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Effective Blended Learning in a Higher Education Pathway Programme in South Africa

Masters Research Report

submitted by
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Abstract

Physical and electronic resources, tools and environments are increasingly being integrated within mainstream higher education. As institutions seize the potential of technology enablement, blended learning formats have become popular. For the blended learning format to positively impact the quality of education in the institution its effective integration into existing practice is crucial.

The Monash South Africa Foundation Programme, a division of Monash University that provides an alternative pathway into higher education, has its focus firmly on delivering quality academic development yet must successfully navigate the challenges of implementing blended learning as part of an institution wide strategic plan for academic excellence.

The purpose of this study was to investigate how the perceptions and attitudes of a teacher in the programme towards blended learning echoed the strategic plan of the institution to use the blended learning approach.

A qualitative single case study was developed around one teacher, framed by the context of the institution's strategic education plan and the programme environment, in order to develop a rich narrative of his experience. Multiple methods of data collection were used to allow for results to be triangulated.

The study showed that this teacher's perceptions and attitudes reflected a positive disposition towards the implementation of blended learning but that the perceived barriers placed the individual's potential of achieving the institutional goals for incorporating blended learning at risk. The need for effective change management and staff that would champion the innovation was identified.

An accumulative narrative of teacher experiences was advocated to develop theories to support further effective blended learning in the programme and the institution and thus enable the institution's strategic goals of achieving academic excellence at ground level.

Declaration

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

Roy Sebastian Cloete _____

Name of candidate Signature of candidate

27th day of February 2014

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To my colleagues, the subject and context of this research, thank you for your time and support, but more importantly for being who you are. Your dedication to your craft and to the betterment of mankind is a constant source of inspiration.

Finally, last on the page but first in my life, Yeshua Ha-Mashiach, without whom I would be completely lost: in You I have my being.

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Table of Contents

List of Figures

List of Tables

List of Appendices

List of Abbreviations, Interchangeable Terms and Identities

CoI	Community of Inquiry
DoTS	Diploma of Tertiary Studies
ICT's	Information and Communication Technologies
LMS	Learning Management System
MSA	Monash South Africa
MSAFP	Monash South Africa Foundation Programme
VLE	Virtual Learning Environment

Terms used interchangeably

In this study the terms below are used interchangeably because they are used as such at the research site and are seen as meaning the same:

Educator, teacher and lecturer in this study all mean the same when referring to the academic staff of the MSA Foundation Programme.

Foundation Programme, Academic Development Programme and Pathway Programme, in the context of Monash, all refer to the same entity, formally titled The Monash South Africa Foundation Programme.

Gender

His and her, unless referring to a specific person, are not meant to be gender specific but are used in either form for ease of reading, instead of his/her.

Identities

Keeping the true identities of individuals anonymous was a priority in this study. The first names that were used, other than for authors, are aliases intended to hide the true identities. Other potential sources for identification of the subjects, such as unit codes that teachers teach were also changed or concealed for the same reason.

Chapter 1: Introduction

1.1 The Purpose of this Study

The purpose of this study was to investigate the perceptions and attitudes of one teacher towards blended learning, specifically within an academic development pathway programme, and how these perspectives reflect the institution's focus on blended learning as a strategy for enhancing educational excellence. For the moment, the central concept of blended learning in this study is described in a broad brush stroke and refers to the employment of new technology, which in some way is integrated with more traditional methods, as a means to better the teaching and learning functions within higher education. Numerous opinions exist in what precisely constitutes the optimal blends that will accomplish this. Such opinions and the constructs and theories that support the blended learning notion are addressed later in the study.

With the relentless surge of new innovation over the last century the influence of technology has grown exponentially in the past few decades, most certainly with regard to its effect on the individual. The advent of computer technology, then the internet and all the developments that have followed, has shrunk the connected world to a global village that has a new way of existing that is seemingly inseparable from technology. In the competitive arena of technological innovation, this new tide has forced industries and people to either sink or swim.

The higher education sector, too, has not escaped the pressures brought to bear on it by changes in the surrounding technological world. Educational institutions and educators alike have been pressed to re-examine their core functions in teaching and learning under the light of technological innovation and its pervasive march. Paradigms, pedagogies and practices have been placed in the spotlight as expectant onlookers anticipate changes that will reform the world of learning. Commentators, however, have noted the relatively low impact of technologies and electronic learning environments in the education industry (Littlejohn & Pegler, 2007, p. xv). While thousands of institutions have indeed been eager to adopt new technologies into the teaching and learning domains of their enterprise (Drysdale, Graham, Spring, & Halverson, 2013), many others have been slow to respond and not veered off trusted paths of tradition encompassing reliable methods and solid reputations. Garrison and Vaughan (2008, p. ix) think it untenable of higher education institutions to hold onto "past

practices that are incongruent with the needs and demands of a knowledge society". However, with gaining momentum, the world of education has largely begun to embrace the potential of modern technology, at times lurching forward, trying to find its balance as it strives to fulfil its purpose in a world where the very meaning of successful teaching and learning seems to be untethered. Given the explosion of knowledge about how the brain works, the impact of environments, how learning occurs and so on together with waves of technological tools being developed and released which claim to exploit the latest insights into learning, it's no wonder that educators and institutions feel a little unsteady underfoot.

Over the past few decades the integration of technology into education has been explored in various ways with the hope of exploiting its perceived potential. Particularly the advent and subsequent penetration of online technology into the world of education has presented previously unheard of opportunities and further fostered this perception. Even Africa, which has lagged behind much of the world with its online access, has made remarkable strides in recent years. The charts below in Figure 1.1 and Figure 1.2 are indicative of this, illustrating not only the shuffle in ranking over three years but also the remarkable expansion and penetration of online technology into the hands of internet users.

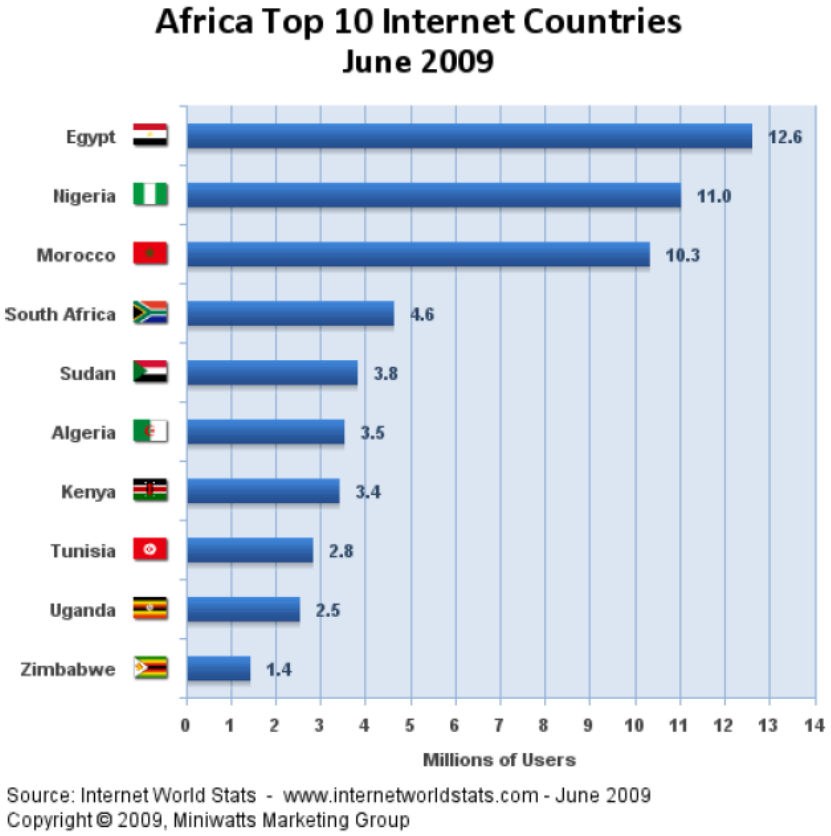


Figure 1.1 Africa Top 10 Internet Countries 2009 (Source: www.internetworldstats.com)

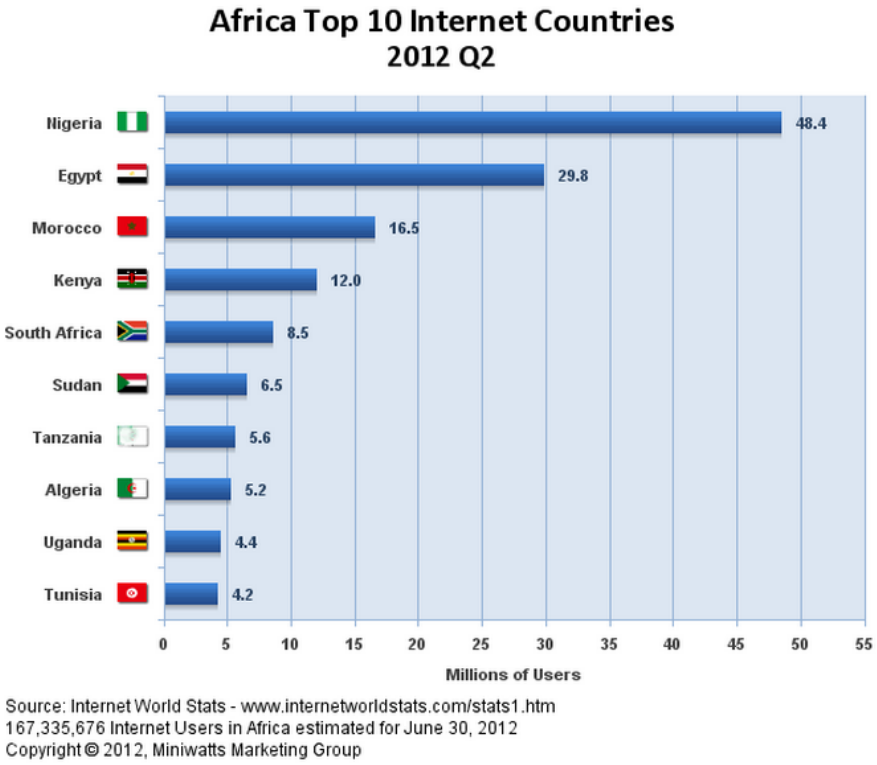


Figure 1.2 Africa Top 10 Internet Countries 2012 (Source: www.internetworldstats.com)

For instance it can be seen how within three years the internet users in Nigeria have increase from 11 million to 48.8 million. South Africa has dropped one position in the rankings but nonetheless increased from 4.6 to 8.5 million in the same period. One should bear in mind that these charts in no way reflect the quality of their access.

It appears that institutions are increasingly recognising that the "move towards integration of technology is obvious and most apparent through the creation of blended courses" Georgina and Olson (2008, p. 8). This is not surprising since new technologies are providing "unprecedented opportunities to create blended learning environments that are highly interactive, meaningful and learner centred" (Kirkley & Kirkley, 2004, p. 42). Of course, this not only implies another change in strategy for improving delivery of educational services but the necessity for change in educators too, the very people that orchestrate the learning opportunities provided by institutions. Directed by their personal realisations, educational and institutional policy, bureaucratic agendas, and even broader political programmes, educators find themselves in a "sink-or-swim" world regarding technology and its probable but indistinct role in their teaching practices. Törner, Rolka, Rösken, and Sriraman (2010) suggest that a multitude of influencing factors impact teaching processes but the three

variables of knowledge, goals and belief[1], in accordance with a theory proposed by Schoenfeld (1998), are sufficient for understanding and explaining many teaching situations. The key element of the belief[2], revealed in part through expressed perception, will have a significant impact on a teacher's willingness to go through the struggle of change and influence his openness to embracing new paradigms and adopting new pedagogies. The enquiry that this study set out to accomplish, investigating teacher perceptions and attitudes towards blended learning, resulted in part from realising this.

Relevance and convenience to me as the researcher helped determine the setting to be specifically within an Academic Development pathway programme. This positioned me at an interesting junction to consider how the teacher perspectives reflect the institution's focus on blended learning as a strategy for enhancing educational development. Wright (2000) pointed out over a decade ago that development is clearly linked to technology and that the underlying link of education is critical in supporting the advances of globalisation. The evolution of the idea for this study originated from personal observations, interests and concerns that accrued over the past two to three years of working in this pathway programme, at Monash South Africa (MSA). The pathway programme, known as the Monash South Africa Foundation Programme (MSAFP), has the core function of academic development which is aimed at pre-undergraduate students, offering them a pathway into an undergraduate degree at MSA that would otherwise have been out of reach.

When I was tasked with teaching a course in this programme on technology that supports and enhances university learning I was forced to fast track my personal learning in the world of educational technology. As I researched and randomly tested some ideas of incorporating technology into my course I began to pay attention to the trends of technology integration and discovered that not only was blended learning an emerging buzz word, but that it seemed key players in the education world had begun to take it seriously. Shortly thereafter I came to

[1] Beliefs are often regarded as a "messy construct" (Pajares, 1992), being difficult to define and elicit. This report will therefore assume "beliefs" to refer to the concept of "professed beliefs" (Schoenfeld, 1998) thus not suggesting they reflect genuine beliefs.

[2] The position held here is that in most instances the apparent perception/attitude can only somewhat educe professed belief.

hear of a plan for educational excellence for the wider Monash institution that placed blended learning as one of four pillars at the centre of its strategy. It was a strategic plan with a timeframe of 2011-2015 guiding it. At its highest and most succinct level the blended learning pillar in the strategy states "Invest in Blended Learning to enrich face-to-face educational experience for students and academics" (Shoemaker, 2011, p. 3), thus strategically underwriting the goal of improving educational outcomes. In this document Shoemaker unfortunately fails to support the claim from theory or research that the enrichment through blended learning translates to better teaching and learning. Educators are informed rather than persuaded that blended learning is the way to move ahead in the institution.

It is important to note, while discussing what blended learning is to Monash, that there is no broadly accepted notion of what blended learning means. The interpretations vary from simply seeing learning that incorporates a range of learning modes, irrespective of technology, on one hand to only understanding blended learning in terms of the technologies involved. Many popular perspectives do tend to lean towards defining blended learning as being located somewhere on a continuum of technology facilitated learning, primarily in terms of delivery mode between fully online and face-to-face.

My personal view of blended learning is that it must involve technology, given the modern context of education where the tools available can be employed to facilitate learning, both in process design and cognitive impact. However, the dictate must not be presented as a certain percentage of technology versus face to face learning or specifying a particular platform or tool or simply insisting on the presence of technology. Rather, through interrogating the desired outcomes of any learning event, determining the best mix of technology vehicles, tools and modes of application that can be employed to augment traditional teaching and learning so as to best facilitate achieving the desired outcomes, leaving space for the exclusion of technology if necessary.

In relation to a learning institution and thus this study, it is my opinion that it is necessary to discern what the phrase means to individual educators and also to the institution they are associated with and thereafter to discover or provoke the 'conversations' between them that will facilitate the process of developing a common understanding in their context. Although 'lone ranger' enthusiasts are to be applauded for their pioneering spirit in an institution, usually being early adopters required for momentum, it is critical for institutions to determine

if they want an eclectic approach or a cohesive vision of blended learning and respond accordingly. It was with this in mind that this study eventually distilled to being centred on one teacher and his views and opinions about blended learning. That would, after all, be his reality of the phrase and only when drawn into a broader conversation would that view possibly be influenced.

Mid-way through 2012, the time at which the purpose of this study began to gain clarity for me, I had begun to wonder how the institutional perspective on blended learning was shaping up on the ground, particularly in our programme. Further, what factors were potentially facilitating, accelerating or obstructing the shift to more blended learning practices? My questions began to cluster around the role of teacher perceptions and attitudes as a significant influence on the "progress" of the institutional agenda. I wondered if the purported benefits of blended learning mentioned in the educational plan document were perceptions shared by teachers located in the context of an academic development programme, where a large emphasis is placed on interaction with and support for students. I realised that it "is perfectly legitimate to be interested in the ways in which 'knowledge workers' in general carry out their work, or think and talk about their work" (Hativa & Goodyear, 2002, p. 2). The emphasis Ertmer (2005) placed on the internal barriers, largely residing in perceptions and beliefs of teachers towards technology adoption added depth to my enquiry.

As the study progressed it became clear that the notion of change would need to be a central theme. I was intrigued by the interplay between change events and perceptions and beliefs of the teachers, which could have significance in the MSAFP. Change is a disruption to the status quo, and whatever the origins, it would always be a "game changer". Dependant on the source, nature and magnitude of the change, reaction to could range from embracing it as an opportunity to total avoidance. Having had a personal interest in the impact of change and the importance of effective change management I contend that even planned change is a disruptive force that needs to be well managed, either by oneself or by an agent, in order to reap the intended rewards of its implementation. Change affects almost every person in education, yet I've noticed in my years of teaching experience that educators have, somewhat unfairly inherited a stereotyped reputation for being slow to respond to change Resistance to indiscriminate change is not a bad thing though, if there is a risk of pedagogical isolation that renders the teaching ineffective. As I began to think about the practices Monash was evidently looking for in its courses, I wondered about how teachers perceived those expectations and how they were supported in the processes of the anticipated change. Even

their understanding of what blended learning means could cast a different light on the situation and thus become an important point of distinction. Eventually the case of a single teacher would be studied to seek insight into such matters.

While the scope of this study had become narrow and contained as a small single case, the actual value of this case study lies in providing an initial catalyst for further research in the MSAFP and then within the broader scope of the institution. The case is essentially a benchmark built on one teacher in terms of his perceptions and attitudes towards blended learning. Some embedded elements from other teachers, possibly future case studies, provided a degree of comparison and contextualisation. If contextual case studies in the MSAFP could incrementally provide the threads from which legitimate theory could be pursued, then value could be found in the MSAFP, the related Diploma of Tertiary Studies (DoTS) programme in Australia, and perhaps other departments at Monash.

1.2 Background to the Research Problem

The case is set within the MSAFP and against the backdrop of a Monash University strategic objective (Shoemaker, 2011) for 2011-2015 to promote blended learning as a means of ensuring continued academic strengthening across all its international campuses (Shoemaker, 2011).

The MSAFP is a division of MSA which is in turn a campus of Monash Australia, a recognised international university with seven campuses, five being in or near Melbourne in the state of Victoria (Australia), one is in Malaysia and one in South Africa and three international centres establishing a presence in Italy, China and India. [3]

MSA was opened as a long-term commitment to sustainable development in South Africa, as part of Monash University's policy of internationalisation (Fahey, 2008) and thus is not funded by the South African government. It is seen as a private provider of higher education in South Africa. Although it forms part of the larger Monash institution and is subject to its policies and regulations, the burden for its sustainability is now firmly located within itself.

3

Australia: Berwick, Clayton, Peninsula, Caulfield, Parkville Campuses
Malaysia: Monash University Malaysia
South Africa: Monash South Africa
China: Southeast University-Monash University Joint Graduate School
India: IITB-Monash Research Academy (IITB: Indian Institute of Technology Bombay)
Italy: Monash University Prato Centre

This makes it important to MSA that the growth and success strategies of the larger institution, like blended learning, are implemented with success.

MSA is truly an international campus thanks to its close affiliation to the sister campuses and largely standardised undergraduate and postgraduate offerings across the campuses. A significant cohort of international students from Southern Africa and other nations study at MSA and it has popular inter-campus student exchange programmes. A number of collaborative initiatives with other international universities and institutions also add to the international reach of the university. However, MSA remains uniquely South African as the international flavour is distinctly complimented by its geographic location in the Greater Johannesburg region. The majority of students are South African and the campus has an active local community engagement role with a growing local research focus. Scanning through staff profiles on the MSA website[4] reveals mostly South African academics with a smaller proportion of staff members originating from other countries. The MSAFP has therefore provided a context for this study which is uniquely rich in its mix of international and local flavours.

The MSAFP, being the specific site for this study, should be further understood in the context of its central purpose. At the point of the inception of MSA in 2001 it was identified that there were many potential students who lacked the academic skills required for direct entry into undergraduate studies. The MSAFP was conceived and implemented by the following year to offer an alternative pathway for access into Monash University undergraduate programmes (Lees & Levy, 2012). Although the MSAFP commenced in 2002, the legacy of Apartheid still had its indelible footprint visible on the education terrain. "The education struggles of the 1980's put enormous political pressure on the South African higher education system to transform itself. This pressure increased in the 1990's" (Cloete & Bunting, 2000, p. 1). The evolution of academic development in South Africa through these troubled years and into the new millennium provided an important context for the growth and development of the programme.

The MSAFP is a "1 + 3-year model", a one year preparatory programme followed by a three-year degree and the programme has demonstrated its transformative potential by successfully broadening the pool of beneficiaries of a higher education who then continue to contribute to

[4] http://www.monash.ac.za/about/contact/staff-details/

the future of the developing nations from which many of the students come, including South Africa (Lees & Levy, 2012). According to Lees, the MSAFP was specifically designed to address some of the socio-political goals of the Green Paper on Higher Education Transformation (1996), with a specific focus on vision 3.1 to "ensure equity of access and the possibility of success to those, irrespective of race, colour, gender, creed, age or class – seeking to realise their potential through higher-level education and learning". Lees and Levy (2012) highlight a number of other aspirations of the programme, including a broader Monash goal of preparing students for the global knowledge economy. The programme has naturally undergone changes over the past decade but its central purpose, according to Lees and Levy (2012), has always been as an academic preparation programme which aims to equip students with the requisite academic skills necessary to complete degree programmes successfully.

Boughey (2007, p. 10) argues for an upward gear shift in the area of quality within the field of "Academic Development" in order to "fulfil its potential to contribute to the South African higher education system". This does raise many practical questions, of course, around the understanding of the term 'quality', its implementation in practice and the measurement of its impact, which remain inadequately addressed. The notion, however, is noble and as the recipient of the ALTC[5] award, the MSAFP demonstrated its commitment to the ideals of quality by providing an effective transition into higher education for students that choose this route.

Thus high quality academic development and learning experiences came to be a vector for this study because it provides a yardstick by which any method of education delivery needs to be measured.

The second vector that intersects the first is located in the context of a global interest in the apparently equivocal role of ITC's in education and more specifically the recent attention paid to blended learning as one of the preferred means of employing technology in education. It is recognised that "ICTs open up new ways of accessing information thereby changing the relationships between students and their teachers" (Jaffer, Ng'ambi, & Czerniewicz, 2007, p.

[5] Australian Learning and Teaching Council: MSAFP Programme was the winner of Australian Learning and Teaching Council (ALTC) Award 2009 – Award Category: Programmes that Enhance Learning: The First Year Experience

135) and thus learning institutions are provoked to consider adopting blended learning approaches in teaching and learning contexts as one valid means to exploit the potential of ITC's in education.

Despite a lack of truly substantial empirical evidence to support the enthusiastic uptake of blended learning strategies at universities across the world, the trend has not abated as institutions seek to remain relevant and responsive to their clients within a global market. As many universities currently jostle for their position in the world of higher education, Monash University has also realigned its stance on educational excellence to accommodate the perceived benefits of incorporating blended learning. The lack of a widespread agreement on exactly what constitutes blended learning compounds deficient evidence that can confidently support the claim that blended learning across disciplines and education codes is an indisputably better option than other modes of teaching and learning. However, based on the worldwide trends of adopting blended learning at universities, it appears that there are sufficient motivating factors present within the institutions to endorse the decision. This appears to be the case with Monash University which increasingly advocates the merits of blended learning and a growing expectation is placed on their educators to incorporate appropriate methods and strategies in their teaching. An example of this disposition is evident from the brief Monash Education Strategic Plan[6] extract below:

> Some see the advent of these digital technologies and the rapidly improving ability to deliver content online as heralding the decline of the university campus. Yet, in every challenge there is also an opportunity. We believe that, far from bringing about the demise of university campuses, these advances will in fact breathe new life into them. These digital technologies provide the means to refresh our modes and methods of learning and teaching to increase student engagement and promote active, collaborative learning, not just knowledge retention. (Shoemaker, 2011, p. 4)

The Monash stance towards blended learning as an opportunity is clarified, yet this extract also highlights some issues resident in the document. Firstly, there is nothing new being argued by Shoemaker. New innovations have almost always resulted in a fear-opportunity dichotomy in education. For example, reaching back centuries, to misgivings about the introduction of slate, followed by slate board technology in the early 1800's, into the classroom. History, of course, does show that often technology had the capacity to

[6] This document is referenced but not freely available, being a strategic document in a private institution.

revolutionise teaching but, equally, there were cases where it certainly did not. This reality demands the garnering of research to support claims from either camp.

Secondly, although the fear factor is admirably parried, no evidence is provided to educators to support the claim that introducing new technologies is the better means to increase student engagement and enhanced learning. Although there is a growing body of evidence, if somewhat lacking in empirical substance, that would seem to suggest that the claim is valid, Shoemaker does not reference it to persuade the educator. Rather, he relies on the intuitive likelihood that the partiality young generations show towards technology would naturally translate into engaging modes and methods for teaching and learning. Hence the passage leans towards being a lightly shrouded bureaucratic instruction rather than a presented case. Why this matters, in my opinion, is it misses an opportunity to mitigate some of the resistance to change that the institution is bound to experience from some of its teaching academics.

The Education Strategic Plan and a Monash support web page provides supporting evidence that Moodle, a Virtual Learning Environment, would play an important role in the blended learning strategy of the university, as discussed on page 18.

Relevant to this case, Lees and Levy (2012, p. 31) states that "The MSAFP now provides an enabling, relevant and challenging curricula ... [and] ... a strong grounding for academic transition from secondary to higher education", and thus it provides a legitimately stable academic context within which blended learning may reasonably be explored.

Within this environment lies the problem that this study hoped to address in part: How is blended learning actually being perceived and employed at MSA, specifically in the MSAFP, and is it contributing to the overall quality of the learning taking place there?

The study aimed to make a contribution to the field of blended learning in Higher Education by investigating the perceptions and attitudes that teachers in the MSAFP have toward blended learning and its potential value in delivering excellent education. It was held that if the perceptions and attitudes of teachers towards blended learning could be discovered that there would be grounds for further study towards developing theory that could inform other blended learning implementation efforts and practice at MSA. A single case study that narrowly focuses on one teacher was the eventually outcome of the process of designing the research, which is discussed on page 49 of this report.

1.3 Research Questions

The research problem was framed through developing a research question supported by subsidiary questions.

1.3.1 Research Question

"In what ways do the attitudes and perceptions of a MSAFP teacher towards blended learning echo the current strategic plan of Monash University to incorporate blended learning into the educational practice of the institution?"

It was hoped that this question would help to discover the tension between institutional expectations and teacher reaction in order to better understand the dynamics that impact changing academic environments.

1.3.2 Subsidiary Questions

Subsidiary questions were identified that would provide direction for the fieldwork questions to be used in the investigation of the research problem. However, being a case study, it was anticipated that some of these questions would likely evolve with the unfolding of the case as ideas and observations emerged from the research, reflecting somewhat the interactive approach of Maxwell (2012) to qualitative research design.

These questions are:

1. What is the teacher's perception of blended learning in general and, more specifically, in his situational context?

2. How does the teacher's perception of blended learning compare to the characterisation of blended learning by others, in the MSAFP context and in literature?

3. How are blended learning practices perceived in relation to the quality of teaching and learning within the academic development role of the MSAFP?

4. How does the Monash institutional position on blended learning impact the practice of a MSAFP teacher?

5. Why do teachers in the MSAFP seem to either advocate or disregard the institutional agenda of creating blended learning environments?

These five questions reappear in the final chapter of the report as they provide a structure for discussing the findings of the study. To answer these questions some objectives were defined that would inform the design and method of the study.

1.3.3 The Key Objectives of this Study

1) Determine the understanding and use of blended learning by a selected teacher.
2) Determine the teacher's openness to and motivation for using blended learning.
3) Determine the teacher's perspective on blended learning as a quality mechanism in academic development.
4) Identify the barriers experienced with blended learning and the professional support required to mediate.
5) Understand the effects of change from introducing blended learning expectations and the requirements for change management in the MSAFP.
6) Understand the articulation of the Monash Education Strategic Plan through one teacher's experience in the MSAFP and so contribute to the necessary conversation on blended learning in MSA.

Reference is made to these objectives in the concluding part of the final chapter in the study (see page 115). The main purpose of setting these objectives was to provide direction and focus in the research. Secondary to that, was to contribute a perspective from which discussion on blended learning and implementation thereof in the MSAFP could be considered. The references made to academic excellence, found within the strategic planning documents at Monash, speak directly to the issue of quality enhancement of academic development and provide a reference point for this case study in the MSAFP. Investigating the practices of blended learning and its transformative potential in the MSAFP, within the scope of this study, was supported by the foundational purpose of the MSAFP. If change is to be sustained, mechanisms need to be put in place to support the incorporation of blended learning policies into practice. According to Hall (1987, p. 4) "The most significant way to improve schools is through improving the instructional performance of teachers....but teachers need assistance and help to change and develop". A final purpose then was to chart perceived needs for change management that should accompany the incorporation of blended learning practices into the MSAFP.

1.4 Rationale and Significance of the Study

The MSAFP recognises that quality in its academic development of students undergoing the transition into higher education is critical to the future success, not only of the Monash students, but more holistically of higher education in South Africa. Naturally, a clear understanding of what is meant by quality would need to be identified. The adoption of blended learning practices could provide a potential avenue through which effective academic development might be pursued. The rationale and significance of this study is underpinned by Boughey (2010), Garrison and Kanuka (2004) and Benson, Anderson, and Ooms (2011).

> One of the most important lessons to be learned from the academic development movement is that student development cannot be achieved separately from mainstream teaching and learning. Clearly the development of academic staff as professional educators in higher education is critical in this regard (Boughey, 2010, p. 23).

The above statement is pertinent to the MSAFP context, which focuses on student academic development, and makes the clear association to the quality of the teaching and learning required in the programme. In order to maintain and enhance this quality there is no avoidance of issues of professional development of the teachers.

The question this raises, naturally, is what staff development will be the most appropriate for the programme? Of course there are many potential avenues to pursue, however one is made abundantly clear in the objectives of the Monash Education Strategic plan. “Invest in Blended Learning to enrich face-to-face educational experience for students and academics”. Is this strategy endorsed at all? Garrison and Kanuka (2004), key protagonists for blended learning blended for over a decade appear to believe so as they credit blended learning with ability to redefine higher education institutions:

> Blended learning can begin the necessary process of redefining higher education institutions as being learning centred and facilitating a higher learning experience...It is essential that researchers begin to explore the impact of blended learning in achieving more meaningful learning experiences (Garrison & Kanuka, 2004, p. 104) .

Vaughan (2007), however, cautions against making assumptions that blended learning will necessarily lead to effective learning, since there are significant challenges associated to learning with technology. Barriers to using technology in education certainly exist but even

when they are not insurmountable, if they are perceived to be a challenge by the teacher then the process of adoption may be thwarted, even if it is an institutional agenda.

> A willingness to accept new technologies could significantly affect the success of blended learning development (Benson et al., 2011, p. 145)

One avenue that could help to understand the "willingness" of teachers, that Benson *et al.* mention, would be a probe into perceptions and attitudes of the teachers. Although other measures of willingness could be defined, these proclaimed beliefs would make a logical point of departure. The need for understanding this willingness addresses the strategic approach to addressing institutional culture and managing the change required in introducing new technologies and methodologies in teaching and learning.

Considering Boughey's (2010) call for staff development as a critical precursor to student development in the light of the potential of blended learning, such as expressed by Garrison & Kanuka (2004), to be a vehicle for transformation in teaching and learning presents an intriguing intersection of inquiry that could be explored through the avenue of teacher perceptions, and thus established initial motive for the focal point of this enquiry.

It seemed natural given the setting of the study, to focus on how the teachers in the MSAFP might orientate their blended learning and academic development toward each other and how the changes, if any, influenced the shift in teaching.

An overarching characterisation of blended learning can be taken as referring to the most frequent understanding, according to the B-Learn-Project (2007), of being a blend of face-to-face and technology based teaching. Academic development, on the other hand, can be taken to refer to the purposeful nurturing of skills required for academic success in higher education. These descriptions are, however, merely meant to provide a temporary frame of reference, since as typical in case studies, issues emerge that tend to colour the description differently. The emergence of how the teacher understands the concepts would have a central role to play in this study. It was expected that what might come to light through this case study is how the perceptions of a teacher could impact on his implementation of blended learning in a pathway programme. Reciprocally, how would the incorporation of blended learning into an academic development programme influence teacher perceptions and attitudes. Both ways, either an aversion to change or an acceptance of change would be instrumental in the outcome of the study.

As Hall and Hord (2011, p. 52) state: "The profession, the press and the public cry for school improvement, in order that all students learn to higher levels" and then add that the reality of meaningful change is firmly based on learning as teachers and others must learn what the new practices entail. They summarise, saying "Change is learning. It's as simple and complex as that," (Hall & Hord, 2011, p. 53).

Initially, I envisaged studying the whole programme as a case study but the attrition through beginning the research and reading extensively, I believe that there is a distinct gap in the literature in terms of details of singular case studies that provide emergent deeper meanings. What eventually became the study was an in-depth case study focusing on the perceptions and attitudes of one teacher towards blended learning and the intersection with academic development in the MSAFP which would provide motivation for a broader case study across the programme. There is at least one reported case study that contributed to the pursuit of my reasoning. Benson *et al.* (2011) highlight the need for understanding teacher perceptions to blended learning. They focussed their study at the delivery level of single module courses in a single business school. My reasoning led me to believe there would be value in investigating an even more unique perception, that of one teacher in charge of delivering a single module.

Foundations for the development of theory were explored in the case but the legitimacy of such theory would have to wait for further case studies or a multiple case study to be conducted and thus gain credence.

With the rapidly passing timeframe objective of the Monash Education Strategic Plan (2011-2015), it was hoped that this study might cast light on the interplay between teacher beliefs and their responsiveness to strategic change. Management would do well to heed the first order of business for change facilitators, according to Hall (1987, p. 5), being "to understand the practices of teachers and their concerns about change". The outcomes of the study could possibly inform management decisions made within the MSAFP and even on the MSA campus in time to influence any necessary adjustments needed to reach the goal of the blended learning strategy at Monash.

Given the context within which the study would be pursued and the nature of the questions being asked, the decision was made to employ an embedded multiple case study design. This research design would accommodate an investigation into the specific units of "perception" and "attitude" within the case of an individual teacher. In seeking deeper insight into the possible role of teacher perceptions and attitudes in the purposeful adoption of technology as

part of blended learning it was also of interest to the researcher to uncover factors that appeared to impact teacher choices in this regard.

Of great significance to the investigation would be uncovering the associations made between the use of blended learning and the improvement of quality in teaching and learning in academic development environments. It was my contention that if there is no perceived benefit to improving the quality of academic development through the incorporation of blended learning methods, then the institutional objectives of embracing these methods would only be adopted out of a sense of obligation, an extrinsic motivation, rather than the belief that it would be worth doing so. Change so motivated would likely result in a slower than hoped for adoption of blended learning practice. The anticipated benefits of adopting and implementing authentic blended learning, which is meant to provide the competitive edge, could thus be undermined as institutions with greater responsiveness to shifting trends and demands in higher education adjust the playing field.

