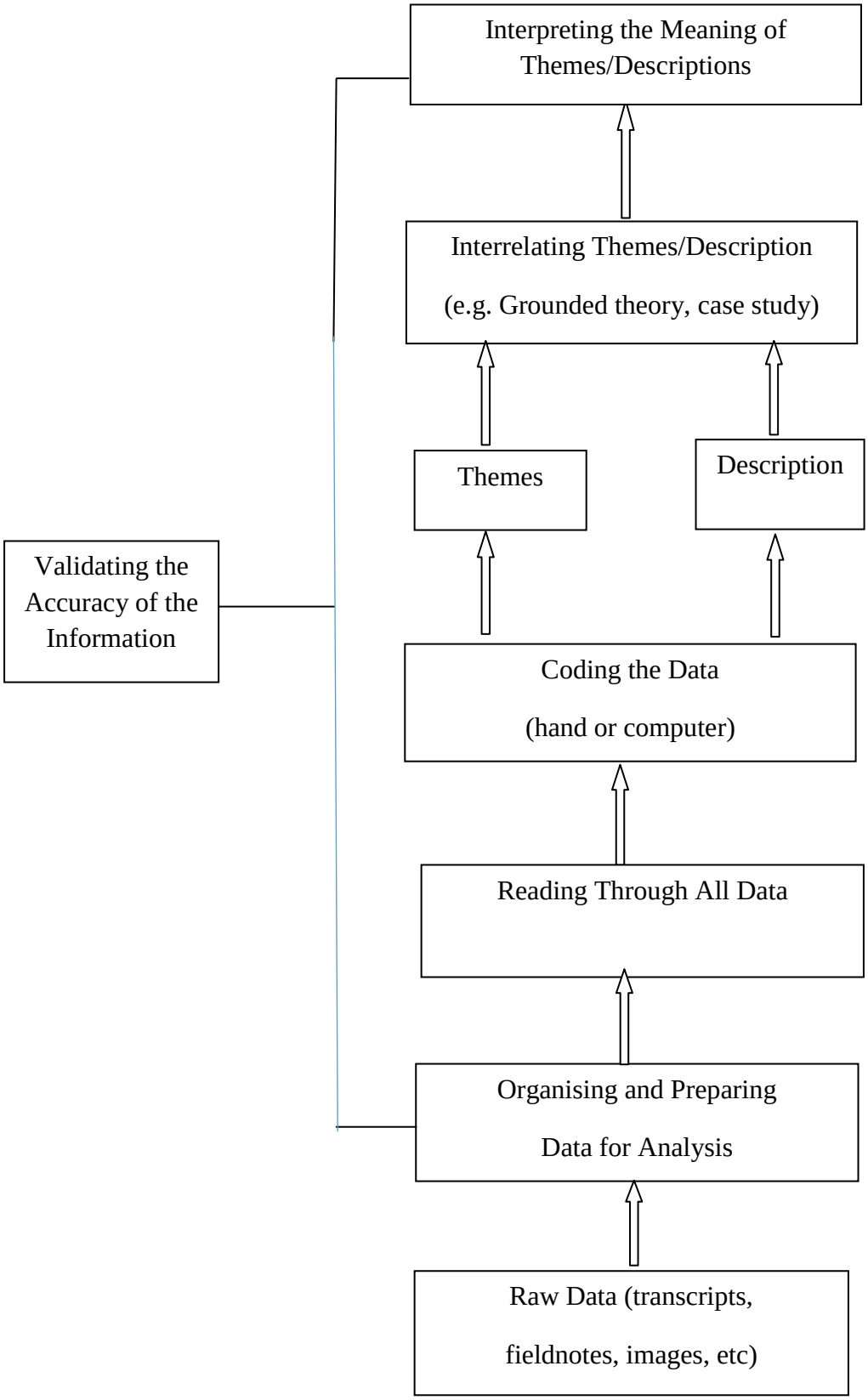

Figure 2: Creswell's model of qualitative data analysis (Creswell, 2009:185)

Creswell's model suggests that once the researcher has got the raw data which may be the transcripts, fieldnotes, images, etc., their analysis follows six steps (Creswell, 2009: 185-190)

that are summarised in the next paragraphs. However, this summary underlines only data collected through interviews because qualitative data in the present study were collected only by means of interviews.

Step 1: Organising and preparing the data for analysis which consists of transcribing interviews and scanning material.

Step 2: Reading through all the data. The researcher reads all the transcripts in order to get a general sense of the information at his/her disposal and reflects on the overall meaning. The researcher tries to get general ideas and may write in the margins the general thoughts of the participants.

Step 3: Beginning of the detailed analysis with a coding process. According to Rossman and Rallis (1998: 171), coding is "the process of organising the material into chunks or segments of text before bringing meaning to information". The coding process involves taking text data, segmenting sentences or paragraphs into categories with a term, which is often used in the language of the participant. This term is called an *in vivo term*.

Step 4: Using the coding process, generate a description and categories or themes for analysis. A description refers to the detailed information and the researcher can generate codes for this description. Then the researcher uses the coding to generate a small number of themes or categories which appear as major findings in qualitative studies and are often used to create headings in the section of the research findings. These themes should reveal multiple perspectives of individuals and be supported by quotations and specific evidence.

Step 5: Advance how the description and themes will be represented in the qualitative narrative. Use a narrative passage to convey the findings of the analysis. This passage can be a discussion of several themes with subthemes, specific illustrations, and quotations or a discussion with interconnecting themes.

Step 6: Making an interpretation or meaning of the data. The researcher tries to find out the lessons learned or the essence of the idea that emerged from the analysis. These lessons could be the researcher's personal interpretation derived from his/her own experience or from a comparison of the findings with information obtained from the literature or theories. Findings may confirm past information, diverge from it, or suggest new questions not yet foreseen earlier in the study.

4.4.2 Analysis of Interviews with Students

During the data collection process, face-to-face interviews with students were tape-recorded with the agreement of the participants. However, when the interviewee was not willing to be tape-recorded, I used the paper and pencil technique. This occurred with only one participant.

The process of analysing qualitatively the data collected by means of interview schedule started with the researcher's finalising the transcription of the raw data, their correct translation into the English language if needed (in most of the cases it was needed), then categorising, coding, etc. The translation of the information has an advantage for the researcher of going through it several times and hence getting familiar with it.

Interviews were often conducted in the Kinyarwanda language which is the mother tongue for both the participants and myself. Sometimes there was a mixture of Kinyarwanda, French, and English languages depending on the interviewee's level of language proficiency. This freedom of verbal expression aimed at permitting participants to express their ideas easily and freely.

Thematic content analysis was used. The information given by participants was carefully analysed with regard to the research questions to be answered. It was grouped by themes. Similarities and differences were highlighted. Comparison of students' testimonies and their respective performances at both levels (metric national examinations' results and marks obtained on the summative assessment of EDP 101 and ELA 101 modules) was made. Both students' individual qualitative and quantitative data were compared to reflect on how B. Ed and non B. Ed student teachers' pre-university academic preparation, their beliefs, and their perceptions of the teaching and learning environment influence their engagement. Lecturers' views were also taken into account as teaching and learning are absolute components of the same reality which is student engagement. Narrative descriptions allowed presenting and reporting the results. These results allowed me to compare the performance of B. Ed students (already prepared for primary school teaching but without a strong background knowledge in English) with the performance of non B. Ed students with a strong background knowledge in English.

In EDP 101 course/module, two files were made. The first file was made of marks of B. Ed students from TTCs. Non B. Ed students were grouped as science (Biology - Chemistry and Mathematics - Physics), social sciences (humanities and secretarial studies) and language

students with regard to the sections followed at high school level. Their marks in this course were entered using SPSS software.

While analysing data collected by means of interviews, individuals' marks obtained in a particular module were compared to the average mark in his/her particular group. This could bring insights in knowing how he/she positioned him/herself in the group class, because the student's performance is linked to his/her involvement in learning. In effect, student's performance or success in the course is an indicator of his/her engagement in learning that particular course.

However, due to some factors that could impact on students' performance like the language of instruction and prerequisites in the course, further analyses were made taking into account those factors and hence making other groups.

In this study, students' testimonies are evidenced for or against by their respective performances which are compared to the average performance within the group class where the participant belongs and with the other group for comparison. The study was only concerned with the performance in both EDP 101 and ELA 101 courses/modules that they took during the first semester of the 2010 academic year in which the research was conducted. The analysis of students' performance was also done with reference to the whole class, i.e. all students (B. Ed and non B. Ed together) to evidence some quantitative data from the CLASSE instrument. The general average performance was thus calculated in both courses for triangulation and validation purposes. It is also worth mentioning that the analysis met challenges.

In fact, this research was quite challenging. The context in which interviews were conducted was likely to make data capturing not easy. The transcription exercise was done at three different levels. The first level consisted of transcribing the interviews once they had been recorded. They were transcribed in their original versions, regardless of the English language in which the report was to be written. At the second level, some interviewees preferred to respond in English but, in most of the cases, it was in very bad English. Thus I was editing the text by writing the transcripts in correct English because the original versions contained many language errors which could confuse the reader. The third level consisted of translating the transcribed interviews into English as it was the language in which the thesis was to be written. The translation was done by myself given that I use all three languages which were

used during the interviews. This process allowed me to get familiar with the data. It is this English version of the interview transcripts that was subjected to data analysis.

As already stipulated, the analysis followed Creswell's model of qualitative data analysis. The first step which consists in organising and preparing the data for analysis was done at the level of the translation and the re-reading of the translated texts to check coherence of ideas. These transcripts were printed and filed separately to facilitate the next steps.

Secondly, I carefully read all the transcripts. This exercise aimed at getting a general sense or meaning of the informationcollected. For each interview, I tried to capture a general idea for every section of the interview protocol. This interview protocol was designed around three sections related to the three research questions to be answered by these interviews. The three research questions were respectively:

- ✓ How does B. Ed and non B. Ed students' academic backgrounds from high school influence their performance in modules which they take in common during their first year of teacher education at KIE?
- ✓ 2. What beliefs do B. Ed and non B. Ed students bring to teacher education and how do these beliefs impact on their performance?
- ✓ 3. How do B. Ed and non B. Ed students perceive the teaching and learning environment of the modules that they take in common, and how does this perception influences their performance?

For the sake of coherence of ideas, each section was dealt with for all the participants before going to the next section, while at the same time noting in the margins general ideas given by the participants. Thereafter, based on the general ideas noted in the margins, key sentences or paragraphs were produced for each transcript and for each section of the interview protocol.

Thirdly, I proceeded by categorising key sentences or paragraphs for each section. They were coded by a term and where possible by an in vivo term. At this level, Tesch (1990: 142-145) provided a useful analysis of the coding process in eight steps as summarised below:

> 1. Get a sense of a whole. The researcher reads the transcripts carefully while noting ideas as they come to mind.

2. Take one interview that may be the most interesting, go through it and ask yourself what it is about. Then write thoughts in the margins.

3. Make a list of all topics after several participants, cluster together similar topics.

4. Go back to data with the list of topics and abbreviate them as codes which are written next to the appropriate segments of the text. This is a preliminary organising scheme.

5. Find the most descriptive words for the topics and turn them into categories. Reduce them by grouping those that relate to each other.

6. Make the final decision on the abbreviation for each category and put them in alphabetical order.

7. Assemble the data material belonging to each category in one place and perform a preliminary analysis.

8. If necessary, recode your existing data.

In the choice of codes, qualitative researchers are encouraged:

> to use codes on topics that readers would expect to find based on past literature and common sense; codes that are surprising and that are not anticipated at the beginning of the study; codes that are unusual, and that are, in and of themselves, of conceptual interest to readers; and finally codes that address a larger theoretical perspective in the research (Creswell, 2009: 186-187).

In the present study however, I used the model described above and mixed it with his own way of organising qualitative data. In fact, the research instrument, which was the interview protocol, was designed in such way that data to be collected were already fitting in a topic or section. Every section of the interview guide embedded the main idea that would be based on finding the corresponding heading or topic and the subsequent questions would generate subtopics.

Therefore, a table was made for each section. The columns indicated the question numbers as they appeared on the interview guide while the rows indicated the pseudonyms of participants written on the transcripts. The general thoughts written in the margins (step 2 in the Creswell model) for every transcript were kept in the appropriate place under each question number for every participant and abbreviations were used if needed. This technique allowed me to go faster for every participant across sections. This table was posted on the wall. The table

provided a quick and clear picture of the participants' views across the sections as well as of their similarities and differences on every question of the interview guide. It was easy to visually get a general view for each question across all the participants.

I had to remember however the sub-questions that emerged from the interview process which, were not written on the interview protocol. Having the general heading (the section), it was now easy to get the sub-headings by matching related terms. This was easy in a study of this kind when it came to comparing two groups' (B. Ed and non B. Ed students) views on the same issues.

4.4.3 Analysing Interviews with Faculty Teaching Staff

Very few Faculty teaching staff members participated in this study. The EDP 101 module was taught by three lecturers while ELA 101 was taught by only one lecturer. Therefore, four interview transcripts were produced. Translation was done where it was needed. Another element which made the analysis easier at this level was the number of themes dealt with. Only two themes were to be explored. Thus, the small number of the transcripts as well as the shortness of the interview protocol made the process of analysis easier. For EDP 101, there were only three lecturers' transcripts and these were directly compared and relevant conclusions were drawn while for ELA 101, there was only one transcript.

4.5 The Reporting of Research Findings

Qualitative data were presented in a narrative way. Quantitative data were presented in tables but also they were sometimes presented graphically in bar charts. Descriptive statistics were used to get the meaning of the CLASSE results. They were limited to percentages of frequencies of students' responses or average on how often or how frequent educationally purposeful activities were occurring in their classes, as the research instrument requested. B. Ed and non B. Ed students' percentages of the frequency to which educationally purposeful activities occurred in their class were compared. The group of students, either B. Ed or non B. Ed, for which a particular activity was more frequent than the other, was thus considered as being more engaged. It was considered as less engaged if the activity was occurring less frequently. However, for B. Ed students in ELA 101 course, it was not possible to use percentages because the number of participants was low ($N < 30$). In effect, there were only four students and therefore percentages would statistically be meaningless. This is the reason

why results were qualitatively reported. On the other hand, inferential statistics were used to compare two groups of students' performances. This concerned the 2008 cohort of mature and school leaver students as well as the 2010 cohort of B. Ed and non B. Ed students' marks obtained in courses studied together at KIE.

The nature of this study was to describe ways B. Ed and non B. Ed students engage in learning EDP 101 and ELA 101 modules at KIE using the CLASSE instrument. This is why these two groups were cross-tabulated. Using SPSS, cross-tabulations of these two categories of students on items investigated on the research instrument or otherwise factors created by the factor analysis technique, percentages and bar charts were produced, and this made the quantitative description of the results possible.

In order to make the tables produced by SPSS more readable, only relevant data in these tables were reproduced in Microsoft Excel to summarise CLASSE results. Then, I made a table that compares B. Ed and non B. Ed students' responses. It comprised three columns. The first column reflected CLASSE items or otherwise factors that were created by the statistical factor analysis technique. The second column reflected B. Ed students. The last column reflected non B. Ed students. The rows for this table showed items or factors on which these above two categories of students had responded.Below these rows for students' results, there were also rows for lecturers' results which crossed out B. Ed and non B. Ed students. Then, I filled in the table by writing in the appropriate place the main idea / result / finding for each category of students and for each item or factor. I also wrote the result / finding for each item in the rows for lecturers.

In drawing this, I sequenced items or factors not with regard to the structure of the research instrument but with regard to subtopics treated when reporting the research findings. This order was adopted in order not to leave behind any single paragraph of data dealt with or ignore any relevant information. This table was produced for both courses/modules dealt with in this study.

This table allowed a clear and quick comparison of B. Ed and non B. Ed students on each educational practice. Using a different colour print, lecturers' reports for each of the items were also written along with students' results for a clear and quick comparison of the $CLASSE_{STUDENT}$ and $CLASSE_{FACULTY}$' s results as suggested by the CLASSE itself.

The kind of table also allowed one to get a general picture of the research findings and facilitated the reader of this thesis to understand data analysis and reporting procedures. However, it is worth noting that for the coherence of the thesis and triangulation purposes, qualitative and quantitative data were reported and analysed together according to the themes being explored.

4.6 Summary of the Chapter

This chapter detailed ways that were followed to analyse data collected from the research field. The analysis was done with regard to the nature of the collected information. Quantitative data gathered using the CLASSE instrument were descriptively analysed taking into account the percentages of the frequencies of responses. Mature and school leaver as well as B. Ed and non B. Ed students' performance in courses studied together were analysed respectively using inferential statistics.

Qualitative data which were collected by means of interviews were analysed thematically and presented in a narrative way. Though various techniques were used to collected relevant data, all the data were interconnected to enhance coherence, uniqueness, validity, and for triangulation purposes.

These analysis procedures led to research findings reported in the next five chapters before the conclusion and recommendations. In this study, the analysis of data, results and interpretation are presented separately. In effect, mixing data analysis procedures and results with interpretations and discussions would make for very long chapters which would create a disequilibrium between chapters.

The following chapter reports on the impact of postsecondary student teachers' backgrounds on their performance in their first year of teacher education at KIE.

CHAPTER FIVE

THE IMPACT OF FIRST YEAR STUDENTS' ACADEMIC BACKGROUND ON THEIR PERFORMANCE IN TEACHER EDUCATION

5.1 Introduction

The process through which I went about analysing data collected by means of interviews, document analysis, and CLASSE for the entire study was described in Chapter Four.This chapter explores the influence of first year students' academic backgrounds on their performance in modules studied together at KIE. It compares first year students with and those without professional preparation in terms of the effect of their academic preparation as an element of engagement on their performance. Resnick (1989) notes that learning is an active and meaning-making process that is influenced by an individual's existing understanding, beliefs, attitudes, and preconceptions which, in a way, are related to academic background.

In a particular way, interviews were used to look into B. Ed and non B. Ed students' perceptions on whether and how their academic background before coming to KIE influenced their performance in the modules that the two groups of students shared. The B. Ed and non B. Ed students' group average performance was statistically compared using t-test.

The results were discussed with regard to the relevant information provided by document analysis. With reference to the influence of the section followed at the high school level on students' performance, it was imperative to examine students' grades in high school leaving examinations and their marks in the KIE modules under investigation. Findings were also discussed in light of other researchers' findings for effective interpretation and advancement of knowledge in the field.

This chapter starts by analysing the performance of first year students for the 2008 academic year. These were mature students (with professional preparation) and school leaver students (without such background). Their results in common courses are likely to bring insight in the understanding of B. Ed and non B. Ed students' performance with similar backgrounds in courses studied together for the 2010 academic year.

5.2 2008 Mature and School Leaver Students' Results in Common Courses

Below is a table that highlights results in common courses for the cohort of 2008.

Table 5: 2008 mature and school leaver students' performance in common courses

	Mature students				**School leaver students**				
Course	**N**	**Mean**	**Std. dev.**	**Range (Min-Max)**	**N**	**Mean**	**Std. dev.**	**Range (Min-Max)**	**P-value**
Psychology	244	62.5	8.4	10 – 85	974	59.6	10.9	0 – 86	< 0.00001*
History	48	56.3	5.9	50 – 73	50	42.6	13.6	0 – 60	< 0.00001*
Geography	59	57.4	8.2	35 – 76	95	52.7	11.8	0 – 72	0.0041
Maths	18	53.9	12.9	16 – 77	135	64.6	10.9	18.7 – 88.5	0.0002
Biology	45	64.1	9	50 – 79	226	67.2	10.9	0 – 89.5	0.0747
English	57	61.8	6.1	48 – 72	181	59.7	7	0 – 73	0.0431
French	19	58.8	7.2	50 – 71	86	55.6	12.6	0 – 77	0.1414

* Unequal variances at the significance level of 5%.

On average, mature students performed better than school leavers in social sciences such as Psychology (mean = 62.5% compared to 59.6%, $p < 0.00001$), History (mean = 56.3% compared to 42.6%, $p < 0.00001$), and Geography (mean = 57.4% compared to 52.7%, $p = 0.0041$). In fact, as primary school teachers, they entered KIE with their teacher identity already formed. They were also more oriented in the field of social sciences than in languages and pure or natural sciences.

Though the average mark for mature students seems to be above that of school leavers in languages, it doesnot seem to be a significant difference between the two groups in French (mean = 58.8% compared to 55.6%, $p = 0.1414$) and mature students performed slightly better than school leavers in English (mean = 61.8% compared to 59.7%, $p = 0.0431$). In fact, mature students strive to overcome gaps and master the language that they will teach.

While mature students performed above school leavers in social sciences and languages, their performance in science seems to be lower than that of school leavers. In effect, they did worse than school leavers in Mathematics (mean = 53.9% compared to 64.6%, $p = 0.0002$) and slightly but not significantly in Biology (mean = 64.1% compared to 67.2%, $p = 0.0747$). This difference is to be attributed to the difference in prerequisites. However, though mature students did not follow sciences in high school, they succeed in these sciences.

The next sections explore B. Ed and non B. Ed students' perceptions of the influence of their academic backgrounds on their performance in the module that they had in common. This is because the literature has shown that perceptions play a pivotal role in the way students approach their learning and how much effort they put in it and, therefore, how it affects their learning and personal development (Hu & Kuh, 2002; Kuh, 2003; Kuh, et al., 2007).

5.3 Participants' Demographics

During interviews and document analysis, the demographic data in relation to participants' characteristics was collected. These characteristics differ from demographic data that was collected through CLASSE in terms of the amount of information to be gathered. In this section, demographic data include students' education status before and during the collection of data for this research.

In this study, the first year students' academic background corresponds to what Prosser and Trigwell (1999: 26) called "students' prior experiences of learning". In this sense, learning implies that teaching takes or has taken place and that teaching and learning experiences at high school constitute students' academic background prior to higher education at KIE. These experiences differ from one stream to another and from one particular student to another. In the Rwandan context, high school corresponds to South African Grade 10 to 12 and is comprised of different streams or sections. Such sections include Mathematics and Physics, Languages, Biology and Chemistry, etc.

Therefore, it can be argued that before entering teacher education at KIE, students have been shaped by the teaching and learning experiences they have had in their respective high school sections. After all, being a B. Ed or a non B. Ed student is determined by one's academic background. The former were trained as professional primary school teachers in Teacher Training College institutions (TTCs) whilst the latter had general training. These had their first experience with the teaching profession at the tertiary level (at KIE).

The effect of academic background on student engagement in teacher education was investigated with the aim of establishing whether these two categories of students perceived their learning experiences prior to KIE as influential or not in their performance in the first year of post-secondary teacher education. In fact, "research links higher levels of engagement in school with improved performance" (Klem & Connell, 2004: 262). This may be the case for the modules shared by both categories of students and in which they have different background knowledge.

The demographic data shows that non B. Ed students were studying in the Faculties of Science, Social Sciences and Business Studies, and Arts and Languages. These students were put in these faculties according to the sections they had followed in high school, without

exception. For instance, if a student had followed languages, he/she was put in the Faculty of Arts and Languages. Out of the ten non B. Ed students who were interviewed, five were in the Faculty of Science; three in Arts and Languages, and two in Social Sciences and Business Studies. The table on the next page shows the ethically recorded participants' characteristics or demographics on which the analysis was done.

When writing up the thesis, some data were removed from the table for ethical considerations. Some of this data include students' names and registration numbers. These names were replaced by letters of the alphabet to protect respondents' identities. The other information which appears in this table and which were taken into account when discussing the results include gender, age, date of interview, the section followed at high school, the aggregate marks obtained at the end of high school leaving national examinations. This aggregate is calculated by the Rwanda Examination Board (REB) for each section. This information also includes the category of student, either B. Ed or non B. Ed, the combination followed at KIE, the marks obtained in EDP 101 or ELA 101 modules by each student interviewed as well as the group average mark obtained in these modules.

Table 6: The overview of the interviewees

Pseudo nym	Gender	Age	Date of interview	Section followed	Aggreg. in Nat. Exam	Average aggreg. in national exam	Category of Student	Comb. at KIE	Resp. at class level	EDP 101 marks	Group Aver. EDP 101	ELA 101 marks	Group aver. ELA 101
A	M	21	25/08/2010	Bio-Chemistry	34	35.5	Non B. Ed	B.P.E	Comb. Repres.	73%	57.3%	-	-
B	M	28	24/08/2010	Languages	41	34.2	Non B. Ed	KEE	Comb. Repres.	56%	57.3%	56%	61.7%
C	M	23	27/08/2010	Math-Physics		26.8	Non B. Ed	PCE	Ord. student	72%	57.3%	-	-
D	F	20	26/08/2010	Humanities	53	41.1	Non B. Ed	GEE	Comb. repres.	58%	57.3%	-	-
E	F	21	26/08/2010	Math-Physics	32	26.8	Non B. Ed	MPE	Ord. student	66%	57.3%	-	-
F	M	24	23/08/2010	Languages	34	34.2	Non B. Ed	SEE	Ord. student	69%	57.3%	68%	61.7%
G	M	23	25/08/2010	Languages		34.2	Non B. Ed	ELE	Ord. student	50%	57.3%	-	-
H	F	22	24/08/2010	Humanities	38	41.1	Non B. Ed	GEE	Ord. student	50%	57.3%	-	-
I	M	22	29/08/2010	Math-Physics	27	26.8	Non B. Ed	MCsE	Ord. student	56%	57.3%	-	-
J	M	23	30/08/2010	Bio-Chem.	38	35.5	Non B. Ed	BCE	Comb. repres.	59%	57.3%	-	-
K	M	23	23/08/2010	TTC		42.7	B. Ed	Entrepr-	Ord.	-	64.8%	-	-

								Ed	student				
L	F	22	24/08/2010	TTC	40	42.7	B. Ed	Maths-Ed	Ord. student	77%	64.8%	-	-
M	M	22	24/08/2010	TTC	44	42.7	B. Ed	Maths-Ed	Ord. student	59%	64.8%	-	-
N	M	24	02/09/2010	TTC	46	42.7	B. Ed	FED-Eng	Ord. student	72%	64.8%	79%	70.1%
O	F	23	02/09/2010	TTC	42	42.7	B. Ed	FED-Eng	Comb. repres.	65%	64.8%	77%	70.1%

Abbreviations used in this table

B. Ed : Bachelor of Education

BCE : Biology - Chemistry - Education

BPE : Biology - Physical Sport - Education

Comb. at KIE: Combination followed at Kigali Institute of Education

Comb. repres.: Combination representative

EDP 101: Introduction to Educational Psychology

ELA 101: Introduction to English Language and Linguistics

ELE : English - Literature in English-Education

Entrepre-Educ.: Entrepreneurship-Education

FED - Educ.: Foundation of Education – English

GEE : Geography - Economics - Education

GEE : Geography - Economics - Education

H.S : High School

KEE : Kinyarwanda - English - Education

Maths - Educ. : Mathematics - Education

MCsE : Mathematics - Computer Science - Education

MPE : Mathematics - Physics - Education

Non B. Ed: Non Bachelor of Education

PCE : Physics - Chemistry – Education

Resp. : Responsibility

SEE : Swahili - English - Education

TTC : Teacher Training College Education

The Rwanda National Examinations Council assesses secondary school finalists. In order to generate points to be used in the selection of candidates to higher institutions of learning, the value obtained by a candidate in each subject of his or her option or combination is multiplied by its corresponding subject weight, then the results for all the subjects examined are added together and the total will constitute the points upon which selection will be based. For example, if a candidate doing physics, chemistry and mathematics has obtained A grade in Maths, A in Physics, and S in General Paper, then that candidate's weighted aggregate will be (3 x 6) + (3 x 6) + (3 x 6) + (1 x 1) = 55.

It should be noted that the combination that participants follow at KIE includes at least two major subjects studied at high school. The section of "humanities" at high school in the Rwandan context includes Geography, History, and Economics as major subjects. The section column indicates the sections followed by the respondents at high school, which refers, therefore, to their academic background prior to KIE. This background can be categorised as science (Mathematics - Physics, and Biology - Chemistry), arts and languages, social sciences and business studies or humanities and teacher training background. The combinations followed by the respondents at KIE are in line with their respective academic background, which indicates a strong relationship between the section followed and the area of specialisation at KIE. Therefore it was easy for the researcher to relate the interviewees' respective academic background prior to KIE with their perceptions on the influence of this background on their performance, in order to answer the first research question of the thesis.

5.4 Students' Perceptions of the Influence of their Academic Background on their Performance in the Introduction to Educational Psychology (EDP 101) Course

This study assumes that prior academic background has an impact on students' performance in their subsequent studies especially when the subject matter being learnt is similar or related to the previous one (Eskew & Faley, 1988). Given that "research has shown support for the relationship between previous academic performance and university performance" (McKinzie& Schweitzer, 2001: 22), I was interested in finding out how students perceived the influence of their education background on their academic performance in their first year of teacher education in a developing country.

A question was asked to both B. Ed and non B. Ed students on the role played by their respective high school sections on their performance in the EDP 101 course. They were also asked to explain how these sections had motivated or de-motivated them in learning this course.

5.4.1 B. Ed Students' Perceptions of their Education Background on Performance in EDP 101

5.4.1.1 The Impact of Professional Preparation on Performance in a Psychology Course

The influence of TTC on performance in EDP 101 was found by B. Ed students to be obvious. They pointed out a direct relationship between their teacher training college experience and their performance in the EDP 101 course. In effect, the mission of TTCs is to educate primary school teachers and psychology is a major course in these Colleges. The students consider the EDP 101 module as a straightforward continuation of the psychology subject that they had at high school.

They found that most of the topics covered in the TTC were also taught in EDP 101. This was likely to have a direct and positive influence on their performance in EDP 101. The participants' answers to various questions provide further information on this issue as discussed in the following section.

B. Ed students interviewed said that EDP 101 module was a kind of revision and continuation of the materials they had learnt in TTC. Therefore, they pointed out that they had enough prerequisites in psychology to enable them to learn the EDP 101 module easily. They also believed that these prerequisites enhanced their achievement despite the language challenge that remained an obstacle.

These students' remarks can be explained by the fact that in TTC, they are taught educational psychology, pedagogy, and methodology to be able to teach in primary schools. All the five B. Ed students interviewed on the possible influence of their prior knowledge of psychology on their performance in the EDP 101 course consider their performance to be greatly influenced by their prior knowledge of psychology from TTC. For them, the EDP 101 module was, to some extent, a kind of revision.

When he was asked whether what he had studied in TTC had any influence on his performance in EDP 101, Mr. K answered:

> Definitely. My field of study at high school has greatly influenced my performance in EDP 101. Most of the topics that we learned in TTC are also taught in EDP 101. Our role here is just to translate from French into English. Otherwise, we already had knowledge in it [psychology]. (Interview: August 23, 2010)

It is unfortunate, however, that I could not know the marks that this student had obtained in this course because the student did not do exam. This mark could have provided more insights into this student's remarks.

On his part, Mr. M put it this way:

> There is no change in terms of content. That is what I have realised. Moreover, in high school, I mean in TTC, they go deeper the content than here (KIE). The difference is that here [KIE] a student does his own 'research' on the content covered in class while facing the English language problem at the same time. At high school, the language of instruction was French and here it has changed to English. (Interview: August 24, 2010)

In the same line of thought, Ms L, a Mathematics-Education combination student expressed herself on the influence that TTC has had on her performance in EDP 101 module in these terms:

> Yes, the fact that I did TTC in my high school has influenced my performance in EDP 101 because some of the contents we studied in EDP 101 here at KIE were similar to the contents we had studied in our senior 4, senior 5, and senior 6 in TTC. I was revising what I had learned in high school, and this is why my performance was very good in this course. Even if some of the course contents were new for me and the high school contents had to be translated from French into English, I performed well. I think that this performance would be worse if I was studying new contents for the first time. (Interview: August 24, 2010)

Ms L's declaration of having performed very well is evidenced by the marks she obtained. She scored 77%, which is higher than the average mark of all B. Ed students (65.1%). Ms L had an aggregate of 40 at the completion of TTC. This aggregate is the lowest of all aggregates of the candidates admitted to KIE, with the highest being 53. This seems to contradict the finding that

performance in high school is likely to be related to performance in the first year of College or University. This student's low aggregate could be attributed to the fact that TTC graduates were assessed on many other subjects on top of professional papers while other sections were assessed only on their majors though other factors that influence the student's success or failure at a particular time could have intervened. These subjects include Mathematics, Biology, History, Geography, English, and French. The reason is that TTC graduates are professionals who are supposed to teach all these subjects at primary school. Therefore, being professionally prepared and intrinsically motivated to learning for the career would have influenced Ms L's scores at KIE.

Professional preparation prior to KIE is likely to have a positive impact on students' performance. B. Ed students perceived their high school as having greatly impacted on their performance because they were already prepared for the course. Their being trained in the education field made them more familiar with higher education in the education area. In addition, they had had teaching experience in primary schools throughout their teacher education programme at high school. Participants acknowledged a direct impact of their previous training in determining their performance in the EDP 101 course as high school student teachers.

In effect, research has shown that prior knowledge of psychology is positively associated with course achievement at higher level (Ross & Byron, 2004). The impact of prior knowledge of psychology on students' performance in a psychology course offered in first year of college or university is similar to Smith's (1968) findings according to which a high school exposure to accounting positively influences performance in college accounting.

5.4.1.2 Prior Knowledge: Motivational Factor for Subsequent Learning

Prior knowledge acts as a motivator for the subsequent learning, especially when there are similarities between the two.B. Ed students believe that their prerequisites in psychology studied at high school acted as motivational forces to studying this course at university, as revealed by some interviewees. When asked about how their field of study at high school had motivated their learning of EDP 101 at KIE, Ms L answered:

> I am motivated to study EDP 101 at KIE because I have found that it adds knowledge on what I studied from my high school. I have reached the level where I can put into practice what I have learned and it will help me throughout my life. (Interview: August 24, 2010)

Having been prepared earlier for the teaching profession, B. Ed students were motivated to study psychology which, ultimately, will be needed in their professional life as teachers. In this regard, Mr. K said that he was motivated because he knew that psychology would help him in his life and it directly concerned his own personality. He said: "… When you study psychology you become part of it and you realise that it is about you" (Interview: August 23, 2010).

5.4.1.3Effect of Pride of Upgrading within the Professionon Performance

Another motivating factor that brought B. Ed students to learn EDP 101 emerged from their need to upgrade in their teaching career so as to be qualified to teach at a higher level (high school). B. Ed students did not want to waste the chance of studying at university, an opportunity which they had not expected before as they had been trained to be primary school teachers. When asked whether and how their field of study in high school had motivated or de-motivated them in learning EDP 101, all interviewed B. Ed students answered that they were motivated to study the course because they were pursuing the training they had started earlier. Knowing that they would need psychology in their teaching career, they were ipso facto motivated to learn it.

The B. Ed students did not only relate psychology to their professional life but they also found in EDP 101 some educational practices (such as forms of assessment) similar to those they studied in TTC, which contributed to their motivation to study this course. In a particular way, Mr. M, who had got a chance to teach for one year before coming to KIE, considered himself as mature and this maturity led him to commit himself to studying hard. This earned him a better mark than that of his counterparts without experience in teaching. He argues that:

> When a person trains as a primary teacher and goes to work, he or she gains maturity. When he or she comes back to school he or she is mature enough. His or her thinking is above that of a fresh school leaver without any experience. This is what makes one more committed, even if he/she had not studied so many things in high school. He or she can decide to work hard and achieve it

because he/she knows what to do, especially because of his/her rich experience with life. (Interview: August 24, 2010)

Mr. M who had performed above the average aggregate (42.7) at the completion of TTC did not perform very well in EDP 101. He scored 59%, which was below the average mark (65.1%) for all B. Ed students in this course, even though he claimed to have worked hard. Working hard was also an aspect that was pointed out by the lecturers whom I interviewed on how they perceived B. Ed and non B. Ed students in terms of being committed to the academic work. Most of these lecturers said that B. Ed students seem to be more committed than non B. Ed students.

It can be concluded that first year B. Ed students consider training in TTC to have had a great positive impact on their performance in the EDP 101 course as a result of the prerequisites they had gained there (in TTCs). Their background knowledge in psychology and in education in general facilitated their learning of psychology which led to high performance. This finding is consistent with that of Ausubel (1978) cited in Prosser and Trigwell (1999); Eskew and Faley (1988) as well as in Smith (1968) even though a long period of time (two years) separated the students' completion of high school and their entry into KIE.

In effect, participants in this study (the 2008 matriculants) were the first to be admitted to KIE on the basis of their grades in the national high school leaving examinations. They were admitted to KIE in 2010. Before this year, TTC graduates were obliged to teach for at least two years before they could be admitted to KIE as mature students on the basis of their performance on an entry exam prepared and administered by KIE. However, even though they were directly admitted to KIE before they could teach, they had to wait for two years (2008 to 2010). This is because national examinations results take long to process and publish and all the high school leavers had to undergo national youth solidarity training *(ITORERO RY'IGIHUGU).*

5.4.1.4B. Ed Students' Challenge in Learning Psychology in English

B. Ed students were challenged by English which became the medium of instruction at KIE.Despite the relationship between the high school psychology subject and the EDP 101 module, the students said to have encountered only one problem: the medium of instruction. In

fact, psychology at high school was taught in French while EDP 101 was taught in the medium of English and the students' knowledge of this language is poor. Investigating their claim further, I noticed that this was because English was taught only two periods a week at high school. In order to address this challenge, these students used to translate their high school course content (in psychology) from French into English and compare it to what they were learning in EDP 101.

5.4.2 Students with Language Background's Perceptions on Performance in EDP 101

The students who are registered in the Faculty of Arts and Languages at KIE studied languages at high school. Participants in this category pointed out that their high school section had positively influenced their performance in EDP 101. They explained that this is because English, which is a medium of instruction in higher learning institutions in Rwanda, was one of their major subjects at high school. Therefore, learning EDP 101 in the medium of English was not a challenge for them, contrary to the TTC graduates. The familiarity with the medium of instruction enabled them to follow and understand the lecturer more easily, read and understand hand-outs, exams, and eventually write their answers to exam questions correctly. This is what Mr. G studying the English - Literature - Education (ELE) combination highlighted:

> […] My high school section helped me understand EDP 101 because it was taught in English, the language which I did at high school as a major subject. I could express myself easily in English even though I sometimes can run short ideas. My expression in English is good and you know your performance depends on the way you have put down your answers. So in reality, even though I encountered new and complicated terms in the area of psychology, which was new to me, the most important thing which has helped me is that I could read and try to understand by myself. I have never asked help from anybody else (Interview: August 25, 2010).

The mastery of the medium of instruction by the learner is very important in the learning process. In effect, the process of teaching and learning is mainly a matter of communication between the teacher and the learners. This didactic communication is only effective and efficient if both the teacher and learners understand each other. Since teaching is facilitating learning, the channel of communication carrying the content (the medium of instruction in this case) needs to be mastered by the three key elements of the didactic triangle (the teacher, the content, and the learners). Then it will effectively serve as a liaison for these three elements.

However, despite the above student claiming to have understood the EDP 101 course due to his familiarity with English, his performance was poor. While the highest mark in his group (non B. Ed students) was 89% with the group average being 60.8%, Mr. G scored only 47.5%, which is below the pass mark and further below the average mark of his group. This mark is also below the average mark of students with language background (58.7%). His failure could be attributed, among other factors of student success or failure, to his level of intellectual ability. It can be argued therefore, that familiarity with the medium of instruction (English) had very little impact on Mr. G's performance in spite of him claiming otherwise. His name was not on the list of candidates admitted to KIE by the RNEC which indicates the weight aggregates for each so as to know how he performed in the national high school leaving examinations. This information could have been a good indicator of his current performance at KIE in EDP 101.

Like Mr. G, Mr. B, who is studying in the Kinyarwanda - English - Education (KEE) combination, considers the impact of languages studied in high school on his performance to be obvious. When the lecturer was delivering the course material in English, he could easily follow the lecturer and understand.He said:

> The section (languages) that I did at high school helped me to understand what the lecturer was saying. I could even read the exam question paper and understand what I was asked to do. It is known that when a student understands the question, he/she will answer it correctly. (Interview: August 24, 2010)

Though the above student (Mr. B) stated that English language had positively influenced his performance in EDP 101, his actual performance in this course was not high. He scored only 56% which is less than the average mark of all non B. Ed students (60.8%) and that of students with a language background (58.7%). In addition, his aggregate in the national high school leaving examination was not good (31). The aggregate of the candidates with language background who were admitted to KIE was between 49 and 31. This implies that Mr. B was the least brilliant student in the group of students with a language background. It can be concluded therefore, that, all things being equal, a student who performs badly in high school is likely to perform badly in his first year of college in spite of them being relatively comfortable with the mediums of instruction.

Furthermore, students' performance depends upon their motivation to learn which enhances their engagement. On the issue of whether he was motivated to be trained for the teaching profession, Mr. B replied that he was motivated but he would rather do other things than teaching after graduating from KIE. This remark reveals his lack of intrinsic motivation for the teaching career. While motivation is fundamentally important in undertaking a subject (Prosser & Trigwell, 1999), Mr. B's lack of motivation could be one of the factors for his poor performance.

Some interviewees pointed out that they were motivated to learn EDP 101 not only because they were conversant with the medium of instruction but also because they found the course interesting. Despite his poor performance, Mr. B stated that: "I was personally motivated when I was learning EDP 101. Due to my English, I was motivated because I could follow and understand what the lecturer was saying" (Interview: August 24, 2010). He also said that he was motivated because he found psychology very interesting and it touched his personal life. As said above however, his motivation was rather extrinsic.

Mr. F who is studying in the Swahili - English - Education (SEE) combination added that when you are conversant with the language in which you are taught, "you understand more quickly and better" (Interview: August 23, 2010). Indeed, the mastery of the medium of instruction is a necessary but not sufficient condition for a student's performance in a particular course. The cases of Mr. G and Mr. B exemplify this.

The interest in the profession one is trained for is another factor in determining students' performance. Therefore, good performance in teacher education cannot be attributed solely to the mastery of the medium of instruction and to the student's own intellectual capabilities. His or her self-determination to learning for the teaching career is also important. Mr. F had been admitted to KIE with a weight aggregate of 34 which was close to the average aggregate of the language students group in the national examinations (34.2); this shows that he was a good student. His performance in the EDP 101 course (69%) is higher than the average mark of non B. Ed students (60.8%) and is higher than the average mark of his colleagues who have a language background, which is 58.7%. This indicates that Mr. F entered KIE with good grades and he kept his performance high in this course as well. When I asked him if he had ever been bored when studying due to the idea that he was meant to be a teacher, he stated:

> No. I don't get bored because you must firstly focus on your career in the future. You must fight to get there and you must make sure that you get there. You must also be aware of the fact that in order to get there, there is only one way to go. If the way is too tough, you try other ways, and you force yourself to get there. (Interview: August 23, 2010)

This student does not get bored because he is goal oriented. One can assume that this student's self-determination to be trained for the teaching profession led to a good performance in a teacher preparation module (EDP 101). Nevertheless, the above student developed interest in the teaching profession after entering teacher education at KIE. He pointed out that he was previously uninterested in the career because a teacher'ssalary is very low. However, he was later convinced that teaching is not mainly about money; he came to learn that the teacher's knowledge is up to date and, therefore, he or she can even do some other income generating activities in parallel with teaching. This change of mind can be attributed to the role played by education related courses that are offered in the teacher education programme. As a result, the student became self-determined. Self-determination in learning could be linked to Self-Regulated-Learning (SRL), which is a form of engagement by which students invest deliberate effort to deepen the course material while controlling concentration, motivation, and effort (Corno & Mandinach, 1983), thus leading to good performance.

English is considered by first year students with language background to have a considerable impact on their performance in a course in which, however, they didnot have any prerequisite. By them being able to follow lectures easily, read and understand lecturers' notes quickly, they found their strong knowledge of English to positively influence their performance in this course, in spite of some of them not performing well. This is likely to influence student engagement.

There is much literature (Kuh et al., 2005; Kuh et al., 2007) arguing that student engagement implies effort and energy that students spend on educationally purposeful activities and, consequently, enhances performance. Not doing so for some courses leads to poor academic performance. Things become even worse for professional courses like EDP 101. As one lecturer (Mr. X) puts it, non B. Ed students themselves acknowledge that they neglect education courses. They take these courses to be difficult and not worth spending time on. Instead, they focus on

courses in their respective areas of specialisation. Mr. G, a student in the English - Literature in English - Education combination confirms this remark:

> I was spending most of my time studying literature which is a component of my combination. Thus, it is like I had three courses which seemed to be difficult and I had to emphasise on them. Therefore, if a problem occurred, it is not because I did not have enough time to study, no. Rather, it would be because I entered a system with which I was not familiar. It was like that. (Interview: August 25, 2010)

This student concentrated effort in learning language courses putting aside EDP 101, which however is a professional course, by spending most of his time studying literature. As a result, he failed the course with 47.5% while he had estimated it to be easy. Thus, not devoting time to learning a particular course equals lack of engagement. Underestimating the real value of the course to be learnt decreases the learner's concentration and engagement with it, which is likely to lead to poor academic performance. This finding emphasises the role of time and effort devoted to learning as important factors of student engagement and success. Conversely, during the interviews, Mr. G claimed to have high interest in the teaching profession. His strong knowledge of the medium of instruction (English) did not positively influence his performance. But in general, the impact of the mastery of the medium of instruction on performance will be considerable if interest, motivation, and engagement with the course are present.

During the interviews with students, it was found that all pointed out a positive influence of their good command of English on performance in a psychology course because it was the medium of instruction. They all acknowledged its role in following lectures and understanding taught materials more easily. However, of the three students whom I interviewed, two performed poorly. Furthermore, the average performance of all students with English backgrounds was not good, as it was 58.7%. These findings suggest that these students' academic background had very little influence on their performance in a professional course. Nevertheless, the role of other factors in their performance should not be underestimated. Thus, a good command of the medium of instruction may not necessarily have influenced student engagement, at least in the case of the student participants in this research.

5.4.3 Perceptions of the Students with the Humanities Background

Students with the humanities background had 2 periods of psychology each week only in their senior four. This means that they had some knowledge in the field of psychology. This led them to confirm a positive influence of their high school section on their performance in EDP 101. Ms Dand Ms H considered their performance in the EDP 101 course to be influenced by the little knowledge they had about psychology before coming to KIE. Ms D said that she was motivated to study the course because psychology is important for teachers. She said:

> We have also learned a bit of psychology. This psychology which I have learned there [at high school] has helped me to go deeper in educational psychology here at KIE. This is because the psychology that I learned at high school served a basis. (Interview: August 26, 2010)

I went further investigating Ms D's performance both in national high school leaving examinations and in the EDP 101 course at KIE. It was noticed that Ms D was the candidate with the highest aggregate (53) among the students from her section who were admitted to KIE. Therefore, it can be concluded that she was the best candidate in her stream. Nevertheless, her performance in EDP 101 was 58%, which is below the average mark for the students in this stream (59.8%). Compared to all non B. Ed students, her average mark was below that of all non B. Ed students which is 60.8%.

Ms H also stated that her high school influenced her performance in EDP 101. She said: "The fact that I did humanities at high school helped me. I learnt psychology and it was my favourite subject. When I arrived here at KIE, I encountered it again. So I felt motivated and this is why I performed well this course" (Interview: August 24, 2010). She stated that she could quickly understand its content because she had some knowledge of psychology. While she pretended to have easily understood the course material, she scored only 50% in EDP 101, while the average mark of students with a humanities background was 59.8%. In addition, her aggregate in the national high school leaving examinations was 38, whilst the average aggregate for her group was 41.1. She was the one with the lowest aggregate among the students who were admitted to KIE from the humanities section. Therefore, this student performed poorly both at high school and in the EDP 101 course at KIE.

Individual performance depends not only on the prior knowledge but also on the individual and intellectual capabilities, their beliefs and environmental factors, among other factors. Ms D and Ms H, both students with almost the same prerequisites in psychology for having done the humanities section, each show similarities between the high school and EDP 101 performance and their motivation for studying this course. Both students claimed to be motivated to study the EDP 101 course. Ms D said she was extrinsically motivated while Ms H claimed to be intrinsically motivated. However, their marks in this course did not correspond to their remarks. It can be argued, therefore, that weak students are satisfied with a pass mark while strong students always set high goals for themselves not only at the tertiary level, but also at lower levels of education. In fact, the same difference in these students' high school performance continues to be observed in their performance in the EDP 101 course, at the first year of university.

Compared to those who majored in languages at high school, the students from humanities performed worse. This means that the little psychology they learnt in senior 4 had very little or no influence on their performance in psychology at KIE. The students' limited knowledge of the medium of instruction may have been one factor for their poor performance in this course.

B. Ed and non B. Ed students with a humanities background have different prerequisites in psychology. These may lead to different levels of engagement and thus in performance. The mastery of the medium of instruction seems not to make a difference because, as it has been shown earlier, it did not positively impact on the performance of the students with a language background.

5.4.4 Perceptions of Students with a Science Background

It was noticed that all students interviewed from education, humanities, and languages backgrounds acknowledged the influence of their high school studies on their performance in EDP 101. In the contrary, Students with the science background consider their performance independent of their high school study experiences. The exception is the two students who had done Biology and one for whom the influence was limited to the hardworking habit that sciences exposed them to.

More specifically, students from Mathematics and Physics background categorically denied the existence of any influence on their performance by their high school study experiences. Here is what Ms E had to say: "The fact that we studied Mathematics and Physics in high school has no impact on psychology that we study here" (Interview: August 26, 2010). Her performance in the national high school leaving examinations (32) shows that she was a good student as she scored higher than the average aggregate of the students who had Mathematics and Physics as major subjects at high school, which aggregate is 26.8. Her performance in EDP 101 (66%) was also higher than both the average mark of non B. Ed students (60.8%) and the average mark of science students taking the EDP 101 course which was 61.7%. This student scored quite well in a teacher preparation module despite her reluctance to become a teacher. This may be due to the fact that she probably wanted to go further in her studies, up to the postgraduate level. This can be noticed in the following extract from the interview that I had with her:

Researcher: Did your Mathematics and Physics high school background motivate you in your studying of EDP 101?

Student: It never motivated me in studying of this module.

Researcher: When you were still at high school, what image did you have of the teaching profession in general?

Student: I considered it as a good profession because we had good teachers; I did not have any problem with it.

Researcher: When you looked at the way teachers lived in general, did you think of being a teacher?

Student: No, I never wished to become a teacher.

Researcher: Why?

Student: It is clear for everybody that teachers are poor, have to travel a long distance to and from schools, and earn very little money. In fact, teachers' life is all problematic.

Researcher: How did you feel about being sent to study at KIE given that you knew very well that KIE's mission is to train teachers?

Student: I felt unhappy because, according to me, to study education is not good at all. But later, I ended up by liking it because I was told that graduating from KIE does not necessarily imply to become a teacher.

Researcher: Can you tell me more about why you felt unhappy when you were sent to study at KIE?

Student: It is because teachers earn less compared to people in other fields. How can two people who went to high school together and spent the same number of years at university end up getting very different salaries? This is really a problem when I think of being a teacher. This is the reason why I felt unhappy when I learnt that I had to study education at university.

This student has a negative image of the teaching profession. This negative attitude is a result of the teachers' poor living conditions mostly due to low salaries. However, Ms E says she is committed to working hard in order to complete her programme with a good grade so that she can further her studies at the postgraduate level.In effect, when askedwhat she will do after graduating from KIE, she said that she wished to continue her studies, get higher degrees not in education, but in technology. This self-commitment to performing higher could explain her good performance in a teaching preparation course (EDP 101).

Contrary to Ms E, Mr. C, a Physics - Chemistry - Education student, who had also done Mathematics and Physics in high school, pointed out that sciences had had an indirect influence on his performance. He stated: "Normally, when you have done science, you are able to adapt more easily to courses in various fields. This may have helped to perform well this module" (Interview: August 26, 2010). In actual fact, Mr. C got a distinction (72%) in the EDP 101 course.

In the present study, Mr. C's claim that science background helps in coping with courses in various fields is evidenced by the fact that the average mark in EDP 101 science students' was 61.7%. This mark is above the average mark of students with the language background (59.7%) in spite of these being more conversant with the medium of instruction (English). The mark is also above the average mark of students with the humanities background (59.8%) in spite of these having some knowledge of psychology from their senior 4. Finally, it was slightly higher

than the average mark of students from secretarial studies which was 61.4%. Thus, science students performed higher than all other non B. Ed students.

It can be argued, therefore, that the high school learning experiences of science students generally helped them cope more easily with courses in other fields of study at the tertiary level. This can be attributed to the fact that science subjects challenge students to work hard and this may result in a strong study habit, which is favourable for student engagement. This is likely to increase performance. Indeed, hard work in order to meet high standards and self-determination to score high increase the level of engagement with the course. This is what may have led science students to perform better than other non B. Ed students. In fact, students in the field of science were used to high expectations from high school and this culture empowers them to deal with new situations. This can be evidenced by Mr. I's remarks. He is also from Mathematics and Physics background and he noted that sciences have prepared him to work hard; which enabled him to cope with the EDP 101 course. He stated:

> The Mathematics and Physics subjects that I did at high school required more effort to learn. I encountered psychology for the first time here at KIE. So, what I did was to transfer my efforts [the habit of working hard] to the study of EDP 101 which is more about the ability to express oneself; it needs a lot of talking. (Interview: August 29, 2010)

Investigating his performance further, I realised that Mr I had got an aggregate of 27 in the national examinations, which was nearly equal to the average aggregate of his section (26.8). Therefore, he was a fairly good student. In the EDP 101 course, he got 56%, which is lower than the average mark of science students. His relatively poor performance in an education course could be linked to his lack of motivation to become a teacher. In fact, he pointed out that he was unhappy to hear that he had to pursue higher education at KIE because his initial aim was to be an engineer.

Similarly, Mr. J from a Biology and Chemistry background asserted that he had planned to become a medical doctor. When asked whether studying in order to become a teacher motivates him to engage fully in the learning process, he said: "Though I study education at KIE, I don't plan to be a teacher" (Interview: August 28, 2010). For him, it was thus unfortunate that he found himself enrolled in teacher education. Students like this one are not academically and socially

integrated within KIE and lack the psychological engagement which is the sense of belonging to the institutional community (Kuh et al., 2007).

According to Kuh et al. (2007), academic integration refers to both satisfactory compliance with explicit norms and normative academic values of the institution. As for the social integration, it "represents the extent to which a student finds the institution's social environment to be congenial with his or her preferences, which are shaped by the student's background, values, and aspirations" (Kuh et al., 2007: 14). Therefore, students who willingly choose KIE and whose background and aspirations are coherent with the institution's mission are socially integrated and engaged in learning courses of the teacher education programme.

To learn a professional preparation course whilst the learner is against the related profession may be a source of a motivational conflict. The student needs to succeed the course for his progress to the next level and, at the same time; he/she hates the profession for which the course prepares. Students experiencing this situation cannot be fully involved in learning the course due to this internal conflict. Student engagement is negatively affected and, consequently, the performance will be low.

In this study, students I and J do not aspire to be teachers and thus did not perform well in a teacher preparation course. There is also a relationship between their performance at high school and their performance in this course as evidenced by Mr. I and Mr. J's performance in EDP 101. They scored 56% and 59% respectively which are below the average mark of their group (non B. Ed students) in this module. Mr. I's aggregate in the national examinations was 27 when the highest aggregate was 44 in his section and the lowest was 24. Mr. J had a very good aggregate (38) while the highest aggregate in his group was 39 and the lowest was 32. In fact, students who perform poorly at high school are likely to perform poorly in their first year of tertiary education and those with good performance are likely to perform well at this level.

Motivation is an important engine for an effective learning leading to good performance. Both intrinsic and extrinsic types of motivation play a pivotal role in determining the student's level of engagement with the course and improving performance. Mr. C, a student in the Mathematics - Physics - Education combination did not want to be a teacher when he was still at high school but thereafter, through interactions with colleagues who had done primary teacher education, he

became interested in the teaching profession. These colleagues told him that psychology was a very interesting course, and he ended up liking it. Mr. C noted: "I was feeling a big loss for not having done psychology. This aroused my interest in and encouraged me to study psychology" (Interview: August 27, 2010). This student even got a distinction in the EDP 101 course (72%).

Besides students from a Mathematics and Physics background, those with a Biology and Chemistry background also consider EDP 101 to have some links with their previous course contents because they found some biology notions and concepts in it. However, the students pointed out that these notions and concepts had a very little influence on their performance in EDP 101. Mr. J said: "The genetics I learned at high school helped me to understand biological aspects addressed in EDP 101" (Interview: August 30, 2010). Mr. J's performance in this course was 59%, which is a bit lower than the average mark of all non B. Ed students (60.8%). Though one participant said that there is no direct relationship between sciences he was doing and psychology, one can notice that previous learning experiences influence the ways students go about learning different subjects at a higher level.

Both participants from a biology and chemistry background said that they would be motivated only when they were studying the aspects related to Biology. Mr. J stated: "I would be motivated when we were studying topics related to what I have studied at high school like genetics, biological determinants of human behaviours, etc. And my notions of Biology from high school helped me to understand" (Interview: August 30, 2010).

Generally speaking, science students reported that their education background neither motivated nor impacted on their performance in the EDP 101 course, mostly because of their negative perceptions of the teaching profession. Therefore, they could not be motivated to study a teacher preparation course. However, they generally performed well in the course due to their study habits and aiming to score higher in order to further studies which is a door of exit from the education domain. Students with a language background considered their knowledge of English to have facilitated their learning of EDP 101 since they were conversant with English, a language that was used as a medium of instruction. Conversely, document analysis showed that these students' performance was not higher than that of students from other sections, who were less conversant with English. The students with a humanities background perceived their education

background to have had little influence on their performance in EDP 101 due to their limited knowledge in psychology.

Finally, B. Ed students with strong background knowledge in education perceived their education background to have greatly influenced their performance in EDP 101. Their motivation was mostly intrinsic but they also expressed extrinsic motivations such as getting a better job in their teaching careers. Their performance was good but not excellent. It can be concluded, therefore, that the influence of academic background on students' performance in the EDP 101 course was perceived by both B. Ed and non B. Ed first year student teachers with reference to sections they followed at high school level.

In effect, students with language background believed that their section had a positive influence on their performance but their marks showed otherwise compared with B. Ed students without strong background but who were intrinsically motivated to learning this course. Since these students were conversant with English, this resulted in a better understanding of the course content as English was the medium of instruction. This de facto facilitated learning and, therefore, impacted on these students' performance. For the students from other backgrounds, the medium of instruction posed a challenge and this has negatively influenced their performance in this course. On their part, B. Ed students' learning experiences in EDP 101 were facilitated by their prerequisites in psychology and education courses in general.

5.4.5 Comparison of all Categories of Students'Performance in EDP 101

This section compares the quantitative data (marks) that show all categories of students' performance in the EDP 101 module. This study found that the average performance in the EDP 101 module for the students with a strong background in English (the medium of instruction) was 58.7%. The average mark for students without such a background was 61.7%. Surprisingly, students with a strong English background performed poorer than those without such a background. The fact that B. Ed students (graduates from TTCs) and those from Humanities section had studied psychology to different extents may also have contributed to this difference. Taken as a class, all students' (B. Ed and non B. Ed) average mark in EDP 101 course was 61%. The next table summarises the marks obtained by different categories of students' in the EDP 101 course.

Table 7: Students' academic background and performance in EDP 101

Students' Background	N	Mean %	Std. dev.	Range (Min – Max)
TTC (B. Ed)	171	65.1	7.5	50 - 85
Sciences	472	61.7	7.5	46 - 89
Languages	268	58.7	10.2	15 - 78
Humanities	199	59.8	6.6	50 - 81
Secretarial studies	44	61.4	6.6	51 - 75
Sciences + Secretarial studies	516	61.7	7.4	46 - 89
All non B. Ed	983	60.8	8.2	15 – 89
Class average performance:		**61%**		

In the EDP 101 course, B. Ed students with pedagogical background knowledge from high school obtained an average mark of 65.1% with a standard deviation of 7.5. The average mark for students with the humanities background was 59.8%, and their standard deviation was 6.6. The lowest mark was the same in both groups of students (50%) but the highest mark was 85% for B. Ed students and 81% for the humanities group. Despite the difference in prerequisites, the humanities group was to be more homogeneous in terms of EDP 101 results than B. Ed students if we refer to the standard deviation though the former's average mark was higher than that of the latter. The observed difference in average mark can be attributed to more knowledge of psychology and self-determination to get higher positions in the teaching career by B. Ed students. This may have put them in a position to score higher than humanities students.

Compared to students with the language background, B. Ed students performed much better. Therefore, the influence of the former's strong background in the medium of instruction on their performance was not significant. The lowest mark in this group was 15% and the highest

was 78%. This very big gap brought the standard deviation to be as high as 10.2, which shows a very high variation in the students' performance in relation to the mean.

The performance in EDP 101 by the students from the science and secretarial studies backgrounds, who had neither the knowledge of psychology nor a mastery of the medium of instruction, was not different. It is surprising and interesting that the lowest mark of 15% belongs to a student with the language background while the mastery of the language of instruction may have had a positive and direct influence on student's learning and performance as pointed out by these students themselves. This means that there are some other factors involved in students' performance. This can partly be explained by the fact that students from science and secretarial studies backgrounds scored higher on average (61.7%) than the language students (58.7%). The lowest mark for the former group was 46% and the highest was 89%, which is even higher than the highest mark in the B. Ed group, which is 85%. The standard deviation was 7.4. It is interesting to note that the highest mark in EDP 101 (89%) belongs to a student with a science background.

While the average mark in EDP 101 for B. Ed students was higher than that of science students, the standard deviation for the two groups of students was the same (7.5). Therefore, with regard to the EDP 101 course, the performance of both groups shows that each group on its own was homogeneous despite their difference in pedagogical prior knowledge.

As a group, non B. Ed students' average performance in the EDP 101 module was 60.8%, with a standard error of 8.2%, 15% as a lowest mark and 89% as a highest mark. B. Ed students scored an average mark of 65.1% with a standard error of 7.5%, 50% as the lowest mark and the highest mark of 85%. This shows that B. Ed students' marks were closer to the mean than those of non B. Ed students. It can be inferred that the group is more homogenous in terms of deviation from the mean and therefore the marks of the two groups of students can be assumed to have unequal variances. However this conjecture needs to be tested. I will now test the hypothesis of equality of population means for the present data.

In the case of B. Ed and non B. Ed students' means in the EDP 101 course, the test for equality of variances give an $F = 0.178$ and a p-value of 0.673 which is too large compared to $\alpha = 0.05$.

Therefore, we do not reject H_0 which stipulates that $\sigma_1^2 = \sigma_2^2$. In other words, the two population variances are not significantly different.

Since this is the case of equality of variances, we perform a t-test with the assumption of equal variances. The t-test for equality of means gives t = 6.491, the p-value being 0.673. This t statistics is significant (p-value < 0.0001), which implies that based on these data, the two population mean marks are significantly different. This conclusion can also be verified using a confidence interval approach. In effect, the 95% confidence interval of the difference is 3.0361 – 5.6668. As 0 does not belong to this interval, the difference of the two population means cannot be 0; that is, the population means cannot be equal.

The influence of prerequisites in the performance on a psychology course was observed for B. Ed students. In fact, B. Ed students' performance was seen to be greatly influenced by their prior knowledge in psychology. This endorses Ross and Byron's (2004) findings in their empirical study that "beyond general ability, domain-specific prior knowledge facilitates student learning in introductory psychology". Sadler and Tai (2001) as well as Brasfield, Harrison, and McCoy (1993) also had similar findings. However, the highest performance was observed in a group without prior knowledge of psychology and without a mastery of the medium of instruction (English), while these aspects were believed to influence performance.

This study also found that prior knowledge is not the sole determinant of good or bad performance. Motivation and self-determination for the profession for which students are being prepared also have a role to play. As argued by Prosser and Trigwell (1999), motivation is fundamentally important in undertaking a learning subject. In fact, Ms D and Ms H who scored 58% and 50% respectively indicated that they would be teachers only if they did not get another good job. This is in spite of them specialising in teaching geography and economics. They intend to join the entrepreneurship sector after their studies at KIE.

Compared to non B. Ed students who seem to undervalue education courses, B. Ed students were found by lecturers to be hard workers. When I asked lecturers which category of students performed relatively higher in EDP 101, Mr. X, who teaches the EDP 101course said that B. Ed students did better compared to the non B. Ed. He argued that: "[…] they are hardworking

students; they know what brought them here, but the rest [non B. Ed students] seem not to value even professional courses. That is why they [non B. Ed students] performed poorly and some of them failed". (Interview: September 20, 2010)

The next section explores students' perceptions of their education background on performance in the ELA 101 module, in both qualitative (narration) and quantitative (marks) terms.

5.5 Students' Perceptions of the Influence of their Academic Background on Performance in the Introduction to English Language and Linguistics (ELA 101) Module

The previous section explored different categories of students' perceptions of the influence that their academic background may have had on their performance in EDP 101 module. Similarly, this section deals with the same issue in the ELA 101 module for students with language and those with education backgrounds.

5.5.1 Students with Language Background's Perceptions on Performance in ELA 101

Two non B. Ed students who were studying the English Language and Linguistics (ELA 101) module were interviewed. One was registered in the Kinyarwanda - English - Education (KEE) combination and the other in the Swahili - English - Education (SEE) combination. On the other hand, two B. Ed students in the Foundations of Education - English combination were also interviewed as they were studying the same module.The two groups of students were sharing this module while the former had more knowledge of English than the latter.This is mainly because the former had had languages as major subjects at high school while the latter had been trained in TTCs, as primary school teachers. The aim was to explore students' perceptions of the influence of their education background on their performance in the ELA 101.

I asked students with a strong language background whether and how they thought their high school studies influenced their performance in ELA 101. I also asked them whether these studies motivated them in learning this course. Their answers were affirmative. According to these students, the fact that English was one of their major subjects at high school directly impacted on their performance. Their explanation is that it made them familiar with English and they found the ELA 101 module was a direct continuation of the English subject that they had had earlier. Mr. B, who is in the Kinyarwanda – English – Education (KEE) combination, noted:

> The languages that I studied at high school played a key role in my performance on the ELA 101 module because it was not my first time to come across the content we studied. We were studying phonetics and grammar in ELA and we had done this at high school. It was a direct continuation or even a revision. (Interview: August 24, 2010)

This student argues that the influence was direct mostly because some of the topics covered in the ELA 101 module were not new for him since he had seen them at high school. "So it was a kind of revision" (Interview: August 24, 2010),he said. However, this impact was not evident in this student's performance in this module because he obtained 56% as an overall mark. This performance was equal to what he achieved in the EDP 101 module, in which he did not have any background and below the average mark of the students with a language background (62.3%). Given his strong background in English that he had acquired from high school and the fact that the module is an English course, it can be concluded that this student did not perform well. Further investigations showed also that his general performance (all courses combined) in the first semester was 56.7%. This indicates that he is not a strong student.

Another language student, Mr. B is the oldest of all the interviewed students in the two courses because he was 28 years old whereas others were aged between 20 and 24. This qualifies him as a relatively "mature student". His aggregate in the national high school leaving examinations was 31; this is the lowest in the group while the highest was 49. This makes the average of 34.2 for all the students from the language section.

Seen through the lens of a mature student, Mr. B's low performance in ELA 101 is consistent with Richardson's (1994: 374) findings, which show that mature students lack "the basic skills needed for effective studying in higher education" because "they may be 'out of practice in the art of learning'" (Roberts & Higgins, 1992: 106). However, his performance contradicts Ofari and Charlton's (2002: 512) findings in a study on nursing students' ages and entry qualifications of students. They contend that "mature nursing students, regardless of their lower entry qualifications, perform better academically than their non-mature counterparts".

In the same category of students with language background, Mr. F who expressed himself easily in English also acknowledged the impact of the English learnt at high school on his performance in ELA 101. When I asked him to explain his answer, he said: "The course content was not

completely new. I came to realise that we had studied most of the topics we learnt here [KIE] at high school, even though it was not all of them" (Interview: September 2, 2010).

Comparing his performance in the Advanced Level (A' Level) national examinations to his performance in ELA 101 at KIE, it can be argued that this student had good performance. In fact, he got an aggregate of 34 while the average aggregate was 34.2 for language candidates. In the ELA 101 module, he scored 68% while the group average was 62.3%. In the EDP 101 module, of which performance was addressed in the previous section, this student scored 69% while the average mark for language students was 59.7%.

A comparison of the above two students' (Mr. B and Mr. F) performance highlights an important observation. Both students have a strong background in English at different levels (31 and 34 aggregates respectively). The same difference was observed in their performance in both EDP 101 and ELA 101 courses with 56% and 69% in EDP 101 on one hand and 56% and 68% in ELA 101 on the other hand respectively. Each of the two performs proportionately to their A' Level national exams in each module. This suggests that students with low performance at high school are likely to perform low in their first year of tertiary education. The same applies to students with good performance, as they are likely to perform well in their first year of tertiary education, all things being equal. It can also be argued that the effort and energy devoted to studying the EDP 101 module in which they did not have prerequisites was similar to that put into the module in which they had prerequisites, ELA 101.

The student's performance is substantially linked with the student's motivation to learn. This motivation is often driven from the course material being learnt. When asked how English that he studied in high school had motivated him in learning ELA 101, Mr. B had this to say:

> It has motivated me a lot. Surtout que, usibye ko na leta cyangwa ubuyobozi bw'ikigo, umuntu ubonye bourse is oriented mu byo yize, nanjye iyo mba ndi umuntu wiyorienta mu cyo nshaka, nari kwiyorienta muri lettres kuko ntabwo umuntu ahanga bushya. Iyo uvuye muri secondaire wiga ururimi ntabwo uza ngo uhange bushya kuko uhanze bushya hari ibintu biba ari bishyashya kuri wowe, mu gihe ubimazemo igihe abona ataribwo bwa mbere ahubwo akabivugurura. (Interview: August 28, 2010)

> (It [English] has motivated me a lot. It is mostly because the Government or the management of the institute places students in Faculties on the basis of students' major subjects at high school. Me too, if I was to make my own choice of what to study at university, I would have chosen languages because I would not have to study all new things. When you had languages as major subjects at high school, you don't come and start afresh learning new things. When you are already familiar with the content you study at the university you do not have to start afresh; instead, you renew and update what you already know).

