

CHAPTER 1: INTRODUCTION

Intelligence tests are still the most widely used method for identifying learning disabilities globally, despite considerable research that queries the usage of Intelligence Quotient (IQ) scores for identifying learning difficulties (Vellutino, Scanlon & Lyon, 2000; Lyon, Fletcher, Shaywitz, Shaywitz, Torgesen, Wood, Schulte & Olsen, 2001; Bradley, Danielson & Hallahan, 2002; Donovan & Cross, 2002; Warner, Dede, Garvan & Conway, 2002; D'Angiulli & Siegel, 2003; Pfeiffer, Reddy, Kletzel, Schmelzer & Boyer, 2000; Watkins & Worrell, 2000; Smith, Smith, Bramlett & Hicks, 2000). The main cause for this dissatisfaction revolves around underpinning theory, namely IQ tests are based on the premise that learning difficulties are caused by neurological developments. In contrast, a large body of research suggests that there are many systemic factors that contribute to learning problems, such as attendance at nursery school, parental education, socio-economic status and inadequate learning opportunities (Williams & Bor, 2006; Manly, Jacobs, Touradji, Small & Stern, 2002; Donovan & Cross, 2002; Gorey, 2001; Torgesen, Alexander, Wagner, Rashotte, Voeller & Conway, 2001; Espy, 2001; Fagan, 2000).

The dissatisfactions with IQ testing and a tendency amongst some researchers towards moving away from a psycho-medical to a social constructivist framework prompted some research into alternatives for identifying learning difficulties. Short-term instructional intervention was one area examined and found to be a fairly effective means of identifying learning differences (Foorman & Torgesen, 2001; Ikeda & Gustafon, 2002; McNamara & Hollinger, 2003; McMaster, Fuchs, Fuchs & Compton, 2003; Vaughn, Linan-Thompson & Hickman 2003; Vellutino, Scanlon, Small & Fanuele, 2006). However, other studies concluded that these instructional approaches are fairly ineffective as they still focused on the individual's internal factors as causing the learning difficulty, while other environmental and other systemic factors were ignored. (Shuttleworth-Edwards, Kemp, Rust, Muirhead, Hartman & Radloff, 2004; Rushton, Skuy & Fridjhon, 2002; Espy, 2001; Kwate, 2001; Gorey, 2001; Gunderson & Siegel, 2001; Coffey & Obringer, 2000; Fagan, 2000).

In the light of these findings, an alternative method for identifying learning difficulties that is compatible with human rights, inclusive education and social

constructivist principles was generated. This approach endeavours to examine the multiple causes of learning difficulties as well as the efficacy of incorporating informal assessment into the identification process.

In this approach the dynamic interplay between intrapersonal, interpersonal and situational variables is examined. During this process various interacting variables are suggested as the cause of learning delays as opposed to assigning all difficulties to neurological aetiologies. This approach has been named the ecosystemic framework. A graphic organiser, based on the ecosystemic framework was developed for use by Harcombe (1993) as a training tool for learning support specialists, psychologists and teachers. This graphic organiser depicted graphically the interaction between the systems that surround children and adolescents as they develop into adults. This tool was named the Ecosystemic Assessment Graphic Organiser by the developer, Harcombe (1993) and has been used ever since then in various training programmes. This study aims at exploring this alternative approach in a South African context.

Changing the assessment of learning difficulties to a systems framework has implications for placement and treatment. For example, assessment processes that involved IQ testing usually resulted in placement in special education, in which the child received the treatment and support. On the other hand, systemic assessment and consequent interventions are aimed at providing support for the various systems that function as barriers to the assessee's development. This means that a study of this nature needs to include the best ways of providing this systemic support.

One approach to providing support in education that has been researched fairly extensively worldwide is the collaborative consultancy approach (Meck & Barrow, 2005; Levac, 2004; Amatea, Daniels, Bringman & Vandiver, 2004; Denton, Hasbrouck & Sekaquaptewa, 2003; DeWert, Babinski, Jones, 2003; Kennedy, Higgins and Pierce, 2002; Doerries & Foster, 2001; Lusky & Hayes, 2001). These researchers found that collaborative consultancy was effective in support contexts as it is a user-friendly approach that makes use of techniques and strategies commonly applied in the behavioural and social sciences. Accordingly this approach is being used in this study to examine the effects in a South African context.

Rationale

The practice of using intelligence testing scores for the identification and placement of learners who experience barriers to learning has been queried by many researchers and practitioners. For example, using IQ test scores solely as a means of identification and placement focuses on the performance of the child and omits the examination of environmental issues and how they relate to the child's development. In addition, norms are often formulated in other countries, which make their usage in South Africa unethical. In addition, recent legislation in South Africa emphasizes inclusive educational practices and the sole usage of IQ testing as a means of identification does not give credence to the notion of examining environmental issues and their effects on learning, which is necessary in an inclusive context. These factors have made the study of an alternative method for identifying learning needs even more urgent.