It had to be considered whether the research that this study proposed was worthy of pursuit in the first place. Garrison and Kanuka (2004, p. 104) are frequently cited[7] in building an argument for the importance of researching blended learning and many advocates have since elaborated on their claims. Vaughan (2007, p. 92) postulates that "the vision for blended learning must be in the best interests of the learning institution and truly shared amongst the constituent members", indicative of the stance that one should find evidence of institutional values in the teaching practices of the lecturers. However, his cautionary tone is evident as he raises a discussion on significant challenges encountered by academic staff in blending technology with traditional teaching. The apparent dichotomy that lurks under the promising surface of blended learning needs to be unearthed and understood in order to make sound management choices and thus demands every avenue of exploring the issues be pursued. Benson *et al*. (2011, p. 145), state: " Lacking in current literature are studies about educators' perceptions of blended learning, their attitudes towards blended learning and their current blended learning practices", thereby confirming my conclusions of an inadequately addressed gap in the literature. Just as Benson *et al.* (2011, p.146) aimed to "fill this gap in the literature by investigating perceptions, attitudes and practices of blended learning of academic staff in

[7] Prompted by the frequency of citation noted in works I was referencing, I used a Google Scholar search to find the Garrison & Kanuka (2004) paper, Blended Learning: Uncovering its transformative potential in higher education, online. At the time of writing the search result indicated a citation frequency of 771, which is a high occurrence compared to other searches on papers within this field.

business higher education", the research I embarked on was also levelled at addressing this gap with the distinction of being relevant to an academic development programme rather than a business school. My contention is that research in blended learning still needs to extricate many more narratives in order to create a body of literature that can more completely inform practitioners and managers alike in the reawakened discourses on blended learning.

The rationale for this study is firmly located in the decision made by Monash University to adopt blended learning practices as one of four objectives in its strategy for improving teaching and learning. The central purpose of the MSAFP as an academic development programme is to foster and develop the quality of academic skills within its students, providing a logical site in which to engage in this research. In his introduction to the Monash Education Strategic Plan 2011-2015 document (Monash, 2011) the Deputy Vice-Chancellor of Monash emphasises the weight of the document contents by stating that "we have five years to make a major and lasting change to our educational trajectory". The core of the document is built around the four objectives of the Monash Education Strategic Plan 2011-2015. Two of those objectives speak directly to this purpose of this study. The first objective is to "ensure excellence in learning and teaching" and the second objective aims to "Invest in blended learning to enrich the face-to-face educational experience for students and academics". This mirrors the intersection of the blended learning and quality academic development vectors of the investigation and it was anticipated that the discoveries made at this intersection would produce observations that could inform practice in the MSAFP and to add a voice to the broader discourse in this area of study. In reference to these objectives Monash had commissioned a team in 2009-2010 to explore the most suitable strategic options for an appropriate learning management system. It was concluded that Moodle[8] as an online learning platform was best aligned to the strategic educational objectives of Monash University[9]. The first Semester in 2103 marked the start[10] of using Moodle across all faculties of the institution. Naturally this constituted broad change implications (discussed on page 41)

[8] Moodle is defined on https://moodle.org/about/ as an Open Source Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE).

[9] Only available on login secured website http://www.vle.monash.edu/faqs/faq-vle.html

[10] Moodle1.9 was introduced at Monash in 2011 to select users and then Moodle2 was strategically introduced in pilot cases in 2012. Officially Moodle replaced other platforms at Monash in early 2013.

as educators and faculties were required to make the shift from previous methods of managing courses.

Previously it was indicated that the pursuit of excellence in education within Monash is high on the agenda of strengthening academic value within the institution. This is not a unique value in the world of academia, although it may be elusive at times. Also mentioned before is the need for quality to pervade in the evolution of the academic development arena within South Africa if higher education is to build on its current standing and not slip into insignificance on the world stage. Hence the value of quality in academic development programmes in South Africa ties directly with the site of this study, the MSAFP. Considering the diverse student profiles and the purpose of the MSAFP it is perhaps worth noting the observations of Holley and Dobson (2008, p. 149) in their statement that a "structured blended learning environment, compared to the previous 'study skills' module did engage students in the classroom for longer and more students completed the module"

One competitive edge that universities seek to exploit is the quality and uniqueness of their student experience as a whole, including the learning experience. Teaching staff are naturally a fundamental contributor to the holistic student experience and specifically to the learning experience. Considering the perceptions and attitudes of teachers gives them a voice in the dialogue on student experience and a participatory role in the conscious construction of that experience. Their inner voice, if amplified, could influence practice that adds value to the student experience. Further, if teacher perceptions and attitudes are acknowledged and accounted for in the implementation of change greater ownership of the blended learning approach would likely be adopted. The results of one study (Hancock, Bray & Nason, 2002) suggests the centrality of teachers' instructional methods as being linked to improved student motivation and achievement.

Cope and Ward (2002) diagrammatically summarised research on teacher perceptions at their point of writing, showing systematic associations between teacher perceptions and an impact on student approaches to learning which influence the eventual student learning outcomes. Considering this study's emphasis on teacher perceptions, the Cope and Ward (2002) schematic representation (shaded) is amended here in the figure below to reflect the additional concerns this study.

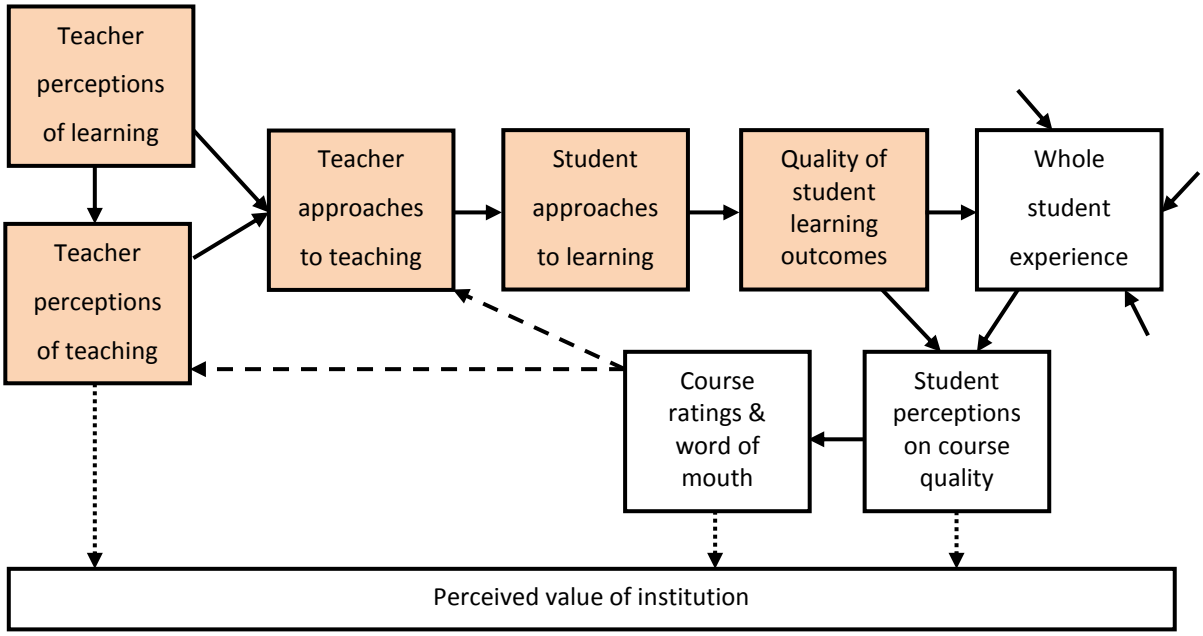


Figure 1.3 Potential impacts of teacher's perceptions

The figure above emphasises the value of stimulating conversations concerning teacher and lecturer beliefs, perceptions and experiences, with a focus on blended learning in this case. These perceptions may initially impact student learning, but accumulatively over time and collectively with other teacher beliefs they can have an influence that has a bearing on the institutional. It is important to note that there has not always been congruence between stated beliefs and teaching practice (Ottenbreit-Leftwich, Glazewski, Newby, & Ertmer, 2010), hoewver, recent studies indicate that there has been an improvement in that alignment, as discussed on page 98, over the past decade (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012).

In the context of this study, the focus is on one teacher's voice regarding the issue of blended learning and quality academic development. It provides too narrow and unique a view to generate any valid theory, however, with the MSAFP being a small team, every voice adds a vibrant colour to the ongoing discourse on teaching practice and pursuit of academic excellence, which seeks to respond to the strategic education plan. Subtle, informed adjustments to the implementation of blended learning may not completely change the trajectory but it would help to align the MSAFP to the institutional strategies for achieving academic excellence.

The promise of successful blended learning in specific contexts, such as within an academic development programme, should be sufficient cause for further exploration. By investigating

the perceptions and attitudes of a teacher specifically in the MSAFP, boundaries were established for the case study (Yin, 2009) allowing for the emergence of a richer interpretation that, although not sufficient for generating theory, would be valuable as an interpretive construct for understanding teaching practice in the MSAFP. Thus this study hoped to contribute to the ongoing success of the MSAFP through informing practices that engage strategic directions in education at Monash University and thereby benefit the academic development of students in the programme.

1.5 Assumptions and Limitations

The first of two main assumptions was that appropriate staff members from the MSAFP would volunteer in their spare time to be participants. It was, however, not expected that this would be problematic since I work in the MSAFP and was able to ask a sample, informally and before MSA had even granted permission for the investigation, whether they would be prepared to participate on a voluntary basis. The assumption was well founded and no problems were encountered.

The second assumption was that the participants would be honest and accurate in their feedback, particularly during the interviews. All the participants know me and would not feel intimidated in a conversation with me as an interviewer, and indeed they seemed very relaxed. However, it had to assumed that they would not try to portray anything other than it was since, notwithstanding my faith in their integrity, I could not be certain of the fact that their responses would be true. Assurances were given that all information would be treated with confidentiality and personal identities concealed in the reporting through coding in an attempt to mitigate any tendency to exaggerate or misrepresent information.

The limitations of the study stemmed primarily from the narrow demarcation of what would finally constitute the case study. Being the first study I've done of this nature, there was some anxiety about the process of emergence from the case study and that sufficient material would surface from such a narrowly defined case.

The case study was confined to the perceptions and attitudes of one teacher within a specific academic development programme, with some embedded elements from other interviews and source data to provide a sense of context and hint at possible theory creation. However, it was recognised that the value in this study would be strictly limited to the richness contained in the interpretation of a single narrative that would not provide any foundation for generalisation.

Further detailed studies of students, teachers, existing practices and blended method initiatives in the MSAFP are required to add a stronger voice on blended learning in the local academic development field. There remains a vast scope for enquiry within MSA in order to build comprehensive and valid models of blended learning practices on this and other higher education campuses.

1.6 Outline of the Chapters in this Study

The research report comprises five chapters with the current **Chapter 1** being an introduction to the study which provides some background and context, highlighting the rationale and significance of the study and the questions it set out to answer.

Chapter 2 reviews aspects of the existing body of literature that describes the field within which this study is located. In particular it will review literature about the use of Blended Learning in higher education, set within the broader context of Information and Communication Technologies (ICT's) in teaching and learning. The value of perceptions in this area is highlighted. A limited review of literature on academic development and change management will be provided, primarily to add to the context within which the study is framed. It should be noted that although reviewing literature finds a focal point in this chapter, there are threads running throughout the study, primarily to facilitate the narrative, which may be considered part of the review.

In **Chapter 3** the methodology is covered. An interpretive approach is highlighted as the overlying paradigm through which the study was viewed, indicating that an insight into the phenomena being studied would emerge from the qualitative case study. An eclectic approach is taken with the use of various methods which were used to examine the perceptions and attitudes of an educator but also to provide a meaningful milieu within which to evaluate its meaning. Procedures used for data capture and analysis are also covered.

Chapter 4 presents the results of the data analysis conducted using methods presented in the previous chapter. The results are clustered in two groups. The first speak primarily to context and that may serve as points of comparison or illustration. The second cluster reports the results of the key data set – that which pertains specifically to the case of the teacher and his perceptions and attitudes.

The study concludes in **Chapter 5** with a discussion of the emerging narrative of the case organised with the aid of the sub-questions posed in Chapter 1. The discussion is concluded

with a summary of salient points from the research, showing how the literature amplifies the meaning and how the study addresses gaps in the data and in the literature, leaving space for recommendations.

Chapter 2: Literature Review

2.1 Introduction

The previous chapter introduced the study by establishing the focus of the research, being the case of teacher perceptions and attitudes towards blended learning in the MSAFP as an articulation of the institutional position on blended learning. The motivation and rationale for the case was built around the value of understanding teacher perceptions as a means to recognise elements of teaching function in a given context, specifically an academic development programme and in pursuit of academic excellence. It was suggested that the potential significance of a case study such as this lies in adding a slim narrative thread to enhance the vibrancy and texture of insights that could eventually lead to decision making for more effective teaching and learning.

This chapter will serve as the first step towards answering the research question "In what ways do the attitudes and perceptions of a MSAFP teacher towards blended learning echo the present strategic plan of Monash University to incorporate blended learning into the educational practice of the institution?" by providing a broader view of the blended learning landscape, academic development and dynamics of change from the a vantage point of relevant literature on these issues. A point to note is that although this chapter is focussed on reviewing relevant literature and locating this research in the field, I do not consider it the only part of the report aimed at achieving this. Throughout the report there are references to literature sources and perspectives which serve to augment this section of the report.

After an introduction I will establish the organisational pattern for the literature review and customise a model for the purpose of steering the review along the specific lines of enquiry of importance to this report, such as the topic of adopting technology into teaching and the impact of change on this. The topical issues of technology in education and blended learning are addressed before briefly looking at some theoretical frameworks for consideration in blended learning settings.

With the universal incorporation of technology into almost every facet of modern life and the expectation for it to spur educational reform and release new life into the floundering education systems of the world, there has been no shortage of recent academic research and writing on educational technology in broad terms. Notwithstanding what has been published, there are still significant gaps in the literature, perhaps more so in certain contexts such as at

previously disadvantaged universities (Ngugi *et al.*, 2007). That educational technology has emerged and come to exist as a field of enquiry has been established internationally from various quarters (Czerniewicz, 2010). Interestingly, in mapping the field in Bernsteinian terms, Czerniewicz (2010, p. 531) indicates that "it is generally being located in the social sciences and, like other social sciences, it is segmentally divided, interacting internally in complex ways". Less prevalent but rapidly expanding is the literature on blended learning, a segment encapsulated within the field of educational technology. When looking into specific areas of technology application, such as in academic development programmes, the literature dwindles even further. Literature on single case studies in such a programme, from the perspective of teacher perceptions and its effect on blended learning in the programme, is apparently yet to be articulated. It is certainly a slight gap in the literature that needs addressing, but none the less a gap that should be addressed.

2.1.1 Organisation Pattern for the Literature Review

Of the approaches to organising a literature review as discussed by Ridley (2011), a 'zooming in' approach by Rudestam and Newton was identified as having relevance to this review. This approach describes the organisation of a literature review as "long shots, medium shots and close-ups which describe different degrees of depth" (Ridley, 2011, p. 83) which could be explored, according to the closeness and relevance to the research.

I realised that such an approach, which Wellington *et al.* (2005, p. 82) represented visually as concentric circles (see Figure 2.1), would be a fairly suitable framework for this review considering the embedded nature of each successive area mentioned in the introduction above.

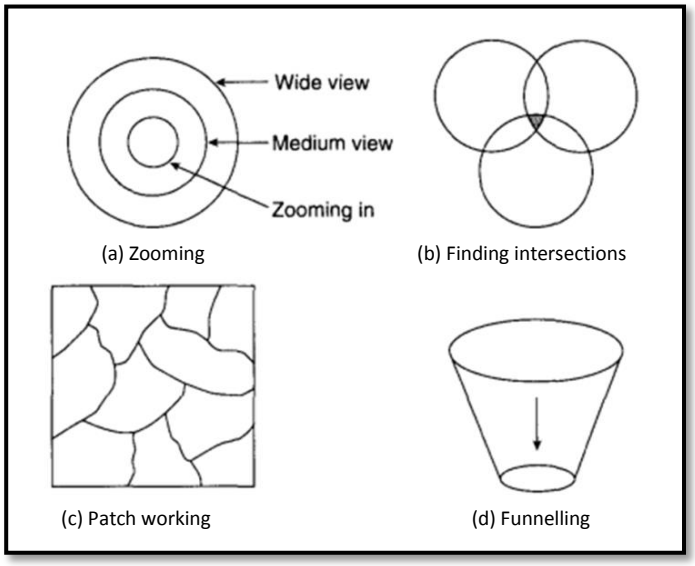


Figure 2.1 Organizational patterns for the literature review. Source: Wellington *et al.*, 2005, p.82

2.1.2 Customising an Organizational Pattern for this Literature Review

It is clearly established that the broad field of ICT's in education would be a wide angle view encompassing a medium angle view of the area of blended learning with other narrower views contained within that. However, the pursuit of excellence in academic development and the element of change, which emerged from my research as an important consideration in this study, did not fit in the concentric design. Perhaps the pursuit of academic development could be seen as a driving force, being the central purpose of the programme which propels the educator along a path of necessary change as he/she adapts to a deepening integration of technology in their teaching practice. This led me to adapt the concentric circles idea into a model that could function as a framework through which to approach the literature review incorporating those ideas (see Figure 2.2). Admittedly it has shortcomings as a situational model, such as not accommodating multiple new change events introduced at the same time, but since this report is primarily focused on the single event of introducing blended learning I will not attempt to defend such shortcomings. The purpose here is simply to frame the literature review such that it mirrors to an extent the narrative of this case study.

Before explaining the model in brief, it would be useful to consider the broad demarcation of the literature that is covered in this review. As mentioned, there is already much research and writing that has been produced in the relatively young field of educational technology, the nature of which is still to be clearly described (Czerniewicz, 2010). No doubt there is much more to come as technology and the field of study regarding its use in education is constantly and rapidly changing.

Only key aspects of ICT's in education are considered here, slanted slightly towards academic development and change, since the purpose is mainly to create a broad contextual field within which to locate a more pointed discussion on blended learning and perceptions relating to it. With blended learning being the central concept in this study, some attention will be given to understanding the development, application and current position of blended learning in education. The themes of change and academic enhancement are pursued and then the lens zooms in even further onto the subject of teacher perceptions of blended learning. Academic development, being the central purpose of the MSAFP, which is considered a driving force, is thus a common thread throughout. Change is considered more as an experiential event through which a person navigates perpetually or intermittently, depending on circumstances.

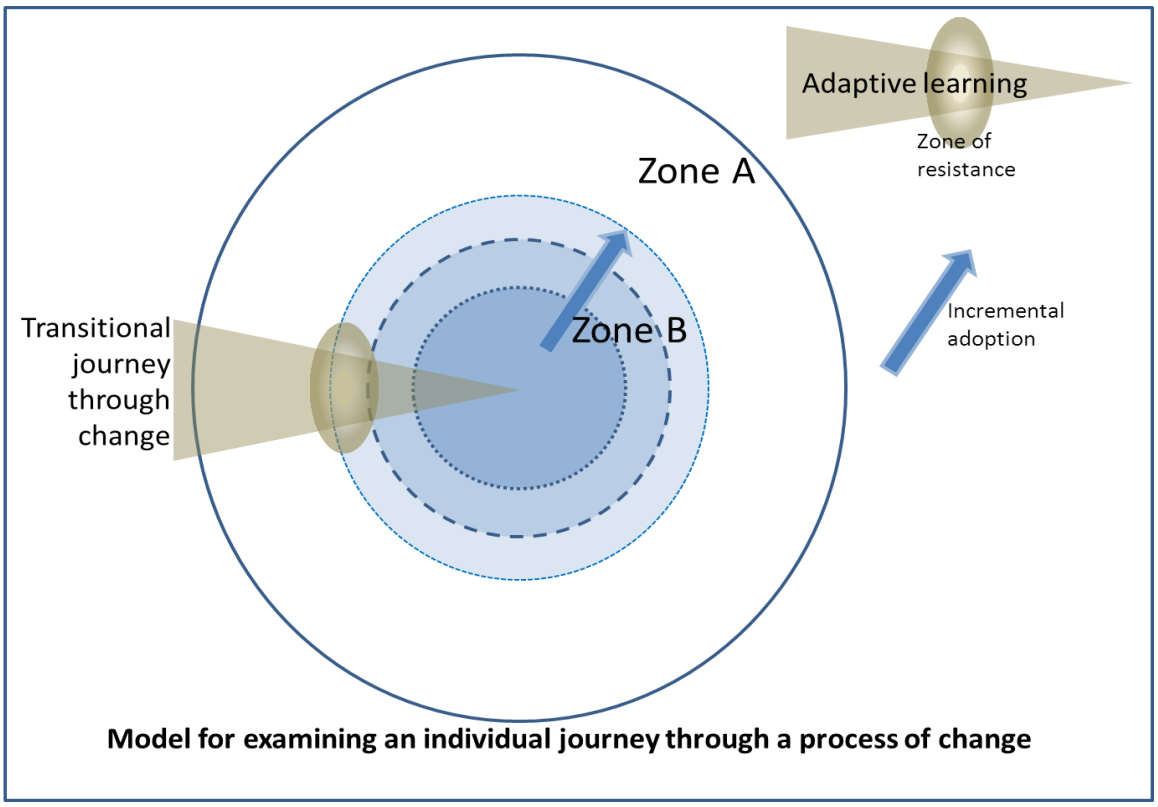


Figure 2.2 A model for organising a review based on the experience of introducing change

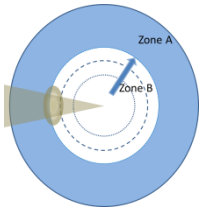
It is necessary at this point to briefly explain how this model of an individual progression through a process of change is used as a framework for the literature review. Beyond the outer circle lies the broader context within which the narrative takes place, in this instance the general teaching and learning functions of an academic development programme. Zone A and B represent events more than place. Zone A would be the on-going "event" of ITC use in the environment, the status quo so to speak. Each new event introduction happens within an existing relevant context and so Zone B, in the centre, represents the event of introducing blended learning into the status quo. Each event, if it has longevity and some ability to penetrate into the existing environment will expand its impact until it is assimilated as an equal. Perhaps it becomes the status quo, hence the multiple rings in Zone B with the arrow representing incremental acceptance within the system. It does not have to become as pervasive or important as its surrounding context, however. In other words it simply becomes accepted as part of "the way it is".

The cone penetrating the circles represents adaptive learning along the experiential journey of the individual, indicating the incremental value of learning to manage the occurrence of change. The "direction" of the experience is from the outside to the centre, the familiar to the

new, a dynamic opposite to the duration and pervasiveness of the new event. ICT followed by blended learning in this case. The diminishing width of the cone at any point represents the reduction in learning and discomfort relative to the degree of adjustment required as the change event becomes more commonplace. Hence, the longer (or deeper) the individual journeys into the event, the less the required learning, and the more at home they feel. Consequently the resistance to the event is expected to diminish. Every time a new event is introduced, at the point where the individual is confronted with the change, there is a new change crisis variable, or zone of resistance, which would need to be managed and navigated if the change is to be accepted and assimilated into the status quo for the individual. This may occur at different points and at differing intensities for each individual, depending on the nature of the event introduced.

The model provides a framework through which the literature is to be examined. Zone A will cover issues relating to ICT at large in education. Zone B represents the introduction of blended learning while the arrow reflects the aspect of change.

2.2 Technology and Education



This section is "framed" by Zone A, referencing the ongoing affair education has with technology, ostensibly the status quo.

"Technology and software have the potential to reduce the separation between learner [and] instructor or resources." (Siemens & Tittenberger, 2009, p. 14) It is this potential that has resulted in the increasing attention ICT have attracted from teachers in recent years, which has meant teachers have had to rethink their teaching and plan very thoughtfully before beginning ICT integration into a curriculum (Wang, 2008). That ITC's hold transformative potential to unlocking the frustrated education sector which has not adequately responded to the rapid changes in the world about is a commonly held view but the challenges of implementation have been more pronounced than initially anticipated (Tearle, 2004).

The global span of interest in technology-enhanced education should not obscure the localised nuances in the use of technology in education. The current status of academic development in South Africa, contextualised by its own unique history, seasons the discussion with some local considerations. The story of educational technology, precipitated by the ubiquitous and connected character of the technology itself, is undoubtedly a global narrative, but with intriguing and distinct subplots located in regional histories and socio-

economic discrepancies, as illustrated in the extract from the introduction of the ITS and Higher Education in Africa report:

> Many of the country profiles revealed that efforts of instructors and/or university students are often individual ones that may fail to impact on the university and, far less, on the tertiary education system as a whole. Given that so many of the national ICT policies emphasise the positioning of their countries in the global economy, there is a clear need to recognise the intellectual assets that the continent does possess and to build and collaborate on the strengths that already exist. (Ngugi *et al*., 2007, p. xi)

Ngugi amplifies a point I made in the previous chapter relating to the institutional objectives and enthusiastic individuals that may need steering into a cohesive drive forward from the institution. The flood of information and communication technology (ICT) permeating the various arenas of education has left few questions around the perceived importance of its role in education. Indeed, the literature is replete with examples and declarations of how ICT's can enhance learning. South African cases clearly identified the increased access and teaching efficiency achieved in tertiary education by effectively utilising new technologies (Mashile & Pretorius, 2003).

Commitment in South African higher education to the changing social and economic climates has been well demonstrated and ICT's have been used for course delivery and as a means to enhance student learning and performance (Nel & Dreyer, 2005). Educational opportunity seems heightened with the potential of technology. Modern ICT trends should be able to facilitate an education for learners in rural Africa equal in cost and quality to any other developed location. Having access to the required technology for delivery of distance learning is the biggest challenge in rural and remote areas of developing countries (Kruger, 2010). The question is simply, can the delivery take place? A potential complication which seems to recur every time new technological developments appear on the horizon is the expectation that technology will be the rescuer of education. My view aligns to that of probably most educators, in that it is the educational need that must determine the appropriate incorporation of technology to serve that need and not the other way around. The technological tail should not wag the pedagogical dog, we agree. Establishing if this is the case is an important consideration in addressing issues of ITC's in higher education.

The institutional motivations and promising methods offered by the technology which tend to drive the choices made by institutions and educators in their approach to adopting technology in education are not uniform, perhaps because it is still an emerging field of enquiry. The rapid evolution of technology and the increasing potential of its application to change the

realm of teaching and learning demands a response from education institutions, academics and educators alike and a "commitment to respect and open-mindedness across existing clusters and subgroupings will serve the interests of the educational technology research community" (Czerniewicz, 2010, p. 531) and the practitioners alike. Naturally, such a response is not attained only by the development in technology but also by the specific environment that elicits the response. Jaffer *et al*. (2007, p. 131) cite their agreement with other authors who "argue that it is the contextualised teaching and learning needs that ought to drive the ICT intervention, rather than the technology itself" and then they elaborate on the unique imperatives of South African contexts for teaching and learning.

Institutions seem keen to turn to the promises of ICT-based learning to foster high quality learning and close the inequality gaps as well as the gaps between expectation and delivery. In South Africa the calls and responses to close the gaps are amplified by the legacy of apartheid and subsequently the tentative stumbling of a nation trying to find its feet. There is much debate on "whether or not a national ITC policy or regulatory framework for higher education is desirable", with some reports findings that it would not be (Ngugi *et al*., 2007, p. 103). Change has been a real part of the landscape in South African education in recent years. Nel (2010) points out that in South African higher education many facilitators have not fully adapted their classroom practices to the changing higher education environment. Neither the richer student diversity nor the global trends of student-centred education have been effectively accommodated yet.

Definite strategies are required to address the teaching and learning "gaps" that typically occur as a result of the challenges faced. Higher education institutions are putting their time-honoured functions of upholding academic rigour and stoically resisting popular trends on the balancing scale. External pressures and internal inadequacies are exposing possible cracks in the halls of learning. Significant change in educational institutions seems inevitable and many propose "that the technological enhancement of teaching and learning could provide possible solutions to bridge these gaps" (Nel, 2010, p. 2).

With the profound effect ICT's have had on most our lives over the past two decades, it is hardly surprising that there would be a broadly held expectation that they could do the same in education – revolutionise it! This expectation is reflected in the Council for Higher Education report (Scott, Yeld, & Hendry, 2007) that, amongst others, suggests a strategy that higher education should enact is the implementation of teaching methods and approaches that

employ educational technology in their arsenal. This speaks of institutionally directed change. Garrison and Vaughan (2008) and others (Campbell, Cook, Kusch & Moulton, 2009; Nel, 2010; Van der Merwe & Mouton, 2005) show and discuss the potential of technology to be favourably employed in helping to solve current dilemmas in education. Nel (2010, p. 5) says that "exciting possibilities of the use of technology in advancing more effective teaching and learning and in the process bridging different types of inequity gaps" exist. She further explains that the "way in which the technology tools [discussed within her paper] were selected for integration and the findings reported for the use of each tool left no doubt that each was selected to support a specific pedagogical objective". No doubt they were, but there is an element of dissonance between the two statements, the latter holding firmly to the unshakeable "pedagogical dog", yet the first reveals preference for the product-orientated discourse that Witte (2007) speaks about which subtly puts the "tail" in charge.

Witte concedes that there is a fine line to be drawn between the product-orientated discourses, which he claims drives most cases where technology is adopted into teaching practice, and the *necessity* to mention or discuss certain products because they fulfil the need for which they are to be used. An example he uses to illustrate this is of someone returning from a conference, having heard of a specific technology, and who then *looks at how they can use that technology* it in their class. This would describe as product-orientated discourse leading the adoption. This would be a case of the "technological tail" wagging the "pedagogical dog". Conversely, someone coming back from the conference who had wanted to accomplish that which the technology now equips them for, having found the enabling technology, would legitimately have the "dog wagging the tail." So too one who sees/hears of a new technology, or a new potential educational application for a technology, that he was not previously aware of but now, recognising how it can legitimately augment his pedagogical beliefs , adopts it into his practice. The pedagogical dog is in charge. These are fine lines of distinction but necessary for educators to think about in understanding the motivations driving their use of technology in their teaching. A tail wagging its dog is likely to not have the legs to go the distance.

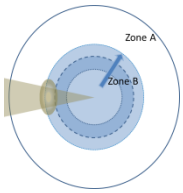
Discerning such distinctions at individual levels can help build a case for researching singular case studies. These can in turn enlighten programme directors' understanding of the beliefs their individual teachers hold and empower them or change agents to better manage the change, particularly in this case regarding the potential value of technology in enhancing academic development. Witte (2007, p. 205) declares that as "instructors and technologists

make their choices, they must be guided by their instructional values and instructional challenges they face. If a particular technology is a solution, it really pays to have well-articulated problems in mind that the technology is meant to address". This is not an uncommon stance, as demonstrated by Jaffer *et al.* (2007, p. 131) in showing in their case "how educational needs can drive design of learning environments and technological use".

Laurillard (2002) highlights how the pressure facing academics is unprecedented, not helped by the inertia in higher education created by traditions, values and infrastructure when it comes to change. Massive pressure for change has been thrust upon higher education and over the past two decades this has escalated. She reminds us of the "need to rebuild the infrastructure that will find the fit between the academic values we wish to preserve and the new conditions of educating larger numbers" (Laurillard, 2002, p. 4). She advocated a culture of continuous improvement in teaching environments. I would argue that theoretically the infrastructure needs to fit the objectives of the institutional learning objectives, irrespective of the numbers involved. Naturally though, there are always constraints to implementation such as budget and available skill sets. The literature testifies technology being used to enhance education and the need to be a change agent, not always successfully as evidenced through technology continuously seeking to reinvent or redefine its role as a catalyst to enhanced education offerings. This led to the trajectories of e-learning and blended learning offering making their bid for the role of game changer. The game however has become far more complicated than expected in the early euphoric years when the internet burst onto the scene with the obvious potential of new technologies being far from self-evident (Guri-Rosenblit & Gros, 2011).

2.3 Blended Learning

2.3.1 Background and Defining Blended Learning



The purpose of this section is to discuss aspects of **blended learning** as a "new Zone B event" introduced into Zone A (ICT in education), as the concept has enjoyed a resurgence of attention in recent years.

The term "**blended learning**" is currently enjoying great popularity, but despite this it "is defined with considerable variation across institutional contexts" (Graham, 2013, p. 333). He continues that the frustrations are not unexpected, since the **blended learning** landscape is still rapidly evolving. Regarding this rapid growth and evolution, Picciano (2009, p. 8) points

out that, despite the general belief that **blended learning** is achieving a deep reach into education, there is little data documenting the reach primarily because of three factors. In summary they are: faculty that do not identify themselves as teaching in a **blended learning** mode when in fact they are, inaccurate, inconsistent or even non-existent record keeping, and finally a crucial point that "there is no generally accepted definition of **blended learning**" (emphasis mine).

Authors like Garrison and Kanuka (2004) argue that **blended learning** is an approach to teaching and learning that has emerged from the growing potential of technology to become the central cog in higher education that other modes of technology based learning, such as online learning laboratories or e-learning approaches, have not been able to exploit fully. The suggestion is that the face-to-face component must be retained in a balance with more technology directed learning. Others like Littlejohn and Pegler (2007) conceded that the art of **"blending"** has been evident in the learning environments created by inspirational teachers for centuries. They suggest technologies may well have evolved, but they have always been present in some form. Equally an argument could be made that technology per se is not the king pin around which **blended learning** revolves, but that any **blend** of method, tools and other influencing factors could constitute **blended learning**. It does seem that it comes down to defining for each individual, programme, school or department what **blended** means to them, positioning it in a broader context of what is generally understood by **blended learning** and then setting out to plan it's application with purpose to accomplish the desired results.

Bonk and Graham (2012) place **blended learning** in the global context of education and technology by noting its accelerated growth, drawing on the cases documented in the edited *Handbook of blended learning: Global perspectives, local designs* which range from American to European, from South African to Australasian locations. The handbook also details two surveys conducted in higher education and corporate world contexts regarding the future of **blended learning** and cautions that "given this significant adoption of **blended learning** in both higher education and corporate training settings, it is vital to create strategic plans and directions for it" (emphasis mine), (Bonk & Graham, 2012)

Over the past few years **blended learning** "has been broadly researched across the globe in the educational circle" (Huang, Ma, & Zhang, 2008, p. 66) yet it has been explained differently since its birth with its meaning in continuous flux. Finding a definition of **blended learning** that satisfies all perspectives has thus proved elusive. The Encyclopaedia

of Educational Technology indicates that "the concept of **"blending"** grew out of the successes and failures of e-learning" (Douglis, 2004). Key proponents of e-learning, such Allen (2007), are less likely to give ground to the argument that e-learning per se was deficient. He concedes, in a somewhat condescending tone, that "**blended learning** appeared to be a regression to instructor led learning as a fix for ineffective e-learning" (emphasis mine), (Allen, 2007, p. 79). He acknowledges that e-learning experiences frequently have simply not been good enough, but he contends that it is not the mode of learning at fault but rather the quality of instructional design. Allen's argument is that all face-to-face, group and other forms of instructional-led learning can suffer the same fate at the mercy of poor design which fails to respond to learner and learning needs by providing authentic learning experiences. The salient point here is that the instructor, teacher and designer have a crucial role/s to play, regardless of the chosen vehicle for the learning experience. Again, the perceptions held by people in these roles of any given mode of learning will create grounds for prejudice to be displayed one way or another.