Participants were of the view that they got a strong foundation from high school and that they were improving their knowledge by studying ELA 101. They were furthering what they had started at high school. Mr. F posited:

> When I was still at high school, my aim was to continue languages at university. I was convinced that at a higher level, I would gain more (knowledge). At university, what I study in English […] is a continuation of what I have started in high school. In fact, my English is getting better. (Interview: September 2, 2010)

From this perspective, students with an English background said that they were intrinsically motivated to study ELA 101 at a university level as it seemed to be a direct continuation of the English they had studied in high school. Thus, their academic expectations were achieved. They aimed at continuing language studies at university, and they achieved it. They perceived the languages they studied at high school to motivate them in studying ELA 101. In the same order of thought, Mr. B stated:

> It has motivated me a lot because it was a continuation of what I started at high school. At university when you are oriented in what you started before and still you want to do it, you feel motivated to learn what is completely new for you. You only add on what you already possess and there is a reorganisation of the existing knowledge. (Interview: August 24, 2010)

These students were actually studying what they had chosen at the completion of high school. This deliberate choice of pursuing languages at university (KIE) is likely to increase their motivation to learn, which is likely to foster their involvement and engagement. Those interviewed said that they were intrinsically motivated to study this course as they were

upgrading and improving their knowledge. One would conclude that good performance would follow as a direct consequence. This, however, was not the case.

The above students were motivationally committed to study the course and English is the subject that they are supposed to teach at the completion of their programme. Therefore, these students manifested interest for the course. In the same spirit, elaborating on the association between interest and prior knowledge, Tobias (1994) concludes that "there is a substantial linear relationship between interest and prior knowledge". Therefore, it can be argued that the performance (in EDP 101) of the students with a language background was influenced by their being conversant with the medium of instruction. This may have helped them to understand and comprehend the course materials as they indicated. However, this research showed that their marks in ELA 101 were worse than those of B. Ed students, who did not have enough knowledge of English.

The analysis of the views of non B. Ed students with language background points out that their motivation to study the course resulted from their satisfaction with their academic orientation in languages and not from their career orientation. In effect, when asked about their perceptions of the teaching profession, they clearly expressed their negative attitude to this career. They stated that they would teach for few years while doing some other business (such as film making) at the same time. They also referred to the usefulness of English as a widely used language in the East African Community country members, including Rwanda. So these students were not really and intrinsically motivated to join the teaching career, and this attitude could explain their poor performance in ELA 101, despite their strong background in English. Their motivation to study the course was more academically and financially rather than professionally oriented.

5.5.2 Students with Education Background's Perceptions on Performance in ELA 101

Two B. Ed students were interviewed on the influence that TTC's study experiences may have had on their performance in the ELA 101 course. While interviewing them, I quickly noticed that they were completely different one from another in their oral expression in English.

Mr. O, a combination representative, was very fluent in English and the interview with him was wholly conducted in this language. However, Ms N had many difficulties in expressing herself in English such that the interview was conducted mostly in Kinyarwanda. Despite their difference in verbal fluidity in English, both students performed well in the ELA 101 course with 79% and 77% respectively. The average mark in ELA 101 for B. Ed students was 70.1%, which mark is much higher than the average mark of the students with a languages background (62.3%) though the sample size was small for B. Ed students.

Both interviewees acknowledged that their TTC's experiences had influenced their performance in this course at KIE. They had learnt English for only two periods per week as indicated by the general timetable of TTCs. The students said that the knowledge of English gained from high school washelpful used in learning the ELA 101 module. B. Ed students asserted that they were motivated in learning this course. This may have increased their engagement and success. In fact, student engagement and success are directly linked to motivation to learn. The students identified two reasons for their motivation.

Firstly, they aimed at improving their knowledge of English given that they had limited knowledge of this language while it is the medium of instruction at KIE. With the feeling of not being well prepared for English courses and courses in English before entering KIE, these students wanted to capitalise on this opportunity by working hard and trying as many strategies as possible. Mr. O said:

> The little background we had from high school was something telling us that we need to put in more effort in order to fit in the system and then be at the same level as all the others who had enough background in the subject matter. So personally, I felt engaged and obliged to put in more effort. That is why, after attending the lecture, I used to have some extra minutes just before leaving [the class] to revise what had been covered the same day. And I was interested in getting more books in which I could find more information to enrich my knowledge. And thereafter, I even used internet in order to search more about the course so that by the time of exam or other assignments, I may not be confused. (Interview, September 2, 2010)

This quotation shows the extent to which this student was engaging with the course. It highlights time and effort devoted to learning the course. The student was determined to bridge the gaps

that he himself was aware of so as to catch up. He did this by adopting different learning strategies as identified in the above quote. Being aware of his or her intellectual weaknesses, an engaged learner deploys energy and effort aimed at coping with the course in order for him or her to understand and succeed.

The second reason identified by these students is that English is the medium of instruction at high school where they are supposed to teach after their studies at KIE. They find the opportunity to learn English as one way to improve classroom practices. This may have influenced their performance, as noted by this student:

> But after entering here [KIE], it was decided that all the programmes should be taught in English. So this aroused my interest in that English module so as to improve my level of English in both writing and speaking. My aim is that when I go to teach I should not have any difficulties in relation to using English. So this is a kind of motivation from training in TTC that helped me to perform well in this module. (Interview: September 2, 2010)

Proficiency in the medium of instruction by the teacher goes hand in hand with success in the teaching professional life and constitutes sources of motivation for student teachers who are committed to the career. This study found that B. Ed students majoring in Foundations of Education with English were intrinsically motivated to study for their career as English is the language they will be using in their profession, after graduating from KIE. It is for this reason that B. Ed students whose main focus is on their profession reported being fully engaged in learning ELA 101 mostly due to the good image of the teaching profession that they had had since their high school.

B. Ed students' motivation to master the language that they will be using in their teaching career may have enhanced their engagement in learning for the career. The immediate consequence was their high performance in an English course despite little prerequisites in it because they came to KIE after they had already acquired the teaching identity.

5.5.3 Comparative Analysis of B. Ed and non B. Ed Students' Performance in ELA 101

Comparing B. Ed and non B. Ed students who were interviewed on the influence of their education background on their performance in ELA 101, it is clear that B. Ed students

performed much better than nonB. Edstudents. The B. Ed students were intrinsically motivated to study for their profession, while non B. Ed students studied ELA 101 because it was a continuation of what they had started at high school. The former were studying the course being professionally motivated whereas the latter were studying it because they were already academically oriented in languages and aspired to use language to make money.

Being motivated to study the course in order to use it for good teaching and learning practices in their future career impacted on student engagement and success differently compared to being motivated to study the course for the sake of continuity and money making ambitions. It seems obvious, therefore, that B. Ed students are learning for intrinsic reasons, focusing on the profession while non B. Ed students are learning for extrinsic reasons related to the benefits of English. Their performance will consequently follow this logic. In effect, two students with language background interviewed scored 56% and 68% each while B. Ed students scored 79% and 77% in the same teaching and learning environment. Yet, the former were more equipped in the subject matter than the latter.

Similarly at the group level, table 8 below summarises B. Ed and non B. Ed students' performance in ELA 101:

Table 8: Students' performance in ELA 101

Students' background %	**N**	**Mean (Mini – Max)**	**Std. dev.**	**Range**
TTC (B. Ed)	18	70.1	8.8	51 - 85
Non B. Ed	221	62.3	8	50 - 85
Class average performance		**65.9**		

This study found that B. Ed students' average mark in ELA 101 was 70.1%, with the minimum mark being 51%, the maximum 85%, and a standard deviation of 8.8. On the other hand, students with a language background had an average mark of only 62.3%, the minimum mark of 50%, the maximum mark of 85%, and the standard deviation of 8. The fact that B. Ed students with fewer prerequisites scored much higher than those with more prerequisites in English (non

B. Ed students) leaves room to assume that they have been more highly engaged in the learning of ELA 101. In fact, "Student engagement is linked to a wide array of desired college outcomes, so it is no surprise that engagement and grades go hand in hand" (Kuh et al., 2007: 46). In addition, B. Ed students were more strongly attached to both the course and the career they were being training for because they had developed a teaching identity since high school.

I will now compare the mean scores of B. Ed and non B. Ed students in the ELA 101 module. The mean scores are respectively 70.1% and 62.3%, with respective standard error of 8.8 and 8. The F-test of equality of variances gives us an F = 0.028 with a p-value of 0.867 which is very large compared to $\alpha = 0.05$. Therefore, we do not reject H_0 which stipulates that $\sigma_1^2 = \sigma_2^2$. In other words, the two population variances are not significantly different. Since this is the case of equality of variances, we perform a t-test.

With t = 3.951 and p-value = 0.867, this t statistics is significant ($p < 0.0001$) which indicates that the mean scores 70.1% and 62.3% are significantly different. This implies that based on the present data, the population mean scores in the ELA 101 module for B. Ed and non B. Ed students are not equal. The same conclusion can be drawn using a confidence interval approach. In effect, the 95% confidence interval of the difference is 3.9280 – 11.7422. As 0 does not belong to this interval, the difference of the means cannot be 0; that is, the means cannot be equal.

There is literature supporting this.This suggests that prior knowledge in English by language students did not positively impact on their performance in an English related course in the first year of teacher education at the tertiary level. This relates to the Palmer, Caliner and Romer (1979) as well as Reid (1983)'s findings that students with prior knowledge perform lower at tertiary level. It also suggests that students who were already prepared for the teaching profession from high school scored higher. Their performance in the ELA 101 module has been positively influenced by their self-determination and both intrinsic and extrinsic motivation to study for the teaching profession that uses English as a medium of instruction. These results could bring me to posit that, in the ELA 101 module, B. Ed students were more engaged than non B. Ed students because the research has found that high students' engagement with the course is linked to a high level of achievement.

In the present research, poor performance by students with strong prior knowledge of English and the high performance of B. Ed students without such knowledge contradict previous research findings. These include Sadler and Tai (2001) and Brasfield, Harrison, and McCoy (1993) who found a positive and significant relationship between prior knowledge in a field of study with performance in the same field at College level. Also, a study conducted by Eskew and Faley (1988) has shown that performance in the first year college in financial accounting was affected by pre-college study of an accounting course.

5.6 Summary of the Chapter

This chapter explored the impact of B. Ed and non B. Ed first year student teachers' prior education backgrounds on their performance in a professional and a non-professional module at KIE. The data was collected through interviews with participants on how they perceived this influence and through an analysis of their marks in these two courses. Interviews with students revealed that this influence varies with the section followed at high school and with the module being learnt.

With regard to the EDP 101 module on the one hand, interview results showed that B. Ed students held a positive image of the teaching profession prior to KIE. This was mainly because they had attended Teacher Training Colleges at high school. Even one particular student who entered this training reluctantly came to like it throughout the course of his study programme. B. Ed students interviewed said that they were motivated to study the EDP 101 course because they were increasing their knowledge in the education field in order to upgrade their qualifications, so as to get better jobs in the teaching career.

B. Ed students showed that they were intrinsically motivated to learning this course and affirmed that the section they followed at high school (TTC) had had a great impact in determining their performance. In fact, they had strong background knowledge in this area. Indeed, their average performance (65.1%) was higher than that of non B. Ed students (60.8%). They were motivated to learn a professional course. A portion of non B. Ed students with humanities background perceived their section having very little influence on their performance. These students had had some knowledge of psychology in their senior four of high school and they were also motivated

to learn this course because it was interesting for them. However, they performed slightly below all non B. Ed students together as their average mark was 59.8%.

Students with a language background found that their high school had impacted on their performance in the EDP 101 course. This was due to their strong background knowledge of English which was the medium of instruction for this course. In fact, didactic communication in English was easy, they argued. This allowed some of them to quickly read and understand the course materials when others were motivated by following lectures in a language that they were conversant with. Some of them were self-motivated to learning for the teaching career while others were not. In spite of these students being more advantaged by their mastery of the medium of instruction, they performed poorly (58.7%) compared to other groups with less knowledge of English. This suggests that they were less engaged with the course and their knowledge of the language of instruction did not influence their performance that much.

Students who had sciences as their major subjects at high school considered their performance in EDP 101 not really depending upon their high school experiences because they found no direct relationship between science and psychology. They had neither education background nor strong knowledge of the medium of instruction. However, they performed better than other groups of non B. Ed students (61.7%) probably because, as some of them argued, sciences prepare people for hard work. In addition, some of them were self-committed to scoring as high as possible in order to proceed to even higher levels of education. These may have decided study hard to pass exams.

Comparing B. Ed and non B. Ed students' performance in the EDP 101 course, the t test shows that the mean scores, 65.1 and 60.8 for B. Ed and non B. Ed students respectively, were significantly different. It was also found that prior knowledge was not the only determining factor for good or bad performance. Other psychological factors like the degree of motivation, beliefs, and environmental factors also play a great role. Motivation and commitment to study for the profession one is being prepared for were also found to have a role to play in student performance, as was the case for B. Ed students. To a great extent, the teaching identity was inculcated in them. It might be within this perspective that lecturers themselves believed that B.

Ed students were more committed to learning teacher preparation courses than non B. Ed students. Some students also acknowledged this.

With regard to the ELA 101 module on the other hand, B. Ed interviewees acknowledged that the little English they had learnt in TTCs had influenced their performance in this module to some extent, because they had some prerequisites on its content. B. Ed students were keen to improve their knowledge of English as it was the medium of instruction at KIE and at high school where they were supposed to teach after their studies at KIE. Therefore, they wanted to get into the field of work being competent and fluent enough. They had decided to work hard and adopt special strategies in order to fit into the system and catch up. In fact, they felt they were lagging behind non B. Ed students, especially in English.

However, this study found that, despite their strong background knowledge of English, nonB. Ed students' performance was lower than B. Ed students in an English based course. In fact, they scored 62.3% when B. Ed students scored 70.1%. The t-test showed that the mean scores were significantly different. These results suggest that prior knowledge in English by non B. Ed students did not positively impact their performance in a course that, according to them, was roughly similar to their high school courses. It also became clear that students who had trained for the teaching profession from high school performed very well in an English course, in which, however, they did not have enough prerequisites. Their self-determination, intrinsic motivation to study for the career and their teaching identity explain this good performance. This suggests that they were more engaged in learning this course than the other group.

The good performance of the B. Ed students, as opposed to a lower performance by non B. Ed students, can be explained more by the former's attitude, interest, and motivation towards learning for the teaching profession than their background knowledge in terms of prerequisites. The fact that the performance of B. Ed students in EDP 101is lower than that in ELA 101 also evidences the low effect of prerequisites on performance in a professional course.

Positive and negative attitudes towards the teaching profession can be perceived through the lens of beliefs and preconceptions about teaching and the teaching career that students bring to the

teacher education programmes in the context of Rwanda. These beliefs can increase or decrease the level of engagement with the course. B. Ed students' beliefs, which were formed together with their teaching identity in TTCs can, help us understand why they performed higher in both courses. This is the focus of the next chapter.

CHAPTER SIX

STUDENTS' BELIEFS BROUGHT TO TEACHER EDUCATION AND THEIR IMPACT ON FIRST YEAR STUDENTS' PERFORMANCE

6.1 Introduction

While Chapter Five was concerned with the impact of B. Ed and non B. Ed students' academic background on their performance at KIE, Chapter Six is concerned with the comparison of these two groups of students in terms of the beliefs that they come along with to the teacher education programme and how these beliefs influence their performance. The hypothesis posited here is that the beliefs about teaching and the teaching profession that students bring to teacher education are more likely to determine their performance than their education background. Therefore, they may influence student engagement.

These beliefs are considered from two angles. The first is the image of the teaching profession that B. Ed and non B. Ed students had before entering KIE when they were still at high school. In fact, if our education systems need to produce effective teachers, they must take candidates' beliefs into account because, as Christensen et al. (1995) point out, prior beliefs and understanding exert a major influence on the impact of teacher education on students' development as teachers. To connect this image with these students' entry into KIE as a higher teacher education institution, participants were asked how they felt the day they knew that they were going to pursue university studies at KIE and why they felt that way.

The second angle is the image that students had of the teaching profession during their first year of teacher training at KIE as well as their perceptions of their future teaching career in the context of Rwanda as a developing country. Lastly, these B. Ed and nonB. Ed students' beliefs are discussed in relation to their performance in the EDP 101 and the ELA 101 modules to establish whether there is any relationship between the two.

6.2 Students' Image of the Teaching Profession prior to Tertiary Teacher Education

6.2.1 Image of the Teaching Career held by B. Ed Students prior to KIE

The interviews conducted with students revealed that the image that they had of the teaching profession when they were still in high school varied with the kind of training they underwent. This is consistent with their perceptions of the influence of their academic background on their performance in a teacher professional course (KIE) as shown in the previous chapter.

This study found that students with a pedagogical background had a different attitude from that of those from other backgrounds. B. Ed students' attitude to the teaching profession was more positive than that of non B. Ed students. This is in spite of the social and economic conditions of teachers, which constitute the main argument for the lack of interest in the teaching profession.

On the one hand, out of the five B. Ed students who participated in the interviews, only one (Mr. M) had reluctantly chosen to join a teacher training college because he had no other choice. However, he changed his mind afterwards during the TTC course of study. This means that B. Ed students interviewed had a positive image of the career before entering KIE.

With reference to Mr. M's case, he had been forced to study primary teacher education at high school whilst he wanted to study Mathematics and Physics. It should be noted that he had been qualified for the above science section as a result of his success in the Ordinary Level (O' Level) national examinations. He had been sent to a school that previously had both Mathematics - Physics and TTC sections. However, by the time he reached the school, the Mathematics-Physics section had been phased out and, consequently, he had to do TTC.

During the whole senior four, Mr. M never liked TTC mostly because the TTC graduates did not have a lot of chances of qualifying for the Government sponsorship for higher education. This required a much higher mark in the A' Level examinations compared to other sections. Later on, he ended up liking the profession he was being trained for. He said:

> As time went on, I came to perform well and I came to like psychology and other courses. The interest for the field of education arose. From that time, I have come to like the teaching profession and, even now, I don't feel I can change my career. (Interview: August 24, 2010)

At KIE, Mr. M's mark in EDP 101 was 59%, which is less than the average mark of B. Ed students in this course. Of all B. Ed students interviewed, he is the only one to have scored less than 60% in this course probably because others had developed an interest in teaching before he did.

In the same way, due to the very high mark required for TTC graduates to qualify for the government sponsorship at university, Mr. K, who is alsofrom TTC section said:

> Mu by'ukuri, ku mwuga w'ubwarimu, ntabwo twari twizeye ko tuzabona bourse kubera ko bafatiraga kuri menshi. Bigatuma rero ubwarimu tubwiyumvamo; ariko ikintu cyaducaga intege tukumva carière tutanayikurikira neza ni amafranga. Wasangaga muri société kuvuga ngo ugiye uri umwarimu! Byabaga bikurimo pe, ukumva wanabikora ariko wabona ariya mafranga ukumva mbese carière iri kugenda igukamukamo. (Interview: August 23, 2010)
>
> (In actual fact, as TTC graduates, we were not sure of getting sponsorship because of the very high marks required [for TTC graduates]. This is why we felt that we were destined for the teaching career. But what was discouraging us and which could even prevent us from committing fully to this career was the issue of money; to decide to be a teacher in our society …! We could really feel that teaching was part of us but when we looked at the salary of a teacher, our commitment to this career grew weaker and weaker).

These remarks show a positive image the students have of the teaching career which, however, is tarnished by the low salary that teachers receive. It is unfortunate that I could not access Mr. K's marks in EDP 101 because he did not do exam, which could have shed more light on his involvement in studying this teaching professional course.

In spite of teacher preparation playing a key role in changing candidates' attitude towards their future profession, this study showed that student teachers lack motivation for their future career due to the teachers' salary being low. It is true that money is important in life today to cater to our basic needs; it is also needed for teachers' well-being as professionals and can function as a stimulus. However, it is not sufficient and should not be the sole aim of a professional teacher.

An individual's familiarity with a stimulus arouses interest in it by discovering advantages that it offers. For example, Ms L had a negative image of the teaching profession before entering a

teacher training college. She considered the teaching career to be a despised profession (*umwuga usebye* in Kinyarwanda) but she quickly changed her mind while in teacher training as she noted:

> I came to like the teaching profession due to the time I spent in a TTC. Also graduates from TTC have more chance to get jobs immediately after leaving school while those from other fields remain unemployed; this brought me to find education as a good field. Moreover, the fact that I got a bursary to go to the university whilst I had never thought of joining university after TTC also contributed to me valuing TTC. I still value even today since it brought me to university. (Interview: August 24, 2010)

Ms L was motivated to learn for the career as the chance to get a job is higher for TTC graduates and these still stand a chance for higher studies. However, her statement imbeds rather extrinsic motives for her positive attitude towards the teaching career. These include the ease of finding a job and government sponsored scholarships after high school. It cannot therefore be concluded, that this student had necessarily a positive image of the teaching profession.

It should be noted that some B. Ed students were discouraged by two things during their training in TTC. First, it was difficult for them to get government sponsorship for higher education and, second, the high school teachers' salaries were extremely low. Therefore, graduates from TTC would give more value to their high school education if they could easily access government sponsorship for tertiary education. Nonetheless, though extrinsically motivated to study for the teaching career, Ms L performed very well in EDP 101 with 77%. This performance can be attributed more to her prerequisites in the subject than to her beliefs.

When I asked how they felt when they knew that they were going to pursue university studies at KIE, all B. Ed student participants replied that they were extremely happy. This happiness resulted from their ambition to achieve a better life after university studies and a personal development. Mr. K stated: "I felt very happy because it was an opportunity for me to improve my knowledge. Secondly, a teacher in primary school is different from a high school teacher" (Interview: August 23, 2010).

Therefore, B. Ed students' personal development in the sense of the hierarchy of needs (Maslow, 1943) constituted a strong motivation to study at KIE. Some of the TTC graduates were so courageous that they chose Mathematics as a major subject of interest in spite of them having a

relatively poor background in it. They also knew that they would study this subject together with students who had followed the Mathematics and Physics section in their high school. This suggests B. Ed students had high self-confidence. The evidence can be found in Mr. M's remarks below:

> I felt very happy because I was lucky to carry the training that I had started in TTC to the level of higher education. I said to myself: 'I am going to study Mathematics in order to become a qualified and competent teacher of Mathematics'. That is what made me happy. That is my objective even today. I feel that I must continue my studies so that I become a competent teacher, who knows what he is teaching, and who is able to deliver it. (Interview: August 24, 2010)

The above student, who was hoping to further his studies while still at high school, aspired to be a competent teacher of Mathematics at high school. He maintained a good image of his prospective career. Interestingly however, he aimed at specialising in Mathematics education when he did not have enough prerequisites in Mathematics compared to those who had followed the Mathematics and Physics section. But he liked Mathematics, he said.

Upgrading knowledge and achieving a better life were not the only sources of happiness for primary school teachers entering KIE to becoming high school teachers. They also found teacher education offering job opportunities to its graduates more quickly than the other sections. Ms L expressed herself in these terms:

> I felt happy to come to KIE firstly because when you graduate from KIE you are immediately given a job in teaching or otherwise you get another job. In fact, I have heard about KIE. I have heard people saying that KIE is an institution which gives a better teacher training than for instance Butare [the National University of Rwanda] and others. I felt happy despite the fact that other people were telling me: 'after all you are going to pursue higher studies but when you come back, you will still be a teacher". But that never shocked me that much because I expected such remarks. I was happy of the institution that I was joining. (Interview: August 24, 2010)

Though extrinsically motivated by the ease of getting a job and despite the discouragement by some people who despise teachers (environmental factor), this student teacher (Ms L) remained self-determined. She maintained her positive image of her future career especially because it was like a surprise for her to find herself admitted to higher education. She believed that the

knowledge she would gain from KIE would enable her to climb up the social ladder. Again, her remarks point to her self-determination which takes precedence over extrinsic motives of job and bursary reward, which allowed her to overlook the discouraging speeches by other people. It evidences her strong beliefs towards her career.

These students' beliefs were likely to act as determinant motivating factors for learning towards the teaching profession. Indeed, beliefs are called "motivational beliefs" which act as favourable contexts for learning (Boekaerts, 2002). In fact, this scholar has found in various researches that a specific set of motivational beliefs pertains to the value students attach to a domain; and beliefs about the teaching profession are, in the present study, linked to that and are perceived to enhance student engagement.

Furthermore, most of the B. Ed students interviewed expressed their intrinsic motivation to learn for the teaching profession. They were proud of becoming high school teacher educators and, possibly, of taking higher positions in the education sector. They posited that they were interested in becoming teachers even before entering Teacher Training College (TTC). Mr. O said that he had wanted to be a teacher since his primary school. He argued that he chose TTC three times at the completion of the O'Level. .

In fact, Mr. O stated: "I entered TTC as someone interested and motivated to follow it because I considered myself as a talented teacher and it pleases me" (Interview: September 10, 2010). This student is intrinsically motivated to study for the career and scored 72% in a teaching professional course. Surely, pedagogy being a science and an art, teaching is a profession which needs full commitment and love for it.

In the same vein, Ms N asserted: "Teaching was a profession that I liked. I entered TTC because I liked it and I knew that I would be a teacher, nothing else. I chose this profession out of love and I was enjoying it [TTC]" (Interview: September 2, 2010). She clearly revealed her intrinsic motives for choosing the teaching career. She scored 65% in EDP 101. This score equals the mean score of B. Ed students.

B. Ed students were committed to studying for the career because they have found in it an important societal value as they said. Mr. O argued that he was seeing in the teacher an important

person by his contribution in developing children to be good citizens who would participate in the development of the country.

Therefore, this study found that the image of the teaching profession that B. Ed students had before entering KIE was generally positive in spite of the teachers' salaries being low. While the issue of salary is a serious handicap, the students expressed their humble character as teachers who developed the teaching identity throughout the Teacher Training College experience. All the interviewees in the category of B. Ed students revealed such an image. Their positive image of the teaching profession is obviously related to the motivation to study for the profession. This motivation to learn is a sine qua none condition for the students' full involvement and potential student engagement that is likely to lead to good performance. No wonder that these students' general performance in a teacher professional course was 65.1%. However, we still need to establish what counted most in determining it between prerequisites and beliefs towards teaching and the teaching profession.

6.2.2 The Image of the Teaching Career held by non B. Ed Students prior to KIE

Contrary to B. Ed students who had a good image of the teaching profession before coming to KIE, the non B. Ed students who were interviewed were divided on the image of the career that they had prior to KIE. Out of ten participants, six said that they had a negative image of the teaching profession while the other four said that they had a positive image of the career. Apparently, out of these four, three were extrinsically motivated to join teacher education and did not intend to stay in the career for a long time. This is mainly because of the low socio-economic status of teachers and their poor living conditions. Teachers are less paid and thus live in bad conditions in terms of socio-economic status, argued participants. Even those with a positive image acknowledged the teachers' low salaries compared to other professionals even when they have the same qualification.

Non B. Ed students whose attitudes were favourable to the teaching profession before joining the teacher education programme developed this attitude from their school experiences. When I asked him to talk about the image that he had of the teaching profession when he was still at high school, Mr. C posited:

> I wanted education to be my career. I used to tutor my colleagues and, from this experience I felt that I might be gifted for and lucky in the education domain. This was the reason why I chose KIE. […]. I did this after a careful deliberation. I took my time to think about my field of study at university. My thinking was that, if I had to choose education, I would have made the best choice because I found education as a field which fits me best […]. I chose KIE because I liked it. I liked KIE because I found myself smart, lucky, and capable enough to be a teacher. […]. People who did education are never jobless. (Interview: August 27, 2010)

This quotation shows that Mr. C, who knew very well that KIE was a teacher training institution, chose it after a careful and conscious examination. The peer teaching that he was doing made him aware of his potential for teaching. This finding underscores the importance of student-student interactions in discovering personal and professional abilities for teacher education. In effect, Kuh et al.(2007: 195) note that"teaching, assisting, and evaluating peers places students at the centre of their learning experiences". This student teacher seems to fit well in his career orientation.

This finding is consistent with that of Auh (n. d.) in a study conducted with first year students who were training for a Bachelor of Education in primary teacher education. This researcher noted that student teachers' self-assessment of their personal qualities was appropriate for primary teachers. In the same spirit, the above student has discovered personal teaching qualities which he wished to practice in his future life. For him, this was not the only source of motivation for the teaching profession. He also considered the teaching career to be a short cut to getting a job. In the context of Rwanda, with a teacher education certificate, you can easily get a job if you wish to teach. This is not the case for graduates from other fields that a lot of people long for. Mr. C was strongly motivated for the teaching profession and had, therefore, a positive image of the career.

In addition, Mr. F also revealed the perceptions he had about the teaching profession when he was still at high school, perceptions which are linked to personal development. He said:

> I had a good image of the teaching career because teachers for me are people who are always updated thanks to their continuous reading and knowledge delivery. Despite the fact that the image of the teacher has been somehow downgraded, I liked this career because the teacher [...] always improves his (*sic*) knowledge. When I was choosing among higher institutions to pursue

> my studies, I chose KIE because it trains teachers. Another source of my motivation is that when I was tutoring my colleagues, they used to say that I deserved to be a teacher. Since then I felt that I should not undermine my talent. (Interview: September 2, 2010)

The aspiration to be updated and knowledgeable together with the sentiment of admiration by colleagues whom he was tutoring at high school appear to be the real motives that pushed Mr. F to want to become a teacher. Asked how he felt when he was sent to KIE for higher education, he replied: "I felt happy because I was already prepared for it [teaching]" (Interview: August 23, 2010).

Similar to Mr. C referred to earlier, Mr. F's teaching qualities were brought to the surface by colleagues whom he was tutoring. This happened in spite of him not liking the teaching profession because he appreciated teachers' work as it facilitates the updating of their knowledge. Through teaching, the teacher gains new knowledge. The way Mr. C and Mr. F were tutoring their colleagues is a window through which we can look at this. Eisner (2006) has effectively found that teachers seek satisfaction from the processes of teaching. Similarly, Block (2008) and Eisner (2006) argue that teaching is an engagement in the world of great ideas.

However, students' remarks sometimes reveal controversies. Two other non B. Ed students said that they have a positive image of the teaching profession but stated that they would not wish to be teachers. Mr. J who had done Biology and Chemistry in high school felt the career was good but he would not like to do it. For him, teaching has a very important role in the life of the country and, compared to other professionals, teachers are trustful and upright, and value the work well done. Since he was not motivated to learn for the teaching career, the students' claim that he has a positive image of the teaching profession is questionable.

This student had previously planned to be a medical doctor and is now doing education because he had no other choice. Ms E who had studied Mathematics and Physics at high school also said that she considered the teaching profession as a good one because she had had good teachers. When I asked her whether she had ever thought of being a teacher, she strongly replied: "No, I never wished to become a teacher" (Interview: August, 26, 2010). The lack of motivation and interest in learning for the teaching profession usually leads to poor performance. However,

despite her negative attitude towards the teaching profession due to the poverty of teachers compared with people in other fields with the same degrees, she performed fairly well with 66% because her goal was to score higher marks that would take her to postgraduate studies in order to escape from teaching.

In this research, it was found that the majority of non B. Ed students had a negative image of the teaching profession before joining teacher education programmes. Even after they had completed their first semester at KIE, the same image remained. Mr. G's attitude towards the teaching profession appears in the statement that follows: "Before, I couldn't imagine myself being a teacher. But now, I do understand. I have already set my mind. … I am motivated somehow" (Interview: August 28, 2010). This student was not really motivated to study for the teaching career; he did not have any other choice and, eventually came to accept it. This may be the reason why his mark in a professional preparation module (EDP 101) was so low (47.5%).

The student was previously not ready to become a teacher because of the way teachers are considered in the society, as he put it. However, he chose KIE because he expected to complete his studies by the time teachers' salaries would have gone up. His choice was respected and he was sent to KIE. He was extrinsically motivated; he did not choose KIE because he really wanted to become a teacher. The evidence for this can be found in his following note: "To study at KIE does not necessarily mean to be a teacher" (Interview: August 25, 2010). This attitude towards the teaching profession is not likely to enhance the learning of a professional preparing module.His failure could be linked to his low level of engagement in the learning of this course.

Linking Mr. G's poor performance in a psychology course (that prepares for the teaching profession) with his negative image of the career, I found that his beliefs or perceptions about the teaching profession constituted a barrier to the effective learning of the course. In effect, "beliefs act as a gatekeeper to belief change throughout the teacher education programme" (Joram & Gabriele, 1998: 177). These authors note that the set of beliefs that are constructed about the courses and programme acts as a barrier to further learning in the university classroom. It is within this spirit that Kagan (1992) stipulates that pre-service teachers' beliefs act as filters through which performance is interpreted.

The implication of this for teacher educators is that in their practices they should act as good models for students because what they do in class influences the learners' thinking and planning of their future. Teachers' ways of teaching and appearance are examples for our students. Ms D's negative image of the teaching profession was inherited mostly from the bad teacher models that she had met throughout her schooling. She asserted: "In my point of view, I didn't like it [the teaching profession]. When our teacher came to teach, I would say: I will not be a teacher; I will not be a teacher" (Interview: August 26, 2010). Her performance in EDP 101 was not very good as she got 58%. This student hates the career because of the bad image she has got from her own teachers who appeared to her as poor.

Students may choose the teaching profession not because they want it but because they want to study anyway, irrespective of whether they get the field that they want or not. The evidence for this finding is that Ms H put KIE last among the three alternative choices for higher education institution at the completion of high school. She perceived teaching as the worst profession. In this case, interest and motivation to learning for this career are likely to be low. Consequently performance in a professional course/module will be poor. This partly explains why Ms H performed poorly with a pass mark of only 50% in EDP 101. During the interview she stated:

> The image that I had of the teaching profession was negative. In fact, once you are in this profession, you don't expect to have a good life. We used to call all teachers *'ba gakweto'* [extremely used shoes: teachers can only afford to buy used shoes]. For us, a teacher was that person who must always wear very used shoes, who can never improve his life style. In short, a teacher was not well seen. (Interview: August 24, 2010)

For Ms H, teachers are poor people, unable to buy shoes or clothes when needed and whose lives cannot improve. In her understanding, the improvement of living conditions is incompatible with teaching. This finding approximates that of Block (2008: 416) when he talks about many teachers' vigorous complaints notably about "poverty anddisadvantaged homes and feelings of powerlessness".

Asked how she [Ms H] felt when she knew that she was to train as a teacher at university, sherather continuedto describe the teacher's image, revealing her own feelings at the same time:

> First of all I was happy because I had passed. Then when I realised that they had given me KIE and knowing that a teacher is a poor man, a non-respected person in the society, I told myself: 'I will be a teacher and this is useless to me. […]. [Yes] KIE is offering us courses about teaching, but I think that graduates from KIE don't have necessarily to teach." […]. I have many neighbours who are teachers. You can see that they don't have a good life at all. Right!! Then I thought: 'I have studied. I have done whatever I could so as to go further with my studies and have a better life.' When I was sent to do education, I said: 'okay, that is the end of the story, me too I will be like those teachers.' Therefore, there is no way I could be happy because from the beginning, my thinking was to study so that at the end I get a better a job. (Interview: August 24, 2010)

The above image of the teachers held by these students and the community at large is likely to encourage people to shun the teaching profession. Teaching is seen as a bad job and, therefore, not attractive. To be a teacher implies to be poor. The above student's motivation to follow a teacher education programme resides in getting a degree and continuing studies further but in another field. This would allow her to get another job and therefore have a better life. Being a teacher means, according to her, being miserable.

Therefore, it can be said that interviews conducted with non B. Ed student teachers at KIE about the image they had of the teaching profession when they joined the teacher education programme revealed that this image was mostly negative. The teaching profession is seen as a way to poverty and misery. This is true because a study carried out by Nzabalirwa and Nkiliye (2012) indicates that 83.8% of teachers cannot afford a balanced diet, 86% do not have adequate housing, 75.4% do not have enough clothes of their liking, 77% can hardly get school fees for their children, and 43.5% find no access fees for medical care (Nzabalirwa & Nkiliye, 2012: 81).These authors note also that teachers' working conditions do not allow them to meet their basic needs.

Consequently, non B. Ed student teachers' negative attitude about the teaching profession could, to some extent, impact on their engagement and involvement with professional preparation course and, eventually, on their performance in this course. The findings suggest that non B. Ed students were less engaged in learning EDP 101 as a professional course and, consequently, their performance was low.

Except for Ms E who scored 66% in EDP 101, others performed poorly, (less than 60%). Ms E's good performance can be partly attributed to her strong commitment to studying hard to get very high marks which could earn her admission into a Master's Programme in Technology so that she could have a better life. She was thus more oriented towards surface learning as she only aimed at getting high marks. The poor performance of the others could be linked to lack of motivation to study an education course which prepares for the career of which they had a negative image. Consequently, their psychological investment and effort directed towards learning this course will be low, which may have led to poor performance.

With regard to B. Ed and non B. Ed students, it can also be argued that prior knowledge of the profession individuals are being trained for is related to the image that they have about this profession. This image, linked to student engagement, could also impact on the quality of performance in a professional preparation course/module. Non B. Ed students' image and performance in a professional preparation module is an evidence. For instance, Mr. I's performance in the EDP 101 course was 56%. Since high school, he aimed to be an engineer and not a teacher. Similarly, Mr. J who scored 59% in the same course wanted to be a medical doctor. He does not believe he will be a teacher, as he states: "Though I am studying education at KIE, I don't plan to be a teacher" (Interview: August 30, 2010). Effectively, their performance in the professional preparation module was not good.

This negative image was largely due to the socio-economic conditions resulting from the meagre salary that teachers get in Rwanda. This salary cannot attract candidates and cannot play the role of adequate incentives and rewards so as to attract candidates to the profession as discussed in the next section. In this case, student engagement throughout the teacher preparation programme suffers and students' performance is poor. Indeed, the above non B. Ed students interviewed scored 47.5%, 56%, 59%, and 66% when the average performance for the whole class was 61%.

This section has addressed the image that students had of the teaching career before entering KIE. The beliefs the students held about the career before joining the teacher education study programme has also been discussed. The section has shown that B. Ed students had a positive image of the teaching profession whilst most of the non B. Ed students had a negative image of this career. This negative image could have influenced, in one way or another, their performance

in a professional preparation module. The negative image was seen to lead to poor performance while the positive image was seen to lead to good performance. The students who joined the teacher education programme at KIE have certain perceptions about the profession within the context in which it is performed. This is the case irrespective of the image of the teaching profession that they come along with. This is the focus of the next sections.

6.3 The Impact of a Teacher Education Programme on Candidates' Attitudes towards the Teaching Career at Kigali Institute of Education

As it was discussed in the previous section, students come to the teacher education programme with preconceptions and diverse attitudes towards the career. Teacher educators play a vital role in shaping professional teacher identity throughout the programme by providing rich experiences that enhance positive and change negative attitudes towards teaching and the teaching profession. Candidates to teacher education often come with the idea that teaching equals the transmission of knowledge to learners.

6.3.1The Act of Transmitting Knowledge as the Conception of Teaching

Teacher education should start by diagnosing student-teachers' preconceptions of teaching so that the outcome of the training can be measured at the end of the programme. This outcome should be a real change in student teachers' behaviours and perceptions of their future career for effective classroom practices. For this reason, I asked participants what their beliefs about the teaching profession were at the early stages of their teacher education programme at KIE. In other words, they were asked to define what they understood by the concept of "teaching" after they had completed the module of 'Introduction to Educational Psychology' and started that of 'Theory and Practice of Teaching'.

Both B. Ed and non B. Ed first year student teachers interviewed defined the concept of teaching quite differently, but all their definitions have 'the act of transmitting knowledge' in common. They claimed that to teach is to transmit knowledge or to provide knowledge to somebody. Below are some of the definitions of the concept of "teaching" as given by interviewees. The definitions by non B. Ed are presented first, followed by those of B. Ed students with their pseudonyms and combinations in brackets.

For non B. Ed students, to teach was:

- To transmit knowledge (Mr. I, MCsE: Mathematics - Computer Science - Education)
- To transmit knowledge that you have gathered, or that you have gained through education. You transmit it to others so that it can benefit them in their daily life (Mr. F; SEE: Swahili - English - Education).
- To teach, as I know it or as I have just understood it, is to transmit to someone certain behaviours so that he/she is able to deal effectively with problems in the everyday life. This is the goal of teaching. It is about trying to change thinking, culture, and behaviours of somebody so as he/she is able to deal effectively with problems that he/she may encounter in life (Mr. C, PCE: Physics - Chemistry - Education).
- To transmit knowledge, or to explain to people the courses that they are following, or whatever you want to tell them so that at a certain time they may be rewarded. Mostly when you are teaching children, you explain to them, you show them what to learn, what to do, and tell them that if you do it well you will get a reward like a certificate or a degree. You teach them while motivating them so that they get to the target at a given time (Ms H, GEE: Geography - Economics - Education).
- To provide someone with knowledge (Ms D, GEE: Geography - Economics - Education).
- As someone who is doing literature in English and education, to teach is to give your point of view on a subject and to let others express theirs. Maybe you are chairing a debate and you give your own point of view so that others can assimilate or gain something good from you. That is how I understand teaching (Mr. G, ELE: English - Literature in English - Education).
- To teach? To teach is to work hard helping another person to know what you know (Mr. A, BPE: Biology - Physical sport - Education).
- To teach is like to develop children so that they become good citizens for the future of the country, to prepare them in order for them to have good life in the future by transmitting the knowledge you have to them in accordance with goals, procedures, and policy that the country has made. In short, you transmit to them updated knowledge (Ms E, MPE: Mathematics - Physics - Education).

- To teach for me is to develop, to increase someone's thinking in different kinds of knowledge for the growth and development of the country (Mr. B, KEE: Kinyarwanda - English - Education). (Interview: August-September 2010)

On the other side, B. Ed students interviewed defined "teaching" as follows:

- To train a learner, to give him/her knowledge that is enough for him/her to be a good citizen. To teach is not to give knowledge about courses only; it is also to mould the learners' emotional dimension for them to be good citizens (Mr. M, Mathematics - Education).

- Teaching is about the transmission of knowledge to learners. I consider teaching as a very important task that we should do for the society because us also, we could not be at this level if we did not have teachers (Mr. K, Entrepreneurship - Education)

- Teaching is about changing society. [….] So, teaching is, according to me, a factor that helps to transform society in a positive way (Mr. N, Foundations of Education - English).

- Teaching is like to direct or lead. I understand that to teach is to help somebody to go the right way, to discern between right and wrong, or to help him/her to know what he/she doesn't know but which would be important for him/her (Ms O, Foundations of Education - English). (Interview: August-September 2010)

The above definitions of "teaching" given by both B. Ed and non B. Ed first year student teachers "can, admittedly, be broadly summed up as 'the act of transmitting knowledge'" (R. Osman, personal communication, August 1, 2011). Generally, non B. Ed students, who do not have a pedagogical background, define the concept of teaching in terms of the transmission of knowledge while B. Ed students, who have such a background, define it in terms of developing the learners to become good citizens.

Students without a pedagogical background (non B. Ed students) define teaching referring to their daily experience of schooling as exposed to knowledge delivery. In fact, student teachers have ideas about teaching that were developed throughout their school experiences (Bramald, Hardman, & Leat, 1995). Even the one semester experience they had had at KIE was mainly a transmission based mode of teaching.

Seven (six non B. Ed and one B. Ed) students defined teaching as mainly a transmission of knowledge in possession of the teacher to others (learners) who do not have it so that they may make use of it to solve problems encountered in their daily lives. Teaching is, according to them, trying to influence or change others' way of thinking, culture, and behaviours for them to address daily challenges effectively. Besides the course content to be transmitted, teaching implies students' activities which must be rewarded by a degree or certificate, as one interviewee puts it in his definition.

Three non B. Ed students defined teaching from the same perspective as B. Ed students: to help and develop the learner. According to them, to teach is to help learners acquire knowledge in accordance with the goals, approaches, and policy set by the country which must be attained. The society's development goals are most effectively attained through education. In this regard, to teach is to develop learners by providing them with updated knowledge on things that they do not know yet. To teach is to lead the child into a good way by which the society is changed. Hence, the aim of teaching is to enable the country or society's growth and development as it is referred to in the definitions given by Ms E, Mr. B, Mr. M, and Mr. N.

As has been pointed out earlier, students with a pedagogical background (B. Ed) define teaching with reference to their pedagogical background by including a component of the act of leading and developing learners. Their understanding of teaching is close to the modern pedagogy; in spite of this it lacks the active participation of the learner in the teaching/learning process. Indeed, Emig (1967) herself defines the teaching process as the intervention by an older into a process of a younger to improve that process or the product of that process. B. Ed students' conception of teaching appears to be more accurate and closer to this scholar's definition of the concept of "teaching". This is because they are more familiar with the field of education than their counterparts, non B. Ed students. They see teaching as training a child in all his or her aspects (intellectual and emotional) for him or her to be a good citizen.

According to these students, to teach is to lead the child into a good way. In fact, a pedagogue, whose role is to teach, was etymologically defined as a slave whose job was to take children to and from school. Teaching is understood in the sense of helping the learner acquire what is important for him or her and for the society. Therefore, to teach is to transform society through

the transmission of knowledge to learners. In effect, teaching is a process of providing opportunities for students to permanently change through an effective engagement with experiences provided by the teacher or the school. Having learnt education before joining KIE, B. Ed students define teaching as a way of leading, conducting, helping and training learners to be good citizens who can change the society. In fact, education is a social phenomenon.

Based on these definitions of teaching by these two groups of student teachers, it can be concluded that teaching was defined with regard to participants' previous learning experiences. In effect, science students view teaching as a transmission of knowledge and problem-solving skills using the knowledge acquired. These students are used to applying theories and formula to solve problems. This may be due to the fact that, generally, literature indicates that science teachers usually use the transmissive teaching style and yet, in their comprehensive study, Sunal et al. (2001) identified this as a barrier for change where teaching is assimilated to telling. The lecturing method is chosen by teachers because they are more comfortable with it (Havice, 1999). Hence, their conception of teaching is linked to their previous and current teachers' ways of teaching.

The students who are studying languages at KIE such as Mr. G who is in the English - Literature in English - Education (ELE) combination, defined teaching with regard to the development of thinking and sharing of ideas. This is how teaching is mostly approached in their field of study (languages). Language students' conception of teaching is associated with the experiences gained from their teachers, as is the case for science students. As for social science students such as Ms H who is in the Geography - Economics - Education (GEE) combination, they defined teaching in terms of doing activities to meet goals and being rewarded. This is one of the characteristics of economists. They define teaching with reference to what is important to them in their area of specialisation.

The fact that students defined the concept of teaching according to their respective field of study can be interpreted in line with the constructivist perspective of reasoning. In this perspective, "humans are seen as subjects who actively construct understanding from experiences using their already existing frameworks" (Wubbels, 1992: 137). In fact, these students defined teaching with reference to the learning experiences that they had gone through. This shows that students'

previous learning experiences influenced their understanding of the concept of teaching, as teaching and learning form one pedagogical unit. Indeed, it is the student's experiences in learning a particular discipline or subject matter that has shaped and continues to shape his or her epistemological philosophy about the concept of teaching.

The definitions given by the students after entering a teacher education study programme corroborate some other researchers' findings that student teachers come to the programme withwell-established conceptions of teaching and learning" (Weinstein, 1990; Christensen et al., 1995) because they have experience of classroom life. In their empirical and comprehensive study on students' conceptions of teaching and approaches to learning by beginning teacher education students, Christensen et al. (1995) identified five conceptions of teaching. These include the shape of children's lives, the presenter of information, and the facilitator of thinking and learning. In a similar vein, Ms E stated that to teach is to prepare children for a good life; Mr. I, Mr. F, and Ms H stated that it is to transmit knowledge, while for Mr. A, teaching is about facilitating the acquisition of knowledge. This corroborates findings by Christensen et al. (1995).

Ashas been noted, the definitions by non B.Ed students at KIE focus more on the transmission of knowledge than those by B. Ed students. This suggests that non B. Ed students will tend to adopt a surface approach to learning because, as the findings by Christensen et al. (1995) indicate, learners adopting a surface approach to learning tend to see teaching as the transmission of information. These scholars note that "there is evidence to suggest that conceptions of teaching correspond with conceptions of learning" (Christensen et al. 1995: 19).

6.3.2 Typology of First year Student Teachers: Beliefs about the Teaching Profession

Interviews with students on their beliefs that they hold about the teaching profession suggest student teacher typology. A careful examination of their remarks can classify them into four categories: traditionalist, maverick, convert, and reservationist students (Sears et al., 1987).

6.3.2.1 Getting to the Typology

This section investigates first year student teachers' perceptions of the teaching profession in the context of Rwanda as a developing country in African. To achieve this, I questioned the participants about the image they had of the teaching profession. In other words, I wanted to

know how they perceived the teaching profession in the context of Rwanda. Subsequently, I asked them whether studying in order to become a teacher motivated or encouraged them in their studies. I also asked them whether they did not get bored in their studies when they thought of becoming a teacher in Rwanda. Finally, I asked them whether they would like to go to teach at high school after their studies at KIE and how they thought the teaching career would meet their expectations.

The answers to these questions reflected student teachers' beliefs about the teaching profession revealing the extent to which they were attached to the career they were being trained for. The analysis of data shows that participants can be classified into four categories with reference to their interest in the career. These categories are identified by Sears et al. (1987; 1994) the traditionalist, the maverick, the convert, and the reservationist.

6.3.2.2 Traditionalist Students

The first category is made up of students who had a positive perception of the teaching career from their high school. These continue to view it in this way during their first year of the KIE's teacher education programme. They enjoy the training that they are undergoing and have a positive view of their future career. These students are labelled as "traditionalists". These, according to Sears et al.(1987; 1994) seriously consider teaching as their career and are, therefore, service-oriented.

In the category of traditionalists, patriotism, one of the key focuses of the post-genocide Rwandan policy to reconstruct the nation, was mostly evoked by students. They said that to teach is not mainly about making money but rather about being patriotic. This is consistent with what Block (2008) noticed in his research. Indeed, Mitchell, Ortiz, and Mitchell (1987) found that an extrinsic reward such as salary was considered as less important by student teachers aspiring to become teachers. Therefore, I suggest that the teaching profession should produce patriotic citizens and thus teachers should be patriotic as well.

The student teachers' vision should not be to become millionaires but to become professional educators. Mr. B for example stated that his concern was not the low salary that teachers earn but rather the pivotal role that they play in the growth and the development of Rwanda. This is

consistent with Mitchell et al.'s (1987)finding that extrinsic reward such as money is notimportant. Equally, in research conducted in Fiji by Lingam (2004), it was found out that most of the first year trainees in Teachers' College were motivated to pursue the primary teaching career because they considered teaching as playing a valuable role in the society. This is also emphasised by Delors (1996: 141) who contends that "teachers have a crucial role to play in preparing young people not only to face the future with confidence but also to build it with purpose and responsibility".

One of the interviewees, Mr. B, was intrinsically motivated to study for a teaching career. He said that his interest for the career encouraged him to be psychologically engaged in the learning process:

> Yes, it [being a teacher] motivates and encourages me. As I told you, it's me who requested to be sent to KIE. I wanted to be a teacher. When I am studying, my goal is to pass, and pass with good grades. Then, the knowledge I will gain from here will help me to do the work after my studies. I will do it as required because of my full commitment to study for the profession. (Interview: August 24, 2010)

He added that after his studies at KIE, he would go immediately to teach at high school because it is the profession that he would have studied and qualified for. By so doing, he wanted to preserve his good image in the society.

Similarly, Mr. A, who was doing the Biology - Physical education and sport -Education combination, wished to help coaching Rwandan teams, thus aiming to "contribute to the development of our sport industry to make it more useful and beneficial in terms of culture and national economic growth in general" (Interview: August 25, 2010). His expectations were that the teaching profession would open doors to other professions. Although patriotic, this student seemed not to envisage staying in the teaching career for a long time.

Mr. C was discouraged by some of his friends from studying a teacher education programme. However, he said: "The most important thing is the way I perceive it personally; and my perception is good, there is no problem" (Interview: August 27, 2010). However, when I asked him whether he would go to teach immediately after graduating from KIE, his answer was not clear, as is shown below:

> I feel like going to teach immediately ….most of the time…., this is to mean that in the ordinary life I feel…. if possible, I can work on my own. But if I find place where to teach and where I will be paid in accordance with my qualification, I will teach. It is the profession that I have chosen, it is the profession that I am reading for, that I planned to do. Therefore, I cannot say that I will not teach whilst I am studying for it. (Interview: August 27, 2010)

His hope was to be employed as a professional teacher who knows English which is the medium of instruction in Rwanda because there are very few teachers who are fluent in English. However, the quotation above shows clearly that his intention was not mainly to join the teaching career. He would teach in case he did not find another job and would immediately quit as soon as he found 'a better' job. After all, he said that the money he would gain from teaching would help him to get another job.

Mr. G, who was thinking of joining journalism or other sectors while he was still at high school, was, at the time of interview, was convinced that he would be a teacher at least for the first three years after graduation. After that he could go and use his talents in other areas.

6.3.2.3 Maverick students

The second category is made of student teachers who are not really motivated and attracted by the teaching profession. They are known as maverick students. These students have joined teacher education because of other variables such as government sponsorship. In fact, some students said that they came to KIE because the Government would sponsor them on condition that they studied teacher education. Mr. J and Ms N are examples of maverick students. Mr. J, who had previously planned to study medicine, was studying education at KIE because the Government could not sponsor him in another area. He pointed out that he did not intend to be a teacher. Ms N was also studying at KIE for the same reason. She said that because she could not pay a private university in a field of her choice, she finally ended up changing her mind and accepting teacher education.

6.3.2.4 Converts Students

This category is made up of students who initially had a negative image of the teaching profession when they were still at high school. However, after they entered a teacher education

programme at KIE, they had to change their minds (often unwillingly) and accept to do it because they did not have any other choice. They thus committed themselves to the profession. This is consistent with Lingam's (2004) finding that some first year student teachers were following the teaching career because they could not do otherwise. This category is comparable to "converts" type of students (Sears et al., 1994). Convert students are those who initially do not see their career in teaching but who, once they are admitted to the teacher education programme, show strong commitment to the job (Sears et al., 1987).

I also asked participants whether students do not get bored when they study the teacher education programme bearing in mind that they will be teachers. Ms E shared the same opinion with her colleagues; she stated that she would join the teaching profession if and only if there was no other alternative and better job. She was converted after she entered the institution.She expressed herself in the following terms:

> You think of that before you enter KIE. Once here, you just accept it against your will and you study as other students do. By changing your mind, you end up liking it [teaching] and understand that you can live any kind of life. From there you don't get bored, but you study hard for your personal growth and development. (Interview: August 26, 2010)

The interview that I had with her revealed that she did not intend to be a teacher after her studies at KIE. She wanted to further her studies in another field such as technology because, as she said, teaching was not her favourite job.

Ms D was extrinsically motivated for the teaching career because she aimed at getting a job in the teaching profession immediately after her studies. She was never bored during her studies in the teacher education programme. She said that her aim was to obtain very high marks so as to be recruited as tutorial assistant at KIE. This would be an opportunity for her to go for further studies and get Masters or PhD degrees in order to qualify as a university lecturer. In this way, the teaching profession would help her to meet her expectations. She was not doing teacher education in order to teach at high school but at the tertiary level.

6.3.2.5 Reservationist Students

Contrary to convert students who finallyenter the profession, reservationists have a vision different from that of the teacher education institution (Sears et al., 1987). Reservationists students are undecided as to whether they will remain in the career or not. They study the programme in order to get degrees and then run away from the teaching career to more comfortable and paying jobs. Such student teachers in this study claimed that the teaching profession in Rwanda was problematic. They argued that teachers were struggling with life in miserable socio-economic conditions due to their low salary. These students were absolutely against doing the work they were training for. In fact, they were not motivated to do teacher education; they were doing it because they did not have any other alternative. Moreover, Calderhead (1988) argues that, these students do not see themselves as being teachers. This is evidenced in the findings in the next paragraphs.

Though Ms H hoped that teachers' living conditions would improve in the future, she had a totally negative attitude about the teaching career. When I asked her whether she would go to teach after her studies at KIE, she ironically and laughed loudly: "Hahahahahaha!!!! […]. I cannot because, from the bottom of my heart, I don't like to teach" (Interview: August 24, 2010). She argued that she wanted to be respected and joining the teaching career would not allow her to achieve this aim.

These beliefs about the teaching profession may lead to a low level of engagement in education related courses and hence to low performance. For example, this student (Ms H) scored only 50% in EDP 101 while she had some knowledge of psychology because she had learnt it at high school as she has a humanities background. This student was unsatisfied with studying at KIE and this situation could inevitably lead to low level of engagement and thus low performance. Indeed, "satisfaction represents a sense that the student feels he or she belongs at, and is loyal to, the institution" (Tinto, 1987 cited in Kuh et al., 2007: 60) and studies found that satisfaction is highly correlated with engagement and academic performance (Kuh et al., 2007). Consequently, unsatisfied students in the KIE teacher education programme are likely to perform poorly in the academic area.

This idea shows that teachers in Rwanda are not well considered compared to other professionals. This is mainly due to poverty resulting from a low salary and the highly demanding nature of the profession. In this regard, Ms L was asked how she considered the teaching career in relations to other professions. She explained:

> When I look at the teaching profession, I see that it is a very difficult profession. It is a profession which makes teachers exhausted every single day of their work. It is fruitful for others but not for the person doing it. We realise that it is a profession to which the Government has not given its real value. This may be due to the poverty of the Government as it has been said but the teacher's salary is not equivalent to the work he/she does from seven o'clock in the morning until five o'clock in the evening. (Interview: August 24, 2010)

This quotation shows that Ms L had a negative image of teaching compared to other professions in the context of Rwanda. The Government of Rwanda acknowledges that the teacher's salary is low and has tried to top it up for the last decade. For instance, in the beginning of the year 2012, the Government added a small percentage (10%) to a teacher's salary and promised a 50% increase by 2017. However, this salary is still too low compared to that of other professionals. This, according to the government, is due to economic constraints of the country.

It is true that teachers in Rwanda are paid less compared to their colleagues with the same qualifications working in other fields. This situation, however, is not unique to developing countries such as Rwanda. In the USA for example, the American Federation of Teachers' teacher salary survey (http://www.aft.org/salary/index.htm) found that teachers' salaries in 2005 fell well below the average for wage earners of comparable educational attainment.

Similarly, Mr. I said that the image of the teaching profession that he had prior to KIE was completely negative because of the status of teachers. Mr. J, who previously wished to be a medical doctor but who was then sent to KIE, claimed that: "Teachers are less paid. Teachers do not receive the dignity they deserve. Teachers are considered as people who do not have any importance in the society" (Interview: August 30, 2010).

Thus, there is a huge gap between the mission of teacher education programmes and student teachers who are abusively called reservationist. During the interview, the student whom I classified in this category asserted: "[…]. I am not here at KIE to study for becoming a teacher"

(Interview: August 30, 2010). This attitude is likely to weaken his involvement in learning teacher professional courses as he lacks motivation to learn for the career. This also shows the challenges that teacher education institutions face in shaping the teacher identity of prospective teachers.

The above feelings were shared with other participants who also lacked motivation and could not be fully engaged in their studies when they think of becoming teachers. Ms H stated: "I am never motivated to learn when I think of becoming a teacher. […]. When I imagine myself going in front of students and teach I am not happy" (Interview: August 24, 2010). When I asked her whether she would go to teach after her studies at KIE, she said: "I will do my internship first. After the internship, I cannot go to teach immediately. I cannot, because from the bottom of my heart, I don't like teaching" (Interview: August 24, 2010). She pointed out that she would train adult people rather than teaching in the classroom. In a similar vein, Mr. I had aspired to be an engineer since high school. He clearly stated that he would never be a teacher.

Student engagement for reservationist students is likely to be extremely low, which may lead to low performance. This is because student engagement implies psychological investment in, and effort directed towards learning and the extent to which one invests himself or herself in learning is directly related to learning outcomes (Prosser & Trigwell: 1999). The above mentioned beliefs that student have about the teaching profession appear to be definitely in contradiction to the mission of any teacher education institution. In other words, the vision and mission of these institutions are in contradiction with the aims of the students that they enrol.

Comparing the four categories of student teachers in this typology, Sears et al. (1987) note that traditionalist and convert students are committed to the teaching career while the mavericks and reservationists show a weak level of commitment to teaching. Indeed, Book, Freeman, and Brousseau (1985) highlight that for these last two types of students, teaching is seen as a likely 'stepping stone' to another profession. This is the case for most non B. Ed students in this study. B. Ed students, on the other hand, are traditionalists because they had their teacher identity formed earlier and are motivated.

Given the fact that the motivation to learn a particular subject is a determinant factor in student engagement; one can wonder how these students studying for a less valued career go about their

studies in general and about studying professional preparation courses in particular at KIE. It is this student engagement in studying those courses which is explicitly explored in this study by means of the Classroom Survey of Student Engagement (CLASSE) whose empirical findings are presented and discussed from Chapters Seven to Ten.

Also, the choice of KIE by some candidates was mostly influenced by the fear of not getting jobs after their studies or the fear of missing the government's sponsorship for tertiary education. This is one of the challenges that teacher education institutions should deal with so as to transform these teacher candidates' negative views into a positive image of the teaching profession that is expected of a professional teacher. If the image of the teaching profession is to change from negative to positive, it should start with these prospective teachers.

In sum, first year student teachers at KIE who participated in the present study hold four types of image towards the teaching profession. These classify them as traditionalists, maverick, converts, and reservationists. All B. Ed students interviewed fall in the category of traditionalists. Non B. Ed students fall in the other three categories with most students with a science background being reservationists.

This study also found out that the majority of the participants intended to teach for few years and then leave the teaching profession for more decent and paying jobs. This justifies Mandel's (2006: 66) view that "too many teachers are leaving the profession after their first year in the classroom in response to the stresses they suffer there". Similarly, Darling-Hammond (1990) found that about 60% of graduates did not immediately enter the teaching work force after graduation. This study also found that this drop out was due to the low salary of teachers and this was consistent with Eisner's finding that many of those who drop out of teaching do so because of the lack of adequate pay (Eisner, 2006).

It is a fact that people are not born teachers; they become teachers. We are shaped by both internal (genetic) and environmental factors or determinants which make us teachers or people in any other profession. While remuneration is important in motivating workers for better production, commitment to the teaching career and hope for a better future can make somebody have a good image of the profession, in spite of a low salary.

6.3.3FactorsInfluencing Students' Adoption of Teacher Education in theContext of Rwanda

Confronted with a new situation, human beings are able to make changes in their behaviours to adapt to the new situation. This section explores some of the factors that influence theadoption of the teaching profession as evoked by participants during interviews. These are reasons why students who had previously a negative image of the profession came to modify it and even change it to a positive one. Such changes should be, in fact, the raison d'être of any teacher education institution.

6.3.3.1 Job Opportunity

Students' negative attitude towards the teaching profession before coming to KIE was changed due to the fear of not finding jobs after their studies. When choosing higher institutions at the completion of high school, these students chose KIE because its graduates get jobs more easily if they wish to teach. The fear of being jobless makes students adapt themselves and adhere to the career they previously hated. Ms D, who had repeatedly said that she would never become a teacher, decided to choose KIE so that she could get a job after university. She said:

> I chose KIE because I was aware of the problems you face when you study in areas other than education. I said to myself that if I don't do education, I will not get a job. I have chosen KIE because my objective was to study and get a job in the teaching career. I was always worried about missing job. […]. I chose KIE so that I can get job easily after my studies. (Interview: August 26, 2010)

In parallel to the present research, a study was conducted to explore pre-service teachers' motivation to pursue primary teaching career in a Teachers' College in Fiji. This college was the only government teacher education institution in Fiji as is the case for KIE in Rwanda. In this research, some first year students said that they were motivated because they considered teaching as a secure job as they could easily get absorbed into the civil service (Lingam: 2004). Hence, some candidates for the teacher education programme get involved in it not for the love for the profession but for the job opportunity it offers. This is mainly because teaching is not very longed for by educated people especially in developing countries because it remains the least well paid.

In spite of teachers in Rwanda being less paid, Ms D opted to study education because she was scared of being unemployed after her studies. In reality, her image of the career had not changed; she decided to go for the teaching profession because it was the only available option. This complies with Mandel's (2006: 44) point that "new teachers have one basic goal in mind – survival". In a developing country like Rwanda, which has very limited resources, pre-primary, primary, and secondary school teachers' salariesare still so low that they cannot even cater to their basic needs (Nzabalirwa & Nkiliye, 2012). However, the little is better than nothing.

6.3.3.2 Government Sponsorship

In addition to the fear of being jobless, government sponsorship is another element which attracts non B. Ed student teachers to the programme even if some of them do not intend to teach after their studies at KIE. Mr. J was asked how he felt when he knew that he was sent to study at KIE whose mission is to train teachers. He answered: "Frankly speaking I was not happy. I was not happy because I had chosen to study medicine. However, after they gave me education, I came here and I finally accepted it" (Interview: August 30, 2010). But when I asked him if studying in order to become a teacher encouraged him to engage fully in learning, he replied that he did not plan to be a teacher.

It is clear that Mr. J accepted to do education because he did not have any other choice. In other words, he had to like what he had, after missing what he wanted. Against his will, he ended up accepting to do teacher education because he got a Government sponsorship in this field, which he could not get had he decided to do medicine. This result is similar to the comment made by some students in Lingam's (2004) study on the most common reasons why they joined the teaching profession.

Along the same line, Ms N said that she was 'forced' to study education because this was the only field in which she got government sponsorship. For her, when the Government sponsorship is available for the students in a given area, they have to accept it whether they like the area or not. This is because they cannot afford to pay for themselves as private students in a field of their choice. This student said that she would go to immediately to teach at a high school after her studies at KIE in case she did not find another job. For her, to graduate from KIE does not mean that one necessarily has to be a teacher.

6.3.3.3 Pedagogical Preparation Courses

The professional courses that are offered to student teachers have a valuable impact on their personal growth and development as prospective teachers. They positively influence their beliefs about teaching and the teaching profession. In fact, "a student's beliefs are affected by experiences with the institution, which then evolve into attitudes about the institution, which ultimately determine a student's sense of belonging or 'fit' with the institution" (Kuh et al., 2007: 15) together with its mission.

Therefore, the impact of the teacher education programme on students' previous attitudes towards the teaching career is made effective through the experiences that learners have with the institution, whose experiences converge to educational outcomes. Both the intended and enacted curriculashape students' identity as teachers to be. The intended and enacted curricula refer to the planned and unplanned teaching and learning experiences offered by the teacher education institution. Professional preparation courses/modules play a pivotal role in shaping teachers' identity. In the students' first year of teacher education, their image of and their beliefs in the teaching profession change or are enhanced through professional preparation modules/coursessuch as Fundamental Life Skills for Teachers, Theory and Practice of Teaching, Introduction to Educational Psychology, etc. which are offered in the first year at KIE.

In effect, at the data collection time for this study, students in the KIE's teacher education programme had completed semester one of the first year. Therefore, they had been introduced to teaching and learning through different institutional experiences including one professional EDP 101 and were then doing a module entitled 'Theory and Practice of Teaching' (EDC 101). These experiences are likely to shape their identity as prospective high school teachers.

In the present study, participants were also asked whether it was necessary to study professional preparation modules in order to become an effective high school teacher. All the participants confirmed that education courses were very necessary. They argued that these courses effectively prepare students for the teaching profession by equipping them with professional skills.

Underlining the importance of pedagogical courses, Mr. C said: "I cannot say that they are just necessary but, I must emphasise and underline that they are very much necessary because they help more than you can imagine" (Interview: August 27, 2010). He gave an example of the

notion of progression that they had learned in the module entitled 'Theory and Practice of Teaching' which was being taught at the time of data collection. He said that this topic had shown that teaching was not mechanical but rather psychologically progressive. It required having good knowledge of what the teacher had to do. He concluded that: "Not everybody can do it [teaching]. Only well trained people, who have enough knowledge about the learner can do it. I find myself having much changed due to what I have just learned right now" (Interview: August 27, 2010). In actual fact, this non B. Ed student scored 72% in EDP 101. The change that he felt after only one semester of study in a teacher education programme can partly be shown by this performance.

Professional preparation courses/modules are vital for any professional training including teaching. Mr. B argued:

> These education modules are very necessary because through them you get to know the methodology that you wouldn't know if you never studied them. Even if you have enough knowledge [in a subject matter], even if you know English or Mathematics very well without knowing how to transmit them [the teaching methodology], I think that you will not do things the ways they are supposed to be done. (Interview: August 24, 2010)

Similarly, Mr. O acknowledged that:

> To know what to teach is one thing and to know the way to teach it is another…. So I find that an effective teacher should be knowledgeable in the subject matter but also trained in the teaching methods" (Interview: September 2, 2010).

Mr. O found the courses taken at KIE to be sufficient and rich enough to help him become a good teacher. Ms N also found education courses offered at KIE effective in preparing her to be a good teacher. This is because, according to her, they address issues on wellbeing of the child, how to handle him or her, how to teach him or her, and how to help him or her grow in a good way. Thus she sees education courses as empowering student teachers who will be seen as "caring professionals" (Osman & Petersen, 2010).

Professional preparation courses equip students with teaching skills and awareness of the profession throughout their training. Failure to do this route effectively may turn teachers into

mercenaries. For example, Ms N mentioned a case of untrained primary teachers she had worked with. These teachers had joined this profession because they could not find jobs in their respective fields like accountancy. They sat for the national examinations as private candidates in teacher training. When they succeed, they get the same certificate as those who follow the three year TTC section and they are, ipso facto, qualified as primary school teachers. Ms N questioned the qualification and the teaching abilities of such people, especially in primary school where there are still class teachers instead of subject teachers.