Accordingly an ecosystemic approach to identifying learning needs is examined in this study. This approach is based on constructivism and systems theory (Vygotsky, 1987 & Feuerstein & Rand, 1974) and as such emphasizes the role that interacting, systemic factors play in a child's learning and development. In other words instead of emphasising the fact that the child cannot learn because of his/her cognitive challenges (*cf.* IQ scores) the ecosystemic approach emphasizes the role that adults and more able peers as well as the broader social and economic factors play in the child's development. This approach is also suggested as a relevant instrument in the current South African context since it is more in line with the principles of democracy and inclusive education.

It is therefore proposed that this study will use, for the purpose of identifying pupils learning needs, an ecosystemic approach, which is represented graphically in the Ecosystemic Assessment Graphic Organiser (EAGO; Harcombe, 1993; 2003). It is anticipated that this approach will enable educators in this study to identifying the interacting factors that promote or prevent learning and development.

Inclusive education practices emphasize that teachers and other role players should be provided with support rather than specialists giving support to individual learners alone as advocated by traditional special education practice. Therefore in this research study a collaborative consultancy approach to teacher support will be used. This approach was chosen because it strives to build positive working relationships, so that

people from different backgrounds, who have different needs, can work harmoniously and productively together in the support process.

Definition of keywords

Before delving into the research report, it is necessary to clearly define some of the commonly used concepts and related terms used.

Medical model or psychomedical model approach/framework: This approach is often used to underpin psychological interventions. This model has also often been adopted in education and been applied to learners who have historically not managed to keep up with mainstream education (Gresham, 2002; Forness & Kavale, 2001; Lerner, 1993). From this viewpoint such learners are considered to be patients with a disease that needs diagnosis and treatment and such treatment is usually given by a professional often in the context of special education schools (Harcombe, 2003; Forness & Kavale, 2001).

Ecosystemic approach/framework: Ecosystemic models are often seen by theorists as being less reductionist than medical models, i.e. they do not focus on only one or two contributing factors to a situation or condition. This approach views a learner holistically i.e. as being affected by the context in which he or she functions, such as society, schools, homes, etc. This approach also takes into account the genetic endowments of learner in interaction with contextual factors (Spann, 2005; Harcombe, 2003; Sutherland & Morgan, 2003; Donald in Engelbrecht, Green, Naicker & Engelbrecht, 1999).

In this study a graphic representation of an ecosystemic approach has been used. This tool has been developed by Harcombe (2003). A copy of this graphic representation and a more in-depth explanation is available in the Appendix (page 59).

Learning disabilities, learning difficulties, learning problems, learning needs, barriers to learning and learning diversity: These terms have all been used interchangeably in this research, as they are terms that have been commonly used over the years in identifying learning problems. In addition it will be noted that some terms will be used more frequently when a particular theoretical underpinning is being discussed. For example, psychomedical models are more likely to have used the term

learning disabilities whereas an ecosystemic model would more likely to have used learning diversity or barriers to learning.

Collaborative consultancy: The term collaborative consultancy refers to a process whereby a consultant (the researcher) offers support to another professional, the consultee (the educators). This process suggests that problem-solving occurs between the consultee and the consultant in a collaborative, supportive ethos in which each party has expertise to offer. Thus, the consultation is portrayed as a triadic, interactive relationship among the consultant, the consultee and the client (the learners) (Levac, 2004).

Structure of the research report

An outline of the structure of this report follows. This current chapter is an introduction to the research report, which covers the rationale, a description of keywords and the structure of the research report.

Chapter two presents a survey of the literature reviewed regarding the different approaches for identifying learners with learning difficulties. Theoretical underpinnings and studies examining the various processes for identification of learning needs are reviewed.

Chapter three presents the methodology used in this research report. This includes the aim of the research, the research questions and research design. In addition methods of data analysis and collection used in this study are explained. The context of the study and the participants are then described in terms of the school and participants used. A brief description of the intervention programmes is also provided. This chapter is then concluded by a discussion of research ethics.

Chapter four presents the findings of the research. This is done by dividing the chapter into two parts, namely findings regarding Harcombe's EAGO and findings regarding collaborative consultancy. The effectiveness of Harcombe's EAGO in identifying learner's individual needs is demonstrated by two sections, namely participants' ability to fill in the EAGO effectively and understanding of the concepts that underpin the EAGO. Similarly findings regarding the collaborative consultancy are demonstrated by the following behaviours that were noticed in the educators: participants' ability to understand and use collaboration and participants' ability to apply

the concepts of collaborative consultancy to supporting each other when using Harcombe's EAGO.

Chapter five presents the discussion of the study. This is done in terms of examining the findings of this study in the context of the studies reviewed in the literature review.

Chapter six is the concluding section of the report and examines the implications and the limitations of the study. This is followed by a discussion of the areas highlighted for future research.