An emergence from existing contexts typifies new trends but this does not necessarily mean there is conformity in the emergent understanding of the new concept, such **blended learning** in this case. There is considerable disagreement regarding the meaning of the term **"blended learning"** (Osguthorpe & Graham, 2003). Some of the perspectives are indicated in the discussion below. For the purpose of this review it is helpful to highlight elements from various perspectives but then to derive central meaning from the commonalities of these understandings.

2.3.2 The Nature and Characteristics of Blended Learning

Huang *et al*. (2008) suggest three central characteristics of **blended learning** are:

- flexibility in the provision of learning resources
- supporting learning diversity
- the enrichment of the e-learning experience

It is difficult to miss the similarities to Khan's definition of e-learning. Taken collectively, the effectiveness of these characteristics would at a minimum depend on students having or acquiring a degree of fundamental computer/ICT skills and having access to reliable technology. In order for these characteristics to be assembled into an effective **blended learning** event, the essential roles of the curriculum designers and teachers cannot be

underestimated. In other words, the teacher is one of the central figures in bringing the best out of a learning experience whether using technology, **blending** the learning or going with the traditional face to face approach. Teacher attitudes and perceptions towards any of these modes of learning will therefore be a crucial factor. In typical **blended learning** situations, flexibility allows for synchronous and asynchronous availability of teaching and learning opportunities with diversity catering for different learning styles and preferences while the resources are provided through virtual learning environments.

The nature of **blended learning** can only be clearly described through the definition and understanding of the concept as held by an individual or specific community but broadly across the field it remains tenuous. Singh (2003, pp. 51-54) suggests that the essence of **blending** lies in: "1) **Blending** offline and online; 2) **Blending** self-paced and live; 3) **Blending** structured and unstructured learning; 4) **Blending** learning, practice and performance support" (emphasis mine), summarising that "Blended learning combines multiple delivery media that designed to complement each other"

On the other hand what it means to be blended for Osguthorpe and Graham (2003) is having the three learning environment components of learning activities, students and instructions being present and presented in both face-to-face and online settings. For Moore and Gilmartin (2010) it is even more, as they consider blended learning to involve more general mixes of teaching and learning approaches, regardless of being face-to-face or online.

Despite Norberg, Dziuban, and Moskal (2011, p. 207) referring to blended learning as the "new normal", it is clear, as Picciano (2009) mentions, that a uniform and definitive description and understanding of what **blended learning** is has yet to be established. What constitutes pedagogically sound use of technology in any given situation remains open to interpretation. Further, in most cases **blended learning** is seen to entail an overlap of face-to-face learning with online learning, each containing any number of distinguishing characteristic elements of activity, again with varying degrees of pedagogic underpinning. Yet this view is counterpoised by opinions that **blended learning** can, by some definitions, potentially exist exclusively within one or the other of these domains, even if this is an unlikely scenario.

Regardless of the incongruence in definition, the idea of blended learning is reported to be "proliferating across college and university campuses" (Bonk, Kim, Zeng, 2012, p. 550)

2.4 Theoretical Frameworks

It is not the intention of this review to elaborate extensively on existing or potential frameworks and models that can be employed by blended learning protagonists, but a brief consideration is given to two frameworks that provide a theoretical underpinning for this report and which may prove valuable to pragmatically minded teachers.

2.4.1 Community of Inquiry Framework

At times there is value in taking a step further back for a wider lens on the issue. Although developed in a specific context for particular reasons[11], the Community of Inquiry (CoI) framework (see Figure 2.3) may provide a useful wide angle lens bringing into focus the central importance of the educational experience. It is not a specific blended learning framework but has clearly been applied to this mode of learning, not least by its designers (Garrison & Vaughan, 2008).

According to Garrison, Anderson, and Archer (1999) the framework represents a process of creating a deep and meaningful (collaborative-constructivist) learning experience which is imbedded within three assumed and interdependent elements which are outlined on the Community of Inquiry website:

> **Social presence** is "the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of protecting their individual personalities."
>
> **Cognitive Presence** is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse
>
> **Teaching Presence** is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes.
>
> *Source: Community of Inquiry website (*https://coi.athabascau.ca*)*

[11] This website documents the work completed during A Canadian Social Sciences and Humanities research funded project entitled "A Study of the Characteristics and Qualities of Text-Based Computer Conferencing for Educational Purposes". This project ran from 1997 to 2001. The theory, methodology and instruments developed during this project are documented and described on the Community of Inquiry website, recently updated to https://coi.athabascau.ca , and which includes papers published in peer reviewed journals.

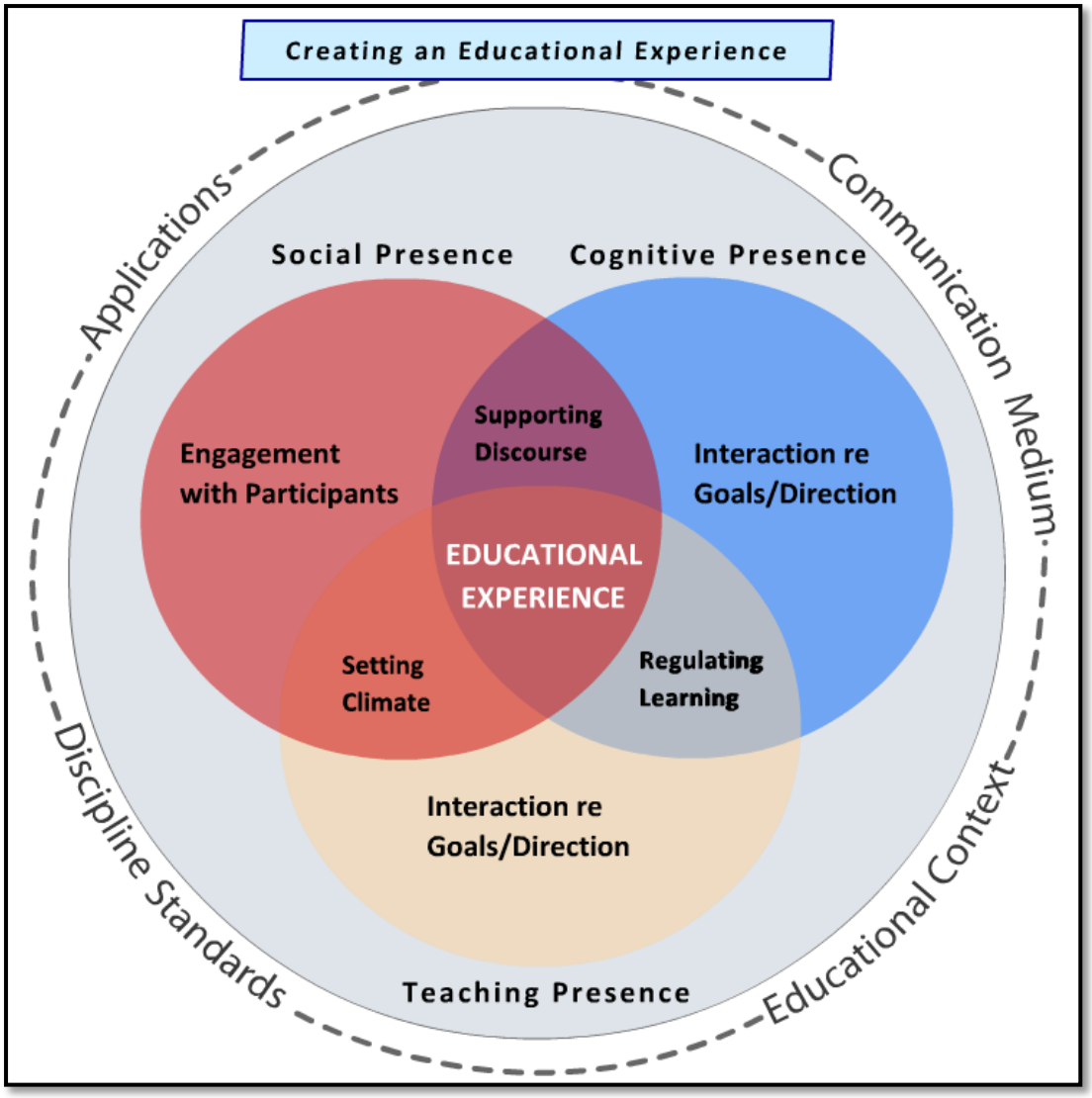


Figure 2.3 Elements of an Educational Experience: Community of Inquiry Framework

(Source: https://coi.athabascau.ca/wp-content/uploads/2013/09/coiAS3.swf)

Each of the three elements in the CoI framework should be seen as making a critical contribution to the value of an Educational Experience but it is possible for a given experience to be devoid of substance in one or more of the elements. This could quite possibly be an underlying cause for some of the failure in e-Learning experiences that Allen (2007) alluded to. To understand a situation in terms of the model, Garrison *et al.* (1999) provide a coding standard which is shown in Table 2.1 below.

Table 2.1 Community of Inquiry Coding Template (Source: Garrison *et al.* (1999))

Element	Categories	Indicators (examples only)
Cognitive Presence	Triggering Event	Sense of puzzlement
	Exploration	Information exchange
	Integration	Connecting ideas
	Resolution	Apply new ideas
Social Presence	Emotional Expression	Emotions
	Open Communication	Risk-free expression
	Group Cohesion	Encouraging collaboration
Teaching Presence	Instructional Management	Defining & Initiating discussion topics
	Building Understanding	Sharing personal meaning
	Direct Instruction	Focusing discussion

To state the obvious, this framework should be considered in totality in terms of giving meaning to the central Educational Experience segment, however the intention here is not to analyse the framework in depth and simply to highlight the aspect of this framework most pertinent to the matter under consideration in this report. Considering the focus is on perceptions of teachers and the impact on an aspect of his practice, it seems most relevant to highlight the teaching presence element where the teacher perceptions and beliefs will directly affect the degree to which indicators of the expected categories will be present in the actual educational experience. Given that the COI has a social-constructivist disposition, it does provide educators the with the opportunity to consider the design of their blended courses with appropriate guided inquiry processes for discussing and reflecting on key questions.

According to Van der Merwe (2012) the CoI is still one of the most influential online learning frameworks available, yet he points out that despite much validation by recognised authors in the field such as Arbaugh, it is "yet to become a full-fledged theory of online learning, partly because of difficulties related to a methodology which can best be described as exploratory and interpretivist" (Van der Merwe, 2012, p. 247). The wide angle advantage aside, which certainly appoints value to the CoI framework from the point of this report, the

question that arises asks if the framework adequately addresses the pragmatic role of the teacher in the educational experience. Research on the CoI offers no significant reporting on educator-level experience in applying the framework with the result that educators may not be able to make decisions in their own contexts about the using the CoI framework (Van der Merwe, 2012). Even when a teacher does make use of the CoI there are still questions that need to be answered, such as Van der Merwe suggests, around the exact definitions of what a well-balanced, well-managed and effective CoI might be.

Not forgetting the centrality of the educational experience as an overarching value, the angle can be narrowed somewhat to attempt to understand better how to articulate the educational experience, adjusting the focus to a slightly more technical framework.

2.4.2 Khan's e-Learning Framework

The advent of the world-wide-web and consequently the ever expanding internet penetration across the globe heightened the excitement for the potential of technology facilitated on-line learning. First generation e-learning, despite its drawbacks, gave rise to the "realisation that a single mode of instructional delivery may not provide sufficient choices, engagement, social contact, relevance and context to facilitate successful learning and performance" (Singh, 2003, p. 51). Singh then points out that at the time he was writing a second wave of **e-learning** was exploring more blended learning approaches with promising signs, not only in the diversity of the experience, but even in the results of the learning.

"**e-Learning** is a generic term used to describe a wide range of application of electronic technologies (TV, radio, CD-ROM, DVD, cell phone, internet, etc) in study environments, with a special emphasis on learning through the web"(emphasis mine), (Guri-Rosenblit & Gros, 2011). These authors then add that there are multiple meanings attached to the term **e-learning** and proceed to discuss four categories of definition:

- technology-driven definitions
- delivery-function definitions
- communication and interaction based definitions
- educational paradigm descriptions

The last of these holds the most value for the discussions in this report. An example of the educational paradigm angle in defining **e-learning** would be Khan suggesting **e-learning** is "an innovative approach for delivering learner-centred, interactive and facilitated learning

environment to anyone, anyplace, anytime by utilizing the attributes and resources of various digital technologies along with other forms of learning materials suited for an open, flexible and distributed learning environment" (Khan, 2005, p. 33).

It has been established earlier that Khan's description of **e-learning** makes a fairly innocuous crossing to the bank on the blended side of a discussion on technology enhanced education. The development of his **e-learning** framework was, by his account birthed with the question, "What does it take to provide flexible learning environments for learners worldwide?"[12] The geographic range may be beyond most regular blended learning courses, but the desire for flexible learning environment still holds a strong voice in blended learned learning discourse.

In his use of the framework Singh (2003) substitutes the word "eLearning" with the word "Octagonal", a popular substitute for the framework (*see Figure 2.4*).

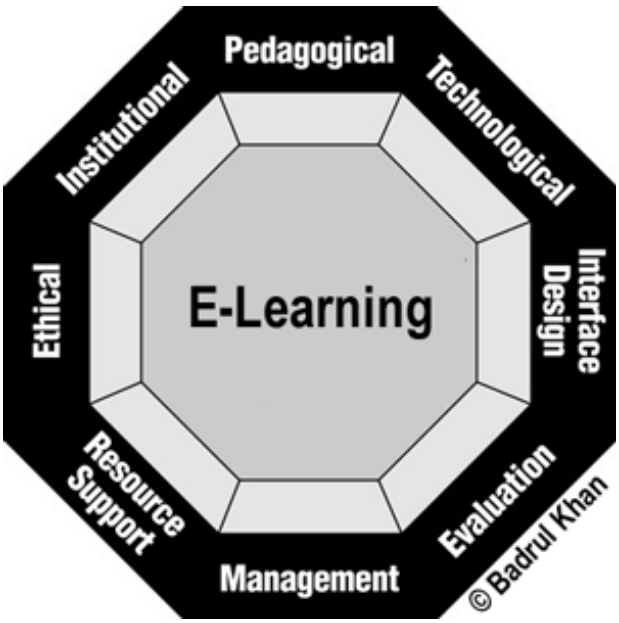


Figure 2.4 Khan's eLearning / Octagonal Framework
(Source: http://asianvu.com/bookstoread/framework/framework300by300.png)

The framework is simple yet flexible and can be used as a guide in planning, developing, delivering, managing and evaluating blended learning programmes and it provides eight dimensions by which to consider the various aspects of the educational experience. This allows for the CoI framework to be granulised, making it more pragmatic in application for a

[12] http://asianvu.com/bk/framework/?page_id=153

teacher. For instance, the three categories in teaching presence (instructional management, building understanding and direct instruction) are given a more detailed but yet still flexible matrix to apply to a particular educational experience.

Singh (2003) mentions how over the past few years blended learning has evolved from simply extending the classroom teaching with some **e-learning** activities to encompass a much richer set of approaches into a strategy which incorporates aspects of these contrasting and supplementary elements:

- Online/Offline learning
- Self-paced/Live/Collaborative learning
- Structured and unstructured learning
- Custom and off-the shelf content
- Learning/practice and performance support
- The application each of the eight factors

The eight dimensions of the octagonal framework represent a way to organising thinking about the blend so that meaningful blended learning experiences can be devised.

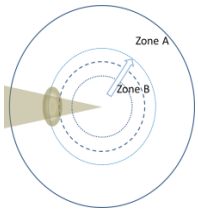
Al-Huwail, Al-Sharhan, and Al-Hunaiyyan (2007) argue that the Khan framework is deficient in that it cultural activities are embedded rather than being a major group.

This is a worthwhile question to ask since both learner and instructor are going to have socio-cultural lenses tinting their specific view of the educational experience under consideration.

The technical arrangement or design of a learning experience will largely determine the actual experience learners have, with varying degrees of success. Yet, I believe, it should be the philosophic and pedagogic reasoning behind the intended educational experience that should determine the design. This may seem obvious, but just as the potential of technology may direct its deployment, so might the exciting possibilities of design in educational experience drift from the guiding principles that establish the need for the design in the first place. The need for practical frameworks that support their dual function becomes pertinent.

2.5 Blended Learning and the Issue of Change

2.5.1 Bridging Change



Teachers would, according to Bonk, Graham, Cross and Moore (2006), play out the role of blended learning specialists in the next decade. They will not only need to possess the skills required for traditional classroom settings but will have to also master the skills necessary for virtual environments.

This is not the only way the next decade can be foreseen, of course. One could envision increased development in the fields of instructional design and greater collaboration with educators as teams setting out to meet the requirements of teachers and institutions. Assuming, though, that Bonk *et al*. make a valid point, the statement that teachers will need to develop expertise in online environments to be effective blended learning specialists brings to light an aspect of tension that could be present in what I have called the "zone or resistance" when adapting to a changing environment. Some teachers who are comfortable in traditional face-to-face settings now have to overcome their resistance to technology, a barrier to blended learning practice (Ocak, 2011), and enter the role of being competent e-learning facilitators too.

This section briefly addresses the aspect of change induced by adopting blended learning. The introduction of the new and the consequent dynamics of that introduction is familiar territory for all educators. In the context of the organisation model, this would be addressing the introduction of blended learning (Zone B) which then "diffuses", to borrow a term from Rogers (2010), into the status quo (Zone A), an environment of familiar tecnology use. Rogers (2010, p. 5) defines diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system". In many respects, if diffusion fails to occur change fails to take place. The change aspect is represented by the cone in the model, difussing from the centre outwards.

Change is an ever present factor in modern education and educators are caught in the paradox of equipping students for a future that no one can clearly foresee. Modern students and broad mined citizens purportedly expect innovative methods and tools which consistently appear on the scene with ever changing technologies. This places educators, at times unwittingly, at the face of the innovation front, while the tried and tested methods for educating and measuring students still exert a strong presence in their frame of reference. The tension comes because teachers can make the mental ascent to the kind of education that is being called for yet their skill sets and proven records anchor their feet to the trusted ground of experience. Although a technological innovation usually has some benefit to

potential adopters, Rogers (2010, p. 13) claims that the advantage is not always obvious to them and "they are seldom certain that an innovation represents a superior alternative to the previous practice that it might replace." Venturing out onto the shifting sands of capricious trends and sentiments can seem reckless. Yet something needs to be done, because "same old, same old" no longer answers the call of the vocation, let alone when the institution initiates the change.

Change affects people, and for the most part, the natural inclination is to avoid it. Ellsworth (2000) recognised it as a regular part of life, but pointed out that none of the many emerging models for change could be taken as the "correct" one. They all need to inform each other and Ellsworth suggests that in a given context flexibility to change even the attributes of the innovation in order to affect the perceptions may be required. Change is unavoidable but if it is to have any lasting effect, it must be accompanied with professional learning (Hall & Hord, 2011). The process of continuous learning has become the norm in the lives of educators working in the "zone A" realm (the current situation) where technology has become a permanent reality but one which is constantly evolving and shifting with the trends of the day. For teachers, this implies choices must frequently be made about new skills and methods that need to be learned or allowed to pass by. In a given context, such as a work environment, the freedom of the choice may be somewhat directed by the institutional goals and the response of the staff is critical to the outcome of the changing scenery.

Managing staff development with the introduction of new technologies is not easy, as Partington and Stainton (2003, p. 149) claim, it "presents the greatest challenge in terms of change management, since it requires a change to the learning environment while also requiring change in the academic culture." The role of a change facilitator, usually a manager or head of department, becomes critical. McMurray (2011, p. 1) suggests that "the single most important determinant of success is strong, committed senior management whose task is to articulate the organisation's new vision and the manner in which it reshapes the organisational culture." The power of teacher perception and belief that may stand in the way of change is subject to skilful mitigation by senior leaders. Harris *et al*. (2009) endorsed the role of good leadership when recommending that on introducing blended learning comprehensive support should be provided for all stakeholders and should be readily available when required.

The online world of technology development is an overwhelming wilderness to wander through even for those educators with a penchant for technology. Leaving teachers to their own devices to develop an online presence in their courses could result in dysfunctional departments or institutions, depending on the mix of individuals employed there. Of course, some might argue for such an approach but most formalised higher education institutions attempt to bridge the divide between traditional education delivery and the required presence of online learning in the student experience by introducing sanctioned Virtual Learning Environments (VLE). For simplicity of use in this document VLE will refer to "a Web-based environment that provides for the online student all the support that a good campus would provide" (Laurillard, 2002, p. 209), not implying only e-learning students but all those who use this means of interaction in their courses.

There are a growing number of opportunities and approaches that institutions may consider in providing VLE's for their staff and students. Partington and Stainton (2003) discuss how institutions employ various strategies, including internal resources, pedagogic and economical considerations, in the decision making process before making a final selection of the platform or technologies they finally end up using. They also highlight a key factor being the necessity of appropriate staff development with the implementation of a VLE. Once skills are mastered in using a VLE it becomes a "safe" way for educators to engage students in their course with an online presence. In context of this study, Monash University adopted Moodle as a VLE (see page 18) with broad change implications for teaching staff who had to change their mode of course delivery from what they were comfortable with. A pertinent question to consider is whether using the institutional VLE alone, despite its interactive online interface, constitutes a satisfactory reference to blended learning. This issue is considered in the final chapter on page 114.

Rogers (2010, p. 12), speaking of technological innovations often uses "the word 'innovation' and 'technology' as synonyms". He distinguishes between hardware and software aspects of technology when considering their diffusion, or acceptance, into a context. Blended learning involves the use of both hardware and software computer technology however we will assume educators are largely familiar with the basics of computer hardware use if they are considering blended learning. The challenges they face then are predominantly on the side of software. Software tends to have a "relatively lower degree of observability and thus a slower rate of innovation" (Rogers, 2010, p. 13). This observation highlights the importance of staff that will be early adopters in the change

process. Time is one of the aspects of diffusion that Rogers discusses, being significant in the innovation-decision process, the innovativeness, and the rate of innovation adoption. He refers to the innovativeness as the "degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members in a social system" (Rogers, 2010, p. 37). On the basis of innovativeness Rogers continues to classify members in the social system as 1) innovators, 2) early adopters, 3) early majority, 4) late majority and 5) laggards. Whether these terms are referenced or not the familiar bell curve that Rogers used (see Figure 2.5) is useful in identifying that a "tipping-point", to use a popular phrase, tends to occurs in the diffusion process at which point a shift takes place in the acceptance of the innovation and the rate of adoption escalates.

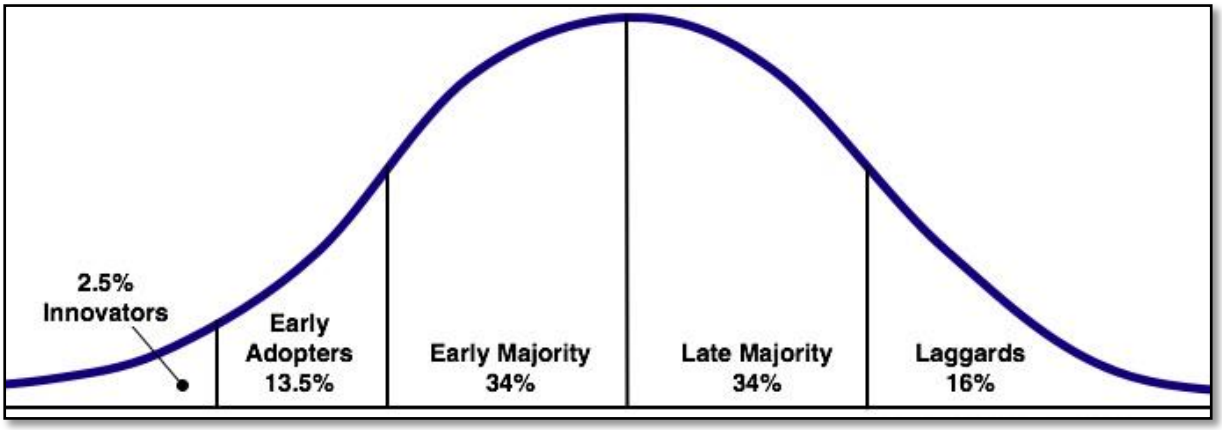


Figure 2.5 Relationship between types of adopters classified by innovativeness and their location on the adoption curve

Source: Rogers (2010)

When change is afoot people respond differently. Amongst them are those that resist, those that delay, those who step right in and are swept into the flow and those that see opportunities to direct the flow. Each individual's innovation-decision, determined largely by personal characteristics, is located somewhere on the outer periphery of the "Zone of Resistance" in my model (discussed on page 26) at which point they commit to the change. From the champion early adopters to the laggards, the spectrum of teachers will look to effective management of the change process, who should be opinion leaders, to ensure that the process stays on course and if this is amiss the barriers faced (discussed on page 114) are likely to be detrimental to the faculty. Georgina and Olson (2008, p. 5) report that "there remains a disconnect between faculty who are willing to learn more about, and to utilise this new

technology-based pedagogical approach, and faculty who altogether disregard this approach for their personal pedagogies", highlighting the challenges faced in times of change.

2.5.2 Using Best Practice to Support Change

A certainty is that change demands a response. As the tide of blended learning has steadily risen, the education world has been forced to respond. In this brief section the role of best practice is considered.

The manner in which teachers respond to the challenge of developing online expertise will be impacted by a number of factors, including the institutional policy and the latitude teachers are given to explore new ground and equally the support they receive in these endeavours.

In Rogers (2010) work the "tipping-point", a phrase that finds it thought origins in diffusion theory (Orr, 2003), is not dependant so much on early adopters as on opinion leaders, who when they observe the effectiveness of the innovation for the innovators, are encouraged to adopt themselves. The majority who are less inclined to make their own assessment, for whatever reason, tend to follow the opinion leaders. This idea highlights the importance of champions, particularly when the change is institutionalised and adoption is mandatory. The process of diffusion can be facilitated through effective sharing of best practice, which is discussed further on page 114 with reference to the role of leadership. Best practice is seen as the instances of blended learning that are being implemented in the social system, in the case of the study, in the MSAFP, that appear to be having the desired outcomes or at least present teachers with observable effects from which lessons can be learned.

The best practices will be "defined" by the social system, whether they align more to the popular interpretations of blended learning or more to those in line with the thinking of Moore and Gilmartin (2010, p. 341) who see blended learning as extending "beyond the media used to incorporate all aspects of, and inputs into the learning process". Regardless of where the alignment settles, it would be expected that a relationship would begin to emerge between belief and practice as both are likely to be influenced by the sharing of best practices. This is supported by experimental studies that identified the close affiliation between classroom practice and the teacher's thinking, beliefs and knowledge (Hativah, 2002; Martin, Prosser, Trigwell, Ramsden, & Benjamin, 2002).

2.6 Conclusion

In this literature review perspectives on blended learning were approached from a broader perspective of ICT's in education. The role and function of technology in education is diverse and the discussion was limited to the area of teaching and learning. In general, technology is held to be a promising tool in the hands of educators who have reassessed the role technology can play in their own teaching, weighing up their pedagogical beliefs on a modern scale and committed to a process of change in order to steer the seemingly inevitable role technology is likely to play. Educators have to be willing to go through the discomfort of learning in order to cross from the current to the new. The underlying drive remains the search for academic or learning enhancement which pulls a golden thread through all the triumphs and failures of embracing the potential of technology, undeterred by hidden traps, inspired by hope of a better world. How the teacher views this new world and the advent of technology all around will determine to a large extent his reaction or response to the situation.

In **Chapter 3** which follows I will present the research design and methodology employed in this study. There will remain elements of literature review, more pertinent to the functions of research though. The literature review can be considered to continue in the final chapters of the study as comment from the field is used in analysing data and interpreting findings for meaningful narratives that constitute the value of this research.

Chapter 3: Research Design and Methodology

3.1 Introduction

In **Chapter 2** a literature review was presented with the aid of a model developed as a framework for directing the review along the specific lines of enquiry relevant to this study, such as the introduction of computer technology into teaching and the impact of change in this process. Blended learning was addressed before briefly looking at some theoretical frameworks for use in blended learning settings.

This chapter will outline the design and research methodology that was applied in this study, so that the reader might better appreciate the perspective and conclusions of the researcher when reading points of discussion in this report.

The topics that will be covered in this chapter include:

a) The research design
b) The research methodology
c) The research methods
d) The research plan
e) The validity and reliability of the research
f) The ethical considerations for this research
g) The intended dissemination of the results

"In a higher education context, the perspectives of students, faculty, and administration concerning blended learning vary markedly" (Vaughan, 2007, p. 83) and therefore it is appropriate that each of these avenues be studied not only collectively, but independently too. The aim of this study was initially to isolate one group, namely the faculty or teaching staff of the MSAFP to provide the vantage point from which to examine the topic of blended learning within an academic development environment. With the selection of the MSAFP site an emic perspective (McMillan & Schumacher, 2006) was automatically applied to the study since the researcher was employed in this division of MSA. This presented certain advantages such as being empathetic to the nuances of personal interaction in the programme but also presented me, as the researcher, with the challenge of having to adopt an etic or outsider perspective at times for objectivity, understanding of course that this was a contrived stance.

The scope of the study design was then narrowed further to concentrate specifically within the boundaries (Yin, 2009) of perceptions and attitudes present within this group, being the phenomena of interest in the study. Research has shown, according to (Hativa & Goodyear, 2002) that although not necessarily simple to identify, strong links are found between the areas of (a) teacher thinking, beliefs and knowledge, (b) teachers' classroom practices and (c) student learning. It stands to reason that educational practitioners' perceptions and attitudes, being elements of thinking, belief and knowledge, would influence their instructional practice. This practice is required to provide the appropriate learning opportunities for students in accordance with the purpose that underpins those opportunities in the first place. In the case of this study, that would be the purpose of providing students preparing to enter undergraduate study with higher education academic development opportunities. Not only should the purpose reflect in those opportunities but it would be reasonable to a discernible semblance of the host institution's philosophies in those opportunities too, trace elements of the institutional culture so to speak. In other words, in the context of this study, one might reasonably expect to find evidence of blended learning being assimilated into the teaching practices in the MSAFP with the intention of enhancing the quality of academic development taking place, and the attitudes and perceptions of the lecturers would be expected to directly impact the location or weight of this evidence.

3.2 Research Design

The nature of the questions being asked and the context within which the study is located should influence the research design (Mouton, 2001). The problem this study was to address led me to formulating questions that would require an interpretive approach to the empirical design, and would be framed within case study method. Seeking to understand teacher perspectives and attitudes on blended learning aligned the study clearly to the primary goal of qualitative research, which according to McMillan and Schumacher (2006, p. 315), lies in "understanding social phenomena from participants' perspectives" which is accomplished by analysing the contexts of the participants and "by narrating participant's meanings for these situations and events". Clearly sense-making in the case would rest on the underlying epistemological perspective of the researcher. The epistemological underpinning of the work reflected in this study is largely interpretive, one of three typologies for the philosophical roots of qualitative research presented by Carr and Kemmis (1986) together with those of positivism and critical forms of research. They point out that as positivist principles were found to be an inadequate epistemology for all educational research, increasingly the

interpretive traditions from social enquiry were making inroads. This is illustrated by Merriam's observation that with "interpretive research, education is considered to be a process and school is a lived experience" (Merriam, 1998, p. 4). It should be mentioned though, that although the distinction from other paradigms is philosophically fairly clear cut, in practice the boundaries are often less distinct (Myers, 1997). Referring to this study as qualitative is largely reflected in the research objectives of solving a problem through an interpretivist lense. However, some of the methods of data collection used in establishing context are more typically associated with quantitative methodology. The conflict that is sometimes seen between qualitative and quantitative paradigms is not truly authentic. Mouton (2009, p.40) points out that at the "methodological and technical level, most researchers accept that quantitative and qualitative tools are compatible and that the choice for their inclusion in a particular project is determined by the specific research problem". In this sense of compatibility this report can be seen as using mixed methods but with the objectives clearly meant to clarify context and derive a deeper interpretation of the case, the broad label of qualitative research is applied.

Case studies have become well established as a means to inform professional practice or evidence-informed decision making (Baxter & Jack, 2008). Yin (2009) and Stake (1995) have both emerged as authoritative voices who have provided clearly defined approaches to guiding case study methodology in underpinning the legitimacy of the approach. It should be pointed out that although I have approached this particular case study as a method, many commentators regard case study as more than just a method, preferring to see it as a research paradigm because of their assumptions of how the social world should be studied (Gomm & Hammersley, 2004). Despite the differences in their methods, the approaches of both Yin and Stake place the focus firmly on the importance of deep exploration of the topic of interest with the intention of uncovering the heart of that which is being studied. As Stake (1995, p. 8) phrases it, "the aim is to thoroughly understand". Baxter and Jack (2008, p. 544) indicate that a "qualitative case study is an approach to research that facilitates exploration within its context using a variety of data sources". This, they claim, ensures that the issue at hand is examined through a variety of lenses, thus allowing multiple facets of the phenomena to be revealed and understood. With the purpose of uncovering teacher perceptions and attitudes towards blended learning within an academic development context and thereby to hopefully inform practice within the MSAFP, the choice of a case study approach was appearing most appropriate. Clearly the epistemology assumed here involves interpreting contextual

situations and interactions in the case for knowledge acquisition. The case would be approached using multiple methods of data gathering to enrich the meaning. Considering the expectation that such a case study might inform practice in our programme it was ratifying to find Merriam (1998, p. 19) claiming that "Insights gleaned from case studies can directly influence policy, practice and future research."

With the case study materialising as the suitable approach, greater rigour was required in evaluating this choice before embarking on the technicalities of designing the research. Although Stake (1995) provides a thorough approach by which to navigate the case study process, it was Yin (2009), in providing for his reader a useful matrix with which to evaluate the appropriateness of research method choices that I found beneficial at this point. He suggests making the evaluation in the light of three conditions he identified as:

1) Types/Forms of research questions
2) Requirement for control over behavioural events and
3) The degree of focus on contemporary events

When qualitative research questions of "how?" and "why?" are being asked with a particular interest in contemporary events but with little need or means to control behavioural events, then the research under consideration would be a good choice for the use of case study research. I found these guidelines useful when considering the purpose of this study and the questions at the centre of this enquiry.

Having established that the case study was an appropriate methodology for approaching this research, the design required a little more sculpting to accomplish what I hoped it would, namely teasing out participant perceptions and attitudes towards blended learning within the teaching context. By saying 'teasing out' it is not implied that there would be any attempt to exert control on the participant behaviour but rather that the emergence of themes and worthwhile observation would come from thoughtful use of the methods that would eventually pry out degrees of complexity that may exist within the case. As Merriam (1998, p. 87) says, "the interviewer-respondent interaction is a complex phenomenon" with each party having biases, predispositions and attitudes that can shade the data, thus requiring a non-judgemental, sensitive and respectful stance from the interviewer from the outset, including the avoidance of manipulating the respondent in any way. Recognising that, from a constructionist perspective, a contextual reality may be constructed out of these types of

complex interactions helps to clarify the ontological claim that a single teacher's reality may differ or affirm others but remains a valid subject of investigation.

This case study was going to represent a cross-section in a time and spatial context upon which the bearing of a single key strategic document relating to blended learning was being utilised as a basis for inquiry. The strategic plan for the implementation of blended learning across the Monash campuses involves a roll out timeframe from 2011 to 2015. The case study aimed at taking a snapshot view defined by a relatively short timeframe around the end of 2012 and extending into 2013. The reason for this was to assess the current state of application of blended learning practice in a single instance within the MSAFP as a benchmark on the 2011-2015 time scale. This limitation is not incongruous with the idea of several authors of placing boundaries on a case, thus binding it to prevent it from becoming what it was not meant to be, as Baxter and Jack (2008) state in this regard, citing the supportive sources of Yin (2003), Stake (1995), Creswell (1998) and Miles & Huberman (1994).