Gravett and de Beer (2010: 9) note that "teaching requires a special mixture of both content knowledge and pedagogical knowledge" which can mainly if not only be gained through exposure to and involvement in classroom practices. These independent candidates do not have access to these because they, independently, were prepared to pass the matric exams. This indicates that professional preparation courses are absolutely essential in shaping prospective teachers' attitudes towards and skills in the profession. Therefore, pedagogic knowledge is of utmost importance for prospective teachers. This pedagogical knowledge "refers to the knowledge teachers need to represent and impact subject matter to student" (Morey, Bezuk, &Chiero, 1997: 8). It "merges content knowledge with pedagogical knowledge so that they are not treated separately when planning and executing teaching" (Gravett & de Beer, 2010: 9).

According to Michael (2003), "research provides limited support for the conclusion that preparation in pedagogy can contribute significantly to effective teaching, particularly subject courses (focused for example, on how to teach maths or science)" (Michael, 2003: 5). However, there is no doubt that "knowledge of how to teach a particular subject is important" (Michael, 2003: 4). In fact, researchers found that teachers attributed their knowledge of a range of instructional strategies, classroom discipline and management and classroom routines to their education courses (Adams & Krockover, 1997; Grossman & Richert, 1988; Valli & Agostinelli, 1993).

When faced with professional preparation courses, some of the students who had a negative image of the teaching profession when they were still in high school changed this image into a slightly more positive one after entering KIE. For some, this change was due to the education courses they had learned, for others it was due to the fact that they had had a chance to get the

government sponsorship in this field. The latter had to force themselves to accept their status of prospective teachers because, after all, they had to get a degree.

Mr. F's lack of interest in the teaching profession disappeared thanks to the effect of the education modules he had learnt. He remarked:

> Yes the teacher's salary is low. Myself when I was at high school I was discouraged by the low salary of the teacher. But since I came to KIE and especially during this second semester, I have realised that to be a teacher is firstly to like the profession and to know what teaching is all about: to value knowledge and those who will receive it instead of being more interested in money. In fact, money is never enough. But if I am a teacher who teaches as required, quality education will be a reality and other things [such as money] may also be achieved. You can even do some other business besides your teaching career, which can earn you extra money while remaining a teacher whose first aim is not to earn money. (Interview: September 2, 2010)

As it can be seen, Mr. F seems to offer advice on how to achieve professionalism in teaching even in difficult conditions. Given that pedagogy is a science and an art which involves knowledge, love, and self-commitment, money should not be a big issue. Some other researchers have come up with similar findings. For instance, responding to the question 'Why should I be a teacher?' Eisner (2006) does not mention money as a factor for choosing the teaching profession. In Block's study, one interviewee said: "I do not teach for the money […]. Perhaps if I thought about the money I would not teach; perhaps if I thought about the money, I could not teach. Of course, there isn't that much money of which to speak" (Block, 2008: 422). It can be argued, therefore, that the process of changing student teachers' attitudes towards the profession, pedagogical preparation courses play a key and pivotal role.

Professional preparations modules/courses aim to professionally prepare student teachers for their future career. This preparation involves motivating students, and cultivating awareness of and commitment to the teaching career in them. This will make student teachers aware of the essence and the nature of the teaching and learning.

6.3.3.4 Motivation and self-determination

I asked Mr. F whether studying at university while he knew that he would be a teacher motivated him to be fully engaged in his studies. He replied: "When you have already accepted and liked

the idea of being a teacher, you are motivated. It's a matter of being aware of what the profession is all about" (Interview: August 23, 2010). During the learning process, he says, he never got bored when he thought of becoming a teacher. His answer to this question shows a strong determination which goes hand in hand with a high level of engagement in learning.

This student said that after his studies at KIE, he would immediately go to teach at high school so as to apply what he had acquired; he said he would make sure he was effective in this career. The good thing he has found about the teaching career is that teachers have knowledge which they always update. He argued that teaching was about getting more and more knowledge and teachers were more susceptible to pass tests for jobs because they spend most of their time reading.

The interview that I had with Mr. J revealed that he was intrinsically motivated for the teaching career. He stated that he did not expect to leave the teaching profession even after his studies at KIE. When I asked him how the teaching career would meet his expectations, he replied:

> I will still be satisfied in the teaching career, irrespective of how much I earn as a salary, whether it is little or much. As long as my orientations [as long as my expectations are met in this career] and my expectations are related to this career that I like so much, I will be satisfied. (Interview: September 2, 2010)

This student is intrinsically motivated and committed to the profession he is being prepared for and, therefore, his level of engagement may be esteemed higher. In contrast to him, Ms N was not really committed to the career in spite of her claiming to like being a teacher. When I asked her whether she had ever got discouraged in her studies bearing in mind that she would become a teacher, she replied that her aim was to succeed. This suggests that for her, it is not a matter of being a teacher but of succeeding and getting a degree which can be used to get a better job. Therefore, she is committed to passing exams and is thus a surface learner.

Student teachers' perceptions of their future career change as the training go on. Mr. G who also had a negative image before joining KIE's teacher education programme changed his mind and became motivated to study in order to become a high school teacher. He was motivated because he wanted to be a good teacher as it can be seen in his remarks below:

> What I learn will help me in the future. […]. So that's why I am motivated. I am not studying for becoming a technician or a driver, no!! I know that I will be a teacher. Maybe I can just do other jobs or join other fields but what is important is that I know that I will be a teacher. Teaching is my career and I am interested in it. (Interview: August 25, 2010)

As an ELE (English-Literature in English-Education) student, Mr. G would like to teach for at least three years and then do the other works that he likes such as drama and film making. He suggested that teachers should not limit themselves and spend all the time in school but they could also run other business in parallel with teaching. He argued that "to be a teacher is to be aware of your love for the teaching career as requested and whatever else you do shall not prevent you from doing it [teaching]" (Interview: August 25, 2010). Thus he is committed to teaching and, at the same time doing another business that can bring money.

Colleagues could also contribute to people remaining in the teacher education programme by persuasion. One example is Ms E who never wished to become a teacher mostly because teachers are poorer compared to others professionals. She ended up setting her mind to cope with teacher education because she was told by colleagues that studying at KIE does not necessarily mean to become a teacher.

This study has also found that very few of the student participants were motivated bythe profession and committed to contribute in the field of education. Mr. I believed that after university studies in the field of education, he would be able to play a role in education policy making and contributing to curriculum change if necessary.

6.4 First year Students' Perceptions of their Future Career within the Rwandan Context as a Developing Country in Africa

With reference to the context of Rwanda, first year student teachers were asked how they perceived the teaching profession for which they were training. Interviewees revealed that since Rwanda was a developing country, there was a lack of necessary resources to enhance the quality of education nationwide. The lecturers whom I interviewed also share the same view.

One participant argued that the teacher's salary could not allow him to buy a car, which is true. However, this situation is not peculiar to Rwanda as a developing country. Even in the United

States, “teachers continue to be seen as service personnel who earn less than their similarly educated peers in other professions” (Hallinan & Khmelkov, 2001: 177). Nevertheless, teachers’ living conditions in Rwanda cannot be compared to those in the US because the socio-economic status of people depends on the living style and the economy of each country.

In an interview, Mr. B remained adamant that in spite of teachers’ salary being low and called several derogatory names such as *urusenda*(chili) andserum, this could not make him dislike the profession. The metaphor of the above names is popular in Rwanda. The chili metaphor means that since this salary cannot satisfy even the basic human needs, a teacher’ s salary is seen as bitter or unpleasant as chili (for those who do not take it). As for the serum metaphor, it stems from the fact that teachers’ salaries can only keep them alive but in conditions that are similar to those of a dying patient. These derogatory names reflect and influence the beliefs and attitudes that people have about the profession. For Mr. B, probably the time will come for teachers’ living conditions to improve. This can happen through a salary increment or any other strategies by the Government that can address this problem. One example that he mentioned is UMWALIMU SACCO (Teacher Savings and Credit Cooperative). Umwalimu is a Kinyarwanda term that means a teacher.

The fact that the teachers’ salariesare still very low discourages even those who were committed to the profession. Ms N used an expression that has been widespread among teachers: “They [the government] will cheat us that they are paying us and we will cheat them that we are working” (Interview: September 2, 2010). Beliefs such as these will surely decrease the quality of education. She continued by saying that “teachers are not as motivated as other civil servants” (Interview: September 2, 2010). This situation causes even those who liked the profession to hate it and/or those who were able to teach leave the profession when they find other jobs.

Mr. O, a B. Ed student confirmed the idea above saying that teachers’ low salaries demotivates them and some leave the profession even for the jobs which are normally reserved for people who are not educated but which provide more income. Mr. O gave an example of his colleague who, after teaching for two years, left teaching for the transport sector. He is now a motorcyclist (a person who transports people with a motorcycle). With this new job, the former teacher can pay three teachers every month and cater to his financial needs as well. Mr. O reported that

teachers at his school used to say that "if they could find a job opportunity in another sector, they would not hesitate to leave the teaching career" (Interview: September 2, 2010).

I asked Mr. O where he stood with regard to leaving the teaching profession for a better paying job given that he had taught for two years earning a small salary. He strongly ascertained:

> Sincerely speaking, if it were not the motivation I told you about before that is in my nature since my childhood that I have been feeling to become a teacher, if it were not this personal motivation, I also would have left because the salary that I was getting was not even enough to cater to my basic needs; I had to look for some other sources of income to survive. […]. So if it was not this vocation of becoming a teacher I found myself in, I also, maybe, would have gone elsewhere. But, the fact that, even when selecting high schools, I once again chose to become a teacher, it shows that I feel this to be more of a vocation rather than a money making activity. And I think that some few teachers may be sharing the same view of seeing the education career not as a place where we get money but as a place where we get the opportunity of transforming the society in a positive way. (Interview: September 2, 2010)

The above findings point toa strong commitment to teaching by B. Ed students as well as the love for teaching which is important but also teachers' efforts need to be rewarded if quality education is to be attained. In fact, psychologists and educationists agree that without motivation, there is no satisfactory outcome because human behaviour is ultimately motivated and research has found that motivation promotes and sustains self-regulated learning (Pintrich, 1999) indicating thus student engagement. Both intrinsic and extrinsic sources of motivation are indispensable. If salary increment is not possible to the level of other professionals due to financial constraints, at least some incentives should be provided for teachers to improve their living conditions and this would impact on the quality of education.

To substantiate this, an empirical study was conducted in government-run rural primary schools in India where a mean bonus of 3% of annual pay was given to teachers based on the average improvement of their students' test scores. The study showed that schools that provided incentives performed better than those whose teachers were not receiving this bonus (Muralidharan & Sundararaman, 2006). However, it should be noted that two psychologists, Deci and Ryan (1985) note that monetary incentives can sometimes crowd out intrinsic

motivation and lead to inferior outcomes especially when they are of small amounts. Incentives in education should therefore be carefully considered.

Even though the teachers' salaries in Rwanda are low, some student teachers believe that the situation will improve progressively. Mr. G remains optimistic as can be seen below:

> My view is that things are somehow becoming fine in Rwanda. Even though teachers' salaries are low, our leaders are trying to find ways of increasing teachers' livelihood. For instance, UMWALIMU SACCO is helping teachers little by little. I think it is a matter of time, it will be all well. Rwanda is trying its best to improve teachers' living conditions and I hope that with the time, it [situation of teachers] will be good (Interview: August 25, 2010)

As pointed out by the above student, the Government of Rwanda is trying to solve teachers' problems to improve their socio-economic situation. UMWALIMU SACCO is one of the strategies adopted in this endeavor. It was put in place by the government of Rwanda with a mission to help teachers to save and provide them with subsidised long term loans at a low interest rate. It is to be used primarily for income-generating activities (Ministry of Education: 2010). Mr. G hopes that this cooperative will help to alleviate socio-economic problems of teachers.

A close look at the participants' responses reveals that for some of them, motivation to learn cannot be linked to the interest shown for the profession. Rather it is linked to the need for a degree and, if an opportunity arises, they run away from the teaching career for better jobs. This might be true for most of KIE students given that most of first year students who were interviewed were not happy with being trained for the teaching profession. They reluctantly accepted it because they had no other choice given that this was the only field that the government was ready to sponsor them in. Thus, they forced themselves to like teacher education in order to succeed and get a degree. Some students openly stated that they would never teach after their studies at KIE.

6.5 Summary of the Chapter

This chapter has explored the beliefs that B. Ed and non B. Ed students brought to the teacher education programme at KIE and tried to relate these beliefs to their performance in the modules

that were investigated. These beliefs reflect the image of the teaching profession that prospective teachers hold before coming to KIE, once at KIE, as well as their perceptions of their future career after KIE. The study found that before entering KIE, B. Ed students interviewed had a positive attitude towards the teaching profession while most of non B. Ed students had a negative attitude towards the career.

Despite the fact that the teachers' salariesis very low and the low status of the teaching profession in the Rwandan society, the students who had had teacher training before coming to KIE (B. Ed students) kept a positive attitude about the teaching and the teaching career. B. Ed students were excited at accessing university and at becoming high school teachers while they previously felt destined to stay at the primary school level. They were intrinsically motivated to study for the profession and were proud of being university students. This can explain why their performance was better even in courses in which they did not have enough prerequisites (such as English) compared to non B. Ed who had had these courses as their major subjects at high school. They were self-determined and committed to filling in the gaps and overcoming their weaknesses in English, the language in which they would be teaching after KIE.

Their good performance in both Psychology and English related courses was a consequence not only of their education background but also, and mainly, of their feelings, beliefs and perceptions about the profession they were being trained for. This also suggests the existence of a strong involvement and engagement with these two courses on their part. Therefore, positive beliefs about the teaching profession are associated with good performance in both professional preparation courses as well as in other courses offered in teacher education programmes, including those in which students' prerequisites are not enough.

This suggests that positive beliefs about the profession that one is being trained for can be associated with the motivation to learn for the profession. This motivation determines the level of engagement, which, in its turn, determines the quality of learning outcomes of which performance is one.

Most non B. Ed students interviewed, on the other hand, were not ready to become teachers, and some of them did not even dream about becoming teachers. The latter categorically stated that though they were doing teacher education, they would never teach. Some of them were studying

at KIE because they did not have any other choice. They could secure government sponsorship only if they studied education. Under these circumstances, they lacked motivation to study for the teaching profession. In both modules that were investigated, non B. Ed students' negative image of the teaching career and their negative beliefs about it could be the cause of their low level of interest and motivation, which are necessary for effective learning. Their low performance could have been the consequence. This suggests the low level of involvement and engagement with the courses and can lead to poor performance even in a course in which students have strong background knowledge such as English. In these courses some of these students' performance was lower than that of B. Ed students.

The negative image of the teaching profession that they held before entering the KIE's teacher education programme and which they were still holding after they had joined KIE may have been a hindrance to their commitment to learning for the teaching career. This negative image was mostly due to the teachers' social and economic status.

With reference to the way first year student teachers perceive the teaching profession in Rwanda, this study found that these students can be divided into four categories. The first category is made up of students who are serviced-oriented, who consider the career as their option. These are referred to as traditionalists. The second comprises the students who are not attracted by the profession and who joined KIE because they did not have any other choice (maverick). The third includes students who had never wished to be teachers but who finally accepted it once admitted to KIE (converts). Finally, the students in the fourth and last category are those who were undecided on whether they could remain in the profession or not (reservationists). Most of students in these different categories viewed their future career in the Rwandan context as not attractive due to the teachers' meagre salaries. This salary could disengage even those who are intrinsically committed to the profession.

The students who had a negative image of the teaching career could change it into a positive one. This study found that four factors were contributing to students' attitude change. Firstly, teacher education in Rwanda offers immediate job opportunities, which is not the case with other fields. Secondly, student teachers accept doing teacher education because the government has sponsored them in this area. Thirdly, professional preparation courses play a very important role

in shaping student identities as teachers in spite of their beliefs in the context of Rwanda. This is because "a belief has no inherent character or value out of context" (Anderson & Holt-Reynolds, n.d). Lastly, some students are intrinsically motivated and self-determined to having teaching career.

With regard to how these student teachers define the concept of teaching, it was noted that after completing their first semester at KIE, non B. Ed students generally defined it as a transmission of knowledge. B. Ed students, however, defined it with reference to developing learners to become good citizens. They consider teaching as a way of leading a child into a good way through the moulding of all the aspects of his or her life, including intellectual and emotional, so that he/she becomes a good citizen.

All in all, the beliefs about teaching and the teaching profession that students bring to teacher education are more likely to influence their performance than their education background. For example, students with a pedagogical background (B. Ed) who had positive beliefs and perceptions about the teaching career performed much higher in English related course than they did in a psychology course. On the other hand, students with a language background (non B. Ed) who had negative beliefs and perceptions about the career performed much less in English than they did in psychology.

The findings on the beliefs that students brought to teacher education and their impact on their first year performance can be seen as referring to the concepts of academic and social integration which are two processes by which students adjust to college life. Students with professional preparation since high school (B. Ed) seem to be academically and socially integrated in the KIE community more than non B. Ed. Academically they perform better and socially their beliefs are positive. The concepts of academic and social integration are understood as follows:

> Academic integration represents both satisfactory compliance with explicit norms such as earning passing grades and normative academic values of the institution such as an engineering school that values the physical sciences over the arts. Social integration represents the extent to which a student finds the institution's social environment to be congenial with his or her preferences, which are shaped by the student's background, values, and aspirations. Social integration is often measured as a composite of interactions with peers and interactions between faculty and students,

> while academic integration reflects satisfaction with academic progress and choice of major (Kuh, Douglas, Lund, & Ramin-Gyurnek, 1994 cited in Kuh et al., 2007: 14).

Students with a high level of social integration fit in or even feel connected to the institutional environment with its mission. Applied to the present research, it can be argued that students who had experienced teacher education before joining KIE (B. Ed) were more academically and socially integrated than students without such experience(non B. Ed). The former had positive beliefs and perceptions of the teaching profession whilst the latter had negative beliefs. Thus, B. Ed students were satisfied with being in a teacher education institution to continue the training they started from high school. They effectively complied with the norms and values of the institution. Socially, these students felt belonging to an institution that they freely chose to meet their aspirations and academic background.

Non B. Ed students, on the other hand, had negative beliefs and perceptions of the teaching profession. They were not satisfied and could not comply with the academic values of KIE as they had not chosen this institution or, at least, it was not choice number one for most of them. In fact, it was found that some of these students felt the teacher was destined to be miserable. Teaching, according to them, equals poor living conditions, etc. These negative beliefs show inadequacy of both academic and social integration in the life of KIE.

The implication of students' beliefs and perceptions in relation to performance and student engagement in teacher education is that student teachers, who hold positive beliefs and perceptions of the profession, are adequately integrated both academically and socially in a teacher education institution. These are traditionalist students and, therefore, teacher service-oriented. They psychologically invest and engage in learning courses that prepare them for the career for which they are intrinsically motivated and, therefore, perform high. On the other hand, students with negative beliefs and perceptions of the teaching profession lack interest and motivation to study for the career. Thus they are not adequately integrated both academically and socially. These are identified as reservationists and maverick students. Their level of engagement in studying for the career is low, which leads to poor performance. Student engagement is also dependent upon how students perceive the teaching and learning environment which is the core business of the next chapter.

CHAPTER SEVEN

FIRST YEAR STUDENTS' PERCEPTIONS OF THE TEACHING AND LEARNING ENVIRONMENT AT KIGALI INSTITUTE OF EDUCATION

7.1 Introduction

Chapter Six focused on the beliefs and perceptions of teaching and the teaching profession that first year students bring to post-secondary teacher education. These beliefs and perceptions are likely to influence student engagement and performance. The present chapter compares B. Ed and non B. Ed students by exploring the relationship between their perceptions and the learning environment or context in which EDP 101 and ELA 101 modules were taught and learnt. It was noticed that these beliefs and perceptions influence student engagement and hence performance within the classroom atmosphere in which various learning styles are adopted by the students.

The students' perceptions of the teaching and learning environment were qualitatively investigated through interviews. In this chapter, I also decided to explore the classroom atmosphere and the sections of optional items of the CLASSE instrument because both categories of items are linked and reveal the conditions under which these modules were taught and learned at KIE. Both qualitative findings obtained by means of the interviews and quantitative data obtained by means of the CLASSE items related to the classroom atmosphere are presented together because they complement each other.In fact, interviews were conducted to answer the research question on how B. Ed and non B. Ed students perceive the teaching and learning environment of the modules that they take in common, and how this perception influences their performance and, at the same time, the classroom atmosphere items of the CLASSE instrument reveal the extent to which these two groups of students quantitatively view the teaching and learning context of these modules.

Therefore, the classroom atmosphere and the teaching and learning environment are interconnected and relate to each other. They even seem to mean the same thing in the context of the present study of which the focus is on student engagement at the classroom level. Thus, both methods explore the same reality. In fact, the quality of the classroom atmosphere is conversely proportional to the quality of the classroom environment and vice-versa. For instance, if the

students and the teacher are not comfortable with the medium of instruction (one of the elements of the classroom atmosphere), then the overall classroom teaching and learning context or environment is likely to not be conducive, which will hamper student engagement.

The kind of atmosphere that characterises a teaching and learning environment of a particular module depends upon many elements including the teaching and learning environment.In fact, it is one of the main factors that influence student engagement and success because the CLASSE itself investigates, among other aspects, the classroom atmosphere. A student's involvement in the learning of a particular course starts with his/her active participation in the course in the classroom setting and continues after class in either individual or group activities. As Prosser and Trigwell (1999) have argued, the way students perceive the teaching and learning context has a direct impact on the way they go about learning.

The EDP 101 and ELA 101 modules were taught in different classrooms and to different individuals. I asked participants to describe how they perceived the appropriateness of the teaching and learning of these two modules for their learning, understanding, and mastery of the course content of these courses. Students' perceptions of their teaching and learning environment are some of the factors that determine their engagement in learning.

Exploring the classroom atmosphere in EDP 101 and ELA 101 classes, this study investigated how comfortable the students were when communicating with lecturers, how comfortable they were with reference to the course content, the classroom density, and finally how adequate they found the conditions under which the courses were taught. Focusing on these aspects, the study quantified students' views on the teaching and learning context and related the data to interview results. This increased the reliability of the findings through triangulation.

Student engagement activities that are discussed in this chapter are solely related to CLASSE items that reveal the classroom atmosphere. These activities are those that the original CLASSE as well as the CLASSE adapted to this research have highlighted. They are grouped under the language of communication and the effect of the classroom density on emotional engagement on the one hand and the general overview of the conditions under which students studied the EDP 101 and ELA 101 modules on the other.

The items of the classroom atmosphere from the CLASSE de facto indicate the teaching and learning environment or context in which the modules under investigation were taught and learned. This is the reason why the data collected through interviews are presented together with those collected using the CLASSE instrument. Both types of data are analysed together for triangulation and validation purposes. While CLASSE, in its original version, does not need to be complemented by other research methods, it does not prohibit this. The two types of data are reported together for the sake of the uniqueness and coherence of the thesis as well as the thematic analysis.

7.2TheTeaching and Learning Environment of the Introduction to Educational Psychology Module (EDP 101)

7.2.1 Communication in the EDP 101 Classes

Easy and effective communication is a key factor for a favourable classroom atmosphere. The general mood of the teaching and learning context is usually provided by the common understanding between the teacher and the learners. This can be achieved mainly through communication.

It is agreed that communication plays a pivotal role in social relations. It can also be argued that the quality of the teaching and learning environment or the classroom atmosphere depends upon the quality of communication between the teacher and students as well as between students themselves. Interlocutors in the classroom must have the same code for relevant translation of the taught and learnt materials, since teaching and learning is all about encoding and decoding the message. This is likely to enhance student engagement because language problems can lead to misinterpretation of the message and to misunderstanding between the teacher and the learners.

The language enhances student engagement in learning in various ways, notably by making them feel comfortable in learning activities that take place in the classroom. Moreover, emotional engagement suffers when the students and the teacher are not comfortable with the medium of instruction.

7.2.1.1 The Language used by Students and Lecturers in EDP 101 Classes

Using adapted CLASSE, I asked both students and lecturers the language which they were more comfortable with when listening, speaking, and writing among the two languages used in the academic area in Rwanda which are English and French. The table below displays how many students in both categories (B. Ed and non B. Ed) use which language:

Table 9: Language that students are comfortable with

Category of students	**Answers**		
	English	**French**	**Total**
B. Ed			
Count	14	20	34
%	41.2%	58.8%	100%
Non B. Ed			
Count	88	99	187
%	47.1%	52.9%	100%

As can be seen, fourteen B. Ed students (41.2%) reported that they were more comfortable in English when twenty (58.8%) reported to be more comfortable in French. For non B. Ed students, 88 (47.1%) were more comfortable in English while 99 (52.9%) were more comfortable in French.

Putting all the students together, 44.2% reported to be more comfortable in listening, speaking, and writing in English while 55.8% reported to be more comfortable in French. Out of the three EDP 101 lecturers, two were more comfortable in French and one in English. In sum, more than 50% of the students and 2/3 of the lecturers reported to be more comfortable in French whilst the medium of instruction is supposed to be, and is, English. This suggests that both students and lecturers struggle with the medium of instruction (English) as pointed out by the students who

were interviewed. During the interviews with lecturers, one lecturer responded in English while others spoke a mixture of French and English.

The figure on the next page illustrates clearly how both French and English are mostly used by students in a recent English academic milieu.

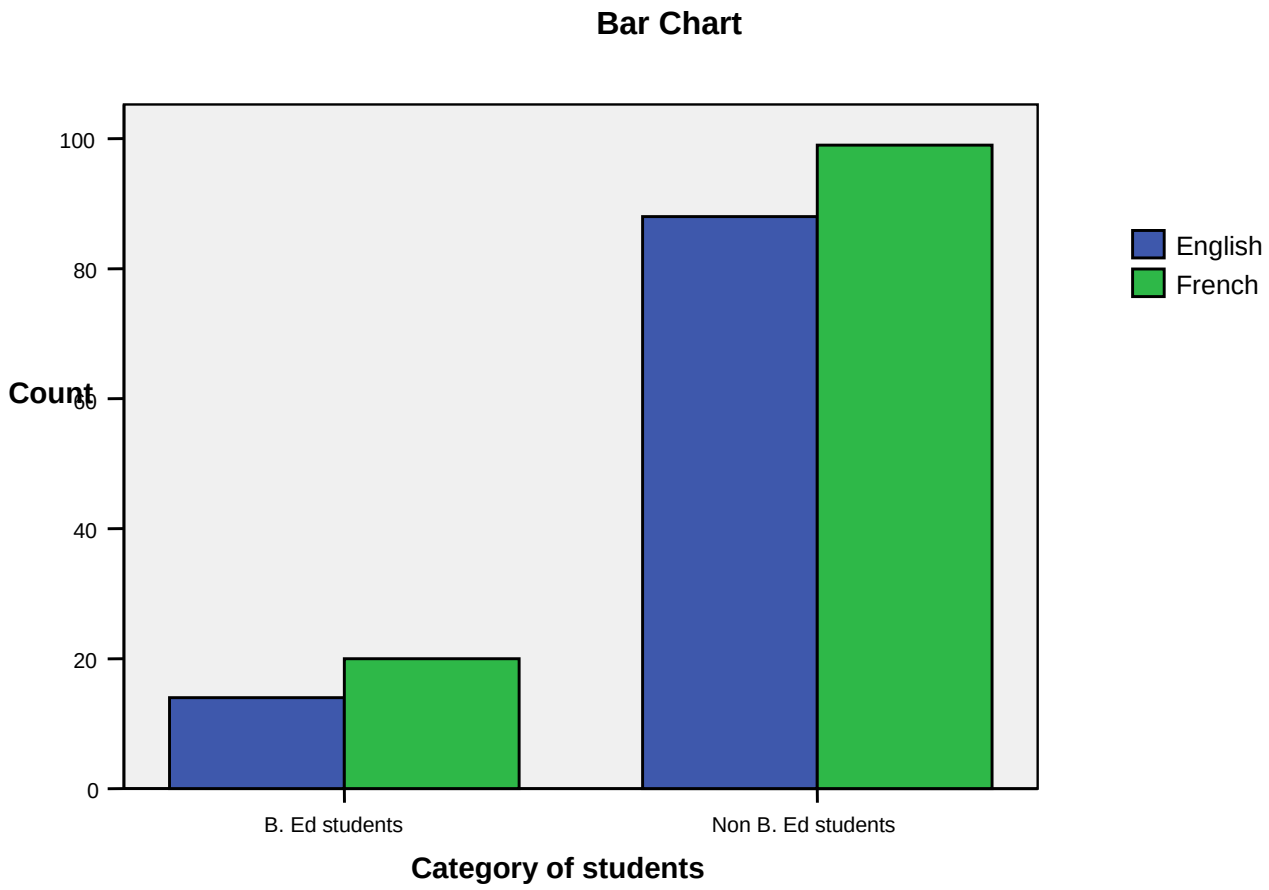

Figure 3: The language in which students are more comfortable

This figure shows that both groups of students reported on the CLASSE that they were more comfortable in speaking, writing, and listening French than English in a course taught in English and 2/3 of lecturers were comfortable in French.

Interview results also seem to concur with the above findings. Most of students in the EDP 101 class said that they had to struggle with English before accessing the course material being taught. For instance, Mr. M reported that: "[...], when the lecturer was teaching, all I would do was to take my psychology notebook from TTC in French and if he introduces a term that is new for me in English, I write it [...] because I will teach in English" (Interview: August 24, 2010). When the lecturer was delivering the lesson, this student was busy comparing his high school notes with the taught materials.

Given the concern he had for the language that he would be using as a high school teacher, the above student focused more on English than on the subject matter of the course. This is not the case for this student only as all the students who did not have a languages background reported experiencing problems with the English language. These students had previously been taught in the medium of French at high school. Thus, the language of instruction (English) constituted an obstacle for many students while it is viewed as determinant factor in characterising the classroom environment/atmosphere.

In this context, students also had to report on how much they found the language used by the lecturers to facilitate their understanding of the EDP 101 course content. Their answers are summarised in the table below:

Table 10: The ways in which students view the language used by lecturers facilitating learning

Category of students	**Answers**				
	Very Little	**1 or 2 times**	**3 to 5 times**	**More than 5 times**	**Total**
B. Ed					
Count	3	4	15	12	34
%	8.8%	11.8%	44.1%	35.3%	100%
Non B. Ed					
Count	34	54	57	42	187

%	18.2%	28.9%	30.5%	22.5%	100%

In the category of B. Ed students, three students (8.8%) and four students (11.8%) found the language used by lecturers to facilitate their understanding of the course content to be respectively to a very small and small extent. Also, fifteen students (44.1%) found this facilitation to be average while twelve students (35.3%) found average to be high.

Thus, for 20.6% of B. Ed students, the language used by lecturers facilitated their learning in EDP 101 to a small extent while 79.4% found this facilitation to be high. It should be noted that B. Ed students had a French background and were taught by two lecturers with the same language background. In addition, they had enough prerequisites in psychology. These factors may have led to their communication with lecturers regarding the language and course content to be easier.

In the category of non B. Ed students, 34 students (18.2%) and 54 students (28.9%) respectively found the language used by lecturers to facilitate their understanding of the course content to a very small and small extent. Again, 57 students (30.5%) found this facilitation to be average while 42 students (22.5%) found it to be high. Thus, for 48.7% of non B. Ed students, the language used by lecturers facilitated their learning to a small extent while 51.4% of these students found it to be high.

These results indicate that 79.4% of B. Ed students found the facilitation offered by the language used by the EDP 101 lecturers much higher than is viewed by non B. Ed (51.4%). Regardless of the B. Ed or non B. Ed status, the results show that 34.6% of all students reported that the language used by lecturers facilitated their learning to a small extent while 65.4% reported that this facilitation was high. More than half (55.8%) of all students and 2/3 of lecturers were more comfortable with French and the language used by lecturers was found by the majority (65.4%) of students to greatly facilitate their understanding of the course content. Both students and lecturers were almost at the same level of English.

When the language used by the teacher matches the language used by students, it is easier for the latter to follow the course. This matching of communication media can enhance student engagement in learning and it is one of the characteristics of the classroom atmosphere.

7.2.1.2 Students' Ease in Following EDP 101 Lectures

With regard to students' ease in following EDP lectures, I asked them to report, on the CLASSE instrument, how easy it was for them to follow lectures in the EDP 101 class. The next table gives the numbers of B. Ed and non B. Ed students according to their perceptions on this issue.

Table 11: Ease in following EDP 101 lectures

Category of students	**Answers**				
	Difficult	**Somewhat Easy**	**Easy**	**Very Easy**	**Total**
B. Ed					
Count	7	10	16	1	34
%	20.6%	29.4%	47.1%	2.9%	100%
Non B. Ed					
Count	36	54	65	32	187
%	19.3%	28.9%	34.8%	17.1%	100%

As can be seen in this table, seven students (20.6%) and ten students (29.4%) from the B. Ed category indicated that it was 'difficult' and 'somewhat easy' for them to follow EDP 101 lectures. It was 'easy' and 'very easy' to follow EDP 101 lectures for sixteen students (47.1%) and only 1 student (2.9%) from the same category. It can be seen that B. Ed students were equally divided on this issue. In fact, 50% reported that it was not really easy to follow lectures while the other 50% reported that it was 'easy' to follow EDP 101 lectures.

In the category of non B. Ed students, 36 students (19.3%) and 54 students (28.9%) reported that it was 'difficult' and somewhat easy' to follow EDP 101 lectures while 65 students (34.8%) and 32 students (17.1%) reported that it was 'easy' and 'very easy' to follow the same lectures. Thus, 48.2% of the non B. Ed students found following EDP 101 lectures not easy while 51.9% found it to be easy.

If we take all the students as a group, results on this issue show that the number of those who found it easy to follow EDP 101 lectures is almost equal to the number of those who found it difficult. In fact, 50.9% in the first category while 49.1% fall in the second. The difficulty in following the lectures could be linked either to the language problem or to the difficult nature of the course material. However, it has been shown earlier that the language experiences and expectation of more than 50% of the students were respectively matched and met by their lecturers.

If it was not generally easy for students to follow lectures, there is room for wondering whether they could even talk comfortably to lecturers as part of the communication between them. The language used in the classroom positively impacts on the classroom atmosphere when it allows students to feel comfortable when talking to their lecturer, and thus engaging in interactive communication. In effect, the classroom atmosphere is conducive when students feel comfortable talking with their lecturers. It is in this sense that students reported on how comfortable they were talking with their lecturers in EDP 101 class. They reported this on the CLASSE instrument. B. Ed and non B. Ed frequencies are summarised in the table below:

Table 12: Comfort when talking with EDP 101 lecturers

Category of student	**Answers**				
	Uncomfortable	**Somewhat comfortable**	**Comfortable**	**Very Comfortable**	**Total**
B. Ed					
Count	6	11	13	4	34
%	17.6%	32.4%	38.2%	11.8%	100%
Non B. Ed					
Count	19	40	96	32	187
%	10.2%	21.4%	51.3%	17.1%	100%

In the group of B. Ed students, six students (17.6%) and eleven students (32.4%) reported that they were respectively 'uncomfortable' and 'somewhat comfortable' when talking with their lecturers. Thirteen students (38.2%) and four students (11.8%) indicated that they were respectively 'comfortable' and 'very comfortable' in the same situation. B. Ed students were equally divided on this issue: 50% were not really comfortable while the other 50% were comfortable in their talks with the EDP 101 lecturers.

On the other hand, nineteen students (10.2%) and 40 students (21.4%) from the non B. Ed category reported they were respectively 'uncomfortable' and 'somewhat comfortable' when talking with their lecturers. 96 students (51.3%) and 32 students (17.1%) from the same category were respectively 'comfortable' and 'very comfortable' in their talks with their lecturers. Thus, 31.6% were not really comfortable while 68.4% were comfortable in that situation. Regardless of the B. Ed or non B. Ed status, 40.8% of students were not really comfortable and 59.2% were comfortable when talking with their lecturers.

Comparing the two categories of students, this study showed that non B. Ed students were more comfortable (68.4%) than B. Ed students (50%) in their talks with EDP 101 lecturers. This is probably because the former were asking for clarifications which the latter did not need due to their academic background. Moreover, students with strong background in the medium of instruction being part of non B. Ed students would feel more comfortable talking with lecturers than B. Ed students without such background. In general, On the $CLASSE_{FACULTY}$, two of the three lecturers who tutor on this course reported that students' being comfortable when talking with them [lecturers] was important. One of them identified this comfort to be very important for students to be successful.

Even though the quality of communication is essential in characterising the classroom atmosphere that plays an important role in influencing student engagement, the perception of the course material by students as difficult or easy is also important for the student's mood in the classroom.

7.2.2 Difficulty of EDP 101 Course Content

I asked students to report on how difficult the course material in their EDP 101 class was. Their answers are summarised in the following table:

Table 13: Students viewing EDP 101 course material as difficult

Category of student	**Answers**				
	Easy	**Somewhat Difficult**	**Difficult**	**Very Difficult**	**Total**
B. Ed					
Count	7	19	5	3	34
%	20.6%	55.9%	14.7%	8.8%	100%
Non B. Ed					
Count	42	81	40	24	187
%	22.5%	43.3%	21.4%	12.8%	100%

Putting together closed responses on the Likert scale, we find thatseven students (20.6%) and nineteen students (55.9%) from the B. Ed category reported that the course material was ‘easy’ and ‘somewhat difficult’. Five students (14.7%) and three students (8.8%) from the same category said that the material was difficult and very difficultrespectively. If we combine closely related answers (‘easy’ and ‘somewhat difficult’ on the one hand and ‘difficult’ and ‘very difficult’ on the other), we find that 76.5% of B. Ed students perceived the EDP 101 course material as not really difficult while 23.5% perceived it as difficult.

For non B. Ed category, 42 students (22.5%) and 81 students (43.3%) reported that EDP 101 course material was respectively ‘easy’ and ‘somewhat difficult’ while 40 students (21.4%) and 24 students (12.8%) reported that it was respectively ‘difficult’ and ‘very difficult’. Combining closely related answers, we find that 65.8% of non B. Ed students found the course material to be not really difficult while 34.2% found it difficult.

The great majority (76.5%) of B. Ed students found the EDP 101 course content to be not really difficult while the percentage of B. Ed students with the same view was 65.8%. This may be a result of the knowledge of psychology that the former had before entering KIE. The performance of these B.Ed students in EDP 101 (65.1%) compared to that of non B.Ed students (60.8%) is another proof for this claim.

If we consider all the students as one group, we find that 71.1% viewed the course material as not really difficult while 28.9% viewed it as difficult. Therefore, it can be concluded that generally, students perceived the course as not difficult. After all, the average mark for the course was 61%. The level of difficulty of the course material as perceived by B. Ed and non B. Ed students is shown on the figure on the next page.

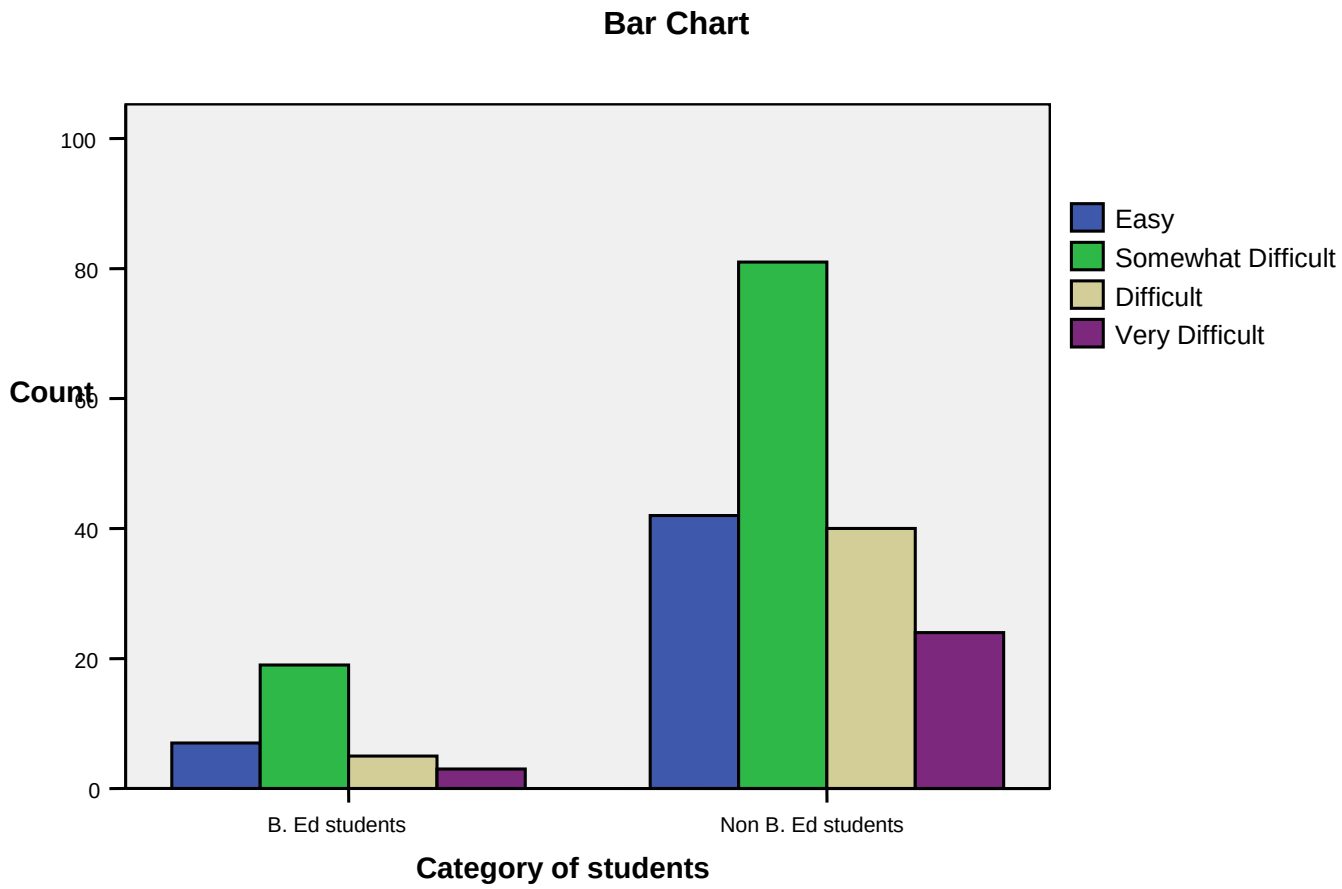

Figure 4: The Level of difficulty of EDP 101 course material

Communication is not the only factor that enhances or impedes the quality of the classroom atmosphere. The number of students in the class (density) also largely impacts on student engagement.

7.2.3 Effect of the Classroom Density on Emotional Engagement in EDP 101 classes

7.2.3.1 Students' Comfort in an Overcrowded Classroom

One of my aims in this study was to investigate student engagement with regard to the classroom atmosphere in an overcrowded class. More specifically, I wanted to investigate how comfortable

the students were when studying EDP 101 in relation to the number of students in their classroom and the classroom arrangement.

The conditions under which this module was taught were judged by the students to be very bad. Explaining why the environment was perceived as very inappropriate, Ms E expressed herself in the following terms:

> In the hall, there were so many students from various education backgrounds. There were those who could understand, those who could not understand, those who knew the language of instruction (English), those who did not know it, those with some prerequisites, and those without them. And all of us we were put in the same hall while we were not at the same levels. (Interview: August 26, 2010)

A clear picture of the teaching and learning context of the EDP 101 module is more extensively described by Ms H, who feels that this environment negatively affected her learning of the course. She stated:

> The teaching and learning environment was not appropriate because of the very big number of students attending the course. Some of us would be standing inside the hall; others would be making noise at the back, others would be standing outside the hall, in the windows... What I can tell you is that we were too many. […]. The lecturer would even come without a microphone. In this case he would be talking only to those sitting in front. But even those in front seats could not study well because of the noise from the windows and from the back of the hall. This environment could not allow you to study well. We were very many ... very many…The microphone could be available once a week. If it was available then there would be power cut off. In this case, the lecturer would either continue, or, basically, teach only those in front or he would stop there. In brief, the teaching and learning environment was very inappropriate. (Interview: August 24, 2010)

There is very little chance for the situation described above to promote students' engagement in learning materials which were expected to be learned in the lectures. Conversely, it was de-motivating not only for those who were new to the teacher education field but also for those who had some background in this field (B. Ed students), who knew about the classroom management.

On the CLASSE instrument, most students pointed out that they were not comfortable when studying the EDP 101 course due to the large number of students and the way the class was arranged. The table below gives more details:

Table 14: Students' comfort studying in an overcrowded class

Category of student	**Answers**				
	Uncomfortable	**Somewhat Comfortable**	**Comfortable**	**Very Comfortable**	**Total**
B. Ed					
Count	15	9	9	1	34
%	44.1%	26.5%	26.5%	2.9%	100%
Count	64	46	51	26	187
%	34.2%	24.6%	27.3%	13.9%	100%

The data in the table shows that fifteen B. Ed students (44.1%) and 64 (34.2%) non B. Ed students were 'uncomfortable'. Nine B. Ed students (26.5%) and 46 non B. Ed students (24.6%) were 'somewhat comfortable'; Nine B. Ed students (26.5%) and 51 non B. Ed students (27.3%) were 'comfortable' while 1 B. Ed student (2.9%) and 26 non B. Ed students (13.9%) were 'very comfortable'.

In sum, 70.6% of B. Ed students reported that they were not comfortable while 29.4% stated that they were comfortable studying in a classroom hosting a very large number of students. In the non B. Ed category, 64 students (34.2%) and 46 students (24.6%) indicated that they were respectively 'uncomfortable' and 'somewhat comfortable'. At the same time, 51 students (27.3%) and 26 students (13.9%) indicated that they were 'comfortable' and 'very comfortable'respectively. Thus, 58.8% of the non B. Ed students reported that they were not

comfortable while 41.2% reported that they were comfortable in EDP 101 classes with regard to the number of students therein.

Therefore, the majority of B. Ed students (70.6%) reported being uncomfortable when studying the EDP 101 module with hundreds of classmates, while 58.8% of B. Ed students expressed the same feeling. This may be because they (B. Ed students) thought about this in relation to a normal class size and to some pedagogical principles they had already acquired from education subjects they had studied in TTC. These include individualisation, motivation, concretisation, etc., and these could hardly be applied in such big classes. In this way, B. Ed students' prior knowledge in the education area influenced their perceptions of the classroom atmosphere.

Putting all the students together, the study found that 64.7% reported being not comfortable while 45.3% reported being comfortable in the EDP 101 class with regard to the number of students. This shows that the majority of students in both groups were not comfortable.

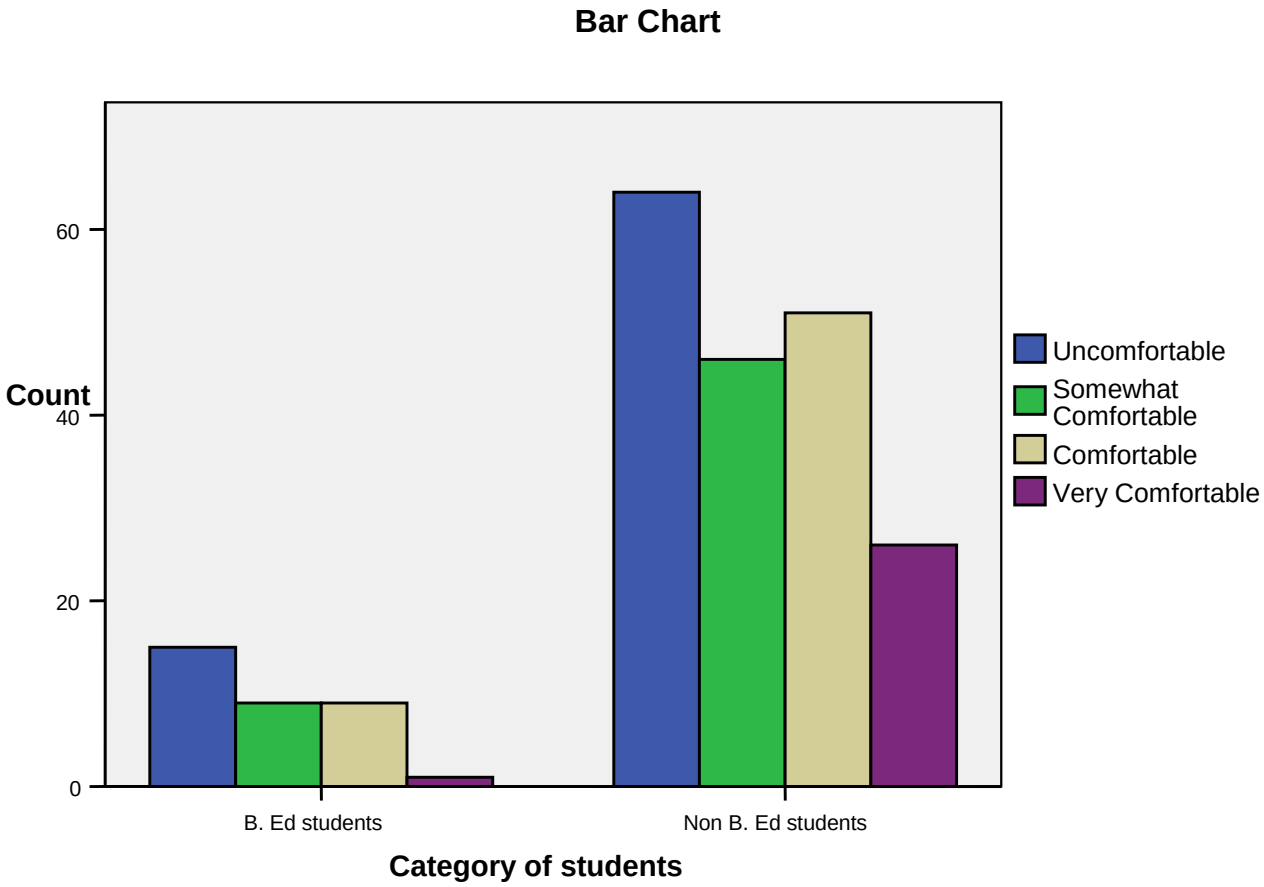

Figure 5: Students' comfort in EDP 101 classes with regard to the class size

I carried my investigations further by asking the students the extent to which the number of students in EDP 101 classes was a handicap to their learning during lectures. B. Ed and non B. Ed students' answers to this question are presented in the following table:

Table 15: The number of students in EDP 101 class viewed as a handicap

Category of student	Answers				
	Not a Handicap	**Small Handicap**	**Quite a Handicap**	**Big Handicap**	**Total**
B. Ed					
Count	3	18	6	7	34
%	8.8%	52.9%	17.6%	20.6%	100%
Non B. Ed					
Count	38	58	34	57	187
%	20.3%	31%	18.2%	30.5%	100%

The data in this table shows that for three students (8.8%) and eighteen students (52.9%) from the B. Ed group, the number of students in EDP 101 class constituted not a handicap and a small handicap respectively for their learning. In the same group, six students (17.6%) and seven students (20.6%) reported that the number was a handicap and a big handicap respectively. 38 students (20.3%) and 58 students (31%) from non B. Ed group reported that the number of classmates was not a handicap and was a small handicap respectively. In this category, 34 students (18.2%) and 57 students (30.5%) indicated that this number was quite a handicap and a big handicap.

In short, 61.7% of B. Ed students estimated the huge class size to be at least a small handicap while 38.2% estimated this to be a handicap for their learning. For non B. Ed students, 51.3% considered the number of classmates to be at least a small handicap while 48.7% considered it to be a handicap for their learning. Therefore, B. Ed students, who were familiar with principles of teaching, perceived the very big class size as a handicap for their learning and mastery of the content to a greater extent than non B. Ed students, who had newly entered teacher education.

The average of all students who reported that the class size was at least a small handicap is 56.5% whilst 43.5% reported it being a handicap.

7.2.3.2 Emotional Engagement in Working with Classmates

In order to have a complete picture of the effects of the class size on students' learning, I have also to investigate whether or not they enjoyed working in groups with their classmates in the EDP 101 course. In fact, working in groups can be one of the strategies to increase students' emotional engagement at the classroom level. CLASSE results show that in both groups there was enjoyment of group work with their classmates as the table below shows:

Table 16: Enjoying group work with classmates

Category of student	**Answers**				
	Very Little	**Some**	**Quite a Bit**	**Very Much**	**Total**
B. Ed					
Count	4	1	7	22	34
%	11.8%	2.9%	20.6%	64.7%	100%
Non B. Ed					
Count	8	30	33	116	187
%	4.3%	16%	17.6%	62%	100%

This table shows that very few students said that they had'very little'or some enjoyment in groupwork with classmates. Only four students (11.8%) and one student (2.9%) from the B. Ed group on the one hand, and eight students (4.3%) and 30 students (16%) from the non B. Ed group on the other reported having had 'very little' and 'some' enjoyment in group work with their classmates in the EDP 101 class. Seven students (20.6%) and 22students (64.7%) from the B. Ed students group on the one hand, and 33 students (17.6%) and 116 students (62%) from the non B. Ed group reported respectively having quite a bit of and very high enjoyment in group work. On the $CLASSE_{FACULTY}$, this class atmosphere variable was respectively viewed as very

important, important, and somewhat important for each level of the Likert scale by the three lecturers.

Putting closely related answers in each group together, we notice that 14.7% and 85.3% of B. Ed students were enjoying group work with classmates to a small and a large extent. As for non B. Ed students, those who were enjoying group work to a small extent were 20.3% while those who were enjoying it to a large extent were 79.7%. Therefore, in the EDP 101 course, B. Ed students were enjoying group work with classmates to a larger extent than non B. Ed students at the proportions of 85.3% and 79.7%.

This finding may be because B. Ed students used to tutor their non B. Ed colleagues in EDP 101 as these had no prerequisites in psychology. In so doing, they may have enjoyed this because, as people who had felt destined to be primary school teachers, they were now teaching university students. This could be considered as an affirmative action before their classmates which usually leads to joy. At this point, B. Ed students were therefore emotionally more engaged in group work than non B. Ed students.

The last point that was investigated in relation to the emotional aspect of the teaching and learning environment was how appropriate were the conditions in which students were taught the EDP 101 module in enhancing students' understanding of the course content in general. As it was throughout the interviews since the interview guide was the same, all students were interviewed, irrespective of their B. Ed or non B. Ed status since they shared this course. They generally perceived the teaching and learning context of EDP 101 as inappropriate. It should be noted that students undergoing teacher preparation need to be taught with the same approaches they are supposed to use in their own teaching after the completion of their studies. This is because novice teachers usually tend to teach in the ways they have been taught.

Interviews conducted with students revealed that the inadequacy of the teaching and learning context was mainly due to the huge and non-homogeneous population of the students attending the EDP 101 course. This environment was not promoting effective learning, and, consequently was not enhancing student engagement. It constituted an obstacle to students' success. In short, the class size constituted a serious handicap for effective student engagement in the learning of this module.

Moreover, the shape of the lecture hall is not conducive to contact between students and the lecturer.This is because this lecture hall is very narrowand so long that the students who are sitting at the back cannot see thelecturer properly. In addition there are no tiers in the hall. This makesit difficult for them to follow what the lecturersays and how he says it. In fact, non-linguistic features (such as signs,facial expressions, gestures, etc.) also play a big role in face-to-facecommunication. Furthermore, the lecturer himself cannot control the whole class because he cannot monitor what is happening at the back.This was such a big challenge for students that some of them could not attend classes. They would prefer to rely solely on lecture notes to understand the course content and, eventually to pass their exams. According to the respondents, especially B. Ed students, it was a waste of time to attend class in such conditions.

In order to overcome these deplorable teaching and learning conditions, Mr. F said that he adopted his own strategies as follows:

> When I realised that I was not studying in good conditions, I could leave the class. Later on I would go to the library or to the internet to look for information related to the topics that had been taught when I was absent. Many students did this. (Interview: August 23, 2010)

In fact, Mr. G also deliberately missed some classes due to uncomfortable teaching and learning conditions. He explained: "There are some class tutorials that I did not attend because of lack of seats. I would be standing outside under the sun … so it was somehow a problem" (Interview: August 23, 2010).

In order to pass the module studied in these conditions, every student tried to adapt to the situation in his or her own ways. For instance, Mr. C adopted a strategy which, in my opinion, favours student engagement and success to some extent. He describes it as follows:

> After I realised that the game was not easy to win [...], I made my own decision: I managed to get lecturer's notes on a memory stick. Then, I would go to the computer lab and try to read and revise the notes. I was putting my own efforts because I had realised that it was impossible to study in such unfavourable conditions. In these conditions, if you don't try to take care of yourself and adopt your own learning strategies, the risk of failing is too high. (Interview: August 27, 2010)

It should be noted that attending classes is compulsory especially for undergraduate students mainly because nothing can replace the teacher. Learning cannot take place if teaching does not happen, and teaching will not happen if there is no teacher. Though we are in a digital age, the computer will never replace the teacher. Whatever effort and time is spent on educational purposeful activities, student-teacher interactions remain essential for effective student engagement (Kuh et al., 2007). The management of teacher education institutions should bear this in mind. In the interviews that I had with lecturers, it was also revealed that the huge class size was a serious problem for the teaching and learning process. This led lecturers to set multiple questions even for take home group assignments, with the number of group members reaching 30.

7.2.4 The Quality of Classroom Conditions in which EDP 101 was taught

Concerning how students' general appreciation of the quality of the conditions in which the EDP 101 course was taught, the majority of students reported on the CLASSE that the teaching and learning conditions were inadequate to the enhancement of their understanding and mastery of the EDP 101 course content as shown in the table below:

Table 17: Adequacy of the conditions in which EDP 101 was taught

Category of student	**Answers**				
	Completely Inadequate	**Somehow Adequate**	**Adequate**	**Very Adequate**	**Total**
B. Ed					
Count	5	17	9	3	34
%	14.7%	5%	26.5%	8.8%	100%
Non B. Ed					
Count	31	71	60	25	187
%	16.6%	38%	32.1%	13.4%	100%

As shown in this table, five students (14.7%) from the B. Ed group and 31 students (16.6%) from the non B. Ed students said that generally, the teaching and learning conditions in which the EDP 101 course was taught were completely inadequate. Seventeen students (50%) and 71 students (38%) respectively from the B. Ed and non B. Ed groups found these conditions to be 'somewhat adequate', while nine B. Ed students (26.5%) and 60 non B. Ed students (32.1%) found these teaching and learning conditions 'adequate'. Finally, three B. Ed students (8.8%) and 25 non B. Ed students (13.4%) found these conditions 'very adequate' and likely to enhance their learning.

In general, 64.7% of the B. Ed students considered the EDP 101 teaching and learning conditions completely inadequate while 54.6% of the non B. Ed students found the same conditions less adequate for the enhancement of the understanding and the mastery of the course content. 35.3% of the B. Ed students and 45.5% of the non B. Ed students found these conditions to be adequate and very adequate respectively. This means that the number of B. Ed students who found these conditions inadequate (64.7%) is higher than that of non B. Ed students with the same view (54.6%). Again, the knowledge of effective classroom practices by B. Ed students could have influenced their answers on this issue.

For the two groups of students, 59.6% perceived the teaching and learning conditions of EDP 101 inadequate for their learning and only 40.4% reported that these conditions were adequate. As pointed out by both the students and lecturers whom I interviewed, these results show that the teaching and learning conditions under which the EDP 101 module was taught were inadequate and not conducive to the enhancement of students' understanding of the course content. The figure below illustrates the situation:

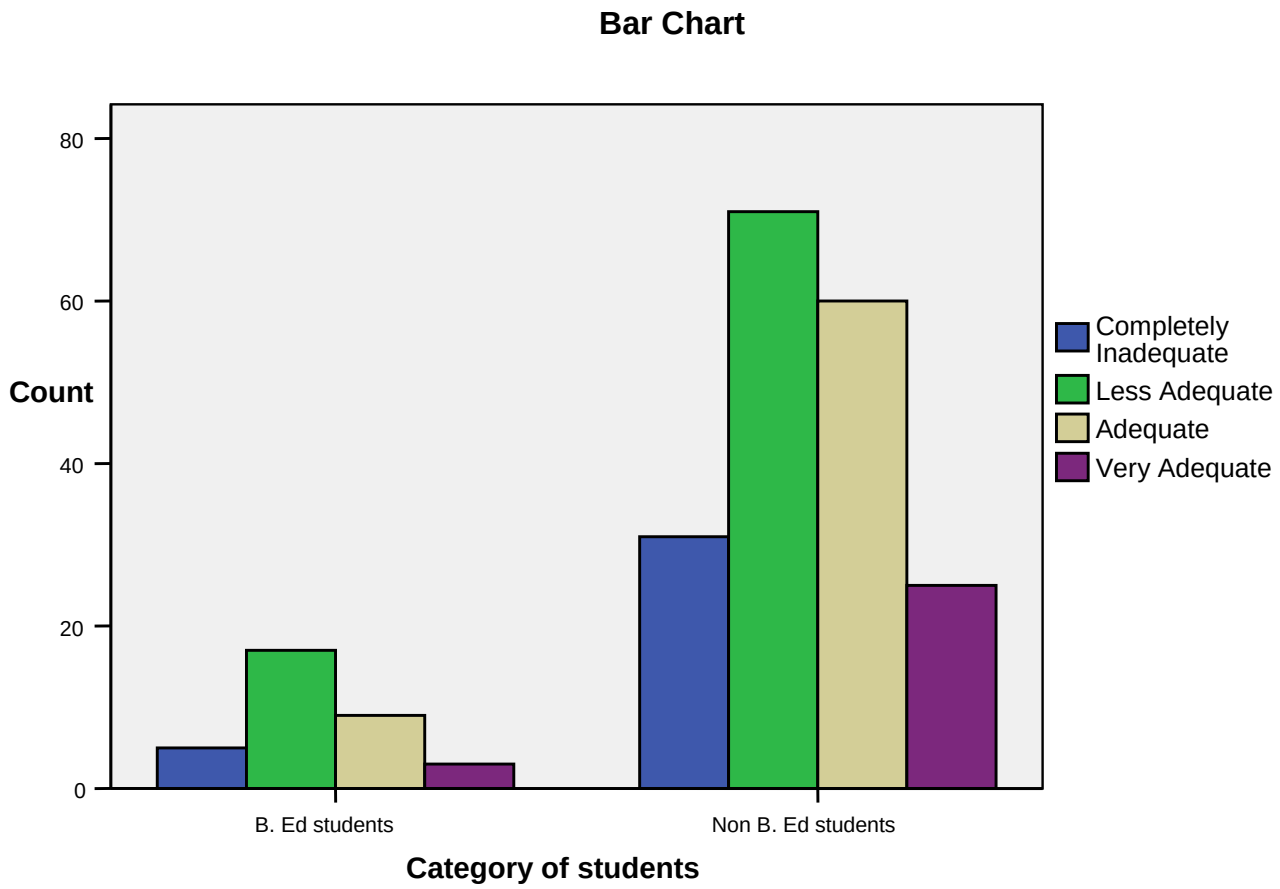

Figure 6: Adequacy of the teaching and learning environment of EDP 101

7.2.5 Highlights on the Classroom Atmosphere in EDP 101 Classes

The following table gives a quantitative summary of the extent to which first year B. Ed and non B. Ed students at KIE differed in their views on the CLASSE items of the classroom atmosphere, with regard to the communication with lecturers and to how comfortable they felt under the conditions in which the course was taught. It shows the items of the classroom atmosphere, the category of students, and the average percentage of answers for both combined closed answers to both combined closed questions, as either low or high. This is done for each category of students

as well as for both categories combined by means of the average of class (all students). This average of the whole class shows how students perceive particular items, irrespective of their education background. The percentages presented here are the averages. The last column gives the students' allegiance or the allegiance of the class.

Table 18: Students' general perceptions of the classroom atmosphere

Category / Items	B. Ed		Non B. Ed		Class average		Allegiance of the whole class
	Low	High	Low	High	Low	High	
Lecturers' language in facilitating learning	20.6%	79.4%	48.7%	51.4%	34.6%	65.4%	It [language] facilitated learning
Easy to follow lectures	50%	50%	8.2%	51.9%	49.1%	50.9%	Not difficult and not easy
Difficulty of the course material	76.5%	23.5%	65.8%	34.2%	71.1%	28.9%	Somewhat easy
Comfort in talking with lecturers	50%	50%	31.6%	68.4%	40.8%	59.2%	Comfortable
Comfort related to class size	70.6%	29.4%	58.8%	41.2%	64.7%	45.3%	Not comfortable
Class size as a handicap	61.7%	38.2%	51.3%	48.7%	56.5%	43.5%	Not a big handicap
Enjoy group work with classmates	14.7%	83.3%	20.3%	79.7%	17.5%	82.5%	Group work brings pleasure
Adequacy of the conditions in class	64.7%	35.3%	54.6%	45.5%	59.6%	40.4%	Inadequate
Average	51.1%	48.6%	47.4%	52.6%	49.2%	52% %	Quite adequate
Class average of the atmosphere	49.8%		50%		50.6%		Quite adequate

In addition to the language with which students reported to be more comfortable (French), this table shows the following aspects:

The language used by lecturers in facilitating learning: 20.6% and 79.4% of B. Ed students reported that the language used by lecturers facilitated their learning to a small and to a large extent respectively. For 48.7% and 51.4% of non B. Ed students, the language used by lecturers facilitated learning to a small extent and to a large extent respectively. Therefore, 34.6% of all students found the language used by lecturers facilitating their learning to a small extent.

Ease in following lectures: B. Ed students were equally divided between easily following lectures and following lectures with difficulty. For non B. Ed students, 48.2% and 51.9% found that it was difficult and easy to follow these lecturesrespectively. Therefore, 49.1% and 50.9% of all students perceived following lectures 'difficult' and 'easy'respectively.

Difficulty of the course material: 76.5% of B. Ed students perceived the course material as somewhat easy whilst 23.5% perceived it as really difficult. 65.8% of non B. Ed students found the course material somewhat easy while 34.2% found it really difficult. In general, 71.1% of all the students viewed the course material as somewhat easy and 28.9% viewed it as really difficult.

Comfort when talking with lecturers: B. Ed students were equally divided between being not really comfortable and being comfortable when talking with their lecturers. 31.6% and 68.4% of non B. Ed students were respectively not really comfortable and comfortable when talking with lecturers. In general, 40.8% of all students were not really comfortable when talking to their lecturers while the percentage of those who were comfortable is 59.2.

Comfort with regard to the class size: 70.6% of B. Ed students were not comfortable against 29.4% who were comfortable. 58.8% against 41.2% of non B. Ed students were respectively not comfortable and comfortable. Therefore, 64.7% were not comfortable while 45.3% reported that they were comfortable studying with too many classmates.

Class size as a handicap to learning: 61.7% and 38.2% of B. Ed students consider big class size being at least a small handicap and a real handicap respectively. For non B. Ed students, 51.3% and 48.7% found the big class size to be respectively at least a small and a real handicap to their

learning. Therefore, for 56.5% of all students, the large number of students constituted at least a small handicap while it constituted a real handicap for 43.5%.

Enjoying group work with classmates: 14.7% and 85.3% of B. Ed students reported enjoying group work respectively,to a small extent and to a large extent. For non B. Ed students, those who enjoyed group work to a small extent were 20.3% and those who enjoyed it [group work]to a large extent were 79.7%. Therefore, 17.5% of all students enjoyed group work to a small extent while 82.5% enjoyed it to a large extent.

General adequacy of the teaching and learning conditions: Concerning the level of adequacy of these conditions, B. Ed (64.7%) found them less adequate than non B. Ed(54.6%) students. At the class level (B. Ed and non B. Ed),59.6% perceived them as being inadequate.

Language of students: 14 (41.2%) of B. Ed students reported that they were more comfortable in English while 20 (58.8%) reported they were more comfortable in French. For non B. Ed students, 88 (47.1%) were more comfortable in English while 99 (52.9%) were more comfortable in French. Combining the students, we notice that 44.2% reported to be more comfortable in English whilst 55.8% reported to be more comfortable in French. It should be noted that the medium of instruction is English. The implication of this situation on student engagement and success is that students' learning is negatively affected by the mismatching of the learners' language and the language in which the course materials are delivered. That is why students, mostly B. Ed, said that they were more engaged with the translation and English vocabulary acquisition rather than the EDP 101 content. It would be even worse for non B. Ed students without either a language or psychology background.

7.3 The Teaching and Learning Environment of the Introduction to English Language and Linguistics (ELA 101) Module at KIE

As it was for the EDP 101 module, the teaching and learning environment of ELA 101 focuses on the communication between students and the lecturer and the extent to which B. Ed and non B. Ed students found it easy or difficult to follow lectures in this module. Studying the ELA 101 module presupposes a good understanding of English, not only as the medium of instruction but also as the subject matter.

7.3.1 Communication in ELA 101 Classes

7.3.1.1 The Language used by Students and the Lecturer in ELA 101 Classes

When exploring the communication in ELA 101 classes, I found it imperative to ask students to indicate first the language between English and French they were more comfortable with when listening, speaking, and writing. In effect, it is assumed that the more students feel comfortable with a particular language used as the medium of instruction, the better the classroom atmosphere is and, consequently, the higher the level of involvement in learning because of the straightforward mediation between the teacher, the content, and the learner. These three are the components of the didactic triangle (Berglund & Lister, 2010). Nothing is more boring than studying in an unfamiliar language though it may sometimes constitute a source of motivation when one aspires to know it.

The findings showed that all four B. Ed students who were studying ELA 101 that they were more comfortable in listening, speaking, and writing English than French (reported on the CLASSE). These students had studied in TTCs at high school where the medium of instruction was French but they were now doing Foundations of Education - English combination at KIE, with English being a major subject. 35 (79.5%) of non B. Ed students reported being more comfortable in English and nine students (20.5%) reported being more comfortable in French. It should be noted that these students studied languages (including English) as major subjects at high school. Therefore, B. Ed students have fewer prerequisites in English (the medium of instruction) while non B. Ed have a strong background in it. On the $CLASSE_{FACULTY}$, the lecturer of this course reported that it was important that students were able to listen, speak, and write the language of instruction (English) in its academic form for them to pass.