CHAPTER 2: LITERATURE REVIEW

Learning difficulties have through the years been given various names, such as minimal brain dysfunction, learning disabilities or barriers to learning. Terminology often reflects the theoretical underpinnings used for understanding learning differences. In other words the identification of the causes of learning differences often depends on the theoretical framework used by the assessor. For example when using a psychomedical model a learner would be identified as having *learning disabilities, dyslexia, reading disorder, mathematics disorder, disorder of written expression* while an ecosystemic, inclusive education model would identify systems that promote or impede learning and development. This approach could include terms such as *barriers to learning, promoters of learning and learning diversity*.

It is also interesting to note that in spite of theoretical and terminology debates regarding learning diversity, the identification of learners with learning differences has increased more than 200% since the concept was formally acknowledged in 1977 (MacMillian, Gresham, Lopez & Bocian, 1999 in Vaughn, Linan-Thompson & Hickman, 2003). Despite the many possible explanations for the increased identification of learners with learning differences, there is little doubt that the growth rate is high, the heterogeneity of individuals identified as learning differently is great and that many students are either misidentified or unidentified (MacMillian et al., 1999 in Vaughn et al., 2003).

The purpose of this research was to twofold. Firstly, to explore the issue of the identification of learning difficulties in a South African high school population and secondly, to explore the collaborative consultancy approach to providing teacher support. Traditionally South African educators and specialists identified learners with special needs by using a psychomedical model, which corresponded with the focus of exclusive education in this country, namely that students with disabilities were traditionally catered to in special schools or special classes. Alternatively this paper proposes using a constructivist, ecosystemic framework for understanding and identifying learning differences. Accordingly this chapter commences with a broad description of how a medical model is used to inform an understanding of learning difficulties. Then the concerns about utilising this approach are highlighted in terms of theoretical and ethical

grounds especially in the South African milieu. Then the ecosystemic framework for the identification of learners with barriers to learning is examined in the context of an inclusive education system. Since using an ecosystemic approach requires that the education system and forms of delivery are more inclusive and supportive in terms of identification and intervention for learners and teachers and other stakeholders than is experienced in more exclusive educational settings, a collaborative consultation mode of support for teachers is discussed at the close of this chapter.

The identification of learning difficulties

As mentioned earlier, many frameworks have been used to explain inadequate learning and developmental progress and one of those is the Psychomedical model. The model categorised learners in ways such as learning disabled, Attention Deficit Hyperactivity Disorder (ADHD), dyslexia, reading disorder, mathematics disorder, disorder of written expression and so on. For example, exclusive education systems tended to categorise learners according to disability which resulted in their being educated separately from mainstream education in terms of their categorisation (Kagan, 2002; Lerner, 1993). This means that within-person/internal factors, such as underlying psychodynamic conflicts, ‘minimal brain dysfunction’, biological antecedents, etc (Gresham, 2002) were, amongst other factors, seen as being the primary causes of learning difficulties. It was assumed that the learner’s condition had to be diagnosed, treated and usually referred to some form of special education and/or specialist help before any meaningful learning and development could ensue (Forness & Kavale, 2001).

The effect of this theoretical perspective inclined specialists, parents and educators towards conceptualising learning differences as pathological (Adelman & Taylor, 1993). An example of this trend in thinking is embodied in the United States of America’s Federal Public Law 101-476, *Individuals with Disabilities Education Act*, 1990’s definition of learning disabilities (in Sternberg & Grigorenko, 2001). This definition states that specific learning disabilities are viewed as intrinsic disorders in the basic psychological processing which needs to be diagnosed according to whether there is a severe discrepancy between achievement and intellectual ability. The discrepancy

notion, the USA Federal definition and other factors led many researchers and specialists to use intelligence tests to identify learning difficulties for many years.

A considerable number of studies have been conducted globally regarding the use of intelligence tests as a means of identifying learning difficulties in children and youth. These studies have used various methods of establishing the validity of their argument, and, in addition, differing forms of intelligence tests were used. An exhaustive search of the literature since 2000 revealed that over 100 studies claimed the validity of using Intelligence Quotients (IQ) tests as means of identifying learning difficulties. Only a selected few of these studies are reviewed in this paper.

The high majority of these studies found that IQ tests, such as the WISC-III, were able to identify a learning disability based on the discrepancy between the learners' intellectual ability, as measured in IQ scores, and academic achievement (Pfeiffer, Reddy, Kletzel, Schmelzer & Boyer, 2000; Smith, Smith, Bramlett & Hicks, 2000; Watkins & Glutting, 2000; Watkins & Worrell, 2000; Canivez & Watkins, 2001; Hale, Fiorello, Kavanagh, Hoeppner & Gaither, 2001; Vaughn, Linan-Thompson & Hickman, 2003; Phelps, McGrew, Knopik, Ford, 2005; Robinson and Harrison, 2005 and Van Luit, Kroesbergen, Naglieri, 2005). No other factors that may delay learning and development were researched in any of these studies.