McMillan and Schumacher (2006, p. 316) refer to the case study design as "an emergent design, in which each incremental research decision depends on prior information." Thus, it is not atypical in case study research for the goalposts to shift during the research process (Maxwell, 2012). Such a shift occurred within my intended unit of analysis. A selected sample of three volunteer participants was initially intended to represent the MSAFP permanent teaching staff which totalled nine at the time of sampling.

At the same time as I became aware of some of the challenges of reliability that would be presented with generalisation from such a small sample. My intention in the early stages of this project was to generate theory, however, I found myself being drawn to rather finding a more distinct singular narrative, having become convinced that in the given context a collection of rich individual narratives would be more compelling in influencing practice than theory would. In addition I was concerned about the validity of generalising to generate theory from such a small sample and in such a defined context. Even when considering the whole staff of nine, there would likely be an internal culture that exists which would probably skew the validity of any claims to theory generation from within the MSAFP alone, particularly because of the central academic development function. Indeed, regularly "in debates about the merits and disadvantages of the case study, the problem of generalisation is raised" (Swanborn, 2010, p. 66). Gomm and Hammersley (2004, p. 3) adds that "It is

sometimes argued that the aim of case study research should be to capture cases in their uniqueness, rather than to use them as a basis for wider generalisation or for theoretical inference of some kind".

Although I would not attempt to argue that case studies and generalisation are necessarily dissonant bedfellows, I became convinced at least in this case that, if a single distinct narrative of one individual were able to indicate and then elicit other similar compelling narratives accounts then perhaps a multiple case study within a broader MSA context may become justifiable and provide adequate grounds for generating good theory for wider application in the institution and possibly others. I came to believe that eventually a tapestry of rich single narrative threads could display a vibrancy and relevance that would otherwise be overlooked in more generalised case study approaches. Nonetheless, it was decided to retain granular elements of multiple single cases by embedding them into the narrative for a degree of comparison to help create a context by which better to read the present case. Further, a position was taken that the single case study including the embedded elements from other individual cases should be considered in terms of identifying best practice (see page 46) in the programme and even from literature, in order to further illuminate the distinct narrative of the case. It was my intention to understand the influence of individual teacher perceptions and attitudes on their own blended learning practice but seen within a broader institutional context, leading to necessarily comparing them to practice within an even broader context of higher education, in order to provide lucidity in the emergent meaning.

3.3 Research Methodology

This research project would seek to interrogate the collected data to hopefully arrive at some of the various factors that illuminate how the perceptions and attitudes in the case may be seen to facilitate or hinder the adoption of blended learning practices by one identified teacher and to contextualise that within the broader MSAFP.

Despite the potential for bias, as an employee in the MSAFP I was, just as importantly well positioned to demonstrate sensitivity to the nuances within the programme that may possibly elude an external researcher. The research on attitudes and perceptions was conducted with current (2012 - 2013) MSAFP teaching staff on a volunteer basis. Convenience sampling meant a non-probability sampling approach would be used because, which is common in education research (McMillan & Schumacher, 2006). Speaking of purposeful sampling they state: "On the basis of the researcher's knowledge of the population, a judgement is made

about which subjects should be selected to provide the best information to address the purpose of the research" (McMillan & Schumacher, 2006, p. 21). Considering that there were only nine permanent teaching staff members in the MSAFP including me, convenience and purposeful sampling would be used.

The Case Site and Sample

"Purposeful sampling is done to increase the utility of information obtained from small samples," (McMillan & Schumacher, 2006, p. 319) and the power of such sampling lies in the many potential insights about the topic that can be gleaned from a study done in depth. The purpose and focus of the study steered the selection to finally settle on a single teacher as the case.

The Case Site

The site where the study was conducted was on the MSA campus, specifically in the MSAFP. The semi-structured interviews were held in the interviewee's private office at the MSAFP in order to ensure they were at ease during the interview. The classroom observations took place at the scheduled venues on the MSA campus. The documents for analysis were accessible on course compact disks and in the password protected online web environment of the Learning Management System (LMS), Moodle, and could be printed from either source. I was granted permission and access to the specific relevant course portals in the LMS, which themselves were also analysed. The strategic documents are available online through secure login protocols. The survey questionnaires were conducted online. Walk-around discussions were held in the public spaces of the MSAFP and sometimes in offices and notes made of relevant observations.

Ease of access to the site was a consideration in the early phases of identifying a research topic, as the MSAFP is the researcher's own place of work, providing what McMillan and Schumacher (2006, p. 125) refer to as a convenient sample. This meant that as the researcher I had prior contextual knowledge. This was advantageous in certain aspects of the research such as understanding the time pressures and dynamics that were at play and together with ease of access, being able to be flexible with interview schedules. It also allowed me to better interpret gesture and subtle comments in the interviews, given that the working context of the interviewees was one shared by the researcher. Naturally, this also

created some disadvantages where objectivity could be clouded and therefore there were elements of emic - etic tension that had to be kept in mind.

The Selected Case and Participants

Since the case study was eventually focused on certain aspects of an individual teacher, he could no longer be considered as a sample since there was no longer any explicit intention of generalisation. The teacher who was the final selection for the case study was determined through a process of careful consideration and elimination. In the early conceptual stage of the study it was thought to make a case study of the whole programme. Questions about the narrative and potential depth thereof began to surface with my hesitation being further heightened when, upon invitation to participate, not all teachers were available. This meant that results from an even smaller sample would have to be generalised and have meaning associated to the programme as a whole. At this point the four teachers had agreed to participate, although one had to withdraw later. The remaining three were interviewed in order to collect data that was likely to be used regardless of the final decision. There would be interview data if a multiple case study of three teachers was pursued or, if a single person case study was finally selected, there would be contextual data to draw on for embedding into the case. In addition, further contextual data was sought through an online questionnaire. Eight of the nine available MSAFP permanent teaching staff completed an online questionnaire anonymously to provide a further matrix by which to interpret the data of the case. This counterfoil for the single case would make some comparisons possible. The only reason for the inclusion of the additional eight respondents, who did not constitute any part of the actual case, was thus to contribute to defining an authentic context. Sessional/part time teachers that work in the programme were not considered in any way and neither was the programme manager, due to the possible bias that their station might project onto the case (see Table 3.1). The teacher chosen as the case study and the other teachers involved were selected with purpose through an elimination process, but subject to their willingness to participate voluntary. Table 3.1 on page 56 indicates potential candidates and some of the factors considered in the process of eliminating all but one of them.

The teacher finally selected presented an intriguing case, which is discussed more comprehensibly in a future chapter. “Stuart” was the alias assigned to protect the identity of this teacher in the presentation and analysis of the data for this case. The name of Stuart’s teaching unit has also been removed from this report and substituted with “Stuart’s unit” or

similar phrase in order to conceal his identity at Monash. Stuart's institutional track record shows him as a highly rated teacher. From situational observation over a number of months and from walk about conversations with students and academic colleagues, he can be characterised as being fully committed to his teaching craft and loyal to the MSAFP despite approaching retirement age. Interestingly, his age added an additional dimension to be considered in the data analysis, but not necessarily a unique one since a couple of other staff members are well experienced and within striking distance of retirement. He is eloquent, fairly outspoken but always tempered with respect and restraint. Students describe Stuart as engaging and a knowledgeable expert while seeing him as cordial and approachable without compromising his "sophisticated" nature. He is dedicated to cultivating quality in his course, his students, their learning and their academic development. Stuart readily acknowledges his own perceived, but sometimes misplaced, shortcomings yet he appears to remain open to new teaching practices and open to change. Stuart qualified as the eventual subject by being willing to voluntarily participate in this study and being available within the time and space constraints. Further, his openness to learning and personal improvement, his commitment to his students and the MSAFP suggested he would be open to embracing blended learning yet his solid experience, expertise and track record suggest he would unlikely latch on to the latest fad simply to prop up his teaching. This placed him as a favoured subject in my eyes, more likely to reveal an interesting narrative than the other two potential candidates, "Shirley", who is generationally far closer to the students and predisposed to using technology and "Lucas" who is also younger and teaches a technology course, thereby likely providing a bent in favour of technology.

Table 3.1 Evaluation of Potential Subjects for Case Study

Category	Role & Responsibility	Considerations for elimination
Head of the MSAFP **(1 candidate)**	Programme Leadership. Minimal teaching.	As leader, should display institutional values. Eliminated based on lack of true opportunity to implement blended learning in practice. Likely bias toward institutional stance due to role. Potential issues of power play.
Sessional Teaching Staff	Provide academic development by teaching in specific disciplines part	Not considered due to temporary nature of their employment. Potential lack of commitment to the programme/long term programme goals. Potential

(4 candidates)	time. Contracts on a semester basis.	lack of pedagogical experience. Potentially increasing the range of possible perceptions but potentially lowering the commitment index due to nature of employment.
Permanent Teaching Staff (9 candidates)	Provide academic development by teaching in specific disciplines full time as 'permanent' employees.	All eligible. Elimination considered when: Unwilling to participate; unable to participate within the place & time boundaries; Lack of compelling case - assessed comparing contextual variables (Potential influences: age/generation, experience, course ratings, field expertise, partiality toward technology) Eligibility enhanced by: high course ratings; innovative practices; apparent uniqueness.

3.4 Methods

"Unlike experimental, survey, or historical research, case study does not claim any particular methods for data collection or data analysis. Any and all methods of gathering data, from testing to interviewing, can be used in a case study, although certain techniques are used more than others." (Merriam, 1998, p. 28)

This case study, as suggested above, did draw on a number of methods. Despite being a narrowly focused single case study, one reason for using a multi-method design was the expectation of gleaning different or additional insights from varied strategies that would enrich the emerging narrative of the case. Another, somewhat lesser, motivation for choosing multi-method was to enhance the design validity. By using various data sources it was expected that emergent assertions would be reasonably consistent within data acquired from varied sources and this could be identified through a degree of triangulation. This does not assume or mean threes or triangles are necessarily involved. It is used in a "metaphorical way", familiar to social scientists, suggesting merely that "viewing from several points is better than viewing from one" (Thomas, 2009, p.110). It is used in this report primarily in providing context that is more authentic, hence contextual data was collected in a variety of ways such as a questionnaire, observations, interviews, and so on.

The interviews would be the centrepiece technique employed and document and LMS (Moodle) course page analysis, observations, questionnaires and walk about discussions would be interwoven with it. Mouton (2009, p. 156) points out that the "underlying assumption is that, because the various methods complement each other, their respective short comings are balanced out." He goes on to caution researchers not to forget that specific types of data collection are designed for collection of certain types of data. He also points out the important principle of supplementing more reactive methods such as direct observation with less reactive methods, such as the use of documentary sources. On a cautionary note, however, Mathison (1988, p. 17) suggests there may be inherent danger in assuming the value of triangulation for ensuring validity, and she suggests rather moving towards a more "holistic understanding" of the situation and thereby constructing "plausible explanations about the phenomena being studied." The interpretive nature of the case study would lend itself to this.

Semi-structured Interviews

"An interview is a discussion with someone in which you try to get information from them. The information may be facts or opinions or attitudes, or any combination of these", claims Thomas (2009, p. 160) while McMillan and Schumacher (2006, p. 203) describes interviews as "vocal questionnaires".

The value of the interview rests on the ability of the interviewer to elicit true and accurate responses from the interviewee. Done effectively, this interviewing skill will greatly add to the validity of the data. Being an interpretive case study, accuracy in the interview recording would be very important (Thomas, 2009), thus audio recording and accurate interview transcriptions would be necessary, both of which were to be securely and confidentially stored by the researcher for a period of five years.

Structured interviews ask a predetermined set of questions, and although there are strengths in this method such as being able to administer fairly quickly and easily and potentially to ease the process of coding (Thomas, 2009), it would have been counterintuitive to an interpretive study to direct the responses too closely when trying to ascertain perceptions and attitudes. Thomas describes unstructured interviews as an interview where the interviewee is able to set the course of the conversation, deciding on what the important themes are. This could leave a lesser skilled interviewer without the data he or she was seeking. The best of both worlds, says Thomas, is found in the semi-structured interview, which allows for the

interviewer to direct the conversation within parameters that are likely to present responses that are pertinent to the cause yet loose enough for the interviewee to formulate his or her own thoughts and responses to the cues in the conversational questions. Thomas points out that one of the other two interview methods may perfectly suit the needs of the interviewer, however in the case of this study, the semi-structured interview allowed me to use the interviewing method as a valuable data collection method that would form the core of the narrative that was constructed from the various data sources. With the focus being on attitudes and perceptions the body language, voice inflictions and in the final analysis, with Stuart being a consummate wordsmith, the dialogue in the interview would provide far more texture to the narrative than documents would be able to. The obvious value of the audio recordings would be supplemented by notes made in and directly after the interviews, since audio alone cannot capture visual clues that communicate meaning and aid interpretation.

Since I had determined that all three candidates who were suitable, willing and available, would be interviewed a short interview schedule (see Appendix A) was drawn up which contained semi-structured questions that would guide the conversations in similar veins but allow the participants the freedom to express their views.

All three interviews were conducted by me, a colleague of the interviewee, and in their office. It was hoped that these two factors would mitigate any apprehension about the interview, the topic under discussion or the request to record the interview with a digital audio recorder. Indeed, there seemed no visible evidence of distress in the interviews.

Document Analysis

In this case study three specific documentation sources were interrogated. Data aggregation from document analysis is "an entirely different proposition from gathering data from people" (Thomas, 2009, p. 170), which would represent a good triangulation option. In a case study, says Yin (2009, p. 103), "the most important use of documents is to corroborate and augment evidence from other sources" providing some specific details to validate the information from interviews or other sources and at times even to uncover contradictory evidence that can stimulate deeper scrutiny into the problem.

Thomas (2009) adds that due to the vastly different types and examples of document that might be examined, it is difficult to prescribe a generic approach to document analysis. Yin (2009, p. 102) suggests the strengths of the documentation include stability (multiple

viewing), unobtrusiveness because they exist independent of the case study, exactness and broad coverage. "Retrievability" and denied access may hinder the use of documents and a further weakness that Yin points out is biased selection of documents and the reporting bias within those documents.

In this case study a bias of selectivity was purposefully applied in order to help bind the case and only three "documents" were selected. Since the case is specifically looking at evidence of perception and attitude of a teacher towards blended learning the documents from which this could most likely be inferred would be:

1) The unit (or course) guide, which is created by the teacher and provides details of the course structure, content and assessment as well as summaries of the teaching approach in the unit.

2) The secured website of Moodle (the LMS) portal for the unit which portrays the dynamic environment in which the teacher places course content, interactive activities and other resources for presentation to the students in the unit, despite not being a document in the formal sense. (See Appendix D2 for limited extracts)

3) The last of the three documents considered was the Education Strategic Plan 2011-2015 document which is an official Monash publication and rendering the institutional stance on blended learning and which is accessible on the secured Monash web environment. (See Appendix D1 for limited extracts)

Observation

Observations played perhaps a lesser role in this study, but were used nonetheless in order to specifically look for evidence of reference to, attitudes about, bias towards or other traces of blended learning present in the classroom/lecture context. In most understandings of "blended learning" there are interwoven elements or references between face-to-face contexts and technology in some form and it would be fair to expect some reference or inference within one context towards the other. I decided to conduct some observations to see if such evidence could be found within a time bounded snap shot view of the subject's class room. Using McMillan and Schumacher's (2006, p. 208) description, the observation would be "interval recording" where "a single subject is observed for a given time and the behaviours that occur are recorded"

Although the observations were in a class room setting and are central in ethnographic research, this was no attempt at employing true ethnographic principles, but at most drawing some direction from ethnographic practice to add a degree of rigour to the observations.

Angrosino (2007) points out that ethnography literally means a description of a people and he underlines that it applies to the collective rather than individuals. Although the study observed classrooms with groups of students present, the objective was very specifically to employ this merely to observe a context of engagement between teacher and students and to search there for trace elements of the teacher's perceptions and attitudes to blended learning. With the concerns of ethnographic fieldwork in the "interactionist tradition" being "geared towards uncovering meanings social actors attach to their actions" (Angrosino, 2007, p. 5) through an immersion into the world of those subjects, this study clearly fell outside such methodology.

Elements of the study such as personalisation, due of the emic perspectives in the study, hint at ethnographic practices. If any labels from ethnography could apply it would be in the observer-as-participant role which is sometimes used by ethnographers to prepare for an interview (Angrosino, 2007) where the observed subjects view the researcher as that and not as immersed in their world. It can be added, however, that the students in these classes were familiar to me and I to them, negating any negative effect the presence of "a researcher" might have had on the interactions in the classes – I was simply another teacher visiting the session. Some detailed notes were made to capture the essence of the observed classes and as a memory jogger. It is worth noting that there was the possibility of the observed teacher playing to the researcher expectations, should he be aware of the precise evidence being sought. Thus, I did not indicate to the teacher the purpose of the observations other than to observe his classes in action as a mostly uninvolved observer.

Questionnaire

As a method of research the widely used questionnaire come with both advantages and disadvantages. The broad appeal stems from them being relatively economical, easily standardised in present the same question set to all subjects, relatively easy to assimilate the data, depending on the means of administration and they can easily be kept anonymous (McMillan & Schumacher, 2006, p. 194). The disadvantages should not be ignored though

due to the relative ease of administration and researchers should make informed choices in the use of the questionnaire. Bickman and Rog (1998, p. 485) point out that there is no verbal exchange in completing questionnaires and hence no opportunity to evaluate if the researcher and the respondent are on the same "wavelength". Misinterpretation and misrepresentation is common and many people select or present "ideal" or "correct" answers, perhaps to suit the how they wish to be portrayed, even if the questionnaire is anonymous. Response rates may also be poor. Considering such concerns, it is advisable that if the method is chosen for data collection, an effort should be made to keep questions simple, clear, concise and as impartial as possible. Naturally, the reach of questionnaires is great, not necessarily suffering the constraints of time, access and resources that other methods, such as interviews, may and this contributes to their popularity.

The questionnaire (see Appendix C1) that was used was completed online by the participants. Although it would have been simple enough to ask colleagues to answer them on paper, the online environment reinforced the "technology & blended learning" aspect of the study and was thus purposefully chosen. The interface of the questionnaire, which was administered through an online service[13], also made it possible to make the questions more interactively varied. Online surveys are also often perceived as being more anonymous increasing the likelihood of honest answers.

Important to remember is that the interviews were being administered to a small group, and even though the response rate was high, it was decided that the size of the group participating would limit the value of the responses to simply providing useful points of comparison and context within which to position the narrative of the single teacher subject.

Walk about Discussions

The "walk-about" sessions took place in the MSAFP office area and in and around the two buildings where most of the MSAFP students attend their classes. Observations were made and noted about the apparent use of technology in class sessions being presented by MSAFP teachers, including Stuart. This technique was used to help determine in the researchers mind, through observation, what the perceived value of technology to instructional process

[13] www.surveymonkey.com

seemed to be. Field notes were made if technology equipment was turned on or not, about who was using it and whether the users were the teacher or the students, individually or in groups. These observations would be used to verify if claims made in the interviews or in the survey seemed consistent with the practice, recognising the potential pitfalls of course in that a limited number of observations do not necessarily reflect the general use over time.

3.5 Research Plan

Data Collection Schedule

The Interview schedule was established in consultation with the volunteer group. The invitations to participate were offered to all the MSAFP teachers. It was hoped that the data collection process could begin in the final week of July 2012, however delays in the proposal stage meant data collection could only begin in October. The interviews were conducted in November once the teachers were more readily available after the semester examinations. The "walk around" events were intermittent and spread over the months from July 2012 to February 2013. A final follow up interview with the selected case teacher was conducted in November 2013 providing a somewhat longitudinal reference for the potential development of themes over time in his case. The surveys were conducted after the interviews had taken place so that a small but particular set of questions might be asked in order to contextualise, to an extent, the information gained from the interviews. Documentation analysis was conducted at the conclusion of the 2012 final semester in October/November and then some further analysis was made in early to mid-2013 using documents pertaining to the upcoming semesters. Appendix H contains an outline of timeframes used for data collection. Appendix A and Appendix B are the interview schedules used for the semi-structured interviews.

Data analysis

"Every enquiry is unique and so any attempt to generalise on analytical methods is a problematic venture". This sentiment is echoed by Yin (2009) who describes that although tools can be useful, there are few fixed recipes to guide the novice researcher if he does not know what he is looking for. He advocates finding a general analytical strategy to follow. The strategy which was used to analyse the data in this study followed the suggestion of Yin (2009, p. 128) of starting with the case study questions rather than the data and identifying

evidence that would provide first contextual evidence and then specific evidence to answer those questions.

All the data was analysed. The intended purpose behind collecting a set of data directed the specific choice of analytic method. In less critical contextual data sets, such as in the walk-about observations, a simple count was briefly interpreted. On the other hand, the staff survey, although only intended for contextual comparison, was coded and categorised where appropriate in order to provide some rigour and validity to the use of data from the survey. The most important data sets in this research were the two interview transcriptions based on recorded interviews with the case study subject. Influence was drawn from different approaches to analysing the data. As Merriam (1998) suggested, the heart of narrative analysis played an important role, intending to communicate the human, in this case the teacher, experience of the world to the reader. Narratives "reflect human interest and support our sense-making processes" (Bold, 2012, p. 30) and this was seen as an important element if weaving threads of individual cases was to have an impact on the blended learning discourse at Monash. Aspects of content analysis were also drawn in to add a different perspective on the data. As Merriam (1998, p. 160) statess, in "one sense, all qualitative data analysis is content analysis in that it is the content of interviews, field notes and documents that is analysed" yet highlights that historically it has been qualitative in many ways. This study makes no claims at being quantitative yet it was felt that certain data was best analysed in a more quantitative way to perhaps provide a supplemental perspective to the unfolding narrative. Hence, a process of coding and categorising was also employed, which is illustrated below:

Table 3.2 Sample of Coding – Categorising process

Interviewee Comment	**Code**	**Category/Categories**
"So I need further instruction on how to use ...I know fully what Moodle can do, I just don't know how to do it"	Need further instruction	Require Training
	Know fully what Moodle can do	Blended Learning Awareness
	Don't know how to do it	Require Training Self-doubt

On the practical issue of coding, a number of electronic qualitative analysis tools were trialled, including Dedoose, an online system, NVivo and QDA miner. Their potential as valuable tools for future use was noted, however, they were eventually abandoned in favour

of traditional manual analysis. I followed the advice of Saldaña (2012, p. 26) for early career researchers and printed the interview transcripts then proceeded with a manual coding and categorising process. The coding that was employed was largely inductive coding with the interview, observation and other similar data sets. The questionnaire was dealt with more deductively. The distinction briefly is that deductive coding proceeds from predetermined themes and categories whereas inductive coding emerges as an iterative process from reading and thinking about the data.

Something to emphasise here perhaps, is the point made by Thomas (2009) that for interpretive research the boundaries between the findings, analysis and discussion parts become less distinct and often suffuses into one another. I this study there are traces of data and analysis findings to be found in Chapter 5 where the interpretive narrative is enriched by including these elements.

3.6 Validity and Reliability

Researchers seek the truth when using various methods to gather data. Validity refers to the degree of congruence between the explanations of the phenomena and the realities of the world, according to McMillan and Schumacher (2006, p. 324). The truth may be difficult to acquire as participants often know what the 'correct', 'required' or expected responses are and may supply these rather than volunteer their own responses. In an attempt to enhance validity, McMillan and Schumacher (2006, p. 325) suggest using prolonged field work, multi-method strategies, participant verbatim language, low-inference description and making use of multiple and participant researchers' member checking. This study has made use of validity enhancing techniques such as those suggested.

According to Yin (2009, p. 45) a general way of approaching reliability is “to take as many steps as operational as possible and to conduct research as if someone were always looking over your shoulder...a good guideline ... is to conduct the research so that an auditor could in principle repeat the procedures and arrive at the same result.”

Field work was carried out over a prolonged period, with two key interviews with the key participant being a year apart. As an employee in the MSAFP, the researcher was able to readily make use of regular opportunities for casual conversations, observations and discussions with members of staff and students, both formally and informal throughout the year. It was not complicated to arrange class visits and since I am a known person in the environment there was little, if any, evidence of discomfort or unnatural behaviour due to my

presence. Admittedly, it was possible that there may have been some reservation to freely participate in a conversation for the same reasons of familiarity and where anonymity may seem less likely however I was not aware of any such reservation. I had access to participants' course pages on the LMS (Moodle) on an ongoing basis and the strategic planning documents from the institution were readily available through a secured staff portal. Multi-method strategies were used to collect data in an attempt to provide triangulation opportunities from the data. During interviews audio recordings were made, with permission, while in observations, walk-abouts and informal discussions, responses were recorded as literally as possible in the moment or shortly thereafter. This allowed for the data required to provide the context within which to locate responses from the primary participant. It was part of the pursuit of "rich, thick description" (Merriam, 1998, p. 211) where enough description is supplied to enable readers to vividly "see" the research situation. The responses to similar questions from different methods showed that the methods were reliable and the data collected was valid.

3.7 Ethical Considerations

The study was conducted with the approval of the Human Research Ethics Committee of the University of the Witwatersrand, Johannesburg (see Appendix F). It was conducted within parameters which adhere to the principle of honesty and the ethics of respect for the knowledge, democratic values and quality of educational research in South African Universities and Monash University as the locale of the study. The study sought voluntary, consensual participation of in-service teaching staff of the MSAFP and the approval of MSA and the Head of the MSAFP to conduct the research on the site. Anonymity of respondents and participants in the report and any other disseminated results was guaranteed in order to mitigate any potential workplace or study related bias or risk. This was achieved through a combination of anonymous questionnaire submissions and coding practices for the interviews, observation notes and document analysis.

3.8 Dissemination of Results

The report will be published and housed at the Education Library on the Wits School of Education campus. It will also be made available online.

More pertinent to the rationale of the study though is to inform practice and possibly policy at MSA by illuminating the experience and perceptions of staff members. Therefore the results of this research will be communicated with the Head of the MSAFP and relevant Executive

staff members in a personal feedback session. The MSAFP hosts periodic internal, but open, "Community of Practice" days in which academic research and presentations are shared in order to stimulate academic excellence within the ranks of the MSAFP teaching staff. It would be most appropriate to share a comprehensive report at such a session as MSAFP is the subject of this study and also the body most likely to benefit from any meaningful outcomes. MSA also holds monthly Teaching and Learning Forums in which academic staff from across the campus present workshops, seminars, examples of successful practice and the like in order to share ideas and stimulate excellence. This would also be an ideal forum in which to present feedback that may prove relevant to the broader body of academics at Monash and at least to provide information on research taking place within the ranks of the MSAFP in its own efforts to improve academic excellence. Notifications and an abstract will be sent to the MSA Research Director for her information and records and for further enquiry from that office if desired.

Monash Australia has a programme called Diploma of Tertiary Studies (DoTS) which is also a transition programme with a slightly different aim and a substantial difference in operational procedure to MSAFP. Nonetheless, the DoTS programme may find informative value in the outcomes of this research that may see potential for application or to stimulate similar or comparative research.

Finally, it is hoped that the results of the proposed study can also form a foundation for constructing related research articles for submission to appropriate journals, focusing on the MSAFP as a unique context within which to study the incorporation of blended learning in the pursuit of academic development. MSA as a campus presents a broader but still localised perspective to further explore.

3.9 Conclusion

In this chapter an attempt was made to indicate to the reader that the design of this research was thoughtfully yet dynamically derived, since the unfolding variables in the conceptualisation of the case required some flexibility. By the time the design was complete, however, the study had been clearly defined as a single-case study, with narrow parameters, yet drawing on a number of methods, including interviews, questionnaires, document analysis and various types of observations to provide adequate data for analysis. The design is robust enough to ensure the validity of the data and the reliability of the study, while providing the plasticity to allow the emergence of the narratives the interpretive researcher required.

In the following chapter the results of the data analysis are provided. The approach taken is to loosely organise the presentation of the results according to the questions posed at the beginning of the study but the reader should bear in mind that the data was being interrogated for meaning in the perceptions of the teacher and an examination of statistical patterns in the data was not always perceived as being significant in the narrative threads. The coming chapter should be read in continuity with the final chapter, since the discussions and conclusions are essentially recounting an experience of a teacher as born out in the data, with respect to the topics in the study.

Chapter 4: Results – Presentation and Observations

4.1 Introduction

In Chapter 3 presented the research design and methodology used in this research. The empirical research design underpins an interpretive approach to the case study in order to understand it thoroughly. Various methods are used to interrogate the case such as the semi-structured interview, observations and document analysis. The chapter also discussed the issues of reliability, validity, ethics and result dissemination. The first chapter in this report addressed the research scope to provide an early understanding of the narrow boundaries applied to this case.

This chapter presents the results of the data analysis, including some observations that were made however Chapter 5 covers the richer story that emerged from the data.

Results are presented according to each method of data collection and are organised into two clusters based on their main purpose. The primary purpose of the first cluster is to collect data for context and points of comparison in building the account of the case. The second cluster presents data sources used for direct evidence about the subject, an individual teacher in the MSAFP. The second cluster needed more effort and persistent interrogation to find insight into the questions posed in this study. The discussions in Chapter 5 however, put the second cluster up on the stage.

4.2 Results Cluster One: Contextual Data

This section of the data analysis reports the most important points that develop context in the case. The observations provide points of comparison to colour the account of the case, rather than to generate theory.

4.2.1 The Monash Education Strategic Plan 2011-2015

This study contains reference to content of the 14-page Monash Education Strategic Plan 2011-2015, specifically about themes addressed in the study. However, being a strategic document it is only available on a secured website to employees of Monash at this point and is not accessible to the public. This report only shows limited extracts, the rest of the document is unrelated to the case and therefore unavailable for use. The extracts are adequate to show the broad institutional goals about blended learning which frame the Monash environment for the case study. See Appendix D1 for a few visual extracts from the plan.

Table 4.1 Analysis of Monash Education Strategic Plan 2011 – 2014

Analysis of Monash Education Strategic Plan 2011 – 2014		
Aspect	**Occurrences in the text**	**Relevance**
Phrase including "Blended Learning"	11	All mentions of Blended learning are in context of strategic plans/objectives to improve and maintain academic excellence.
Phrase including "technology"	2	Technology central to learning Technology-enabled blended learning approach
Phrase including "excellence"	14	Generic application: 2 occurrences. Specific to education/teaching/learning: 12 occurrences
Objectives of the Plan referencing Blended Learning	4	Investing in a Blended Learning Strategy across Monash is one of four objectives which include four strategies and measures to reach the goal.

The document shows a clear link between blended learning and teaching with online technology to provide excellent academic experiences for Monash students.

4.2.3 The MSAFP Questionnaire

Respondents completed the questionnaire online, the purpose of which was to collect information for contextual detail. The respondents to this questionnaire were not considered subjects of the case. Their opinions however, were considered in terms of the interpretivist approach, to be very valuable in creating an "opinion backdrop" against which to consider the single teacher of the case. The questions sought context and points of comparison for the case study from the responses of the permanent MSAFP teaching staff. Eight out of nine potential respondents completed the questionnaire. Summary information of the responses to the 10 questions follows while the next chapter will discuss the relevance to the case.

Question 1: **How many years of teaching experience do you have?**

Table 4.2 Teaching Experience in the MSAFP

Years of Teaching Experience in the MSAFP	**Response Count**
1-5	**1** (12.5%)
6-10	**2** (25%)
10-15	**0** (0%)
15-or more	**5** (62.5%)
Total number of responses	**8**

Most of the permanent staff have extensive teaching experience and by this measure are comparable with the subject of the case. Taken from the MSAFP questionnaire, eight (more than 60%) of its fulltime teachers are well into their teaching careers, with at least fifteen years of experience. A further observation is that the remaining three responses indicate five or more years of experience separating them from the majority of permanent teachers in the programme. This gap could potentially represent a divide in perspectives, and some comments from the interview with Shirley (alias), who falls in this younger group, are mentioned further down in this discussion and provide interesting points of comparison.

Question 2: **Please *rank* these items in order of importance from most to least relevant in terms of what you believe motivates your involvement in the MSAFP?**

Table 4.3 Personal motivation in the MSAFP (in aggregated rank position)

Teacher Motivation in MSAFP		
Codes	**Categories (Motivation)**	**Average Rank Position (Out of 7)**
It's a stepping stone in my career	Personal Growth	6.50
It's a decent job	Personal Growth	6.13
I feel I am a valuable part of a successful team/programme	Personal Growth	4.25
I can grow as a teacher	Personal Growth	4.00
I can contributor to the overall whole-student experience of our students	Student Centred	3.13
I can contributor to rounded academic development of students	Student Centred	2.38
I can contribute to prepare students in a field of study that I'm passionate about	Student Centred	1.63
Total number of responses		**8**

The randomly organised statements in the questionnaire address mainly two issues, namely personal motivations and altruistic student centred motivations for being involved in the MSAFP. Probably unsurprisingly, the statements about personal development and well-being all outranked the student centred reasons for working in the MSAFP. Bear in mind this is the aggregated ranking and individuals may have ranked theirs differently

Question 3: **Please select the most appropriate comment for you in relation to the Monash Educational Strategic Plan 2011-2015.**

Assuming respondents were all being honest, none of them were unaware of the document although two signalled they had no knowledge of its contents. One respondent was very familiar with the contents of the plan. Most of the respondents, 5 of the 8 that completed this question, claimed some content awareness. See Table 4.4 below.

Table 4.4 MASFP awareness of the Monash Educational Strategic Plan

Monash Educational Strategic Plan Awareness		
Code	**Category**	**Response Count (%)**
I've never heard of it	Unaware	**0** (0%)
I know about it, but that's about it	Vaguely Aware	**2** (25%)
I know it has something to do with educational/teaching excellence	Slightly Aware	**3** (37.5%)
I have read it and would recognise themes in a discussion on it	Aware	**2** (25%)
I am quite well acquainted with it	Well Aware	**1** (12,5%)
I am very familiar with all its contents	Highly Aware	**0** (0%)
Total number of responses		**8 (100%)**

Question 4: **There has been a fair amount of talk about blended learning. Do you think this is because... (Multiple selections available)**

Table 4.5 View on why Blended Learning seems topical

View on why Blended Learning seems topical		
Codes	**Categories**	**Response Count**
Teaching colleagues mention it often	Staff mention	**1**
There is a university wide emphasis on blended learning	University Emphasis	**6**
Teaching methodologies that include technology are topical	Technology in Teaching	**5**
Popular fad or trend that will pass	Passing Fad	**1**
Modern students expect/demand technology in all areas	Student Requirement	**5**
Other (please specify)		**1**
Total number of multiple option responses (all 8 respondents responded)		**19**

Eight responses were received. One respondent made an additional comment: "our department wants to implement it". A department references a unit with more than one teacher (including sessional staff).

Respondents suggested the Monash institution wide emphasis on technology enabled teaching and technology savvy students as the two main reasons for heightened blended learning awareness.

Question 5: Regarding the use of Moodle, which of the following best describes your experience?