In the interviews, B. Ed students who were studying the ELA 101 module said that they were strongly motivated and committed to studying English because it was the medium of instruction at high school where they were supposed to teach after their studies at KIE. Moreover, they were also interested in doing this profession. This, knowing English and being able to use it is one of the ways to success in this profession. On the other hand, the majority of non B. Ed students (79.5%) reported being more comfortable using English than French. Being comfortable with the language of instruction is one of the factors influencing the mood of students when studying

thiscourse. This mood suggests students' emotional engagement in learning. In regard to the mood due to the language situation, both categories of students were happy with English as they could communicate with the lecturer.

The fact that most of both the B. Ed and non B. Ed students were comfortable using English than French in an English related course can be seen as a factor to enhance student engagement. However, this is not sufficient. The same comfort they experience with the language of instruction should also be experienced with the language used by the teacher. Once this is achieved, students' learning and understanding of the course will be easier and student engagement will be enhanced. With reference to this principle, in adapting the CLASSE, I asked students the extent to which they thought the language used by the lecturer facilitated their understanding of the ELA 101 course content.

The findings show that for three out of four B. Ed students, the language used by the lecturer had facilitated their understanding of the course to a small extent and 1 reported that it had facilitated their learning quite a bit. This can possibly be attributed to the students' French background while the ELA 101 lecturer was lecturing only in English. Contrary to the B. Ed students, most of the non B. Ed students reported to have found the language used by the lecturer facilitated their learning to a large extent and to a small extent. 27 students (61.4%) and twelve students (27.3%) indicated that the language used by the lecturer facilitated their understanding of the course to a large extent and to a small extent respectively. Four students (9.1%) and one student (2.3%) reported that the language used by lecturers facilitated their learning to a small extent and to a large extent are respectively.

It was also noted that non B. Ed students (who had a strong English background from high school) reported that their English had facilitated their understanding of the course to a greater extent than B. Ed students (with fewer prerequisites in English). This is consistent with interview results which show that non B. Ed students were peer-tutoring B. Ed students in this course because, probably, non B. Ed students had understood the course content during class more than B. Ed students, as a result of their education background,.

Another emotional element of student engagement in classroom communication is the comfort with which they have to talk to the teacher. Thus, the CLASSE asks students to report on how

comfortable they felt when talking with the course lecturer. This study showed that the four B. Ed students were found to be equally divided between feeling comfortable and feeling very comfortable when talking with their ELA 101 lecturer. However, it should be noted here that B. Ed students had been taught in French at high school as they indicated during interviews.

Because B. Ed students studying English freely chose it as their subject of interest knowing that they would do it with students who have majored in it, they were comfortable with the language. Non B. Ed students on the other hand, reported having felt respectively comfortable and very comfortable when talking with their ELA 101 lecturer in the proportions of 21 (47.7%) and ten (22.7%). Eleven students (25%) said that they felt somewhat comfortable and two students (4.5%) felt uncomfortable when talking with their ELA 101 lecturer.

Therefore, all B. Ed participants and 70.4% of non B. Ed students reported being 'comfortable' and 'very comfortable' when talking with their ELA 101 lecturer while 29.5% of non B. Ed students reported that they were 'somewhat comfortable' and 'uncomfortable' in this situation. The lecturer of the course reported that it was very important for students to be comfortable when talking with him for them to pass the course and to be successful in their studies in general. In actual fact, the average mark of both of these groups in this course (ELA 101) confirmed the lecturer's opinion. In fact, the average mark of B. Ed students in ELA 101 was 70.1% while that of non B. Ed was 61.7%. These marks are proportional to how comfortable these groups of students feel when talking with their ELA 101 lecturer. As can be seen, B. Ed students reported being more comfortable than non B. Ed when talking with the lecturer of ELA 101 and performed much higher than them.

This conclusion would be inaccurate if these students used to talk with the lecturer in French as he is fluent in both French and English. However, as has been pointed out earlier, since the course was English, then English may have been the only language of communication in this class. An exception would be the case in which the lecturer would want to explain some aspects to those with a French background. Then he may need to use French a little bit. However, these exceptions are very few.

7.3.1.2 Students' Ease in Following ELA 101 Lectures

In the same framework of communication in class, emotional classroom engagement depends not only on students feeling comfortable when talking with their lecturers but also on how they find it easy to follow lectures.

Two of the four B. Ed students who participated in the study found it somewhat easy and the other two found it easy to follow ELA 101 lectures. For non B. Ed students, eight (18.2%) and thirteen students (29.5%) respectively found it respectively difficult and somewhat easy to follow lectures. On the other hand, fifteen students (34.1%) and eight students (18.2%) found it respectively easy and very easy to follow these lectures.

No student in the B. Ed group found it very easy to follow lectures in the ELA 101 course possibly due to lack of enough prerequisites but 18.2% of the non B. Ed students found it very easy. Putting all the students together, we notice that for 52.3% of non B. Ed students, it was easy and very easy to follow these lectures while it was somewhat easy and difficult for 47.7% in the same category of students. The lecturer reported that it was important that students find it easy to follow his lecture for them to pass the course.

7.3.2 Difficulty of ELA 101 Course Content

The students' perceptions about the course being taught also have an impact on the way they go about studying it. In this sense, B. Ed and non B. Ed students were requested to report on the CLASSE on how difficult the course material in the ELA 101 course was. B. Ed students reported that the ELA 101 course material was easy. In fact, three quarter of these students indicated that the course material was easy and a quarter indicated that it was somewhat difficult.

In the category of non B. Ed students, three students (6.8%) and eighteen students (40.9%) reported that the ELA101 course material was respectively easy and somewhat difficult. Fifteen students (34.1%) and 8 students (18.2%) reported that it was respectively a bit difficult and very difficult. Thus, 52.3% of the non B. Ed students found the ELA 101 course material a bit difficult and very difficult. These, however, had strong background knowledge in English.

47.7% in the category of non B. Ed students found the ELA 101 course material easy and somewhat difficult.

At this point it can be argued that B. Ed students, who did not have enough prerequisites in English found the ELA 101 course material much easier than non B. Ed students. This seems paradoxical because these students even relied on non B. Ed students, who were more knowledgeable in the course, for additional explanations after class. On the other hand, their performance in this course confirms this finding because B. Ed students performed significantly higher than non B. Ed students (70.1% against 62.3%). In fact, the fact that they found the course easy may have made their performance high. Though B. Ed students found the course easy, they needed their colleagues to provide with them more explanation because they were not yet confident in the language. They still felt gaps in comparison to language students.

7.3.3 Effect of the Classroom Density on Emotional Engagement in ELA 101 Classes

7.3.3.1 Students' Comfort in Overcrowded ELA 101 Classes

In relation to the ELA 101 module, the context in which this module was taught was not different from the one in which EDP 101 was taught. All first year students who were studying English as one of their major courses would meet in the same classroom and were taught by the same lecturer as the EDP 101 course. When I asked him how he viewed the teaching and learning environment of ELA 101, Mr. B responded that:

> It [teaching and learning environment] was like in EDP 101 because ELA 101 is a module that is taken by all the first students in the faculty of Arts and Languages. We were too many. Sometimes the sound system would break or the electricity would be cut off while the use of PowerPoint projection was mandatory given the high number of students. In this case, only those in front were advantaged because they were the only ones who could hear the lecturer. In fact the problem we had was related to the very big number of students in one class. (Interview: August 24, 2010)

As has been mentioned earlier, the first year ELA 101 class at KIE was attended by all first year students studying English as a major subject, which means that their numberswere too high (around 500). Therefore I asked the students to report on the CLASSE how comfortable they were in studying ELA 101 given the large number of students in their class. The assumption here

is that, if the class is overcrowded, students may feel uncomfortable when studying in such conditions and this could have a negative effect on their engagement.

Contrary to non B. Ed students who were equally divided between feeling less comfortable and comfortable, three quarter of the B. Ed students indicated that they were comfortable while a quarter said they were very comfortable. Eleven students (25%) and eleven students (25%) non B. Ed students reported to be respectively uncomfortable and somewhat comfortable. Sixteen students (36.4%) and six students (13.6%) reported feeling respectively comfortable and very comfortable.

All B. Ed students who responded to $CLASSE_{STUDENT}$ reported being comfortable while non B. Ed students were equally divided into being less comfortable and comfortable with regard to the number of students in the classroom. B. Ed students reported being more comfortable than non B. Ed students in an overcrowded class. However, one would expect them to be in need of more classroom comfort in a small group, since they were studying a course in which they did not have enough prerequisites. This would provide them with a learning environment from which they would benefit.

The fact that the students reported being comfortable or not comfortable when studying in a big class implies that some of them consider a very high number of students in the same class to be a handicap while others do not consider it to be a problem. For this reason, I asked students to report the extent to which the number of students in the ELA 101 constitutes a handicap for their learning in class.

Again, the B. Ed students referred to above, who reported being comfortable in class despite the very big number of students, pointed out that this number was not a handicap for their learning. In the category of non B. Ed students, fifteen students (34.1%) considered the large number of students not to be a handicap, fourteen students (31.8%) considered this number to be a small handicap, and eight students (18.2%) considered it to be quite a handicap, while seven students (15.9%) considered it to be a big handicap for their learning.

Thus, all the B. Ed students who were interviewed responded that the class size was not a handicap while for some students, who had strong background knowledge in English, the big

number of students was seen as a handicap for their learning. Closed answers and closed questions on the Likert scale show that 34.1% of non B. Ed students found it quite a handicap and a big handicap while 65.9% found it not to be a handicap and a small handicap for their learning. This means that for 65.9% of non B. Ed students, the large number of students did not really constitute a handicap that would hamper their learning. It is however important to notice that the ELA 101 lecturer reported on the $CLASSE_{FACULTY}$ that for students to be successful in this course, it was very important that the students in the class be reduced to a number that was more easily manageable. Again, B. Ed students, who did not have a strong background in English from high school, could need more comfort in studying the ELA 101 module that allows them more attention and concentration to catch up.

7.3.3.2 Emotional Engagement in Working with ELA 101 Classmates

As has been discussed earlier, both the students and the lecturers who were interviewed confirmed that group work was mostly used, especially during continuous assessment tests. So, I asked students to report on the extent to which they were enjoying group work with their classmates in the ELA 101 class, given that group work is an aspect of classroom atmosphere which also touches on their emotional life.

Two of the four B. Ed students reported that they had enjoyed group work quite a bit with classmates in the ELA 101 class while the other two reported that they enjoyed group work very much. In the category of non B. Ed, six students (13.6%) reported having enjoyed group work to a very small extent while three students (6.8%) reported having somewhat enjoyed group work with classmates. In the same category, ten students (22.7%) reported having enjoyed group work quite a bit while 25 students (56.8%) reported having enjoyed group work with classmates in the ELA 101 class very much.

As can be seen, all the B. Ed students (100%) and 79.5% of non B. Ed students enjoyed group work with classmates much while 20.4% of non B. Ed reported having enjoyed group work in the ELA 101 class to a small extent. These results indicate that, generally, students were happy working in groups. Thus, students enjoyed learning in communities which is a good indicator of collaborative learning and hence of student engagement (Zhao & Kuh, 2004)

7.3.4 The Quality of ELA 101 Classroom Conditions as Viewed by Students

In order to have students' views on the ELA 101 classroom atmosphere, I finally asked them to evaluate the adequacy of the conditions in which they were taught the ELA 101 course in enhancing their learning in general. The views of the two groups of students on this issue were very diverse.

In the group of B. Ed students, three out of four reported that the abovementioned conditions were adequate. One student from the category of B. Ed students indicated that these conditions were completely inadequate while two students reported that they were adequate and one student reported that the conditions were very adequate. Thus, for B. Ed students, these conditions were generally found to be very adequate. Non B. Ed students, on the other hand, were equally dividedbetween two views: the conditions were not adequate and the conditions were very adequate. Further details about the views of non B. Ed students on this issue follow. Fourteen students (31.8%) and eight students (18.2%) reported that the ELA 101 course teaching conditions were completely inadequate and less adequate respectively. Sixteen students (36.4%) and six students (13.6%) reported that these conditions were respectively adequate and very adequate. Thus, the conditions in which the ELA 101 course was taught were generally considered to be adequate and very adequate by 50% of non B. Ed students while all B. Ed students generally found them very adequate.

The very high number of students in the classroom was not the only problem as far as the teaching of the ELA 101 course was concerned. There was also fault in learning facilities such as the electricity and the sound system. Sometimes there was electricity cut off and the sound system not available. The teaching and learning environment of the ELA 101 course was no different from that of EDP 101 that was discussed earlier. The size of the classroom could not accommodate all the students, as highlighted by Mr. F:

> You could find many students following the course standing outside the classroom and others at the far back of the classroom. After class you could ask [one of the students] what the lesson was about but they would not be able to give you an appropriate answer. The environment was not appropriate because of the very big number of students in the class. (Interview: August 23, 2010)

The students who came to study and could not find seats ended up not coming to class again. This situation was not only demotivating for the students but could also disengage them from learning because classroom interactions are important indicators of student engagement. Classroom interactions characterise a positive classroom atmosphere that can stimulate and favour a high level of student engagement. However, in both modules that I investigated, the classroom atmosphere was judged by students as unfavourable to student engagement.

7.4Students' Perceptions of the Impact of the Teaching and Learning Environment on Student Engagement at KIE

The teaching and learning environment of the EDP 101 and ELA 101 courses was identified as inappropriate by the students whom I interviewed.In both modules, human and material resources were not adequate for the enhancement of student learning. Similarly, teaching and learning conditions were perceived as inappropriate to student engagement. Students who were victims of this situation considered this environment not to be didactically conducive, which, therefore, has a negative impact on their learning.

Ms L perceived the teaching and learning conditions in which the EDP 101 module was taught as inappropriate. They were characterised by a very weak didactic communication between students and the lecturer. This communication, Ms I suggests, should characterise any teaching and learning milieu for effective student involvement in learning. She described the context in which she learnt the EDP 101 course as hampering student-teacher interactions, which however are important in the fostering of student engagement. Her description is as follows:

> In this course, the lecturer was like a priest preaching to his adepts in a Sunday church service. There was no didactic communication. This situation was like that in which only one person is allowed to speak while the others don't have the right to reply. [...]. Therefore, the teaching and learning environment was inappropriate because we couldn't have opportunity to discuss with the lecturer for a better understanding. (Interview: August 24, 2010)

In such a context, students cannot interact with the lecturer. In addition, some students said that this learning context led a one way (unilateral) top down communication. Yet, pedagogic communication involves a horizontal type of communication between the teacher and the

learners. Ms D stressed that the teaching and learning environment of the EDP 101 course has negatively influenced her learning. She said:

> The environment in the classroom was disrupting. When some students are shouting I cannot hear properly. I catch very little information of what the lecturer says. What I will gain too is very little compared to what I would gain if I were studying in good conditions. (Interview: August 26, 2010)

Studies have indicated that a passive lecture like the one described above where the teacher mostly talks and students listen is contrary to every principle of an optimal learning environment (Kuh et al., 2007). This finding is consistent with the teaching mode at KIE which is mainly a transmission of knowledge.

The teaching – learning process is mainly based on didactic communication. The teacher's role in class differs from that of a priest giving a homily, as one respondent pointed out. As Kuh et al. (2007: 94) advise, "Active and collaborative learning typically is more effective because students learn more when they are intensely involved in their education and are asked to think about and apply what they are learning in different settings". Hence, the inappropriateness of the teaching and learning environment undoubtedly has a negative impact on students' learning and, eventually, on student engagement.

I also asked the students to describe the influence that their perceptions of the teaching and learning environment of EDP 101 or ELA 101 had had on their psychological investment and effort directed towards studying these two modules. Generally, they all claimed that this influence was negative. For instance, Mr. B opines:

> Since we studied these modules in hundreds, the environment in which we studied these modules was very bad. It was unfavourable for effective learning because when you were not sited in front or when power was cut off, you would get out of the class most of the times. When sitting at the back, you could not study; you would rather go home, and wait for the handouts. (Interview: August 24, 2010)

Under such learning conditions, student engagement is almost impossible. In effect, engagement with the course will never take place effectively if the student is not comfortably sited in the

classroom and actively participating in the learning activities. His/her psychological investment and effort directed towards learning is hardly possible. Mr. J claimed that "the class size does not help to engage in the learning process, due to a noisy and disturbing environment" (Interview: August 23, 2010).

Learning is a psychological activity, which effectively takes place if and only if the learning environment is set for, and conducive to this activity. Learning involves motivation, interest, concentration, association, and the participation of the learner. These are necessarily achieved in a psychologically well set environment. This environment must be conducive for effective learning. Talking about the impact of such a teaching and learning environment, Ms. H affirmed that:

> The influence is negative because sometimes you get discouraged when you think of attending a course under such conditions. It is discouraging when you think about the noise, when you think of standing for two consecutive hours pretending to study. You can't follow the lecturer. Yeah; and you really get bored and discouraged. (Interview: August 24, 2010)

Because motivation precedes engagement and engagement leads to effective learning (Eccles & Wang, 2012), learning cannot take place without motivation. When students lack motivation to learn, they may not attend the class. Ms H continued: "Because you are not sure of what to do and how to do it for you to hear the lecturer, you may decide not to attend class and do something else" (Interview: August 24, 2010).

It is not only non B. Ed students who were lacking motivation to study this course in such conditions; B. Ed students also felt the same way. For example Mr. M tried to force himself to attend the EDP 101 class though he lacked motivation for it. He would go to class just to enrich his vocabulary in English. If it was not for his knowledge in English, he would not have attended this class. He argued that: "If the course were taught in French, I would never attend it" (Interview: August 2010). He would rather get textbooks from the library and use them together with his notes from TTC in order to understand the EDP 101 content. This would suggest that the module content was similar to materials taught at high school while it is a university course. If this is the case, then its content would be too shallow for the tertiary level. If it is not the case,

then the students who use this strategy may be deceiving themselves about what they are supposed to get from this course.

It is clear that the minimal physical space required for the classroom to accommodate students was not met. As a result, many students were not motivated to attend the class. Yet, interest and motivation are essential for learning to take place, as the human behaviour is goal oriented. This applies to all teaching and learning activities. The above students' perceptions of the influence of the learning environment on student engagement in learning the EDP 101 course are similar to those revealed by the students taking the ELA 101 course. For example, when I asked Ms N, who is a B. Ed student, how her perception of the teaching and learning environment had influenced her psychological investment in learning, she said:

> Most of the times you could not go to school due to the way you perceive the situation. If the class was to start at 8:00 and I am not in the classroom by 7:45 I could not find a seat as the classroom would already be full. Then I would say to myself: even if I get it I will not be able to listen to the lecturer because I will be sitting at the back of the classroom. So I would decide not to attend. In short, the teaching and learning environment was not good (Interview: September 2, 2010).

Learning could be possible in overcrowded classes and there is a possibility for students to learn in hundreds and effectively engage in learning,however, this requires adequate resources to be available. There could include lecture halls that are big enough, well arranged, and effectively equipped. This goes hand in hand with enough lecturers and tutors so that the students can be split into groups with manageable numbers of students for effective group discussions and tutorials as confirmed by the lecturers whom I interviewed.

7.5 Students' Evaluation of the Quality of the Teaching of the EDP 101 and the ELA 101 Modules

7.5.1 Evaluation Criteria

After students had described the teaching and learning environment of the EDP 101 and the ELA 101 modules, I wanted to get their perceptions about the quality of teaching of each of these two courses. The leading hypothesis was that under normal circumstances, good teaching usually leads to good learning.

This evaluation was done on the basis of certain criteria of good teaching in an undergraduate programme. These criteria are the feedback received by students, explanation of concepts, making the teaching interesting, motivating students, and finally understanding students' problems.

For each of the criteria, students were asked to indicate whether they generally viewed these criteria as good, bad, or if they never happened in the teaching of the courses under investigation (EDP 101 and ELA 101).

7.5.2 The Quality of Teaching of EDP 101

7.5.2.1 Explaining, Interesting, and Motivating Criteria

In general, all participants interviewed appreciated the quality of teaching in the EDP 101 module. The criteria of good teaching (explanation of issues, making the teaching interesting, and motivating students) were excellently appreciated and commented on by the students. The interviews showed that the teaching of the EDP 101 module was viewed by the students as very good. For instance, Mr. B's evaluation of this teaching was as follows:

> The reason why I say that EDP 101 has been exciting for students is because, for us who did languages at high school, it was the first time to encounter psychology. It was taught by very good, knowledgeable, competent, and professional lecturers. They made us love the course. (Interview: August 24, 2010)

It should be noted that the EDP 101 course was taught by three lecturers, all of whom were qualified in education and were specialists of psychology. Two of these had more than 10 years of teaching experience in higher education. Thus, it is definitely the way they taught this course that made Mr. B qualify them as good, knowledgeable, competent, and professional. Indeed, good teachers are knowledgeable and enthusiastic about their courses, encourage students to express their views and interact with them (Feldman, 1996; Kuh et al., 2007). The EDP 101 lecturers are likely to be doing all the above, which may have contributed to the quality of their teaching being judged as very good by their students. Lecturers in charge of this course were seen by students as people who performed their task (teaching) very well. They were seen as

well trained and able to make their teaching interesting. Given that students can be the best evaluators of their teachers, one can assume that these students' views are more or less accurate.

Substantially, the teaching of this course was positively judged on the basis of how it prepares student teachers for the teaching profession. Making a value judgment of the teaching of EDP 101, Mr. C has shown that the lecturer was making a clear link between the course and the career for which he was preparing his students. He argued:

> The lecturer was making his teaching interesting by giving concrete examples that could help you see the relevance of the material being taught. Examples of how things happen in class were given and we become interested by the course. [...]. He was directing our attention to what he was teaching. For instance, he used to tell us like, you as teachers, you must know this. Then you had to pay more attention to what he had to say next. So, he was motivating us in a positive way. (Interview: August 27, 2010)

These remarks indicate that the lecturer was linking the course to the students' future profession, which made his teaching interesting. The above interview result is consistent with the CLASSE result in which most students claimed to feel comfortable with the EDP 101 classroom atmosphere as has been pointed out earlier. In effect, the teacher's qualities in making his/her class viable and attractive by motivating the students, arousing their interest for the materials being taught, his/her dynamism, and non-monotonous voice could contribute to making the classroom atmosphere enjoyable for the students.

It should be remembered that the students who were interviewed said that the teaching and learning environment of EDP 101 module was inappropriate and demotivating due to the large number of students resulting in a lack of enough seats and a noisy class, faulty technology, power cut off, etc. However, the majority of respondents who answered CLASSE questions reported having been comfortable with the classroom atmosphere. This may be due to the teaching qualities manifested by the lecturers in the class. Moreover, some interviewees did not respond to the CLASSE since participation was voluntary.

7.5.2.2 Feedback and Understanding Students' Problems

Two criteria of good teaching, namely the feedback received by students and understanding students' problems, both received nuanced responses. In effect, two participants were undecided on whether the feedback was good or bad. For them, students could ask questions and not get answers due to the big number of students. Yet, research has shown that "students learn more when they are given timely feedback that is both supportive and corrective" (Kuh et al., 2007: 93). These authors contend that "the best feedback is interactive, involving teachers, staff, and students in a conversation about how the student is performing" (Kuh, et al., 2007: 95).

In the same way, it was reported that the lecturer could not attend to students' problems due to their big number. The large class size could even lead to discouragement and sometimes to absenteeism.

7.5.2.3 The Issue of Language

One other aspect that was dealt with in the present study is the language in which both students and lecturers are more comfortable in listening, speaking, and writing. In effect, the language in which students are taught definitely has an impact on student engagement and success. However, the aim of the study is not to determine this impact.

Of all the students whom I interviewed, only one participant, Mr. J, viewed the quality of the teaching of the EDP 101 module as poor, when it came to the language used by the lecturers. According to him, the lecturer was using the languages that he could not understand. He complained that the lecturer was using French and Kinyarwanda, languages this student did not know. "So he couldn't understand my problem", he said. (Interview: August 30, 2010).

The above finding can be seen as a consequence of an abrupt language in education policy change that is taking time and energy for both teachers and students to adapt to. In effect, the fact that the lecturer was not very conversant with English coupled with his desire to explain the concepts in more detail to many students who were also not comfortable in English, could have led the lecturer to use a mixture of several languages during his teaching.

However, the lecturer ignored the presence of students who might be conversant withneitherFrench, nor Kinyarwanda. As has been pointed out earlier, the introduction of English as a medium of instruction at all levels of education in Rwanda is still challenge for all

stakeholders in education. This is mainly because the policy was introduced while teachers and students were not yet ready to accommodate it. This is the reason why I asked both the students and the lecturers (through the CLASSE instrument) the language in which they felt more comfortable among the two international languages (French and English) formerly used together in the academic area in Rwanda.

It should be noted that the current language in education policy in Rwanda has its origin in the colonial era. From this era till 1994, the medium of instruction was French, which was an official language alongside Kinyarwanda. After the 1994 genocide, English was made an official language and started to be used as a medium of instruction in some schools. Until 1998, both English and French were used as media of instruction in the upper primary and high school, depending on the background of learners. This means that there were English medium schools and French medium schools. Some would have both sections: one that used English and one that used French.

At the tertiary level for instance at the NUR, both English and French were used as media of instruction. Students were offered courses in English and French before degree courses to enable them to study in both English and French. Thus, bilingualism was promoted. This changed with the 2009 academic year when the Government decided to make English the only medium of instruction from the primary to the tertiary level. However, another decision has been recently made that lower primary pupils must learn in their mother tongue, Kinyarwanda.

In this research, I dwelt on the problems faced by the students in relation to language. When Mr. C entered the office for an interview, he started by saying: *"icyongereza cyanjye ni kibi cyane, ndashaka ko interview itaba mu cyongereza"* (Interview: August 27, 2010) (My English is too bad that I do not want to be interviewed in English). On the other hand, in the interview with Ms D, she showed her intention to express herself in English and forced herself to do so even though her spoken English was not that good. She did not want to answer in Kinyarwanda in spite of me asking her to use the language which she was more comfortable with. Below is an illustration of how bad her English was:

> **Researcher:** Can you tell me how the section you followed at high school has motivated you in studying EDP 101?

Student: Human science has motivated me in learning EDP 101…..

Researcher: How?

Student: [Silence!] Because in human science I have learnt… we learnt Sociology, Psychological and Philosophy. Those, those, those issues, those issues help us to collaborate in societies with others, to sharing information and to know how we can manage our environment. But in concern sociology, in sociology we learn, we learn how live together with the others. But in philosophy we have learnt, I have learnt in, that in human science, I have learnt how to think, then to think in order to know the reality of things. But concern our course, concern EDP, concern psychological, psychological has motivated me to live together with others to know the personality, when, because here in KIE we will be the teachers! That basis of psychology which I have pride I have pride, in human science, in human science psychological has help me to know deeply the importance of psychological here, psychological. Because psychological… you cannot teach without knowing the psychological of your children, your children, your students or your learners. Then psychological has that section of human science that I have learnt has help me in my, in my daily life because I have learnt many courses such as psychological and here in KIE because we are in education our lecturer try to train us, to give us some information about educational psychological. That educational psychological will help us… if you will be in front of the learners, we will, …first of all, if I will be in front of the learners, I will have many information about.. First of all I have to ask such question: what kind of children I am going to teach? What are their behaviour? What are their personality? I will know… I will…those question will help me to know some information about those learners….When I will start to teach them, some of them, I will see some of them are cleaver, some are timid, some are them are shy, and so on. That psychological has motivated me and… to know the personality of others, the way they behave and so many things.

Researcher: Ok. Since you studied human sciences at high school, and the EDP 101 module is about human beings, it was a kind of continuation. Isn't it?

Student: Yeah. It was a kind of continuation?

Researcher: Because you did human sciences in high school, I think the EDP 101 "Introduction to Educational Psychology" was a kind of continuation of the courses you had at high school.

Student: Yeah, it is my continuation because in high school of have learnt it. And here in KIE I learn it from level 1 to level 5. Yes it is a kind of conti [continuation]…. It is a continuation to have information about educational psychology.

Researcher: Ok. Can you tell me about your perceptions, what image did you have of the teaching profession when you were still at high school? How did you perceive the teaching profession in general when you were still at high school?

Student: About the teaching profession?

Researcher: Yeah

Student: When I was still in high school. For me I was still….I was still … I think that I was still...I can say that I was still...

Researcher: You can mix English, Kinyarwanda, or French or, whatever to express yourself more easily.

Student: Okay, that expression, I didn't understand that….

Researcher: If I try to say it in Kinyarwanda: ukiri muri secondaire, wari ufite uko ubona ubwarimu muri rusange, in general. Image wari ufite ku mwuga w'ubwarimu ni iyihe? Wabonaga abarimu muri société aho wari utuye, aho wabaga hari abarimu. Umwuga w'ubwarimu wawubonaga ute? (When you were still at high school, you viewed the teacing profession in a certain way, generally speaking. Which image did you have of the teaching profession? I assume that there were teachers where you lived. How did you perceive the teaching profession?)

Student: Image concern the teacher while I was in high school… for me… my point of view, …my point of view, I have seen that … I think that,… always I didn't like… if our teacher comes to teach, me I said: I will not became a teacher, I will not became a teacher. I will not become a teacher. The way they behave, the way they take the crops…Me I didn't like to teach on that time. Concern teaching, I didn't… Even though I am here in KIE but I like to teach now because we are in teaching. […]. (Interview: August 26, 2010)

It should be noted that some students preferred not to use English in the interviews even whenthey were conversant with it while others, such as Ms. D above, chose to use English even if they were not fluent in it. Ms. L and Mr. O, in spite of their being from a French background

(for they had studied in TTCs) preferred to use only English throughout the whole interview and their spoken English was good.

Nevertheless, the language used during interviews could not give sufficient information on the language in which students felt more comfortable in their studies in the teacher education programme at KIE. As has been revealed earlier, the majority of B. Ed students (58.8%) were more comfortable using French while 41.2% of them were more comfortable using English in the EDP 101 course. In the same course, the information that was provided by non B. Ed students did not show a big difference. In fact, 52.9% reported being more comfortable in French while 47.1% reported being more comfortable in English. Generally, non B. Ed students were more comfortable in English than B. Ed students. The tentative explanation would be that the former group of students includes those with a strong background in English. However, this is not true because, as the bar chart below shows, there was only one combination from the Faculty of Arts and Languages out of the 8 combinations whose students participated in the study. This combination is Kinyarwanda - English - Education and comes in the fifth position in terms of frequency as illustrated in the bar chart on the next page.

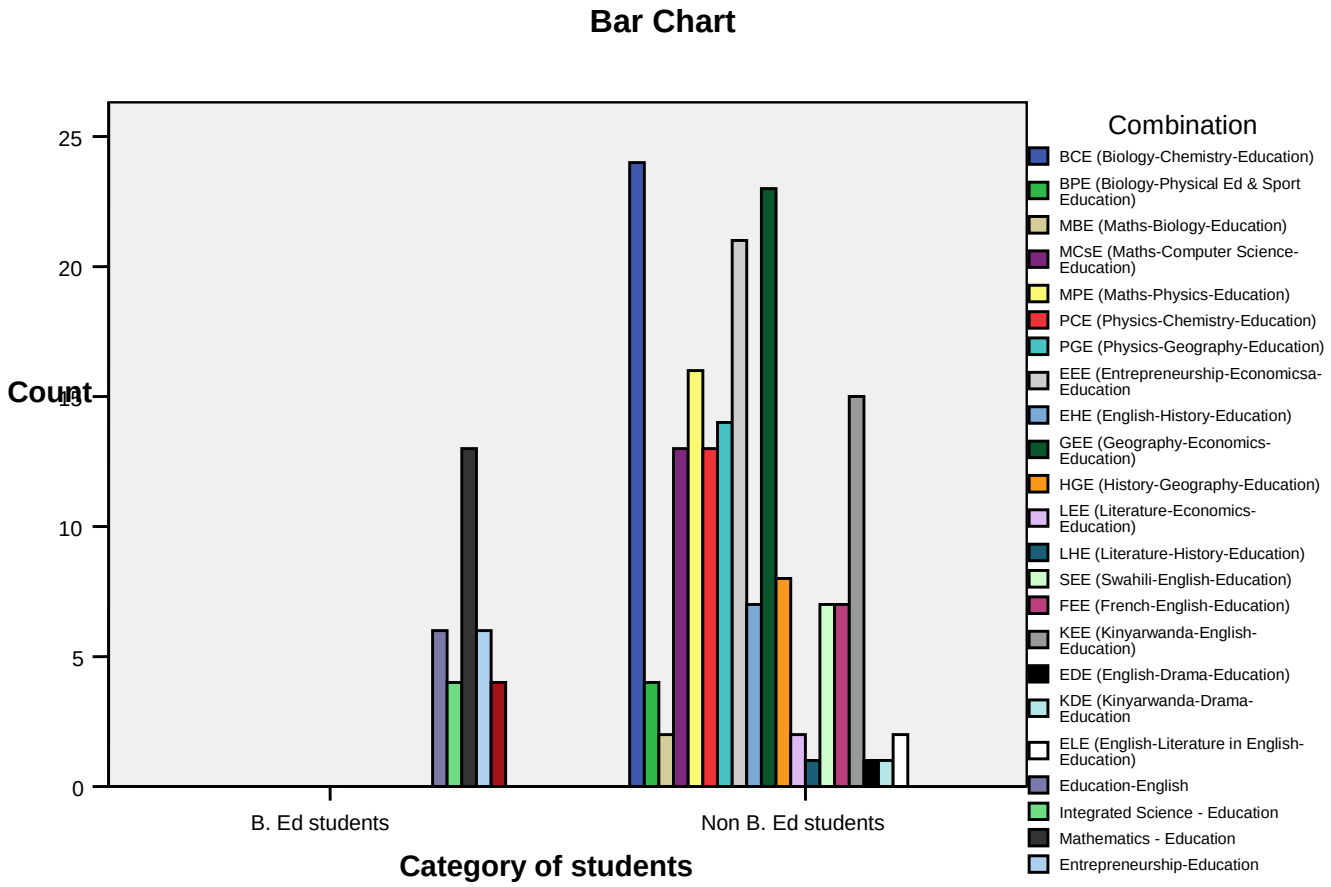

Figure 7: Combinations followed by of participants at KIE for EDP 101

In the ELA 101 course, the CLASSE instrument showed that all the 4 B. Ed students sampled were more comfortable using English. After all, 3 of them were registered in the Foundations of Education - English combination. For the non B. Ed students also, a great majority (79.5%) were more comfortable using English while only 20.5% were more comfortable using French. These findings seem to reflect the reality since all non B. Ed students had languages (including English) as major subjects at high school and were specialising in the teaching of this language. The figure below illustrates this according to the combinations that these students were following:

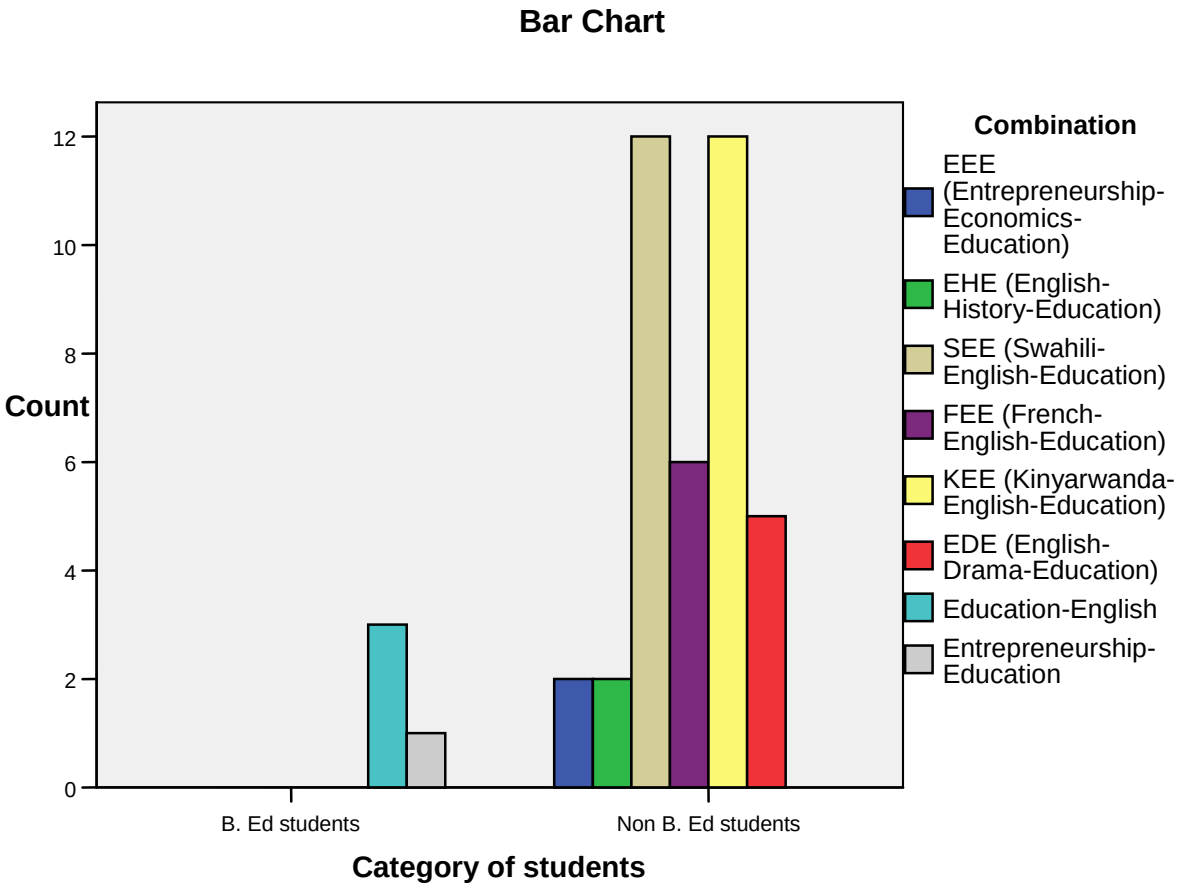

Figure 8: Combinations followed by participants at KIE for ELA 101

Given the challenges faced by both students and lecturers in teaching and learning with regard to English as a medium of instruction, a progressive implementation of this policy would have allowed this lecturer more time to get familiar with English before using it. The argument is that, "if the medium of instruction is English, then the lecturer should be teaching in English and only using French or Kinyarwanda when explaining things exclusively to speakers of those languages" (R. Osman, personal communication, August 1, 2011).

This strategy could work for the ELA 101 module of which the lecturer was completely bilingual (speaking both English and French) and could thus accommodate every student's language needs

in his class. For the EDP 101 course, however, this was hardly possible. Two of the three lecturers in the EDP 101 module were more comfortable when using French while they were required to teach in English. The other one, however, was more comfortable in English as he was from the English background. Except for the first lesson where all lecturers are present so as to introduce the module, each one of them has to teach specific sections of the module alone. If all the three lecturers could be in class for each and every lesson, students could feel more comfortable as the lecturers would complement one another.

7.5.3 The Quality of Teaching of ELA 101

Interviewees appreciated the quality of teaching ofthe ELA 101 module in terms of explaining concepts, making the lesson interesting, motivating students, providing prompt feedback, and understanding students' problems. In an overcrowded classroom, prompt feedback becomes a problem. For instance, Ms. N said that the teacher could not answer all students' questions. In addition, the assessment was only group work based, except for final exams. The teaching environment of ELA 101 was judged as appropriate due to the lecturer's teaching qualities and skills despite the class size.

Mr. O argued that it was not easy for the lecturer to be in control of the class because of a very big number of students. For him, the lecturer tried to maintain the attention of the students in order to follow what was being done. He continued saying that sometimes, the lecturer would ask questions to check whether the students were following. Mr. O concluded that, "We can't say that it [teaching and learning environment] was very appropriate, but it was not inappropriate either; it was appropriate" (Interview: September 2, 2010).

I asked this student to generally comment on the quality of the teaching of ELA 101. He said that the lecturer would give additional time to B. Ed students to catch up what others had studied before they joined the class. In fact, there had been an error in the timetabling at the beginning of the semester, which made B. Ed students delay in joining the ELA 101 class. This catch-up time, according to Mr. O, allowed them [B. Ed students] to succeed. In so doing, this lecturer complied with the "qualities of the instructor that influence student learning which include preparation and organisation, clarity, availability and helpfulness, and concern for and rapport with students" (Kuh et al., 2007: 93).

In terms of understanding students' problems, Mr. F said that the lecturer was not good at this since "nobody could enter the classroom after him [the lecturer] and nobody could leave the class when the lesson was going on" (Interview: August 23, 2010). However, I suggest that this attitude of the lecturer is to encourage if we need our students to be really involved in learning. By emphasising that students should observe rules and regulations during classroom teaching and learning hours, the lecturer was aiming at achieving procedural engagement (Nystrand & Gamoran, 1991). In spite of being strict about classroom regulation, the lecturer of ELA 101 used to motivate students by telling them humorous stories, students said. When I asked Ms N (a B. Ed student) whether there were skills she had gained from the lecturer that could help her in her profession as a teacher, she had this to say: "Our lecturer knows very well how to motivate students. He was a good teacher and students loved him" (Interview: September 2, 2010). She gained from the lecturer ways of motivating students, being enthusiastic and helpful as some of the qualities of the teacher.

The quality of teaching of these two modules (EDP 101 and ELA 101) was generally good despite the bad conditions in which these courses were taught. "The lecturers did their best", the students said. Compared to ELA 101, the quality of teaching in EDP 101, which was taught alternatively by three lecturers, was viewed as better by students mostly because the course was related to their daily life. Indeed, the students reported that psychology is by essence interesting. These students' appreciation was possibly due to the nature of the course and also to the students' group average age for which the concepts and principles developed in the course are more interesting.

Generally, the quality of teaching of the two modules that were investigated was judged as satisfactory. But, when I asked her if she had any other comment to make on the evaluation that she had just made about the quality of teaching in general, Ms. L, a B. Ed student doing Mathematics - Education combination, opined:

> Okay! If I take the case of KIE, how lecturers are…, they have enough knowledge but I am wondering whether most of them are knowledgeable in teaching methods. Only a few of them have knowledge and skills in teaching techniques. This methodology issue of knowing how to transmit knowledge, to know the students you are teaching, their levels … and these aspects are

> not taken into account, they are not much looked at. You find that the lecturer comes with the objective of finishing his module, assessing, giving assignments, and that's it. You find that lecturers do not intend to know their students' level at the beginning. Only a few of them do so. (Interview: August 24, 2010)

Based on the above student's remarks, I suggest that this student was referring to almost all lecturers of KIE. It should be noted that students are well positioned to assess our [us as teachers] teaching. This assessment will be more effective if the students have got knowledge on pedagogic principles, as is the case for B. Ed students. For instance, Ms. L, who was a qualified primary school teacher, would quickly notice any lack of pedagogical skills by her lecturers in class. Apparently, Ms. L's feelings would do this for all lecturers in general and not necessarily the EDP 101 lecturers. The concern with lecturers' pedagogical skills by the students is likely to be stronger when classes are overcrowded as is the case for KIE classes.

Having noted this problem in institutions of higher learning in Rwanda, KIE initiated a post graduate certificate in education qualifying lecturers in higher learning institutions to teach at this level (Ministry of Education, 2010). In 2012, KIE also started a postgraduate diploma in education for high school teachers.

I asked a B. Ed combination student representative how the environment that he had qualified as generally appropriate had influenced the students' psychological investment in learning. His answer was as follows:

> I can say that it [the teaching environment in overcrowded classes] has had a negative effect when attending the classes. Because as you know, when the class has different students from different backgrounds, it should be better for the teacher to reach each and every student to know their weaknesses in order to address them and their strengths in order to keep them up. But the lecturer could not focus on every one of us even though we were few in numbers as a class 18 B. Ed over 221 non B. Ed students as I told you. So, when in class, we had to defend for ourselves personally in order not to be lost. And this is what pushed us to spend more time studying on our own for our own benefit after classes. And we had to emulate those who had enough background if I can say, this was something helping us to try our best in order to perform and something interesting is that by the end, all of us from my combination, we succeeded. (Interview: September 2, 2010)

This personal commitment and engagement in learning a module in which B. Ed students did not have enough prerequisites is likely to evidence why they performed better than those who had a strong background in it. Feeling the lack of enough prerequisites in a course which they wanted to pass and being intrinsically motivated to study the course, B. Ed students decided to be much more involved in learning by spending much time on the course for them to catch up. This is consistent with the ELA 101's lecturer's statement that "B. Ed students have been trained as teachers and they seem to be very committed" (Interview: September 28, 2010).

Finally, it is noteworthy that the teaching and learning context dictates the students' learning styles. Research (Prosser & Trigwell, 1999) has highlighted that approaches to teaching are likely related to students' approaches to learning which, I assume, are also linked to the classroom atmosphere. The students' learning styles in the two modules is the focus of the next section.

7.6 Students' Learning Styles in the EDP 101 and ELA 101 Classroom Setting

Learning style is used here as the way students go about learning EDP 101 or ELA 101 courses during the teaching and learning process. It refers to the sort of things which students emphasise most in class. My intention is not to identify or to list students' cognitive processes by which students acquire knowledge; my intention is to broadly explore students' ways of learning during the lesson delivery.This is what I refer to as learning styles. These learning styles are an integral part of the teaching and learning context or environment of the courses under investigation.

In order to investigate the learning styles, I started by asking participants the kind of things on which they were focusing most in learning these courses during class. This question was intended to bring information on how students used to go about the learning of these two courses within the environment that has been discussed earlier. My assumption was that the knowledge about the way students go about the learning of these modules would shed some light on lecturers' teaching approaches. The interviews with participants revealed that most of them would be listening, following the lecturer's explanations while taking personal notes. The students also used to refer to their high school notebooks if the course was related to something that they had studied at high school.

In the EDP 101 class, all B. Ed students, who had enough prerequisites in psychology from high school claimed that they used to compare course material they had learnt in TTC with what was being taught at KIE. Explaining his approach to the learning of the course, Mr. M stated:

> When the lecturer was teaching, what I considered as the most important strategy was to compare what the lecturer was saying to the knowledge I already had in psychology from high school. I would focus on that. If he said something, I would compare it with what I had studied at high school, and I would say "it is that". I had to check whether it was the same. In case it was different and I was confused, I would ask questions. (Interview: August 24, 2010)

It is not only the B. Ed students who would refer to their high school notebooks. Non B. Ed students who had studied languages at high school would also compare their English notes from high school with those given in the ELA 101 course. The example of Mr. G illustrates the situation:

> What I used to do, I would take my notes from senior 4 to senior 6, and then I would compare them with the lecturer's hand-outs. The notes were the same except that those of the university were denser and somehow prepared differently to develop your mind. (Interview: August 25, 2010)

Thus, both categories of students reported that when the lecturer was delivering the course materials, they were busy comparing what he was teaching with what they had learnt at high school. This was done in both the EDP 101 and in the ELA 101 courses.

With reference to students' learning styles, all the participants (both B. Ed and non B. Ed students) were using the same learning styles in studying the EDP 101 course. They were mostly listening and taking their own notes. Referring to EDP 101, Mr. G, a non B. Ed student with English background, explained:

> [...]. It was a new subject, a subject we had never seen. […]. That is why we were interested in listening to the teacher and writing down interesting things that I could catch which would help me when revising the course. (Interview: August 25, 2010)

People differ in their ways of reacting to the stimuli. In the classroom situation, students adopted different learning strategies. Mr. F and Mr. B were both students in languages but they used

different learning strategies in the same course (EDP 101). Mr. F was listening carefully to the lecturer and taking personal notes. He put it this way:

> I liked following the lecturer carefully and writing down the few things I could catch from his teaching. I did not have worry about the lecturer's notes [hand-outs] because I was sure that he would give them. When the notes came, I would compare them with what I had fixed in my mind during the class as well as with the few things I had written down. (Interview: September 2, 2010)

Mr. B, on the other hand, liked following and listening carefully, but would not write anything. This would suggest certain passivity. However, as he explained, he chose this strategy in order to stay focused on what the lecturer was saying. This should rather be regarded as self-regulated learning (Sharan & Tan, 2008). He maintained:

> I like listening to the teacher carefully. […]. At the same time, I attentively follow what is being displayed on PowerPoint presentations. Thereafter, I take the hand-outs and study them. During my self-directed study, I remember how the lecturer has developed materials and what he said at every stage of the teaching. Then, everything becomes clear. But when I study while writing down what the lecturer is saying, my mind is on the paper and I miss much of what is being said. This is how I learn when I am in class. (Interview: August, 24, 2010)

Learning styles adopted by students can reveal the ways lecturers go about teaching. In fact, research has shown a positive correlation between approaches to learning, students' perceptions of the learning environment, and teachers' teaching styles (Prosser & Trigwell, 1999). The way teachers go about delivering course material largely determines the way learners go about the material.

For instance, in the ELA 101 course, Mr. B was reading lecturer's notes, underlining the points which he did not understand so that he could ask for clarification during the following session. He argued that he had adopted this strategy because the lecturer used to give the notes in advance and would explain them in the following session. In effect, in their comprehensive study, Campbell et al. (2001) note that students' approaches to learning are significantly influenced by the type of teaching they encounter in the classrooms. Mr. B would make sure that he came to class having read the notes provided for that session.

This study found that the way students used to go about the learning of the modules that were investigated reveals that the course materials were delivered through the expository teaching method which normally leads to a surface approach to learning. For instance, when I asked him whether the classroom environment was appropriate for his learning, understanding, and mastery of the course content, Mr. A replied: "Due to the very big number of students from all the combinations, lecturing method was mostly used" (Interview: August 25, 2010). This shows that the student was not happy with the transmissive mode of delivery. The classroom environment was characterised by the teacher-focused approach which is not, and is thus viewed as inappropriate.

In effect, this study also found out that the teaching and learning process in the two modules that were investigated was mainly the teacher-focused as pointed out by the students, including Mr. Aabove. This finding is consistent with previous studies which found out that in large classes, the teaching method used is predominantly the traditional lecture in which teachers transmit knowledge to students who passively listen and take notes (Coffey & Gibbs, 2002; Jones, 2007 cited in Burkill, Dyer, & Stone, 2008). In fact, Exley and Dennick (2004) cited in Burkill et al. (2008: 322) argue that the lecture is "the cornerstone of many undergraduate courses and is believed by many academics to be the only way their subjects can be taught to increasing numbers of students". Similarly, the modules which I investigated are taken by students from different combinations. This implies a very big number of students in classrooms and, consequently, the lecturing method is largely used. This seems paradoxical to what is suggested by policy documents. These emphasise a learner centred methodology in a modular system of instruction that is supposed to be used in all institutions of higher learning in Rwanda since 2007 (MINEDUC: 2007b).

In general, the first year student teachers at KIE who participated in this study perceived the teaching and learning environment for the two modules/courses under study as inappropriate. This is mainly because classrooms were overcrowded. The psychological effects of the classroom community defined as "the connections among students and between students and instructors that lead to increased learning" (Young & Bruce, 2011) were seen to decrease the level of student engagement in the two courses that were investigated.

An analysis of the classroom environment or context in these two courses points to negative psychological effects of the lack of the classroom community by the students. These effects resulted in frustration, the feeling of being ignored by and disconnected from the teacher, and boredom on the part of the students. This situation is materialised by some students' deliberate absenteeism, among other things.

7.7 Summary of the Chapter

In this chapter, the teaching and learning environment of both the EDP 101 and the ELA 101 modules was extensively explored through the interviews and the CLASSE instrument's items related to the classroom atmosphere which is directly linked to this environment. It was found that in both courses, classes were overcrowded and this has had a great impact on how B. Ed and non B. Ed students got involved in learning. This led them to adopt different strategies to cope with the situation.

The teaching and learning environment was explored through the language used by students and lecturers, how easy it was for the students to follow lectures, and how difficult or easy the course content was for the students. Then, the effect of the classroom density on students' involvement in learning was considered by examining how comfortable the students were when studying in an overcrowded class. I also investigated how the students felt about working in groups with classmates before exploring their perceptions on the impact of this teaching and learning environment on their engagement. B. Ed and non B. Ed students' views on their experiences with the teaching and learning context were also analysed.

In the EDP 101 module, it was found that the majority of B. Ed students (58.8%) and slightly more than fifty percent (52.9%) of non B. Ed students as well as 2 of the 3 lecturers were more comfortable when using French than English, while the medium of instruction was English. This paradox has serious pedagogical implications on both the lecturers' teaching approach and activities and the students' learning. For instance, the lecturers' approach to teaching was found to be mainly teacher-centred due to lack of confidence and fluidity when using the medium of instruction. They tend only to transmit what they have prepared for students. A direct consequence of this approach is that the students' approach to learning is mainly listening and,

for some, taking notes. This approach characterises the students who adopt a surface approach to learning as opposed to a deep approach.

Students – lecturers' interactions were found to be limited only to answers to questions that were seldom asked by the students. They did not include the intense and rich interactive communications that should characterise an interactive classroom and which enhances learning. This is mainly because there was lack of confidence when using the medium of instruction by both students and lecturers. This had a negative impact on student engagement. Another negative effect of the non-mastery of the language of instruction on student engagement that was noticed is that the students who were not very conversant with English struggled more with language than with the subject matter. This is evidenced by the fact that B. Ed students' average performance was higher (a distinction: 70.1%) in an English course than in EDP 101 (65.1%) which, however, is a course in which they had strong background knowledge.

It was also found that the majority of B. Ed students (79.4%) estimated that the language used by lecturers to have facilitated their learning to a large extent, while the percentage of non B. Ed students who had the same view is 51.4%. The comfort with language is not just about being able to listen and understand the lecturer, but is also about feeling free and confident to talk with their lecturer. In this study, it was found that non B. Ed students were comfortable talking with EDP 101 lecturers to a higher level (68.4%) than B. Ed students (50%). After all, B. Ed students were generally more comfortable with the medium of instruction than non B. Ed students.

Communication in class is not only limited to the language of communication. It is also about the way learners find the subject matter easy or difficult to understand. In this vein, prerequisites play a pivotal role in facilitating learners' understanding. This study showed that 76.5% of B. Ed students and 65.8% of non B. Ed students found the EDP 101 course content as not really difficult. The high percentage of B.Ed students can be explained by the fact that they already had some knowledge of psychology before joining KIE. Their average performance itself reflects this as it is 65.1% against 60.8% for non B. Ed students.

From classroom communication, the classroom density also has direct effects on student engagement. Due to an overcrowded classroom, the interviews revealed that the conditions under which the EDP 101 course was taught were perceived as very inappropriate. The quantitative

study itself showed that 70.6% of B. Ed and 58.8% of non B. Ed students were uncomfortable with studying in such an overcrowded classroom. The class size was seen as constituting a serious handicap to learning and the understanding of the course content more for non B. Ed students (at 61.7%) than for B. Ed students (at 51.3%).

Interviews with both students and lecturers also revealed that, due to the overcrowding of classes, group work was mostly used as almost the only alternative to assessment. This is not an effective assessment strategy, but it was used anyway. The study found that B. Ed students were enjoying group work with classmates to a greater extent than non B. Ed students in the proportions of 85.3% to 79.7%. This may be due to the fact that the former used to help their non B. Ed student colleagues who did not have pedagogical background knowledge.

The general conditions under which this course was taught and learnt were judged as very bad and were not, therefore, promoting student engagement. These conditions were itemised as lack of enough human and adequate material resources as well as some organisational aspects like timetabling, etc. However the average quantitative results of the classroom atmosphere in the EDP 101 module showed that the classroom atmosphere was quite adequate with 50.6% compared to less adequate with 49.4%.

In the ELA 101 classes, all the B. Ed students who were studying this course reported being more comfortable in English than in French while the percentage of non B. Ed students who were more comfortable with English was 79.5%. The lecturer of this course reported that it was important for the students to be able to listen, speak, and write the language of instruction (English) for academic purposes for them to be successful. It is worth noting here that B. Ed students who were doing the ELA 101 course pointed out that they were strongly motivated and committed to learning English because it was the language in which they would be teaching and they were also more interested by this teaching profession than their non B. Ed student colleagues.

This may be because B. Ed students had limited knowledge of English before joining KIE. Indeed, three out of four reported that the language used by the lecturer had facilitated their understanding of the course to a small extent while it had facilitated the understanding of the course to a great extent for 61.4% of non B. Ed students. Moreover, the four B. Ed students were

comfortable and very comfortable when talking with the ELA 101 lecturer and the situation was the same for 70.4% of non B. Ed students. This type of relationship between these categories of students and the lecturer is also observed in the extent to which these students find it easy or difficult to follow the lecture.

In effect, all the B. Ed students who participated in the study found it somewhat easy and easy to follow ELA 101 lectures while it was easy and very easy for 52.3% of non B. Ed students. 47.7% of these non B. Ed students found it somewhat easy and difficult to follow the lectures. The ELA 101 course material was perceived as easy by three out of four B. Ed students. Concerning non B. Ed students, who however had strong background knowledge in English, 52.3% found the course material quite a bit difficult and very difficult while 47.7% found it easy and somewhat difficult. This is also reflected in their performance in this course as B. Ed students performed much better (70.1%) than non B. Ed students (62.3%).

On the issue of the effect of classroom density on the emotional engagement in ELA 101 classes, all B. Ed students who responded to CLASSE reported being comfortable while non B. Ed students were equally divided between being somewhat comfortable and comfortable when studying the course in hundreds. In a similar vein, the class size was not a handicap for all B. Ed students and for 65.9% of non B. Ed students who participated in the study. This shows that 34.1% of non B. Ed found the size of the class to be a real handicap. This may be one of the factors for their poor performance.

With regard to working in groups, all B. Ed students reported that they had enjoyed group work to a large extent with classmates in the ELA 101 class while 79.5% of non B. Ed students reported having enjoyed group work to a large extent.

In general, three out of four B. Ed students reported that the conditions in which they were taught the ELA 101 course were adequate while non B. Ed students were equally divided on this issue: 50% reported that the conditions were adequate while for the other 50% these conditions were not adequate. It seems that the students considered these conditions as being at least adequate compared to the conditions in which they studied EDP 101, a course taken by all first year students. In effect, even though students were too many in the ELA class, at least they could squash up in the classroom and not stand outside to look through the windows as was the case

with EDP 101 classes. In any case, these modules were taught and learned in inappropriate conditions due to the very large number of students attending the course.

The above results indicate that, though the number of B. Ed students who responded to the CLASSE instrument was too small compared to non B. Ed students in the present study, it can be argued that the former perceived the teaching and learning environment of the ELA 101 module in a slightly different way from that of non B. Ed students. One can also argue that students who had had teacher professional training before joining the post-secondary teacher education programme perceive the teaching and learning of non-pedagogical/non-professional courses in a more positive way than their colleagues who had their first encounter with teacher education at KIE. The positive image that these students had of teaching and the teaching profession played a big role in their studies: it maintained their interest and motivation, enhanced their determination to study for the profession and strengthened their engagement. This led to good performance in both courses in which these students did not have enough background knowledge before joining the tertiary education. In fact, the average performance of the B. Ed students in English was 70.1%, while it was 62.3% for non B. Ed students. Furthermore, this study showed the same link in performance for mature students and those who went to the university straight after primary teacher training in the 2008 promotion in History, Geography, English, and French.

In this study, the teaching and learning environment was perceived by both B. Ed and non B. Ed students as lacking some important features that enhance student engagement in both the EDP 101 and the ELA101 modules. The physical space was not enough to accommodate all the students. This led to lack of interest, motivation, discouragement, disengagement, and frequent absenteeism. In addition, human and material resources were not adequate for the enhancement of student learning and the didactic communication was not effective. In short, the influence of the teaching and learning on student engagement was perceived as generally negative.

Evaluating the quality of teaching of the modules that I investigated, B. Ed and non B. Ed students found that the teaching of these courses was generally well conducted. Lecturers were

perceived as good at explaining concepts, making lessons interesting, and motivating students. In terms of the feedback provided by the lecturers and their understanding of students' problems, the teaching was also estimated to be good. The very big class size could not allow lecturers to effectively give prompt individual feedback and individualise their teaching and assessment. During classes, under these circumstances, students would mostly listen and take personal notes either to memorise or to use while reading lecturers' notes for better understanding. This suggests that the teaching style that was used was transmission-based, which style does not engage students fully.

CHAPTER EIGHT

FIRST YEAR CLASSROOM INTERACTIONS AND INVOLVEMENT IN LEARNING: PREDICTORS OF STUDENT ENGAGEMENT AT KIE

8.1 Introduction

While Chapter Seven explored students' perceptions of EDP 101 and ELA 101 classrooms' atmosphere which relate to the teaching and learning environment as one of the determinants of student engagement, Chapter Eight aims to answer the fourth research question of this study that was formulated as "To what extent do B. Ed and non B. Ed students interact with lecturers, peers and get involved in educationally purposeful activities in the modules studied together and how this affects their performance?" This chapter argues that the quality of students' - faculty members' interactions, peer interactions as well as engaging activities is a determinant predictor of student engagement in teacher education, among many others. Comparing the two categories of students, the argument here is that B. Ed students who are professionally prepared prior to KIE are more engaged in learning for the teaching profession than non B. Ed students.

This chapter deals mainly with two benchmarks of effective educational practices which are "active and collaborative learning […] and student-staff interaction (Kuh, 2001a: 13) among others. In this study, items of the $CLASSE_{STUDENT}$ and $CLASSE_{FACULTY}$ which I considered to reflect active and collaborative learning on the one hand, and student - staff interaction on the other hand were grouped under three types of nature of educational practices. These types are students' - lecturers' interactions, students' - students' interactions, and students' - community members' interactions.

On the CLASSE instrument, students had to agree or not agree on how often each of the above educational practices occurred in their class, while lecturers had to agree or not agree on how they perceived those practices to be important for students to be successful. This information allowed the researcher to investigate interactive and collaborative learning benchmarks which are effective educational practices of student engagement.

In this thesis, for methodological reasons, peer interactions and students-faculty members' interactions are presented separately, although they are approved by researchers to be conclusive

indicators of student engagement. Classroom interactions are dealt with in this chapter (Eight) while specific engagement activities will be discussed later in Chapter Ten simply for methodological reasons and for the balance of chapters.

I am very well aware of the fact that engagement activities and classroom interactions are all components of the same reality: student engagement and success. Thus, two main components are dealt with in this chapter. These are student engagement through classroom interactions and specific engagement activities in both modules, namely EDP 101 and ELA 101.

8.2 Student Engagement through Classroom Interactions in EDP 101

This section discusses how B. Ed and non B. Ed students engage in learning EDP 101 through classroom interactions. Students' – faculty members' interactions and interactions between students are explored here.

8.2.1 Lecturers Involving Students in Learning the EDP 101 Module

8.2.1.1 Areas of Involvement

It is assumed that lecturers involve students in learning by setting high standards to be attained, through appropriate students' workload, helping students' personal development, providing them with necessary skills for effective teaching, and by challenging them academically. Nonetheless, the level of academic challenge as indicating the effort and energy that students devote to learning and doing assessment tasks will be dealt with in Chapter Nine which specifically investigates students' time and effort or energy devoted to educationally purposeful activities.

Effective teachers/lecturers are primarily committed to facilitating the acquisition of knowledge and skills by involving students in learning activities. Teaching refers to facilitating learning while learning supposes the student's psychological involvement in the activity of acquiring knowledge. In this way, "teachers shape engagement" (Skinner & Pitzer, 2012: 27) and this should be the main concern of an effective teacher educator.

Investigating students' opinions on how lecturers involved them in learning the EDP 101 module, I asked students whether they were aware of the goals to be attained at the beginning of the course, whether they perceived their general timetable as allowing them to be fully involved

in learning the course, how much the assessment pattern revealed deep or surface learning, and finally how they perceived the course as helping them in their personal development and gaining skills for becoming good teachers.

Therefore, the students' involvement by lecturers was explored by looking at whether lecturers set high standards; whether the workload and timetable was flexible; students were academically challenged; as well as whether lecturers worked on their personal development and skills for becoming good teachers.

8.2.1.2 Setting High Standards for Students

Teachers start involving their students in learning their courses from the time they plan the teaching and learning activities. This planning starts with a clear definition of learning objectives towards which all the teaching and learning activities converge. Therefore, by setting high standards or expectations, the lecturer involves or engages students in learning the content he/she will teach towards what is expected from them. Then, they strive to achieve these goals while at the same time getting involved and engaging with the learning materials. This is how setting high standards is an important factor of student engagement.

However at KIE interviews showed that ten out of fifteen participants said that they started the course without knowing the goals to be attained. Only five responded that they were aware of the module's goals while teaching refers to helping students achieve predetermined educational goals.

Wellplanned classroom activities lead to the achievement of standards or expectations. In effect, theoretical and empirical research studies have shown a positive relationship between high expectation/standards and academic achievement because they provide challenge and inspiration that press individuals to strive meeting them as goals at their highest performance (Ozturk & Debelak, n.d). These authors also note that without expectations, individuals tend towards mediocrity or even failure.

However, lecturers must be careful when setting expectations. Expectations should be reasonable. If set too high, many students may struggle, become frustrated, and perform poorly (Ku et al., 2005). Poor performance leads to exclusion. In the case of KIE where this

research was conducted, students' failure would de facto lead to the loss of the Government sponsorship as interviewees said, and this is the case in all public institutions of higher learning in Rwanda. For this particular promotion of 2010 which is investigated in the present study, document analysis showed that only two students were privately sponsored. Being aware of learning outcomes would thus enhance their chance of succeeding.

Therefore, it is of a paramount importance for students to know the educational goals to be attained as learning outcomes because if you do not know the destination, there is a risk of losing track and going elsewhere. The lecturer must set and communicate in advance what is expected from students so that they engage with the course content accordingly (Ozturk & Debelak, n.d) and this will improve their performance.

However, most of the participants (ten out of fifteen) said that they were not aware of the expectations in the EDP 101 course which is likely to be one of the factors that explain students' performance in this course whilst lecturers were professional teacher educators who were well aware of the importance of the well specified learning aims and outcomes. Nevertheless, learning outcomes are already stated in the module handbook available for students in the KIE library, as required by the modular system in higher education (Jenkins & Walker, 1994; Ministry of Education, 2007b).

Moreover, on the CLASSE instrument, all three lecturers indicated that it was important for students' success to know these expectations. Therefore, students interviewed might, as they have said not have attended the first lesson/class in which lecturers usually introduce the whole module, together with the expectations which are normally given at this first stage.As a teacher educator at KIE for the last 13 years, I realise that attendance during the first week of teaching is usually very low.

Students' ignorance of the standards to be attained (which are however clearly stated in the module handbook) is likely to weaken their performance because researchers have found that high expectations for student performance characterise institutions with higher student engagement (Kuh et al., 2005) and that students tend to adjust their behaviour and comply with the academic expectations of the environment (Blose, 1999). Students might therefore not have paid adequate attention to the aims of the course. As has been seen, the general

performance in this course (EDP 101) was not very good for both B. Ed and non B. Ed students (65.1% and 60.8% respectively).

Setting high expectations for prospective teachers has the ultimate educational goal of shaping professional teacher identity by training them within the spirit of outcomes-based education which is an educational philosophy that has shown its effectiveness. Consequently, if student engagement is a key to determining students' performance, then prospective teachers must be trained within this philosophy. Research shows that student teachers will initially teach the way they were taught (Britzman, 1991 as cited by Hopper, n.d).

In effect, knowledge about high expectations in a given course of study acts as a motivational factor for achievement, and therefore enhances student engagement in meeting success criteria. As Ozturk and Debelak (n.d) emphasise, an effective teacher does not only express and clarify standards to students but also encourage them to meet those standards. In this spirit, the form of assessment or evaluation of the material taught must be challenging enough for students to do their best to meet those standards.

In this regard, quantitative data showed that 61.8% B. Ed and 53% non B. Ed students believed that the exam done in EDP 101 was not very challenging, while 38.2% B. Ed and 47% non B. Ed students found it challenging. 59.9% of the non B. Ed students reported that they worked harder than they thought they could to meet standards as opposed to 40.1% for B. Ed students. An explanation for this is that B. Ed students, who were already qualified primary school teachers with good background knowledge of psychology, perceived examinations in a psychology course less challenging than non B. Ed students for whom psychology was new.

Another motivational factor that brings students to their involvement in learning (though standards are not known) is their self-determination, interest, and motivation for the course. On this point, Mr. B stated for EDP 101 that"unless being personally motivated by the course because what I was studying would help me to teach, I did not know those standards" (Interview: August 24, 2010). When students seek to perform better in a course, they work accordingly. In other words, they seek to meet the standards even if these are not explicitly known.

Thus, students just entering teacher education felt challenged and worked harder than they thought they could to meet expectations, unlike those with education background in a professional course. This suggests that non B. Ed students cognitively interacted with lecturers more than B. Ed students in terms of working hard because they felt they were being more academically challenged.

8.2.1.3 Workload and Timetabling

Not only high standards encourage involvement in learning but also if the student's general timetable or workload is too heavy, it can discourage him/her in his/her learning. A well-established study timetable is the one that is flexible for students and which enables them to devote the necessary time and energy to be spent on educational purposeful activities. For this reason, participants were asked whether they found their general timetable or workload favourable for their effective engagement in learning.