On the other hand, at least 300 of the additional studies found, in this period, strongly queried the usage of IQ scores alone in determining the cause of learning difficulties. (Vellutino, Scanlon & Lyon, 2000; Lyon, Fletcher, Shaywitz, Shaywitz, Torgesen, Wood, Schulte & Olsen, 2001; Bradley, Danielson, Hallahan, 2002; Donovan & Cross, 2002; Warner, Dede, Garvan & Conway, 2002; D'Angiulli & Siegel, 2003). For example, a large majority of these researchers suggest that performance on IQ tests alone is an ineffective predictor in the identification of learning difficulties. More specifically other studies offered many reasons for the ineffectiveness of using IQ tests as the main criteria for diagnosing learning differences and disabilities.

An example of one strand of this research that examined the usage effects of IQ tests in relation to cultural groups, found that IQ tests tend to be culturally-biased (Shuttleworth-Edwards, Kemp, Rust, Muirhead, Hartman & Radloff, 2004; Rushton, Skuy, Fridjhon, 2002; Kwate, 2001; Gunderson & Siegel, 2001; Coffey & Obringer,

2000). This suggests that the sole use of IQ tests for identifying learning needs is not responsible practice as certain cultural groups are disadvantaged. Apart from querying the relevance of IQ scores in determining learning problems, many studies found that other causes of learning difficulties, such as inadequate learning opportunities and the development of reasonable motivation for learning were stronger predictors of learning problems than IQ scores (Shuttleworth-Edwards, Kemp, Rust, Muirhead, Hartman & Radloff, 2004; Coffey & Obringer, 2000; Gunderson & Siegel, 2001).

Other research suggests that learners who start attending school at a preschool level have an advantage over those learners who do not attend nursery school as they score higher on IQ tests (Gorey, 2001; Torgesen, Alexander, Wagner, Rashotte, Voeller & Conway, 2001; Manly, Jacobs, Touradji, Small & Stern, 2002; Blair, Gamson, Thorne & Baker, 2004). This, therefore, suggests that some learners with lowered IQ scores may be unnecessarily diagnosed as learning disabled.

In addition, Fagan, (2000); Espy (2001); Garcia Bacaete & Rosel Ramirez (2001); Donovan & Cross (2002); Garlick (2003); Lawlor, Najman, Batty, O'Callaghan, Williams & Bor (2006) argue that factors such as parental education, income and other indices of socio-economic status, predict academic achievement as well as IQ scores, which suggests once again that using IQ tests scores alone is not responsible practice.

It is considered that there is sufficient evidence from the studies cited to suggest that using IQ test scores alone as predictors of learning disabilities causes misunderstandings and misapplications. This can be damaging to learners and their families as well as being seen to prevent meaningful interventions that assist the learners with their learning.

It is interesting to note that after exhaustive research only one other alternative to using IQ testing for identifying learning difficulties was found. This alternative is based on the concept of using short-term instructional interventions, namely Response-to-Intervention (RTI) as a means of identifying learners with learning problems. For example, Foorman & Torgesen, (2001); Ikeda & Gustafon, (2002); McNamara & Hollinger, (2003); McMaster, Fuchs, Fuchs & Compton, (2003); Vaughn, Linan-Thompson & Hickman (2003) and Vellutino, Scanlon, Small & Fanuele, (2006) tested this notion and found that on the whole using a short-term instructional intervention did

preclude certain learners from being classified as learning disabled/dyslexic, which prevented them from being routed to special education. However, other researchers criticised RTI studies' assumptions that learners who do not respond to instruction have an inherent deficit. In other words the adequacy of the instructional programme was not queried on any level (Kavale, 2005; Vaughn & Fuchs, 2003; Simmerman & Swanson, 2001).

However, it is argued here that the concept of using a short-term intervention process instead of using IQ scores alone is a move in the right direction, though it is still not considered sufficient as an assessment tool as no consideration is taken of interacting factors, such as the learners' emotional status, the fit between the intervention and the learner and so on (Semrud-Clikeman, 2005.)

The findings of the RTI studies demonstrates that there has been some shift away from solely using a psychomedical model for understanding learning differences towards thinking systemically about the causes of learning problems.

Towards a constructivist, ecosystemic framework for identifying learning differences

One of the most cogent reasons for using a constructivist, ecosystemic framework as a basis for understanding learning differences is that the psychomedical model is very simplistic and therefore precludes the examination of many factors that have been found in many studies to cause differences in learning and development. On the other hand, a complex politico-socio-economic developmental framework (Edmondson, 2002) is viewed by many theorists and researchers (Spann, 2005; Harcombe, 2003; Sutherland & Morgan, 2003; Tyler & Jones, 2000) as being a more valid framework to use in understanding learning differences. Such frameworks examine the interactive effect of school, home and intrapersonal systems on the development of individuals, which has been variously called ecosystemic / interactive / developmental / interaction frameworks (Shapiro & Biber, 1972; Adelman & Taylor, 1993; Donald, 1996 in Engelbrecht et al., 1999; Harcombe, 2003).