Table 4.6 MASFP staff experience of Moodle

The MSAFP staff experience of Moodle		
Codes	**Categories**	**Response Count (%)**
Loving it! Used many functions and always trying something new!	Dynamic User	**2** (25%)
Using it as more than a repository, but need more time to become comfortable with other features.	Inhibited User	**2** (25%)
Using Moodle simply as a repository at the moment	Repository User	**3** (37.5%)
I have been too nervous to try it	Fearful User	**0** (0%)
I don't believe Moodle offers any advantage over the shared drive, so use it begrudgingly	Obligated User	**1** (12.5%)
I don't believe Moodle offers any advantage over the shared drive, so I still use only the drive	Refuse to Use	**0** (0%)
Other (please share your perspective)		**(1)**
Total number of responses		**8 (+ 1 comment)**

One respondent commented: "better use of Moodle requires built-in admin time in our timetable.....we are overworked and I am not willing to spend my spare time working on Moodle!"

Only a quarter of the permanent staff sees themselves as highly engaged or dynamic users of Moodle. The majority (75%) describe limited use, experiencing constraints such as time, necessity or opinion.

Question 6: How would you define blended learning (BL)? People have diverse ideas. Some are presented here as options (and you may select any number) but if you have a different point of view please share it.

The summary of these results is in Table 4.7 on the next page.

Table 4.7 MSAFP Definitions of Blended Learning

MSAFP Definitions of Blended Learning		
Code	Categories	Response Count
BL is nothing new... it's just a buzz word attached to good teaching practice using diverse techniques	Diverse teaching techniques	3
BL is regular teaching method but which has incorporated technology in any form (online or offline)	Teaching that includes technology	3
BL is a mixture of face to face teaching and online teaching	Face-Face & Online teaching	4
BL is face to face teaching supported by online resources and activities	Face-Face teaching with online activities	6
BL is a redundant phrase because no one can agree on what it means	Meaningless	0
Total number of responses (multiple allowed): All respondents participated		**16**

The question is somewhat leading since the respondent may have had a different idea before seeing the suggestions. However, the suggested definitions cover a wide range of possibilities, indicative of most positions in literature. Multiple selections were also available to help respondents who would prefer an expanded response to a single choice. An open response field called "Other" was available but no respondent offered additional suggestions. There were sixteen selections made but only a quarter of them (4/16) marked the selection "BL is a mix of face-to-face teaching and online teaching", which is the dominant perspective provided in literature and public forums. The majority view selected was face to face teaching supported by online activities and resources.

Question 7: Regardless of my current ability/willingness/desire to incorporate blended learning activities in my teaching I believe that adopting blended learning practices in the MSAFP in the near future is …

Table 4.8 Opinions on the Future of Blended Learning at MSAFP

View of Blended Learning in the Future of MSAFP		
Categories	**Categories**	**Response Count (%)**
vital to our function of academic development	Vital	**2** (28.6%)
important to our function of academic development	Important	**3** (42.8%)
tangential (peripheral) to our function of academic development	Tangential	**2** (28.6%)
unimportant to our function of academic development	Unimportant	**0** (0%)
Total number of responses		**7** (100%)

Five out of seven respondents believe blended learning will play a significant role in the future of MSAFP will but interestingly two of the seven believe its role would be insignificant.

Question 8: The barriers that I experience when I consider incorporating blended learning techniques in my teaching methodology is/are (multiple selections available)

Table 4.9 Barriers to Incorporating Blended Learning

Barriers to Incorporating Blended Learning		
Codes	**Categories**	**Response Count**
a fear of technology	Technophobia	2
time constraints imposed by having to learn new methods/skills/technologies	Time to learn	4
lack of training options for skill improvement	Insufficient training options	0
lack of direction in the application of the method	Lack guidance	2
pedagogical advantages are unclear to me	Unclear pedagogy	3
a dislike for being dictated to by technology or the institution in my teaching	Resent being dictated to	2
belief that my subject cannot benefit from blended learning - it has unique requirements	No relevance	0
Other (please specify)		1
Total number responses (multiple allowed)		**14**

A respondent commented: "There is not always time to apply all sorts of teaching and learning. It depends what kind of BL is applied. BL for the sake of BL is not important. Every unit must construct a specific model."

13 selections were made, each representing a barrier perceived/experienced by someone. Four of these indicate time and learning barriers to adopting blended learning, in concert with the one that left a comment. Two were uncertain about the expectation for using blended learning. Three said the pedagogical advantages were unclear. There were two that are technology averse and finally two that say they did not want to their teaching methods to be dictated.

Question 9: I believe blended learning has the potential to...

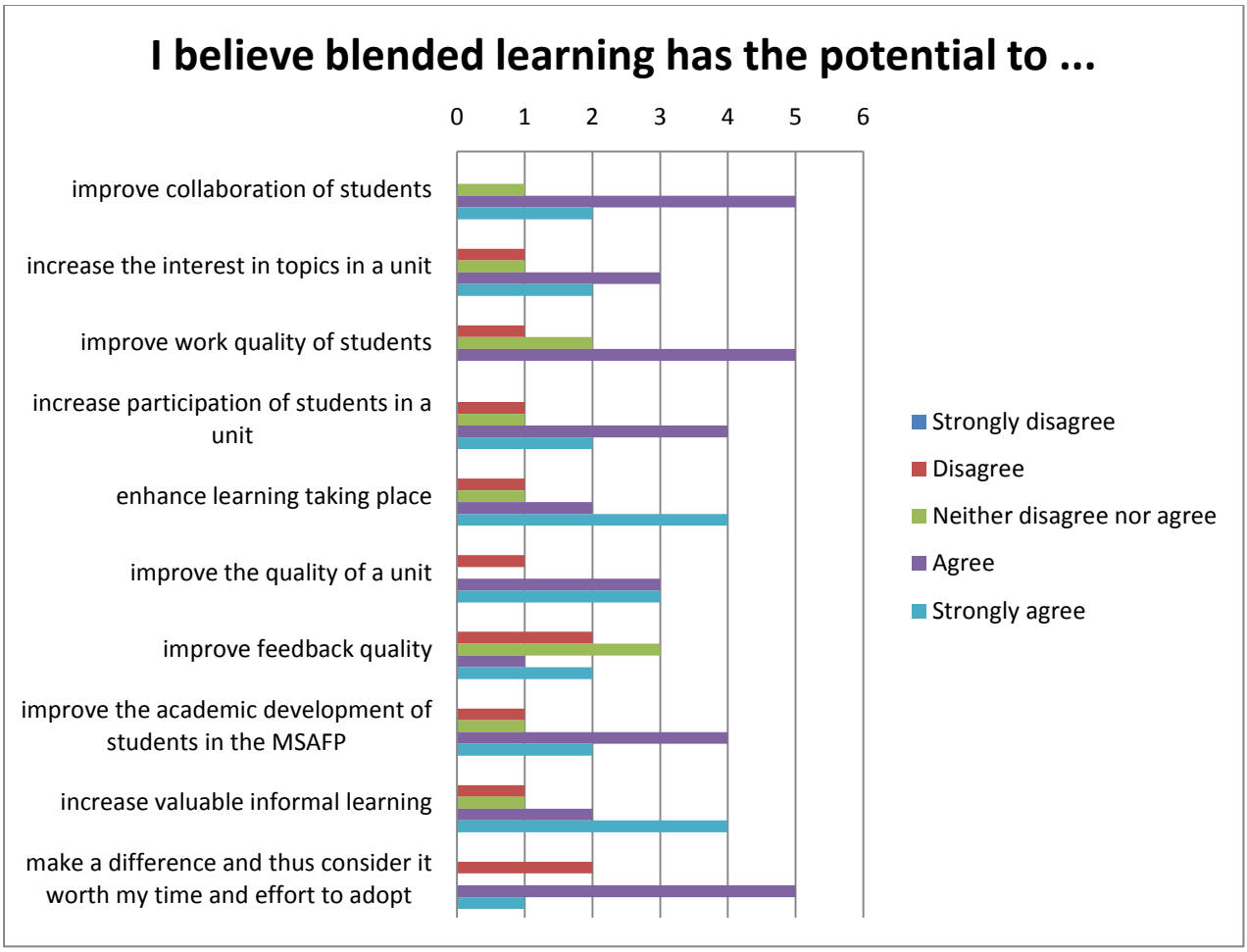


Figure 4.1 Perception of blended learning potential

All eight respondents participated in this question. They applied a five point scale, shown in the key of the diagram above, to each statement. The least supported belief was that blended learning could make a difference to the quality of feedback in a unit, with only three of the eight respondents agreeing or strongly agreeing with the statement. The remaining statements all received predominantly (five or more) "Agree" or "Strongly Agree" reactions. The coming discussion (in Section 5.5 on page 110) will provide more detail on this response.

Question 10: Please briefly describe any ways you believe best indicate your use of blended learning (according to your understanding thereof) in your teaching over the past two - three semesters. Please also indicate the frequency with which you incorporate blended learning in your unit as consistently, sporadically or isolated.

The answers to this question are summarised here briefly but are found in their original form in Appendix C2.

Table 4.10 Summary of teacher indications of their best blended learning practices

Summary of Teacher's Blended Learning Practices
Moodle: 6 respondents say that they use Moodle, of which 3 indicate only as a repository (with one of them stating there is no apparent value over the local shared drive at MSA). One of the remaining three comments that Moodle is very unfriendly and unwieldy and only uses it because expected to. One does not elaborate at all and the sixth user uses it extensively and with diversity.
Online: Use of hyperlinks to resources; research assignments; communication / interaction; Wiki (web 2.0); resources
Recorded tutorial videos for students
Blended learning will require much more time and effort than is afforded; Training required

Moodle features strongly in what teachers believe to be their best blended learning practices, largely displaying a positive attitude towards it, with some reservations on ability and skill. One respondent found it a highly challenging. Other comments regarding blended learning practice all had association with online activity, except one that referenced recording own videos as a teaching aid. Some expression was made to the extent of time constraints, effort required and training needed.

Summary: Overall there is a healthy awareness of blended learning. The understanding with in the group of what blended learning is varied to an extent but mostly recognises the online aspect as integral to the idea. From the signs of resistance to blended learning, most involve time and skill acquisition issues. There is some resistance to the institution dictating blended learning practice although the general view is the practices have merit.

4.2.4 Walk-around Observations

The walk-around observations were collected in two ways: intentionally and incidentally. Intentional observations were, for instance, made by walking around the campus at given times to note the incidents of technology use in class sessions that were underway. Only what was clearly obvious was recorded and no assumptions were made on technology use.

Incidental observations entailed recording relevant snippets of overheard conversation, unanticipated observations, impromptu conversations I had with other people and so forth that contained unexpected but relevant and potentially useful information relevant to the study.

I conducted intentional observations on four occasions and have recorded the summarised results in the table below. Only observations that involve permanent teachers were recorded even though other sessions were observed. Classes were not interrupted.

Table 4.11 Intentional walk-around observations of technology use

Observation Event	**Number of sessions**	**Technology Evident (Classes with only verbal interaction evident in parenthesis)**	**Types of Technology in use (number of incidents observed)**
1	5	4 classes (1)	Projected Slide (2) Visualiser (1) Website (1)
2	3	3 classes (0)	Projected Slide (2) Video (1)
3	6	4 classes (3)	Projected Slide (2) Student Database (1) Moodle (1)
4	5	5 classes (0)	Projected Slide (2) Student database (1) Video (2)
Total	**19**	**16 classes (4)**	**Projected Slide (8)** **Video (3)** **Student Database (2)** **Visualiser (1)** **Website (1)** **Moodle (1)**

Projected slides were visible on the screen in 50% of the observed incidents of technology use. They may have been used as lecture slides, tutorial discussion prompts or other uses. Videos use was noted in 3/16 cases. It was not clear if these videos were streamed from the internet or played from a pre-recorded source. The Student Database is a system for recording attendance and results, sending messages and attachments to students and some other uses. Teachers tend mostly to use the system for tracking student attendance, although there could have been other reasons for showing it on the screen. The database system is available to staff and students (with different access rights) through an online web portal.

Incidental observations recorded mostly anecdotal evidence to support character portraiture of the subject in the case study. This chapter does not report on these observations but instead they are included in Chapter 5 as part of the discussion. These observations involved informal conversations with teaching colleagues and students, relevant snippets of conversations overheard in the passages and general observations as a researcher made by being entrenched in the MSAFP as a teacher.

4.3 Results Cluster Two: Teacher Data

This section of the data analysis reports on data that provides potential insight into the perceptions and attitudes of the specific teacher at the centre of the study. These data sources present the key observations from the interviews and supporting sources from which the narrative of the single case study is educed and teased out for better understanding in the next chapter.

4.3.1 The Semi-Structured Interviews

Three members of the MSAFP staff were interviewed, including the teacher finally selected for the case, who was at a later stage interviewed once more. Observations from all the interviews add information to the discussion in chapter five, but only the analysis of the interviews held with the selected teacher is critical and presented at this point. These semi-structured interviews were the key data source for identifying perceptions and attitudes of the teacher.

Before analysing the transcripts I read through them a number of times for content familiarity. Although of secondary value, the first technique applied for analysis was electronic word search and count to determine the frequency of keywords. This technique provided some insight but the results of the counts must be seen in the broader analysis of the content. Frequency on its own is not necessarily indicative of importance. For instance, an interviewee may use a term regularly in the struggle of trying to explain that term in a context they understand, without suggesting that term has increased value. Further, word counts do not account for inferences to an idea where the word is not used.

The results of the word count are reported first, in table form, and then the results from the coding and categorising process will follow.

A word was not included in the count if found in a completely unrelated context, such as an embedded word like “time” found in sometime”. Further, relevant words searched for but not found are not included, for example “internet”. Table 4.12 showing the results is on page 80 and 81.

Table 4.12 Key word count from the selected interviewee transcripts 1 and 2

Key word count from the selected interviewee transcripts 1 and 2			
Word/s searched (comment)	**Occurrence in Interview 1**	**Occurrence in Interview 2**	**Total Occurrence**
Relating to technology in teaching			
Blended learning	10	0	10
Technology	24	2	26
Moodle	16	5	21
Access (remote access to course resources)	4	1	5
Online	4	1	5
Video	5	5	10
YouTube (1 occurrence in combination with "video", making the count redundant)	4 (+1)	2	6
Clip (not in conjunction with "video"/"YouTube")	2	0	2
Links	1	3	4
Film	1	0	1
Website	5	0	5
e-Mail	17	0	17
PowerPoint	0	3	3
Excel	0	9	9
Facebook	3	0	3
Prezzi	0	4	4
Computer	7	6	13
Shared Drive	2	0	2
Memory Stick	2	0	2
Place on (Action uploading to Moodle)	1	0	1
Repository (in reference to Moodle)	0	2	2
Total Relating to technology in teaching	*Total: 108*	*Total: 43*	*Total:151*
Teaching Method/Approach/Resource			
Face-to-face	8	0	8
Academic	1	0	1
Lecture material (access via Moodle)	2	1	3
Lecture event	10	1	11
Tutorial material	4	4	8
Education Plan	2	0	2

Educational Institution	2	0	2
Move with the times	1	0	1
Time constraint in teaching	0	4	4
Total Teaching Method/Approach/Resource	*Total:30*	*Total:10*	*Total: 40*
Teacher Barriers			
Resistance	1	1	2
Don't / wouldn't know how	5	1	6
Frustrated	0	1	1
Time (not enough/takes too much/ waste)	10	4	14
Total Teacher Barriers	*Total: 16*	*Total: 7*	*Total: 23*
Teacher Support			
Moodle Tutorial (teacher training)	0	1	1
Training	2	6	8
Show (relation to instruct / tutor)	2	3	5
Need instruction	1	0	1
Total Teacher Support	*Total: 5*	*Total: 10*	*Total: 15*
Overall Summary			
Total Relating to technology in teaching	*Total: 104*	*Total: 42*	*Total:146*
Total Teaching Method/Approach/Resource	*Total:30*	*Total:10*	*Total: 40*
Total Teacher Barriers	*Total: 16*	*Total: 7*	*Total: 23*
Total Teacher Support	*Total: 5*	*Total: 10*	*Total: 15*

The results show some words with a high rate of instance in one interview but a low instance in the other interview. This may be due to the second interview following from the first and not covering the same ground. Points raised in the first may have needed elaboration but not required repeating of the word/s. For instance, the question on what blended learning means to the interviewee elicited regular use of the words, even further into the interview. In the second interview points that needed elaboration did not necessarily need to include the words "blended learning".

After reading the transcriptions for understanding, I set about coding and afterwards categorising them. A reiterative approach was taken to look for previously unnoticed themes. Coding and categorising allowed me to identify patterns in the themes of the interviews.

The following table shows the process of coding and categorisation used.

Table 4.13 Code and Category Formation

Interviewee Comment	**Code**	**Category/Categories**
"So I need further instruction on how to use ...I know fully what Moodle can do, I just don't know how to do it"	Need further instruction	Require Training
	Know fully what Moodle can do	Blended Learning Awareness
	Don't know how to do it	Require Training Self-doubt

The interview questions steered the coding and categorising at first. The results were summarised and organised according to the categories listed below:

a) Understanding of Blended Learning
b) Teaching Practice and Blended Learning
c) Impact of Blended Learning on Teaching Quality
d) Barriers to Blended Learning / Technology in Teaching
e) The Monash Education Plan and Teacher Development
f) Impact of Change

Only the most applicable codes and categories to the discussion to take place in the following chapter are presented here in the summary.

Table 4.14 Understanding of blended learning

Understanding of Blended Learning	
Sample Codes	Categories (n)
Introducing technology into the class, inside and out of classroom.	Technology in teaching (9)
Students can access the information, etc	Remote access (7)
Online exercises and submission	Online activity (1)
Use *Moodle* for storage	LMS (8)
Refer students to websites...	Online research (2)
Blended learning is not just introducing technology	Broader than Technology (2)
Online presentation can release pressure on face to face teaching in short semesters	Complimentary (1)

Overall incorporating technology into teaching seems to represent the best understanding of blended learning for this teacher.

Table 4.15 Teaching practice and blended learning

Teaching Practice and Blended Learning	
Sample Codes	Categories (n)
Use Moodle for storage	LMS Repository (8)
Uses a lot of visuals	Visual material (11)
Avoids live links – too slow	Online interaction (2)
Put media on memory stick and so bring it in for instant access	Memory sticks (2)
Students can access resources on Moodle and shared drive	Material access online (7)
Short YouTube's with questions to answer	Active learning with media (3)
Not just watching videos for entertainment	Media with purpose (1)
Refer students to websites for article	Use online sources (2)
Some units in Australia presented online now and students prefer not coming to lectures	Online Lectures (2)
Face-to-face still important – avoids remoteness...critical	Face-to-face essential (3)
Field trips – logistical nightmare – would love to do it	Field Trips (2)
Place messages to students	Communication (4)
All have access in advance	Time-Saver (2)

The teacher placed a large emphasis on the use of visual media, particularly the use of video. Making material available to students online which is accessible from any location also featured strongly.

Table 4.16 Impact of blended learning on teaching quality

Impact of Blended Learning on Teaching Quality	
Sample Codes	Categories (n)
I know fully what Moodle can do	Impact awareness (5)
Prefer them to go directly to the websites themselves	Primary Sources (2)
If students pick up that the teacher is bored, they lose interest	Relevant teachers (1)
My best teacher ever...used only notes in his lecture...there was absolutely no "blended learning"	BL not required (4)
blended learning should expose students to the extra dimension of seeing	Visual (3)
Blended learning is absolutely pedagogically sound, but not a silver bullet	Pedagogically Sound (1) Not magic (2)
In teaching with tech we can help students	Student Development (1)
Use Moodle for organising unit	Administrative organiser (2)

The teacher expressed an awareness of the potential blended learning holds to be a major role player in good quality modern teaching. He also cautioned against the assuming that blended learning would be a silver bullet, illustrating with personal experience of great teaching in the absence of any blended approach.

Table 4.17 Barriers to blended learning / technology in teaching

Barriers to Blended Learning / Technology in Teaching	
Sample Codes	Categories (n)
I need further instruction on how to use	Insufficient training (4)
I just don't know how to do it	Skill deficit (6)
Trainers run through it too quickly	Misdirected Training (2)
Only resistance to blended learning is own inability and inexperience	Lack experience (5)
Don't like placing personal information online	Web2.0 (2)
Don't have the time to teach self	Time constraint (2)
Little evidence students will go and watch YouTube before hand	Student Apathy (2)
Moodle difficult to use with unclear directions	Complicated (2)
Trainers are insensitive to our constraints	Indiscriminate training (1)
Never top priority when other things have to get done	Low priority (1)
Resistance of teachers may be technological or just don't feel like it	Teacher indifference (1)

The primary barrier appears to be the belief in his lack of skills, know-how, experience, which may be justified or not. The training interventions are misdirected, he feels – not for a lack of opportunities but for the lack of value they offer individuals teachers with different skills.

Table 4.18 The Monash Education Strategic Plan and teacher development

The Monash Education Strategic Plan and Teacher Development	
Sample Codes	Categories (n)
I want to learn more	Willingness (4)
Want to uses quizzes but doesn't know how to put in Moodle	Skill-Knowledge gap (6)
Confess – not immersed in plan	Plan: low detail awareness (1)
Been to presentations	Plan: general awareness (2)
Can't imagine a Monash student going into wider world not having exposure to tech	Student Development (1)
Need tutoring/coaching 1-1 to kick start	Coaching (2)
Open to placing lectures online – all for electronic teaching	Teach online (1)
Tutor system should be used to develop teachers	Tutors for teachers (1)
Monash is far from identifying specific needs of specific people	Individualised intervention (1)
Institution needs to show more empathy and understanding and be less authoritarian	Institutional Empathy (2)

The teacher does not show an acute awareness of the details of the Monash Education Strategic Plan. He does support the motion plan puts forward of incorporating blended learning. He appeals for more empathy from Monash and for individual attention in developing required skills.

Table 4.19 Impact of change

Impact of Change	
Sample Codes	Categories (n)
I'm also in favour of technology	Open to technology (3)
I want to learn more	Willingness (6)
For my bureaucratic convenience	Benefit (2)
No problem doing it (blended learning), just very uncomfortable with doing it	Open to change (5) Dis-Comfort Zone (2)
Comfortable with ideas of technology – lack practical know-how	Ill-equipped (5) Tension (Willingness vs Ability) (4)
Institution needs to show more empathy and understanding and be less authoritarian	Empathy required (2)

The teacher expresses a willingness to make the required changes but expresses reservations in his ability to do so without personal level intervention, creating a tension between willingness and perceived ability.

General observation: Coding and categorisation the interviews also added meaning to the stories that were emerging, because of the thorough approach. Overall, the coding and categorising revealed a committed teacher, who desires to be relevant and effective in the classroom and thus is willing to embrace technologies that take his reach beyond the traditional means. He faces many barriers in this, some common like time constraints for new learning, others coming from more personal views such as beliefs of inadequate skill sets, which may be true or not.

Coding the teacher's comments and counting the word usage naturally added colour to the emerging narrative. However, the greatest value of the process was found in the multiple reviews of the interview, which gradually revealed nuances in the story and revealed the uniqueness of the case. This served to highlight to me the value of the narrative analysis of such studies as this.

4.3.2 Document analysis: Unit Guide, Moodle and Student Unit Survey Results

Beyond analysing the Education plan, more documents were identified for analysis that could reveal evidence of the teacher's views and attitudes towards technology and blended learning. Likely sources to reveal an underlying position of the teacher could be the Unit Guide, which he produces at the onset of each semester and the Moodle site that accompanies the course.

The teacher is the person responsible for the Moodle unit site. In the case of the latter, more than simply the content but the very use of Moodle itself, being an LMS and important factor in the unit, was worth considering. A third set of documents was considered for a different reason, namely the official Monash unit surveys completed by the students. The surveys have predetermined questions used for all units across the institution, none of which specifically address the use of technology in the unit. However, it was decided that the survey results could add insight into the attitude of the teacher towards his unit and thereby underscore the perceptions and attitudes discerned from the interviews.

Stuart's Unit Guide

A formal document would seem like an unlikely source from which to assess teacher attitudes towards blended learning. However, Stuart's Unit Guide does provide opportunities for the unit coordinator, in this case the teacher in question, to express to the student audience the nature of the unit and the approach of the teacher. Potentially this information could overtly express a particular disposition towards technology in the unit or alternatively it might be inferred. It was hoped that, taking into account the teacher's apparent understanding of blended learning determined from the interviews, there may be terminology or phrases that are revealing.

The interviews had revealed, in précis, that this teacher's perception of blended learning in essence was the introduction of technology into the students learning contexts in order to enrich or extend the possible learning experience. In light of this the unit guide was analysed using electronic word search for references to the use of any types of technology in the unit. Also included are references to face-to-face scenarios. The results of this analysis are summarised in Table 4.20 below with some context of the occurrence indicated in the relevance column.

Table 4.20 Stuart's Unit Guide Analysis

Stuart's Unit Guide Analysis		
Aspect or items mentioned	**Frequency in the text**	**Relevance**
"Blended Learning"	1	Mentioned as a bullet point in the section on Teaching Approach
"Moodle"	14	General use of Moodle: 2 Interaction on Moodle: 12
"technology"	1	Included in Critical cross field outcomes for the unit: Use science and technology effectively and critically...."
"online"	5	Reference to resource location: 1 Identification in resource name (e.g. BBC News Online): 4
"internet"	1	Included in specific outcome of the unit: "Use ... skills to enhance research of the print media including the internet"
"video"	16	In the phrase "YouTube video": 2 Other uses/references: 14
"YouTube"	32	Instruction to watch YouTube: 2 In provided YouTube URL's: 30
"slides"	2	One reference to lecture format; one reference to student presentations.
"Power-Point"	2	Reference to lectures.
"lecture"	17	One use of "lecture" in the context of lecture material made available online in Moodle. 16 further references to the lecture sessions & content
"tutorial/tutorials/tutor"	67	29 references to tutorial sessions 33 references to tutorial activities 5 references to assistant student tutors

There is very little evidence of specific reference to blended learning in the unit guide. Several instances of an item could indicate the use of a blended learning approach, certainly as defined by the teacher. Caution should be exercised in putting too much stock in frequency of occurrence as this does not necessarily equate to the importance of the item. An interpretive assessment of these results within the context of a reading of the unit guide will be included in the following chapter.

Stuart's Moodle Site

An additional data source analysed for this case is the LMS webpage for Stuart's unit, the Moodle 2.0 unit site. Users of the Monash Moodle environment gain access via a secure Monash login and the site for each unit has a standardised user interface that is institutionally branded. The arrangement of the user interface for each unit is the responsibility of the unit lecturer or department team in larger units. In this case Stuart is the only person responsible for the unit's site configuration and content. Thus, with Moodle being centre stage as a blended learning tool, the site was considered worth analysing for evidence of blended

learning elements used by the teacher. It would, in addition, provide an insight into the student's view of the course from an online perspective. The Moodle site for two back to back semesters was examined, the second one being a six week compressed version of the normal 12 week semester.

The observations that provided the most insight from the analysis are listed below in Table 4.21. The inferences from them are discussed in the following chapter.

Table 4.21 Stuart's Moodle Site Analysis

Stuart's Moodle Site Analysis		
Observation	**Count per 12 week and 6 week semester**	**Note**
General Description: Course presented in 12 blocks and 6 blocks in respective semesters, each representing a topic or week. Blocks contain links to various resources, such as documents and video. There is no embedded media on the site landing page. There is a link to a discussion forum.	12 week & 6 week course.	The layout is organised but uninspiring. Appears to be simply a repository. The unit is well structured with elements repeated each week, such as Lecture, Tutorial, Tut template, etc. Although available, the forum shows no student activity.
Video uploaded into Moodle	12 week – 1 6 week - 0	A direct link that opens in a new Moodle window
PowerPoint slides (download directly to computer upon clicking the link)	12 week – 11 6 week - 0	The slides used in the face-to-face lecture in the 12 week semester. Not provided in the short semester (see note on PDF's below)
Word documents (download directly to computer upon clicking the link)	12 week – 25 6 week – 17	In each 12 week course there is a Tutorial document with questions and a Tutorial template on which to answer those questions. In the 6 week course the Tutorial activities have been doubled up in one document.
PDF documents (open directly in Moodle & provide an option to download)	12 week – 11 6 week - 11	PDF's: Expanded version of the PowerPoint lecture slides with supplementary commentary and additional images inserted. In the 6 week course Lecture 1 & 2 are posted.
General Comment: PowerPoints and PDF's that contain lecture material are highly visual. Evidence of video and other internet links found, but only contained within the documents, thus requiring a two step process to access. In essence, there are three elements to the site: Forum, Video and documents (PDF's display in Moodle, and others download)		

The three elements present on Stuart's Moodle site are labeled in Figure 4.2 below.

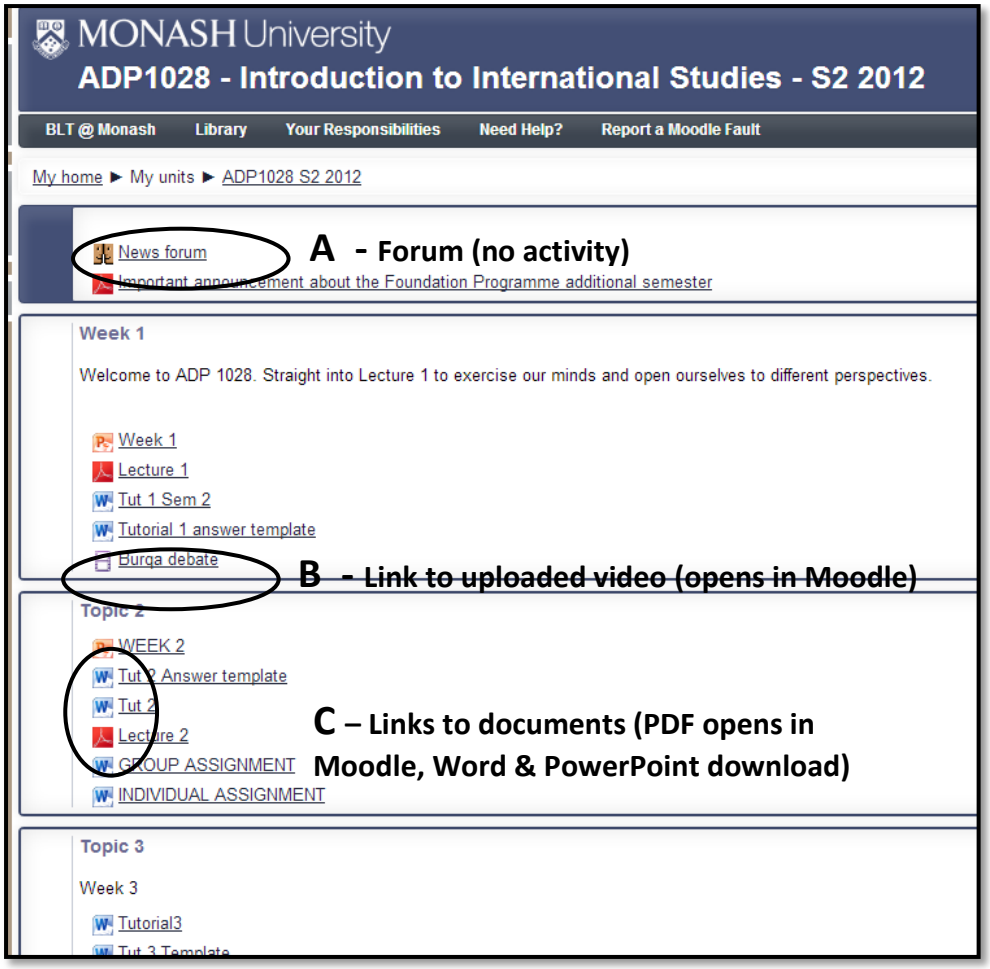


Figure 4.2 Three elements found in Stuart's Moodle site

The elements were:

A. A link to a forum, which on investigation showed no student activity
B. Links to videos that open in Moodle (embedded)
C. Links to documents (PDF documents opened in the Moodle interface while Word and PowerPoint documents download. Further links were available in these documents)

It would seem from the analysis of Stuart's Moodle sites that the use of this platform is primarily as a well organised repository, a fact that may represent both positive and negative views. Apparent is a dedicated commitment to using the platform but missing is evidence of the ability, desire of perceived need to make use of more dynamic features of the tool.

Monash Student Survey for Stuart's Unit

The analysis of the report from the Student surveys completed for Stuart's unit was considered as useful in identifying a student perception of the unit. This would be useful in two areas of interpretation. The first, the perceived quality of the course could be a possible

indicator of the commitment and dedication shown by the teacher to teaching this unit, in this programme or in general. This would be useful insight considering the teacher was approaching retirement age (in early 2014) and an argument could be made that this approaching life event may influence the teacher's attitude towards teaching and the potential exploration of teaching technologies. The survey could also be used to indicate the scope for additional value to be added to the unit. This could be added through blended learning methods. An argument could be made that if the survey indicates sufficient satisfaction in the course, that introducing change for the sake of change may be a redundant action.

Results of the surveys conducted over four consecutive semesters were included in this analysis, including the focal 2012-2013 period. This would reduce the impact of variables that may exist from one semester to another.

The survey asks for feedback on five comments listed below:

1) The unit enabled me to achieve its learning objectives
2) I found the unit to be intellectually stimulating
3) The learning resources in this unit supported my studies
4) The feedback I received in this unit was useful
5) Overall I was satisfied with the quality of this unit

The results were available from a staff and student password secured website. The results for Semester 2, 2012; Summer Semester 2012-3; Semester 1, 2013 and Semester 2, 2013 were accessed and the data transferred to a spreadsheet. The imported data was examined from numerous angles using pivot tables and charts. The data set that proved most useful was the respondent responses as a percentage of the total responses for each aspect on the evaluation scale (see Appendix E). The evaluation scale used in the survey was:

1. Strongly disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly agree
6. Not applicable
7. Don't know

The purpose was to seek potential insight into the perceptions and attitudes of the teacher, in this instance, by using data from the official Monash unit evaluation completed by students. A selected summary is provided in the figure below which revealed the majority of respondents rated most of the statements with “Agree” or “Strongly agree” in each semester. Figure 4.3 shows the combined rounded off percentage value of the total responses.