Students, especially non B. Ed students, claimed not to have enough time to go deep into education courses. One of the reasons evoked was new and more complicated modules on the general timetable, as Mr. B stated:

> There were other modules which were totally new for us and which were voluminous. It was too much. Sometimes we were told by the elders that this module *'isigaza'* [retains] students, meaning that many students fail it. In this case, you were obliged to study it accordingly and even spend more time on it. […] . An example is ICT module. It is a first year, semester 1 module. Students are afraid of it mostly because of its history. Historically it is a module which retains many students in level 1 because they have failed it. We have been informed about it. (Interview: August 24, 2010)

This finding shows the impact of past exam results in courses other than the ones students are presently studying. Furthermore, the performance of the previous intake influences the consecutive intake because students project their performance to the whole programme rather than to the subject they are dealing with at present. This perception is influences their involvement because, "the amount of work they are asked or expected to do is among the most crucial factors affecting their engagement with a course of study" (Chambers, 1992: 141). Being scared of failing a course which has a bad image because many others have failed it, new comers

(first years) concentrate much effort, time and energy learning this course, and thus lack enough time to engage with education courses which they consider easy.

It was clear that some non B. Ed students seemed to underestimate education courses compared to others, due to the fear of failing the so-called "tough courses". Within this perspective, it can be said that these students would simply memorise the information needed for passing an exam in these so-called "easy courses". These are surface oriented learners rather than deep oriented (Duff, 1999; Prosser & Trigwell, 1999). They devote less time and energy and do not seek for meaning and relationships (Prosser & Trigwell, 1999). This attitude towards the EDP 101 module is likely to lead to lower level of engagement, and hence to lower performance.Apart from these few cases for which the workload seemed to be heavy and could not favour their engagement in learning EDP 101, the majority of students interviewed (ten out of fifteen) found their general timetable favourable and allowed them time to study this course.

8.2.1.4 Personal Development and Skills for Becoming Good Teachers

Aiming at getting students' views on the contribution of EDP 101 in shaping them to be effective teachers, I asked them how they thought this module had helped them in their personal development and skills for becoming good teachers. This would provide insights on participants' perceptions of the image they have about this professional course, in terms of their personal development and skills that are acquired to become good teachers as they progress towards teaching professionalism.In general, this module was viewed as an important course which prepared students for the career they were training for. EDP 101 was seen as an education course which 'pedagogically' prepares future teachers for their career, even if it includes aspects of psychology related to education.

Most of the participants reported that the EDP 101 course helped them in their personal development and skills for becoming good teachers by providing them with knowledge about themselves and about the students they would be teaching once in the profession. Mr. A says that:

> In my future, I will always need EDP 101 in my teaching profession. The course showed me how I can motivate the students. I will be teaching for their better learning. It is thus understandable

> that you cannot perform this if you never studied psychology. Secondly, it showed me the way of managing children and other people that you are teaching [...]. EDP 101 has given me ways of making my teaching understandable by the learners in an easy way. This involves taking into consideration the teaching and learning environment, the way you take care of them, the way you motivate or encourage them in their learning, etc. (Interview: August 25, 2010)

This quotation shows that student teachers found the course to have prepared them to be efficient in their future career. In the same spirit, Mr. C concurs:

> In this module, you are taught how to know yourselves first, your qualities and your weaknesses. Then, they teach you how to know the learners, their stages of development, and their related problems. You are shown that you must know your students before you can teach them. This has helped me a lot. (Interview: August 27, 2010)

As a pedagogical preparation module leading to the professionalism they were being trained for, students interviewed found that the EDP 101 module has played a pivotal role in shaping them as prospective teachers by revealing their potential and how they must behave as teachers. The course has also shown them how to handle the learners in class. For example Mr. M confirms that:

> Psychology has helped me. With it, I know how to control my feelings, and my behaviours. For instance, if I am angry, I cannot punish someone because if I do it with angriness, I will punish him badly. I have to think and after I will determine the kind of punishment that is adapted to the level of the fault committed because punishment must be corrective. I will do it because of the knowledge I gained in psychology. (Interview: August 24, 2010)

These findings illustrate how student teachers at KIE found EDP 101 to be a professional course which substantially prepares them for their teaching career. This is exactly what teacher education is all about: connecting candidates with the world of their future career. Those who had started the profession of teaching earlier increased their knowledge. Upgrading knowledge in the domain which had been started earlier prompted B. Ed students to be more confident in their domain, they said.

The EDP 101 course upgraded B. Ed students' knowledge and introduced non B. Ed students to the teaching profession. The implication here is the imbalance between B. Ed and non B. Ed

students in psychology knowledge possession after students have completed the course/module which, hopefully as the literature says, will decrease in subsequent years (Jacoby, 1975).

As said earlier about the role of a pedagogical preparation course in influencing pre-service teachers' attitude towards their future career, the EDP 101 course empowered students with knowledge that contributed to their personal development and equipped them with skills that would help them to become efficient teachers. This result suggests that non B. Ed students who were mostly lacking this knowledge and skills interacted with lecturers on this aspect more than B. Ed students.

8.2.2 Students – Lecturer Interactions in EDP 101 Classes

Students' – teacher interactions constitute a key indicator of student engagement. These interactions are explored focusing on how often students have used email to communicate with their lecturers, discussed grades or assignments with them, discussed with them ideas from readings or classes outside of the class, and received prompt written or oral feedback from them on their academic performance.

As it was shown in Chapter Four of this thesis, the factor analysis technique has put together the use of email to communicate with EDP 101 lecturers and the inclusion of diverse perspectives (religions, genders, political beliefs, etc.) in class discussions or writing assignments. Therefore, these two items constitute factor 2 which the researcher named **"**interactive communication".

In fact, the use of email to communicate with the lecturer on the one hand and the consideration of diverse perspectives in class discussions or when writing assignments on the other hand in a particular course suggested an interactive exchange of ideas or information between students and their lecturers. This exercise involved engaging the lecturer's diverse opinions that must be integrated into the student's own views when completing the assignment. In fact, interactive communication supposes active interaction and connectivity that require ipso facto a certain degree of engagement. Results are presented in the table below:

Table 19: Interactive communication in EDP 101 classes

Category of students	Answers				
	Never	**1 or 2 times**	**3 to 5 times**	**More than 5 times**	**Total**
B. Ed					
Count	11	14	9	0	34
%	32.4%	41.2%	26.5%	0%	100%
Non B. Ed					
Count	73	73	35	6	187
%	39%	39%	18.7%	3.2%	100%

This study showed that interactive communication was never, or has rarely occurred between students and lecturers in EDP 101 classes. In effect, B. Ed and non B. Ed students reported never having communicated interactively with their lecturers in the proportion of eleven students (32.4%) B. Ed and 73non B. Ed students (39%). fourteenstudents (41.2%) and 73 students (39%) B. Ed and non B. Ed respectively communicated with them only 1 or 2 times, which is almost the same percentage. Nine B. Ed students (26.5%) and 35 non B. Ed students (18.7%) communicated with them 3 to 5 times; and finally no B. Ed student reported to have communicated with them more than 5 times while this frequency was observed insix non B. Ed students (3.2%).

If we put together those who reported to have never or rarely and those who only 1 or 2 times communicated with their lecturers, we find that 71.4% of B. Ed and 78% of non B. Ed students fall within this category; while only 26.5% and 21.9% students reported to have communicated with them 3 to 5 and 5 times or more. This suggests that interactive communication between students and lecturers was never, or has rarely occurred in EDP 101 classes as reported by many students. Non B. Ed students reported more than B. Ed to have never or rarely communicated with lecturers. The following figure illustrates the frequency by which students and lecturers communicated interactively in the EDP 101 class:

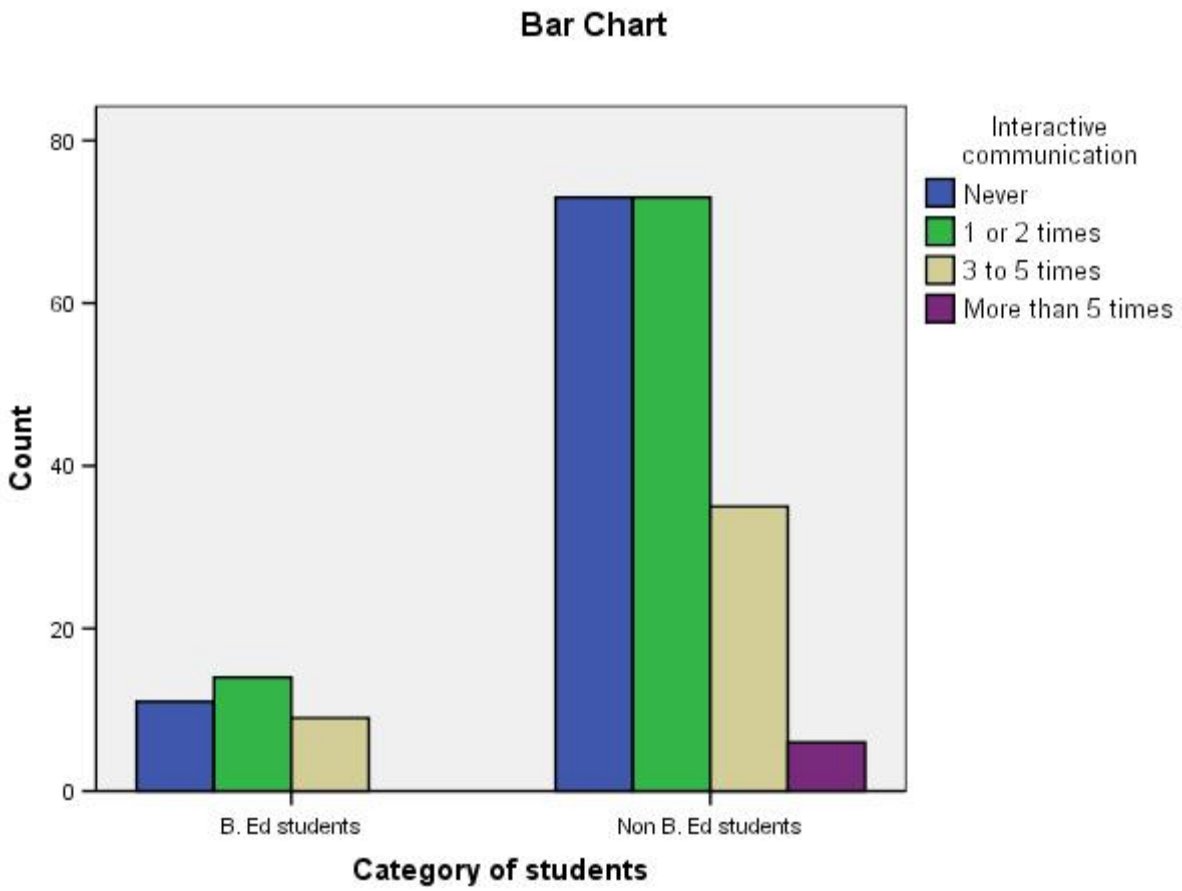

Figure 9: Frequency of interactive communications in EDP 101 classes

It is clear that most of non B. Ed students reported at the same percentage to have never communicated interactively with their lecturers or did so once or twice; while most B. Ed students reported to have communicated with them 1 or 2 times. Hence, in EDP 101 classes, interactive communication between students and their lecturers was rare in both groups of students but occurred more with B. Ed than non B. Ed students.

These first year students doing their first semester are still computer illiterate and surely many of them do not yet have email addresses. Secondly, the nature of the course itself (Introduction to Educational Psychology) could not refer to religions, genders, political beliefs, etc., as diverse perspectives. This may explain the low frequency of the use of emails in communicating with lecturers and the opinions that refer to diverse perspectives.

The low level of interactive communication at KIE could also depend on the large number of students, the teaching and learning environment which is not conducive, as well as the transmissive mode of teaching style adopted by lecturers as the only solution to address all the students. This teacher-centred method is contrary to interaction communication. In fact, these conditions of overcrowded classroom create in students a psychological feeling of being unconsidered, ignored, and distant from the lecturer, decreasing therefore the level of interactions with the teacher. In effect, in large-class lectures, students have the problem of being anonymous (Gilbert, 1995).

With regard to $CLASSE_{FACULTY}$, the combined items to generate interactive communication on the $CLASSE_{STUDENT}$ were considered as they appeared on the research instrument. Of the three lecturers who taught this module, one for each case said that it was very important, important, and somewhat important that students use email to communicate with the lecturer for them to be successful, although the use of internet in a developing country alike Rwanda is still difficult.

Interactions between the teacher and students do not happen only in the classroom. This collaboration may continue after class. Students continue to be engaged in learning when they discuss with their lecturers ideas gained from their readings or from classes. On this issue, 24 B. Ed (70.6%) and 117 non B. Ed students (62.6%) said that they had never discussed this with their lecturers; fourB. Ed (11.8%) and sixteen non B. Ed students (8.6%) had discussed with them once; twoB. Ed (5.9%) and eighteen non B. Ed students (9.6%) discussed with them twice; while four B. Ed (11.8%) and 36non B. Ed students (19.3%) reported to have discussed with them more than 2 times.

Therefore, the majority of students never/rarely discussed with their lecturers about ideas gained from the EDP 101 course after class. In effect, we notice that this discussion has never happened or has happened only once for 77.5% of the B. Ed and 71.2% of the non B. Ed students. This reveals that after class students did not meet with their lecturers to discuss academic matters. Indeed, as some students said in the interviews, their daily workload was generally so heavy that they did not have time to meet with lecturers after class. Furthermore, it was indicated in Chapter Six that students saw teaching as being mostly delivered through the transmission mode which

was concerned with passing on knowledge and was therefore teacher-focused. In this case, interactions are reduced.

However, two lecturers reported that it was important to discuss ideas from EDP 101 readings or classes with students outside the class so that they could be successful; and one lecturer estimated it to be somewhat important. This education practice never/rarely occurred. Students' time constraints, the teaching style that focused on teacher as well as students not being aware of lecturers' consultation times could considerably reduce students' - lecturers' interactions after class. Lecturers should for example, during class, inform their students of their availability for consultations because interactive communication with them might constitute an area of focus for enhancing student engagement and success. In fact, "there is no substitute for spending time interacting with students, whether face to face or electronically" (Kuh et al., 2005: 77).

As a lecturer in this institution, the practice in KIE is that every teaching staff member sets the time for consultations with students and puts it on his/her office door. However, experience has shown that, very often, only final year students who are writing their research projects make use of this time for supervision.

Given that reciprocal communication between students and the teacher is one of the aspects of student engagement and success, B. Ed and non B. Ed students were asked to report on how frequently they were receiving prompt written or oral feedback on their academic performance from their lecturers in the EDP 101 module.

While results were that interactive communication has never/rarely occurred between students and lecturers in EDP 101 classes, $CLASSE_{FACULTY}$ showed that, for students to be successful, two out of three lecturers reported that it was important to communicate and discuss with them either using email, discussing grades or assignments, and discussing ideas from readings outside of class. But all three lecturers reported that it was very important for students to receive written or oral feedback on their performance in order for them to succeed the course.

The frequency of the feedback is a rich form of interaction between students and the teacher. As findingsrevealed, seventeenB. Ed students (50%) reported that they had never received feedback on their performance andtwelvestudents of this group (35.3%) said that they sometimes received

this feedback. Therefore, 85% of B. Ed students have never or have sometimes received this kind of feedback from their lecturers. On the other hand, 76 (40.6%) and 68 (36.4%) non B. Ed students never or sometimes received this feedback. Thus, 77% of non B. Ed students never or sometimes received prompt written or oral feedback on their performance. Thus, this feedback was rare.

These results show that the majority of students, mostly B. Ed, have never received feedback or received it sometimes, while lecturers reported that it was very important for students to receive feedback in order for them to succeed. However, students learn more when they are given timely feedback that is both supportive and corrective (Kuh et al., 2007). This is observed through oral and written constructive feedback or comments made on assignment papers or after the end-semester results have been released.

The lack of adequate feedback found with first year students at KIE is not specific to this institution. This finding is similar to that of Krause et al. (2005) as cited in Scott et al.' s (2011) comprehensive. They found that in the UK, feedback was also rated at a lower level than other elements of educational provision, a situation that appears not unique to the UK. In this regard, Nicol (2010) notes that both students and academic staff, expressed dissatisfaction which maybe attributed to the 'massification' of higher education.

The present study shows that at KIE there is lack of prompt written or oral feedback in education courses, suggesting thus a gap which however, if overcome, could enhance student engagement and success. This weakness is mostly due to the 'massification' of higher education (Nicol, 2010) where the classroom is overcrowded and very limited resources in terms of enough human resources like tutorial assistants who may ensure the breaking down into small and manageable groups. This situation culminates in adopting a transmissive/teacher-focussed approach to teaching. In this regard, all lecturers in both EDP 101 and ELA 101 recommended the recruitment of enough tutorial assistants and this was in line with providing students with sufficient feedback.

Based on students and staff members' interviews and on the researcher's own experience as a lecturer of education courses at KIE, prompt oral feedback is often given in class when answering students' questions and rarely on assignments and never on exams.

Firstly, groupwork isoften done in the second half of the semester, the marking takes time and marks are available to students at the end of the semester. This work seems to be abusively called continuous assessment test as it does not effectively play a diagnostic role. Secondly, students do not have access to their exam scripts on which comments can be made by the marker.

Therefore, these comments remain useless to students who will never get informed about them and do not serve any educational purpose. Due to the large number of students attending education courses, there is no space for constructive feedback on their academic performance in those education courses at KIE given that these courses are completed by the end of the semester.

As educationists by profession, EDP 101 lecturers know the motivational effect of the teachers' comments on the learners' academic progress and performance. Lecturers' constructive comments on students' performance are likely to enhance engagement and success. Indeed, teachers' appreciation of their students' performance acts as a motivator for subsequent learning and it is often in the form of feedback.

The feedback on the student's performance is more constructive if it addresses on individual's capabilities. In fact, interviews with students revealed that most of them said that the quality of teaching in terms of feedback received was bad, though they were referring to the feedback received in class during the teaching and learning activities.

In addition, discussions about grades or assignments between students and lecturers was said to be important by two lecturers. For one lecturer, it was very important. Therefore, it was considered necessary for students' success. In fact, lecturers were aware of the effect of the feedback given to students on their academic performance as it would clarify areas not yet mastered.

The apparent absence of interactions between students and lecturers in terms of feedback at KIE is attributed to the classroom density which is extremely high so that the end of assignment marking coincides with the end of the semester and there is no time for constructive feedback. Moreover, the exams are done towards the end of the semester and the only feedback from exams is the obtained marks, given that the following semester starts with new courses.

Thus, in the context of KIE, the level of interactions between students and lecturers is low whilst recent research indicates that teacher-student interactions are facilitators of student engagement because these interactions can shape student engagement in the classroom in two ways (Skinner & Pitzer, 2012). Skinner and Pitzer posit that:

> The first is by promoting students' intrinsic motivation: by offering challenging and fun learning activities, allowing and encouraging students to discover and follow their own interests and goals, and providing clear instruction and feedback about how to reach them. The second is by creating classroom contexts that support the development of increasingly more self-determined reasons for accomplishing the parts of learning that are not intrinsically fun (Skinner & Pitzer, 2012: 21-44).

It is clear that students should be encouraged by lecturers or teachers to work hard in order to meet educational goals through clear instruction and prompt feedback within a classroom context in which they are self-determined in the learning process. In this case, they are engaged through interactions with their instructors.

8.2.3 Collaborative Learning through Peer Interactions in EDP 101

This section aims at investigating students' - students' interactions because research identified them as a powerful indicator of student engagement. In effect, according to Schlossberg (1989), if the participation in activities on campus and in student organisations is to be meaningful, then student-peer interaction is imperative. A study conducted by Ebert-May, Brewer, and Allred (1997) found that students learn more effectively by participating in a cooperative group.

Though students at KIE have different education backgrounds, most of those interviewed said that they were not feeling disadvantaged studying with advanced classmates in the course they were taking together. It was a rich opportunity for them to be engaged in communities of learning, where the most empowered students were helping their colleagues.

The majority of students in both groups (B. Ed and non B. Ed students) found it useful to study courses together in which some had prerequisites and others did not because they were helping each other. Mr. A, with a Biology and Chemistry background argued that:

> Having studied with B. Ed students helped me a lot. If there were topics that I have not understood well in psychology, I was looking for a B. Ed student so that we can study together

> and he/she helped me to understand. In parallel, I was explaining him or her the terms related to biology like the syndromes we studied in psychology. In this way, everybody was gaining from everybody's knowledge. (Interview: August 25, 2010)

In general, students found it very useful to study together because there was a reciprocal peer teaching in which students often understand better than with the lecturer. Further investigating the nature of peer interactions in learning courses in which students have different academic background, I asked a B. Ed student (Ms. L) whether she was not feeling disadvantaged studying the ICT module with those who had done science section in high school on the one hand, and studying English with those who had done languages in high school on the other hand.

Ms L who had done TTC responded that she was very lucky to study a module with colleagues who were more skilled in it than her. She argued that they were tutoring each other and that it was more profitable than being taught by the lecturer only. Peer tutoring, she said, "helps us to emphasise and go deeper into the topic; we understand better" (Interview: August 24, 2010). She highlighted the role of peer interactions in these words:

> Okay, not at all [I am not disadvantaged studying with colleagues who have more prerequisites than I do]. In the contrary, the fact that we were studying with people who were more skilled in those domains helped me. This is because we studied ICT together with those who had done secretarial studies in their secondary school or sciences. These had basic knowledge for understanding ICT. I was benefitting from them in groups by approaching them and asking them to explain for me what I did not understand in class. They have been like my tutors. In the entrepreneurship also, we approached those who had done economics in secondary school because they had basic knowledge in it and they tutored us because we were lucky to study with them. This way of doing made us, understand better these modules that we studied together but having different education background. In English, those who had done languages in secondary school who ipso facto knew better English than us were helping us to clarify some aspects and understanding better after class. This has helped us a lot because if we had learned English alone, I mean B. Ed students, we may not be good enough, we would only have remained with what we knew before. But when we learned a topic in English, and those who did it in secondary school helped us to go deeper into the topic, we understood better. Moreover, the fact that we work together in the same groups with those who are more knowledgeable helps us a lot. In return,

> there are some of them whom we helped in EDP 101 and they gained some knowledge. (Interview: August 24, 2010)

This finding, like in previous research studies, highlights students – students' interactions in learning through peer support and reciprocal tutoring by those with strong background knowledge in the subject matter. This cooperative learning enforces student engagement. In fact,Cooper, Prescott, Cook, Smith, Mueck, and Cusco(1990: 12) note that cooperative learning enables "students to become more involved with the course material and with each other as they actively work together in small groups". This new learning environment is appropriate to engaging students. This is supported by Tinto and Russo (1994)as cited by Zhao and Kuh (2004) who note that in learning communities:

> Students create their own supportive peer groups (…), become more involved (…), spend more time and effort on academic and other purposeful activities, and become more actively involved and take more responsibility for their own learning instead of being a passive receiver of the information (Tinto &Russo, 1994 as cited by Zhao & Kuh, 2004: 118).

Interaction between students is recognised as more effective than student – teacher contact in the classroom setting. It is positively related to active and critical thinking outcomes individually with less rote memorisation, self-monitoring and learning how to learn from other students rather than listening to the lecturer (Kulik, Kulik, & McKeachle, cited in Cooper et al., 1990).

This practice is encouraged in institutions of learning because it creates communities of learning where peer teaching benefits both the taught and the teaching students. When Ms L in this study was asked how tutoring her colleagues helped her own learning of EDP 101 module, she confirmed that:

> When I tutor them, it doesn't mean that I have to teach everything. But, I refer to the notes, I read a bit, and I remember some other things, then we start discussing about it. From this discussion you get to know how he/she understands the topic, and you start by there to help him or her so that he/she increases what he/she knew [before]. You go then to the module [module handbook] given by your lecturer in order for him/her to be able to read and understand it. Meanwhile, when you are explaining to him/her, you end up by mastering [acquiring materials] through the rehearsal and it will be very easy for you to revise for the exam. (Interview: August 24, 2010)

The way she was going about tutoring her colleagues enhanced her own way of learning the module because, by going deeper into the course so as to be able to explain it, this student teacher sought meaning and relationships which characterise a deep approach to learning. This is in line with Benware and Deci (1984) who found that not only the peer learner benefits but also the peer instructor experiences cognitive benefits. In effect, the more one deals with the subject matter, the more he or she is deeply engaged with it whether alone or with others.

In relation to peer interactions, learning and performance, research has shown that "participating in a learning community might have a salutary effect on academic performance" (Zhao & Kuh, 2004: 124), because students have the opportunity to deepen the course content. It was also proved that "a learning community is associated with higher levels of academic effort, academic integration, and active and collaborative learning" (Zhao & Kuh, 2004: 124), suggesting thus high level of student engagement.

However, while theories about communities of learning advocate for peer – teaching, as one of the interviewed lecturers pointed out when he was asked to comment on combining students with strong academic preparation in the subject matter and those without it, some non B. Ed students said that it would have been useful to separate them from B. Ed students who were already trained as primary teachers. Mr. C claimed that: "I think that separating us from B. Ed students would have been much more useful than studying together, because they had some knowledge about psychology whilst we did not know anything about it" (Interview: August 27, 2010).

This feeling was shared by Ms D, also a non B. Ed student who would have liked to study psychology in a separate classroom because B. Ed students already knew psychology. She argued that:

> Yes, it was not effective for us. When we were studying it [EDP 101], B. Ed students were more informed about psychology because they had done it in secondary school. For us, social science students, we were asking ourselves questions like: those students know EDP [EDP 101], why are they here? Why are they coming to study it because they know [it]? For us we don't like these B. Ed students to study in the same class with us. Why are we sitting together? We were saying that the way they will succeed is not the same way we will succeed. This is also the situation in upper levels. B. Ed students perform well in psychology than non B. Ed students. Even though we try to

> perform well, it is not the same way as B. Ed students in education courses. (Interview: August 26, 2010)

These findings illustrate the way these students were concerned with marks to be obtained in this course in comparison with their classmates the B. Ed students. They expressed their worries about scoring fewer marks than B. Ed students who had prerequisites in psychology, instead of benefiting from them for their deeper understanding of the course. They can be qualified as surface learners because they are mainly concerned with marks rather than understanding the course deeply.

Mr. H also felt disadvantaged studying with B. Ed students in the same class. His main concern was about the lecturer who relied on B. Ed students' knowledge in the course, ignoring others (non B. Ed students) without an education background. It can be noted here that that non B. Ed students constitute an overwhelming majority in numbers. This student detailed the way he perceived the teaching and learning context of a non-homogeneous classroom in these words:

> B. Ed students who did TTC study EDP 101 easily and the teaching context favours them. I say this because there is time when the lecturer is teaching, when he asks a question, a B. Ed student gives an answer because he/she knows, then the lecturer continues, and it ends by there. The lecturer fails to remember that there are others who had never met psychology in their life. […]. When the lecturer asks a question, it is answered by a TTC laureate and the lesson continues. For the lecturer, students understand. Often, the 'yes' of a B. Ed student means that the majority of students understand, and the lecturer says that: "Those who did not understand will get explanations from others". But as you need to pass the course, you are obliged to go to B. Ed students to ask for explanations. According to me, this mixture of students with different education background was advantaging some and disadvantaging others. (Interview: August 24, 2010)

It can be said that students who do not want to study in the same class with their counterparts who are more knowledgeable in the course are individualistic. The idea behind it is that when given the same exam they were afraid of performing worse than those with strong background knowledge in the subject matter. Mr. H,referred to above was also worried about marks rather than understanding. This shows his surface approach to learning.

By applying Biggs (1987) and Prosser and Trigwell's (1999) views on approaches to learning, these non B. Ed students were surface motivated to learning education courses and thus were surface learners as opposed to deep understanding and meaning making. This is true in the case of KIE because research has shown that "teachers who adopt a teacher-focused strategy are more likely to encourage students to adopt a surface approach to learning" (Prosser & Trigwell, 1996: 79).

Inversely, those who focus on what students do in relation to the teaching are student-focused and are more likely to encourage students to adopt deep approach to learning (Prosser & Trigwell, 1996). However, as a lecturer of EDP 101 said, if the student was self-committed to learning the course, he/she would succeed in it regardless of his/her prerequisites. Indeed, Ihnatowycz (2011) notes in his abstract the positive and significant relationship between commitment to the learning goal and performance.

The lecturer's attitude towards the "yes" from the students that some students consider as unprofessional is ultimately a direct consequence of big class sizes. It is also a reminder to teachers in similar contexts to bear in mind the learners' characteristics. A 'yes' to a teacher's question would not mean that all or at least the majority of students understand, especially when they are of different education background. This is what lecturers fail to do at an undergraduate level at KIE.

There is another module called "Foundation of English" which was not analysed in the present study for not being credit rated, but which served as reference and illustration of some students' feelings about their different backgrounds. To illustrate the way the institution [KIE] managed to get homogeneous classes in this module, Mr. H said: "We first sat for a preliminary test. From the results, we were classified into different groups of students with almost the same level in English; and the groups constituted the classes. In this case, the class was almost homogenous" (Interview: August 24, 2010).

In comparison with their counterpart non B. Ed students, B. Ed students had a feeling that they had more study skills than others and that they could learn many things in less time. This belief is due to the fact that they studied so many courses in high school as they were being prepared to be primary class teachers. For example, Mr. M believed that non B. Ed students who did

languages in high school and those who did Mathematics and Physics at this level may not be studying hard to strengthen their knowledge, pretending that they already knew the content.

Prompted by a feeling of filling the gap, this student commits himself to study very hard, goes deeper to mastering the content that he will be teaching given that he was studying Mathematics "in order to become a qualified and competent teacher of Mathematics" (Interview: September 2, 2010). His view about colleagues with strong Mathematics background is supported by Palmer et al. (1979) who argue that those students with strong background in a subject could not engage themselves fully in learning those subjects due to overconfidence.

This study found that in a psychology course, some students without background were positive about studying collaboratively with students who had prior knowledge of psychology as it was for B. Ed in other courses. All B. Ed students interviewed believed that learning together with non B. Ed was more engaging than the former, some of whom manifested a surface approach to learning.

It can be said that, at KIE, the quality of students' – students' interactions was better than that of students' - lecturers' interactions. The latter was dominated by a teacher-focused mode of teaching, dictated by the teaching and learning environment together with the classroom density. The majority of interviewees viewed peer interactions as being concretised by peer tutoring which usually enhances learning. Therefore, in first year classes at KIE, students'-faculty interaction unfavoured student engagement while student-students' interactions favoured it.

8.2.4 Students - Community Interactions in EDP 101 and ELA 101

Service to the community by doing research and teaching is a mission of universities. In this regard, students had to report on how frequently they had participated in a community-based project (e.g. service learning) as part of their courses, either EDP 101 or ELA 101. This aspect is described here for both modules to balance the length of the text.

In the EDP 101 course, the majority of B. Ed and non B. Ed students reported to have never or have once participated in a community-based project as part of their course. In fact, sixteen (47.1%) B. Ed and 102 (54.5%) non B. Ed students had never participated in such an activity; while eight (23.5%) and 25 (13.4%) B. Ed and non B. Ed students respectively said they

hadparticipated in it once. Seven (20.6%) and 3 (8.8%) B. Ed students participated 2 and more than 2 times; while 27 (14.4%) and 33 (17.6%) non B. Ed students are the ones who also said they had participated 2 and more than 2 times in a community–based project.

In the ELA 101 course, all four B. Ed students said that they had never participated in a community–based project as a part of their ELA 101 class, while 24 (54.5%) non B. Ed and only one (2.3%) who participated once. In this category, eight (18.2%) and eleven (25%) reported to have participated in it 2 times and more than 2 times respectively. With regard to this education practice, all three lecturers of EDP 101 had different views about its importance for students' success. They viewed it in three different ways as not important, important, and very important.

Thus, in both courses and for both categories of students, participation in a community-based project was not reported at high level and lecturers also did not find it important for students to succeed due to the theoretical nature of these courses as their titles indicate. In fact, the nature of these two courses namely 'Introduction to Educational Psychology' and 'Introduction to English Language and Linguistics' cannot involve students in participating in a community-based project (e.g. service learning) as part of their courses.

8.3 Student Engagement through Classroom Interactions in ELA 101 Module

8.3.1 The Lecturer Involving Students in Learning ELA 101

In the ELA 101 module, all the interviewees said that they were not aware of what was expected of them. They seemed to emphasise that the lecturer did not set standards to be achieved at the completion of the module. For instance, Mr. B said that he was not aware of the expectations to be attained in these words: "I only studied this module because I wanted to add to what I knew from my secondary school so that I can master the content that I will teach" (Interview: August 24, 2010).

This suggests that the lecturer did not involve his students by letting them being aware of the standards so that they could work towards them. It is however known that, "when faculty members expect students to perform at high levels and support their efforts to meet their high standards, students generally strive to rise to the occasion" (Kuh et al., 2005: 178). Nonetheless,

expectations are clearly stated in the module handbook under the rubric of learning outcomes and are given at the first session which, as said earlier, is usually not attended by many students.

On the CLASSE instrument, 41.4% of non B. Ed students reported that they often and very often worked harder than they thought they could to meet standards, while all 4 B. Ed never did or sometimes did this. An ELA 101 lecturer reported that this practice was very important for students to be successful. However, with reference to their marks and their academic prior knowledge of English, it can be said that the effort non B. Ed students pretend to have invested in learning this course did not lead to greater outcomes because they performed poorly. Therefore, they did not effectively work harder to meet expectations.

Few students perceived their workload to be so heavy that they did not have enough time to engage fully in learning this module. For instance Mr. F stated that "it was too much for me" (Interview: August 23, 2010). Except this one, other non B. Ed students found their workload favourable for their involvement in learning because they did not have many courses on their timetable.

Interviews also indicated that two non B. Ed students perceived the ELA 101 module's type of assessment as requiring memorisation. In an overcrowded classroom where materials are delivered through the transmissive mode, students adopt a surface approach to learning (Prosser & Trigwell, 1996) which inspires learning with memorisation of facts for assessment purposes (Biggs, 1987). The memory as being the faculty of capturing information, storing it, and reproducing it when necessary, these participants perceived exam questions in ELA 101 as emphasising this faculty, and therefore cognitively less engaging students at higher levels of thinking.

However, two B. Ed students acknowledged that the course evaluation challenged them at two levels, namely deep understanding as well as memorisation. In ELA 101 course, only one student (Mr. G) who acknowledged deep understanding for EDP 101, perceived differently the ELA 101 form of assessment. He asserted that:

> For English, it was as usual. […], I cannot say that you know the questions before the exam but it's like you can guess. In English, there is nothing to memorise, you need to read and understand

because the exam consists of similar questions. It is very different from Psychology. (Interview: August 25, 2010)

Therefore, some students perceived the type of evaluation in ELA 101 as requiring both understanding and memorisation of the course content in order to pass the exam. This is also what Mr. F highlighted when he stated that "In English, the questions required to have understood but also to have memorised" (Interview: August 23, 2010).

Finally, the lecturer involves student teachers in learning a particular course of study when he/she teaches it in such way that students see it as enhancing their personal development and skills to become good teachers. B. Ed and non B. Ed students affirmed that this module consisted in adding to what they had gained in secondary school though they were at very different levels in terms of prerequisites.

Upgrading knowledge in the domain which had been started earlier by non B. Ed students brought them a confidence. As Mr. F put it, "ELA 101 helped me to become more confident in using English language anywhere especially speaking in public. Before, I was shy to speak English but today, I try to express myself about my future career" (Interview: August 23, 2010). On the other hand, B. Ed students revealed that they were highly motivated to learn English to overcome their weaknesses in this language and become confident in the language in which they would be teaching during their preferred future career. In the ELA 101 course, students were not aware of the goals to be attained, they said that they have devoted much effort to learning; the workload was generally flexible; the exam required memorisation and understanding; and the module helped both B. Ed and non B. Ed students to become more confident in English.

8.3.2 Students' - Lecturer Interactions in ELA 101 Classes

Students' interactions with the lecturer of the ELA 101 module were seen in the same light as those for EDP 101 described earlier. It was through the same educational practices or items of the CLASSE that B. Ed and non B. Ed students reported the frequency to which they occurred.

In this module, factor analysis has combined items dealing with the use of email to communicate with the teacher and the fact of coming to ELA 101 class without having completed readings or assignments in one factor. The factor was named "student - teachercommunication and lack of

commitment to academic work".Cross-tabulating both B. Ed and non B. Ed students' responses, the study showed that three out of four B. Ed students reported that they had never used email to communicate with the teacher and did not manifest commitment to academic work as they had come to class without completing readings, while one did this once or twice.

For non B. Ed students on the other hand, 26 (59.1%), 13 (29.5%), 3 (6.8%), and 2 (4.5%) respectively reported never; once or 2 times, 3 to 5 times, and more than 5 times to have communicated with their lecturer using email and had come to their class without having completed their readings or assignments. It is clear that for 40.9% of non B. Ed students, the use of email and lack of commitment to academic work occurred at least once or twice, while it never occurred for most B. Ed students.

In fact, the use of email among first year students was not obvious as they were just studying ICT and many did not even have email addresses. The lecturer for the course considered this practice to be somewhat important. Indeed, in situations where people are not yet computer literate, which is the case in developing countries; the use of email is almost nonexistent.

Though communication may be an aspect of interaction between people, using email to communicate with the teacher might not necessarily mean to interact with him or her. I assume that communicating through email can be seen as a form of passive communication as the interlocutors are at a distance and thus lacking body expression which plays a convincing role during the communication in the teaching and learning situation. Young and Bruce (2011) argue that some researchers agree that the psychological distance may result in student isolation, frustration, or boredom.

Communication between students and the teacher is also effective through prompt written or oral feedback that is provided to students' academic work and is an indicator of student engagement. In the ELA 101 module, three and one B. Ed students reported to have sometimes and very often received this kind of feedback respectively, probably because the lecturer gave B. Ed students additional catch up lessons to compensate for the time they had lost in the beginning, before they

could write the exam in this course. Being a small number (18) in these lessons, they were lucky to get prompt feedback from the lecturer.

In the contrary, for non B. Ed students, fifteen (34.1%) and thirteen (29.5%) students respectively reported that they have never and have sometimes received this feedback, while six (13.6%) and ten (22.7%) students have often and very often received this feedback. Thus, 63.6% of non B. Ed students confirmed to have never or sometimes benefitted from the lecturer's feedback while 36.4% often or very often received it. The majority of non B. Ed students did not receive feedback from their ELA 101 lecturer due to their big number (221), while this feedback is esteemed to play a very important role in the learning process to improve students' learning and success.

In effect, "both strong and weak performances receive feedback about areas of strength and areas of improvement … feedback is intended to motivate students to do their best and not just meet minimum levels of mastery" (Kuh et al., 2005: 84). On the $CLASSE_{FACULTY}$, Mr. Q perceived the feedback to be important for students' success. During the interview, he said that he was giving written comments on their [students] papers in continuous assessment test (CAT) and oral comments in class on how students had performed. Feedback plays a bridging role between the student's effort and what the institution expects of him or her. As Kuh et al. (2005) confirm, feedback also allows the link between student performances with institutional expectations. This kind of feedback enhances students' motivation whatsoever background they have. This is emphasised by Blase and Blasé (1999: 361) that "feedback has a positive effect on motivation, self-esteem, efficacy, and sense of security".

The lecturer's effective and timely feedback to students is not only important for motivational ends, it is also a way of interacting with them which is ultimately essential for student engagement and success. None ignore the importance of students'– teacher interactions for effectively involving students in the learning process, as one lecturer of the EDP 101 module, Mr X acknowledged during the interview. He argued that: "You know at this level, we don't have to spoon-feed students […] and also […], we have to interact with them" (Interview: September 10, 2010). Furthermore, this interaction has been identified as an important drive of student engagement (Kuh, 2001), and therefore should be emphasised.

This interaction between students and their lecturer in educational practices can often focus on ideas from students' readings or classes outside the classroom. Curiously, for three out of four B. Ed students, this never happened and it happened more than twice for one student. For non B. Ed students, 26 (59.1%) students reported to have never discussed these ideas with their lecturer, it happened once for two (4.5%) students, and 2 and more than 2 times for eight (18.2%) students.

This shows that, after class, discussions about academic matters between students and the lecturer were rare, 63.6% against 36.4%. As mentioned earlier with the EDP 101 course, first year students in the context of KIE do not make use of the lecturers' office consultation times, probably because they ignore this or their workload is too tight during the day, as one student argued during the interview.

B. Ed students (three out of four) reported 'never' while non B. Ed students (40.9%) reported to have discussed 'at least once' with their lecturer about ideas from their readings or classes outside the classroom. This is probably because those non B. Ed students were more comfortable in spoken English because they had studied it as their major in secondary school and improved it at KIE, while B. Ed students were often scared to speak the language for fear of making mistakes, as they were not fluent in English. This is exactly the case in Rwanda for people who have recently shifted from French to English.

Within this context, Francophone students feel more comfortable in written English which they studied as a course in secondary school than spoken English. This has been proved by students who study and succeed well in English universities abroad and at tertiary level in Rwanda, but yet still show fear of speaking the language. If we consider students with strong background in English from secondary school as slightly similar to students whoseEnglish is the native language in comparison with B. Ed students assimilated with students whose English is their second language, the above finding would be consistent with Biggs' (1990) result in Hong Kong that overseas students immersed in an L2 (Language 2) context endorsed a deep approach to learning. This could explain why Rwandan Francophone students in English countries perform in their postgraduate studies. An ELA 101lecturer reported however that for students to be successful in this course, discussing with the lecturer was important.

In general, the level of students' interactions with the ELA 101 lecturer was low. The majority, i.e. three of the fourB. Ed students and 88.6% of non B. Ed students respectively never or only once communicated with him using email. Three out of four B. Ed students received feedback while 63.6% of non B. Ed students never received it, or received it sometimes. Three of the four B. Ed students never discussed with the lecturer after class while 40.9% of non B. Ed students discussed with him at least once.

This situation illustrates that interactions between students and the lecturer of the ELA 101 course were rare whilst they are important indicators of student engagement. This can be attributed to the overcrowded classroom, the teacher-focused style of teaching, and the limited resources that characterise the teaching and learning environment. But at least a small group of 18 B. Ed students were lucky to receive additional hours and benefitted from the feedback provided by the lecturer during these catch up sessions.

8.3.3 Peer Interactions in ELA 101 Classes

Students were interacting in the ELA 101 class through collaborative learning. As it was shown in Chapter Four of this thesis, factor analysis for this course showed that items related to how frequently in their ELA 101 class students have worked with classmates outside the classroom to prepare class assignments, have worked with other students on projects during class, and have included diverse perspectives (religion, gender, political beliefs, etc.) in class discussions or writing assignments were summed up together and the researcher named the factor "collaborative learning activities".

$CLASSE_{STUDENT}$ results showed that all four B. Ed students had learnt collaboratively with colleagues. Two reported they have done this 1 or 2 times while 3 to 5 times and more than 5 times was respectively reported by one student in each case. Non B. Ed students reported that they participated in collaborative learning in the proportions of 38.6%, 40.9%, and 9.1% respectively for 1 or 2 times, 3 to 5 times, and more than 5 times while only 11.4% never participated in learning communities.

This highlights that 88.6% of non B. Ed students have learnt ELA 101 with colleagues at least 1 or 2 times and 50% have learnt this course collaboratively for 3 to 5 and more than 5 times. The lecturer also found that these components or items of the collaborative learning were important for students to be successful in ELA 101.

These results indicate that both B. Ed and non B. Ed students frequently participated in academic work with peers. But the fact that non B. Ed were helping B. Ed students who had less prerequisites in English, the concept of collaborative learning used in this study is to be understood as learning with peers and not in the sense given to it by Palincsar and Herrenkohl (2010) where the meaning is shared and the thinking is distributed among group members. Moreover, interviews revealed that individual students were helping their colleagues to deepen the taught content not necessarily in groups. In this course, B. Ed students were less knowledgeable and were seekers of assistance from non B. Ed students who positively interacted with them.

Peer interactions in classroom setting also occurred during ELA 101 class presentations. With the CLASSE instrument, B. Ed and non B. Ed students' results on the frequency to which they have been exposed to class presentation, results showed that B. Ed students had many chances to present in class than non B. Ed students, perhaps because they were fewer in number compared to their counterparts; or because, as one interviewed B. Ed student said, they were motivated to be confident in this language in which they would be teaching after KIE. They also wanted to practice their speaking skills as much as possible in front of their colleagues, and could therefore be volunteers to present on behalf of their respective groups.

These students were not scared to speak this language with colleagues. Another element could be the fact that they were familiar with teaching as they had experienced this during their training at high school level. It was therefore easy for them to go in front of the class and present or act as teachers whereas others could be scared of doing so. In effect, all 4 B. Ed students who responded to the survey instrument have presented at least 2 times. On the contrary, the majority of non B. Ed students, 31 (70.5%) said that they never presented; 6 (13.6%) presented once, 3 (6.8%) and 4 (9.1%) presented 2 and more than 2 times respectively.

For the lecturer of this course however, making a class presentation was seen as very important for students to be successful in the course, which was mostly reported to have frequently occurred for B. Ed students. This would suggest that B. Ed students could succeed more than non B. Ed students in this course.

Therefore, in this study, it was found that interactions between students and the lecturer were rare. On the contrary, students'-students' interactions were more frequent. Given that these two kinds of interactions promote student engagement, peer interactions in this course are more likely to lead to high level of engagement because collaborative learning activities were frequent in the EDP 101 course. Indeed, the literature has shown that learning communities are positively associated with student engagement (Saunders & Love, 2004).

In addition, B. Ed students seemed to be more involved in learning the ELA 101 module through peer interactions than non B. Ed students. B. Ed students benefitted from the lecturer's feedback and from class presentation more than their colleagues, non B. Ed students. Moreover, B. Ed students were much more interested in the course as they wanted to catch up, fill the gaps and overcome weaknesses so as to become confident in the language of instruction at their future workplace. They were much more motivated in learning for the profession as mentioned earlier. Their positive beliefs towards the career they were being trained for also explains their average mark of 70.1%, when non B. Ed students, with low level of motivation for the career were confused with overconfidence and scored 62.3% despite their strong background.

8.4 Specific Engagement Activities in Learning EDP 101 and ELA 101

8.4.1 Specific Engagement Activities in Learning EDP 101

These activities are related to items of the pre-designed survey instrument (CLASSE) that was used to collect data under the rubric named "engagement activities". We qualify them as "specific" because, in our understanding, all the rubrics and items of the instrument measure only one phenomenon, "student engagement".

Specific engagement activities refer to the frequency to which B. Ed and non B. Ed students reported to have been involved in educationally purposeful practices of the CLASSE that factor analysis grouped together. I named this category "engagement/involvement with the course"

because these activities materialise what Astin's (1999) theory of student involvement refers to as "the amount of physical and psychological energy that the student devotes to academic experience" (Astin, 1999: 518) which is the framework for this study.

These educational practices embed items on the students' contributions to a class discussion, putting together ideas or concepts from different courses when completing assignments or during class discussions, asking questions during the class, working on a paper or a project that requires integrating ideas or information from various sources, working with other students on projects, using an electronic medium (chat group, Internet, instant messaging, etc.) to complete an assignment, tutoring or teaching other students, and finally working harder than they thought they could to meet lecturers' standards or expectations. It is clear that students' involvement in these activities coheres ipso facto with student engagement with the module being learnt.

By cross-tabulating B. Ed and non B. Ed students' responses on their engagement/involvement activities with the course factor, the table below summarises frequencies by which these students reported to be engaged in learning the EDP 101 course, with regard to the above-mentioned educational purposeful activities.

Table 20: Student engagement/involvement

Category of student	**Answers**				
	Never	**1 or 2 times**	**3 to 5 times**	**More than 5 times**	**Total**
B. Ed					
Count	1	16	16	1	34
%	2.9%	47.1%	47.1%	2.9%	100%
Non B. Ed					
Count	19	81	77	10	187
%	10.2%	43.3%	41.2%	5.3%	100%

Sixteen (47.1%) B. Ed and 81 (43.3%) non B. Ed students reported they had been involved with the EDP 101 course 1 or 2 times.Sixteen B. Ed students (47.1%) reported that they have been involved with the course 3 to 5 times while 77 (41.2%) non B. Ed students had been involved 3

to 5 times. Again, a very small number (one)B Ed student (2.9%) and tennon B. Ed students (5.3%) confirmed that they had been involved with the course more than 5 times. But if we group close responses together, we find that B. Ed students were at 50% for never and 1 or 2 times while non B. Ed were respectively at 53.5% for never and 1 or 2 times against 46.5% non B. Ed students for 3 to 5 and more than 5 times, being thus less involved.

B. Ed students reported to be more involved / engaged with a professional course than non B. Ed students, because they were more psychologically engaged by the feeling of belonging (Willms, 2003) and were fitting well into the teacher education programme as their preferred career choice. However, considering that B. Ed students were professionally prepared prior to KIE; that they were intrinsically motivated to learn a professional course and for the career; and had strong background knowledge in this course; we can say that the frequency to which they reported involvement activities occurrence is not at a satisfactory level (50%) when compared to the one of non B. Ed students (46.5%) who were extrinsically motivated, with some hating the profession, and without pedagogical background.

To some extent, they might have felt overconfident in the course and not intensely involved in learning it, given that the literature has highlighted the importance of interest and motivation in determining student engagement. This could also explain why they scored 65.1% in EDP 101 while they scored 70.1% in ELA 101 in which they did not have enough prerequisites.

On the $CLASSE_{FACULTY,}$ EDP 101 lecturers indicated that the above educational practices were important and even very important for students to be successful. Their responses showed that two out of three reported that they considered students' contribution to a class discussion that occurred to be important, while one viewed it as very important. For the two of them, it was very important for students to put together ideas or concepts from different courses when completing assignments or during class discussions, while it was important for one. Two lecturers believed that it was very important to ask questions during class, while one believed it to be important. All of them considered it very important to have worked on a paper or a project that required integrating ideas or information from various sources. Two found it important to work with other students on projects while one found it very important. For two lecturers it was very important to use an electronic medium to complete an assignment whereas one found it somewhat important.

Finally, two of them reported that it was very important to tutor or teach other students for them to be successful. It is worth noticing that all lecturers believed that it was very important for students to integrate ideas from diverse sources for them to be successful and indeed, education is all about integration.

These results corroborate with the interviews conducted among students. In fact, students themselves said that the EDP 101 course was itself interesting and was dealing with their own life as well as their future career. The course had interesting topics most of which have touched the students' life in their different age range, as one student interviewed said. Most of students interviewed were aged between 20 and 23 years. Lecturer X also said during the interview that the course was interesting for students of such age group. It was therefore obvious that students contributed to a class discussion using ideas gained from diverse sources such as biology as it was revealed by interviews. Interviews conducted with students also revealed that they were asking questions to lecturers though some were not answered due to the big number of students. This is consistent with the quantitative data which showed that most students were really engaged with the course and were asking questions.

Another element to consider is the working groups when preparing and completing assignments and preparing for the exam. This was highlighted by both students and lecturers during the interviews, and quantitative results confirmed this too. Both B. Ed and non B. Ed students said that they were benefiting from peer teaching on both sides.

In parallel, quantitative data showed that students were involved with the course when tutoring each other, as one B. Ed student interviewed confirmed. When she was teaching her colleagues, she was at the same time mastering the course and this would make easier her learning preparing for the exam. This finding is consistent with Cooper et al.'s(1990) result that, by teaching colleagues, the colleague teacher benefits enormously. In addition, when the interviewed lecturer was asked how he would improve students' performance by accommodating both B. Ed and non B. Ed students, he suggested he uses the mixed group works including both B. Ed and non B. Ed students so that non B. Ed students could benefit from B. Ed students. The bar chart below summarises the predominance of engaging activities with the course between both B. Ed and non B. Ed students.

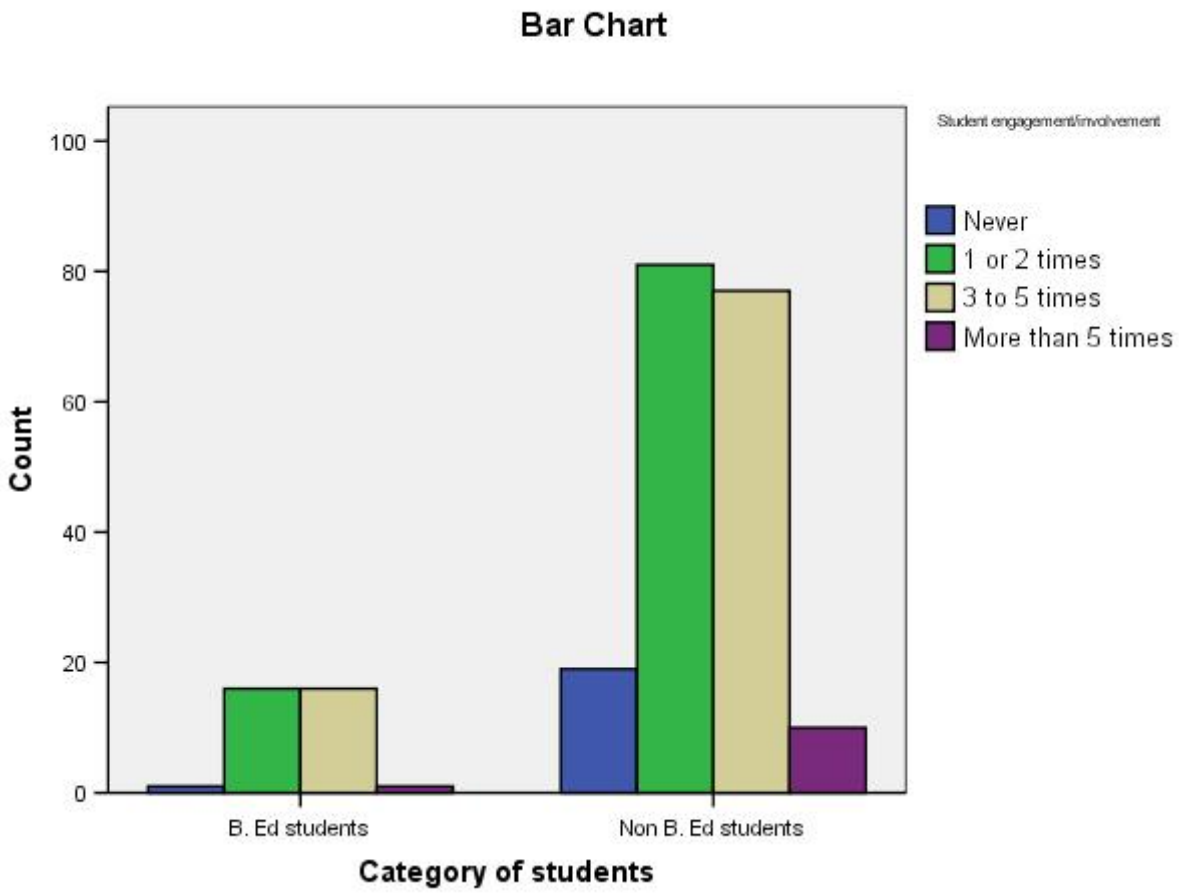

Figure 10: Involvement activities in EDP 101 course

Another aspect which reflected students' effort was related to how often they worked harder than they thought they could to meet standards or expectations. The next table summarises students' responses:

Table 21: Students working harder than they thought they could

Category of student	Answers				
	Never/Rarely	**Sometimes**	**Often**	**Very often**	**Total**
B. Ed					
Count	14	12	6	2	34
%	41.2%	35.3%	17.6%	5.9%	100%
Non B. Ed					
Count	24	51	68	44	187
%	12.80%	27.30%	36.40%	23.50%	100%

The table shows that, in the category of B. Ed students,fourteen (41.2%) reported that they have never/rarely worked harder than they thought they could to meet lecturers' standards or expectations. For twelve (35.3%) it was sometimes, for six (17.6%) it was often and for two (5.9%) it was very often. Thus, the majority of B. Ed students (76.5%) reported to have never or have sometimes worked harder than they thought they could to meet their lecturers' expectations, which shows that they did not put in too much effort to meet predetermined standards. Though they were much more committed and involved than non B. Ed students, they did not feel they had to work harder than they previously thought because they were much better prepared for the course.

On the other hand however, only 24 (12.8%)non B. Ed students reported to have never worked harder than they thought they could to meet lecturers' expectations. In this category of students, 51 (27.3%) have sometimes worked harder, 68 (36.4%) have often worked harder, and 44 (23.5%) have very often worked harder than they thought. Therefore, 40.1% of non B. Ed students reported to have never or to have sometimes worked harder than they thought they

could while 59.9% reported to have often and very often worked harder than they thought they could to meet standards.

Comparing B. Ed and non B. Ed students, we notice that non B. Ed students without prerequisite in psychology worked harder than B. Ed students to meet standards. They might have worked harder because they may previously have underestimated the course, thinking that it was easy. But in general, B. Ed students were more involved in learning this professional course. The following figure is an illustration of how both categories of students made the effort to work harder than they thought they could to meet standards:

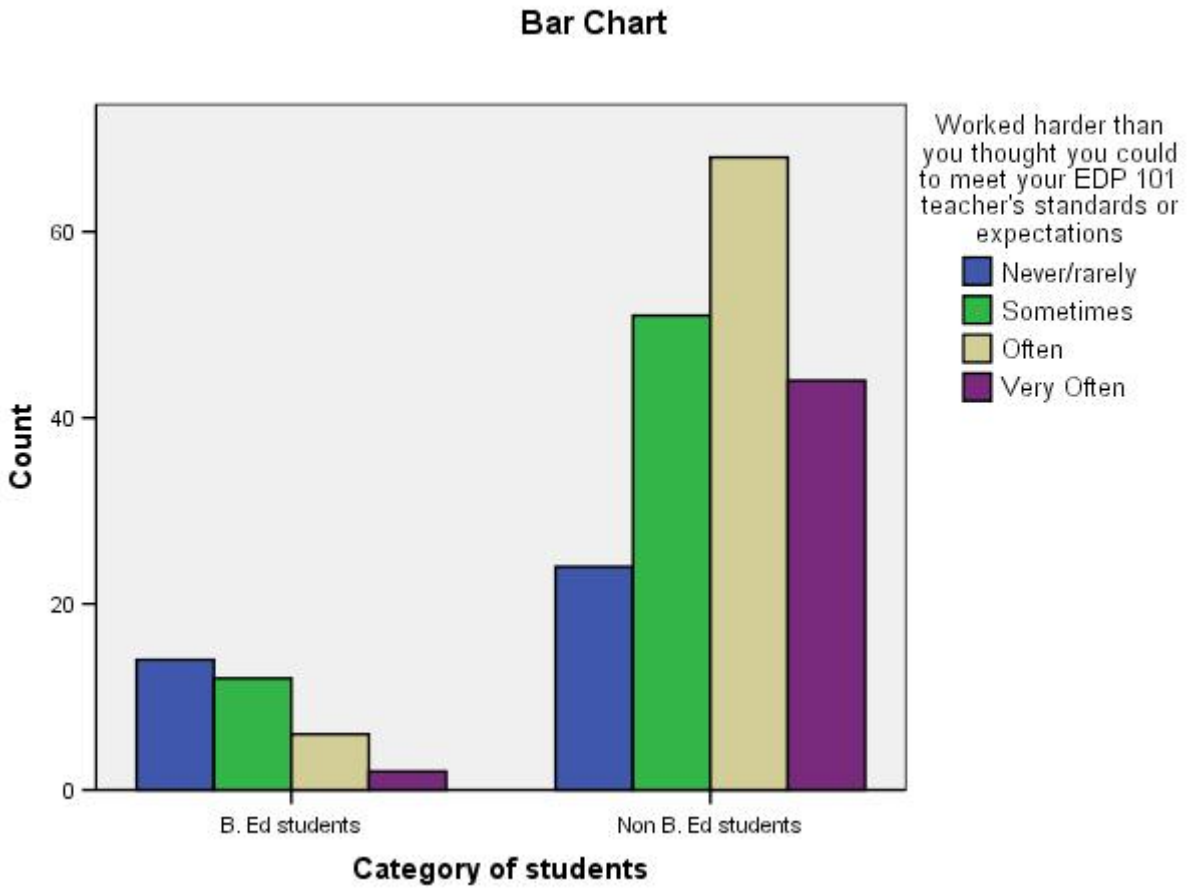

Figure 11: B. Ed and non B. Ed students' hard work to meet expectations

These results confirm our assumption that B. Ed students, because they had studied psychology in their high school might perform better than non B. Ed students who were just studying psychology for the first time. In effect, non B. Ed students had to work harder than B. Ed students to catch up because, as interviews with students revealed it was like, B. Ed students were revising the course and were comparing their notes from high school with those given at KIE. One B. Ed student interviewed even said that the course content learned at KIE was almost the same as the one learned at high school. Their problem was only the translation of what they had studied in secondary school in French to English. In fact, this is an introductory course, and should obviously provide students just entering teacher education with preparatory knowledge which B. Ed students must have studied in their initial teacher training. This can explain why the majority of B. Ed students with a strong background in psychology never or sometimes worked harder than they thought they could.

Interviews with lecturers also confirmed this when they were asked about the category of students they thought struggled to study the course. One lecturer said that problems were encountered at the beginning, but afterwards, it could depend on individual commitment to learning the course. $CLASSE_{FACULTY}$ results also showed that two of the three lecturers interviewed reported that it was very important that students work harder than they thought they could to meet standards or expectations, while one believed that it was important. Yet it was very important, more specifically for those without education background.

8.4.2 Specific Engagement Activities in Learning ELA 101

The description of students' effort in engagement activities in learning the ELA 101 module followed the same procedure as those followed in EDP 101 because the issue was similar. For the ELA 101 module, the number of respondents was different from that of EDP 101; it was smaller as already indicated earlier in this thesis. The sample was limited to 4 B. Ed and 44 non B. Ed students.

In the ELA 101 module, educational practices that factor analysis had grouped together were requiring students to report on how frequently they had asked questions during their ELA 101 class, contributed to a class discussion that was organised,prepared two or more drafts of a paper or assignment before submitting it, tutored or taught other students, and worked on a paper or a

project that required integrating ideas or information from various sources in the ELA 101 class. I named this factor "engagement/involvement in ELA 101 course". In fact, all these practices deal with the way students get involved or engaged in learning the course.

$CLASSE_{STUDENT}$ indicated that three of the four B. Ed students reported to have been involved with the ELA 101 course more than 5 times, while 1 had been involved in it 3 to 5 times. This shows that all of them have been engaged at least 3 or more than 5 times. Of 44 non B. Ed students, three (6.8%) reported to have never been involved in the course, while 21 (47.7%) and twenty (45.5%) respectively reported to have been involved in the course once or twice and 3 to 5 times respectively.

While three out of four B. Ed students said they had been involved more than 5 times, no single non B. Ed student was found in this category. The majority of them, that is 93.2% reported to have been involved in ELA 101 one or two times and 3 to 5 times. Again, this may indicate that B. Ed students were more engaged than non B. Ed students in learning the course because the frequency of involvement was very high.

Using Palmer et al.'s (1979) description of engagement, this high level of engagement could be attributed to higher level of motivation to learning for the teaching career for B. Ed students, while the low level for non B. Ed students can be attributed to 'overconfidence' in a module for which the latter have strong background knowledge. This is also consistent with interview results with both students and lecturers.

Nonetheless, when the lecturer of this course was responding to the $CLASSE_{FACULTY}$, he reported that asking questions during their ELA 101 class, contributing to a class discussion that was organised, tutoring or teaching other students, and working on a paper or a project that required integrating ideas or information from various sources were considered very important for students to be successful in the course. For him, preparing two or more drafts of a paper or assignment before submitting it was important for students' success.

Being involved/engaged in the course goes hand in hand with being hardworking. In this regard, students were required on the $CLASSE_{STUDENT}$ to say the frequency by which they had worked harder than they thought they could to meet ELA 101 lecturer's standards or expectations. On this issue, half of the B. Ed students (2) said that they had never and the other half (2) had sometimes worked harder than they thought they could to meet standards. These students did not have enough background in English. The same proportion of students reported that they found it somewhat easy to follow ELA 101 lecturers. Effectively, most of them, i.e. (B. Ed) reported on the CLASSE instrument that they were very interested in learning this course.

On the other hand, only two non B. Ed students (4.5%) said that they never/rarely worked harder to meet the lecturer's standards. Others reported that they sometimes, often, and very often worked harder than they thought they could to meet their lecturer's standards in the proportions of fifteen (34.1%), fifteen (34.1%), and twelve (27.3%) respectively. Therefore, 68.2% of non B. Ed students reported to have worked sometimes and often harder than they thought they could to meet standards, while 27.3% did it very often.

Thus, B. Ed students who responded to the CLASSE seemed to have been less challenged by the course in terms of working harder than they thought they could and found it easy to follow the lectures. However, they did not have enough prerequisites in the course and they were requesting help from non B. Ed students who were more knowledgeable. As mentioned earlier, some B. Ed students were very good at English. They themselves requested to study it at KIE as their subject of interest with those with language background. They themselves felt confident.

Confidence, the desire to catch up, self-determination, intrinsic motivation to master the language and to learning for the career, holding positive beliefs of teaching and the teaching career could have acted together to make them feel comfortable with the course. The evidence is the average mark they obtained (70.1%) which is significantly higher than the one of non B. Ed students (62.3%) who had majored in it but who were extrinsically motivated and dissatisfied by the training they were receiving.

8.5 Summary of the Chapter

This chapter was concerned with first year classroom interactions and involvement in learning as predictors of student engagement in teacher education at KIE. It explored mainly interactions between students and lecturers and between students themselves in both courses as well as the specific engagement activities as identified by the CLASSE instrument, firstly in EDP 101 and secondly in ELA 101.

Interactions between students and lecturers were explored by looking at how lecturers were involving students in learning and how they were communicating interactively with students. The way lecturers were involving students in learning was considered as a kind of interaction which is not obviously observable. It is rather inferred and located between activities planned by the teacher which students respond to in their learning. It can be called "inferred cognitive students-lecturer interaction" which necessarily has an impact on student engagement. In this context, the teacher involves students in these activities. Those dealt with in this study were setting high standards or expectations, providing adequate workload and timetable, challenging students academically, and providing them with adequate skills for their personal development as prospective teachers. In fact, these activities reveal what we called "inferred cognitive students-lecturer interactions", which is described above.

In the EDP 101 course, interviews showed that the majority of students started the course without knowing the goals to be attained which however appear in the module handbook available in the library and are usually given in the first class session, which is unfortunately attended by few students. Educational aims and objectives towards which students must strive should be made available and brought to the students' awareness. By so doing, teachers shape engagement (Skinner & Pitzer, 2012).

The workload was found to be generally favourable for their engagement in learning the module but four participants considered it to be too heavy. In comparison to B. Ed students, most non B. Ed students claimed that they did not have sufficient time to deepen education courses because they had other new and complicated modules such as ICT. This reveals the tendency to devote less effort and energy to those courses. This also suggests that these students were learning to pass exams and were therefore surface oriented.

In effect, the extent to which students interact with lecturers depends, among other factors, on the nature of the course, and the importance that students attribute to it. If students feel overloaded or exposed to a tough course, there is a tendency of lower level of interaction with the course that is thought to be relatively easy. In this regard, the nature and amount of work students deal with on their general timetable influence their engagement in a given subject (Chambers, 1992).Lecturers also cognitively interact with students by setting assessment questions that challenge them and require them to do their best so that they can achieve the highest level of attainment. Indeed, lecturers involve or engage students through assessment patterns (Whittington & McCormick, 1998).

In this study, both interviews and survey led to the same findings that EDP 101 exam questions required deep reading and understanding of the course content. Students were challenged but the results indicated that non B. Ed students (47%) were more challenged than B. Ed students (38.2%). This is obvious because of their academic background related to the subject matter.

However, the way students were said to have gone about learning which deep reading is and understanding seems to be in contradiction with the approach to teaching adopted by lecturers, whilst research in the field indicates that teachers' approach to teaching is positively related to students' approach to learning. Due to the very big number of students, teaching and learning at KIE consists mainly in quantitative orientation where teaching refers to the transmission of knowledge and learning to a quantitative increase of knowledge (Biggs, 1990), suggesting thus surface approach to learning (Biggs,1987). This may explain why exams are always in multiple choice formats which involve many questions. Therefore, those students who are not interested, who have extrinsic motives and who are not proud of becoming teachers will tend to learn only for passing exams for certification.

The teaching and learning style that prevails in first year classes at KIE also dictates the kind of interactions between students and lecturers in and out of class. These interactions are undoubtedly important for effective student engagement. On the survey instrument, most students (77.5% of B. Ed and 71.2% of non B. Ed) reported that interactive communication between students and lecturers has never / rarely or sometimes occurred, while lecturers reported

them to be important for students to be successful. The study also found that students had never received feedback on their academic performance or received it sometimes, and yet lecturers found the feedback to be very important for students to succeed.

The lack of time and space for discussion between lecturers and studentsafter class, the rarity of feedback given to students is justified by the heavy students' timetable. It also justifies the general classroom teaching and learning atmosphere, which are largely characterised by overcrowded classes and which impose the use of the transmissive teaching style.

In fact, Ramsden (1992) notes that it is evidenced that at the tertiary level, teaching practices, assessment processes and contextual influences push students to adopt surface approaches to learning. In a comprehensive study, Dart et al. (1999) noted that by improving classroom learning environments and adopting the constructivist model of teaching, students will adopt deep to learning.

Interactive communication which is understood as the use of email, discussion about ideas from the course or grade assignments, and feedback received between the teacher and students in EDP 101 classes was rare. The relatively poor conditions of developing countries, limited computer literacy of first year students entering higher education, the time period for writing the assignment and the exam, as well as the big number of scripts to be marked are key factors of the lack of interactive communication at KIE.

Research in the field of student engagement has also emphasised that peer interactions in educationally purposeful activities lead to high level of engagement (Kuh et al., 2007). In this study, interviews with both students and lecturers revealed that the majority of students in both groups (B. Ed and non B. Ed students) found it useful to study courses together in which some had prerequisites while others did not have, because they helped each other.

Most students said that they were very lucky to study a module with colleagues who were more skilled in it. Indeed, peer tutoring allows students to go deeper and understand better. Peer teaching benefits both groups of students and creates communities of learning. In our

understanding, this opinion is that of students with deep approach to learning and was mainly expressed by B. Ed students. Some non B. Ed students interviewed expressed their desire to study this course in a separate classroom without B. Ed students.