Social constructivism has changed our views of how we conceptualise the way humanity develops and learns. For example from this viewpoint learning is

conceptualised as being a process in which knowledge is constructed by, for and between members of a discursively mediated community (Hruby, 2001). In other words if learners are not a part of an ongoing, mediation process (Schur, Skuy, Zitsman and Fridjhon, 2002) they will appear as if they are learning disabled and score inadequately on IQ tests. According to this view, however, it is not their learning ability which is seen as being at fault but rather it is the inadequate mediation they received (Vygotsky, 1987; Feuerstein & Rand, 1974).

When using this framework it becomes clear that the learner is not labelled as 'sick' or 'the one with the problem' but rather he or she is viewed as having only a small part to play in the complexity of the interactions between systems and historical events (Harcombe, 2001 cited in Engelbrecht & Green, 2001.) Thus the ecosystemic approach is viewed as being multidimensional, holistic and dynamic in nature (Engelbrecht et al., 1999) and therefore a more valid explanation of learning differences than a reductionistic, medical model view.

Ecosystemic thinking and assessment procedures

When a constructivist, ecosystemic approach is used for understanding learning differences, all the relationships between the systems (home, school and the wider politico-socio-economic spheres) within which the learner interacts with are examined in terms of their effects on learning and development (Harcombe in Engelbrecht & Green, 2001). These relationships help pinpoint the various causes of learning difficulties.

Therefore constructivist approaches to assessment procedures are considered theoretically appropriate for use in any country but due to the past and residual political and socio-economic disadvantages in South Africa, it is argued that this approach is especially suitable to the South African context. Using this framework ensures that learning barriers are identified enabling educators and other relevant people to be supported according to the barrier. In addition South Africa's current education reform (inclusive education) requires that all learners be afforded equal rights to a quality education and to be protected from discrimination and inequity (Department of Education, 2001).

Although ecosystemic theory has been applied in various fields (Spann, 2005; Guruge, 2004; Creech & Hallam, 2003; James, & Meezan, 2002), an extensive survey of recent literature found no studies which used ecosystemic thinking to underpin assessment procedures for determining the causes of learning problems. Only one study was found in which this theory was applied to understanding behavioural differences, though this study was not related to learning *per se* (Tyler and Jones, 2000). This study utilised a program that trained educators in understanding how chronic behavioural problems occur as part of a dynamic, interactive process between the child and his/her environment. In this study it was found that although most teachers found the theoretical ideas difficult to understand, they obtained a practical understanding of ecosystemic interactions, which helped the respondents to show an improvement in behavioural problems as well as academic improvements (Tyler & Jones, 2000).

Useful though the previous study is in showing how thinking systemically can improve chronic behavioural problems, it is concerning to note that no studies were found using constructivist, ecosystemic thinking in relation to elucidating learning and development, especially in relation to learning differences/disability. This means that children with learning problems are still, world around, largely being diagnosed using medical model instruments, such as IQ tests. As a result of this many learners are being relegated inappropriately to special educational settings and many of the underlying causes of learners' developmental and learning delays, such as education, socio-economic conditions and resultant inadequate parenting, teaching and available resources, (Engelbrecht et. al., 1999) are being unaddressed.

Therefore, it seems clear that a theoretical underpinning that takes various factors into consideration, when analysing learners developmental and learning needs, is essential for the South African context. It is argued that a constructivist, ecosystemic framework fulfils these requirements and that the study of this approach to assessment is urgently required.

Using Constructivist, Ecosystemic Approaches to Assessment: Harcombe's Ecosystemic Assessment Graphic Organiser (EAGO)

Since social constructivism is a very complex theory which examines the interaction between many factors, it became necessary to develop an instrument that would enable educators and other care-givers to gather and analyse such data in a fairly simple and comprehensive manner. Accordingly Harcombe (1993) developed a graphic representation to be used as an instrument in the assessment process for identifying the factors that hinder and promote development and learning. Thus this study utilised Harcombe's Ecosystemic Assessment Graphic Organiser (EAGO; Harcombe, 2003).

When using the EAGO practitioners are able to identify the interacting factors that trigger and are triggered by one another in a cyclical pattern, and examine the dynamic interplay of intrapersonal, interpersonal and situational variables. In other words the EAGO highlights the interactions between history, interpersonal characteristics, political status, socio-economic status, social structures and other characteristics that promote understanding learning diversity. This instrument was used as a basis for this study (see appendix B, page 75 for a copy of the EAGO and appendix A, page 54 for a more detailed description of it).

Ecosystemic thinking and support delivery

When an ecosystemic model is used to understand learning diversity, especially in an inclusive education context, it becomes clear that any interventions should move away from solely providing support for the learner (as happened when psychomedical models were used) towards providing support to teachers, caregivers, specialists and socio-economic systems, where necessary, in an effort to promote the optimal interactions between the various systems necessary for adequate development to take place.