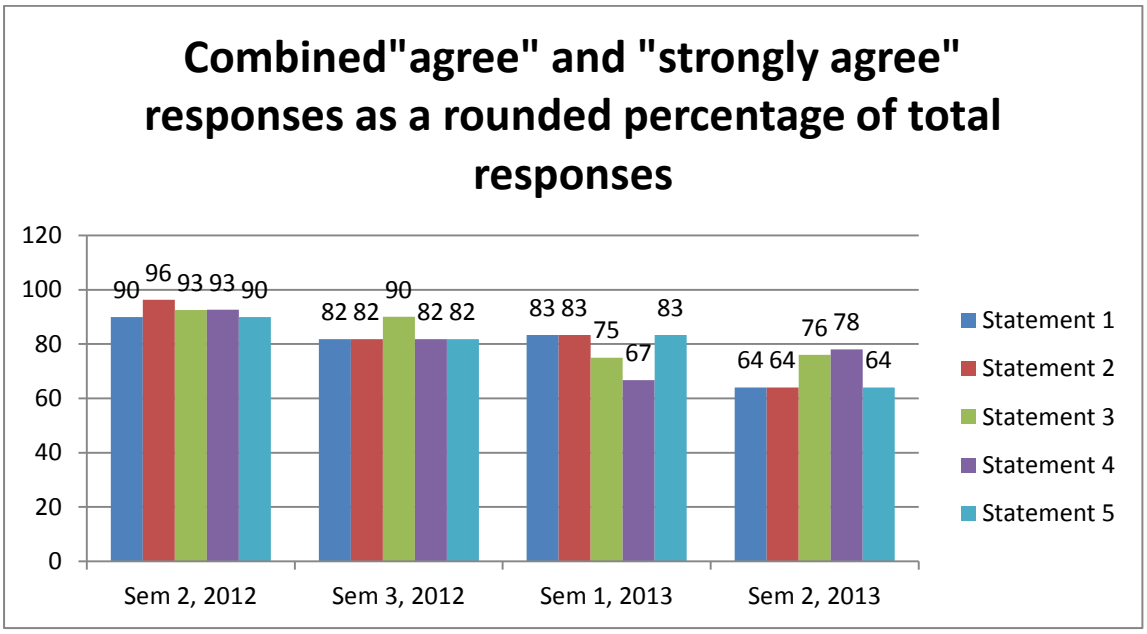


Figure 4.3 Combined “Agree and “Strongly agree” responses as rounded off percentage value of the total responses.

It was noteworthy that the positive responses to each statement over the four semester period ranged from 64% to 96%. However, it was noted that this sequence appeared to show a downward trend across the four semesters, which using the same data, is illustrated better in Figure 4.4. Note that responses to statement 1 and 5 are the same in each semester and statement 2 also correlates to this, resulting in overlying trend lines.

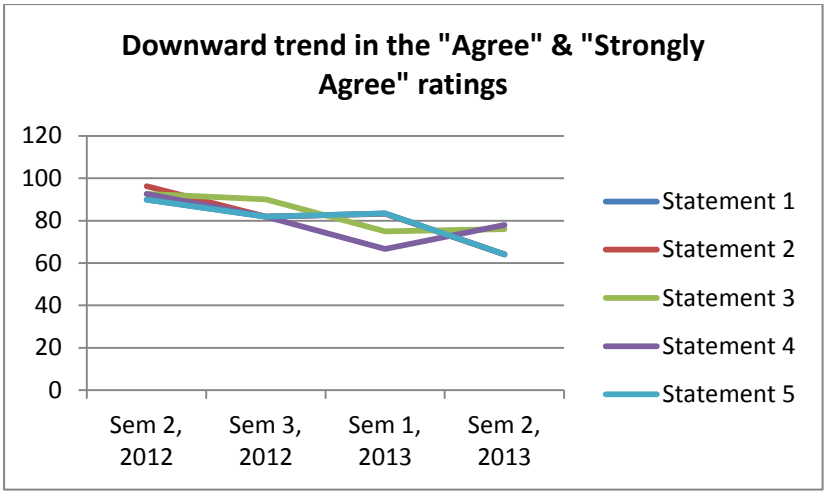


Figure 4.4 Downward trends in the positive ratings for the unit.

It was beyond the means of this scope to consider the possible causes of this trend. It may indicate a dwindling commitment from the teacher, but it could equally indicate increasing expectations from the students or any other number of influences.

Results from the student surveys of Stuart's unit may be meaningless as a point of comparison, however, if they simply reflect similar responses to all other units in the MSAFP unit surveys. As a snapshot comparison on this particular question in semester 2 in 2012, Stuart received a median score of 4.89 compared to the score of all the aggregated units offered at MSAFP (including Stuart's unit) of 4.08 – 19.85% higher. A similar pattern is seen across all the questions in the survey.

4.3.3 Observations: Stuart's Classroom

On three occasions a lecture of Stuart's was observed. The word "lecture" is used simply because that is how it is scheduled and labelled in the MSAFP. The sessions however were all interactive to a degree and should not be thought of as a delivery from a lectern. The study drew on Ethnography to an extent only because the research was specifically seeking evidence on the use of technology or references to technology or other things that may hint at a form of blended learning. Only observations on such issues were recorded, the most important being summarised in Table 4.22 on the following page. (See Appendix I for more).

Table 4.22 Classroom observations relating to technology and blended learning

Classroom observations relating to technology and blended learning	
Aspect observed	**Comment**
Student database used in every session to capture attendance.	On one occasion two students were noticed checking the attendance on the web interface they have available. Most follow on screen.
Direct discussion of the use of or application of technology in Stuart's unit did not occur in any of the observed sessions.	Wasn't expected. Use of technology was observed, required or implied but not discussed as a means of learning / handling material.
Specific discussion on the use of technology use in context of the lecture topic or content occurred twice, once in a pointed remark.	Cannot be associated with blended learning – these were references to the role/impact of technology in the world relating to International Studies.
Reference to video / YouTube – made eight times over the course of the observations. Five times in reference to a video clip being used in the lecture and three times in reference to links in the LMS to clips students were meant to watch.	The references to the video use in class were used in the conducting of a lesson – indicating for instance the structure of the lesson. The references to video links on Moodle were meant to remind or direct students to a required resource.
Eleven references, occurring three or four times per lecture, referring students to Moodle and activities to be engaged in via the LMS.	It was obvious that students were expected to use Moodle to access resources required for the unit, both those being used in class and additional resources. They were reminded of this a number of times during lessons.
Technology in use in every session: Personal Computer and Projector. PowerPoint. Video player. In one lecture, going online to view visual material and identify credibility of source.	Stuart's unit is presented with a great deal of visual material: illustrated references made to art, maps, personalities, historical documents, provocative reporting images, documentary filming, etc. Technology for media projection was required for this.
General: One reference made to smart phone devices that students use and their value in the speed of information dissemination.	Not an instruction for use but rather an illustration relating to the content of media, its advantages and disadvantages and *the relative speed and ease of access to the content*, stressing the need for source validation.
Other: The lessons were all interactive. A fairly extensive amount of information was covered in each lecture but using a mixture of varied classroom practices, showing the experience of the teacher and his ease with his subject. They included sections of presentation, walking around the classroom and engaging individuals in brief discussions on topic, fielding questions from the floor, allowing for brief consultation amongst the lesson participants to test and challenge each other's thinking.	These observations made to allow for the interpretation that blended learning is a mixture of teaching style and learning opportunities that do not necessarily include the use of technology.

Overall the classroom observations were valuable in providing a milieu to the interviews held with the teacher. Observed elements of the teacher's character and teaching style were useful in making sense of some comments made by the teacher in the interview, allowing for insight into what was meant with certain phrases. There were no overtly obvious observations to support blended learning in the form described in most literature, but there was evidence to suggest blended learning as described by the teacher was being practiced in the unit.

4.4 Conclusion

This chapter reported on the most revealing results found, using various methods, from the data gathered for this study. Issues not considered in this chapter are drawn into the discussions of the final chapter as it engages the emerging narrative that has grown out of this case study. The next chapter discusses the results reported above and the emergent storylines, drawing them together around the initial questions posed at the beginning of the study.

Chapter 5: Discussion and Conclusions

5.1 Introduction

The previous chapter presented the results of this research, gathered using the methods outlined in Chapter 3. They were organised in two clusters, the first addressing mostly the *context* of the case and the second addressing the primary *focus* of the case. The context considered for this case consisted chiefly of the Monash Education Strategic Plan 2011-2015, the MSAFP teaching staff students and the teaching environment. The primary focus of the case was a single teacher in the MSAFP, specifically his views and attitudes towards integrating blended learning practices at Monash.

This chapter discusses the results and observations made from the data, especially from the interviews, with the purpose of relaying the story of this single case, in response to answering the research question posed in Chapter 1 and restated below for convenience. The discussion intends to interweave rich threads (McMillan & Schumacher, 2006, p. 62) from the case into a bigger context and so present a compelling individual story that warrants the examination of similar cases at Monash. If such cases are able to stimulate discussion at MSA, the experiences of other teachers and lecturers on the campus may resonate and this could stoke a healthy debate around blended practices. The research question posed in Chapter 1 of this study will guide the discussion to this end, organising it around the subsidiary questions (see page 12) stated in Chapter 1.

The central research question guiding this study was: *"In what ways do the attitudes and perceptions of a MSAFP teacher towards blended learning echo the current strategic plan of Monash University to incorporate blended learning into the educational practice of the institution?"*

5.2 A Context for the Discussion

The backdrop to this case is a strategic plan for introducing blended learning practices at Monash University. This is a leading university with numerous campuses, Monash South Africa being the youngest. As with many universities, technology has long played an important part on the research and academic fronts, but only recently have global crises in higher education flared up provoking more strategic revisits to the way in which higher learning might harness the touted potential of technology to make it a game changer, or in some cases a redeemer. In Section 2.2 on page 28 the importance of open-mindedness to

technological developments and the requirements of specific environments to the response of institutions was discussed. A few years ago Garrison and Kanuka (2004, p. 96) stated that "blended learning is an effective and low-risk strategy which positions universities for the onslaught of technological developments that will be forthcoming in the next few years". This appears to have been an accurate statement in that the world has seen an explosion of available online technologies in recent years and many universities have indeed identified blended learning as a "safe" position from which to engage this changing world. Greater global forces than evolving technology alone have, however, provoked a more urgent and vigorous revisit of the status quo in higher education. Even though "higher education institutions, especially universities, are notorious resisters to change" (Garrison & Kanuka, 2004, p. 104) they have had to strategically re-evaluate the prospect of their potential demise should they remain inflexible to change. Although they presents a somewhat fatalistic view for institutions not prepared to embrace technology driven change, based only on supposition, they do present what seemed to be a prevalent mind-set. With a growth in computer technology that was rapidly becoming remarkably portable and personal and an expansion and evolution of internet technologies that could not have easily been foreseen, educators began taking note of new possibilities that were emerging. This included the concept of blended learning, to which educators could easily relate despite the elusiveness of its definition and which caused many institutions to seriously rethink the role of technology in their institution Bonk, Kim and Zeng (2012, p. 550) report the increasing spread (see page 34) of the trend and how this increase will be approximating the "new normal" of Norberg et al. (2011, p. 207). Monash University, having put a four pronged strategic plan (Shoemaker, 2011) in place to take the institution successfully into the future, has like many others cast blended learning in one of the leading roles.

The Monash South Africa Foundation Programme, as a division of Monash South Africa and being the location of this study, has its future at stake too. As a popular pathway into higher education it must remain relevant as an academic development programme to both the institution that it serves and the students that attend its courses in the hope of securing entrance into an undergraduate degree programme. This places teachers that work in the programme at a crossroad between specific teaching and learning goals that ensure student success and institutional agendas. Ideally, the two should be synergistic. Teachers are faced with many demands and expectations and they set about meeting them in the best ways they know how. For the most part they recognise that this would also entail fairly regular change,

driven by many external and internal factors Rogers (2010), as discussed on page 42 with reference to his model of diffusion of innovation. Remaining relevant in education requires appropriate change (McMurray, 2011) but the process is not easy and requires strong management and leadership. Good leaders will be attentive and responsive to the dynamics, the woes and the successes of their team, expertly guiding them through troubling waters. Masterful teachers, being resilient and flexible, can sway with the forces of change and eventually adapt as they become agents of diffusion, but their individual stories are not often heard. If individual experiences can amalgamate into a broader discourse it may be possible to exert influence through the conversations (Ertmer, 2005) with the potential to affect the perspective of leaders and possibly impact future directions. This study aimed at uncovering one teacher's perceptions and attitudes towards blended learning as a voice to provoke others to listen, tell their stories too and stir a wider conversation at Monash. Possibly future studies on broader conversations could generate useful theory.

Unsurprisingly, the flurry of technological development over the past decade has resulted in increased pressure on higher education to engage such technologies and opportunities for the potential they appear to hold. The typical resistance to change has had to yield some ground to those calling for change. This tug-of-war may be partly responsible for the jerky nature of transformation in higher education. This, I believe, is a compelling reason to call for research that highlights stories from the frontlines (Benson et al., 2011), let alone identifying the effects of the change and pointing out course correction if needed. These unique stories can help to better understand the impact and effectiveness of the change process, such as occurs when blended learning is introduced into a programme.

Although case studies such as this typically present narrow perspectives on an issue, they can present threads to be woven into a tapestry that can collectively hold greater value for the institution (Benson et al., 2011). Casting some light on the suitability of the thread is achieved by understanding something of the context. The survey which MSAFP staff completed, incidental observations from teachers and students and walk-around notes, provide points of comparison by which to illuminate aspects of the case in context.

Before the discussion shifts its focus specifically to the identified case, a note must be made on the value of studying perceptions and attitudes of teachers. Stated beliefs of teachers and teaching practice have not always aligned (see page 20). Ottenbreit-Leftwich *et al.* (2010) attributed this largely to *external* barriers, such as poor access to computer technology, which

overshadow other influences. This discordant relationship has recently become more aligned (see page 20), in part due to the reduction of some of these external barriers (Ertmer *et al.*, 2012). Being somewhat relieved of the imbalance a relook at *internal* factors is merited (Ertmer et al., 2012), as they become potentially more telling in understanding practice. Internal motivations or barriers such as teacher beliefs about learning, their own confidence and the value they perceive in teaching with technology (Ertmer et al., 2012) may now sway greater influence in actual practice and so understanding them better may prove valuable.

The potential influence of the internal perspective is indicated in a diagram by Cope and Ward (2002) which was extended in Chapter 1 (see page 20) to indicate the stance of this study that the potential ripple effect of teachers' perceptions may indeed have a further reach than expected. This diagram infers the possibility that the collective voice composed of individual narratives may have the potential to throw light on understanding the larger wellbeing of the organisation.

Attention is now shifted to Stuart, an alias for one teacher in the MASFP and his attitudes and perceptions towards blended learning practice. His teaching context is briefly considered. Elements of Stuart's nature and personality as perceived by others in the work place, the MSAFP working environment and the thoughts of colleagues on blended learning provide a filter through which to consider his perceptions and attitudes in following sections of the chapter.

On pages 56 it was noted that Stuart was nearing retirement age, but considering this in context provides interest to the case, rather than detracting from it. It could be assumed that advancing age would marginalise the story of this individual, yet there are many employees at MSA that are of a similar age who might resonate with Stuart's experience. There are enough points of comparison to consider his story worth telling. Taken from the MSAFP questionnaire, eight (more than 60%) of its fulltime teachers are well into their teaching careers, with at least fifteen years of experience and three more staff with five to ten years of experience. The gap found here could potentially represent a divide in perspectives, and some comments from the interview with Shirley (alias), who falls in this younger group, are mentioned further down in this discussion and provide interesting points of comparison.

In reference to Stuart as an individual, remarks made by colleagues and students alike[14], indicate his affable disposition. "Stuart is such a gentleman," said a colleague "always courteous!" On one occasion a few colleagues were chatting in the kitchen while waiting for the kettle to boil when one alluded to the value he adds in programme: "I'm glad Stuart raised that question in the meeting! I totally agree with him...he said what was on many minds, I'm sure!" Another chimed in: "Ja [yes], at least he's never rude about it, like I would be, hey [chuckles]? He always puts it so well." Apparently the MSAFP teachers appreciate Stuart's regular input at staff meetings and also the fact that he will often take the lead in raising questions with management when situations need clarification. In one of the other interviews that was had in the data collection phases, a younger colleague happened to comment as illustration on a point she was making about her perceptions of teachers adapting to new technologies in the MSAPF: "For instance, even though I think Stuart is, like, a bit old fashioned in some ways, you know, I think it's great how he gets involved when there's things to be done – even with new stuff – like using the student database[15]." These types of comments were heard a number of times during the phase of data collection, and they hint at the nature and character of Stuart as a dedicated and thorough professional. The sum of informal field observations regarding Stuart in the eyes of his colleagues would be that they respect him, value his input and experience and generally do not view him as trapped in a generational time warp but see him as a vibrant and active member of staff playing an important role in the success of the MSAFP.

It would seem, from similar informal observations where student opinions about Stuart or his classes were noted, that they too see him as being an engaging teacher. Overheard on the passage was this comment: "Gotta go – (*Stuart's unit*) in five – I love that class man, it's so interesting" (*Italics: unit name replaced to conceal identity*). Stuart is the only teacher of the course, and although the subject matter might well be engaging in itself, it could be fair to assume that the student was probably referencing the whole class experience. This assumption is reasonably supported by looking at the online Monash unit evaluation survey response to "I found the unit to be intellectually stimulating" for Stuart's unit. The data clearly indicates that students enjoy Stuart's unit finding it engaging and valuable, with his results consistently outweighing other units.

[14] See Appendix I for more comments noted from informal observations and discussions

[15] The database referred to was a new administrative technology introduced into the MSAFP in 2011.

That Stuart generally delivers engaging classes is not in question. I observed lessons and other presentations he made and personally found them interesting and well presented, which was borne out by unit survey responses and three personal letters of congratulations he recieved from the Monash Deputy Pro-Vice Chancellor for excellent survey responses achieved in recent semesters[16].

The purpose of including some character portraiture and data to support the claims is to establish in part the motive for finally selecting this particular teacher for the case study and also to establish that personal work ethic would not stand in the way of examining the blended learning issue. It is not to laud Stuart as an exemplary teacher in any way. Rather, by establishing that he is well liked, has a solid work ethic, delivers engaging classes and is committed to the cause of the MSAFP we can reasonably discount arguments that might bring into question his professional integrity when discussing his perceptions and attitudes to blended learning in terms of the narrative threads this study is seeking.

The sections that follow will now address the five subsidiary questions that were identified in Chapter 1 (see Section 1.3.2 on page 12) as a guide to the discussion.

5.3 The Teacher's Perception of Blended Learning

Sub-question 1: "What is the teacher's perception of blended learning in general and, more specifically, in his situational context?"

Perception, as used in the question above, refers to both the teachers idea of what blended learning is, a description or definition so to speak, and a stance towards it. His situational context is a reference to how he personally uses and/or experiences blended learning.

Benson *et al*. (2011, p. 147) conclude in their study what has been shown previously (Oliver & Trigwell, 2005) that blended learning is not understood uniformly by academic staff, and importantly this underscores the departure point for the interpretation of the data in this study. Despite comparisons that are made to other understandings of blended learning, notably those discussed in Chapter 2 (see page 32-34) it would be misdirected to evaluate the respondent's perceptions and attitudes to blended learning on anything but his own conceptions of what

[16] I am aware of this as I signed as witness (in 2013) to an award application made by Stuart in which evidence to this effect was presented.

that might mean, whether he articulated it or it emerged from the interrogation of the data in his case. Comparisons can naturally be made to other perspectives.

In Stuart's Unit Guide document the only explicit use of the term blended learning is mentioned as a point under the heading "Teaching Approach":

> **Blended learning:** (*Unit code replaced*) students will be using Moodle 2 in 2013. Extensive use is already made of video clips to support various themes. Essay assignments to be submitted on Moodle2. Short exercises and quizzes set on Moodle 2. (*Stuart's Unit Guide, 2013:5*)

No clarification is specifically applied to the meaning of "blended learning" as used in the unit guide. It is, however, clear that Moodle 2.0 is to play a role for students taking the unit. Moodle 2.0 is the version of the Moodle LMS platform that is currently being used across Monash University as the recently introduced VLE to host unit and course offerings. There is a sense of interaction within the Moodle environment that is implied with phrases such as "to be submitted on" and "quizzes set on" Moodle. At most, the teacher's meaning of blended learning as inferred here is of an internet based platform that facilitates teacher and student exchange and access to course content. It appears that video clips are also considered part of blended learning. This is supported by the prominence of the word "video" in the unit guide, occurring 21 times. There is no mention of "technology" as a word in respect to learning in the unit guide. The word "online" occurs five times but only in reference to news source links required for the course. "Face-to-face" does not occur, thereby not distinguishing "class" (which has seven occurrences) as a mode of instructional interaction distinct from online learning interaction. The word "class" is only used in context of tasks required or preparation expected for class interaction.

I had access to Stuart's Moodle 2 website over a period of two semesters. Neither website instance provided any explicit description indicating a mode of teaching and learning, each simply displaying the resources made available in accordance with the course structure. Naturally, by its very existence as a VLE platform for the unit, it becomes a contributing factor to blended learning by the teacher's own professed association in the unit guide.

The most valuable source of information regarding Stuart's perception of what blended learning means to him came, as expected, from the first interview held with him on 6 November 2012, after the conclusion of the second semester and during preparation for the "Summer Semester" that would begin in the first week of 2013. In response to the direct question: "What is your understanding of blended learning?" Stuart answered:

> *I think essentially it is the introduction of computer technology into a classroom using the facilities that we have in class, and outside of class, so that students can also access information, instructions. Not that I do much of it but...do exercises online to submit. At the moment I'm using Moodle for example, if that's where you want to go for now, just as a storage, that's my first step.* (Stuart, Interview 1)

That blended learning involves technology, in the context of use in the MSAFP, seemed to be a clear premise for Stuart throughout his interview. Rather, the matter in question lay in the manner of this use. Establishing online access to resources seemed to be more important than the nature of the interaction at the point of access. Interaction seemed to be limited to "collect and deliver" although further along in the interview there were hints at proving links to other online spaces, in other words redirection to additional media and resources. The word "blended" or "blended learning" was used ten times in this interview, but there was little value in such a number count since there were many other inferences to what might constitute blended learning for Stuart. For example, at a point he expressed an opinion that students expect to do things through technology, revealing as he spoke about it, his belief that appealing to students through the use of technology has become a necessity in teaching. This perspective affirmed Stuart's stance on what constitutes blended learning without stating it openly. The word "technology" appeared 23 times in the transcript, indicating an underlying tone of blended learning being more generally associated to technology. "Video" and "YouTube" were found five times each, within fairly close proximity, indicating to some extent in the discussion on blended learning that use of such visual electronic media are considered elements of blended learning.

As he spoke Stuart provided occasional clues in his use of the word "blended" that disclosed the sense that he sees "blended learning" more or less as a substitute word for applying technology in instructional or learning contexts and not necessarily as a blend of modes of instructional delivery (i.e. face-to-face and online):

> *...teachers do need to incorporate blended learning otherwise you will, you know...you are going to be left behind because your cohort of students is technologically empowered and they expect to do things with technology...* (Stuart, Interview 1)

Reviewing this phrase in context revealed "blended learning" as a strong allusion to the word "technology" and its use for Stuart. The perception of the term "blended learning" being a close facsimile of "technology" was captured here too, and interestingly, also a positive attitude towards its use:

> *I still have to say, despite the advantages of blended learning, and as I've said before I'm no Luddite*[17] *so I'm in favour of technology...my favourite teacher ever...used nothing other than a presentation from notes...* (Stuart, Interview 1)

Reference to advantages of blended learning and being in favour of it indicated a positive attitude. However, more than a hint was detectable that blended learning is not seen as the only avenue to excellence in learning. Stuart twice referenced his experience of a great teacher when he was a student during this interview.

> *...the best lectures I ever had were by a lecturer who did not use blended learning at all...but just the quality of his presentation was so good that he actually didn't need, I don't think, any additional technology* (Stuart, Interview 1)

By suggesting that the skilled practitioner "*did not use blended learning at all"* and "*did not need...any additional technology"* to deliver a great lesson, rather than suggesting the lecture was not interactive or the teacher did not incorporate other stimuli or methods to facilitate learning, supported the impression that the use of technology translates largely to the meaning of blended learning for Stuart. An attitude was revealed here, namely that technology is not what makes great teaching. This suggested Stuart holds a perspective of technology being useful, adding value in many ways, but not a necessity for creating excellence in learning.

The association of the use of technology to blended learning for Stuart was reinforced by the regular references he made to the use of short videos and YouTubes. He mentioned an interactive approach to his incorporation of this media technology into both face-to-face lessons and when linked to from Moodle, where he required related tutorial tasks to be completed. He was quick to point out "it is not a case of watching videos for entertainment".

The word Moodle was used 16 times in the interview but a large proportion of the discussion made reference to it without using the name, again indicating perhaps that an occurrence count has marginal value in some cases. A telling statement regarding his perception of blended learning, in relation to Moodle was:

> *I know fully what Moodle can do, I just don't know how to do it.* (Stuart, Interview 1)

[17] This description from www.urbandictionary.com is useful: One who fears technology (or new technology, as they seem pleased with how things currently are...why can't everything just be the same?) A Luddite generally claims things were "just fine" back in the day, and refuses to replace/update failing equipment/software/computers on the basis that they were just fine 10 years ago.

> *So when it comes to quizzes for example, I know exactly what Moodle can do and I would like to use those quizzes... some I have done on paper base, but don't know how to put them into a Moodle format* (Stuart, Interview 1)

These comments revealed a positive predisposition to Moodle but equally a strong sense of frustration, hinting at barriers he experiences regarding the tool. Such comments should be of importance to the education strategic team at Monash. It by no means disavows the use of a VLE, Moodle specifically, but sends a clear message that the process of adopting it is challenging and frustrating, which could easily begin to adversely impact a positive outlook.

Overall, Stuart seems to associate the concept of blended learning largely to the thoughtful or necessary incorporation of technology into teaching and learning situations. In this sense he engages blended learning to the extent that he feels capable of doing so but also recognises the need for and potential of developing this aspect of his teaching further. An interesting counterpoint that he included was this statement:

> *Blended learning...can be other things in my understanding...when I hear for example that Shirley*[18] *has done an ... excursion, my first question is how on earth...* (Stuart, Interview 1)

Despite Stuart's overall representation of blended learning being closely linked to using technology in his teaching, here he referenced the idea that blended learning might also refer to any number of potential situations where the manner of instruction and learning may differ from traditional classroom instruction. As mentioned on page 35, this perception would be in line with that of Moore and Gilmartin (2010, p. 328): "Drawing on the work of Hinterberger *et al*. (2004), we argue that blended learning is more than just a combination of face-to-face and online teaching, but rather involves more general mixes of teaching and learning approaches". Benson *et al*. (2011, p. 147) also noted that the "perception of blended learning as more than just technology was a common feature of several interviews", with "everything thrown in" as one of their participants put it. This certainly hints at the blurred distinctions in the term "blended learning".

As a point of comparison to Stuarts apparent perspective, when asked to select a description for the term blended learning in the MSAFP survey, three respondents identified with it being nothing new and only a new "buzz" word for teaching that incorporates diverse teaching strategies. Three selected the option of blended learning simply referring to teaching that

[18] A colleague of Stuart's in the MSAF, whose name has been substituted to protect her identity.

incorporates technology in some form, while four indicated a mixture of face-to-face and online modes of teaching (see Table 4.6 on page 73). Inconsistent interpretation of a rather fuzzy term is not unique to teachers in the MSAFP. Indeed the familiarity of the words in 'blended learning' invites teachers to easily form their own interpretation on its meaning. The inconsistency should be noteworthy to managers and leaders, stressing the importance of clear communication in times of change where everyone should 'hear' the same thing. "Faculty perspective in teaching online becomes increasingly important as colleges and universities seek to make greater use of this technology" (Picciano, 2009, p. 9), emphasising the need to pay attention to perceptions and forge a common ground.

In summary, Stuart displayed a positive outlook towards blended learning, which broadly encompasses many possibilities, but which he chiefly sees as the employment of technology in whatever form and manner to enhance his teaching, the prospects for learning and the appeal to students. Although not clearly in the mould of those that claim blended learning must reflect as a point on the continuum between face-to-face and pure online learning, it is not incongruous with other perspectives and forms the measure by which to interpret what his opinions and beliefs are around blended learning.

5.4 Comparisons to the Teacher's Perception of Blended Learning

Sub-question 2: "How does the teacher's perception of blended learning compare to the characterisation of blended learning by others, in the MSAFP context and in literature?"

This question flows directly from the previous question, retaining Stuart's perceptions as the focal point of the comparisons. As discussed on page 32, Picciano (2009) claims the lack of data documenting the penetration of blended learning into education is because of the way faculty perceive their own activities, poor record keeping and a lack of clear definitions of blended learning. The deficiencies highlighted in this statement underscore the problematic idea of comparison when the objects of comparison share a label but are characteristically different. This section attempts only to highlight distinctions and similarities with little attention paid to the issues of quality and value. The eventual outcomes of different approaches may be comparable, but that is beyond the scope of this report. What is highlighted for the researcher is once again the need to have a clearly communicated expectation from leadership in an institution where broad implementation of blended learning is pursued.

The observations made in Stuart's classrooms were all consistent with each other in that he used technology in various ways during each the session. The Student Database System[19] was used to capture absenteeism at the beginning of each session. Students have web based access to this data where they can track their attendance records and assessment performance. The system flags the student when their attendance is waning. The interface was projected on the screen and followed by students as they monitored the accuracy of capture. Interestingly, during one of the sessions I had the line of sight to notice two students checking this on their mobile devices while the capture was being made. In walk-around observations the system was twice observed being used by other teachers in a similar fashion.

Stuart's sessions proceeded with presentation slides, with regularly interjected discussions or questioning. Each of the lessons included at least one short video clip of about two minutes as a point of illustration and basis for discussion. Additional references to YouTube links available on Moodle and the expectation for students to view them in completing their tutorial tasks together was mentioned at least once in every class with references to Moodle made three to four times. The regular use of video in and out of class time was simple to identify, validating the points Stuart mentioned in the interviews regarding the use of multi-media in his teaching. From walk-around observations other MSAFP staff members were seen to be using video, Moodle, projected presentations, websites and a visualiser (which Stuart was not seen using). The individuals themselves may or may not have perceived themselves as engaging blended learning practice but in terms of how Stuart described elements of his blended learning, his colleagues seemed to be engaging similar tools, although little comment can be made on how they did so. The most useful commentary would come from the MSAFP survey.

In reference to tools, Moodle 2.0 apparently plays a key role in the blended learning agenda of the institution and in the lives of the teachers. The survey results indicated two dynamic users, two inhibited users, three repository users and one obligated user (using the categories that were defined in the data analysis stage - Table 4.5 on page 72) indicating a range from enthusiastic and diverse use to minimal use, under compulsion. Here the point on quality comes to the fore. With all the teachers using Moodle and qualifying, in a sense, as blended learning teachers, a variance in their perceptions on using it results in fairly disparate

[19] A system initially developed for the specific use in the MSAFP of performance tracking to assist in rapid identification of students at risk. Plans to expand the system across MSA are underway.

implications for the quality of learning it supports. In comparison of use, Stuart is probably located between the repository users, as that is the main use he mentions, and the inhibited user, since he indicates willingness and attempts at extending his use of the platform:

> *At the moment I'm using Moodle, for example....just as storage. So I need further instruction...*
>
> *...because I put all my instructions on Moodle, I put all the material, lectures, tutorials, it's all there on Moodle as well so they can be accessed off campus.*
>
> *I'm not happy with it* [his current status using blended learning] *I want to learn more how to use Moodle you know. Ja* [yes] *well, for my bureaucratic convenience but also as a tool for reducing paperwork and for getting the students involved.*
>
> *...quizzes would be very useful for me to use...I would also like to develop my own skills on marking on Moodle.*
>
> (Stuart, Interview 1)

In terms of comparison to best practice, after extensive reading and organisation of perspectives as the researcher I felt that, although there seemed to be some areas of consent on the meaning of blended learning, in practice there appeared such a broad spectrum of application that identifying "best practices" presupposes a particular disposition. This conclusion does not preclude valuable lessons that can be made from some comparison. Such an exercise could provide teachers with ways to augment what they already do or alternatives to consider in reinventing their approach. Stuart's conception of blended learning, which has been discussed above, is weighed here against a few examples from literature (discussed in Chapter 2) in what 'defines' blended learning.

Graham (2013, p. 333) declares that "despite current popularity of the term blended learning, it is defined with considerable variation across institutional contexts." This reference to varied use and definitions recurs throughout the literature. A few samples are presented here:

> "Blended learning combines multiple delivery media that are designed to complement each other and promote learning and application-learned behaviour" (Singh, 2003, p. 51)

This was discussed in Chapter 2 on page 35, showing how Singh designates four areas in which blending takes place.

> "Blended learning is both simple and complex. At its simplest, blended learning is the thoughtful integration of classroom face-to-face learning experiences with online learning" (Garrison & Kanuka, 2004, p. 96)

Although they reference familiar environments, the face-to-face classroom and an online learning space, they insist their idea must be distinguished from an enhanced classroom concept.

> "Drawing on the work of Hinterberger *et al*. (2004), we argue that blended learning is more than just the combination of face-to-face and online learning, but rather involves more general mixes of teaching and learning approaches." (Moore & Gilmartin, 2010, p. 328)

This broader perspective sees blended learning as more than a combination of both online and face-to-face interaction but that it can be extended by incorporating a range of materials, resources, types of assessments and in-class activities that reflect a diverse mix of approaches to teaching and learning.

In a recent survey of blended learning meanings it was found that "The most common use of the term blended learning denotes a combination of traditional face-to-face and online instruction" (Graham, 2013, p. 334). It is useful as a general reference to keep Graham's observation in mind, however, as previously stated (in Section 2.3.1 on page 32), the wide range of suggested "definitions" for blended learning in recent years has not led to a common description that satisfies all commentators. Picciano (2009, p. 10) describes the definition of blended learning as very fluid, considering the nuances that may exist in any one expression of it. Thus my conclusion is that although I support the search for a satisfactory common description, until one can be agreed upon, guidance could be taken from the most popular use or perhaps from the best contextual fit.

For the moment I believe the definition should rest with each school, faculty or university to define what it means for them in their context and to set about cultivating a blended learning culture that suits their needs. This approach would not come without challenges, however. One such challenge that immediately comes to the fore is the risk of losing cohesion in an institutional strategy that requires policy implementation. If every division forges its own understanding the implementation is likely to be inconsistent and counterproductive. The only way to avert this would be to ensure exceptionally clear lines and channels of dialogue and communication. It must be clearly established if there is a single unified organisational objective and what it is or whether the organisation is encouraging its divisions to be exploratory and entrepreneurial regarding the implementation of blended learning. At Monash, the Educational Strategic Plan clearly indicates that there is a global objective for the institution. It is slightly less specific in the expectation that the implementation is uniform

throughout the organisation. The communication filtering to the ground appears to be even less distinct in terms of uniformity of the interpretation of blended learning and what it means for Monash and its teachers and learners. Too many assumptions are made in terms of the broadly accepted descriptions of blended learning in literature and the press with inadequate attention paid to the meanings understood by the teachers, which may have various degrees of congruence with the institutional view.

In Stuart's case, he has his perspective on what blended learning is which does not necessarily reflect that of his colleagues, the MSAFP or Monash, thus highlighting the need for open communication channels and considered leadership that can mould a common understanding and culture.

5.5 Perceived Benefits

Sub-question 3: "How are blended learning practices perceived in relation to the quality of teaching and learning within the academic development role of the MSAFP?"