These results are due to a number of features. In effect, KIE first year classes in the courses investigated are characterised by the transmission mode of teaching, lack of intense and rich interactive communication on the subject matter being taught and learned, barriers in the language of instruction for both students and lecturers, as well as the pedagogical unmanageable class size. The consequence is the rarity of interactive communications and feedback. Those features negatively impact on students – teacher's interactions on the one hand and peer interactions on the other hand.

In the ELA 101 module and with regard to the ways the lecturer involved students in learning, all the interviewees said that they were not aware of what was expected of them. The workload was generally perceived as favourable for their full engagement in learning this module. The type of assessment was seen as requiring memorisation and understanding. All interviewees acknowledged that the course allowed them to upgrade their knowledge and become more confident, which helped them in their personal development and skills to become good teachers.

Concerning the interactive communication in this course, it was found that most B. Ed students did not use email to communicate with the lecturer. They also did not show commitment to academic work because they had come to class without completing readings, while this had happened at least once or twice for 40.9% of non B. Ed students.

In the ELA 101 course, peer interaction often occurred. All four B. Ed students interviewed reported to have learnt collaboratively with their colleagues while 88.6% of non B. Ed students had learnt ELA 101 with colleagues at least 1 or 2 times; and 50% had learnt collaboratively 3 to 5 and more than 5 times. Three out of four B. Ed students made class presentations while few non B. Ed students had done this. This was probably due to their willingness to demonstrate their

teaching skills and practice their spoken English language which they were proud of, as their teaching tool in their preferred future career.

The second part of this chapter was about specific engagement activities. In the EDP 101 course, it was found that 50% of the B. Ed students were much involved with the course and 50% were less involved. For non B. Ed students, 53.5% were less involved and 46.5% were much involved with the course. 23.5% of B. Ed students and 41.1% of non B. Ed reported that they worked harder than they thought they could to meet their lecturers' expectations. Though they were much more committed and involved than non B. Ed students, B. Ed students did not feel they had worked harder because they had enough prerequisites. Non B. Ed students might have felt that way because they had previously underestimated the course by thinking it was easy, but would have worked harder when preparing for the exam, just for the sake of passing it.

In the ELA 101 course, three out of four B. Ed students reported to have been involved with ELA 101 course more than 5 times, while none of the non B. Ed students fell into this category. They reported that they were involved 1 or 2 times and 3 to 5 times. Again, this indicates that B. Ed students were more engaged than non B. Ed students simply because of their motivation, interest, and awareness of their status as teachers-to-be.Half of the B. Ed students for each case reported they had worked harder and sometimes harder in ELA 101 to meet standards while 68.2% and 27.3% of non B. Ed students reported to have worked sometimes and often harder than they thought they could to meet standards.

This study also found that non B. Ed students with strong background in English reported a high rate (40%) of coming to class without completing their readings. B. Ed students also reported to have received more feedback from their lecturer than non B. Ed students, but the feedback received was not about their performance but on their interaction with the lecturer during class sessions when the lecturer organised extra sessions for them to catch up the time they had lost. They were a small number as they were only 18.

In sum, in both modules, B. Ed students interacted with lecturers and with the course more than non B. Ed students. Therefore, they were more engaged than their counterpart non B. Ed students.

CHAPTER NINE

TIME AND EFFORT DEVOTED TO LEARNING COMMON MODULES AND INSTITUTIONAL CONDITIONS OF STUDENT ENGAGEMENT

9.1 Introduction

While Chapter Eight was concerned with students' interactions with lecturers and colleagues as well as their investment in learning as a key aspect of student engagement and success, the current chapter compares B. Ed and non B. Ed students' time and effort devoted to learning both EDP 101 and ELA 101 courses by means of the CLASSE and explores the institutional conditions of student engagement as perceived by lecturers by means of interviews. In fact, time and effort spent on study as well as the environmental conditions have a great impact on student engagement, and hence on performance.

One of the sections of the original CLASSE instrument refers to "other educational practices". In this thesis, we refer to them as indicating "time and effort" that students devote to doing educational practices because they have been designed to investigate how much time they spent or how often they have done those practices. The claim is that time and effort devoted to purposefully educational activities is measured by items of this section of the CLASSE instrument.

A study on student engagement like this one must obviously take into account the time that students spend in learning because "learning is a function of time" (Fredrick & Walberg, 1980: 183) as research has shown a correlation between higher level of schooling and knowledge (Hyman, Wright, & Reed, 1975 cited in Fredrick & Walberg, 1980). The more students spend much time engaging in purposefully educational practices, the more effort devoted, andthe higher their level of engagement is. Time itself connotes effort devoted to a given activity.

In effect, the section on "other educational practices" of the CLASSE refers to the number of hours used in preparing for the next class session, the times by which students have attended or have been absent in class, the frequency of attendance of review sessions, the material time used taking or revising notes, the time spent in writing a report or a paper on the course taught, the

frequency by which students are required to produce an academic work of a relevant length, as well as the frequency by which students participate in a study partnership with classmates.

9.2 Time and Effort Devoted to Learning EDP 101

9.2.1 Students' Physical Participation

9.2.1.1 Time Spent Preparing for the Next Class Session

On the item about how often students spend more than 3 hours preparing for their EDP 101 class (studying, reading, doing homework, or lab work, analysing data, rehearsing, and other academic matters) in a typical week, B. Ed and non B. Ed students' answers are summarised in the table below:

Table 22: Frequency of spending more than 3 hours preparing for EDP 101 classes

Category of student	**Answers**				
	Never/Rarely	**Sometimes**	**Often**	**Very Often**	**Total**
B. Ed					
Count	3	17	7	6	33
%	9.1%	51.5%	21.2%	18.2%	100%
Non B. Ed					
Count	27	70	44	45	186
%	14.5%	37.6%	23.7%	24.2%	100%

In effect, in the category of B. Ed students, three students (9.1%) reported that they had never/rarely spent more than 3 hours preparing for the EDP 101 class while seventeen (51.5%) claimed that they had sometimes spent that amount of time. In the same category, sevenstudents (21.2%) and six students (18.2%) respectively reported that they often and very often spent more than 3 hours preparing for their EDP 101 classes.

On the side of non B. Ed students, 27 students (14.5%) reported that they had never/rarely spent more than 3 hours preparing for their EDP 101 class and 70 students (37.6%) said that they had sometimes spent such amount of time. In the same category of non B. Ed students, 44 students (23.7%) often spent more than 3 hours preparing for their class while 45 students (24.2%) very often spent that time.

We notice that 51.5% and 39.4% of B. Ed students have sometimes and often or very often spent more than 3 hours preparing for the next class session in EDP 101 compared to 37.6% non B. Ed students who sometimes spent this amount of time and 47.9% who often or very often spent such time in this activity. Threestudents (9.1%) and 27 students (14.5%) B. Ed and non B. Ed respectively declared that they had never/rarely spent more than 3 hours to prepare the next class session. Therefore, 90.9% of B. Ed and 85.5% of non B. Ed studentshad at least sometimes spent more than 3 hours. Thus, more than non B. Ed students (85.5%), B. Edstudents (90.9%) reported that they had sometimes, often and very often spent more than 3 hours preparing for the next EDP 101 class session.

Thus, B. Ed students were spending much more time studying this professional course than non B. Ed students. They had strong background in psychology; they were motivated to learn for the profession and had positive beliefs about it; they were self-determined and committed to understanding deeper this course which they started before joining KIE; and this type of learning for mastering process requires much time and effort. On the contrary, non B. Ed students for whom the course was new spent less time because they were less interested. They had negative beliefs about the profession and were surface learners to meet exam requirements that is why the amount of time spent learning this course was small. The implication is that they were less engaged than those who were professionally prepared prior to KIE.

On the $CLASSE_{FACULTY}$, the 3 lecturers' views were that it was very important, important, and not important to spend more than 3 hours preparing for the next class session for students to be successful. As the research instrument indicated, this time was in fact spent in studying, reading, doing homework, rehearsing, and doing other academic matters related to the EDP 101 course in a typical week.

9.2.1.2 Times of Absences in EDP 101 Classes

Another aspect reflecting time that indicated student engagement in learning is the frequency of the students' absence in class. In fact, the more students attend classes in a particular subject, the more they are focused on it, and the more they are engaged with it. In this study, students had to say how many times they had been absent in EDP 101 classes as the following table indicates:

Table 23: Frequency of absence in EDP 101 class

Category of student	**Answers**				
	None	**1-2 absences**	**3-4 absences**	**5 or more absences**	**Total**
B. Ed					
Count	9	15	9	1	34
%	26.50%	44.10%	26.50%	2.90%	100%
Non B. Ed					
Count	80	43	36	28	187
%	42.80%	23%	19.30%	15%	100%

The table above indicates that nineB. Ed students (26.5%) and 80non B. Ed students (42.8%) reported that they had never been absent from an EDP 101 class. Fifteen (44.1%) B. Ed and 43 (23%) non B. Ed students had been absent once or twice. NineB. Ed students (26.5%) and 36non B. Ed students (19.3%) reported that they had had 3 – 4 absences while oneB. Ed student (2.9%) and 28 non B. Ed students (15%) declared that they had had 5 or more absences.

Comparing B. Ed and non B. Ed students, the study showed that B. Ed students reported that they had been absent from EDP 101 classes more than non B. Ed students. In fact, the percentage of B. Ed students who reported that they had never been absent was much lower (26.5%) than that of non B. Ed students (42.8%). The percentage of B. Ed students who reported that they did

not attend class 1 – 2 times was almost double of that of non B. Ed students. The percentage of B. Ed students who reported to have had between 3 – 4 absences was higher than that of non B. Ed students while all three lecturers of this course reported that attending classes was very important for students to be successful in the course. B. Ed and non B. Ed students' views are illustrated in the bar chart below:

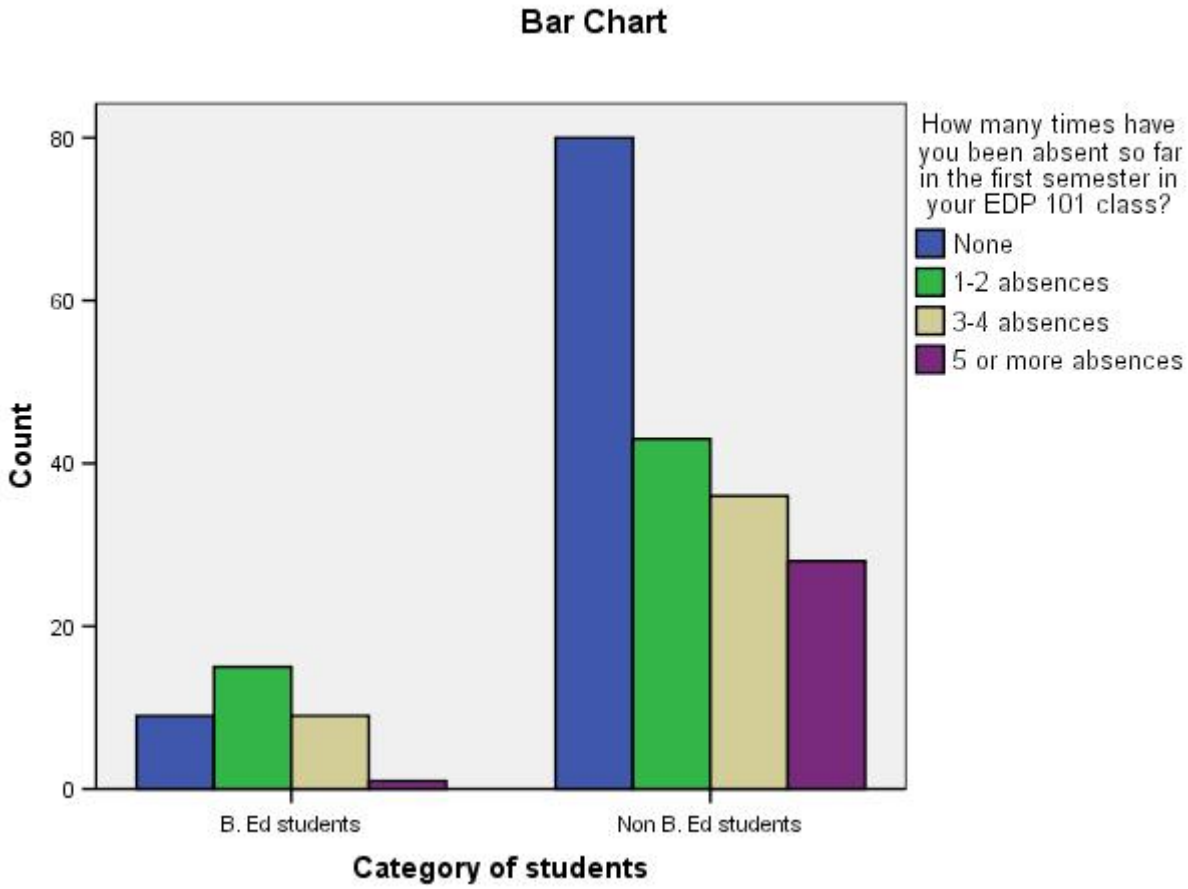

Figure 12: B. Ed and non B. Ed students' attendance of EDP 101 classes

The high rate of absenteeism for B. Ed students could be due to a number of factors such as their overconfidence as possessing prerequisites in psychology, bad conditions in which the course was taught and learned, overcrowded classrooms and lack of effective classroom interactions. B. Ed students' pedagogical preparation in high school equipped them with knowledge of adequate teaching and learning conditions such as classroom atmosphere. These students were somewhat

disappointed and, therefore, decided not to attend, as they stated during interviews. Even though B. Ed students were spending much time preparing the next class session, they did not see class attendance as being useful and preferred to study the course by others means. Some B. Ed students interviewed considered attendance a waste of time.

Despite the high rate of absenteeism for B. Ed students, their performance was better than the non B. Ed students. This result was due to their strong academic background knowledge in pedagogy and psychology. Another reason for B. Ed results was their interest and motivation for the teaching career. Such motivation pushed these students to seek for other ways of accessing and learning materials taught. For instance they used the internet and library research and got notes on a USB flash disk instead of attending overcrowded classes.

In effect, although literature has shown that students who spend more time in the classroom perform better than those with high rates of absenteeism, a comprehensive recent study by Hidayat et al. (2012: 1) notes that "increased access to information and advance technology, and even apathy among students regarding the value of lecture attendance are also believed to impact student performance". This confirms what Mr. M (B. Ed student) said that, due to the horrible conditions under which the course was taught, especially the classroom density, he would rather get notes after class and study them instead of going to class. Other studies indicated that the size of the school is one of the reasons of student absenteeism (Lindsay, 1982 cited in Nancy, 1982).

Furthermore, lecturers said that B. Ed students were more engaged in learning this professional course than non B. Ed students who seemed to neglect education courses. Consequently, the reasons for the B. Ed students' absenteeism in EDP 101 classes are to be attributed not to the students' lack of motivation for the course but to the teaching and learning context or environment which was not conducive without enough seats.

Classroom conditions, B. Ed students' overconfidence due to their prior knowledge of psychology and lack of effective classroom interactions caused B. Ed students to underestimate their presence in psychology classes while non B. Ed who were meeting 'psychology' for the first time, and who perceived it as a very interesting course as one interviewee said, found their attendance much more important to succeed in the course. Their motivation was due to their target of being promoted to level two (second year). Absenteeism of non B. Ed students can be

attributed to the teachers' behaviour (Fjortoft, 2005) since some of them felt abandoned or ignored. This feeling emanated from the class size. This is the case in which the teacher relied on the "yes" answers from those with prerequisites because the lecturer was using the language students did not know.

9.2.1.3 Attendance in EDP 101 Review Sessions

Students' class attendances and participation in review or help sessions aimed at enhancing their understanding of the course content are equally important. B. Ed students who never attended review sessions to enhance their understanding of EDP 101 course content were eight (23.5%) as opposed to 50 (26.7%) non B. Ed students. 98 B. Ed students (23.5%) against 27 non B. Ed students (14.4%) attended these sessions once. SixB. Ed students (17.6%) and 45 non B. Ed students (24.1%) attended these sessions 2 times when twelveB. Ed students (35.3%) and 65non B. Ed students (34.8%) attended these sessions 3 or more times.

Thus, 47% of B. Ed students and 41.1% of non B. Ed students reported that they never attended or once attended a help session to enhance their understanding of the course. In addition, inappropriate classroom conditions, lack of effective classroom interactions, and transmissive mode of teaching together with overconfidence may have made B. Ed students underestimate the importance of their presence in review sessions. 53% of B. Ed students and 58.9% of non B. Ed students attended these sessions 2 times and 3 or more times. This shows that non B. Ed students participated in these sessions more than B. Ed students. In fact, non B. Ed students without education background were in need of review or help sessions more than B. Ed with prerequisites and overconfidence. Two lecturers of this course reported that attending this kind of sessions was very important for students to succeed. Students' responses are illustrated below:

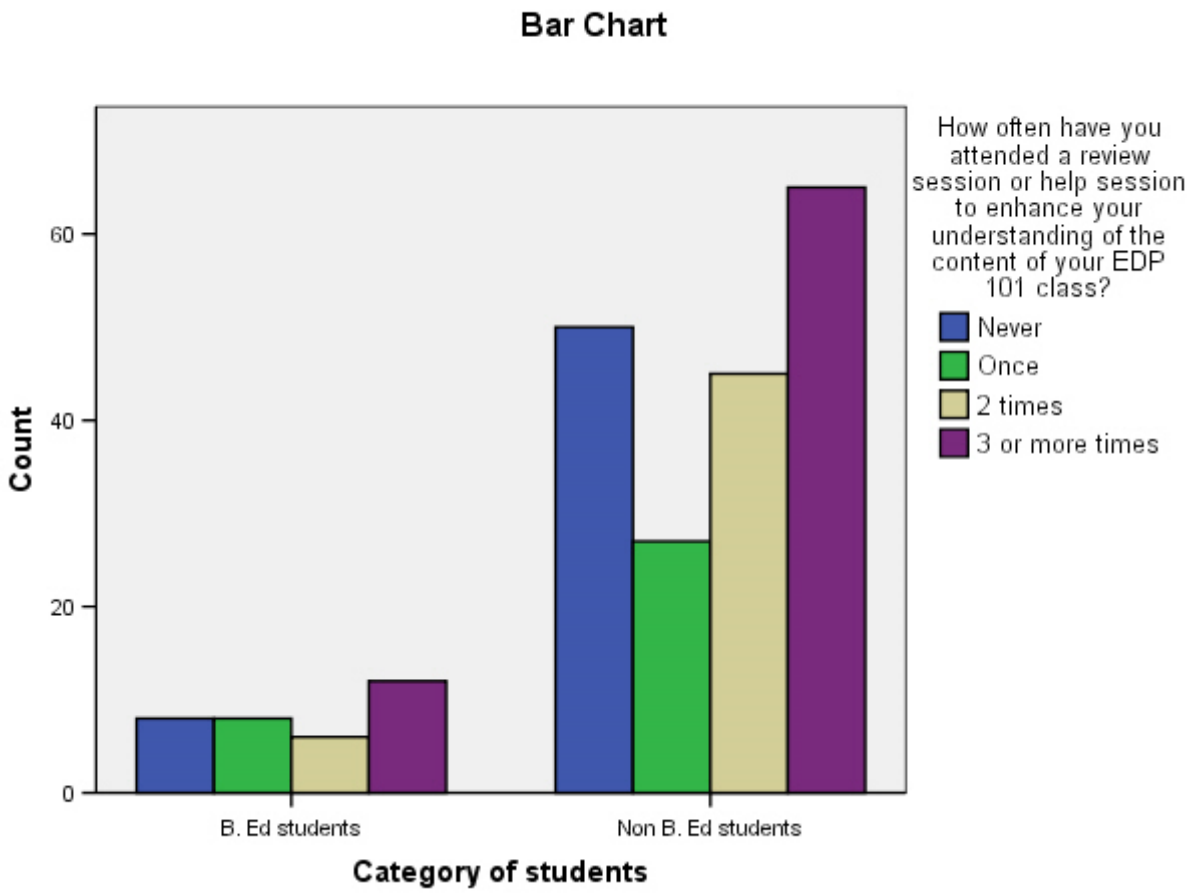

Figure 13: Attending EDP 101 help sessions

It can be said that both B. Ed and non B. Ed students reported to have physically devoted time and effort participating in preparing for the next class sessions, attending classes and reviewing sessions. Students with background knowledge (B. Ed) spent much time preparing for the next class but their attendance in both classes and review sessions was low compared to that of non B. Ed students. The former were overconfident and disappointed by the inappropriate teaching and learning environment and were using the class-time for individual learning of the course. For the latter, EDP101 was considered an easy course. Thus, for them, the next class could not take much of their time which was used for tough courses. They valued class-meetings with lecturers of this course because they were scared of failure and also wanted to take notes.

Student engagement and success depends upon the time and effort devoted to studying the course and performing related tasks such as practicing for the mastery of the course materials. This is the case in which students are taking or revising their notes, studying together with classmates, preparing for the test and engaging in writing a report or a paper on the course taught.

9.2.2 Students Dealing with EDP 101 Course Materials

9.2.2.1 Frequency by which Students take Notes during EDP 101 Classes

Teaching and learning are two concomitant activities. As said earlier, the way teachers deliver courses defines the ways students go about learning them (Prosser & Trigwell, 1999). Some students will take notes when others will only listen to the teacher. Reporting on how frequently students took notes in their EDP 101 class, this study showed that sixB. Ed (17.6%) and 26 non B. Ed students (13.9%)never or rarely took notes when teaching was going was occurring.

This would mean that this small percentage was passive in class. However not taking notes does not necessarily mean being inactive in class. In fact, one student interviewed said that the taking of notes distracted him paying attention to the lecturer and he could not catch much of what the lecturer was saying. He added that he was actively listening and catching as much as possible. Also, Mr C highlighted that the lecturer's explanations were more important and that was why he was firstly following carefully these explanations. In effect, active listening during a lecture is an important skill.

ThirteenB. Ed students (38.2%) reported in almost the same proportion as 72 % non B. Ed students (38.5%) in terms of percentages that they were sometimes taking notes when the teaching was going on. Those who said they were often taking notes were tenB. Ed students (29.4%) and 38non B. Ed students (20.3%). FiveB. Ed students (14.7%) and 51non B. Ed students (27.3%) were very often taking notes. Students who were never/rarely and those who were sometimes taking notes together were thus 55.8% B. Ed and 49.4% non B. Ed students. Those who were often and very often taking notes were 44.1% B. Ed and 47.6% non B. Ed students.

Therefore, this study showed that B. Ed students were less engaged in taking notes than non B. Ed in EDP 101 classes. This finding is consistent with the interview result that during an EDP

101 lesson, most B. Ed students were busy comparing their notes from high school with materials that the lecturer was delivering. Yet, for them, note taking focuses on new concepts. Students who claimed to take notes were few. All 3 lecturers reported that taking notes was very important for them to be successful. This result is consistent with Westrick et al. (2009) who, in their comprehensive study with pharmacy students, found that in large lectures, students attend because they want to take their own notes and that instructors need to highlight key concepts to encourage active note taking and create a more interactive learning experience.

9.2.2.2 Revision of EDP 101 Notes prior to the next Class Session

Taking EDP 101 notes in class was not a guarantee of attending the next class session having reviewed them for high level of involvement with the course during that session. On this issue, students had to report on how often they had reviewed their notes prior to the next class.

Results show that the majority of students in both groups were sometimes, often, and very often reviewing their notes prior to the next class. Only oneB. Ed student (2.9%) and twenty non B. Ed students(10.7%) said that they never/rarely reviewed them. ThirteenB. Ed students (38.2%) and 72 non B. Ed students (38.5%) reported that they sometimes reviewed their notes. A huge difference between B. Ed and non B. Ed students was seen for those who often reviewed their notes before attending the next class in the proportion of fourteen (41.2%) for the former and 56 (29.9%) for the latter. Those who said they were very often reviewing their notes were sixB. Ed students (17.6%) and 39non B. Ed students (20.9%).

However, if we put together categories of responses which are close one another, that is never/rarely and sometimes on the one hand, and often and very often on the other hand, we realise that B. Ed students reviewed their notes more than non B. Ed students. In effect, fourteenB. Ed students(41.1%) and 92non B. Ed students (49.2%) were never/rarely or sometimes reviewing their notes while twentyB. Ed students (58.8%) and 95non B. Ed students (50.8%) were often and very often reviewing their notes prior to the next class. It is normal that students interested in the career revise the professional course notes more than those who are reluctant. It was also shown earlier that B. Ed students reported to be more absent in EDP classes preferring to get notes by others means other than attending. This is the reason why they review

notes more than non B. Ed students before the next class so that they can be updated with the course materials taught at their absence. The bar chart below illustrates answers:

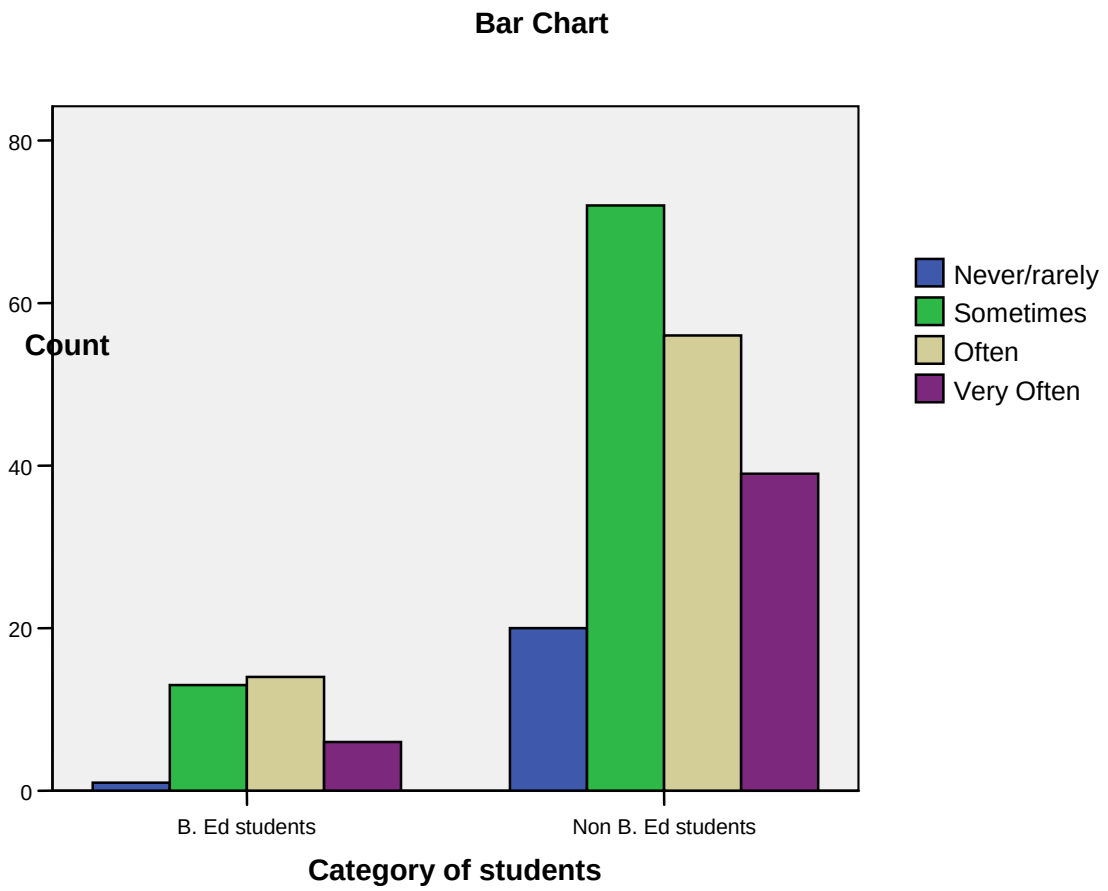

Figure 14: EDP 101 notes reviewing before the next class

$CLASSE_{FACULTY}$ showed that the faculty recommends students to review their notes before the next class in order to be successful. Reviewing notes indicates that students are devoting effort and energy while spending time being engaged with the course. At the same time, they are getting ready to receiving new teaching materials which must be integrated with the previous ones. Indeed, learning is viewed as the integration of new and existing knowledge.

9.2.2.3Studying in Partnership with Classmates Preparing for a Test

It is assumed that the review of notes by individual students is done during their self-directed study. Students may also study with their colleagues especially when they prepare for a test. Therefore, students were asked to say how often they had participated in a study partnership with a classmate in the EDP 101 course to prepare for a quiz or a test. Cross-tabulating B. Ed and non B. Ed students' responses, the following numbers and percentages were obtained:

Table 24: Participation in a study partnership with classmates

Category of student	**Answers**				
	Never	**Once**	**2 times**	**3 or more times**	**Total**
B. Ed					
Count	4	2	6	22	34
%	11.8%	5.9%	17.6%	64.7%	100%
Non B. Ed					
Count	21	19	36	111	187
%	11.2%	10.2%	19.3%	59.4%	100%

This table shows that a small percentage in both categories of students never participated in a study partnership with a classmate to prepare for a quiz or a test and in almost the same proportions, fourB. Ed students (11.8%) and 21non B. Ed students (11.2%). Two B. Ed students (5.9%) and nineteennon B. Ed students (10.2%) studied with their classmates once. SixB. Ed (17.6%) and 36 non B. Ed students (19.3%) participated in a study partnership twice. Many that is 22B. Ed (64.7%) and 111 non B. Ed students (59.4%) said that they studied with classmates 3 or more times.

Thus, 17.7% of B. Ed and 21.4% of non B. Ed students reported that they never studied with their colleagues preparing for a quiz or a test while 82.3% B. Ed and 78.7% non B. Ed reported that they participated in a study partnership with a classmate to prepare for a quiz or a test 2

times or 3 or more times. This study partnership is a good indication of learning communities, peer interactions, and thus engagement because learning communities are found to be connected with student engagement (Kuh et al., 2007). This finding is consistent with interview results. B. Ed students reported this practice to occur more frequently than non B. Ed students in the proportions of 82.3% and 78.7% respectively probably because they were mostly requested by non B. Ed students to help them. In a situation where students study in hundreds with a teacher-focused teaching method, students understand better when studying with others.

In parallel, $CLASSE_{FACULTY}$ indicated that two out of three lecturers valued this practice as very important when one perceived it as important for students' success. The bar chart on the next page shows clearly that both groups of students reported that participation in a study partnership with a classmate when preparing for a quiz or a test mostly occurred 2, or 3 or more times.

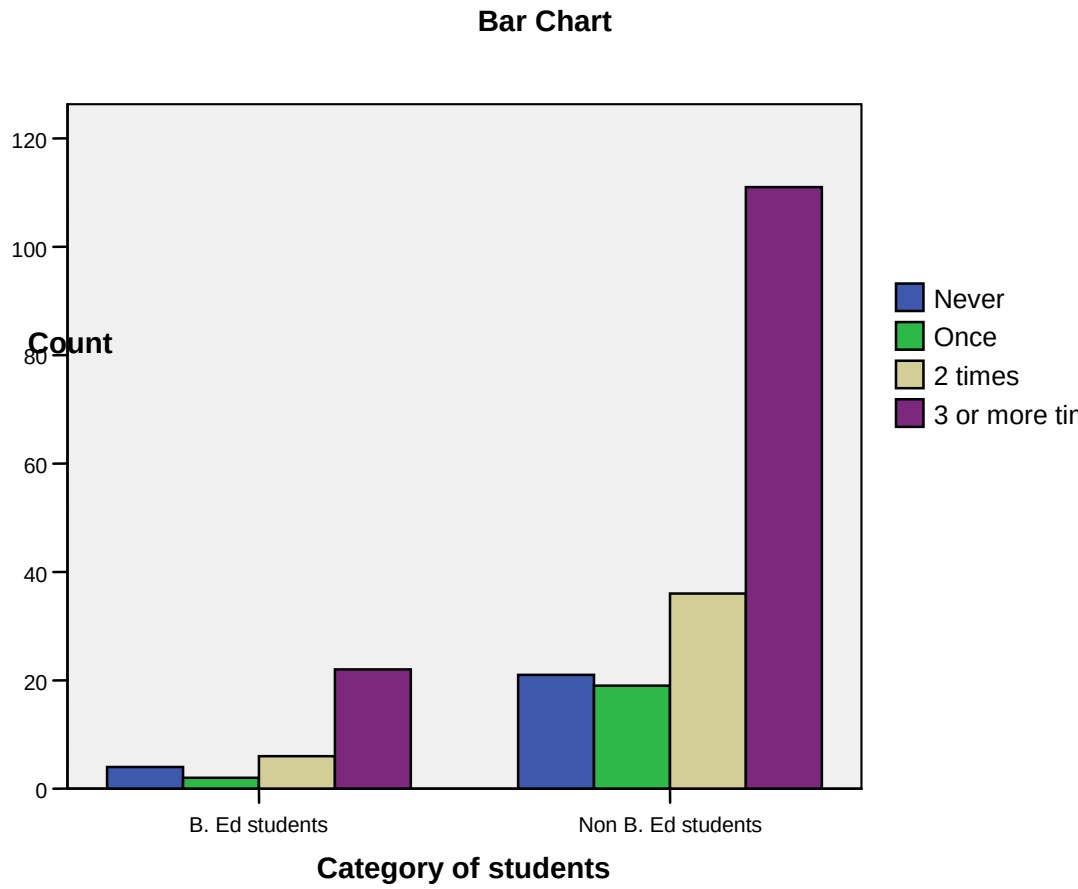

Figure 15: B. Ed and non B. Ed students' participation in a study partnership

9.2.3 Level of Academic Challenge

The level by which students find themselves academically challenged refers to effort, energy, and even time they spend dealing with the course materials either in learning or dealing with assessment tasks. Teachers should therefore plan educational activities that promote academic challenge because "stimulating, intellectually challenging academic tasks that demand considerable effort from students appear to be the most important influences on student growth

and satisfaction" (Kuh et al., 2007: 93). In fact, a good student who finishes his/her well set exam feels satisfied and comprehends exactly what the course/module was about.

The more an evaluation is challenging, the more students spend energy, and thus get effectively engaged with the course being evaluated. B. Ed and non B. Ed students were interviewed about the level of academic challenge that they perceived through the evaluation tasks. This aspect would provide an indicator of how lecturers involved them in learning through assessment patterns. They were also asked whether Continuous Assessment Tests (CATs) and exams done were encouraging deep understanding of the course content or otherwise pure memorisation.

All students interviewed (15) stated that assessment in EDP 101 required deep understanding though a few non B. Ed students were, in our view, surface oriented as said earlier. In relation to students' individual performances in the course, 3 scored above 70%, 2 scored above 60%, and 7 scored between 47.5% and 59% which is not a very good score. The exam paper was predominantly in multiple choice formats which expected students to think twice before responding. Mr. C argued that "in this type of questions, all the answers are quite similar and you choose the most appropriate answer. Thus, you cannot pass this type of exam if you did not understand well the course content" (Interview: August 27, 2010). More extensively, Ms H put it this way:

> You cannot choose if you don't understand. If you have memorised, you could not answer the question because you had first to read, understand, and then choose the correct answer. Therefore, it wasn't a matter of memorisation but of understanding. (Interview: August 24, 2010)

Students found this form of assessment involving engagement with the course. It can be agreed that they faced a cognitively engaging situation to answering exam questions in the EDP 101 course. In this way, lecturers have thus set an exam paper that challenged students. By being challenged when writing an exam, students spend more effort and energy to correctly answer the question. In fact, assessment tasks professionally designed are those which enhance student engagement.

A multiple choice format for the exam was mainly dictated by the very large number of students as well as CATs given as mid-semester assessment. Lecturers said that despite its disadvantages,

CATs have been, and are still being given as group works in the context of KIE to facilitate marking. Nevertheless, in these exams, one or two essay questions are compulsory to give students a chance to express themselves.

From the lecturers' point of view, continuous assessment tests are key components that may enhance student engagement when it is progressive. Mr. Y pointed out that:

> The condition which can enhance that [one of the conditions which can enhance student engagement] is an evaluation which is progressive. When we have a progressive evaluation after a lesson, after a week, a month which is an evaluation which is progressive, they [evaluations] can motivate students. (September 20, 2010)

However, though academic results are a clear indicator of the students' understanding and mastery of the course content, "they are not likely to offer much evidence of individual performance" (R. Osman, Personal Communication, August 1, 2011) or reveal exactly the students' level of academic challenge, especially in this study where the above marks include CAT (group work) which counts for 40% and which is done in groups where some students do not participate, as both students and lecturers interviewed said. The limitation is that marks obtained by individual students are not necessarily indicators of how students are academically challenged because low or high performance is not linked to low or high level of academic challenge which is specifically dealt with in the CLASSE instrument used.

CLASSE asks the extent to which examinations in the course did challenge students to do their best work. Results are presented in the next table:

Table 25: Extent to which EDP 101 exam challenged students

Category of student	Answers				
	Very Little	**Some**	**Quite a Bit**	**Very Much**	**Total**
B. Ed					
Count	9	12	8	5	34
%	26.5%	35.3%	23.5%	14.7%	100%
Non B. Ed					
Count	36	63	45	43	187
%	19.3%	33.7%	24.1%	23%	100%

These results show that nineB. Ed (26.5%) and 36non B. Ed students (19.3%) found the EDP 101 exam not very challenging. TwelveB. Ed (35.3%) and 63 non B. Ed students (33.7%) found it somewhat challenging. EightB. Ed (23.5%) and 45 non B. Ed students (24.1%) found this exam quite a bit challenging while fiveB. Ed (14.7%) and 43non B. Ed students (23%) found it very challenging.

These percentages show that 61.8% of B. Ed and 53% of non B. Ed students found the exam done in EDP 101 not very challenging while 38.2% of B. Ed and 47% of non B. Ed students found it very challenging. It is obvious that students with previous academic background in education find psychology exams less challenging than those without such background. Interviews with students also confirmed this. Moreover, $CLASSE_{FACULTY}$ indicated that one lecturer believed a challenging exam was very important for students to be successful, another one valued it as important and the other one perceived it somewhat important for students' success.

Nevertheless, a well set exam should challenge students at all levels of the revised Bloom's taxonomy of educational objectives which refer to remembering, understanding, applying,

analysing, evaluating, and creating (Thompson et al., 2008). As Whittington and McCormick (1998) argue, assessment should be challenging students at the cognition levels to which they aspire as teaching must have emphasised "developing students' ability to think at higher cognitive levels" (Whittington & McCormick, 1998: 3). For this reason, the overcrowded class at KIE must not constitute an alibi for setting only multiple choice format questions. Open questions that allow challenging higher levels like evaluating and creating are also mandatory.

Documents analysis also showed that non B. Ed students performed worse than B. Ed students. Indeed, the former's average performance in this course was 60.8% while the latter was 65.1%. This result is in line with the assumption that B. Ed students, by pursuing the profession they were prepared for before entering KIE, perform better in a professional course than those just entering teacher education. Their background knowledge of psychology explains this.

Furthermore, though we may come to this conclusion and despite the two population means being statistically significant, the difference between B. Ed and non B. Ed students' average marks seem not to be very high given the difference in prerequisites and this difference could decrease in subsequent years (Jacoby, 1975; Baldwin & Howe, 1982). As two lecturers interviewed said, the difference is observed in the beginning of the semester but later on students come to be almost at the same level in psychology given thatthe more experienced psychology lecturer pointed out that any student with 'normal' intelligence could study and understand the content of this course.

Another aspect mentioned during the interview and which has to be highlighted in this study is the effect of past exams. When preparing for examinations, students went through past exams to get familiar with the way questions were formulated in the course they were dealing with, and gained a lot especially if it was delivered by the same lecturers who set questions in the previous years. Mr. G posited: "It has been a very big problem for someone who went for exam without having carefully read past exams and without having read carefully and study deeply the module" (Interview: August 25, 2010).

In brief, faculty members are required to make good decisions in planning educationally purposeful activities which effectively engage students to achieve set standards. In effect, Kuh et al. (2005) emphasise that faculty members are key to setting and maintaining performance

standards by requiring students to complete rigorous written or oral examinations, giving them exam questions which require organising and synthesising information, and demonstrate competence.

B. Ed and non B. Ed students were devoting time, effort, and energy dealing with EDP 101 course materials through note taking, reviewing notes, studying in partnership, and being academically challenged. Results indicate that non B. Ed students reported to be more involved in notes taking and more academically challenged than B. Ed students. The latter reported they spent more time revising their notes and studying in partnership. These results are mainly due to their difference in academic preparation prior to KIE where possessing or not having prerequisites in psychology determined each group's participation in these activities.

9.3 Time and Effort Devoted to Leaning ELA 101

9.3.1 Material Time and Physical Attendance in ELA 101 Classes

9.3.1.1 Time spent preparing for the next ELA 101 Class Session

Students reported on how often they spent more than 3 hours preparing for the next ELA 101 class (studying, reading, doing homework, or lab work, analysing data, rehearsing, and other academic matters) in a typical week. All four B. Ed students who participated in the study reported that very often they spent that time. For non B. Ed students, only 2 (4.5%) have never/rarely spent more than 3 hours preparing for ELA 101 class, 13 (29.5%) have sometimes spent that time, 18 (40.9%) have often spent it, and 11 (25%) have very often spent more than 3 hours preparing for the next ELA 101 class.

Whilst all 4 B. Ed students who answered the survey instrument were very often spending more than 3 hours preparing for ELA 101 class, only 25% of non B. Ed students were doing so. Focussing on the amount of time spent, i.e. students who reported to have often and very often spent more than 3 hours, we realise that only 65.9% of non B. Ed students fall within this category while 34% never or sometimes used this time for the same purpose.

Fort B. Ed students without enough prerequisites in English it was necessary to spend more time preparing for the next English class for three main reasons. Firstly, they had to fill the knowledge

gap that they had compared with their classmates whose English was their major since secondary school. Secondly, as was shown by the interviews, their aim was to master the language of teaching as they hold positive beliefs and image of the teaching profession. They were also very interested and self-committed to learning for the career. They were highly motivated to learning this course because, as Kember (2000) argues, students are motivated by courses which provide a good preparation for a future career. Thirdly, they had to succeed the course because in Rwanda, Government sponsored students lose their bursaries when they repeat the year. So, it was mandatory to pass.

Non B. Ed students on the other hand would feel overconfident with the English language and spend less time on it. Another reason is the negative beliefs and image they held towards the teaching career which lowers their motivation to learning for the profession that they perceive as un-respectful, badly aid, and some unwillingly joined. Their level of interest and motivation towards learning for the career was very low while it is vital for student engagement. In fact, Izard (2007: 272) notes that its ubiquity is "enhanced by its effectiveness in engaging and sustaining the individual in person-environment interactions that facilitate exploration, learning and constructive endeavours". More specifically, interest "powers decisions about engaging and maintaining engagement with classroom activities" (Ainley, 2012: 292). Motivation on the other hand precedes and leads to engagement (Eccles & Wang, 2012).

Consequently, students with low level of interest and motivation are characterised by low level of engagement, which results in poor performance even if they have strong background knowledge compared to those who manifest high level of interest and motivation. This is evidenced by the fact that non B. Ed students' average performance in this module was 62.3% while B. Ed students succeeded with a distinction, 70.1%. This finding contradicts Sadler and Tai's (2001) result that rigorous pre-college preparation predicts higher grades and confirms Stallings' (1980) finding that when the student's time on task increases, then his/her achievement increases also because B. Ed students were spending much time studying the English course.

In this study, if B. Ed students were spending much time in studying, reading, doing homework, rehearsing, and doing other academic matters preparing for the next ELA 101 class session, what the lecturer valued and perceived as very important for students to be successful, then they were

more interested and motivated, and thus were more engaged, suggesting better performance. Indeed, as shown above, students who reported to have spent much time (more than 3 hours) in those activities succeeded very well though they had fewer prerequisites. The following bar chart illustrates clearly how often B. Ed and non B. Ed students differed in spending this amount of time preparing for their ELA 101 class in a typical week.

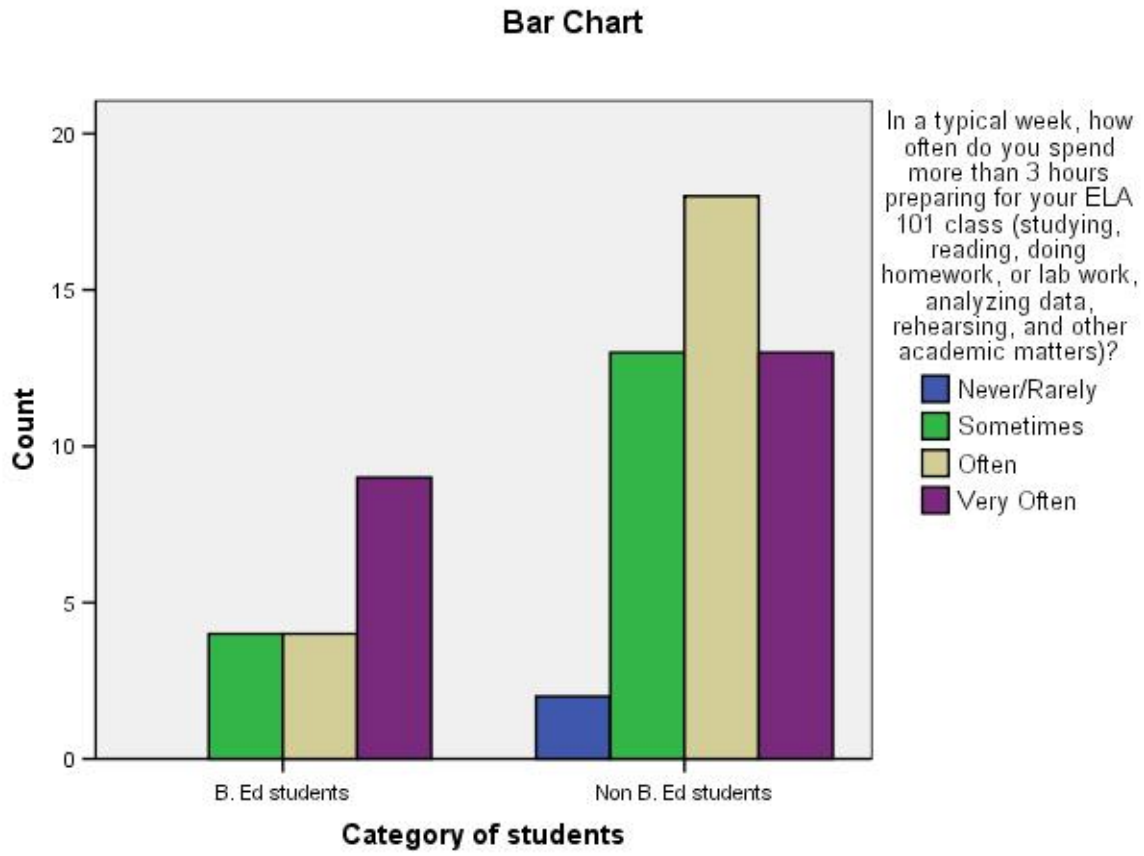

Figure 16: Time spent preparing for ELA 101 classes

9.3.1.2 Times of Absences in ELA 101 Classes

Another aspect reflecting time that indicated student engagement in learning the ELA 101 module was related to times by which students have been absent in class. The more students attend class, the more they are engaged in learning. Responding to how many times students had

been absent so far in the first semester in ELA 101 classes, the majority of respondents said that they did not have any absence or had 1 - 2 absences as showed by data.

Of the four B. Ed students, three reported that they had never been absent in ELA 101 classes and one claimed that he had 1 or 2 absences. In the category of non B. Ed students, 29 (65.9%) did not have any absence but 9 (20.5 %) had 1 or 2 absences. Three (6.8%) had 3 – 4 and 5 or more absences. This indicates that B. Ed students were attending ELA 101 classes more regularly than non B. Ed students whose 12.6% reported that they had 3 – 4 and 5 or more absences. As said by interviewees (students and lecturers), the bad conditions in which the course was taught were mainly due to the very large number of students in the same classroom (Lindsay, 1982 cited in Nancy, 1982), and these conditions together with the overconfidence in the language could have made non B. Ed students to lackmotivation and have poor class attendance. On the $CLASSE_{FACULTY}$, the lecturer reported that it was very important that students attend ELA 101 classes for them to be successful. Effectively, B. Ed students succeeded more than non B. Ed students.

B. Ed students were proud and motivated to learn for the teaching career, and they manifested interest in mastering English. These students acknowledged weaknesses in English and learnt this language more frequently than their counterpart non B. Ed students who had done languages in high school. As confirmed by the lecturer interviewed, non B. Ed students whose teaching was not their primary concern were studying the course for the sake of passing exams. Therefore, their motivation to attend classes was low.

9.3.1.3 Attendance in ELA 101 Review Sessions

After students have attended class, they need to review taught materials because revision and rehearsal is important in the process of learning. On the item that was asking how often students had attended review sessions or help sessions in order to enhance their understanding of ELA 101 content, B. Ed students were divided. One never attended it, two attended it once and one attended it 3 or more times. None of the non B. Ed students attended a review session once. Ten (22.7%) said that they never attended it, four (9.1%) attended it 2 times and a great majority, i.e. 30 (68.2%) reported to have attended a review session 3 or more times. The lecturer of the course perceived attending these sessions as important for them to be successful. Attending

review sessions enhances and strengthens understanding. This requires time and effort devoted to mastering the course content as repetitions enhance learning.

Attending classes and review sessions indicate the students' physical participation, and to me,these educational practices indicate effort as well as energy they spend in activities of learning. Furthermore, students attend in order to deal with the course material either by taking notes, reviewing them, and studying together with classmates preparing for a test.

9.3.2 Students Dealing with ELA 101 Course Materials

9.3.2.1 Frequency by which Students take Notes during ELA 101 Classes

In this study, students had to report on how frequently they took notes in their ELA 101 class. All B. Ed students reported that they had very often taken notes but also most of non B. Ed students reported the same. 16 (36.4%) and 20 (45.5%) respectively said that they were often and very often taking notes while only 3 (6.8%) and 5 (11.4%) respectively claimed that they never and sometimes took notes in ELA 101 class.

Thus, 81.9% of non B. Ed students were often and very often taking notes while 18.2% were never and sometimes doing so. An ELA 101 lecturer indicated that it was important to take notes for students to be successful. B. Ed students found it necessary to take notes of key aspects that the lecturer emphasised as they had fewer prerequisites. If most students (B. Ed and non B. Ed) were very often taking notes, it is because lecturing was the method used by the teacher, a method imposed by the classroom density. Furthermore, once notes are taken, they must be reviewed because repetitions enhance and strengthen learning.

9.3.2.2 Revision of ELA 101 Notes prior to the next Class Session

Students had to report on how often they had reviewed their notes prior to the next scheduled meeting in their ELA 101 class. B. Ed students were divided on this issue. In fact, a half (2) of the students never reviewed their notes and another half (2) reviewed their notes prior to the next scheduled meeting.The majority of non B. Ed students, i.e. 17 (38.6%) and 21 (47.7%) respectively were often and very often reviewing their notes before the next class session of ELA 101. Thus, 86.3% of non B. Ed students reviewed their notes. 2 (4.5%) and 4 (9.1%) respectively never and sometimes reviewed their notes prior to the next meeting. This education practice was

seen as often happening and the lecturer valued and perceived it as important for students to be successful. As interviews showed, non B. Ed students were comparing their notes of high school to those given by the KIE lecturer, which was an indicator of engagement with the course.

Students who were often or very often reviewing their notes were de facto more involved and engaged with the course than those who said they never or sometimes reviewed their notes prior to the next class meeting. This indicates the time and effort devoted to dealing with the course. However, non B. Ed students' performance in this course is not a direct effect of these revisions because many repetitions suggest better understanding if the adopted approach to learning is deep.

9.3.2.3 Studying in Partnership with Classmates in the Preparation of a Test

The review of English notes could be done either individually or in a group with colleagues in the preparation not only of the next class session but also for a test. Therefore in this study, students were asked to say how often they had participated in a study partnership with a classmate in ELA 101 course to prepare for a quiz or a test.

Results show that all B. Ed students reported that they had participated in a study partnership with a classmate to prepare for a quiz or a test 3 or more times. A great majority, 36 (81.8%) of non B. Ed students also reported that they had participated in it 3 or more times, another four (9.1%) participated twice and four (9.1%) claimed that they had never participated in a study partnership. Thus, 90.9% of non B. Ed students participated at least 2 times in a study partnership with classmates preparing for a quiz or a test. These results show that both students (B. Ed or non B. Ed) were studying in groups in preparation for the upcoming evaluation. This is consistent with what students and lecturers said during the interviews that studying is mainly done in group works and it is within these groups where students help each other.Effectively, the ELA 101 lecturer valued this practice as very important for students' success. This educational practice was thus importantly valuable for faculty and it frequently occurred in ELA class.

As interviews with students revealed, by studying in groups, non B. Ed students were helping B. Ed students by providing them with additional explanations after class. This explains why all B. Ed students reported that they participated in a study partnership with classmates preparing for a

quiz or test 3 times or more, as frequently as possible. 9.1% of non B. Ed students who said that they never studied with classmates might have been among the overconfident students. Participation in group works takes time and shows that students are engaged in learning communities, and this is known as fostering student engagement. The institution should therefore put in place conditions that enhance students' involvement in learning.

9.4 Institutional Conditions of Student Engagement at Kigali Institute of Education

9.4.1 Institutional Conditions of Student Engagement viewed by EDP 101 Lecturers

As already underlined in this thesis, student engagement is about what students do at college or university and what the institution does for students to be engaged in learning. Since this study is investigating student engagement in learning particular courses at the classroom level, KIE's conditions that make a difference to student engagement and success are explored through interviews with lecturers of those particular courses. It is worth noting however that the institutional conditions of student engagement at KIE apply only to the teaching and learning environment of the two modules investigated, that is EDP 101 and ELA 101 for 2010 academic year.

In fact, lecturers were, to some extent, considered as key informants on the institutional conditions since they were, at first hand, making use of these conditions provided by the institution in their daily teaching activities. Obviously, the teaching and learning which takes place in the classroom is monitored by the lecturer. In this regard, lecturers were asked whether they found the teaching and learning environment or context conducive for better learning, better understanding, and mastery of the content by their students.

In general, an analysis of EDP 101 lecturers' interview transcripts revealed that the environment was not really conducive. Of the three lecturers whose pseudonyms are respectively Mr. X, Y, and Z, two found it [learning environment] conducive to some extent. They found it quite conducive because students performed quite well, 61% which is the average score of the whole class.

Institutional conditions of first year students' engagement in learning psychology at KIE were generally viewed by both students and lecturers as characterised by a non-conducive

environment mostly due to many students in class. Mr. Z claimed that "the environment was not exactly conducive. It was not quite conducive because of a [the] great number of students" (Interview: September 17, 2010). Moreover, the lecturer Y described it in these words:

> It was not conducive because of the size of the class. I had around 500 students who cannot follow well the PowerPoint projection and even the explanation because there are some who are behind, others who are very far from the teacher, and they cannot see on the blackboard because they are very far, when I give explanation, they cannot follow. That is why the teaching [teaching and learning environment] was not conducive. Even the time of evaluation, it was difficult to evaluate a big number; reason why we try to find out the way we can use to evaluate but which is not a good evaluation because we give them multiple choice questions and few essay questions because of the size of the class. (Interview: September 20, 2010)

The situation described above compared to the way students themselves described the teaching and learning context of this module indicates that the conditions that the institution should provide to enhance teaching and learning have not yet been met. This situation is not likely to effectively implement the institution's policy as Mr. X mentioned: "However, KIE emphasises learner centred methodology which is not possible". He also argued:

> We expect students to go and read, come and present: group work. These are things that really make students read, understand, and master. But they are hardly done. We don't normally do them. […]. If you have for example 600 students, you try to put them in groups, you will not get time for all to present. (Interview: September 20, 2010)

The plethoric size of the class dictated both the method of teaching and the assessment strategy which wasnot necessarily the best way as lecturers confirmed. The lecturer Y said that due to the very big number of students, CAT was made of a group work of 20 – 30 students each in order to facilitate marking. All group members were thus obtaining the same mark for the work. This means that students' individual overall performance in the course will result from the exam mark, the only one to determine students' individual capabilities.

Though the literature has greatly saluted group work as a form of assessment for its advantages in tertiary education institutions (Davies, 2009), for it to be effective and engage students, Jaques (2001) identified its seven attributes which are collective perception, needs, shared aims,

interdependence, social organisation, interaction, cohesiveness, and membership. Interviews conducted with both lecturers and students suggest that at KIE, group works do not comply with these attributes because of the sizes of the groups and lack of interest among some members.Therefore, faculty members at KIE should ensure the existence of these attributes if group work, as a form of assessment has to promote student engagement.

Even though the situation forces lecturers to form very large groups for group work, they were aware of the non-participation of some group members in doing the assignment. Asked how many students composed a group, Mr. Y replied: "It depends, but for the last time it was around 30 students, 20 like that; and we can see that only 10 can participate actively and others come to fill their names. Yeah" (Interview: September 20, 2010). Since student engagement implies effort devoted to learning activities, the group should be smaller because, as Davies (2009) highlights, the larger the group, the smaller the effort expended by members. He says that the group size should vary from two to six members to be efficient, and this is unrealistic in the context of KIE.

Individualisation of the assessment is the best. Mr. Y argues that, "it would be better to have an individual evaluation which is not possible with the size of the class" (Interview: September 20, 2010). The class size impacts on both the assessment in mid-term and on the setting of the final exam questions as students mentioned earlier. Indeed, the above lecturer emphasised that the final exam questions "are mainly in multiple choice formats" to facilitate the marking process.

Lecturers were also asked the extent to which they think KIE has channelled students' energy towards activities that engaged students in effective learning for greater outcomes in EDP 101. They felt that it was not too much but they recognised its effort to trying to do the best by providing teaching materials though these were very limited. The most complicated issue was financial. In this regard, Mr. Z argued that:

> Finances za KIE ntabwo nzizi neza, ariko ikigaragara cyo iyo umuntu arebera hanze, ubona yuko KIE ikeneye imbaraga nyinshi cyane zo muri finance kugira ngo ishobore kuba yafasha abanyeshuri kugira ngo bige. Rwose haracyakenewe amafranga, haracyakenewe imbaraga nyinshi kugira ngo KIE ifashe abanyeshuri kugira ngo bashobore kwiga. (Interview: September 28, 2010)

(I don't know much about the finances of KIE, but what is visible from an outsider is that KIE needs much empowerment in finances so that it can be able to help students in their studies. Definitely there is a need of money; there is a need of empowerment so that KIE can be able to help students in their studies).

Some facilities are available in the KIE learning environment. As a young institution, KIE owns learning facility equipment such as computers, overhead projectors, library, various laboratories, etc. As revealed in their research results, the commission of parliamentarians which investigated the effectiveness of higher learning institutions in Rwanda in 2009 found that KIE was the first higher learning institution among the 27 countrywide to have more computers though "the internet is not reliable" as said Mr. X when interviewed.

This lecturer said that the KIE library was equipped with modules which had been written for diploma students while others are doing the Bachelor's degree programme. As he acknowledged, KIE students were relying mostly on those modules though they contained only half of what students were supposed to cover, but at least that one was there. Other learning facilities which lecturers mentioned were present at KIE were microphones and projectors that KIE provided to help lecturers deliver their courses.

9.4.2 Institutional Conditions of Student Engagement Viewed by the Lecturer of ELA 101

Similar challenges as those evoked above were also observed in ELA 101 classroom setting. The lecturer for this module (pseudonym = Mr. Q) was interviewed in order to know whether his module's teaching environment was conducive or not. He said that the teaching and learning context of ELA 101 was not totally conducive for two main reasons. The first reason was related to the very big class size ('massification') and the second was the inadequate resources like the unequipped library, lack of ICT facilities, etc., which are needed for the implementation of the learner centred classroom principles like the students' independent learning as required by the modular system itself. Independent learning is imperative for effective student engagement.

Independent work is necessary in a language course evaluation. However, at KIE, ELA 101 lecturer said that the testing approach seems not to be coherent with the modular system of teaching and learning. Mr. Q pointed out that:

> If we could be giving an opportunity for students to do some independent work, do some kind of research, and so on, come and present, there are so many other ways through which students could be tested so that they can really prove that they are critical thinkers (Interview: September 28, 2010).

In fact, student engagement refers de facto to involving students in thinking critically. If our assessment system practically does not focus on this aspect but rather being mostly influenced by the poor conditions (especially for the courses investigated in this study) which do not allow lecturers to challenge students' critical thinking enough, then student engagement suffers.

About whether KIE has channelled students' energy towards learning ELA 101 module, Mr. Q noticed that: "I think it is … quite a bit. Why …., because the system is still new, there are still so many challenges. The impact is significant but if you look at the goal, what they aim [decision makers], there is still what to do" (Interview: September 28, 2010). He added that, in developing countries, financial problems remain a key factor that weakens student engagement in learning especially at university or college given the increasing numbers of candidates to this level of education.

9.4.3 Lecturers' Overview of B. Ed and non B. Ed Students' Engagement at KIE

From the point of view that B. Ed and non B. Ed students come from different education backgrounds and study the same modules, lecturers were asked to mention the category of students that had more difficulties in learning these courses. When asked who spends more time and energy in learning EDP 101 module, Mr. X said:

> Much time? Much energy? Of course B. Ed students. […]. The B. Ed students are the ones who spend more energy! They mind, they bother, they work, in discussions, in groups, but the rest [non B. Ed students], they seem not to value the course, and most of the times they are the ones failing, repeating. (Interview: September 20, 2010)

If this case was only for EDP 101 as a professional course, then the pedagogical background of B. Ed students prior to KIE would have influenced this result. However, during the interview, ELA 101 lecturer found both categories of students as such. This is not an accidental or a one-time result because, as was mentioned in Chapter Five concerning the performance of 2008 mature (compared to B. Ed) and school leaver (compared to non B. Ed) students, school leavers failed the most and repeated subjects, even those in which they had strong background. Mature students' average performance was higher than that of school leavers in most of the subjects of interest to the former. A similar phenomenon is observed for 2010 B. Ed and non B. Ed students. This situation can be attributed to the professional preparation which empowered B. Ed students with teaching, assessing, and learning skills that lecturers have, and to the quality of beliefs that both B. Ed and non B. Ed students come to teacher education at KIE with.

Mr. X found for example that students doing Mathematics, Physics, and Education do not value pedagogical courses, and he thanked KIE administration for having made some changes in which Bachelor of Science with Education will change to Bachelor of Education with Science; it is hoped that this will enable students to take education courses as compulsory and not as subsidiary to sciences, arts, or social sciences and business studies.

This lecturer described both B. Ed and non B. Ed students differently. He believes that B. Ed students come to KIE knowing that they are being trained as teachers, which makes them like their profession and increases their teaching pride. As for non B. Ed students, he thinks that they are not committed to the teaching profession because they consider pedagogical or educational courses as "small" while these courses are vital fora teaching career.

In this study, it was shown that B. Ed students were more committed than non B. Ed to learning not only the EDP 101 but also the ELA 101 course. Mr. Q, the lecturer of this course (ELA 101) also posited that "I think the B. Ed students, though they had little background in language, they had more attention span or commitment than the language ones". This view was evidenced by their average mark obtained in ELA 101 overall evaluation where they scored significantly higher (70.1%) than those with strong background (62.3%). However, referring to the impact of the students' prerequisites to coping with the materials being taught, he asserted that "if we look at how easily could a group adapt to the new materials, I think the group who did language, who

spent a lot of time doing languages in secondary school could find it easier than the other one, generally speaking" (Interview: September 28, 2010). His view is definitely consistent with CLASSE results in which 52.3% of non B. Ed students reported that it was easy and very easy to follow ELA 101 lectures while it was somewhat easy and easy for two B. Ed students for each level.

Although B. Ed students studied psychology in their high school, lecturers' views were that, in general, this prior knowledge impacts on their learning of EDP 101 course in the early stages, i.e., at the beginning, but later on, all students (B. Ed and non B. Ed) stand at the same level. However, lecturers noted that this depended on the individual student's commitment and involvement. Mr. Z stated that educational background did not matter. He pointed out:

> It is because psychology taught here at KIE is not the same as psychology taught in TTC. They are different. The requirements,or the way the lecturer teaches here is different from that of the teacher in TTC. Another thing I see is that, a student from secondary school in science or language section who comes and study psychology here, though he/she did not do psychology, comes with a G factor ["G factor" refers to the general factor by opposition to "S factor" which refers to specific factorof intelligence] which allows him or her to understand psychology. (Interview: September 17, 2010).

In effect, this lecturer, specialist of psychology with many years of teaching experience in higher education, considered the learning of EDP 101 course at KIE as not necessarily requiring prerequisites in the field of psychology. He said that any 'normal' student could learn it and succeed it if he/she committed and invested him/herself. This lecturer argued further that time, effort, and energy spent in learning this course was an individual problem in these words:

> Ni individuel kubera degré de motivation, degré d'engagement. Naho ubundi umuntu ashyizeho umwete, nta challenge, obstacle yahura nayo n'imwe. Ariko rero energy, effort iba yashyizweho na buri muntu, uko areba isomo bigenda bitandukana. Ntabwo ari ibya group ahubwo ni iby'umuntu ku giti cye (Interview: September 17, 2010).
>
> (It is individual [problem] because of the degree of motivation, [and] the degree of engagement. Otherwise, if the student is committed, he or she will not have any challenge, or meet any

obstacle. But energy and effort that everybody invests in learning, the way he/she perceives the course varies from individual to individual. It is thus not a matter of the group but of individuals).

These results indicate the role of the student's self-determination and commitment in learning. This spirit emanates from the motivation that the student has, the way he/she perceives the course as well as from the beliefs held towards the career he/she is learning for because learning is a goal oriented activity. Thus, persistence and engagement is largely dependent on those which should therefore be enhanced by the institution.

9.4.4 Improving First year Students' engagement at KIE: Lecturers' Voice

In this study, the improvement of first year students' engagement at KIE is explored through interviews with lecturers about the conditions that they think the institution could put in place for this purpose, and about how they [lecturers] would improve B. Ed and non B. Ed students' engagement if they were occupying a decision-making position.

On one hand, in order to improve the students' engagement, EDP 101 lecturers suggested manageable classes, an equipped library with textbooks, and access to internet facilities.Educationally purposeful activities take place in an academic environment which is rich in stimuli and which is manageable. The very high class density negatively affects the whole process of teaching and learning by imposing teaching and assessment methods that are likely to suggest surface approaches to learning. Teaching is done by transmission of knowledge, and consequently, learning is done by memorisation without deep or meaningful mastery of the materials to meeting the requirements to pass from one level to the next.

Student engagement could be obviously enhanced if the institution provides an adequate academic teaching and learning milieu. This was why I asked lecturers the conditions which they thought needed to be created that would allow students to be fully engaged, to have psychological investment, and put more effort towards learning. In this regard, Mr. Z asserted that:

> Idéallement byaba byiza rwose abanyeshuri bafite aho bigira, physiquement hagaragara bafite za rooms, bafite uburyo bwo kujya muri bibliothèque, bakagenda bagasoma ibyo mwarimu ababwiye, bakabibona, bafite internet connection, bakareba, ibyo bashaka bakabibona. Ibyo

> idéallement byaba ari byiza. Ikindi kandi mbona ari ngombwa hano muri KIE kidahari ni uko nk'umwarimu yari akwiye kuba afite nk'abatutorial bamufasha kugira ngo bancadre abanyeshuri. (Interview: September 17, 2010)
>
> (Ideally it would be much better if students have enough space for their studies. They need study rooms, they need to have opportunity to go to the library to read and get information about what the lecturer has taught; they need to have internet connection which allows them to have access to whatever they are looking for. This would be ideally great. Another thing which I find important but which is not at KIE is that a lecturer should have tutorial assistants who can help him to monitor students).

Having enough physical space which supposes adequate classrooms and free spaces with benches around the campus, providing adequate teaching and learning resources like sufficient and equipped computer laboratories and other classroom teaching materials as well as hiring enough tutorial assistants who can work effectively, that would enable the enhancement of student engagement at KIE. Mr. Q' s remarks on the conditions which need to be created for greater enhancement of student engagement in learning ELA 101 module were as follows:

> There are many conditions. One: student-teacher ratio that is the number of students per teacher. This I think should be respected and we always discussed this issue. That is one. Two: the library is not really adapted to the modular system. It means that we need for example, not in the central library, if we could have enough books at the level of the faculty, department, etc. and other facilities like ICT facilities, all those things could really enhance. There is also the testing system. The testing is still mostly traditional while the teaching is intended to be learner centred (Interview: September 28, 2010).

As the above lecturer highlighted, the conditions in which students are taught and learn at KIE are not of the nature which effectively involve and engage them in learning. I asked Mr. Q what he thought could be a good teacher – student ratio at KIE and he replied: "I think if we could consider our conditions of this part of Africa, maximum or an average of 60 could be okay. But going to 300 would be really unviable" (Interview: September 28, 2010).

As this lecturer mentions, student engagement in developing countries of Africa like in Rwanda where resources are very limited compared to the growing numbers of students in higher

education is quite challenging, not only during the lesson but also at the level of the assessment of learning outcomes. However, Kuh et al. (2005) note that most engaging activities are easier to arrange when class sizes are reasonable,for instance 20 to 30 students. They also acknowledge that active and collaborative learning can be successfully implemented in large classes and that the key vehicle for this experience is "seminaring" in which students discuss readings, bring multiple points of view, and engage with their peers.

It can be said that lecturers expressed the conditions that they think KIE as an institution of higher learning should put in place for the improvement of the teaching and learning of EDP 101 and ELA 101 modules. These were mainly the improvement of the library services by subscribing to some libraries, improving research, providing learning facilities, recruitment of tutorial assistants, and motivating lecturers. The motivation of lecturers concerned the improvement of their salaries which were, as the Commission of parliamentarians highlighted, very low compared to other universities in the region. During the interviews, Mr. X mentioned the meagre salary of KIE lecturers which can make them leave the institution. Fortunately, we note here that these salaries are to be increased by July 2012 when all civil servants' salaries are increased too.