Such support should enable teachers and other role players to manage the systemic interactions themselves, instead of being omitted from the expert loop as usually occurs with the psychomedical model approach to support, where the learner alone was usually supported by the expert. Such a supportive method is called the collaborative consultancy approach, which has been researched fairly extensively in North America over the last few years in various contexts (Amatea, Daniels, Bringman & Vandiver,

2004; Denton, Hasbrouck & Sekaquaptewa, 2003; DeWert, Babinski, Jones, 2003; Doerries & Foster, 2001; Lusky & Hayes, 2001) and in particular regarding inclusive education (Meck & Barrow, 2005; Levac, 2004; Kennedy, Higgins and Pierce, 2002). In general these studies suggest that the collaborative consultancy approach is highly effective for providing support to collaborators in education and other contexts. A few of these studies are examined below.

For example, the Amatea, Daniels, Bringman & Vandiver (2004) and Doerries & Foster's (2001) studies, which were conducted in United States of America (USA), illustrated the effectiveness of using a collaborative consultancy model for family counselors. This model combined a systems-ecological approach with solution-focused, problem-solving strategies. The aim of these studies was to demonstrate that the child is very seldom the source of the problem and that it is necessary to involve the family in order to broaden counselors' interventions. These researchers found that collaborative consultancy was effective as it is a user-friendly approach that makes use of techniques and strategies commonly applied in behavioural and social science available to both counselors and parents in order to best help the child.

Another USA study by Kennedy, Higgins & Pierce (2002) found that general education teachers rarely have the training to work with students who have multiple exceptionalities in the general education classroom. In addition this study found that collaborative consultancy between general education teachers and special education teachers was highly effective in improving pupil learning in the general classroom.

Similarly additional USA studies by DeWert, Babinski & Jones (2003) and Denton, Hasbrouck & Sekaquaptewa (2003) utilized collaborative consultancy to provide support to novice teachers. This study found that through collaborative consultancy beginning teachers were provided with increased emotional support, decreased feelings of isolation, increased confidence, more enthusiasm for work, increased reflection, ability to adopt a more critical perspective and improved problem-solving skills.

These studies have provided some evidence to show that collaborative consultancy can be an effective method in providing support, particularly since problem-solving is done in such a way that the consultee is enabled to handle future challenges independent of the consultant. However certain researchers from the USA maintain that

collaborative consultancy takes time to implement and to produce change in any environment (Lusky & Hayes, 2001). They add that the manner in which the consultant is identified, selected and gains entry into the school will have a major impact on establishing a collaborative relationship. Furthermore the consultant needs to develop a rapport with the people in the school community in order to attempt to understand the difficulties they encounter. Thus the consultant cannot impose his or her agenda on the school personnel and all parties involved in the process need to be open to modifying their behaviour in order to be effective in the development and implementation of solutions (Lusky & Hayes, 2001).

Conclusion

In this literature review studies examining the effectiveness of various methods of identifying learning needs were reviewed. Though many of the studies examined the concept of using IQ testing as a viable method of identifying learners with learning difficulties, the findings largely suggest that this method is not useful as many of the other factors that affect learning and development were not researched and/or taken into consideration. However, in spite of the dissatisfaction with this method only one other method was found namely, the Response-to-Intervention (RTI) model. This alternative approach for diagnosis and identification, however, queried the effectiveness of RTI models, as well as the many other factors that could interfere with learning and development not being examined. No studies were found on using an ecosystemic approach to the identification of learning difficulties. However, an argument for using this approach was presented.

When an ecosystemic approach is used in identifying learning diversity a team approach is needed to set such a process going. Accordingly a collaborative consultancy approach was posited as being effective in such circumstances. Studies examining collaborative consultancy models were therefore reviewed. Although not many studies were found, a fair body of evidence suggests that this approach would be effective when paired with an ecosystemic approach to identifying learning needs.

CHAPTER 3: METHODOLOGY

This chapter explains the methods followed in this study. It covers the aims of the study, research questions, research design, the data collection and analysis strategies. The intervention program and research ethics are also explained.

3.1 Aim

The aim of this study was twofold, namely to examine the EAGO as an alternative strategy for identifying learning needs in a South African public secondary school, since more traditional psychomedical models of identifying the factors that promote or inhibit learning, namely using intelligence tests have been found inadequate by many researchers. The second aim was to examine a collaborative consultancy approach to providing support to educators in the same school, as the participants are situated in an inclusive educational context and as such require enablement for future work.

It was decided to use Harcombe's EAGO as a tool for helping participants understand the practical implications of using an ecosystemic approach. The EAGO is based upon an ecosystemic framework as conceptualised by various theorists and researchers (Spann, 2005; Harcombe, 2003; Sutherland & Morgan, 2003; Tyler & Jones, 2000). For a more in-depth description of the ecosystemic framework and on Harcombe's EAGO used in this research see appendix A, page 54.

It was decided to use a collaborative consultancy approach since research reviewed in this paper indicates that educator support is often best provided by using this approach (Meck & Barrow, 2005; Levac, 2004; Amatea et. al., 2004; Denton et. al., 2003; Doerries & Foster, 2001). For a more in-depth description of the collaborative consultancy approach used in this study see appendix A, page 57.