Overall Stuart appears to hold the perception that blended learning should have a positive influence on the quality of teaching and learning in the MSAFP benefiting the academic development of students. This is tempered with comments like "*it is not a silver bullet*" that clearly indicate his impression that, despite its potential, blended learning is not essential to quality teaching and learning but rather that the teacher and not the tool will be the final determinant of quality. Stuart also mentioned his belief that teacher skill levels are detractors from realising the potential of blended learning. This is telling in itself, since on numerous occasions he claimed to lack the required skills, suggesting that he believes his quality of teaching could improve as his skills improve, despite already receiving excellent feedback from students on his course. Further, based on his experience he seemed to believe that some students seem too "*apathetic*" and he did not think they would engage with the resources. Incidentally, this hints at another research avenue based on learner perspectives and factors that facilitate their engagement in blended learning. However, Stuart expressed more reasons overall to believe in the advantage of blended learning to the quality of teaching and learning. Students tend to be predisposed to technology use, piquing their interests by using online elements in the course, he thought. The ease of accessing the course content and activities at any time or place he counted as an advantage. Stuart's opinion was that blended learning is pedagogically sound but felt that using it must suit the need (required outcome) and not the means (technology).

This impression seemed to be in concert with the selections made in the MSAFP staff survey, (see Figure 4.1 on page 76), which provided an indication of teacher beliefs on the potential of blended learning. Ten possible benefits of blended learning that could enhance the quality of learning were presented and the teachers graded each on a five point scale ranging from "Strongly disagree" to "Strongly agree". The overall opinion based on the result appeared to indicate clearly that the majority felt blended learning could have a beneficial impact on learning quality. Overall 22 "Strongly agree" and 33 "Agree", a total of 55 out of a possible 80 responses (68.8%), were positive with a further 11 (13.8%) being neutral. Only 11 (13.8%) "Disagree" responses were made and there were no "Strongly disagree" selections. To an extent these results indicate that the overall perception in the MSAFP leans favourably towards the value of blended learning in increasing the quality of learning in the programme. This clearly aligns with Stuart's perspective on this point. An interesting observation is that the highest disagreement was with respect to improving the quality of feedback (two negative responses and three neutral), and two respondents did not think the difference blended learning could make would warrant the time and effort involved in adopting the practice, although all six other respondents were positive. Again, this kind of observation should be noteworthy to management in terms of cohesion and momentum in managing the change to blended learning approaches.

From an institutional perspective it is clear that as a key strategy, blended learning is perceived very favourably as a means to attaining "the highest quality learning and teaching, the highest quality courses, keenly-sought graduates and the highest quality student experience". It would appear that the teachers in the MSAFP to a reasonable extent would agree, with some remaining unconvinced. Certain teachers are very buoyant about blended learning:

> *"So I think we absolutely have to move away from what worked in the past because we are not living in the past anymore; we've moved on so far and we need to make use of the technologies to make it easier." (*Interviewee*)*

Others hold a different opinion with two/seven responses to a question in the survey on the future of blended learning for the MSAFP seeing it as tangential to the function of the programme (see Table 4.8 on page 74). From this question it appeared that the majority of the staff considers blended learning to be a vital or important element in the future of the MSAFP, however two did not.

One respondent, irrespective of belief in the potential of blended learning, was not prepared to make the effort involved in the change. The respondent commented in the survey:

> *"...we are overworked and I am not willing to spend my spare time working on Moodle!"* (Anonymous questionnaire respondent)

Stuart reflects a realistic optimism, recognising some of the obstacles he has to clear in order for him to use blended learning to the extent that he believes it will truly benefit the teaching and learning in his unit:

> *"...once I'm comfortable with a particular skill, once I've acquired the skill I'm very happy to use it. I'm all for electronic teaching."* (Stuart, Interview 2)

> *"...students live in a technological environment so I think, immediately, by employing technology in their academic development is something which as young people they are going to be happy with."* (Stuart, Interview 1)

During this portion of his interview Stuart also mentioned the ease of adapting to technology that students seemed to possess and the necessity of using technology in becoming global citizens, especially the Monash students being in a university with an international span.

Carefully attuned leadership will be needed to sensitively steer the overall positive sentiment towards blended learning as a means to improving the quality of academic development in the MSAFP as the momentum lies on the positive side. However, not managing the change effectively may allow the inertia of the detractors and other frustrations in the change process to undo the Monash blended learning strategy. Georgina and Olson (2008) mentioned a "disconnect" between faculty willing and unwilling to take up a new pedagogical approach (discussed on page 45), once again emphasising the critical role of the leadership where there is expected to be compliance to an institutional strategy. There appears to be some evidence of these tensions in the MSAFP and almost certainly there is likely to be some across the broader MSA campus.

5.6 The Institutional Impact

Sub- question 4: "How does the Monash institutional position on blended learning impact the practice of a MSAFP teacher?"

The first point of clarity sought was on the awareness levels of the institutional position on blended learning. Awareness should be informed by the Monash Education Strategic Plan but may have, to an extent, surfaced from the situations involving change in the MASFP or from conversations in the hallways and faculty meetings. In completing the MSAFP

questionnaire, respondents were to indicate their awareness of the plan. Fortunately all of the eight respondents had heard of it. However, only one of the respondents was well aquainted with the plan.

Although it would be gratifying to the leaders implementing the changes that, by one means or another, all the permanent teaching staff at the MSAFP were aware of the plan with some professing a degree of insight into its specific content and strategy, a valuable observation for them would be that for the majority this strategic plan was only familiar in its existence rather than its contents. With 2015 approaching, the drivers of the initiative may be interested in gauging the enthusiasm and urgency with which the plan is being implemented. Although all three interviewees I spoke with claimed to be aware of the plan and some of its contents, I had to brief them all on the blended learning aspect of it in order to proceed with the intended discussion of it. "*I have to confess that I haven't immersed myself in that*", said Stuart. My conclusion is that in those cases, based on the data from the interviews, the understanding of an institutional drive towards blended learning comes primarily from being told that teachers had to adopt the use of Moodle over a period of two semesters and also from an occasional agenda point in meetings. I wondered if I would have drawn the same conclusion if I had interviewed more teachers.

In Stuart's interviews some notable points of view in relation to the institutional position on blended learning were made. A number of them are more suited to discussion under the next section as they relate to perceived barriers to using blended learning.

The institutional approach was largely underwritten by the implementation of Moodle as a VLE platform for the university. Stuart felt that the initiation into using Moodle was inadequate:

> *"I found a bit of the weakness of the Australian visitors who gave us presentations, is they show us what it can do, but they run through it very quickly...when they go I know...a lot of what Moodle can do but don't know how to put it together on Moodle..." (Stuart, Interview 1)*

It was clear in the interview that the frustration of not being able to follow rapid-fire tuition in a group left Stuart feeling lost and willing to abandon the cause.

> *So rather than sit and fiddle fruitlessly on Moodle trying to work out and spend hours and hours trying to work out a quiz, I'm not going to do it, it will just waste my time and frustrate me. Whereas, if I had the know-how... I would certainly use it."* (Stuart, Interview 1)

Stuart persisted and became reasonably proficient in basic functions but still, by his admission, lacked many skills required to harness the power of the platform effectively. Stuart said he found Moodle itself perplexing, stating: "*I find Moodle instructions not clear at all*" (Interview 2) and went on to describe some confusing elements that clearly made no sense to him.

However, despite his frustrations Stuart recognised the potential of Moodle to facilitate his unit in an environment that allowed for improved access by students, and in time, greater interaction with other online technologies including ways of engaging students in meaningful learning, and so he persisted. *"I'd love to use it* [more]. *You know, I wish I had the time and direction to..."* (Stuart, Interview 2). He has taken up the institutional charge to use Moodle, battled frustrations to the point he could stay afloat, and look forward, beyond the obstructions to what it might hold. However, his positive attitude about the value of blended learning appears to be somewhat restricted by some barriers.

5.7 Catalysts and Resistors

Sub-question 5: "Why do teachers in the MSAFP seem to either advocate or disregard the institutional agenda of creating blended learning environments?"

A pertinent question to consider is whether using the institutional VLE alone, despite its interactive online interface, constitutes a satisfactory reference to blended learning. This would naturally depend on the stance taken towards the meaning of blended learning by the institution and the teacher. From the interviews with Stuart, his frequent references to Moodle indicate that he does apportion a large part of what he understands as blended learning to the platform and its functions. On the other hand his references to technology and learning environments he indicated as blended environments to protrude beyond the VLE's parameters. Although the Education Strategic Plan does not mention the details of how teachers should practice blended learning in their courses, it is clear from the strategies and measurable that the expectation is that Moodle would play the pivotal role. Perhaps this is lacking in the communication to the teachers on the ground. That every educator has to use Moodle is not in doubt as the message has been clearly transmitted through meetings and the fact that the other VLE options have been phased out and are no longer available. Whether the teacher is expected to operate solely from within this platform or not is not clear.

The ambiguity mentioned above once again calls for strong leadership qualities and opinion leaders to emerge that have a clear understanding of the expectation and can promote the diffusion of innovation according to the institutional vision.

It is clear from comments by Stuart and other colleagues that lack of time is perceived as a major barrier to the adoption process regarding Moodle, on which there appears to be some consensus that it is not straight forward for the newcomer. The process of diffusion can be facilitated through effective sharing of best practice, which is discussed further on page 42 with reference to the role of leadership.

The results of this study were congruent with Van der Merwe and Mouton (2005) who indicate time as the premier barrier for ICT integration into teaching and learning practice.

The above discussion is largely premised on the construct of blended learning being desirable. There is a growing body of evidence that supports the claims that it is beneficial to learning, both as a context and mode of learning but also in that technology in certain instances is a suitable means to improve cognitive development. However, one could oppose the proliferation of technology in learning processes and environments on certain grounds. Claims could be made that technology placates learners who are truly searching for entertainment above learning. That technology, in unhealthy proportions, may simply be a slow release self-destruct mechanism as it engenders lower and lower concentration levels due to the nature of media delivery via technology. Of course the counter claim could be made that if the learning is still achieved, then this does not matter. However, given the purpose of this study being situated in a context where blended learning is an institutional objective, these debates become somewhat irrelevant.

5.8 Conclusion: Objectives in Review

In approaching this study I set some objectives (see Section 1.3.3 on page 13) to guide the line of questioning that would ultimately lead to answering the main question of the study. In this section these objectives are briefly reviewed, providing structure to some concluding remarks.

Objective 1: Determine the understanding and use of blended learning by a selected teacher.

It was determined that "though the term blended learning is more often used to signify mixed methods of delivery, incorporating online and face-to-face interactions" (Moore & Gilmartin,

2010, p. 341) it would simply disqualify the subject of the case from being a typical blended learning teacher and that it was necessary to use the teacher's own definition of blended learning by which to evaluate his perceptions on the topic. This effectively determined a perspective on blended learning that equated strongly to the purposeful and effective use of any technology in and out of the classroom that is employed to further the learning opportunity. On the fringe of his understanding was an inclusion of other methods of teaching and learning that did not require technology, being somewhat in line with Moore and Gilmartin (2010, p. 341) who see (as mentioned on page 46) blended learning as extending "beyond the media used to incorporate all aspects of, and inputs into the learning process". The nature of the MSAFP, being an academic development programme, has proven one of its central strengths to be the face-to-face sessions, as the success of the programme has previously been built on paying close personal attention to all its students. Stuart, the teacher, found ways to enrich this experience with technology, such as with videos in and out of class, improved remote access to course resources and links without forgoing or replacing parts of the unit with formal online learning. This was a response to the unique challenge of developing a blended learning environment in an academic development programme with entrenched value in face-to-face sessions.

Objective 2: Determine the teacher's openness to and motivation for using blended learning.

Stuart indicated a very receptive disposition towards using blended learning. This appeared to stem from his beliefs that blended learning, or incorporation of teaching technologies in a broader sense, could enhance the value of learning situations, find affinity with tech-savvy students and be relevant to global shifts in the future of education and work. The relationship between belief and practice was raised on page 46, supported by Hativah, (2002) and Martin, Prosser, Trigwell, Ramsden, & Benjamin (2002). The teacher's receptive beliefs underlie a "willingness to accept new technologies [that] could significantly affect the success of blended learning development" (Benson *et al*., 2011, p. 145).

Objective 3: Determine the teacher's perspective on blended learning as a quality mechanism in academic development.

The teacher's perception on quality was coloured with anecdotes about the best teacher he had ever known when he was at university - this person had kept rapt audiences with no more than some notes as a reference. There may have been circumstantial factors that gripped

Stuart and may not have done with his peers, but it clearly left him with the belief that there is no substitute for a great teacher. It should be kept in mind that when this impression was made on Stuart as a student in the mid-1970's, the technology that is available to teachers today simply did not exist and technology in general did not play nearly such a central role in the average student or teacher's life as it does currently. This generational reality likely would distinguish an average student's view of a great teacher today from that of Stuart's. The point is perhaps highlighted by an interview comment made by Shirley, who was a still a student in mid-2000:

> *"What worked ten years ago has shifted so much and we find situations where students are operating at a level higher than us in terms of engaging with technology, and again I see my students...and this sounds terrible, but almost as consumers and if you want them to consume what you are trying to 'sell' them, you have to do it in a way that they are comfortable with." (Shirley, Interview)*

Not everyone would necessarily agree with Shirley's perspective, but it does highlight the different mind-set that a student today might have compared to one 40 years ago.

Stuart cautioned against seeing blended learning as a silver bullet, but that said, Stuart clearly expressed his belief that if the context warrants it and an appropriate technology can be applied, that blended learning could most certainly be a catalyst for quality academic development. The perspective he presented indicated that technology should be employed, but not for the sake of using it but because it could achieve the desired outcomes he had designed. This stance resonates with the sentiment of Boughey (2007, p. 8) in that academic development practices should be nuanced and contextualised in order to contribute to differentiated learning needs at programme level. These considerations do raise questions of methodological approach for the teacher of modern university students. Perhaps, as the distinctions between life and technology increasingly blur, the distinction between learning with or without technology will increasingly blur, diffusing the efforts and rhetoric to blend the two supposedly distinct worlds of education and technology and simply allow learning to occur within the 'natural' environment of the learner.

Objective 4: Identify the barriers experienced with blended learning and the professional support required to mediate.

Beadle and Santy (as cited in Harris, Connolly, & Feeney, 2009, p. 158) warn that the "Lack of [skills] training is identified as a considerable risk". It was evident throughout the interviews with Stuart that he perceived himself as inadequately equipped with skills and

knowledge to effectively employ Moodle and other blended learning techniques into his teaching, resigning to a slow incremental improvement as he learned a few more skills over time. Interviewing him twice, almost a year apart, highlighted the small steps he had taken over that period from using Moodle primarily as a repository for resources and links to inching into the area of administrative use, being no closer to using the quizzes he had hoped to master since the first interview.

He stated his frustration in misdirected training, even though it had been offered, which was not specific to his needs. Stuart mentioned on more than one occasion how much he would value and make use of one-on-one support if it were available.

The most noticeable obstacles identified were his poor self-conception as a technology learner. He was not uncomfortable with technology or the idea of using it, but claimed no natural affinity to learning new skills in it. The complexities of Moodle stood in his way of self-coaching while he also recounted the experience of dictatorial attitudes from leadership as unnecessary. Stuart's generally positive beliefs, however, did mitigate the barriers to an extent. Time to learn new skills or even fully apply the ones that he had mentioned frequently, was probably the most persistent detractor from moving forward and made him less susceptible to the charms of a positive outlook. This reinforced the perspective of Van der Merwe and Mouton (2005, p. 35) who claim time as the primary barrier to the integration of ICT's in teaching and learning activities. Interestingly, the second most prominent position on their list of barriers emphasises intrinsic rather than extrinsic factors, highlighting Stuart's self-doubts once more.

Objective 5: Understand the effects of change from introducing blended learning expectations and the requirements for change management in the MSAFP.

Harris *et al*. (2009) (see page 43) spoke of the importance of comprehensive and accessible support. This would represent good advice on the basis of Stuart's experience. He dutifully soldiered on slowly coming to grips with Moodle and although not averse at all to the ideas and promises of blended learning, frustrated by the perceived obstacles that the change has introduced into his teaching life. He seemed not to perceive an option as a diligent teacher but to continue for the reasons of keeping abreast with the trends and needs of students and also because of the institutional requirement to use Moodle. However, there were a few other voices in the MSAFP that, under the cloak of anonymity in the survey, were quite outspoken about their resistance to the changes and their resentment of having to give more time and

effort to learn new skills for something that they were not even convinced had merit. Monash has made training available at times and provided online support, but some of the most noticeable comments were in relation to the frustrations of not being able to learn the skills or have accessible face-to-face support to assist in acquiring them. A lack of institutional support and the diversity of faculties changing roles was cited by Ocak (2011, p. 697) as a concern, noting from that study the faculty requirement for continuous administrator support to overcome challenges of blended learning. Ocak mentioned, as noted on page 42, that teachers had to overcome their resistance to technology to become competent in e-learning environments, which would be facilitated by institutional support.

Objective 6: Understand the articulation of the Monash Education Strategic Plan through one teacher's experience in the MSAFP and so contribute to the necessary conversation on blended learning in MSA.

The Monash Education Strategic Plan clearly stipulates its intention of provisioning the university with resources to facilitate the implementation of blended learning as a means to delivering academic excellence. Most of this backing appears to have manifested in the development of a customised Moodle 2.0 platform, which allows freedom for educators to develop a "blended learning" course. With the roll out of Moodle, there was accompanying training provided, primarily from visiting teams once a semester in the first year. How this strategic move has articulated in Stuart's case, is that he was indeed using Moodle, but in a very restricted format compared to its capabilities. He obviously required guidance and would prefer small group or individual tutoring, which he had not found available. The consequence appeared to be that in his case he was using the system inadequately and despite his classes being well rated, the full potential for blended learning to contribute to excellent academic learning and performance was being lost. The responsibility for this value attrition lies at the door of the institution, which, despite its existing efforts have not adequately assessed the experience of the teaching staff and addressed their concerns nor fully explained the rationale and approach to blended learning that they wished to embed in the university as a whole.

5.9 Reflections and Recommendations

This study, in many ways directed its own course, and as such became an interesting adventure. However, upon reflection there are some immediate avenues that come to mind for improving the study. Although a sense of longitudinal effect was achieved by having

interviews with Stuart a year apart, in order to establish if any significant evolution had occurred in his blended learning approach, the overall benefit was in all likelihood outweighed by the value of being able to provide feedback sooner to stakeholders such as the MSAFP management. To reinforce the point, if this study does initiate other similar inquiries within the MSAFP or even MSA, then the potential for theory generation increases. This would be beneficial to practice on the campus, however, the possibility for that to occur within the timeframes of the Monash Educational Strategic Plan 2011-2015 is very limited. On the other hand, the plan's timeframe was imposed to establish a new trajectory for blended learning at Monash, and in many ways represents only the beginning of a journey where research on blended learning might still have a long and robust future.

Any recommendation to institutions adopting blended learning strategies would be amiss though without emphasising the point made by Garrison and Kanuka (2004) that blended learning should not just be an augmentation to the existing dominant approach or method. In the pursuit of educational value blended learning should "facilitate communities of learners to become critical thinkers" through appropriately mixing activities and modes of learning engagement to pursue goals including "pedagogical richness, access to learning resources, construction of knowledge and social interaction" (Hadjerrouit, 2008). Indeed, not only blended learning but all educational technology should not be seen as the panacea for educational challenges although there is significant potential to impact learning outcomes due to its ability in certain situations to leverage traditional teaching and learning activities (Jaffer *et al*., 2007). These authors point out that it is important to "identify situations where educational technology will be appropriate and when and how to use educational technology in these situations". Therein lies, I believe, the ethereal qualities that make the particular mixes of blended learning so difficult to synthesise and which accounts for so much of the variance in the effectiveness of blended learning cases.

As the scope of this study evolved to become a narrow but rich study the intention had to make a necessary adjustment from generating theory to being a possible precursor to generating theory. This was due to the impossibility of making truly valid generalisations from the results (De George-Walker & Keeffe, 2010) of one teacher's perceptions and attitudes, even though they were contextualised somewhat within the surveyed perspectives of other colleagues and by various methods of data collection for the purpose of triangulation. Beyond establishing possible grounds for theory generating research in the blended learning arena, I believe this study still added value in the particular setting of the case. The case

study initiated a particular line of narrative along which a resonating collective voice on blended learning experiences can develop and which could see teachers' and lecturers' experiences contributing to the conversations that affect the adoption of blended learning in the MSAFP and at MSA.

The initial recommendations that flows from this study is simple and in line with findings from this research and that of Benson *et al*. (2011, p. 153) who state: "Factors affecting the integration of blended learning stemmed from the attitudes and perceptions of academic staff towards new teaching practices and technologies." The case of Stuart showed a clear relationship between his willingness to struggle through his frustrations around Moodle and the fact that he perceived positive benefit to using technology in his teaching contexts. As pointed out by Benson *et al.* (2011) the perceptions, positive or negative, of the teachers significantly steered the adoption of blended learning. The Monash Education Strategic Plan 2011-2015 makes clear the intention of the university to implement blended learning as a key objective towards achieving academic excellence through the institution. With the project well under way the recommendation to ground level management, leaders in faculties, schools, and programmes, would be to create safe and open communication channels where teachers can be heard and where institutional values can be sensitively promoted in the search for a unified and positive perception towards blended learning. Barriers to adopting blended learning need to be addressed to prevent teachers from merely appreciating blended learning's potential value from afar while dolefully prodding the obstacles in their path. As pointed out by Ertmer et al. (2012, p. 433) despite the provision of technology, "little will be gained if second-order barriers (knowledge and skills, attitudes and beliefs) are not addressed." Ellsworth (2000, p. 3) adds weight behind this recommendation suggesting (see page 43) that one way of approaching obstacles to change is to modify or adapt the innovation's attributes and then adds that even if this cannot be altered, "it may be possible to change the perceptions of the innovation among stakeholders".

In terms of the model I devised for the Literature review (see page 27) the centre of Zone B is the point of initial introduction of a change event. As the event diffuses into Zone A at various points individuals within the social system encounter their "Zone of resistance". At some point the diffusion into A is, hopefully, complete but before that there is a period of time, shaded between the red lines in Figure 5.1. This would be the time-space in which it is critical for leadership to identify the points of resistance and manage the staff barriers in order to successfully steer the process of innovation diffusion. The recommendation would be

to begin identifying the characteristics of the resistance and the occurrence of it as soon as possible in order to effectively manage the change implementation.

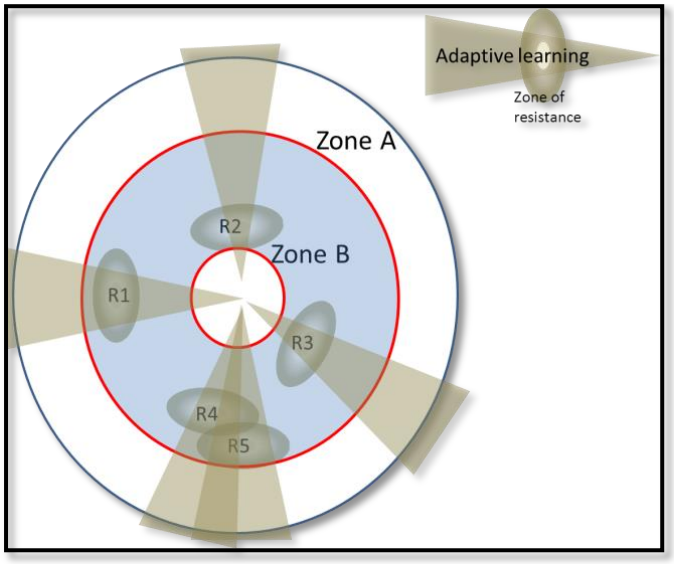


Figure 5.1 Multiple single cases and managing change in a change event.

The nature of this study, becoming what it did, has created the potential for the narrative of a single, dedicated teacher's experience of locking horns with his changing world of teaching, to stimulate the telling of other experiences that need to be heard. The recommendation from this is for academic staff at MSA to pursue reflective work or similar research that can be a stimulant for conversations around blended learning and other strategies in pursuit of academic excellence. Figure 5.1 also gives an indication of how multiple single narrative potentially begin to weave a fully picture for managers and researchers to interpret. Researchers can consider the gaps that still exist in the literature around teacher perceptions of blended learning and the impact they can have on learning and programmes within specific situations.

As a niche research area it would be a response to Drysdale et al. (2013, p. 98) who conclude their work saying: "Institutional policy and adoption research is closely tied to two other areas for which we encourage further research: professional development and faculty dispositions regarding the implementation of blended learning".

Further research in this area could potentially generate theory that would have far broader application, not only in the MSAFP, but also for all Higher Education institutions, nationally and globally, who offer pathway programmes for access into university study.

5.10 Final Word

This study has sought to answer the question *"In what ways do the attitudes and perceptions of a MSAFP teacher towards blended learning echo the current strategic plan of Monash University to incorporate blended learning into the educational practice of the institution?"*

These are the perceptions and attitudes faced by a teacher with issues of changing teaching paradigms and consistent institutional demands for teaching excellence. As the study proceeded, a narrative emerged which uncovered a willingness by the teacher to participate in the institutional objectives. It also spotlighted the need for institutional leadership to facilitate a more unified vision of what blended learning means to the institution and to provide the necessary support to ensure teachers make a successful transition into a defined blended learning role.

It should be noted that this study focussed on teacher perceptions, while there are others (De George-Walker & Keeffe, 2010, p. 2) who suggest that from the perspective of the learner what has been discussed should be called "blended *teaching*" and they make a good case for continued research on the topic from the student's perspective. Surely with the discursive nature of the literature and interpretations of blended learning, further detailed studies of students, teachers, existing blended practices, policy, initiatives and so forth in the MSAFP and beyond are required to add a stronger voice to blended learning in the local academic development field. There remains a large scope for enquiry within MSA in order to build comprehensive and valid models of blended learning practices and develop theory that will support it. Although there is not yet a comprehensive body of research that is persuasive enough to irrefutably state that blended learning results in better teaching or learning, given so many variables that can affect that outcome, the evidence, however, is largely persuasive that the learning experience can well be enhanced, and that in itself makes the pursuit worthwhile.

References

Al-Huwail, N, Al-Sharhan, S, & Al-Hunaiyyan, A. (2007). Learning design for a successful blended e-learning environment: Cultural dimensions. *Journal of Computer Science, 6*(4), 60-69.

Allen, M. (2007). *Designing successful e-learning: Forget what you know about instructional design and do something interesting*. San Fransisco: Pfeiffer.

Angrosino, M. (2007). *Doing Ethnographic and Observational Research*. London: SAGE Publishers.

Baxter, P. & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report, 13*(4), 544-559.

Benson, V., Anderson, D., & Ooms, A. (2011). Educators' perceptions, attitudes and practices: blended learning in business and management education. *Research in Learning Technology, 19*(2).

Bickman, L., & Rog, D. J. (1998). *Handbook of applied social research methods*. London: SAGE

B-Learn Project. (2007). B-Learn: Assisting teachers of traditional universities in designing blended learning. Website: http://www.ut.ee/blearn/136246.

Bold, C. (2012). *Using Narrative in Research*. London: SAGE.

Bonk, C.J., Graham, C.R., Cross, J., & Moore, M.G. (2006). *The handbook of blended learning: Global perspectives, local designs*: Pfeiffer San Francisco, CA.

Bonk, C.J, & Graham, C.R. (2012). *The handbook of blended learning: Global perspectives, local designs*: Wiley. com.

Bonk, C.J, Kim, K., & Zeng, T. (2012). Future Directions of Blended Learning in Higher Education and Workplace Settings. In C. J. Bonk & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs*. San Fransisco: Wiley. com.

Boughey, C. (2010). Academic Development for Improved Efficiency in the Higher Education and Training System in South Africa. Pretoria: Development Bank of Southern Africa.

Boughey, C. (2007). Marrying equity and efficiency: The need for Third generation academic development. *Perspectives in Education, 25*(3), 27-38.

Campbell, D., Cook, K. J., Kusch, B., & Moulton, S. (2009). *Inspiring Learning and Teaching: Using e-tools to Facilitate Change*. Paper presented at the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2009, Vancouver, Canada. http://www.editlib.org/p/32454

Carr, W , & Kemmis, S. (1986). *Becoming Critical: Education, Knowledge and Action Research*. London: Falmer Press.

Cloete, N., & Bunting, I. (2000). *Higher education transformation: Assessing performance in South Africa*: Chet.

Cope, C., & Ward, P. (2002). Integrating learning technology into classrooms: The importance of teachers' perceptions. *Educational Technology & Society, 5*(1), 67-74.

Czerniewicz, L. (2010). Educational technology–Mapping the terrain with Bernstein as cartographer. *Journal of Computer Assisted Learning, 26*(6), 523-534.

De George-Walker, L. , & Keeffe, M. (2010). Self-determined blended learning: a case study of blended learning design. *Higher Education Research & Development, 29*(1), 1-13.

Douglis, F. (2004). Blended Learning: Choosing the Right Blend. In B. Hoffman (Ed.), Encyclopedia of educational technology: San Diego State University. Retrieved from http://www.etc.edu.cn/eet/Articles/blendlearning/index.htm.

Drysdale, J. S., Graham, C. R., Spring, K. J., & Halverson, L. R. (2013). An analysis of research trends in dissertations and theses studying blended learning. *The Internet and Higher Education, 17*(0), 90-100.

Ellsworth, J. B. (2000). *Surviving Change: A Survey of Educational Change Models*: ERIC Clearinghouse on Information & Technology, Syracuse University, New York.

Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers & Education, 59*(2), 423-435.

Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration? *Educational Technology Research and Development, 53*(4), 25-39.

Fahey, S. (2008). Rethinking International Engagement in Africa. Available online: http://www.monash.edu.au/international/dvc/assets/rethinking-international-engagement-in-africa.pdf

Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*: John Wiley & Sons.

Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. *The Internet and Higher Education, 2*(2–3), 87-105.

Garrison, D.R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education, 7*(2), 95-105.

Georgina, D. A, & Olson, M. R. (2008). Integration of technology in higher education: A review of faculty self-perceptions. *The Internet and Higher Education, 11*(1), 1-8.

Gomm, R., & Hammersley, M. (2004). Introduction. In R. Gomm, M. Hammersley & P. Foster (Eds.), *Case Study Method*. London: SABE Publications.

Graham, C.R. (2013). Emerging Practice and Research in Blended Learning. In M. G. Moore (Ed.), *Handbook of distance education.* New York, London: Routledge.

Guri-Rosenblit, S., & Gros, B. (2011). E-Learning: Confusing terminology, research gaps and inherent challenges. *The Journal of Distance Education/Revue de l'Éducation à Distance, 25*(1).

Hadjerrouit, S. (2008). *Evaluating the Pedagogical Value of Blended Learning in Informatics and Mathematics Education: A Comparative Study*. Paper presented at the World Conference on Educational Multimedia, Hypermedia and Telecommunications 2008, Vienna, Austria. http://www.editlib.org/p/28904

Hall, G. E. (1987). *Change in schools: Facilitating the process*: Suny Press.

Hall, G. E, & Hord, S. M. (2011). Implementation: Learning Builds the Bridge between Research and Practice. *Journal of Staff Development, 32*(4), 52-57.

Hancock, D.R., Bray, M., & Nason, S.A. (2002). Influencing university students' achievement and motivation in a technology course. *The Journal of Educational Research, 95*(6), 365-372.

Harris, P., Connolly, J., & Feeney, L. (2009). Blended learning: overview and recommendations for successful implementation. *Industrial and Commercial Training, 41*(3), 155-163.

Hativa, N., & Goodyear, P. (2002). *Teacher Thinking, Beliefs and Knowledge in Higher Education* (N. Hativa & P. Goodyear Eds.). Dordrecht, Boston, London: Kluwer Academic Publishers.

Hativah, N. (2002). Becoming a better teacher: A case of changing the pedagogical knowledge and beliefs of law professors. In N. Hativa & P. Goodyear (Eds.), *Teacher Thinking, Beliefs and Knowledge in Higher Education*. Dordrecht, Boston, London: Kluwer Academic Publishers.

Holley, D., & Dobson, C. (2008). Encouraging student engagement in a blended learning environment: the use of contemporary learning spaces. *Learning, Media and technology, 33*(2), 139-150.

Huang, R., Ma, D., & Zhang, H. (2008). Towards a design theory of blended learning curriculum. *Hybrid Learning and Education*, 66-78.

Jaffer, S., Ng'ambi, D., & Czerniewicz, L. (2007). The role of ICTs in higher education in South Africa: One strategy for addressing teaching and learning challenges. *International Journal of Education and Development using ICT, 3*(4).

Khan, B. H. (2005). *Managing e-learning: Design, delivery, implementation, and evaluation*: Information Science Publishing.

Kirkley, S. E., & Kirkley, J. R. (2004). Creating next generation blended learning environments using mixed reality, video games and simulations. *TechTrends, 49*(3), 42-53.

Kruger, C. J. (2010). *Latest ICT Trends in Enhancing Education*. Paper presented at the The South African Computer Lecturers' Accosiation (SCALA) 2010 annual conference, Univerisity of Pretoria, South Africa. web.up.ac.za/ecis/SACLA2010PR/SACLA2010/Papers/SACLA029.pdf

Laurillard, D. (2002). *Rethinking University Teaching: A Converstaional Framework for the Effective Use of Learning Technologies* (2 ed.). London: Routledge.

Lees, D., & Levy, S. (2012). The Monash South Africa Foundation Programme (MSAFP). In S. Levy & C. Earl (Eds.), *Student Voices in Transition: The Experiences of Pathway Students* (pp. 27-39). Pretoria: Van Schaik Publishers.

Littlejohn, A., & Pegler, C. (2007). *Preparing for blended e-learning*: Routledge.

Martin, E., Prosser, M., Trigwell, K., Ramsden, P., & Benjamin, J. (2002). What universtiy teachers teach and how they teach it. In N. Hativa & P. Goodyear (Eds.), *Teacher Thinking, Beliefs and Knowledge in Higher Education* Dordrecht, Boston, London: Kluwer Academic Publishers.

Mashile, E. O., & Pretorius, F. J. (2003). Challenges of online education in a developing country. *South African journal of higher education, 17*(1), 132-139.

Mathison, S. (1988). Why triangulate? *Educational researcher, 17*(2), 13-17.

Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (Vol. 41): Sage publications.

McMillan, J. H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry* (6th ed.). Boston: Pearson Education Inc.

McMurray, D. W. (2011). The importance of'goodness of fit' between organizational culture and climate in the management of change: a case study in the development of online learning. *Research in Learning Technology, 9*(1).

Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education. Revised and Expanded from" Case Study Research in Education."*. San Francisco: Jossey-Bass.

Moore, N., & Gilmartin, M. (2010). Teaching for better learning: A blended learning pilot project with first-year geography undergraduates. *Journal of Geography in Higher Education, 34*(3), 327-344.

Mouton, J. (2001). *How to ucceed in your Master's & Doctoral Studies*. Pretoria: Van Schaik Publishers.

Mouton, J. (2009). *Understanding social research*. Pretoria: Van Schaik Publishers.

Myers, M. D. (1997). Qualitative research in information systems. *Management Information Systems Quarterly, 21*, 241-242.

Nel, C., & Dreyer, C. (2005). Factors predicting English second language students' use of Web-based information systems: Implications for student support. *South African Journal of Higher Education, 19*(1), 129-143.

Nel, L. (2010). *Bridging teaching-learning gaps: Engagement through technology*. Paper presented at the The South African Computer Lecturers' Accosiation (SCALA) 2010 annual

conference, Univerisity of Pretoria, South Africa.
http://web.up.ac.za/ecis/SACLA2010PR/SACLA2010/Papers/SACLA036.pdf

Ngugi, C. et al. (2007). ICTs and higher education in Africa.