In order to contribute to the improvement of student engagement, lecturers were asked what they would do in case they were appointed as decision makers to improve B. Ed and non B. Ed students' performance by accommodating both groups. Mr. Y suggested that it would be important to offer additional classes or repetitions to non B. Ed students to help them master the content, and emphasised mixed learning groups which combine both B. Ed and non B. Ed students so that the latter could benefit from the former. While this lecturer intended to enhance learning in combined groups as some students highlighted earlier, Mr. X found solutions in improving institutional and even state policies for more commitment to the teaching profession by student teachers.

As opposed to the above orientation, in trying to accommodate both B. Ed and non B. Ed students in an attempt to improve their performance of EDP 101, Mr. Q, the lecturer of ELA 101 course brought in the idea of teaching these groups separately by arguing:

> These two groups should not study together. They have two different focuses…. The fact of putting the same module, having them studying together is just because of the constraints and mostly financial, logistic, staffing, and so on and so forth. So what could be done to solve that problem is only to recruit more staff, ensure that this B. Ed [students] study a part from the other people and from the beginning they take their orientation, everything is adapted to their fields and so on and so forth. (Interview: September 28, 2010)

Because the notion of student engagement and student's personal development are related, Mr. X qualified KIE laureates as ambassadors at their work places. For this reason, he posited that KIE laureates should really have enough skills and knowledge in their profession. If he was a decision-maker for KIE, Mr. X stated that he would ensure that students who come to KIE would develop a love for their profession, which he suggested should be the focus of a teacher training programme. He pointed out that:

> I would enforce that the profession or pedagogical part of the training is highly emphasised and should have more weight in the teaching. And yet it is the key because these are teachers, they need to know the ways of teaching and learning. I would prefer the whole institution to be offering Bachelor of Education because this is a teacher education institution. Instead of saying Bachelor of Arts, [or] Bachelor of Science with Education, I will say Bachelor of Education with Science or with Arts. That is why they don't put much effort, because they compare themselves with other students in other institutions of higher learning and they tend to think they are the same footing. Somebody being B. Sc. in another institution and another one doing B. Sc. in KIE, they are more or less the same. They don't see themselves being teachers. That is what needs to be done. There should be a policy on teacher education being emphasised. Even if need be the programmes would be revised. That is what I would put in place. (Interview: September 10, 2010)

This lecturer's voice highlights the raison d'être of teacher education which should be that of KIE. Studies have shown that student teachers come with prior knowledge and beliefs that influence the way they construct new knowledge (Joram & Gabriele, 1998) and education courses must play a pivotal role in influencing or transforming existing preconceptions by building or shaping teacher identity throughout the teacher training.

This lecturer highlighted the fact that non B. Ed students joined the institution against their wills, which meant that they joined KIE because they got the government sponsorship which would

award them a degree. They joined KIE for the sake of getting a degree which they would use to do other jobs. This was also highlighted earlier by students themselves.

He pointed the finger to the government policy which allows KIE laureates to join other workplaces rather than teaching. According to him, this was another factor that pushed students to dislike education courses. He also added teacher incentives as an important factor that discouraged these student teachers. He reported that the salary of teachers is lower than what their counterparts with the same academic qualifications get in other jobs. In effect, he concluded that being at KIE against one's will, better job opportunities and poor teacher remuneration were the main factors that made students undervalue the teaching profession. These factors that contributed to hating the teaching career were also identified earlier.

9.5 Summary of the Chapter

In this chapter, the time and effort devoted to learning EDP 101 and ELA 101 courses referred to the time that students spent preparing for the next class sessions, the number of absences in class settings and the frequency by which they attended review sessions, took notes in class, revised their notes prior to the next class sessions and studied in partnership with their classmates. The chapter also explored KIE's conditions of student engagement through the voice of lecturers.

In EDP 101 classes, this study found that 90.9% of B. Ed students and 85.5% of the non B. Ed students often spent more than 3 hours preparing for the next class sessions. B. Ed students devoted more time to studying the course while non B. Ed spent such time preparing for the next class. However, B. Ed students scored a higher rate of absenteeism from classes than non B. Ed students who, instead, attended review sessions more frequently than B. Ed students in the proportion 58.9% to 53%.Non B. Ed students reported physically attending more classes than B. Ed students who spent more time preparing for the next class. B. Ed students' low level of attendance in both classes and review sessions is to be attributed to two factors. Firstly, the unfavourable classroom conditions which made them believe attendance was a waste of time, and secondly, their overconfidence due to professional preparation prior to KIE that favours them to do their own research in the field rather than attending classes.

This study showed that B. Ed students were less engaged in taking notes than non B. Ed students in EDP 101 classes because they were busy comparing their notes from TTC with materials being delivered and yet note taking focuses on new concepts. All three lecturers reported that taking notes was very important for them to be successful. B. Ed students spent more time preparing for the next session and reviewing their notes prior to the next class meeting than non B. Ed students did. This was mainly due to the fact that B. Ed students were interested in understanding deeply this course which they started from high school. These students participated in a study partnership more than non B. Ed in the proportion of 82.3% to 78.7%.

Thus, B. Ed students reported that they spent more time and devoted more energy dealing with EDP 101 course materials than non B. Ed students because they were interested and intrinsically motivated to learning a teacher professional course. They were psychologically prepared to become secondary school teachers and proudly entered KIE for their social ascension while non B. Ed were not ready for the career and most of them entered KIE by extrinsic motives as their last resort for job opportunities.

In the ELA 101 course, all four B. Ed students who responded to the CLASSE spent more than 3 hours preparing for the next English class because they had to overcome their weaknesses in English. Their aim was to master the language of instruction used in their preferred career and lastly they were obliged to pass the course for financial reasons. However, 65.9% of the non B. Ed students spent that time. Non B. Ed students were overconfident because of their strong background knowledge and had negative beliefs about the teaching career which lowers their motivation to devote effort and energy. Consequently, they performed poorly while B. Ed performed excellently.

Moreover, B. Ed students were attending classes more regularly than non B. Ed students of whom 12.6% reported that they had 3 – 4 and 5 or more absences. Concerning the attendance of the review sessions, three out of four B. Ed students attended it at least once while 77.3% of non B. Ed students reported that they attended them 2, 3 or more times and 22.7% never attended them. Thus, it can be said that B. Ed students reported that they physically attended more ELA 101 class activities than non B. Ed students.

Dealing with the course materials in ELA 101, this study found that all B. Ed respondents and 81.9% non B. Ed students were often and very often taking notes because of the lecturing method of delivery. B. Ed students were divided on the frequency by which they were revising their notes to prepare for the next class meeting while the majority (86.3%) of non B. Ed students often and very often reviewed their notes. All four B. Ed students and 81.9% of non B. Ed

students were often and very often taking notes in order to prepare for a quiz or a test 3 or more times. ELA 101 lecturer valued this practice as very important for the students' success.

About the institutional conditions of student engagement in learning first year common modules at the KIE, EDP 101 lecturers agreed that, in general, the environment in which the module was taught and learnt was not conducive mostly because of the class size. There was not enough physical space and other facilities to accommodate all the students and this negatively affected the teaching and learning activities. It specifically affected an important aspect of this process, that is, assessment either in CAT or exams.

In the ELA 101 course, the teaching and learning context was seem to be not conducive because of the lack of enough facilities and class size. This also affected the testing approach which did not cohere with the modular system of teaching and learning in the context of KIE. The lecturer acknowledged that financial problems remain a key factor that weakens student engagement in learning in Africa and of course in the region.

Lecturers' views on B. Ed and non B. Ed students' engagement in learning EDP 101 and ELA 101 courses agreed that B. Ed students were more involved and more engaged in learning these courses than non B. Ed students. In fact, B. Ed students have been trained as teachers, they like their profession, and are proud of it whereas non B. Ed students do not see themselves getting committed to the teaching profession and thus consider pedagogical courses as "small".

Lecturers also raised their voices on how to improve first year students' engagement at KIE. They show that the improvement of student engagement must be based on the enriching conditions in which modules are taught and are learned emphasising manageable classes, library equipped with textbooks, internet facilities, recruitment of enough tutorial assistants, etc. In order

to cultivate enthusiasm and enforce self-commitment to learning pedagogical preparation modules for non B. Ed students, there was a suggestion of making KIE a strictly educational institution which offers Bachelor of Education with other disciplines for the sake of making everybody feel as if they really belong to the teacher education programme. This is the psychological engagement which "includes feelings of belonging, identification, and interpersonal relationships" (Ainley, 2012: 284). All EDP 101 lecturers proposed that both groups of students (B. Ed and non B. Ed) should be taught together in the same class for reciprocal benefits. However, the lecturer of ELA 101 proposed to teach them separately.

CHAPTER TEN

COGNITIVE SKILLS OF STUDENT ENGAGEMENT AT KIGALI INSTITUTE OF EDUCATION

10.1 Introduction

While the previous chapter focused on the time and effort devoted to learning as well as on KIE's conditions of student engagement, Chapter Ten compares B. Ed and non B. Ed students about the mental activities called "cognitive skills" that they found to be emphasised in the teaching and learning of EDP 101 and ELA 101 modules as they appear on the CLASSE instrument. Indeed, cognitive skills emphasised on in the teaching and learning of a given course are good indicators of student engagement and may predict the student's performance.

In fact, one of the sections of the original CLASSE instrument is named "cognitive skills". It requires students to report on how much they thought their coursework had emphasised the five mental activities as indicated. These are memorising, analysing, synthesising, making judgements, and applying taught materials. Lecturers reported also on how important these mental activities were for students to be successful in their respective courses.

10.2 Mental Activities Emphasised in EDP 101 Module

10.2.1 Memorisation

Reporting on how much the EDP 101 course emphasised the memorisation of facts, ideas, or methods from the course and readings so that students could repeat them in pretty much the same form, B. Ed and non B. Ed students' responses on whether it wasvery little, somewhat, quite a bit, or very strongly emphasised are given in the next table:

Table 26: Memorisation

Category of student	Answers				
	Very Little	**Some**	**Quite a Bit**	**Very Much**	**Total**
B. Ed					
Count	5	11	6	12	34
%	14.7%	32.4%	17.6%	35.3%	100%
Non B. Ed					
Count	36	46	28	77	187
%	19.3%	24.6%	15%	41.2%	100%

This table shows that fiveB. Ed students (14.7%) and 36 non B. Ed students (19.3%) who participated in the study found in the EDP 101 course there was very little emphasis on memorisation. For elevenB. Edstudents (32.4%) and 46non B. Ed students (24.6%), the course somewhat emphasised this skill. SixB. Ed students (17.6%) and 28 non B. Ed students (15%) found the course emphasised memorisation quite a bit and for twelveB. Ed (35.3%) and 77non B. Edstudents (41.2%), the course emphasised memorisationvery much.

By combining closed alternatives, that is, very little and somewhat on one side, and quite a bit and very much on the other side, we find that 47.1% and 43.9% B. Ed and non B. Ed students found the EDP 101 course to very little and somewhat emphasising memorisation while 52.9% of B. Ed and 56.2% of non B. Ed students found it quite a bit and very much emphasising memorisation.

Although both groups felt that the course was emphasising memorisation, non B. Ed students scored more (56.2%) than B. Ed students (52.9%) on the idea that EDP 101 emphasised the memorisation of ideas so that students could reproduce them during evaluation. However, all non B. Ed students interviewed said that the exam questions in EDP 101 required them to have deeply understood the course. They argued that a multiple choice exam format required deep understanding.

At first glance, one can think that this is a contradiction but it is not. It is reasonable for non B. Ed students to view EDP 101 as easier than other modules such as ICT. For them, EDP 101 emphasises memorisation mostly because, as was shown earlier, they were surface oriented in their learning while B. Ed students were interested in understanding this course deeply.

Moreover, a first year undergraduate introductory psychology course requires memorisation of what has been understood. Assessment or evaluation also should be challenging enough to address student engagement with the course as well as the set of expectations to be achieved. B. Ed students (52.9%) found EDP 101 coursework emphasising memorisation, and yet, those who were interviewed acknowledged that the exam questions were requesting both memorisation and understanding, which correspond to the first two levels of the Revised Bloom's Taxonomy of educational objectives. On the $CLASSE_{FACULTY}$, two lecturers reported that it was important that the coursework emphasises memorisation and one said it was very important. The bar chart below allows viewing clearly how both groups of students perceived the course emphasising memorisation. Without memory, learning is impossible. The bar chart which follows illustrates the answers:

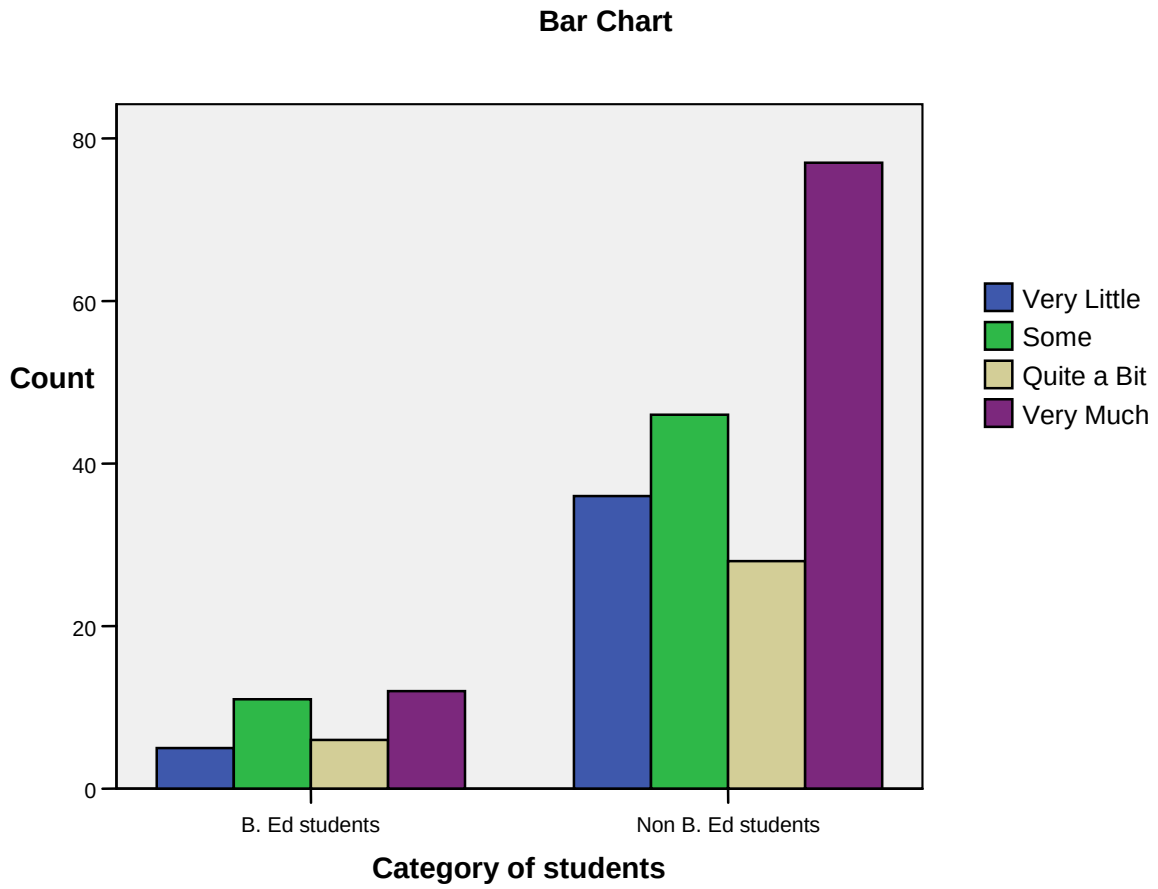

Figure 17: Memorisation as emphasised in EDP 101

10.2.2 Analysis

Usually memorisation alone would be meaningless without the ability to understand and analyse school subjects, and then access knowledge from different components of the phenomenon. Analysing basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components was estimated by B. Ed and non B. Ed students in the proportions below:

Table 27: EDP 101 as emphasizing analysis

Category of student	Answers				
	Very Little	**Some**	**Quite a Bit**	**Very Much**	**Total**
B. Ed					
Count	6	12	6	10	34
%	17.6%	35.3%	17.6%	29.4%	100%
Non B. Ed					
Count	22	64	40	61	187
%	11.8%	34.2%	21.4%	32.6%	100%

With regard to this table, six B. Ed (17.6%) and 22 non B. Ed students (11.8%) found the course emphasised analysis'very little', twelve B. Ed (35.3%) and 64 non B. Ed students (34.2%) perceived the course as 'somewhat' emphasising analysis, six B. Ed (17.6%) and 40 non B. Ed students (21.4%) found it emphasising analysis 'quite a bit'whereas ten B. Ed (29.4%) and 61 non B. Ed students (32.6%) found EDP 101 very much emphasising this mental activity.

Therefore, 52.9% B. Ed and 46% non B. Ed students found the coursework very little and somewhat emphasising analysis while 47.1% B. Ed and 54% non B. Ed students found it quite a bit and very much emphasising analysis. Non B. Ed students found the coursework insisting on analysis more than B. Ed students did. This agrees with what non B. Ed students said during the interviews that the EDP 101 exam required deep understanding. It was also shown earlier that they were more challenged than B. Ed students because they were engaging with new concepts in psychology. It is therefore logical that they find the course requiring more analysis. But, the idea that they were surface oriented in their learningis controversial. What comes out is that the course may have emphasised the analysis of alternatives to answer multiple choice questions correctly but the way they were dealing with learning was different from what B. Ed students were doing. The following bar chart illustrates both groups' views:

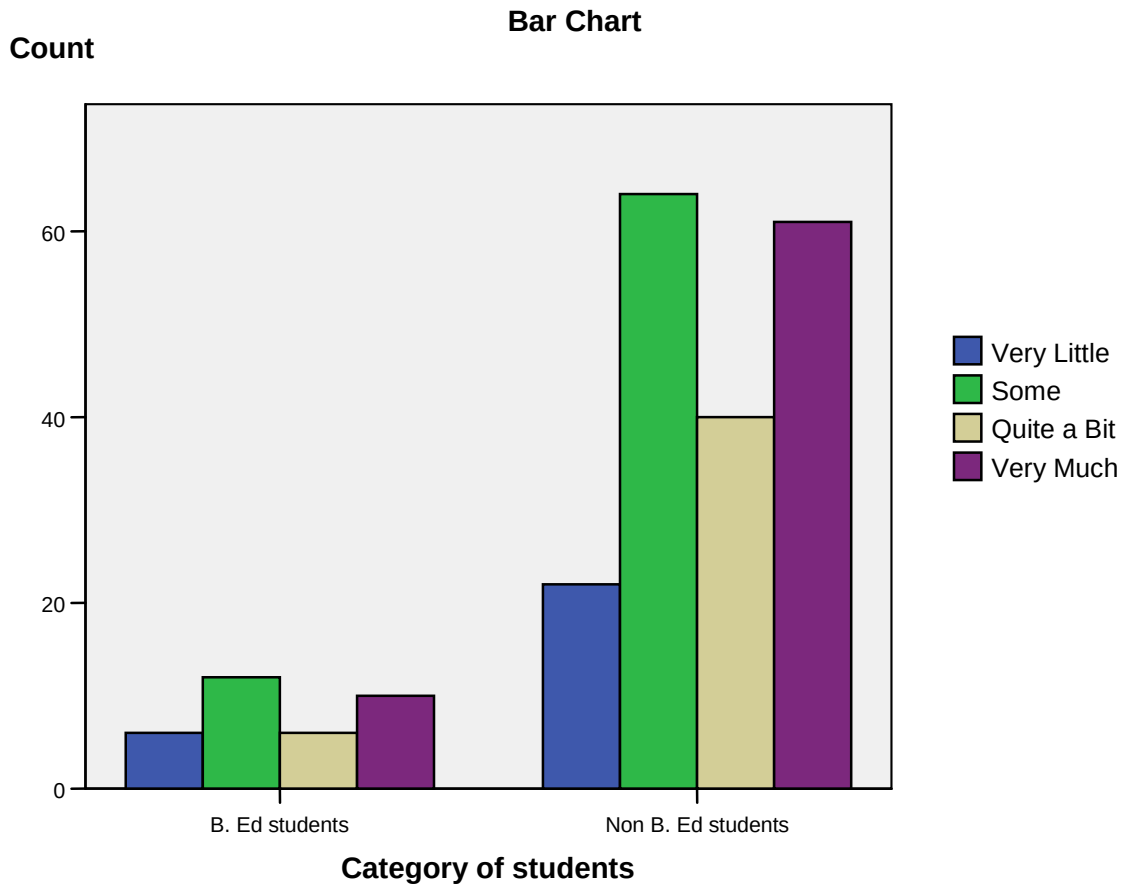

Figure 18: Analysis as emphasised in EDP 101 coursework

Two of the three faculty members considered EDP 101 coursework to be very important to emphasise analysis for students to succeed.

10.2.3 Synthesis

Logically, analysis as a mental activity without the synthesis would be an incomplete mental thinking process. In this study, students had to report on how much EDP 101 coursework had emphasised synthesising and organising ideas, information, or experiences into new more complex interpretations and relationships of skills. Both B. Ed and non B. Ed students' results on this mental activity are found in the table below:

Table 28: EDP 101 as emphasising synthesis

Category of student	Answers				
	Very Little	**Some**	**Quite a Bit**	**Very Much**	**Total**
B. Ed					
Count	10	9	7	8	34
%	29.4%	26.5%	20.6%	23.5%	100%
Non B. Ed					
Count	30	45	46	66	187
%	16%	24.1%	24.6%	35.3%	100%

Observing this table of results, we can see that ten B. Ed (29.4%) and 30 non B. Ed students (16%) found EDP 101 coursework as having very little emphasis on the synthesis skill and nine B. Ed (26.5%) and 45 non B. Ed students (24.1%) found that it somewhat emphasised this skill. In the category of B. Ed students, seven (20.6%) found that the coursework had emphasised this skill quite a bit, and this has also been reported by 46 non B. Ed students (24.6%). The table also shows that eight B. Ed (23.5%) and 66 non B. Ed students (35.3%) found that EDP 101 emphasised synthesisvery much.

Therefore, 55.9% of B. Ed as opposed to 40.1% of non B. Ed reported that EDP 101 coursework has very little and has somewhat emphasised the synthesis and organisational mental activities. For 44.1% of B. Ed students, the coursework has quite a bit and very much emphasised such mental activities. Such perception has also been expressed by 59.9% of non B. Ed students. Thus, non B. Ed students believed much more than B. Ed students that EDP 101 coursework has emphasised the synthesis processvery much.

This could be true because B. Ed students did coursework as an extension of what they had learnt in high school, and for them it was a matter of remembering while those who were studying psychology for the first time found it as referring to the higher levels of thinking. Furthermore, students who had pedagogical preparation before coming to KIE knew, from experience as

primary teachers, how the synthesis skill was so important and how it should be evaluated. Yet, this is probably not very much emphasised with the multiple choice format questions.

The study also found that faculty members had the same beliefs about how important EDP 101 was to them by the fact that the coursework emphasises analysis and synthesis cognitive skills. In effect, as shown earlier in the analysis, for two lecturers it was very important, and for one, it was important that the coursework emphasises synthesis and organisation of ideas, information, or experiences into new, more complex interpretations and relationships of skills. The bar chart below clearly shows how these categories of students have responded in almost similar proportions to the four alternatives given on the Likert scale.

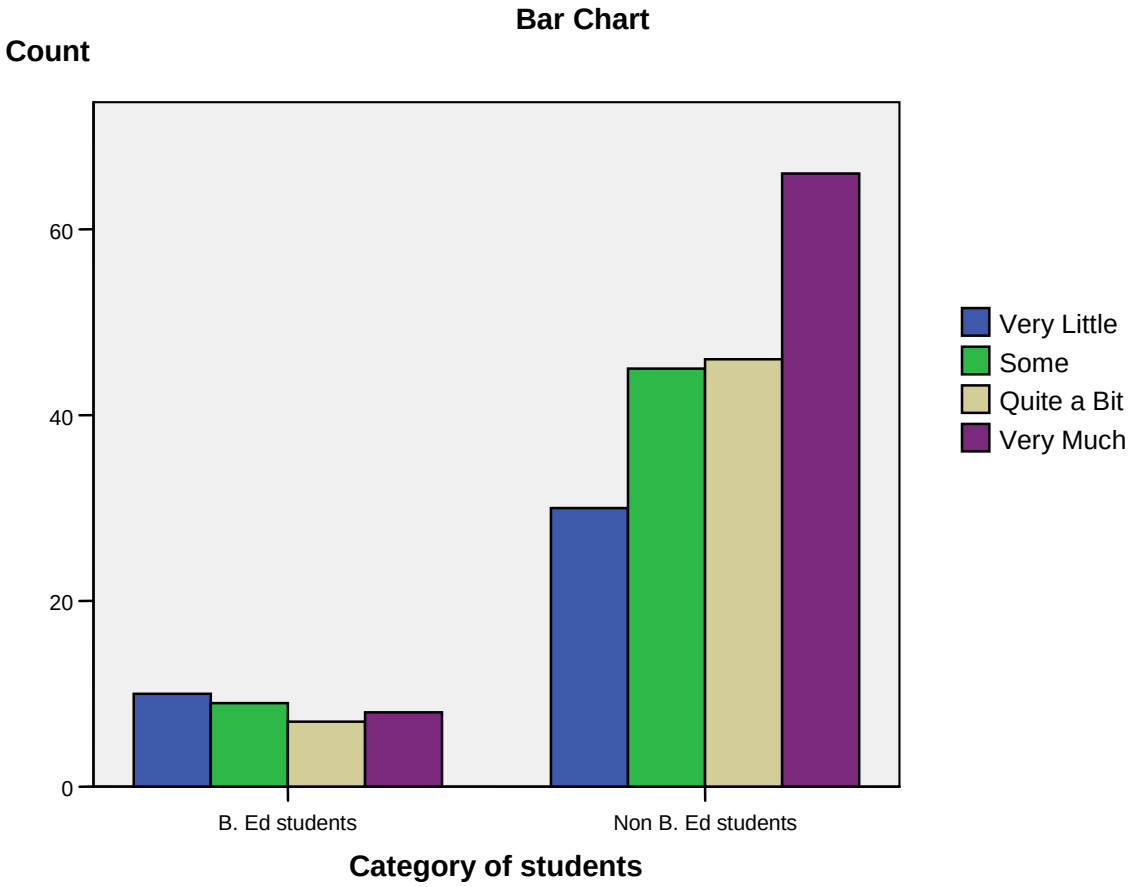

Figure 19: Synthesis as emphasised in EDP 101

10.2.4 Making Judgement

Once students have memorised, analysed, and synthesised taught materials, they must be able to make a value judgment or evaluate the materials learnt. In this regard, B. Ed and non B. Ed students were required to say how much EDP 101 coursework emphasised making judgments about the value of information, arguments, or methods such as examining how others gathered and interpreted data and assessing the soundness of their conclusions. Results are summarised in the next table:

Table 29: EDP 101 as emphasising the making of judgments

Category of student	Answers				
	Very Little	**Some**	**Quite a Bit**	**Very Much**	**Total**
B. Ed					
Count	9	8	8	9	34
%	26.5%	23.5%	23.5%	26.5%	100%
Non B. Ed					
Count	36	47	38	65	186
%	19.4%	25.3%	20.4%	34.9%	100%

Making judgment as a mental activity would be, in our understanding, coherent with the "evaluation" level of the Revised Bloom's Taxonomy of cognitive objectives (Pickard, 2007;Brümen, 2007) which was the highest on the hierarchy of Bloom's taxonomy. Therefore, the more students find the coursework emphasising making judgments, the more the lecturer of the course cognitively engages them and thus the higher the level of student engagement.

In this studyresults showed that 9 B. Ed (26.5%) and 36 non B. Ed students (19.4%) reported that the coursework placed very little emphasis on the judgment skill. For eight B. Ed (23.5%) and 47 non B. Ed students (25.3%), the coursework has somewhat emphasised this skill. Finally, eight (23.5%) and nine (26.5%) B. Ed students as well as 38 (20.4%) and 65 (34.9%) non B. Ed students reported that the coursework had quite a bit and very much emphasised the making of judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessed the soundness of their conclusions.

Putting together closed responses, we find that 50% of B. Ed students and 44.7% of non B. Ed students reported that the course had very little and somewhat emphasised the judgment capability while 50% of B. Ed and 55.3% of non B. Ed students reported that it had much emphasised this capability. This shows that B. Ed students were divided (50%) while non B. Ed (55.3%) felt that the coursework had much emphasised this skill.

Again, this could be explained by the fact that non B. Ed students were facing psychology for the first time and thus found it requiring higher cognitive skills. This supports the idea that non B. Ed students were more challenged by the course in which they did not have prerequisites. For faculty members, this skill was perceived by two lecturers to be important while one perceived this skill to be very important for the students' success. The bar chart that follows shows how the B. Ed students' results about the extent to which the coursework emphasised making of judgment were equally distributed.

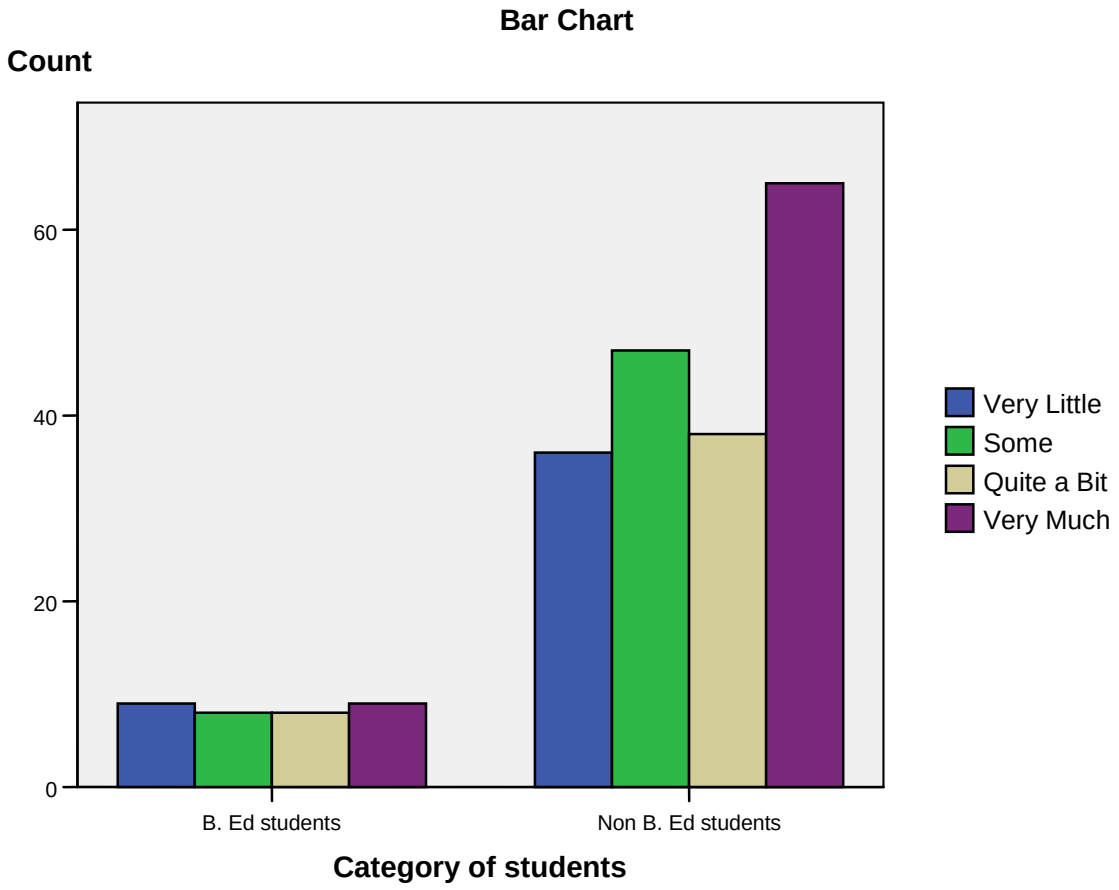

Figure 20: Making judgments as emphasised in EDP 101 course

10.2.5 Application

Learning is not a simple accumulation of knowledge followed by the ability to analyse, synthesise, and evaluate. Without the ability to apply what has been learned in solving everyday problems, effective learning would never have taken place because knowledge should be utilizable. Therefore, students reflectedon how much EDP 101 coursework emphasised applying theories or concepts to practical problems or in new situations. The table below summarises their responses.

Table 30: EDP 101 as emphasising application

Category of student	**Answers**				
	Very Little	**Some**	**Quite a Bit**	**Very Much**	**Total**
B. Ed					
Count	10	6	9	9	34
%	29.4%	17.6%	26.5%	26.5%	100%
Non B. Ed					
Count	54	45	28	60	187
%	28.9%	24.1%	15%	32.1%	100%

Results obtained by cross-tabulating B. Ed and non B. Ed students' responses show that, ten B. Ed (29.4%) and 54 non B. Ed students (28.9%) viewed EDP 101 coursework as having very little emphasise on the application of theories or concepts to practical problems or in new situations. Six B. Ed (17.6%) and 45 non B. Ed students (24.1%) found that the coursework had somewhat emphasised this skill. Nine (26.5%) B. Ed compared to 28 (15%) non B. Ed students viewed the coursework as emphasising application quite a bit while it was viewed as greatly emphasising this skill by nine B. Ed (26.5%) and 60 non B. Ed students(32.1%).Thus, EDP 101 coursework was viewed as very little and somewhat focusing on application by 47% of B. Ed and 53% of

non B. Ed students who participated in the study. Those who viewed the coursework as quite a bit and very much focusing on this cognitive skill were 53% of B. Ed and 47% of non B. Ed students.

More B. Ed students (53%) viewed EDP 101 coursework as emphasising application of theories or concepts to practical problems than non B. Ed students (47%). This is probably because B. Ed students had opportunities to do teaching experience in primary schools when they were still in high school. During their teaching experiences, they were practically applying theories or concepts learned in psychology to the real field of work. In classroom situations at KIE, theories learned in educational psychology were mentally assimilated to teaching contexts which they knew while non B. Ed were theoretically receiving without practical reference. We believe that, when studying an EDP 101 course, B. Ed students revived the use of different theories taught in real teaching situation which they had gone through. The bar chart below summarises and gives a clear picture of how much B. Ed and non B. Ed students found EDP 101 course as emphasising application.

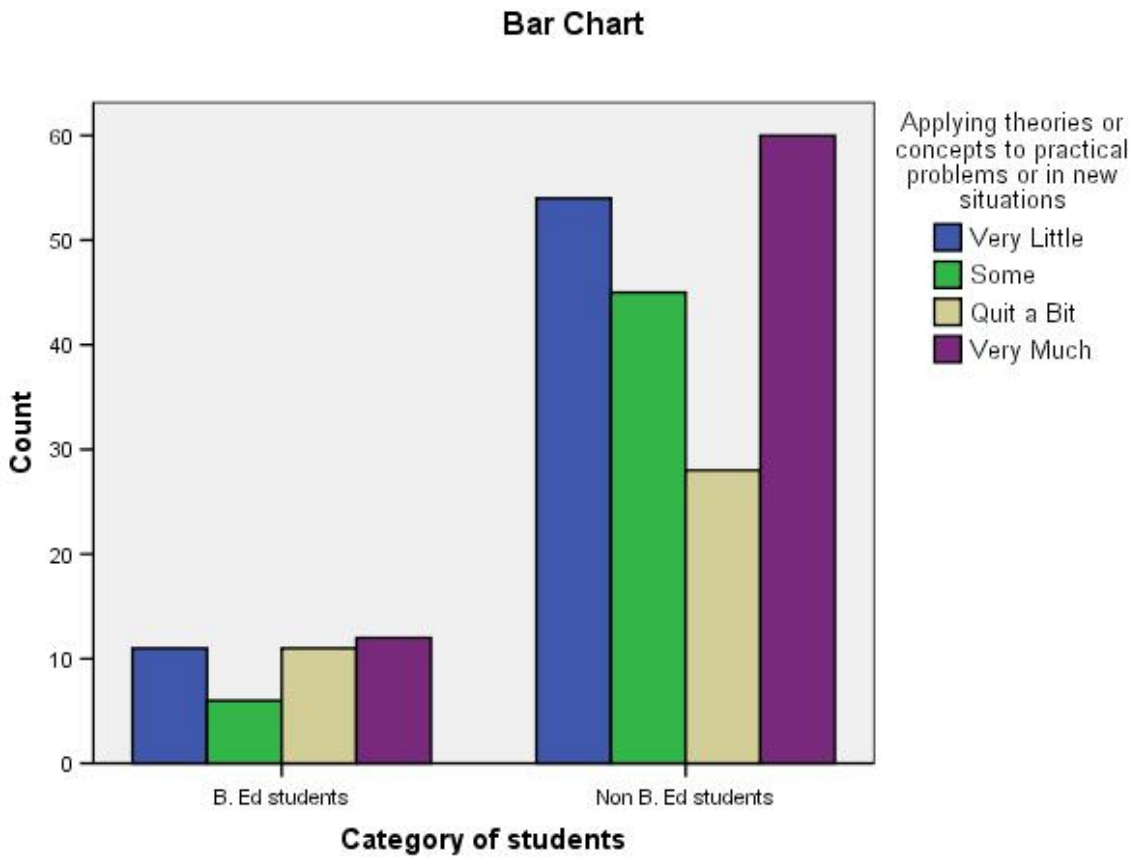

Figure 21: Application as emphasised in EDP 101

According to $CLASSE_{FACULTY}$'s results, all three lecturers of the EDP 101 course/module believed that it was very important that the coursework emphasised the application of theories or concepts to practical problems or in new situations while students had not much experiencd this skill.

10.2.6 B. Ed and non B. Ed Students' General Views on Mental Activities

Comparing B. Ed and non B. Ed students' perceptions about how much the EDP 101 module had emphasised the five cognitive skills, the present research found that, in general, the non B. Ed group (54.5%) perceived the coursework more than the B. Ed group (49.4%) as emphasising mental activities which are memorisation, analysis, synthesis, making judgment, and application.

In effect, the following table compares B. Ed and non B. Ed students on how they perceived the coursework studied together, and how they emphasised the five cognitive skills as shown in this table.

Table 31: General trends on cognitive skills in EDP 101

Groups & % age / **Skills**	**B. Ed (much)**	**Non B. Ed (much)**
Memorisation	52.9%	56.2%
Analysis	47.1%	54%
Synthesis	44.1%	59.9%
Making Judgment	50%	55.3%
Application	53%	47%
Average	**49.4%**	**54.5%**

Considering the extent to which students with professional preparation background (B. Ed) prior to KIE and those without such background (non B. Ed) viewed EDP 101 course as having placed great emphasis on memorisation, analysis, synthesis, evaluation, and application, we found two main results.

The first is that students without pedagogical background found the course to be emphasising these mental activities more than students with such background knowledge. But application skill was an exception. This is explained by the difference in prerequisites and experience. Once students have acquired knowledge similar to the subsequent learning, they are cognitively exposed to soft materials while those studying a given course for the first time perceive themselves as being cognitively exposed to hard materials. They see the course as requiring these cognitive skills.

The second finding is that students with professional preparation prior to KIE found the course to be emphasising application of theories or concepts to practical problems or in new situations more than those without such background. In effect, the former do not dissociate learning theories being studied with the practical teaching and learning context which they experienced in their high school.

These mental activities or cognitive skills can be assimilated to the hierarchical levels of Bloom's taxonomy of educational objectives which are knowledge, comprehension, application, analysis, synthesis, and evaluation. This taxonomy has been revised. It is presented from lower to upper order thinking skills as remember, understand, apply, analyse, evaluate, and create. Create replaced synthesis, and this has shown positive results in helping student teachers plan their lessons (Brümen, 2007).

It is within this spirit that the EDP 101 exam must have met or assessed these levels. In this study, students responded to the CLASSE research instrument after they had obtained their end of first semester deliberated marks by the Academic Senate. These findings revealed that B. Ed students performed better than non B. Ed students.

10.3 Mental Activities Focused on in ELA 101

The previous section described how B. Ed and non B. Ed students viewed EDP 101 coursework in terms of emphasising memorisation, analysis, synthesis, making judgments, and application skills. Similarly, this section dealt with how B. Ed and non B. Ed students studying ELA 101 viewed it as a course aimed at emphasising the above cognitive skills.

Reporting on the extent to which ELA 101 coursework has emphasised memorising facts, ideas, or methods from the course and readings so that students can repeat them in pretty much the same form, two out of four B. Ed students indicated that it [memorisation] was emphasisedvery little. One for each case indicated respectively that it was emphasised 'somewhat' and 'quite a

bit'. For non B. Ed students, seven (15.9%) and thirteen (29.5%) indicated that it [memorisation] was 'very little' and 'somewhat' emphasised while twelve (27.3%) in each case indicated that it was 'quite a bit' and 'very much' emphasised.

On the one hand, three out of four B. Ed students reported that there was very little memorisation and was'somewhat' emphasised by ELA 101 coursework and only one indicated that it was emphasised 'quite a bit'. For them, this skill was less emphasised. On the other hand, 45.4% of non B. Ed students perceived the coursework to emphasise 'very little' and 'somewhat' memorisation while 54.6% felt this skill had been emphasised very much. Contrary to B. Ed students, non B. Ed students viewed ELA 101 coursework as putting more emphasis on memorisation.

Analysing what has been memorised is a logical procedure in learning. On the item about how much ELA 101coursework was emphasising analysis of the basic elements of an idea, experience, or theory such as examining a particular case or situation in depth and considering its components, CLASSE results showed that only one B. Ed student found the coursework very little and quite a bit emphasising analysis whiletwo perceived it to be emphasising analysis very much. Thus, three out of four B. Ed students reported that ELA 101 coursework has quite a bit and very much. For them, the coursework emphasised analysis a great deal.

For non B. Ed students, ten (22.7%) and seven (15.9%) reported that the coursework had very little and somewhat emphasised analysis while ten (22.7%) and seventeen (38.6%) reported that it had quite a bit and very much emphasised this mental activity. Thus, for 38.6% of non B. Ed students, ELA 101 coursework placed less emphasis on analysis while the majority (61.3%) reported that it had emphasised it a lot a mental activity that the lecturer perceived as very important for them to succeed. Therefore, both groups of respondents found the coursework emphasising analysis.

Indeed, Introduction to English Language and Linguistics must definitely emphasise the analysing skill of the basic elements of an idea, experience, or theory such as examining a particular case or situation in depth and considering its components and this is inferred by the nature of the coursework itself, ELA 101. In fact, there is no way you can teach the language and its linguistic aspects without emphasising the analysis skill. Analysis as a mental activity must

be completed by the synthesis. The argument is that an analysis without synthesis is an incomplete reasoning.

Regarding the way B. Ed and non B. Ed students reported ELA 101 coursework as having emphasised synthesising and organising ideas, information, or experiences into new, more complex interpretations and relationships skill, results showed that, two non B.Ed students and one B. Ed student indicated that synthesis was quite a bit and very much emphasised while 1 said it was very little emphasised. This means that three out of four felt that the coursework had emphasised synthesisvery much.

For ten (23.3%) non B. Ed students, and eight (18.6%) B.Ed students, the coursework was viewed as very little and somewhat emphasising synthesis while twelve (27.9%) and thirteen (30.2%) respectively viewed it as quite a bit and very much emphasising this mental activity. This means that 41.9% of non B. Ed students felt that the coursework was less emphasising synthesis while 58.1% felt that it was much emphasising this skill.

Therefore, both groups viewed ELA 101 coursework as emphasising synthesis and organisation of ideas, information, or experiences into new, more complex interpretations and relationships. Indeed, their lecturer perceived this skill to be very important to him and that the coursework emphasises it for students to be successful. This is because the nature of the course imposes both analysis and synthesis which are inseparable.

After students have memorised, analysed, and synthesised materials learnt, they must be able to make a value judgment of the materials acquired. In this regard, B. Ed and non B. Ed reflected on how much their ELA 101 coursework had emphasised making judgments about the value of information, arguments, or methods such as examining how others gathered and interpreted data and assessing the soundness of their conclusions.

This study found that two B. Ed students in each case reported that the coursework had quite a bit and very much emphasised the making of judgments. In fact, all four B. Ed students perceived that the ELA 101 course placed much emphasis on the judgment skill. In the same way, eighteen (40.9%) and nine (20.5%) non B. Ed students reported that this coursework very much and quite a bit emphasised evaluation, but seven B. Ed (15.9%) and ten non B. Ed students

(22.7%) said that it was very little and somewhat emphasising this skill. Thus, for 61.4% of them, the coursework put much emphasis on the making judgments. Both categories of students perceived the ELA 101 coursework as greatly emphasising the judgment skill. The lecturer also felt that the fact of having ELA 101 coursework which emphasises the judgment skill was important for students to be successful.

It is useless to give a value judgment on something and stop there without utilising it to solve eventual problems that you could encounter. It is within this spirit that CLASSE instrument asks students how ELA 101 coursework had emphasised applying theories or concepts to practical problems or in new situations. On this issue, two, one, and one B. Ed students respectively indicated that the coursework had 'very much', 'quite a bit', and 'somewhat' emphasised this skill. This means that three out of four B. Ed students reported that ELA 101 emphasised much application of theories and for one, it had somewhat emphasised this application. Non B. Ed students, on the other hand, did not have the same views.Twelve (27.3%) found that the coursework had emphasised applicationvery little;nine (20.5%) felt that it had somewhat emphasised it [application], thirteen (29.5%) declared that the coursework had emphasised applicationquite a bit, and ten (22.7%) viewed it as placed great emphasis on application. Thus, 52.2% of non B.Ed students perceived the course as emphasising application skill a lot, whereas 47.8% of non B. Ed students felt less emphasis was placed on application skill while the lecturer of this course indicated that, on the $CLASSE_{FACULTY,}$ it was very important for him that the coursework emphasises this skill.

In sum, except memorisation skill which was perceived as being greatly emphasised by B. Ed students, all the other skills, i.e., analysis, synthesis, the making of judgment, and application skills were perceived almost in the same way by more than half of the respondents.

10.4 Summary of the Chapter

This chapter described the extent to which B. Ed and non B. Ed students perceived EDP 101 and ELA 101 modules in terms of emphasising the five mental activities or cognitive skills. It was found that B. Ed students perceived the educational psychology course as putting less emphasis

on the four cognitive skills which are memorisation, analysis, synthesis, and evaluation because they had attended post-secondary teacher education and were qualified primary school teachers. They had already been exposed to a kind of soft teaching and learning materials due to their prerequisites in the field of education. These students also found the EDP 101 course greatly emphasising application. Having been exposed to classroom practices as primary teachers, they were likely able to assimilate the educational psychology theories learned at KIE into classroom contexts and thus perceived the course as emphasising application the most because they had practical reference.

With regard to non B. Ed students, they did not have pedagogical preparation and found that the EDP 101 course emphasised the four cognitive skills a great deal. These students perceived the EDP 101 course as emphasising application less because they had not had any practical reference in teaching. It is worth noting that, for each of these courses, memorisation was perceived as being less emphasised by students without a strong background in it. B. Ed students believed ELA 101 emphasised memorisation less and non B. Ed felt EDP 101 put less emphasis on memorisation.

For the ELA 101 course, B. Ed students felt the course emphasised memorisation more than non B. Ed students but both categories of students perceived in almost the same proportions the emphasis made on other cognitive skills, which are analysis, synthesis, the making of judgment, and application.

CHAPTER ELEVEN

CONCLUSIONS AND RECOMMENDATIONS

11.1 Introduction

This chapter summarises empirical findings of this research, concludes, and suggests recommendations for improvements and further research studies. The chapter answers the six research questions that directed the study and relates answers to the aim of the study, that is, to investigate through comparison, the extent to which B. Ed and non B. Ed teacher education students were effectively engaged and succeeded in common courses referring specifically to the factors of student engagement which, consequently influence students' performance.

This study argued that first year B. Ed and non B. Ed students' pre-university academic preparation, their beliefs, perceptions of the teaching and learning environment, interactions with Faculty staff members and peers, time and effort they spend on academic activities andinstitutional conditions influence student engagement and success.

11.2 Influence of Academic Background on Performance

The study found that B. Ed and non B. Ed students' academic backgrounds influence their performance in modules which they take in common during their first year of teacher education at KIE with reference to their prerequisites and their differences in teacher identity formation. It was claimed thatpostsecondary student teachers' professional preparation influences student engagement and hence performance.

This study argued that teacher education at tertiary level where some students are pedagogically prepared while others are not, professional background plays a more important role in determining student engagement than their respective academic background knowledge. At KIE, B. Ed students are more focused on continuing their career while non B. Ed students without such backgroundremain unmotivated to learn. The difference in academic preparation largely influences their beliefs about the teaching profession which, in turn, determines the way they engage in learning for that profession, and consequently, determines their performance.

11.2.1 Performance of Students with and without professional preparation prior to KIE

This study found that mature and B. Ed students with education background from high school performed better than school leavers and non B. Ed students without such background in a psychology course. In psychology, B. Ed students scored 65.1% while non B. Ed students scored 60.8%. This t-statistic is significant (p-value < 0.0001), which implies the two population mean marks are significantly different. This finding confirms the result that there is a positive relationship between academic preparation, engagement and performance (Porter, 2006; Kuh & Hu, 2002) among related fields of study in the first year of post-secondary education (Eskew &Faley, 1988; Smith, 1968; Jacoby, 1975; Baldwin & Hower, 1982; Brasfield, Harrison, & McCoy, 1993; Sadler &Tai, 2001).

In addition, the study found that in Rwandan teacher education, professional background is likely to be a key determinant of first Year College / University students' performance. Being professionally prepared prior to KIE was positively related to good performance in first year courses in which students do not have enough prerequisites.

In effect, it was found that for the 2008 academic year cohort at KIE, mature students (with professional teacher preparation) performed better than school leavers in subjects in which they did not have enough prerequisiteswhile they were majors for school leavers since high school. They scored higher than the latter in social sciences. A similar phenomenon was observed with the 2010 academic year cohort of B. Ed and non B. Ed students in the English course. B. Ed students scored 70.1% while non B. Ed scored 62.3%. Therefore,non B. Ed students' prior knowledge of English did not positively impact on their performance and the mean difference was significant.

The high performance of B. Ed students in English cannot be attributed to theiracademic background but to psychological features like motivation to learn for the teaching career, interest, and positive beliefs held about teaching and the teaching profession inherited from their professional preparation which had earlier shaped their teacher identity. This identity is likely to determine the level to which student teachers engage in learning for the profession. They wereintrinsically motivated, self-determined, committed and energised, attracted andproud to

study for a better teaching position that they would occupy after KIE. On the other hand, school leavers and non B. Ed students were studying the teacher education programme by extrinsic motives. Their goal was rather financial status and some science students said they would never teach because they did not like it.

The different B. Ed and non B. Ed students' beliefs about teaching and the teaching career is likely to influence the way they go about learning both pedagogical preparation and subjects of interest. B. Ed students pursuing intrinsic goals are likely to engage more than non B. Ed students. In fact, Vansteenkiste, Timmermans, Lens, Soenens, and Broeck(2008) argue that people who endorse intrinsic goals are more likely to engage in a task in a focused way while extrinsically goaloriented individuals are less deeply involved in learning tasks. This explains their high performance.Another reason could be that, already being teachers, they know efficient learning methods and styles. They pay more attention on how lecturers teach, what they most emphasise during the lecture and are able to predict which topics are most likely to be asked in exams because they, themselves used to assess learners. Therefore, they pass their exams with fewer difficulties than others.

Interviews indicated that a few non B. Ed students were motivated to learn but many others were not. Most of them hoped the social and economic situation of teachers would change and then would take up a teaching career as a transition to another more attractive and well-paying job. In fact, non B. Ed students entered teacher education because of extrinsic goals which usually predict superficial learning (Vansteenkiste et al., 2008). They were thus less engaged and the low performance is a consequence.

Therefore, post-secondary first year student teachers' performance in Rwanda depends not only on prior academic preparation but also and mainly on the kind of perceptions or beliefs about teaching and the teaching profession that students bring to the programme at tertiary level. Indeed, the above authors noted that extrinsically goal orientation results are the poorer conceptual learning and performance (Vansteenkiste et al., 2008).The average markof non B. Ed students in English shows evidence of this.

11.2.2 Impact of the Teaching Identity on Performance in Teacher Education

Professional identity is likely to impact on students who enter KIE already professionally prepared (B. Ed students) because identity is important in teacher development (Day & Kington, 2008). Its importance is underlined in the comprehensive study by Day, Kington, Stobart, and Sammons (2006) who note that individuals' professional identity affects the sense of purpose, self-efficacy, motivation, commitment, job satisfaction and effectiveness.

In the present study, B. Ed students already have their teacher identity formed when others (non B. Ed) are struggling to get it started but are confronted with internal and external forces that conflict with it. B. Ed students' primary teacher training prior to KIE contributed largely to framing their identity as teachers because, "learning to teach is framed in terms of the development of teaching identity" (Gu, n.d). They have developed a sense of belonging to the teaching community. Wenger (1998) notes three modes of belonging and sources of identification namely engagement, imagination, and alignment. B. Ed students went through these three processes.

Firstly, because engagement "involves investing ourselves in what we do as well as in our relations with other members of the community" (Wenger, 1998: 177), B. Ed students developed their sense of belonging to the teaching community, invested themselves in teaching activities, and considered themselves to be teachers as evidenced in interviews. B. Ed students started earlier engaging with teaching. Secondly, imagination is "a process of relating ourselves to the world beyond the community of practice in which we are engaged and seeing our experience as located in the broader context and as reflective of the broader connections" (Wenger, 1998: 177). This study found that, through imagination, students compared themselves to other civil servants in terms of salary, respect in the society, and the role played by education - teaching - in the development of the country. Lastly, by alignment, students become connected to the broad enterprise of teaching. They became aligned on the teaching queue. Therefore, through the three processes, B. Ed students started their identification to the teaching profession earlier and were thus ahead of non B. Ed students in terms of teacher identity.

Besides identification, negotiation of meanings that are defined in the process of identification is another process of identity formation (Tsui, 2007). According to Wenger (1998), the negotiation

of meaning is determined by the extent to which one is able to contribute to and shape the meanings in which he/she is invested and is therefore fundamental to identity formation. In effect, because meanings are produced in the process of participation (Tsui, 2007), only people effectively engaged in particular types of activities like teaching come up with jargon that is proper to that particular area of practice. Through the process of identification with a particular profession, meanings are negotiated. The identification with that profession is acquired through the differentiation that individuals make from others. They consider themselves as different from others. Military or policemen, pastors or priests and nuns, teachers, medical doctors, businessmen / women, etc. are identified as such because throughout their training and practices, they developed their professional identities by identifying with the profession and negotiating their own meanings or ways of perceiving the world.

Therefore, B. Ed students come to KIE with a pre-established teacher identity, and aspire to higher levels of teaching while non B. Ed students who have developed another kind of identity through their specific fields of study at high school level are obliged to assimilate, adapt their own to or adopt teachers' identity. Some struggle in this battle when others do not want to adopt this new way of relating themselves to the new world.The teacher education programme should thus shape teacher identity in prospective teachers by influencing their beliefs which, in turn determine their performance.

11.3 Impact of Students' Beliefs on their Performance

Postsecondary students' teacher identity arouses interest and motivation to learn for the teachingcareer, informs the kind of beliefs that peoplehold towards the career, enhances engagement, and leads to good performance. Hence, teacher identity explains the difference in performance for students with and without a professional background in EDP 101 and ELA 101 courses. In fact, the teacher identity that B. Ed student teachers came to KIE with made them hold positive beliefs about teaching and the teaching profession which orients their motivation and engagement in learning to become teachers of more senior grades.

This study found that B. Ed students held a positive image and positive beliefs about the teaching profession before entering KIE, at KIE, and after KIE. All of them were 'traditionalist students'who considered teaching as their career. They were also service oriented which

coincided with their teacher identity. These characteristics are likely to enhance student engagement and explain why they performed well in both courses studied in this research and exceptionally well in a course in which they had fewer prerequisites.

The literature in the field points out that beliefs which are individual perceptions and constructed from experience influence the way student teachers construct new knowledge in the new learning situation (Joram & Gabriele, 1998; Scheurman, 1996; Fajet et al., 2005). This suggests that student teachers' beliefs about the profession they are being trained for are likely to determine the way they engage in learning for that profession, and thus have an impact on their performance.

The lack of teacher identity for non B. Ed students (without pedagogical preparation) may justify their negative image and beliefs about teaching and the teaching profession and impacts negatively on student engagement in learning for a career. This can lead to a poor performance. In fact, they were extrinsically motivated to learn for the career, and were surface learners who aimed only at passing exams. They unwillingly joined teacher training. Their attitudes towards the teaching profession were found to be maverick, convert, and reservationist because they were not motivated, unwillingly accepted to do teacher education once at KIE, or they were undecided. Their negative beliefs about the profession can be related to the fact that they had not yet identified with the teaching community and even some science students denied the status of teaching. This could be the origin of their poor performance even in courses in which they had strong background knowledge, suggesting their low level of engagement.

The above claims are founded on the fact that several researchers strongly agreed that student teachers' beliefs about the teaching profession impact on the way they learn (Richardson, 2003; Markic et al., 2005) and teach (Feiman-Nemser, 2001; Richardson, 1996; Pajares, 1992), and that beliefs are critical in terms of what and how candidates make sense of what they are studying (Richardson, 2003). Therefore, as the role of teacher education is to develop in student teachers professional teacher identity out of their perceptions, special attention must be paid to their beliefs and preconceptions. In fact, Feiman-Nemser and Remillard (1996) emphasise that pre-service teachers' misconceptions should be recognised as an important informant for teacher

educators as they continue to explore and develop these beliefs throughout the teacher education programme. Furthermore, Knowles (1992) cited in Chong and Low (2009: 60) notes that "the concept of professional identity is related to teachers' concepts or perceptions of the profession".

Non B. Ed students had a negative image of the teaching profession which was essentially de-motivating them in learning for a teaching career. The teaching profession was seen as a despised career by most non B. Ed students. Their misconceptions about teachers due to teachers' social and economic status did not attract them to the career. Their beliefs about the career and their lack of motivation and commitment to learn for it inevitably led to a low level of engagement.

Interviews revealed that non B. Ed students who requested to be sent to teacher education were mainly motivated by easy job opportunities and the chance that the government would sponsor their degree studies. Their future career - teaching - was mostly seen as disappointing.

In the present research, both interviews and survey results indicated that students who came to KIE with positive beliefs about the teaching profession were more engaged and performed much better than those who joined teacher education with negative beliefs about the career they were being trained for. This is an indication that the quality of beliefs that students hold about teaching determine the way students involve in learning for this profession and perform their first year courses.

11.4 The Influence of Students' Perceptions of the Teaching and Learning Context on Engagement

This study qualitatively and quantitatively explored the classroom atmosphere and conditions under whichEDP 101 and ELA 101were taught and learnt as viewed by students and even their lecturers.

In the EDP 101 classroom, although English was the medium of instruction, most B. Ed students and lecturers were more comfortable with using French than non B. Ed students. This result shows the mismatch of the official medium of instruction with the language used by lecturers and students. Language barriers are likely to obstruct curriculum delivery and receptivity. Most B. Ed students interviewed said that they were very focused on language issues rather than the

course content. Indeed, they performed much better in English than they did in psychology despite their strong background knowledge of the latter.

Another element of difference between non B. Ed and B. Ed students is that B. Ed students coped easily with lecturers in terms of reciprocal communication because they shared the same language barriers with regard to the language of instruction. This may explain why a great majority of B. Ed students (79.4%) and only 51.4% non B. Ed students reported that the language used by their lecturers greatly facilitated their learning of EDP 101. Moreover, non B. Ed (68.4%) reported that they were more comfortable talking with lecturers than B. Ed students (50%) probably because this oral communication was conducted in English. In this case, those who are comfortable in English do not have any inhibitions before lecturers and colleagues and are likely to be more communicative than their counterparts whose knowledge of English is limited. Due to their prior knowledge in the subject matter before joining KIE, B. Ed students (76.5%) found that the course content was not really difficult while non B. Ed students who felt the same way numbered 65.8%.

With regard togeneral classroom conditions, the majority of B. Ed students (70.6%) reported that they were not comfortable with studying the course in an overcrowded classroom while non B. Ed students who were not comfortable with that were 58.8%. Furthermore, B. Ed students (64.7%)evaluated the classroom conditions in which they were taught EDP 101 as being generally inadequate more thannon B. Ed students (54.6%) because they had, from teacher training college, the background knowledge of conditions in which effective teaching and learning should take place.

The above results explain the B. Ed students' absenteeism and non-attendance of review sessions of EDP 101 as well as their performance which seems to have been influenced by their prerequisites because they scored less well than they did in English. If students are not comfortable in class because of unfavourable classroom conditions, learning suffers and the level of student engagement is low. Lecturers were not comfortable with the classroom density either.

Lecturers recommended that the classroom density should match human and material resources as well as adequate technologies that can make large classes smaller, etc. This would enable the

implementation of effective pedagogies in situations characterised by massification. As Kuh et al. (2005) argue, effective pedagogies can be adapted to large classes by:

> Adapting various active learning pedagogies: dividing students into small groups, give them tasks, incorporate some form of technology to maintain students' attention on key concepts, require class attendance, hold students accountable by giving a quiz almost every week, use of short videos and other interactive displays and move the video camera around the classroom to make the class feel small (Kuh et al., 2005: 74)

Probably because of the prerequisites B. Ed students possessed in the education domain, they felt that the class size was not a big handicap for their learning at the proportions of 61.7% while nonB. Ed students (dealing with psychology for the first time) did at the rate of 51.3% and found the class size as a handicap. In this case, engaging pedagogies is really valuable. 85.3% of B. Ed students enjoyed group work in teaching their colleagues, while non B. Ed students who enjoyed this were 79.7% probably because of their prior knowledge. Having experience in teaching, B. Ed students enjoyed this simulation much more than those who were being taught. Thus, the teaching and learning context of the EDP 101 module was generally perceived as not favourable and this would negatively impact on students' engagement in learning.

In ELA 101 classes, all four B. Ed students studying this course and who responded to the CLASSE reported that they were more comfortable with using English than using French while 79.5% of the non B. Ed students felt the same. The lecturer was perfectly bilingual using both languages but it was obviously taught in English. The great majority of students were more comfortable with using English because this would have facilitated their learning and made their understanding of the lecture much easier.

However, while 88.6% of non B. Ed students reported that the lecturer's language had facilitated their understanding; three out of four B. Ed students said that the lecturer's language had not facilitated their understanding. All four B. Ed and a large majority (70.4%) of non B. Ed students were comfortable with talking to the lecturer because they did not have any problem with his language. However, only half (two out of four) of B. Ed students and 52.3% of non B. Ed students, felt that it was easy to follow lectures. Since communication between students and the

lecturer was conducted in the same language, difficulty in following lectures could be related to the inadequate conditions in which the teaching and learning was taking place.

Paradoxically, B. Ed students' performance in this course was much higher than that of non B. Ed students who were academically well prepared in English, and communication with the lecturer facilitated their understanding. Another paradox is that all four B. Ed students found the course content easy while 47.7% of the non B. Ed students felt the course content was easy. Surprisingly, more than half (52.3%) of non B. Ed students with a strong background in English found it difficult. This result indicates that B. Ed students devoted effort and energy studying English and found it easy while non B. Ed students who were more knowledgeable in English were less engaged in the course. This is because they felt overconfident and therefore spent less time, effort and energy studying English and ended up failing the course.

This result is consistent with the testimony of the lecturer of this course that B. Ed students were more engaged in learning the course than non B. Ed students. It is also consistent with the finding that B. Ed students performed better than their counterparts, non B. Ed students in this course. This can also be interpreted in the light of beliefs that student teachers hold towards teaching as well as the role of teacher identity in learning for the career. It was previously shown that B. Ed students hold a more positive image of the career than non B. Ed students and that these beliefs have a great impact on the way students go about learning for the profession.

B. Ed students studying ELA 101 are self-regulated learners because they deliberately invested themselves by putting much effort to deepen and manipulate the content while being concentrated and motivated (Corno & Mandinhach, 1983) despite unfavourable conditions. Compared with EDP 101 classes, these conditions were apparently well appreciated by 3 over 4 B. Ed students and 50% of the non B. Ed students.

Effectively, all four B. Ed students and 65.9% of the non B. Ed students reported that the class size was a small handicap, and thus not a hindrance to their learning. The majority of both groups of students also enjoyed working in groups because B. Ed students were benefiting from non B. Ed students.

It is clear that qualitative and quantitative data collected on whether the teaching and learning conditions were or were not adequate in terms of the classroom density seem to contradict each other. Interviews seem to indicate that teaching and learning conditions were inadequate and that this had a negative influence on the students' learning whereas quantitative data seem to soften this. The general tendency is that the teaching and learning environment of EDP 101 and ELA 101 modules were inappropriate due mostly to overcrowded classrooms.

In both courses under investigation, the quality of teaching was perceived by almost all students in both groups as good. Lecturers were generally described as very good, knowledgeable, competent, professional, and helpful. Aspects which received more credit are the way lecturers motivate students, make their teaching interesting, and their ability to make the lessons concrete. In terms of feedback received, both groups of students said that lecturers rarely provided prompt feedback because of the large number of students.

In sum, this study found that the teaching and learning environment was perceived by both B. Ed and non B. Ed students as not fostering student engagement in both EDP 101 and ELA101 modules. Human and material resources were not adequate. There was lack of effective didactic communication due to barriers in the medium of instruction, especially in EDP 101 classes. The physical space was not big enough to accommodate all the students. The inadequacy of the teaching and learning environment at KIE led to lack of interest, motivation, discouragement, disengagement, and frequent absenteeism, especially for those whose teacher identity was at its embryonic stage of formation, i.e. non B. Ed students.

Lecturers also viewed the teaching and learning environment as being inappropriate for the same reasons as those given by students which decrease the level of student engagement. It therefore negatively affects the classroom interactions as well as the amount of time that students spend in activities of learning.

11.5 First year Classroom Interactions at KIE

In the EDP 101 course, interactions between students and lecturers were explored by looking at how lecturers were involving students through "inferred cognitive students-lecturer interactions"

which set high standards or expectations, providing adequate workload and timetable, challenging students academically, and providing them with adequate skills for their personal development as prospective teachers and how lecturers were communicating interactively with students.

In both courses, interviews revealed that in general most of the B. Ed and non B. Ed students were not aware of the goals to be attained and the workload was quite favourable. It is however recommended that teachers set high academic expectations and provide support to assist students in meeting these standards (Kuh et al., 2005). Non B. Ed students cognitively interacted with lecturers more than B. Ed students because they were academically more challenged.

Working hard and being challenged indicate effort devoted to learning. Exam questions were viewed as quite challenging for those with fewer prerequisites and reported to have worked harder than they thought they could. Effectively, involving students in learning supposes also that teachers prepare the course materials and exam questions that challenge enough students. Challenging students academically is one way of engaging them in the learning process because "academic challenge represents a range of activities from time spent studying to the nature of intellectual and academic tasks students are expected to perform at high levels of accomplishment" (Kuh et al., 2005: 177).

It was found that the EDP 101 course empowered students with knowledge that contributed to their personal development and equipped them with skills that helped them to become efficient teachers. This result suggests that non B. Ed students who were mostly lacking this knowledge and skills interacted with lecturers on this aspect more than B. Ed students. Both groups of students acknowledged that EDP 101 had equipped them with necessary skills to be good teachers, and they also felt that all lecturers including those of ELA 101 were good models. Both interviews and survey came to the same conclusion that EDP 101 exam questions required deep reading and understanding. In EDP 101 classes, interactive communication between students and their lecturers was rare in both groups of students, but this occurred more frequently with B. Ed than it did with non B. Ed students. The rarity of interactive communication is interpreted within the transmissive mode of teaching that is dominant.

Due to overcrowded classes in both courses, the teaching and learning approach took a quantitative orientation to the transmission and increase of knowledge, suggesting thus surface approach to learning (Biggs, 1987) mostly for non B. Ed students who are extrinsically motivated to pass exams for certification purposes while B. Ed are intrinsically motivated to master courses. The quantitative orientation to teaching led to multiple choices of assessment formats in EDP 101, and it was noted that the feedback on the students' academic performance was rare or non-existent.

KIE first year classes in both EDP 101 and ELA 101 courses were characterised by features such as the transmission mode of teaching, lack of intense and rich interactive communication, barriers in the language of instruction for both students and lecturers, as well as a pedagogically unmanageable class size. These constituted the main causes of the rarity of interactive communications and feedback, and this impacted negatively on student engagement and success.

In the above situation, Gilbert (1995) notes that the big problem that students suffer from large class lectures is that they are anonymous. This author characterises large classes as often involving lectures, little interaction, and multiple choice examinations. Interviews with students and lecturers in this study confirmed these remarks.

In ELA 101classes, the "inferred cognitive student-lecturer interactions" described above were not absent. Peer interactions often occurred. Three out of four B. Ed students made class presentations while fewer non B. Ed did so, probably because of their unwillingness to demonstrate their teaching skills and expose their spoken English.

In sum, in both modules, B. Ed students interacted with lecturers and with the course more than non B. Ed students. Therefore, they were more engaged than their counterpart non B. Ed students, and marks obtained in these courses confirmed this finding.

11.6 Time and Effort spent in Learning and Institutional Conditions of Student Engagement

Time spent in learning is an important factor that predicts student engagement. Sanderson (1976) as cited in Fredric and Walberg (1980: 189) notes that "time spent relates to whether students

favour instruction, are involved, and have goals". This is what generally characterised B. Ed students in both modules that this study investigated.