3.1.1 Research questions

The research questions are grouped under the two aims as follows.

Aim 1: To examine the usage of the EAGO as an alternative strategy for identifying learning needs in a South African public secondary school

1. Was the EAGO effective in helping the participants' to identify learners' individual needs?

2. Were the participants able to demonstrate an understanding of the concepts that underpin the EAGO?
3. Were the participants able to demonstrate a shift from a medical model to an ecosystemic model of understanding barriers to learning?

Aim 2: To examine the usage of a collaborative consultancy approach to providing support to educators in using Harcombe's EAGO.

4. Were the participants able to understand and use the collaborative consultancy approach?
5. Were the participants able to use the collaborative consultancy approach to support each other when using Harcombe's EAGO?

3.1.2 Research design

This intervention study was designed to be qualitative, and used participatory action research (PAR) as a basic part of the research design (Babbie & Mouton, 2003; Denzin & Lincoln, 1994). Babbie & Mouton (2003) describes PAR as being a community-based collaborative approach to investigation, which seeks to engage 'subjects' as equal and full participants in the research process. Therefore PAR was used as this intervention studied was situated in a community which needed collaborative support in relation to improving the performance of pupils with learning differences. It was considered the best approach to use for this study.

In addition to PAR, a case study approach was used as it would supply more in-depth evidence than is possible with PAR. Further a "triangulation" approach was used for the case study data in an effort to strengthen the research findings.

Data in this study was gathered from using focus groups, participant observation and formative evaluation (Scholz & Olaf, 2002). Focus groups have only recently emerged as a standard data collection technique for qualitative researchers. They provide an alternative to other forms of interviewing as the interaction among participants is the source of data, with the researcher taking on the role of moderator who gently guides the discussion. Such guiding may "involve periodically recalling the original focus of the group, prompting group members to respond to issues raised by other, or identifying

agreements and disagreements among group members.” (Willig, 2004:29) In this study focus groups were used in the beginning of workshops four and five. The participants were asked to recall information from the content of the previous workshops in order to evaluate the knowledge acquired and evaluate the participants’ ability to apply this knowledge to their learners.

Since the collection of many sources of data was considered necessary, participant observation was included in the study. Gathering this information had to be done carefully as I had to become a member of the group. Therefore during the group process I endeavored to observe the interactions between and the perceptions of the participants to the best of my ability. As soon as the workshops were over I committed my observations to paper. It was decided not to make the participants aware of this observation process as firstly it might have interfered with the development of trust between us and secondly it may have made the participants self-conscious.

Formative evaluation was conducted in order for me to gain feedback on each workshop. This was done by either handing out evaluation forms at the end of the workshop or by collecting Harcombe’s EAGO (see appendix D, page 91-94 for examples) once the participants had completed it. The aim of collecting these graphic organisers was to assess whether the participants were able to complete them without my assistance. The evaluation forms focused on providing data to answer the research questions thereby examining the efficacy of the intervention. Thus data was gathered by continuous evaluations based on educators learning, applications of learning and perceptions of the process.

3.2 Context of study

3.2.1 The school

The study took place at a public secondary school, which serves the residents located in one of the suburbs of Johannesburg. Both the school and the people in the area provide a number of services to the community. There is a community centre, as well as many places of Christian worship, seven educational institutions, a police station and two medical clinics. Although there is no shopping centre, the streets of this area are overflowing with hawkers and the main street is composed of privately owned shops.

The school is situated on the outskirts of the area. The parent population is of a low socio-economic group, as most of them are predominately unemployed. Some parents work as hawkers, domestic workers, security guards, educators and waiters.

Since the residents of this area have a low socio-economic status, the school has gone to great lengths to ensure the security of the premises, such as the school gate, which is always closed as well as locked. A security guard is present for visitors to sign in. In addition there is a police station opposite the school, providing the stakeholders with a sense of security.

The school has a number of school fields used by the learners during break time and extracurricular activities. The school comprises of an administration building, a number of classrooms situated within four buildings connected by corridors and gardens. There are toilets at the end of each building. There is also a school hall as well as a computer centre.

3.2.2 The participants

Participants were selected by means of non-probability, purposive sampling. The original intention of the research was to obtain a sample from the school, comprising of both male and female educators teaching grades eight and nine as well as the heads of department and principal. However it soon became apparent that the principal did not have the time available to join the group as he was constantly attending meetings with parents, members of the Department of Education or educators. In addition the principal left the school in June 2005, half way through the intervention and one member of the group, who was Deputy Principal at the time, took over as principal, which meant he was not able to complete the workshops.

Participant 1 was a 58-year-old male who had been working at the school for 20 years. He was the Acting Deputy Headmaster and the Head of the Technical Department. He had a National Teachers Diploma (Technical), a N1 to N5 technical certificate as well as 3 Structural Draughtsman Diplomas which were obtained at 2 local technical colleges.

Participant 2 was a 47-year-old male who had been working at the school for 6 years. He was an educator at the school and had obtained his Higher Education Diploma at a local university.