Norberg, Anders, Dziuban, Charles D, & Moskal, Patsy D. (2011). A time-based blended learning model. *On the Horizon, 19*(3), 207-216.

Ocak, M. A. (2011). Why are faculty members not teaching blended courses? Insights from faculty members. *Computers & Education, 56*(3), 689-699.

Oliver, M., & Trigwell, K. (2005). Can'Blended Learning'Be Redeemed? *E-learning and Digital Media, 2*(1), 17-26.

Orr, G. (2003). Diffusion of innovations, by Everett Rogers (1995). Retrieved 14 July 2013, from http://www.stanford.edu/class/symbsys205/Diffusion%20of%20Innovations.htm

Osguthorpe, R.T., & Graham, C.R. (2003). Blended Learning Environments: Definitions and Directions. *Quarterly Review of Distance Education, 4*(3), 227-233.

Ottenbreit-Leftwich, A. T., Glazewski, K. D., Newby, T. J., & Ertmer, P. A. (2010). Teacher value beliefs associated with using technology: Addressing professional and student needs. *Computers & Education, 55*(3), 1321-1335.

Pajares, M Frank. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of educational research, 62*(3), 307-332.

Partington, P., & Stainton, C. (2003). *Managing Staff Development*. Buckingham: Open University Press.

Picciano, A. (2009). Blending with purpose: The multimodal model. *Journal of the Research Center for Educational Technology, 5*(1), 4-14.

Ridley, D. (2011). *The Literature Review: a step-by-step guide for students*. Los Angeles: SAGE Publishers.

Rogers, Everett M. (2010). *Diffusion of innovations* (4 ed.). New York: Simon and Schuster.

Saldaña, J. (2012). *The coding manual for qualitative researchers*: Sage.

Schoenfeld, Alan H. (1998). Toward a theory of teaching-in-context. *Issues in Education, 4*(1), 1-94. doi: http://dx.doi.org/10.1016/S1080-9724(99)80076-7

Scott, I., Yeld, N., & Hendry, J. (2007). *Higher education monitor: A case for improving teaching and learning in South African higher education*: Council on Higher Education Pretoria.

Shoemaker, A. (2011). *Monash University Education Strategic Plan 2011 - 2015*. (Monash Deputy Vice Chancellor Office: Closed Document).
http://www.odvce.monash.edu.au/assets/documents/education-strategic-plan.pdf

Siemens, G., & Tittenberger, P. (2009). *Handbook of emerging technologies for learning*. Online, University of Manitoba, Canada.

Singh, H. (2003). Building effective blended learning programs. *Educational Technology, 43*(6), 51-54.

Stake, R. (1995). *The Art of Case Study Research*. Thousand Oaks: SAGE Publications.

Swanborn, P. (2010). *Case Study Research*. London: SAGE Publications.

Tearle, P. (2004). A theoretical and instrumental framework for implementing change in ICT in education. *Cambridge Journal of Education, 34*(3), 331-351.

Thomas, G. (2009). *How to do your Research Project*. Los Angeles: SAGE Publications.

Törner, G., Rolka, K., Rösken, B., & Sriraman, B. (2010). Understanding a Teacher's Actions in the Classroom by Applying Schoenfeld's Theory Teaching-In-Context: Reflecting on Goals and Beliefs. In B. Sriraman & L. English (Eds.), *Theories of Mathematics Education* (pp. 401-420): Springer Berlin Heidelberg.

Van der Merwe, A., & Mouton, J. (2005). Integrating ICTs into the teaching and learning environment: An investigation of lecturer perceptions of possible barriers and incentives. *Perspectives in Education, 23*(4), 19-37.

van der Merwe, M. D. (2012). Applying the community of inquiry framework: a novel tool for systematic and economic coding and analysis of forum discourse in situ and in context. *International Journal of Learning Technology, 7*(3), 246-260.

Vaughan, N. (2007). Perspectives on blended learning in higher education. *International Journal on E-learning, 6*(1), 81-94.

Wang, Q. (2008). A generic model for guiding the integration of ICT into teaching and learning. *Innovations in Education and Teaching International, 45*(4), 411-419.

Wellington, J. J., McCulloch, G., Bathmaker, A., Hunt, C., & Sikes, P. (2005). *Succeeding with your Doctorate*: Sage Publications Limited.

Witte, J. P. (2007). Why the Tail Wags the Dog: The pernicious influence of Product-Oriented Discourse on the Provision of Educational technology Support. *Annual Review of Applied Linguistics, 27*, 203-215.

Wright, C. A. (2000). *Issues in education and technology: Policy guidelines and strategies*: Commonwealth Secretariat.

Yin, R. K. (2009). *Case Study Research Design and Methods*. Los Angeles: SAGE Publications.

Appendices

Appendix A: Semi-Structured Interview Schedule 1

The discussion was developed around the following guideline questions:

1) What do you understand blended learning to be?
   (Note: The teacher's definition of blended learning will determine the application of the term henceforth.)
2) What do you know about the Monash Education Strategic Plan and the role of blended learning in the plan?
3) Do you incorporate / plan to incorporate blended learning in your teaching? Motivate.
4) The Monash Education Strategic Plan makes it quite clear that by 2015 blended learning is meant to be a central pillar of the academic environment at Monash. What is your response to this?
5) Discuss your thoughts on blended learning as a teaching strategy, specifically within the MSAFP context?
6) What restrictions do you think may challenge you and teachers embarking on a blended learning approach?
7) What is your comment on the support provided by MSAFP/MSA for teachers exploring blended learning? Any suggestions?
8) What are your impressions of blended learning as a driver for academic excellence?
9) What do you think MSAFP's most appropriate response would be to the Education Plan regarding blended learning?

Note: This is a guideline...the conversation must be allowed to take relevant deviations, but should be brought back to the questions if possible. The essential thrust: What is blended learning, what is its value and application and how does it address the Education Plan?

Appendix B: Interview Schedule 2

The discussion was built developed around the following three guideline questions as an extension to the discussions in the first interview held one year before.

1) Please elaborate on how you have used Moodle (or any other blended learning formats) through the course of the year since the last interview.
2) What are the biggest frustrations you experience in using blended learning as a teacher, specifically within the MSAFP context?
3) What would your comments be on the support structures that you have experienced or would like to see regarding the adoption of Moodle (or other blended learning opportunities)?

Appendix C1: MSA Teacher Questionnaire

Blended Learning in the MSAFP: Survey

1. How many years of teaching experience do you have? (Just for background :-)

○ 1-5 ○ 6-10 ○ 10-15 ○ 15-or more

2. Please rank these items in order of importance from most to least relevant in terms of what you believe motivates your involvement in the MSAFP?

[ ] I can contribute to prepare students in a field of study that I'm passionate about

[ ] I can contributor to rounded academic development of students

[ ] I can contributor to the overall whole-student experience of our students

[ ] I feel I am a valuable part of a successful team/programme

[ ] It's a decent job

[ ] I can grow as a teacher

[ ] It's a stepping stone in my career

3. Please select the most appropriate comment for you in relation to the Monash Educational Plan 2011-2015.

◉ I've never heard of it

○ I know about it, but that's about it

○ I know it has something to do with educational/teaching excellence

○ I have read it and would recognise themes in a discussion on it

○ I am quite well acquainted with it

○ I am very familiar with all its contents

4. There has been a fair amount of talk about blended learning. Do you think this is because... (multiple selection available)

☐ there are staff that you have regular contact with that keep mentioning it

☐ there is a university wide emphasis on blended learning

☐ technology is so pervasive and teaching methodologies that include technology are more topical

☐ its a fad/trend that has everyone talking about it, but it will go away in time

☐ today's students so 'connected' to technology that it is imperative to talk about including it

Other (please specify)

5. Regarding the use of Moodle, which of the following best describes your experience?

- Loving it! Used many functions and always trying something new!
- Using it as more than a repository, but need more time to become comfortable with other features.
- Using Moodle simply as a repository at the moment
- I have been too nervous to try it
- I don't believe Moodle offers any advantage over the shared drive, so use it begrudgingly
- I don't believe Moodle offers any advantage over the shared drive, so I still use only the drive

Other (please share your perspective)

6. How would you define blended learning (BL)? People have diverse ideas. Some are presented here as options (and you may select any number) but if you have a different point of view please share it.

- BL is nothing new... it's just a buzz word attached to good teaching practice using diverse techniques
- BL is regular teaching method but which has incorporated technology in any form (online or offline)
- BL is a mixture of face to face teaching and online teaching
- BL is face to face teaching supported by online resources and activities
- BL is a redundant phrase because no one can agree on what it means

Other (please specify)

7. Regardless of my current ability/willingness/desire to incorporate blended learning activities in my teaching, I believe that adopting blended learning practices in the MSAFP in the near future is...

- vital to our function of academic development
- important to our function of academic development
- tangential (peripheral) to our function of academic development
- unimportant to our function of academic development

8. The barriers that I experience when I consider incorporating blended learning techniques in my teaching methodology is/are....(multiple selection available)

- ☐ a fear of technology
- ☐ time constraints imposed by having to learn new methods/skills/technologies
- ☐ lack of training skill improvement options
- ☐ lack of direction in the application of the method
- ☐ pedagogical advantages are unclear to me
- ☐ a dislike for being dictated to by technology or the institution
- ☐ belief that my subject cannot benefit from blended learning - it has unique requirements

Other (please specify)

9. I believe blended learning has the potential to...

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
improve collaboration of students	☐	☐	☐	☐	☐
increase the interest in topics in a unit	☐	☐	☐	☐	☐
improve work quality of students	☐	☐	☐	☐	☐
increase participation of students in a unit	☐	☐	☐	☐	☐
enhance learning taking place	☐	☐	☐	☐	☐
improve the quality of a unit	☐	☐	☐	☐	☐
improve feedback quality	☐	☐	☐	☐	☐
improve the academic development of students in the MSAFP	☐	☐	☐	☐	☐
increase valuable informal learning	☐	☐	☐	☐	☐
make a difference and thus consider it worth my time and effort to adopt	☐	☐	☐	☐	☐

Other (please specify)

10. Please briefly describe any ways you believe best indicate your use of blended learning (according to your understanding thereof) in your teaching over the past two - three semesters. Please also indicate the frequency with which you incorporate blended learning in your unit as consistently, sporadically or isolated. .....

Done

Powered by SurveyMonkey

Appendix C2: MSAFP Teacher Questionnaire Responses to Question 10

Question 10: Please briefly describe any ways you believe best indicate your use of blended learning (according to your understanding thereof) in your teaching over the past two - three semesters. Please also indicate the frequency with which you incorporate blended learning in your unit as consistently, sporadically or isolated.

- Regularly. Use Moodle extensively and with diversity. Use other websites such as TED, RSA and YouTube regularly. Engage students with online ePortfolios. Use web2 tools - online clicker-interactive. Use is fairly consistent.
- I use Moodle.
- I use some links to draw the attention of the students to these topics.
- Sometimes, I give the students assignments to research on the internet.
- Lately I have used self-made videos that cover all the content of the syllabus.
- I use BL mostly consistently.
- All I have done over the past semester was to use Moodle as:
  1. a depository for posting lecture notes, tutorial materials and other
  2. a way to communicate messages to students;
- I believe it may be used for interacting with students better, but that will require lot of time commitment outside normal working hours.
- My opinion (if it counts!): It is then obvious that in this context I believe so far that it has no added value for the students compared to the shared drive except the fact it is accessible from outside the campus. For the rest, improving the quality of blended learning requires lot of time and input from the lecturers, reason why I believe that unit coordinators should have lighter teaching workloads to allow them designing materials that will improve learning via blended learning. If this is not taken into account, then it is just something done in order to look good. We need platforms to design online tests, online exercises etc. They need to be designed specifically and there must be a way to generate generic memos. How is it done? How long does it take? I believe much more than one or two hours a week. There must also be lot of training, and not only 2 hours a semester!
- It is my view that the reason why it is implemented in the Foundation Programme is: we just want to look good, but we do not walk the talk!
- How often do I use it? All my teaching materials are loaded in Moodle, but in class, I use the T-drive.
- I believe that Moodle is just a repository.
- In the unit that I teach we have utilized various tools for blended learning. Tools that have been used include a Skills Assessment Manager, wiki, Moodle etc
- Blended learning is incorporated through use of on-line web-sites that allow for remedial learning and extra practice where weaker students need this, as well as options for extended learning for students aiming for HDs. Blended learning is used seldom in the class, although many modes of presentation are used. URLs are provided for students to visit where necessary.
- Use of you Tube video clips.

- Moodle as repository for lectures and learning material with little advantage over the share drive.
- Find Moodle extremely user unfriendly and unwieldy. Would not use it if not forced to by Monash.
- Consistently use elements that are useful without too much time spent.

Appendix D1: Document Analysis: Extracts from Education Strategic Plan

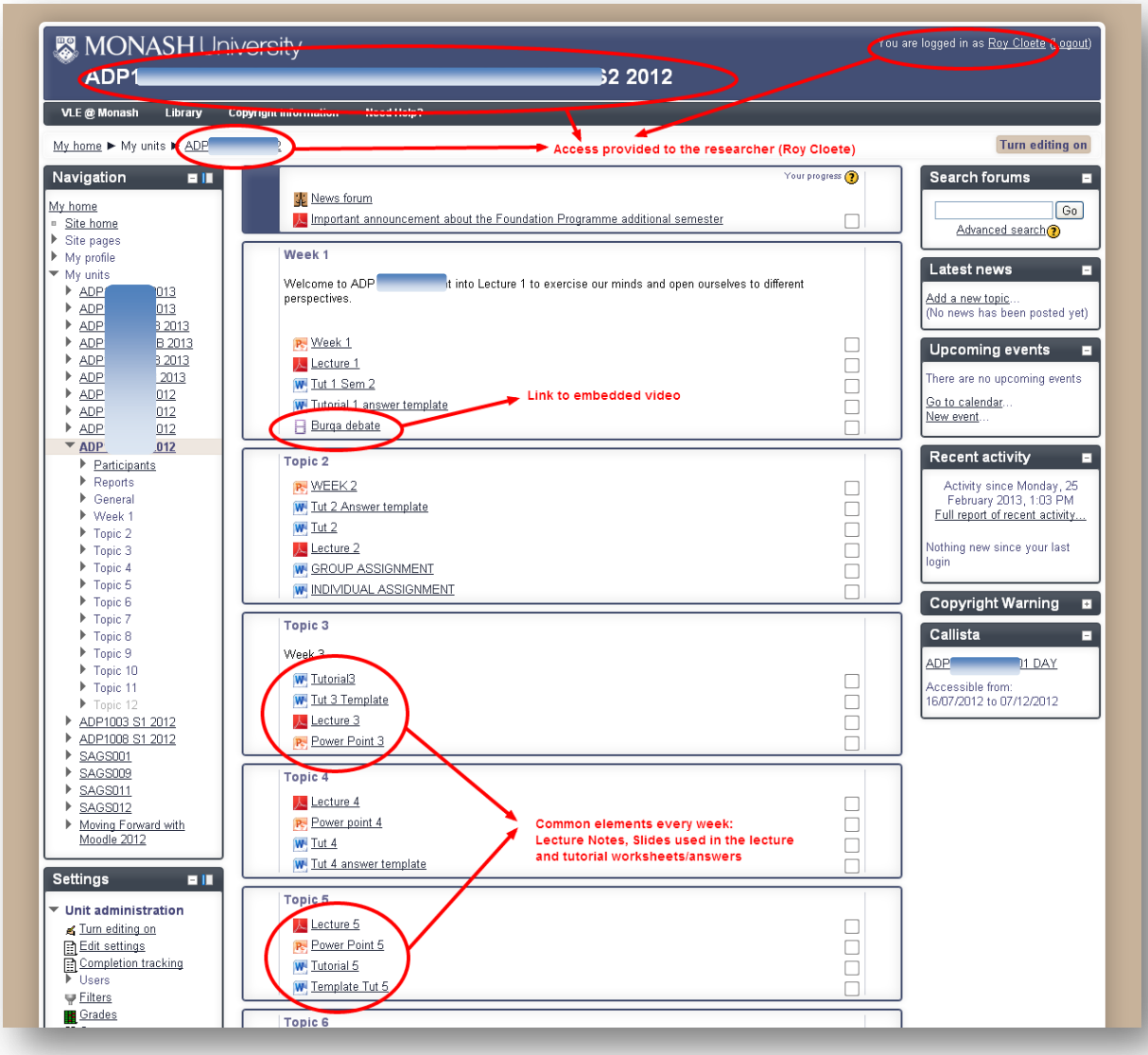
career with impact. Therefore, this *Education Strategic Plan* offers a blended, personalised learning experience t
ongoing alumni relationships – long after graduation. It is invested in global futures, in challenging careers and ir

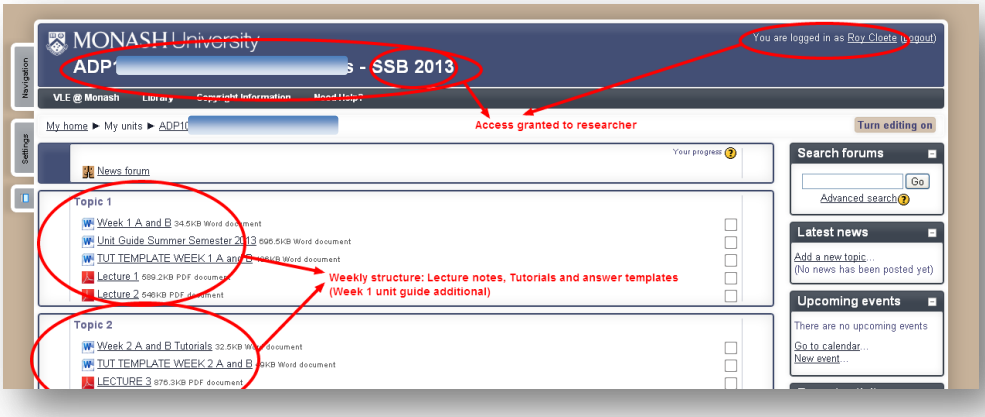
We have five years to make a major and lasting change to our educational trajectory. This strategy outlines exac

Professor Adam Shoemaker
Deputy Vice-Chancellor (Education)

Objective	**E4: Invest in Blended Learning to enrich the face-to-face educational experience for students and**
Strategies	• Develop and implement an integrated Digital Education Strategy as a central component of the Monash

Appendix D2: Document Analysis: Extract from Stuart's Moodle Site





Appendix E: A selection of analysed data from Monash Student Evaluation of Stuart's (Responses in percentage)

Statement 1: The unit enable me to achieve its learning objectives

	Sem 2, 2012	Sem 3, 2012	Sem 1, 2013	Sem 2, 2013
1 Strongly disagree	0.0	0.0	8.3	0.0
2 Disagree	3.4	0.0	0.0	8.0
3 Neutral	7.0	18.2	8.3	28.0
4 Agree	33.0	18.2	50.0	38.0
5 Strongly agree	56.6	63.6	33.3	26.0
6 Not applicable	0.0	0.0	0.0	0.0
7 Don't know	0.0	0.0	0.0	0.0
Total % Responses	100	100	100	100

Statement 2: I found the unit to be intellectually stimulating

	Sem 2, 2012	Sem 3, 2012	Sem 1, 2013	Sem 2, 2013
1 Strongly disagree	0.0	0.0	8.3	4.0
2 Disagree	3.7	9.1	8.3	8.0
3 Neutral	0.0	9.1	0.0	24.0
4 Agree	14.8	18.2	75.1	30.0
5 Strongly agree	81.5	63.6	8.3	34.0
6 Not applicable	0.0	0.0	0.0	0.0
7 Don't know	0.0	0.0	0.0	0.0
Total % Responses	100	100	100	100

Statement 3: The learning resources in this unit supported my studies

	Sem 2, 2012	Sem 3, 2012	Sem 1, 2013	Sem 2, 2013
1 Strongly disagree	0.0	0.0	8.3	2.0
2 Disagree	3.7	0.0	0.0	6.0
3 Neutral	3.7	10.0	16.7	14.0
4 Agree	18.5	10.0	41.7	36.0
5 Strongly agree	74.0	80.0	33.3	40.0
6 Not applicable	0.0	0.0	0.0	0.0
7 Don't know	0.0	0.0	0.0	2.0
Total % Responses	100	100	100	100

Statement 4: The feedback I received in this unit was useful

	Sem 2, 2012	Sem 3, 2012	Sem 1, 2013	Sem 2, 2013
1 Strongly disagree	0.0	0.0	8.3	0.0
2 Disagree	3.7	0.0	0.0	4.0
3 Neutral	3.7	18.2	25.0	18.0
4 Agree	37.0	27.3	33.3	42.0
5 Strongly agree	55.6	54.6	33.3	36.0
6 Not applicable	0.0	0.0	0.0	0.0
7 Don't know	0.0	0.0	0.0	0.0
Total % Responses	100	100	100	100

Statement 5: Overall I was satisfied with the quality of this unit

	Sem 2, 2012	Sem 3, 2012	Sem 1, 2013	Sem 2, 2013
1 Strongly disagree	0.0	0.0	8.3	4.0
2 Disagree	0.0	0.0	0.0	8.0
3 Neutral	7.4	20.0	25.0	24.0
4 Agree	22.2	10.0	33.3	30.0
5 Strongly agree	70.4	70.0	33.3	34.0
6 Not applicable	0.0	0.0	0.0	0.0
7 Don't know	0.0	0.0	0.0	0.0
Total % Responses	100	100	100	100

Appendix F: HREC (Wits) Ethics Clearance

Wits School of Education

27 St Andrews Road, Parktown, Johannesburg, 2193 Private Bag 3, Wits 2050, South Africa
Tel: +27 11 717-3064 Fax: +27 11 717-3100 E-mail: enquiries@educ.wits.ac.za Website: www.wits.ac.za

Student Number:
8512220
Protocol Number:
2012ECE098

Date: 23-Oct-2012

Dear Roy Cloete

Application for Ethics Clearance: Master of Education by Coursework

Thank you very much for your ethics application. 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:

Effective Blended Learning in a South African University Academic Development Programme (Research Proposal Ethics Application)

The committee recently met and I am pleased to inform you that clearance was granted. The committee was delighted about the ways in which you have taken care of and given consideration to the ethical dimensions of your research project. Congratulations to you and your supervisor!

Please use the above protocol number in all correspondence to the relevant research parties (schools, parents, learners etc.) and include it in your research report or project on the title page.

The Protocol Number above should be submitted to the Graduate Studies in Education Committee upon submission of your final research report.

All the best with your research project.

Yours sincerely

MMabeta

Mats'e Mabeta
Wits School of Education

011 717 3416

Cc Supervisor: Dr. D Lawrence

Appendix G: Site Permission Letter

MONASH South Africa

A campus of Monash University Australia

Research

12 November 2012

TO WHOM IT MAY CONCERN

I have been requested by Mr R Cloete in his capacity as a Masters student of the University of the Witwatersrand to conduct research at the MSA campus for a project titled: Effective blended learning in a Higher Education Pathway Programme in South Africa. Ethics clearance has been received from the University of the Witwatersrand.

This letter serves to confirm that the Office of the DPVC Research has given permission to Mr Cloete to hold interviews with and distribute questionnaires to teachers of the MSA Foundation Programme in order to successfully complete the research project.

Permission is granted with the proviso that all ethical guidelines will be followed and that gathering of the will not disrupt classes.

Kind regards

ASSOC. PROF. DINA BURGER
DEPUTY PRO VICE-CHANCELLOR: RESEARCH
MONASH SOUTH AFRICA

Postal – Private Bag X60, Roodepoort, 1725, South Africa Location – 144 Peter Road, Ruimsig
Telephone +27 11 950 4020 Facsimile +27 11 950 4022 Email inquiries@monash.ac.za www.monash.ac.za

Appendix H: Data Collection Timeframe (Summarised from written diary)

Semi-Structured Interviews: 5 – 9 November 2012

(Stuart 1st Interview: 6 November 2012; Second Interview 4 November 2013)

(Shirley's Interview: 7 November 2012)

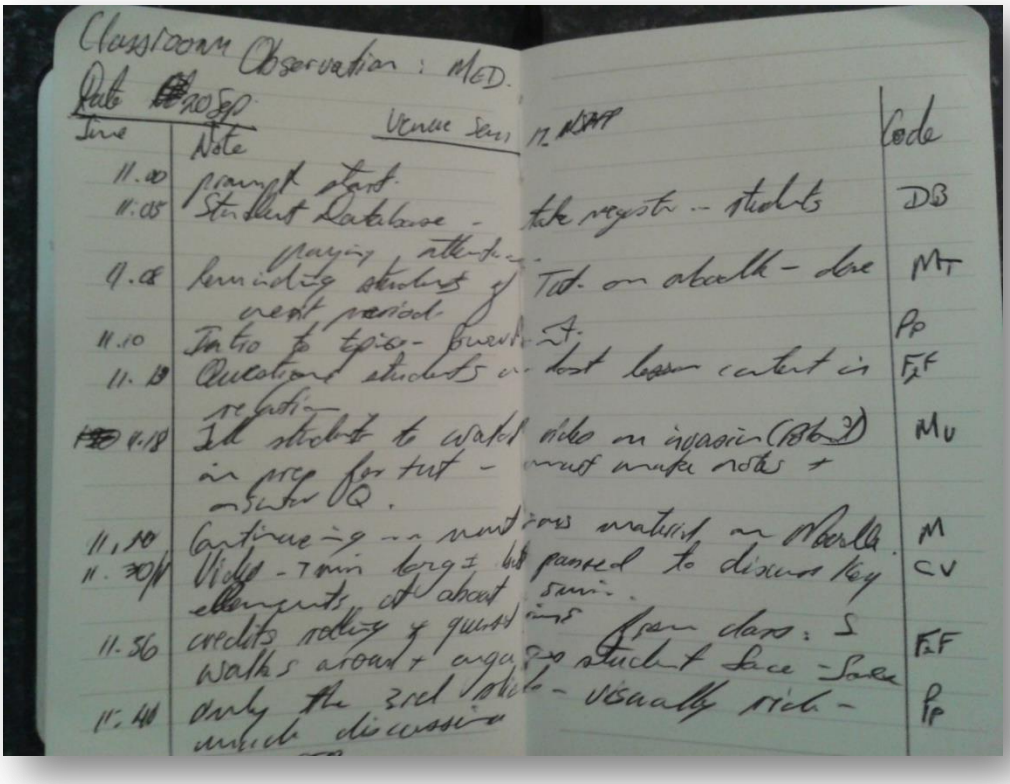
Staff Survey: 25 February 2013 – 18 March 2013 (4 weeks)

Stuart's Class Observations: 20 September 2012; 21 January 2013; 18 June 2013

Walk-around for technology observation: 21 September 2012; 22 January 2012.

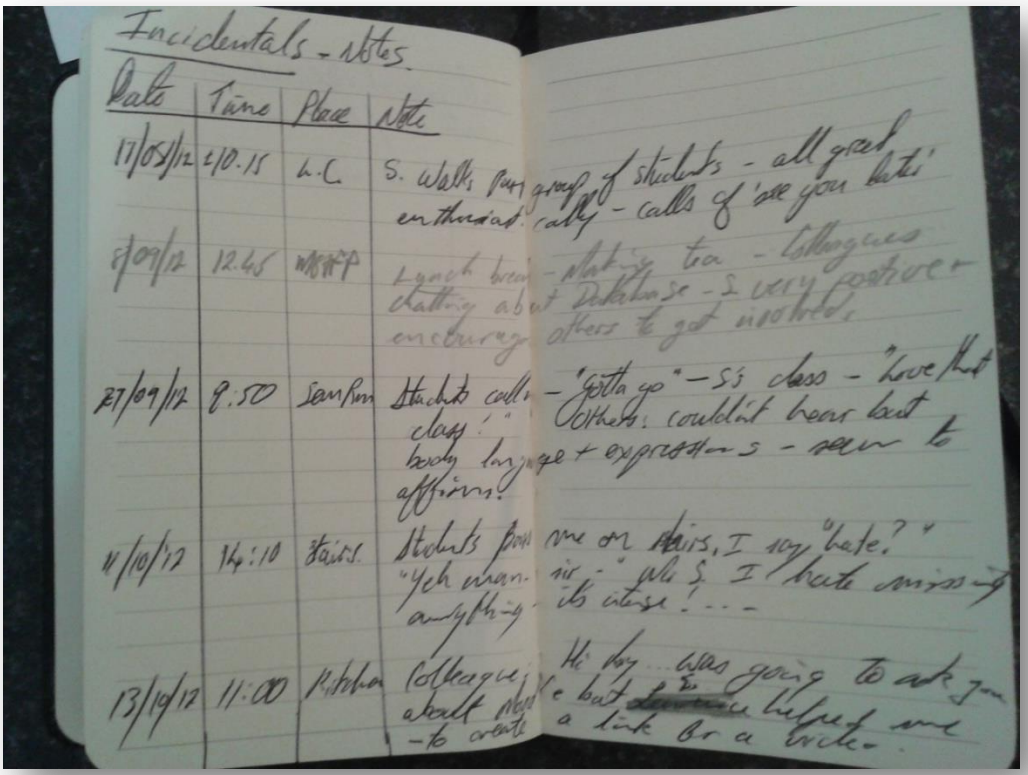
Notebook kept on my person on most days in order to easily record any observations.

Appendix I: Observation Data (Classroom; Walk-around/Characterisation)


Classroom Observation : MED.

Date 20 Sep

Time	Note	Venue Sem 11	Code
11.00	prompt start.		
11:05	Student Database -	take register - students	DB
11.08	reminding students of	Tut. on about - done	MT
11.10	Intro to topic - Event		PP
11.15	Question students on last lesson content in		F2F
11.18	Ask student to watch video on invasion (Bob) in prep for test -	must make notes +	MV
11.30	Continue-ing -		M
11.30	Video - 7 min long - has paused to discuss key		CV
11.56	elements of about 5 min. credits rolling + questions from class: S		F2F
11.40	walks around + answers student face - Sara only the 3rd		PP
	which discussion		


Incidentals - Notes.

Date	Time	Place	Note
17/09/12	10.15	L.C.	S. walks past group of students - all great enthusiastic rally - calls of 'are you late'
5/09/12	12.45	MSRP	Lunch break - making tea - Colleagues chatting about Database - S very positive + encouraging others to get involved.
27/09/12	8.50	Sem Room	Student calls - "gotta go" - S's class - "love that class!" Others: couldn't hear last body language + expressions - seem to affirm.
11/10/12	14:10	Stairs	Students pass me on stairs, I say "late?" "Yeh ma'am - sir" - why S I hate missing anything - its unfair! ...
13/10/12	11:00	Kitchen	Colleague: Hi Roy ... was going to ask you about ... a bit ... helped me - to create a link or a video.

Appendix J: Permission Letter samples – Invitation & sample consent form

Roy Cloete
Protocol number: 2012 ECE 098
1 November 2012

Dear Colleague (TO BE REPLACED WITH TEACHER NAME) – List of those to be invited provided at the end of this letter)

INVITATION TO PARTICIPATE IN A RESEARCH PROJECT

Although I am employed in the Monash South Africa Foundation Programme (MSAFP) this letter is written in my capacity as a Masters student in the School of Education at the University of the Witwatersrand.

I am doing research entitled *"Effective Blended Learning in a Higher Education Pathway Programme in South Africa"* and hope to have MSAFP as the mentioned programme.

The purpose of this study is to investigate the response of the Monash South African Foundation Programme (MSAFP) to the blended learning objectives set by the Monash University Education Strategic Plan 2011-2015 and its intersection with the central purpose of the programme, which is academic development, by investigating the attitudes and perceptions of teachers in the Monash South Africa Foundation Programme (MSAFP) towards blended learning and academic development.

The central research question is

> "Do the attitudes and perceptions of the MSAFP teachers towards blended learning contribute to a receptive climate for the implementation of blended learning policy and demonstrate potential benefits of the policy to the academic development of students in the MSAFP?"

My research focuses only on one element that would have a bearing on this area of investigation. Students would be an obvious additional area to research, however it is my opinion that a deep study of the teachers, as pivotal role players, can provide insight into not only the adoption of blended learning in response to the current Strategic Education Plan but also into the ongoing application of blended learning practices in the MSAFP. For the study I require the participation of willing teachers from the Monash South Africa Foundation Programme in conducting semi-structured interviews and questionnaires.

The reason for choosing the MSAFP is that because of my close association as an employee in the programme I am very well placed to do research here that not only serves my personal academic endeavours but also has the potential to directly inform practice in the programme, evaluate the responsiveness of the programme to broader academic excellence policy at Monash and to contribute to the accurate positioning of the MSAFP in the academic development field in South Africa.

I was wondering whether you would mind assisting me in this study by voluntarily participating in a short (about 30 minutes) semi structured interview and/or answering a questionnaire. The purpose would be to obtain your perceptions about blended learning, its use and value in the MSAFP and its potential as a quality improvement mechanism in the programme. If you are willing I would also

highly value being able to look at documentation, specifically that referencing blended learning such as your personal development plan, preparation documents and your Moodle website, for instance.

Be reassured that you may withdraw your permission for all or parts of this process at any time during this project. There are no foreseeable risks in participating in this study. The participants will not be paid for this study. Complete anonymity is maintained in the study with no actual names of staff being associated to any comments or information provided and absolute confidentiality will be maintained. Names of the research participants will not be divulged in any academic writing or discussion relating to this study as a coding system will be used. The interviews will be behind closed doors in an office that you feel comfortable in. The questionnaires will be online, or can be printed, and neither will require identification of any sort. Submission will be online or into a sealed drop-off box in the administration office.

All research data will be kept (converted if necessary) to electronic format and stored securely. All data will be destroyed 3-5 years after completion of the project.

Please let me know if you require any further information.

I look forward to your response as soon as is convenient. If you are willing to be a participant I will kindly request of you explicit permission to interview you, to record the interview, to peruse certain documents that may be pertinent to this study and to present you with an anonymous questionnaire relating to the study. You may agree to all, some or none of these as participation in all aspects of the study is voluntary.

Yours sincerely,

_____

SIGNATURE

Roy Cloete

Monash South Africa, 144 Peter Road, Ruimsig, Roodepoort

Email : roy.cloete@monash.edu

Tel : (Office) 011 950 4116

(Cell) 0792465123

Consent Form: MSAFP Teacher Interview

Please fill in and return the reply slips below indicating your voluntary willingness to be interviewed for my (Roy Cloete: Protocol number 2012ECE098) research project called:

"Effective Blended Learning in a Higher Education Pathway Programme in South Africa"

Permission to be interviewed:

I, _____ , (name & surname)

	(Please circle your response)
... give my consent to be interviewed	Yes / No
... know that I don't have to answer all the questions and that I may withdraw from the study at any time	Yes / No
... know that I will not be advantaged or disadvantaged in any way by participating in this study	Yes / No
... am aware that the researcher will keep all information confidential in all academic writing	Yes / No
... am aware that my interview will be destroyed between 3—5 years after completion of the project	Yes / No
... know that there will be no monetary or other compensation for participating in this study	Yes / No

Teacher Signature: _____ Date: _____

Contact person:

Roy Cloete (Protocol number: 2012 ECE 098)
Address144 Peter Road, Ruimsig, Roodepoort
Email : roy.cloete@monash.edu
Tel numbers : (011)950-4116 (w) ; 079 246 5123(c)