However, in EDP 101, non B. Ed students attended classes and reviewed sessions more than B. Ed students who reported to have spent much time preparing for the next class meeting, and were much deeper dealing with the course by doing their own research. B. Ed students' low level of attendance was attributed to unfavourable classroom conditions which brought them to consider attending as a waste of time, and to their overconfidence in the course. Indeed, in large classes, students enjoy low pressure, sense of independence, and the anonymity of attendance (Gilbert, 1995). They were even less engaged in taking notes because they had prerequisites.

Physical participation preparing for and attending classes and review sessions means ipso facto devoting time and energy to learning activities while at the same time being cognitively engaged with the course of study. This research found that B. Ed students spent more time preparing for EDP 101 classes than non B. Ed but, the latter spent more time than the former attending both classes and review sessions. Unfavourable classroom conditions together with overconfidence constituted the main reasons for the lack of physical participation of B. Ed students.

In the ELA 101 course, all four B. Ed students who responded to the CLASSE spent more than 3 hours preparing for the next class session while only 65.9% of non B. Ed students who, through overconfidence, spent less time. B. Ed students were more regular attending and taking notes in class than non B. Ed students. This was evidenced by their higher performance.

Therefore, if both students with strong background in English and those without such background often and very often revised their English notes, and if the former scored 62.3% when the latter scored 70.1%, then we can conclude that the former have adopted a surface while the latter adopted a deep approach to learning. But also the former did not meet the assessment criteria defined by the lecturer while the latter could predict materials likely to be evaluated because they are also teachers.

In both courses, B. Ed students devoted more time and effort to learning than non B. Ed students. Because the literature indicates that time and effort devoted to learning indicate student

engagement when student engagement leads to greater learning outcomes, those who devoted more time and energy were more engaged and therefore performed better.

Whereas strong background knowledge of psychology influenced B. Ed students to be absent from EDP 101 classes and review sessions, weak background knowledge in English stimulated them to attend classes and review sessions, take notes, and study with classmates more frequently than non B. Ed students with strong background in English. In fact, both groups shifted their participation. Participation in these educationally purposeful activities was most frequent in the module in which students had fewer or no prerequisites and less frequent in the module in which they had enough prerequisites.

Although B. Ed students' performance in psychology was higher (65.1%) than that of non B. Ed students (60.8%), it was very much lower than their performance in English (70.1%). Non B. Ed students' score of performance in English (62.3%) was nearly equal to their score of performance in psychology. These results show that in teacher education, strong academic background in a subject matter may lead to overconfidence which decreases the level of participation in activities related to time and effort. Consequently, their performance was low. Inversely, the level of engagement increases if students recognise their weaknesses in the subject matter because they strive to fill the felt gap. Consequently, their performance is higher.

Moreover, institutional conditions that enhance student engagement at KIE were found insufficient or even non-existent by both students and lecturers interviewed. There were very large classes, lack of tutorial assistants and other material resources such as well-equipped libraries, sufficient computers and reliable internet connection, etc.

11.7 Cognitive Skills of Student Engagement Focused on at KIE

The extent to which B. Ed and non B. Ed students viewed EDP 101 and ELA 101 courses emphasising five cognitive skills (memorisation, analysis, synthesis, evaluation, and application) depended largely on their academic background. For B. Ed students, EDP 101 emphasised application and focused less on the other four skills. This perception could be due to the fact that they assimilated educational psychology theories to their experience in classroom practices as

primary school teachers, which also helped them develop their teacher identity. Their previous experiences in teacher education could have influenced their perceptions of the other skills. Their views were opposed to those of non B. Ed students without any practical reference to teaching. Lecturers however believed that the students required all five skills to be successful.

For the ELA 101 course, B. Ed students said that the course emphasised memorisation more than non B. Ed students but both categories of students perceived in almost the same proportions the emphasis made on the other cognitive skills. It is worth noting that, for each of these courses, memorisation was perceived as being less emphasised by students without a strong background in it.

11.8 Limitations of the Research

While the current literature on student engagement has compared various institutions of higher education which might have different student and environmental characteristics (such as age, race, ethnicity, public or private, rural or urban, college or university, admission procedures, or socio-economic and cultural ethos), and without considering students' particular fields of study, the present study is limited to the public institution called Kigali Institute of Education.

This research which investigates the first year student engagement at KIE is limited at the classroom level to two specific courses. It uses interviews, document analysis, and CLASSE instrument as methods of data gathering. These methods are imposed by the nature of the research questions. The analysis of quantitative data collected by means of the CLASSE instrument was limited to descriptive statisticsto answering the fourth, fifth, and sixth research questions as listed above in the Chapter One. In fact, the aim was understand how first year B. Ed and non B. Ed students effectively engage in learning common courses.

Inferential statistics were not used throughout the whole study due to the nature of the study as a case study, the research population and samples as well as the nature of the research questions which do not suggest extrapolations of the results from the CLASSE instrument. Inferential statistics have been only used to compare B. Ed or mature and non B. Ed or school leaver students' performances from data collected by document analysis, i.e. B. Ed and non B. Ed

students' marks obtained in courses studied together in order to answer the first research question whilst interviews have been used to answer the second and third research questions.

Therefore, broad generalisations cannot be made from a single case study, i.e. KIE. This research provides understanding of student engagement and success in a public post-secondary teacher education institution of a developing country where some students are professionally prepared from high school while others are not. This mode of teacher preparation is frequent in developing countries where primary teachers are trained at the high school level. The implication is that, at tertiary level, primary teachers furthering studies in education study together with those students just entering teacher preparation.

11.9 Recommendations

11.9.1 The Route to Enhancing Student Engagement in Teacher Education at KIE

The present study draws from the current literature in the field of student engagement and informs the Ministry of Education, the KIE administration, as well as the faculty members about areas of emphasis for the improvement of quality undergraduate teacher education in Rwanda. In fact, these areas foster student engagement which leads to effective learning.

11.9.1.1 The Ministry of Education and KIE Administration

There is evidence that the teaching and learning of common modules will continue to be done in large classes at KIE due to increased number of candidates and financial constraints. Therefore, there is a need to focus on the creation of an engaging learning environment because, as Altbach (1997)cited in Kezar and Kinzie (2006) indicates, such large class sizes imply the lecture method, increased separation of faculty and students, and a decline in classroom interactions. This situation creates an impersonal and passive learning environment which is less likely to create learning (Astin, 1993; Chickering & Gamson, 1987; Pascarella & Terenzini, 1991). Furthermore, an engaging learning environment also includes sufficient physical space, human and material/equipment resources which need to be improved at KIE. Tutorial Assistants

(TAs)should be recruited to help in providing students with enriching and challenging educational experiences because such experiences are successful in engaging students. In this regard, assessment will not consist mainly in multiple choice formats but will engage students in higher forms of learning such as analysing, synthesising, and evaluating. In effect, Zepke and Leach (2010) found that students engaged in these forms of learning tended to be more engaged. Consequently, an advice is given that "teachers need to create rich educational experiences that challenge students' ideas and stretch them as far as they can go" (Zepke & Leach, 2010: 171). Achieving this goal contributes to quality teacher undergraduate education at KIE.

KIE needs to focus on the three principles of a quality undergraduate education (Kezar & Kinzie, 2006) which have been termed "student engagement" (Kuh, 2001as cited in Kezar & Kinzie, 2006). These are:

> (a) Quality begins with an organisational culture that values high expectations, respect for diverse learning styles, and emphasis on the early years of study; (b) Quality undergraduate curriculum requires coherence in learning, synthesising experiences, on-going practice of learned skills, and integrating education with experience; (c) Quality undergraduate instruction builds in active learning, assessment and prompt feedback, collaboration, adequate time on task, and out of class contact (Education Commission of the States (ECS), 1995 as cited in Kezar & Kinzie, 2006: 149).

These activities and practices (contact with faculty, collaboration, integrating education and experience, or high expectations) are mechanisms that create engagement (Kezar & Kinzie, 2006). This is understood as the time and energy that students devote to educationally purposeful activities and the extent to which the institution gets students to participate in activities that lead to student success (Kuh, 2003).

KIE administration and faculty members should therefore ensure that the above mechanisms are in place and that all the teaching, learning, and research activities aim at achieving the institutional mission statement. KIE should match its mission with its educational purposes giving direction to all aspects of institutional life, including policies and practices that foster student success (Kuh et al., 2005).

In fact, a study by Kezar and Kinzie (2006) focussing on the mission and its role in understanding how institutions might approach the process of creating student engagement on campus found the mission being a richer tool for understanding the ways campus enacted the programme, policies, and practices related to engagement. More specifically, "the mission was related to the way that these institutions develop faculty-student interaction, active and collaborative learning, and supportive campus environments" (Kezar & Kinzie, 2006: 159).

Research studies highlighted properties and conditions that enable student engagement to flourish and help to create institutional cultures that promote student success (Kuh et al., 2005; Strydom & Mentz, 2010; Strydom,Basson, & Mentz, 2012) which are common to engaging institutions that KIE should also emphasise. These are a living mission and lived philosophy, an unshakeable focus on student learning, creating learning environments that promote educational enrichment, clarifying the pathways that maximise student success, facilitating an improvement-oriented institutional culture and ethos, and making sure that the quality of learning and student success is owned by everyone in the institution.

With regard to the mission of the institute, a lecturer interviewed pointed out that KIE should be training student teachers in one programme: Bachelor of Education in various fields of study. This would enhance and create students' awareness of their ultimate role as teachers, and form and strengthen student teachers' professional identity. All students admitted to KIE would feel a sense of belonging in the community of teaching which would enhance student engagement in learning for the career.

B. Ed students (from the TTC section) would continue to study with those from other sections in their subjects of interest. However, as they have advanced skills in the field of education when compared to others, they should rather specialise in the field of education such as administration of education, early childhood education, guidance and counselling, etc. and their exit profile should be oriented to Teacher Training Colleges and Colleges of Education, as well as in the school leadership and management sector. Non B. Ed students will continue to specialise in their respective fields of study.

Since it is at this level where professional teacher identity is developed, and given the fact that teachers tend to teach the way they have been taught (Hopper, n.d; Frank, 1990; Handler, 1993), it is imperative that teacher educators and student teachers be exposed to an engaging teaching and learning environment through teacher preparation programmes as they build a professional teacher identity. In so doing, "these programmes guide teacher candidates in developing a positive teacher identity so that they can eventually become effective teachers in the classroom" (Chong & Low, 2009: 70) after KIE.Therefore, KIE should promote conditions that foster student engagement which leads to effective learning and success.

Moreover, as was shown in this thesis, the nature of students' beliefs about the teaching profession plays an important role in determining the way they engage in learning for the career. The Government of Rwanda should, as it has started, put more effort in improving primary and secondary teachers' working conditions which,Nzabalirwa and Nkiliye (2012) found extremely poor. They recommend that the Government should give incentives to motivate teachers and make their career more attractive like housing and transport as well as the 'One Laptop per Teacher' as there is already 'One Laptop per Child' programme.

More viable conditions of teachers would contribute to positive beliefs about teaching and the teaching profession by student teachers. In addition to UMWALIMU SACCO cooperative, an incentive such as a salary increment for schools which have performed well could help. In fact, there is a valuable reason to positively influence student teachers' beliefs. If teacher education has to play its vital role of positively transforming the society in all spheres of the country life, more inputs are needed to enable the teaching profession to be joined by intrinsic and altruistic motives which, according to Chong, Low, & Goh (2011), are important influences in driving teacher candidates into teaching. If teachers teach because they could not do otherwise, then the outcomes, i.e. laureates are not the products of the quality education that the Ministry of Education tends to promote. Lecturers also play a key role in shaping the teaching identity.

The recruitment of lecturers by KIE administration should meet students' expectations for them to engage in large classes. In fact, students prefer instructors who are qualified, experienced or very knowledgeable in organising, conducting, and evaluating large classes, advises Gilbert

(1995). He continues saying that "instructors who are enthusiastic, dynamic, speak well, maintain attention and hold interest are regarded by students as effective" (Gilbert, 1995: n.p).

11.9.1.2 KIE Faculty Teaching Staff

This study indicates an area of emphasis that lecturers at KIE should focus on most in preparing effective teachers for Rwandan schools. This area is student engagement because it is vital for students' effective learning and success. In effect, "student engagement is a precious energetic resource, not only for students, but also for teachers' own enjoyment and engagement in teaching" (Skinner & Pitzer, 2012: 37). The study highlights aspects that lecturers at KIE should insist on to foster student engagement. These aspects are students' beliefs about the teaching profession together with their academic background, the enhancement of student-lecturers and peer interactions, time and effort, as well as activities that involve most students in learning, and effectively dealing with large classes by making them more personal. On this element, Gilbert gives important advice that:

> Although more difficult than in a small class, it is possible to have meaningful contact with students in a large class. There is emerging evidence that student involvement, faculty-student contact and personal rapport do occur in some large classes. Being personal, preventing students from feeling insignificant and anonymous, and staying in touch with TAs are all key aspects of effective large class instruction (Gilbert, 1995: n.p)

In practice, Zepke and Leach (2010) highlight ten proposals for action to improve student engagement which, in my understanding, should be recommended to the Government of Rwanda through the Ministry of Education, KIE administration, and faculty staff members. These are:

> (1) Enhance students' self-belief; (2) Enable students to work autonomously, enjoy learning relationships with others and feel they are competent to achieve their own objectives; (3) Recognise that teaching and teachers are central to engagement; (4) Create learning that is active, collaborative and fosters learning relationships; (5) Create educational experiences for students that are challenging, enriching and extend their academic abilities; (6) Ensure institutional cultures are welcoming to students from diverse backgrounds, (7) Invest in a variety of support services; (8) Adapt to changing student expectations; (9) Enable students to become active

citizens; and (10) Enable students to develop their social and cultural capital (Zepke & Leach, 2010: 169).

In effect, the above authors note that the students' self-belief is a key attribute in motivation for engagement in active learning and that intrinsic motivation assists self-determination which enables individuals to meet competence, autonomy and motivational needs. An explanation for this is that students in institutions that provide these above opportunities "are more likely to be motivated, to engage and succeed" (Zepke & Leach, 2010). Also importantly, the Ministry of Education and KIE administration should highlight the fact that Kuh et al. (2006), as cited in Zepke and Leach (2010: 170) "place teaching and teachers at the heart of engagement". Ameliorating the teachers' living conditions would surely and positively influence student teachers' attitude towards teaching and the teaching profession.

11.9.2 Focus for Further Research

The present study specifically focused on an unexplored area of student engagement in teacher education with Kigali Institute of Education in Rwanda as a case study. Further research in the area could look at:

- Student engagement in teacher education at the Kigali Institute of Education surveying junior and senior students in common courses. This study would provide insights on the extent to which the teacher education programme shapes the professional teacher identity of student teachers with and without professional preparation at two levels, i.e. at the entrance and at the exit of the teacher education programme. This study would provide knowledge on the similarities and differences between these two groups of students and identify areas of emphasis throughout teacher training in order to promote student engagement in teacher education.

- Student engagement in teacher education at the Kigali Institute of Education surveying junior and senior B. Ed and non B. Ed students in courses studied separately. This study would provide insights about the role and importance played by the teacher education

programme in the formation of professional teacher identity because these courses are disciplinary oriented within the teacher education programme. They are specific to the field of study for instance Chemistry, Physics, Biology, Mathematics, French, Swahili, English, Drama, or Education like Primary Teaching Methods (EDT 101) for B. Ed students is. Senior non B. Ed students' results would provide knowledge about possible changes in their perceptions about teaching and the teaching profession.

- Student engagement in Colleges of Education. This study would also provide knowledge on student engagement in KIE's affiliated colleges of education.

- Student engagement in Teacher Training Colleges (Grade 10 to 12). This study would provide knowledge on how students psychologically invest in and devote time and effort towards learning for the teaching career at their initial preparation for primary teaching.

- Because international research has shown that a focus on student engagement can help to enhance student learning and other desired outcomes as well as the efficiency and effectiveness of higher education systems (Strydom, Mentz, & Kuh, 2010), a study on Rwandan Survey of Student Engagement that surveys higher learning institutions is recommended for the improvement of the higher education system in Rwanda as it has recently been with the South African Survey of Student Engagement. This will allow the Rwandan education system to be nationally and internationally benchmarking with the developed countries' education systems.

11.10 Conclusion

In this research, it was claimed that, at Kigali Institute of Education in Rwanda, the level of student engagement is higher for B. Ed than non B. Ed students. In fact, it was assumed that students with pedagogical preparation prior to post-secondary teacher education engage and succeed better than those without such background in first year courses/modules that they study together in a teacher education programme.

The argument is that, in the post-secondary teacher education domain, students' academic background influences their beliefs about teaching and the teaching profession which impact on the way they perceive the teaching and learning environment or context, their interactions with lecturers and peers in educationally purposeful activities as well as the amount of time and the quality of effort they devote to activities of learning for the career, thus determining student engagement which in turn determines their performance in their first year of College or University.

This research provides evidence. It was found that in post-secondary teacher education at KIE, professional experienceprior to KIE is associated with good performance in both courses in which students had or did not have strong background. In fact, B. Edstudents with such experience are likely to have high level of social and academic integration, which presumes high level of engagement. Students without professional teacher identity performed lower even in courses in which they had strong background knowledge. This phenomenon was observed with 2008 mature and school leaver students as well as 2010 B. Ed and non B. Ed students. In fact, students with pedagogical preparation have acquired their professional teacher identity which allows them to cope with and be fully involved in learning for the teaching career.They joined teaching with intrinsic motives. Most others joined teacher education for extrinsic reasons, and are therefore less engaged in learning for this career. Consequently, their performance is low.

This study found that professional preparation is an advantage to engaging and succeeding in common professional and non-professional courses of the teacher education programme. In effect, students coming with teacher identity hold positive beliefs about the career they are being trained for despite difficult contextual conditions such as low salaries. They are likely to perceive positively the teaching and learning context because of their facility in academic and social integration and they also interact more frequently with lecturers and peers in educationally purposeful activities.

In addition, this study found that in a psychology course, most students and lecturers at KIE experienced similar language problems. They were forced to use English while their language proficiency was French. In English, the lecturer and students' language was matching, indicating

thus a relatively good communication, and partly justifying B. Ed students' performance in this course. They were proud to master this language which would be used after KIE in their senior teaching position. They spend much time and energy studying the course than others who seem to be overconfident and end up by performing poorly.

Interviews and survey instrument data as well as marks obtained at KIE indicated that students with pedagogical preparation prior to KIE seemed to have engaged at a higher level than those without such background. Besides environmental factors including low pay and the classroom density, psychological factors of student engagement such as motivation, sense of belonging to the education domain, teaching identity and beliefs held about the career are the main reasons for this phenomenon.

On the one hand, B. Ed students with pedagogical preparation havealready formed their teaching identity which seems to put them ahead par rapport to non B. Ed students just entering teacher education for whom the teaching identity is at its embryonic stage during the first year of teacher education. On the other hand, non B. Ed students joined the programme unwillingly and do not feel they belong to the teaching community. They are strongly de-motivated by the low pay of teachers, have negative beliefs about the profession, and interact with their lecturers and peers less frequently. Thus, student engagement in teacher education at Kigali Institute of Education in Rwanda is mainly influenced by the indecent socio-economic conditions of teachersand the classroom density.

In sum, being professionally prepared to teach since high school, student engagement and success is likely to be higher for B. Ed students already predisposed to perform the teaching profession at higher grades than non B. Ed students who mostly entered teacher education with extrinsic motives. The former hold positive beliefs about the career, have good perceptions of the context despite the low salary of teachers, devote much time and energy studying for the career, and frequently interact with lecturers and peers more than the latter for whom teacher identity at its embryonic stage of formation is hampered by motivational conflicts which are not of the nature of enhancing students' investment in learning. Most of them were not willing to do education but because they could not do otherwise, they finally accepted it for degree purposes.

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APPENDICES

APPENDIX A: Original CLASSE$_{STUDENT}$

CLASSE$_{STUDENT}$
Classroom Survey of Student Engagement*

Insert University Logo Here

This survey includes items that ask about your participation in [Course XYZ] and about educational practices that occur in this class. Your honest and straightforward responses to these questions will help us identify targets for improvements and enable us to provide an even higher quality academic experience.

PART I: ENGAGEMENT ACTIVITIES

So far this semester, how often have you done each of the following in your [Course XYZ] class?

	Never	1 or 2 times	3 to 5 times	More than 5 times
1. Asked questions during your [Course XYZ] class	☐	☐	☐	☐
2. Contributed to a class discussion that occurred during your [Course XYZ} class	☐	☐	☐	☐
3. Prepared two or more drafts of a paper or assignment in your [Course XYZ] class before turning it in	☐	☐	☐	☐
4. Worked on a paper or a project in your [Course XYZ] class that required integrating ideas or information from various sources	☐	☐	☐	☐
5. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments in your [Course XYZ] class	☐	☐	☐	☐
6. Came to your [Course XYZ] class without having completed readings or assignments	☐	☐	☐	☐
7. Worked with other students on projects **during** your [Course XYZ] **class**	☐	☐	☐	☐
8. Worked with classmates **outside of** your [Course XYZ] **class** to prepare class assignments	☐	☐	☐	☐
9. Put together ideas or concepts from different courses when completing assignments or during class discussions in your [Course XYZ] class	☐	☐	☐	☐
10. Tutored or taught other students in your [Course XYZ] class	☐	☐	☐	☐
11. Used an electronic medium (list-serv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment in your [Course XYZ] class	☐	☐	☐	☐
12. Used email to communicate with the instructor of your [Course XYZ] class	☐	☐	☐	☐
13. Discussed grades or assignments with the instructor of your [Course XYZ] class	☐	☐	☐	☐
14. Discussed ideas from your [Course XYZ] with others outside of class (students, family members, coworkers, etc.)	☐	☐	☐	☐

SAMPLE

15. Made a class presentation in your [Course XYZ] class
☐ Never ☐ Once ☐ 2 times ☐ More than 2 times

16. Participated in a community-based project (e.g., service learning) as part of your [Course XYZ] class
☐ Never ☐ Once ☐ 2 times ☐ More than 2 times

17. Discussed ideas from your readings or classes with your [Course XYZ] instructor outside of class
☐ Never ☐ Once ☐ 2 times ☐ More than 2 times

18. Received prompt written or oral feedback on your academic performance from your [Course XYZ] instructor
☐ Never/Rarely ☐ Sometimes ☐ Often ☐ Very Often

19. Worked harder than you thought you could to meet your [Course XYZ] instructor's standards or expectations
☐ Never/Rarely ☐ Sometimes ☐ Often ☐ Very Often

PART II: COGNITIVE SKILLS

So far this semester, how much of your coursework in your [Course XYZ] class emphasized the following mental activities?	Very Little	Some	Quite a Bit	Very Much
20. **Memorizing** facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	☐	☐	☐	☐
21. **Analyzing** the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	☐	☐	☐	☐
22. **Synthesizing** and organizing ideas, information, or experiences into new, more complex interpretations and relationships	☐	☐	☐	☐
23. **Making Judgments** about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	☐	☐	☐	☐
24. **Applying** theories or concepts to practical problems or in new situations	☐	☐	☐	☐

SAMPLE

PART III: OTHER EDUCATIONAL PRACTICES

So far this semester

25. How often in your [Course XYZ] class have you been required to prepare written papers or reports of more than 5 pages in length?
☐ Never ☐ Once ☐ 2 times ☐ 3 or more times

26. To what extent do the examinations in your [Course XYZ] class challenge you to do your best work?
☐ Very little ☐ Some ☐ Quite a bit ☐ Very much

27. In a **typical week** in your [Course XYZ] class, how many homework assignments take you more than one hour each to complete?
☐ None ☐ 1 or 2 ☐ 3 or 4 ☐ 5 or more

28. In a **typical week**, how often do you spend more than 3 hours preparing for your [Course XYZ] class (studying, reading, doing homework or lab work, analyzing data, rehearsing, and other academic matters)?
☐ Never/Rarely ☐ Sometimes ☐ Often ☐ Very Often

29. How many times have you been absent so far this semester in your [Course XYZ] class?
☐ None ☐ 1 - 2 absences ☐ 3 – 4 absences ☐ 5 or more absences

30. How frequently do you take notes in your [Course XYZ] class?
☐ Never/Rarely ☐ Sometimes ☐ Often ☐ Very Often

31. How often do you review your notes prior to the next scheduled meeting in your [Course XYZ] class?
☐ Never/Rarely ☐ Sometimes ☐ Often ☐ Very Often

32. How often have you participated in a study partnership with a classmate in your [Course XYZ] class to prepare for a quiz or a test?
☐ Never ☐ Once ☐ 2 times ☐ 3 or more times

33. How often have you attended a review session or help session to enhance your understanding of the content of your [Course XYZ] class?
☐ Never ☐ Once ☐ 2 times ☐ 3 or more times

34. How interested are you in learning the [Course XYZ] course material?
☐ Very uninterested ☐ Uninterested ☐ Interested ☐ Very Interested

PART IV: CLASS ATMOSPHERE

So far this semester, what are your general impressions of the [Course XYZ] class atmosphere?

35. How comfortable are you talking with the instructor of your [Course XYZ] class?
☐ Uncomfortable ☐ Somewhat Comfortable ☐ Comfortable ☐ Very Comfortable

36. How much do you enjoy group work with your classmates in your [Course XYZ] class?
☐ Very Little ☐ Some ☐ Quite a Bit ☐ Very Much

37. How difficult is the course material in your [Course XYZ] class?
☐ Easy ☐ Somewhat Difficult ☐ Difficult ☐ Very Difficult

38. How easy is it to follow the lectures in your [Course XYZ] class?
☐ Difficult ☐ Somewhat Easy ☐ Easy ☐ Very Easy

PART V: OPTIONAL [COURSE XYZ] ITEMS

So far this semester

39. [Course XYZ] class unique item #1
☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

40. [Course XYZ] class unique item #2
☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

41. [Course XYZ] class unique item #3
☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

42. [Course XYZ] class unique item #4
☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

43. [Course XYZ] class unique item #5
☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

SAMPLE

44. [Course XYZ] class unique item #6

☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

45. [Course XYZ] class unique item #7

☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

46. [Course XYZ] class unique item #8

☐ Option 1 ☐ Option 2 ☐ Option 3 ☐ Option 4

PART VI: DEMOGRAPHICS

47. How many credit hours are you enrolled in this semester?

☐ 1–6 credit hours ☐ 7–11 credit hours ☐ 12-15 credit hours ☐ >15 credit hours

48. What is your classification?

☐ Freshman (<30 hrs) ☐ Sophomore (30-59 hrs) ☐ Junior (60-89 hrs) ☐ Senior (90+ hrs)

49. What is your academic major?

Thank you for taking the time to complete this survey

SAMPLE

*** This survey is an adaptation of the National Survey of Student Engagement (NSSE) with permission from Indiana University.**

APPENDIX B: Original CLASSE$_{FACULTY}$

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CLASSE$_{FACULTY}$
Classroom Survey of Student Engagement*

This survey asks about your perception of the importance of various activities and practices occurring in your [Course XYZ] class. Your honest and straightforward responses to these questions will help us to identify targets for improvements within the course.

SAMPLE

For students to be successful in your [Course XYZ] class, how important is it that they	Not Important	Somewhat Important	Important	Very Important
1. Ask questions during your [Course XYZ] class	☐	☐	☐	☐
2. Contribute to class discussions that occur during your [Course XYZ} class	☐	☐	☐	☐
3. Prepare two or more drafts of a paper or assignment in your [Course XYZ] class before turning it in	☐	☐	☐	☐
4. Work on a paper or a project in your [Course XYZ] class that requires integrating ideas or information from various sources	☐	☐	☐	☐
5. Include diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments in your [Course XYZ] class	☐	☐	☐	☐
6. Come to your [Course XYZ] class having completed readings or assignments	☐	☐	☐	☐
7. Work with other students on projects **during** your [Course XYZ] **class**	☐	☐	☐	☐
8. Work with classmates **outside of** your [Course XYZ] **class** to prepare class assignments	☐	☐	☐	☐
9. Put together ideas or concepts from different courses when completing assignments or during class discussions in your [Course XYZ] class	☐	☐	☐	☐
10. Tutor or teach other students in your [Course XYZ] class	☐	☐	☐	☐
11. Use an electronic medium (list-serv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment in your [Course XYZ] class	☐	☐	☐	☐
12. Use email to communicate with you as the instructor of your [Course XYZ] class	☐	☐	☐	☐
13. Discuss grades or assignments with you as the instructor of your [Course XYZ] class	☐	☐	☐	☐
14. Discuss ideas from your [Course XYZ] with others outside of class (students, family members, coworkers, etc.)	☐	☐	☐	☐

	Not Important	Somewhat Important	Important	Very Important
15. Make a class presentation in your [Course XYZ] class	☐	☐	☐	☐
16. Participate in a community-based project (e.g., service learning) as part of your [Course XYZ] class	☐	☐	☐	☐
17. Discuss ideas from your [Course XYZ] readings or classes with you outside of class	☐	☐	☐	☐
18. Receive prompt written or oral feedback from you on their academic performance in your [Course XYZ] class	☐	☐	☐	☐
19. Work harder than they think they can to meet your standards or expectations in your [Course XYZ] class	☐	☐	☐	☐

PART II: COGNITIVE SKILLS

How important is it to you that the coursework in your [Course XYZ] class emphasize the following mental activities?	Not Important	Somewhat Important	Important	Very Important
20. **Memorizing** facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	☐	☐	☐	☐
21. **Analyzing** the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	☐	☐	☐	☐
22. **Synthesizing** and organizing ideas, information, or experiences into new, more complex interpretations and relationships	☐	☐	☐	☐
23. **Making Judgments** about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	☐	☐	☐	☐
24. **Applying** theories or concepts to practical problems or in new situations	☐	☐	☐	☐

PART III: OTHER EDUCATIONAL PRACTICES

For students to be successful in your [Course XYZ] class, how important is it that they	Not Important	Somewhat Important	Important	Very Important
25. Prepare written papers or reports of more than 5 pages in length in your [Course XYZ] class?	☐	☐	☐	☐
26. Are challenged to do their best work on the examinations they have in your [Course XYZ] class	☐	☐	☐	☐
27. Have homework assignments during a **typical week** in your [Course XYZ] class that take more than one hour each to complete?	☐	☐	☐	☐
28. Spend more than 3 hours during a **typical week** preparing for your [Course XYZ] class (studying, reading, doing homework or lab work, analyzing data, rehearsing, and other academic matters)?	☐	☐	☐	☐

SAMPLE

For students to be successful in your [Course XYZ] class, how important is it that they	Not Important	Somewhat Important	Important	Very Important
29. Attend your [Course XYZ] class?	☐	☐	☐	☐
30. Take notes in your [Course XYZ] class?	☐	☐	☐	☐
31. Review notes prior to the next scheduled meeting of your [Course XYZ] class?	☐	☐	☐	☐
32. Participate in a study partnership with a classmate in your [Course XYZ] class to prepare for a quiz or a test?	☐	☐	☐	☐
33. Attend a review session or help session to enhance their understanding of the content of your [Course XYZ] class?	☐	☐	☐	☐
34. Are interested in learning the [Course XYZ] course material?	☐	☐	☐	☐

PART IV: CLASS ATMOSPHERE

How important are the following class atmosphere variables to the success of students in your [Course XYZ] class?	Not Important	Somewhat Important	Important	Very Important
35. Being comfortable talking with you as the instructor of the [Course XYZ] class	☐	☐	☐	☐
36. Enjoying group work with their classmates in your [Course XYZ] class	☐	☐	☐	☐
37. Finding the course material in your [Course XYZ] class to be difficult?	☐	☐	☐	☐
38. Finding the lectures easy to follow in your [Course XYZ] class?	☐	☐	☐	☐

PART V: OPTIONAL [COURSE XYZ] ITEMS

For students to be successful in your [Course XYZ] class, how important is it that they	Not Important	Somewhat Important	Important	Very Important
39. [Course XYZ] class unique item #1	☐	☐	☐	☐
40. [Course XYZ] class unique item #2	☐	☐	☐	☐
41. [Course XYZ] class unique item #3	☐	☐	☐	☐
42. [Course XYZ] class unique item #4	☐	☐	☐	☐
43. [Course XYZ] class unique item #5	☐	☐	☐	☐
44. [Course XYZ] class unique item #6	☐	☐	☐	☐

SAMPLE

45. [Course XYZ] class unique item #7 ☐ ☐ ☐ ☐

46. [Course XYZ] class unique item #8 ☐ ☐ ☐ ☐

PART V: DEMOGRAPHICS

47. Over the past 3 years, how many times have you taught this [Course XYZ] class?
☐ none, new course prep ☐ once ☐ twice ☐ 3 or more times

48. How many years of teaching experience do you have in higher education?
☐ less than 3 years ☐ 3 - 6 years ☐ 7-10 years ☐ 11 or more years

49. Approximately how many students are enrolled in this [Course XYZ] class?
☐ less than 15 students ☐ 15 - 30 students ☐ 31 - 60 students ☐ 61 or more students

Thank you for taking the time to complete this survey

SAMPLE

*** This survey is an adaptation of the National Survey of Student Engagement (NSSE) with permission from Indiana University.**

APPENDIX C: Adapted CLASSE$_{STUDENT}$

CLASSES$_{TUDENT}$: Classroom Survey of Student Engagement (EDP 101)

This survey includes items that ask about your participation in Introduction to Educational Psychology (EDP 101) module and about educational practices that occurred in this class. Your honest and straightforward responses to these questions will help us identify targets for improvements and enable us to provide an even higher quality academic experience.

Part I: ENGAGEMENT ACTIVITIES

So far for the first semester, how often have you done each of the following in EDP 101class?	Never	1 or 2 times	3 to 5 times	More than 5 times
1. Asked questions during your EDP 101class	□	□	□	□
2. Contributed to a class discussion that occurred during your EDP 101class	□	□	□	□
3. Prepared two or more drafts of a paper or assignment in your EDP 101class before submitting it	□	□	□	□
4. Worked on a paper or a project in your EDP 101 class that required integrating ideas or information from various sources	□	□	□	□
5. Included diverse perspectives (religions, genders, political beliefs, etc.) in class discussions or writing assignments in your EDP 101class	□	□	□	□
6. Came to your EDP 101class without having completed readings or assignments	□	□	□	□
7. Worked with other students on projects **during** your EDP 101class	□	□	□	□
8. Worked with classmates **outside of** your EDP 101classto prepare class assignments	□	□	□	□
9. Put together ideas or concepts from different courses when completing assignments or during class discussions in your EDP 101class	□	□	□	□
10. Tutored or taught other students in your EDP 101class	□	□	□	□
11. Used an electronic medium (chart group, Internet, instant messaging, etc.) to discuss or complete an assignment in your EDP 101class	□	□	□	□
12. Used email to communicate with the teacher of your EDP 101class	□	□	□	□
13. Discussed grades or assignments with the teacher of your EDP 101class	□	□	□	□
14. Discussed ideas from your EDP 101with others outside of class (students, family members, etc.)	□	□	□	□

15. Made a class presentation in your EDP 101class

□ Never □ Once □ 2 times □ More than 2 times

16. Participated in a community-based project (e.g., service learning) as part of your EDP 101class
□ Never □ Once □ 2 times □ More than 2 times
17. Discussed ideas from your readings or classes with EDP 101teacher outside of class
□ Never □ Once □ 2 times □ More than 2 times
18. Received prompt written or oral feedback on your academic performance from your EDP 101 teacher
□ Never/Rarely □ Sometimes □ Often □ Very Often
19. Worked harder than you thought you could to meet your EDP 101teacher's standards or expectations
□ Never/Rarely □ Sometimes □ Often □ Very Often

PART II: COGNITIVE SKILLS

So far for the first semester, how much of your coursework EDP 101 class emphasized the following mental activities?	Very Little	Some	Quit a Bit	Very Much
20. **Memorizing** facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	□	□	□	□
21. **Analyzing** the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	□	□	□	□
22. **Synthesizing** and organizing ideas, information, or experiences into new, more complex interpretations and relationships	□	□	□	□
23. **Making Judgments** about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	□	□	□	□
24. **Applying** theories or concepts to practical problems or in new situations	□	□	□	□

PART III: OTHER EDUCATIONAL PRACTICES
So far in the first semester

25. How often in EDP 101 class have you been required to prepare written papers or reports of more than 5 pages in length? □ Never □ Once □ 2 times □ 3 or more times
26. To what extent do the examinations in EDP 101 class challenged you to do your best work?
□ Very Little □ Some □ Quite a Bit □ Very Much
27. In a **typical week** in EDP 101 class, how many homework assignments took you more than one hour each to complete? □ None □ 1 or 2 □ 3 or 4 □ 5 or more
28. In a **typical week**, how often do you spend more than 3 hours preparing for your EDP 101 class (studying, reading, doing homework, or lab work, analyzing data, rehearsing, and other academic matters)?
□ Never/Rarely □ Sometimes □ Often □ Very Often
29. How many times have you been absent so far in the first semester in your EDP 101class?
□ None □ 1 – 2 absences □ 3 – 4 absences □ 5 or more absences
30. How frequently did you take notes in your EDP 101 class?
□ Never/Rarely □ Sometimes □ Often □ Very Often
31. How often did you review your notes prior to the next scheduled meeting in your EDP 101class?
□ Never/Rarely □ Sometimes □ Often □ Very Often
32. How often have you participated in a study partnership with a classmate in your EDP 101class to prepare for a quiz or a test? □ Never □ Once □ 2 times □ 3 or more times
33. How often have you attended a review session or help session to enhance your understanding of the content of your EDP 101 class? □ Never □ Once □ 2 times □ 3 or more times
34. How interested are you in learning the EDP 101 course material?
□ Very uninterested □ Uninterested □ Interested □ very Interested

PART IV: CLASS ATMOSPHERE

So far in the first semester, what have been your general impressions of the EDP 101 class atmosphere?

35. How comfortable are you talking with the instructor of your EDP 101 class?
□ Uncomfortable □ Somewhat Comfortable □ Comfortable □ Very Comfortable
36. How much do you enjoy group work with your classmates in your EDP 101 class?
□ Very Little □ Some □ Quite a Bit □ Very Much
37. How difficult is the course material in your EDP 101 class?
□ Easy □ Somewhat Difficult □ Difficult □ Very Difficult
38. How easy is it to follow the lectures in your EDP 101 class?
□ Difficult □ Somewhat Easy □ Easy □ Very Easy

PART V: OPTIONAL ITEMS

39. How comfortable were you when you were studying your EDP 101 if you consider the number of students in your class and the classroom arrangement?
□ Uncomfortable □ Somewhat Comfortable □ Comfortable □ Very Comfortable
40. How much is the number of students in your EDP 101 class a handicap for your better learning in class?
□ Not a Handicap □ Small Handicap □ Quite a Handicap □ Big Handicap
41. How much do you find the language used by the lecturer facilitating your understanding of the EDP 101 course content? □ Very Little □ Little □ Quite a Bit □ very Much
42. In general, how adequate are the conditions in which you are taught to enhancing your mastery learning of the course EDP 101? □ Completely Inadequate □ Less Adequate □ Quite Adequate □ Very Adequate

PART VI: DEMOGRAPHICS

43. What is your gender? □ Male □ Female
44. What is your combination? ……..
45. In general, what is the language in which you are more comfortable in listening, speaking and writing?
□ English □ French

Thank you for taking the time to complete this survey.
This survey is an adaptation of the Classroom Survey of Student Engagement, itself adapted from the National Survey of Student Engagement (NSSE) with permission from Indiana University.

CLASSE$_{STUDENT}$: Classroom Survey of Student Engagement (ELA 101)



This survey includes items that ask about your participation in Introduction to English Language and Linguistics (ELA 101) module and about educational practices that occurred in this class. Your honest and straightforward responses to these questions will help us identify targets for improvements and enable us to provide an even higher quality academic experience.

Part I: ENGAGEMENT ACTIVITIES

So far for the first semester, how often have you done each of the following in ELA 101class?	Never ⇩	1 or 2 times ⇩	3 to 5 times ⇩	More than 5 times ⇩
1. Asked questions during your ELA101class	□	□	□	□
2. Contributed to a class discussion that occurred during your ELA 101class	□	□	□	□
3. Prepared two or more drafts of a paper or assignment in your ELA 101class before submitting it	□	□	□	□
4. Worked on a paper or a project in your ELA 101 class that required integrating ideas or information from various sources	□	□	□	□
5. Included diverse perspectives (religions, genders, political beliefs, etc.) in class discussions or writing assignments in your ELA 101class	□	□	□	□
6. Came to your ELA 101class without having completed readings or assignments	□	□	□	□
7. Worked with other students on projects **during** your ELA 101class	□	□	□	□
8. Worked with classmates **outside of** your ELA 101classto prepare class assignments	□	□	□	□
9. Put together ideas or concepts from different courses when completing assignments or during class discussions in your ELA 101class	□	□	□	□
10. Tutored or taught other students in your ELA 101class	□	□	□	□
11. Used an electronic medium (chart group, Internet, instant messaging, etc.) to discuss or complete an assignment in your ELA 101class	□	□	□	□
12. Used email to communicate with the teacher of your ELA 101class	□	□	□	□
13. Discussed grades or assignments with the teacher of your ELA 101class	□	□	□	□
14. Discussed ideas from your ELA 101with others outside of class (students, family members, etc.)	□	□	□	□

15. Made a class presentation in your ELA 101class
□ Never □ Once □ 2 times □ More than 2 times

16. Participated in a community-based project (e.g., service learning) as part of your ELA 101class
□ Never □ Once □ 2 times □ More than 2 times

17. Discussed ideas from your readings or classes with ELA 101teacher outside of class
□ Never □ Once □ 2 times □ More than 2 times
18. Received prompt written or oral feedback on your academic performance from your ELA 101 teacher
□ Never/Rarely □ Sometimes □ Often □ Very Often
19. Worked harder than you thought you could to meet your ELA 101teacher's standards or expectations
□ Never/Rarely □ Sometimes □ Often □ Very Often

PART II: COGNITIVE SKILLS

So far for the first semester, how much of your coursework ELA 101 class emphasized the following mental activities?	Very Little	Some	Quit a Bit	Very Much
20. **Memorizing** facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form	□	□	□	□
21. **Analyzing** the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components	□	□	□	□
22. **Synthesizing** and organizing ideas, information, or experiences into new, more complex interpretations and relationships	□	□	□	□
23. **Making Judgments** about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions	□	□	□	□
24. **Applying** theories or concepts to practical problems or in new situations	□	□	□	□

PART III: OTHER EDUCATIONAL PRACTICES
So far in the first semester

25. How often in ELA101 class have you been required to prepare written papers or reports of more than 5 pages in length? □ Never □ Once □ 2 times □ 3 or more times
26. To what extent do the examinations in ELA 101 class challenged you to do your best work?
□ Very Little □ Some □ Quite a Bit □ Very Much
27. In a **typical week** in ELA 101 class, how many homework assignments took you more than one hour each to complete? □ None □ 1 or 2 □ 3 or 4 □ 5 or more
28. In a **typical week**, how often do you spend more than 3 hours preparing for your ELA 101 class (studying, reading, doing homework, or lab work, analyzing data, rehearsing, and other academic matters)?
□ Never/Rarely □ Sometimes □ Often □ Very Often
29. How many times have you been absent so far in the first semester in your ELA 101class?
□ None □ 1 – 2 absences □ 3 – 4 absences □ 5 or more absences
30. How frequently did you take notes in your ELA 101 class?
□ Never/Rarely □ Sometimes □ Often □ Very Often

31. How often did you review your notes prior to the next scheduled meeting in your ELA 101class?
□ Never/Rarely □ Sometimes □ Often □ Very Often
32. How often have you participated in a study partnership with a classmate in your ELA 101class to prepare for a quiz or a test? □ Never □ Once □ 2 times □ 3 or more times
33. How often have you attended a review session or help session to enhance your understanding of the content of your ELA101 class? □ Never □ Once □ 2 times □ 3 or more times

34. How interested are you in learning the ELA 101 course material?

□ Very uninterested □ Uninterested □ Interested □ very Interested

PART IV: CLASS ATMOSPHERE

So far in the first semester, what have been your general impressions of the ELA 101 class atmosphere?

35. How comfortable are you talking with the instructor of your ELA 101 class?
□ Uncomfortable □ Somewhat Comfortable □ Comfortable □ Very Comfortable
36. How much do you enjoy group work with your classmates in your ELA 101 class?
□ Very Little □ Some □ Quite a Bit □ Very Much
37. How difficult is the course material in your ELA 101 class?
□ Easy □ Somewhat Difficult □ Difficult □ Very Difficult
38. How easy is it to follow the lectures in your ELA 101 class?
□ Difficult □ Somewhat Easy □ Easy □ Very Easy

PART V: OPTIONAL ITEMS

39. How comfortable were you when you were studying your ELA 101 if you consider the number of students in your class and the classroom arrangement?
□ Uncomfortable □ Somewhat Comfortable □ Comfortable □ Very Comfortable
40. How much is the number of students in your ELA 101 class a handicap for your better learning in class?
□ Not a Handicap □ Small Handicap □ Quite a Handicap □ Big Handicap
41. How much do you find the language used by the lecturer facilitating your understanding of the ELA101 course content? □ Very Little □ Little □ Quite a Bit □ very Much
42. In general, how adequate are the conditions in which you are taught to enhancing your mastery learning of the course ELA 101? □ Completely Inadequate □ Less Adequate □ Quite Adequate □ Very Adequate

PART VI: DEMOGRAPHICS

43. What is your gender? □ Male □ Female
44. What is your combination? ……..
45. In general, what is the language in which you are more comfortable in listening, speaking and writing?
□ English □ French

Thank you for taking the time to complete this survey.
This survey is an adaptation of the Classroom Survey of Student Engagement, itself adapted from the National Survey of Student Engagement (NSSE) with permission from Indiana University.

APPENDIX D: Adapted CLASSE$_{FACULTY}$

CLASSE$_{FACULTY}$: Classroom Survey of Student Engagement (EDP 101)

This survey asks about your perception of the importance of various activities and practices occurring in your EDP 101 class. Your honest and straightforward responses to these questions will help us identify targets for improvements within the course. Put **X** in the box that best corresponds to your opinion.

Part I: ENGAGEMENT ACTIVITIES

For students to be successful in your	Not Important	Somewhat	Important	Very Important
EDP 101 class, how important is it that they	Important	⇩	⇩	⇩	⇩
1. Ask questions during your EDP 101 class	□	□	□	□
2. Contribute to a class discussion that occurred during your EDP 101 class	□	□	□	□
3. Prepare two or more drafts of a paper or assignment in your EDP 101 class before submitting it	□	□	□	□
4. Work on a paper or a project in your EDP 101 class that requires integrating ideas or information from various sources	□	□	□	□
5. Include diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments in your EDP 101 class	□	□	□	□
6. Came to your EDP 101 class without having completed readings or assignments	□	□	□	□
7. Work with other students on projects during your EDP 101 class	□	□	□	□
8. Work with classmates outside of your EDP 101class to prepare class assignments	□	□	□	□
9. Put together ideas or concepts from different courses when completing assignments or during class discussions in your EDP 101 class	□	□	□	□
10. Tutor or teach other students in your EDP 101 class	□	□	□	□
11. Use an electronic medium (chart group, Internet, instant messaging, etc.) to discuss or complete an assignment in your EDP 101 class	□	□	□	□
12. Use email to communicate with you as the instructor of your EDP 101 class	□	□	□	□
13. Discuss grades or assignments with you as the instructor of your EDP 101 class	□	□	□	□
14. Discuss ideas from your EDP 101 with others outside of class (students, family members, etc.)	□	□	□	□
15. Make a class presentation in your EDP 101 class	□	□	□	□

16. Participate in a community-based project
(e.g., service learning) as part of your EDP 101 class□ □ □ □
17. Discuss ideas from your EDP 101 readings
or classes with you outside of class □ □ □ □
18. Receive prompt written or oral feedback on your
academic performance in your EDP 101 class □ □ □ □
19. Work harder than they think they can to meet your
standards or expectations in your EDP 101 class □ □ □ □

PART II: COGNITIVE SKILLS

How important is it to you that the coursework	Not	Somewhat	Important	Very Important
in your EDP 101 class emphasize the following	Important	Important		
mental activities	⇩	⇩	⇩	⇩

20. **Memorizing** facts, ideas, or methods from your courses

and readings so you can repeat them in pretty much
the same form □ □ □ □
21. **Analyzing** the basic elements of an idea, experience, or theory
such as examining a particular case or situation in depth
and considering its components □ □ □ □
22. **Synthesizing** and organizing ideas, information, or experiences
into new, more complex interpretations and relationships □ □ □ □

23. **Making Judgments** about the value of information,
arguments, or methods, such as examining how others
gathered and interpreted data and assessing the soundness
of their conclusions□ □ □ □
24. **Applying** theories or concepts to practical problems
or in new situations □ □ □ □

PART III: OTHER EDUCATIONAL PRACTICES

For students to be successful in your EDP 101 class, how important is it that they	Not Important	Somewhat Important	Important	Very Important
	⇩	⇩	⇩	⇩

25. Prepare written papers or reports of more than
5 pages in length in your EDP 101 class? □ □ □ □
26. Are challenged to their best work on the
examinations they have in your EDP 101 class? □ □ □ □
27. Have homework assignments during a typical week
in your EDP 101 class that take more than □ □ □ □
one hour each to complete?
28. Spend more than 3 hours during a typical week
preparing for your EDP 101 class (studying, reading,
doing homework, or lab work, analyzing data, rehearsing, □ □ □ □
and other academic matters)?
29. Attend your EDP 101 class? □ □ □ □
30. Take notes in your EDP 101 class? □ □ □ □
31. Review notes prior to the next scheduled meeting □ □ □ □
of your EDP 101 class?

32. Participate in a study partnership with a classmate in your EDP 101 class to prepare for a quiz or a test? □ □ □ □

33. Attend a review session or help session to enhance their understanding of the content of your EDP 101 class? □ □ □ □

34. Are interested in learning the EDP 101 course material? □ □ □ □

PART IV: CLASS ATMOSPHERE

How important are the following class atmosphere variables to the success of students in your EDP 101 class?	Not Important	Somewhat Important	Important	Very Important
35. Being comfortable talking with you as the instructor of the EDP 101 class?	□	□	□	□
36. Enjoying group work with their classmates in your EDP 101 class?	□	□	□	□
37. Finding the course material in your EDP 101 class to be difficult?	□	□	□	□
38. Finding the lectures easy to follow in your EDP 10 class?	□	□	□	□

PART V: OPTIONAL ITEMS

For student to be successful in your EDP 101 class, how important is it they:

39. Form a class with reasonable number of students that are easily manageable □ □ □ □

40. Academically and perfectly listen, speak, and write the language of instruction (English) □ □ □ □

41. Conform themselves to the conditions in which the teaching and learning takes place □ □ □ □

PART VI: DEMOGRAPHICS

42. Over the past 3 years, how many times have you taught this EDP 101 class?
□ None, new course preparation □ Once □ Twice □ 3 or more times

43. How many years of teaching experience do you have in higher education?
□ Less than 3 years □ 3 – 6 years □ 7 – 10 years □ 11 or more years

44. Approximately how many students are enrolled in this EDP 101 class?
□ Less than 100 students □ 100 – 200 students □ 200 – 300 students □ 300 – 400 students
□ 400 – 500 students □ 500 – 600 students □ More than 600 students

45. In general, what is the language in which you are more comfortable in listening, speaking and writing?
□ English □ French

Thank you for taking the time to complete this survey.

This survey is an adaptation of the Classroom Survey of Student Engagement, itself adapted from the National Survey of Student Engagement (NSSE) with permission from Indiana University.

CLASSE$_{FACULTY}$: Classroom Survey of Student Engagement (ELA 101)



This survey asks about your perception of the importance of various activities and practices occurring in your ELA 101 class. Your honest and straightforward responses to these questions will help us identify targets for improvements within the course. Put **X** in the box that best corresponds to your opinion.

Part I: ENGAGEMENT ACTIVITIES

For students to be successful in your	Not	Somewhat	Important	Very
ELA 101 class, how important is it that they	Important	Important		Important
	⇩	⇩	⇩	⇩
1. Ask questions during your ELA 101 class	□	□	□	□
2. Contribute to a class discussion that occurred during your ELA 101 class	□	□	□	□
3. Prepare two or more drafts of a paper or assignment in your ELA 101 class before submitting it	□	□	□	□
4. Work on a paper or a project in your ELA 101 class that requires integrating ideas or information from various sources	□	□	□	□
5. Include diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments in your ELA 101 class	□	□	□	□
6. Came to your ELA 101 class without having completed readings or assignments	□	□	□	□
7. Work with other students on projects during your ELA 101 class	□	□	□	□
8. Work with classmates outside of your ELA 101class to prepare class assignments	□	□	□	□
9. Put together ideas or concepts from different courses when completing assignments or during class discussions in your ELA 101 class	□	□	□	□
10. Tutor or teach other students in your ELA 101 class	□	□	□	□
11. Use an electronic medium (chart group, Internet, instant messaging, etc.) to discuss or complete an assignment in your ELA 101 class	□	□	□	□
12. Use email to communicate with you as the instructor of your ELA 101 class	□	□□	□	
13. Discuss grades or assignments with you as the instructor of your ELA 101 class	□	□	□	□
14. Discuss ideas from your ELA 101 with others outside of class (students, family members, etc.)	□	□	□	□
15. Make a class presentation in your ELA 101 class	□	□	□	□
16. Participate in a community-based project				

(e.g., service learning) as part of your ELA 101 class□ □ □ □
17. Discuss ideas from your ELA 101 readings
or classes with you outside of class □ □ □ □
18. Receive prompt written or oral feedback on your
academic performance in your ELA 101 class □ □ □ □
19. Work harder than they think they can to meet your
standards or expectations in your ELA 101 class □ □ □ □

PART II: COGNITIVE SKILLS

How important is it to you that the coursework	Not	Somewhat	Important	Very
in your ELA 101 class emphasize the following	Important	Important		Important
mental activities	⇩	⇩	⇩	⇩

20. **Memorizing** facts, ideas, or methods from your courses

and readings so you can repeat them in pretty much the same form□ □ □ □
21. **Analyzing** the basic elements of an idea, experience, or theory
such as examining a particular case or situation in depth □ □ □ □
and considering its components
22. **Synthesizing** and organizing ideas, information, or experiences
into new, more complex interpretations and relationships □ □ □ □
23. **Making Judgments** about the value of information,
arguments, or methods, such as examining how others
gathered and interpreted data and assessing the soundness □ □ □ □
of their conclusions
24. **Applying** theories or concepts to practical problems □ □ □ □
or in new situations

PART III: OTHER EDUCATIONAL PRACTICES

For students to be successful in your ELA 101
class, how important is it that they

25. Prepare written papers or reports of more than
5 pages in length in your ELA 101 class? □ □ □ □
26. Are challenged to their best work on the
examinations they have in your ELA 101 class? □ □ □ □
27. Have homework assignments during a typical week
in your ELA 101 class that take more than
one hour each to complete?□ □ □ □
28. Spend more than 3 hours during a typical week
preparing for your ELA 101 class (studying, reading,
doing homework, or lab work, analyzing data, rehearsing, □ □ □ □
and other academic matters)?
29. Attend your ELA 101 class? □ □ □ □
30. Take notes in your ELA 101 class? □ □ □ □
31. Review notes prior to the next scheduled meeting
of your ELA 101 class? □ □ □ □
32. Participate in a study partnership with a classmate
in your ELA 101 class to prepare for a quiz or a test? □ □ □ □
33. Attend a review session or help session to enhance their
understanding of the content of your ELA 101 class? □ □ □ □
34. Are interested in learning the ELA 101 □ □ □ □
course material?

PART IV: CLASS ATMOSPHERE

How important are the following class atmosphere variables to the success of students in your ELA 101 class?	Not Important	Somewhat Important	Important	Very Important
35. Being comfortable talking with you as the instructor of the ELA 101 class?	□	□	□	□
36. Enjoying group work with their classmates in your ELA 101 class?	□	□	□	□
37. Finding the course material in your ELA 101 class to be difficult?	□	□	□	□
38. Finding the lectures easy to follow in your ELA 101 class?	□	□	□	□

PART V: OPTIONAL ITEMS

For student to be successful in your ELA 101 class, how important is it they:				
39. Form a class with reasonable number of students that are easily manageable	□	□	□	□
40. Academically and perfectly listen, speak, and write the language of instruction (English)	□	□	□	□
41. Conform themselves to the conditions in which the teaching and learning takes place	□	□	□	□

PART VI: DEMOGRAPHICS

42. Over the past 3 years, how many times have you taught this ELA 101 class?
□ None, new course preparation □ Once □ Twice □ 3 or more times

43. How many years of teaching experience do you have in higher education?
□ Less than 3 years □ 3 – 6 years □ 7 – 10 years □ 11 or more years

44. Approximately how many students are enrolled in this ELA 101 class?
□ Less than 100 students □ 100 – 200 students □ 200 – 300 students □ 300 – 400 students
□ 400 – 500 students □ 500 – 600 students □ More than 600 students

45. In general, what is the language in which you are more comfortable in listening, speaking and writing?
□ English □ French

Thank you for taking the time to complete this survey.
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APPENDIX E: Interview Guide forStudents

My name is Gabriel Nizeyimana, a PhD student at the University of the Witwatersrand, Johannesburg in South Africa. For the completion of my thesis entitled **Student Engagement in Teacher Education at the Kigali Institute of Education in Rwanda**, this interview is conducted with first year students in relation to their psychological investment and effort directed towards learning modules studied together with both B. Ed and non B. Ed students during their first semester, 2010 academic year.

Demographics:

Names**:..... Age: .....Sex: .....**

Student status**:** Combinationrepresentative ☐ uty combination representative ☐

Ordinary student ☐

Common module learnt:

- Module learnt:Introduction to Educational Psychology ☐
- Fundamental Mathematics I ☐ Introduction to English and Linguistics ☐

SECTION I: Academic background in high school in relation with performance in modules which B. Ed and non B. Ed students take in common during their first year of teacher education at KIE.

1. What was your field of study in high school? .....

2. What is your current field of studyor Combination at KIE?
.....

3. a) Does your field of study in high school have a certain influence or impact in determining your current performance in:

- Introduction to Educational Psychology module? Yes ☐ No ☐
- Fundamental Mathematics I or Introduction to English and Linguistics module?
  Yes ☐ No ☐

b) How do you think your field of study in high school has influenced your current performancein:

- Introduction to Educational Psychology module

……
……

- Fundamental Mathematics I or Introduction to English and Linguistics module

……
……

4. Please tell me about how your field of study in high school has motivated or de-motivated you in your learning of:

- Introduction to Educational Psychology module?

……
……

- Fundamental Mathematics I or Introduction to English and Linguistics module?

……
……

SECTIONII: B. Ed and non B. Ed students' beliefs that they bring to teacher education and how these beliefs affect or influence student engagement

5. Tell me about your perceptions or image of the teaching career when you were still in high school?
……
……

6. a) How did you feel when you knew that you were going to pursue university studies at KIE whose mission is to educate teachers?

Happy ☐ Unhappy ☐ Undecided ☐

b) Why did you have those feelings?
……
……

7. You are studying in order to become a secondary school teacher.

a) Do you think that pedagogic / education courses or modules are necessary to be an effective secondary school teacher? Yes ☐ No ☐

b) Can you explain your response? ……

……,……

c) What are your beliefs about the teaching profession? In other words, what do you think teaching is about? ……

……

d) As a first year student of KIE, what image do you have about the teaching profession? In other words, how do you perceive the teaching profession in the context of Rwanda?

……
……..

8. a) Does studying in order to become a teacher motivate or encourage you to engage fully in the learning process?Yes ☐ No ☐

b) Bearing in mind that you will be a teacher at the completion of your studies at KIE, were you sometimesgetting bored throughout your learning process, especially when you were concentrated preparing end of first semester exams? Yes ☐ No ☐

9. a) After you graduate from KIE, would you like to immediately teach in secondary school Yes

Yes ☐ No ☐

b) Why*?*

……

……

10. How do you think your teaching career will meet your life expectations?

……

……

SECTION III: Students' perceptions of the teaching and learning context and their influence on student engagement

11. What sorts of things do you do (focus on) or are you aware of when engaged in studying modules taken in common during class in:

- Introduction to Educational Psychology module?

.....

.....

- Fundamental Mathematics I or Introduction to English and Linguistics module?

.....

.....

12. a)How do you perceive the teaching and learning environment/context of modules taken in common in terms of being appropriate for your better learning, understanding, and mastery of the content?

- Introduction to Educational Psychology module?

Very Inappropriate In☐ropriateAppropri☐Very Appropriate☐ ☐

b)Why do you say so? ……..

- Fundamental Mathematics I or Introduction to English and Linguistics module?

Very InappropriateIn☐ropriateAppropria☐Very Appropriate☐ ☐

b)Why do you say so? ……..

c) How does this perception influence your psychological investment and effort directed towards learning these modules?

……
……

13. Good teaching leads usually to good learning. How do you qualify or evaluate the quality of teaching of modules learnt in common in terms of:

Criteria	**Introduction to Ed. Psychology**			**Introduction to English and Linguistics**		
	Good	Bad	Never happen	Good	Bad	Never happen
Feedback received						
Explanation of issues and concepts						
Making the teaching interesting						
Motivating students						
Understanding students' problems						

Can you make some comments on the quality of teaching and learning of these modules you studied together? .....

14. When you were studyingthese modules, were you aware of what was expected of you (goals to attain) in:

- Introduction to Educational Psychology Yes ☐ No ☐
- Fundamental Mathematics or Introduction to English and Linguistics

  Yes ☐ No ☐

15.a) Do you find your general timetable (workload) favourable for your effective engagement in learning modules studied in common?

Yes ☐ No ☐

b) Can you give some reasons why you perceive it in that way?

……
……

16. Were the CATs (Continuous Assessment Tests) and exams you did encouraging deep understanding of the course content or otherwise pure memorisation in:

- Introduction to Educational Psychology :

  Deep understanding ☐ Pure memorisation ☐

- Fundamental Mathematics I : Deep understanding ☐ Pure memorisation ☐

- Introduction to English and Linguistics:

  Deep understanding ☐ Pure memorisation ☐

17. How did the course helped in your personal development and skills for becoming a good teacher?

- Introduction to Educational Psychology .....
- Introduction to English and Linguistics.....

APPENDIX F: Interview Guide for Lecturers

My name is Gabriel Nizeyimana, a PhD student at the University of the Witwatersrand, Johannesburg in South Africa. For the completion of my thesis entitled **Student Engagement in Teacher Education at the Kigali Institute of Education in Rwanda**, this interview is conducted with Lecturers who taught modules

taken in common by both B. Ed and non B. Ed students during the first semester for 2010 academic year. This study aims to investigate students' psychological investment and effort directed towards learning, that is, student engagement in learning these modules.

Demographics:

Names**:..... .....**

Status**:** Dean ☐ HoD Lecturer ☐ Module leader ☐

Teaching Experience in Higher Education: ……..

Course taught:

- Introduction to Educational Psychology ☐
- Fundamental Mathematics I ☐ Introduction to English and Linguistics ☐

SECTION I: Conditions of the institution that matter for student engagement and success and their presence or absence at KIE

1. It is known thatgood teaching leads usually to an effective learning.

a) Did you find the teaching and learning environment of this module conducive for a better learning, understanding, and mastery of the content? Yes ☐ No ☐

b) Why do say so? ……

……..

2. a) What are the conditions that can enhance student engagement, that is students' psychological investment in and effort directed toward learning and understanding of this module?

……..

……

b) What are those which are present at KIE? ……

……

3. a) To what extent or how much do you think KIE channelled students' energy towards activities that engaged students in effective learning for greater outcomes in this module?

Very Little ☐ Some ☐ Quite a Bit ☐ Very Much ☐

b) Considering financial difficulties of developing countries such as Rwanda, especially at KIE, how do you think the institution (KIE) can create an environment that supports student learning?

……

……..

SECTION II:Lecturers' perceptions of student engagement in learning common modules

4. B. Ed and non B. Ed students have different education background from their high school. But you taught them this module/course together.

a) Which category of students do you think has many difficulties in learning this course?

B. Ed students ☐ Non B. Ed students ☐

b) Can you give some explanations for your response? In other words, why do you think category 'A' (B. Ed students) copes easily in learning the module/course than category 'B' (non B. Ed students) or vice versa?

……
……

c) Which category do you think spent much time, effort and energy to learning this module/course?

……

d) Why? ……

……..

e) If you consider their general performance in this module, did they perform differently?

Yes ☐ No ☐

f)In which sense? ……..

……..

4. If you were a decision-maker, how would you improve these students' performance by accommodating both B. Ed and non B. Ed students for effective student engagement in learning this module? ……..

……..

Appendix G: Letter requesting permission to conduct research in KIE

Gabriel NIZEYIMANA

PhD Student

Faculty of Humanities

School of Education

University of the Witwatersrand, Johannesburg (South Africa)

Email: tnize09@gmail.com

Tel: - (+27)845216271 (South Africa)

- (+250)788643789 (Rwanda)

Rector
Kigali Institute of Education (KIE)
P.O. Box 5039
Kigali

Date: 08/03/2010

Dear Sir

Re: Request for permission to conduct research in your institution,KIE.

I am employed as a Lecturer at Kigali Institute of Education in the Faculty of Education on study leave. As the fulfilment of the requirements for the degree of Doctor of Philosophy in Education, under the supervision of Professor Ruksana Osman, I am conducting a research titled **"Student Engagement in Teacher Education at the Kigali Institute of Education in Rwanda"**. The study aims at investigating first year student engagement and success in modules that B. Ed and non B. Ed students study together in order to contribute to the improvement of first year students' learning. The study will use mainly $CLASSE_{STUDENT}$ and $CLASSE_{FACULTY}$ which is a Classroom Survey of Student Engagement respectively for both students and teaching staff as well as in-depth interviews with students and some Faculty teaching staff members as tools for data collection. Also the documentation of students' results in their high school leaving examinations will be used. It is estimated that data will be gathered at the end of the first semester and beginning of the second semester of 2010 academic year. I would appreciate the permission to conduct the research in KIE.

Faithfully yours
Gabriel NIZEYIMANA

APPENDIX H: Permission letter to conduct research in KIE

Kigali Institute of Education
P.O. Box : 5039 Kigali – Rwanda
Tel: (250) (0)255100591/(0)252586823
Fax: (250) (0)252586890/(0)252586885
E-mail: admin@kie.ac.rw

11/3/2010

Mr. Gabriel NIZEYIMANA
PhD Student
Faculty of Humanities
School of Education
University of the Witwatersrand,
Johannesburg
South Africa

RE: Permission to collect data from KIE

Your e-mail dated 8/3/2010 refers.

I am pleased to inform you that your request for permission to access data from KIE to enable you gather information for your PhD on the topic "**Student engagement in Teacher education at the Kigali Institute of Education in Rwanda**" is granted.

By copy of this letter the relevant offices within the Institute are requested to accord you any possible assistance.

I wish you success in your endeavours.

Yours sincerely,

Prof. George K. Njoroge (PhD)
Rector

CC.

- Vice Rector Academic
- Vice Rector Administration and finance

Appendix I: Participants' Informed Consent Form

I, _____, hereby confirm that I have been informed by the researcher, Mr Gabriel Nizeyimnana, about the nature of his study entitled "Student Engagement in Teacher Education at the Kigali Institute of Education in Rwanda".

The research aims to investigate the extent to which teacher education students at Kigali Institute of Education (KIE) effectively engage and succeed in common courses, with specific reference to first year students' engagement and success in pedagogical preparation modules and subjects of interest.

I may, at any time, without prejudice, withdraw my consent and participation from the study. I have had sufficient opportunities to ask questions/explanations about the study and declare that I accept voluntarily to participate in this study.

I have received, read and understood the information provided by the researcher regarding this study. I am aware that all the information I give will be treated confidentially and processed anonymously in this study and its final report. I also understand that the data collected for this study will be destroyed by the researcher five years after the completion of the research. I hereby give assent with the understanding that strict confidentiality will be observed and assured.

Appendix J: Ethics Clearance

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 • Private Bag 3, Wits 2050, South Africa

Tel: +27 11 717-3007 • Fax: +27 11 717-3009 • E-mail: enquiries@educ.wits.ac.za • Website: www.wits.ac.za

Ggg

STUDENT NUMBER: 416608
Protocol: 2009ECE169

17 December 2009

Mr. Gabriel Nizeyimana

Kigali Institute of Education

kigali

RWANDA

Dear Mr. Nizeyimana

Application for Ethics Clearance: PhD in Education

The Ethics Committee in Education of the Faculty of Humanities, acting on behalf of the Senate has considered your application for ethics clearance for your proposal entitled:

Student Engagement in Teacher Education at the Kigali Institute of Education in Rwanda.

The following comments were made:

- An indication is needed as to where the data will be securely stored before it is destroyed after it has outlived its usefulness (usually 3-5 years after completion).
- The Subject Information Sheet could more appropriately be changed to read 'Participant Information Sheet'.
- The Informed Consent Form should include the title of the research project.
- It is suggested that the Informed Consent Form should include contact details of the participant.
- It is advised that a separate copy of the Participant Information Sheet be provided to each participant to enable him/her to keep a record of the conditions of participation and to contact the researcher if needs be.

- The letter to the Rector of the KIE should end with a sentence where the researcher would "appreciate permission to conduct the research".
- There are a number of errors in the Interview Guide with Students:
    1. 1st question should read: "What was your field of study in high school?" (not 'is')
    2. 6th question should read: "How do you think your field of studying high school explains your current performance…" (not 'does explain')
    3. page ii, 2nd question should read: "does studying in order to become a teacher motivate or encourage you…." and " Do you sometimes get bored…" (not 'motivates' and not 'get sometimes bored')

Recommendation:

Clearance is recommended once the minor errors and suggestions have been fulfilled to the satisfaction of the supervisor.

The supervisor needs to inform the office of the Wits School of Education's Research Ethics Committee that the above mentioned amendments have been made to the proposal for ethics clearance to be granted.

Yours sincerely

Matsie Mabeta

Wits School of Education

Cc Supervisor: Prof. R Osman (via email)