Participant 3 was a 32-year-old male who had been working at the school for 9 years. He was an educator, sports master and was Head of Fundraising at the school. He had obtained his Higher Education Diploma at a local university.

Participant 4 was a 26-year-old female. This was her first year at the school. She was a Grade 9 and 10 educator who had obtained her Higher Diploma in Education from a local university.

Participant 5 was a 34-year-old male. This was his first year at the school. He was an educator who had obtained his Higher Diploma in Education from a local university.

Participant 6 was a 38-year-old male who had been working at the school for 2 years. He was an educator and a sports coach. He had obtained his Personnel Manager Diploma from a local university.

Participant 7 was a 43-year-old male who had been working at the school for 17 years. He was an Outcomes Based Facilitator, Head of Grade 10 and rendered support to educators. He had obtained his Masters Degree in Geography from a local university.

Participant 8 was a 31-year-old male who had been working at the school for 3 years. He was an educator who was on the School Assessment Team as well as being on the sports committee. He had obtained his Bachelor in Education and Honours Degree in Technology from a local university.

Participant 9 was a 36-year-old female who had been working at the school for 15 years. She was an educator as well as being Head of the Afrikaans Department and Head of Grade 8. She had obtained her Higher Diploma in Education from a local university.

Participant 10 was a 42-year-old male who had been working at the school for 19 years. He was an educator at the school and had obtained a Higher Education Diploma from a local university.

Participant 11 was a 28-year-old female who had been working at the school for one year. She was an educator who had obtained her Higher Diploma in Education from a local university.

Participant 12 was a 40-year-old male who had been working at the school for 18 years. He was an educator who had obtained his Honours Degree in Education from a local university.

I was participant 13, a 26-year-old female and had been working at the school for two years. I had obtained my Honours Degree in Education (Educational Psychology) from a local university. My initial contact with the school was initiated during the community project component of my Masters degree. Since my interaction with the participants had been so positive, my supervisor and I decided to continue providing services to the school for the research report criteria for my Masters Degree in Psychology (Educational Psychology).

Participant 14 was my supervisor, a 62-year-old female who had also been working at the school for four years supervising honours and masters research. She had obtained her Masters Degree in Education (Educational Psychology) from a local university (see appendix B, page 61 for a table with further details)

Almost all of the educators had at least a diploma in teaching and most of them have lived in the area at some stage in their life. They are therefore familiar with the community and area.

3.3 Intervention programmes

3.5.1 Description of pre-intervention process

Since this research utilised participatory action research, the process of intervention is important. It is for this reason that this section is lengthy. I conducted a community project during my Masters degree in Education (Educational Psychology) course work year, which formed the basis for the implementation of the research conducted in this study.

The research commenced on 11 March 2004 when Dr. A, Mrs. H and Mr. N together with the Educational Psychology Masters students held a meeting with the principals of the schools in the area concerned in order to conduct their community projects. I informed the principal of the school that I was planning on continuing my research in their school once the community project had ended.

The second visit took place on 18 March 2004 when I and two colleagues met with the principals of all the schools involved in order to express any concerns, opinions and beliefs regarding the work to be done. The principals also requested a commitment of at least a year's involvement in the various schools.

A third visit, held on the 25 March 2004, comprised of a discussion with myself, my colleagues and the educators in order to find out the information needed for the mapping of the community. We requested one or two of the educators, who had been living in the area for a number of years, to assist us in gathering this information. In addition a needs analysis was conducted so that we could establish what the educators' needs were. From this we could see what the common problems or needs were and the workshops would be based on these identified needs and problems.

During this visit we discussed collaborative consultancy with the educators and explained that the workshops would cater for the needs of the educators for the benefit of the school. It was also explained that for collaborative consultancy to be a success it needs to be experienced as a learning process, where attending and participating in the workshops should be a voluntary process.

The needs were brainstormed and written down in a mind-map style. The need prioritized by the educators was that the learners were badly behaved both in and out of class. The educators explained that with corporal punishment being prohibited, they were unaware of other techniques to maintain control and discipline at all times. Another need identified, which would be covered by me during the following year, was that the educators were unaware of how to identify and accommodate learners with barriers to learning. It was agreed that the focus of the community project would be the examination of alternative forms of discipline.

The community project commenced on 6 May 2004 in the third school term and ran into the first few weeks of the fourth school term of 2004. Towards the end of 2004 another needs analysis was conducted in order to establish any remaining needs the educators had. It was established that the educators were still unable to identify or assess learners with barriers to learning and required workshops to assist them. These workshops were scheduled to commence in the beginning of 2005.

3.3.3 Description of intervention process

This study commenced in 2005 and the workshops took place on a Tuesday afternoon after school ended for 1 hour and 30 minutes, over a period of 14 weeks. These afternoons were booked for the research at the end of 2004.

On 19 January 2005 I contacted the principal, Mr. G, to establish contact and organize dates and times for the year. He informed me that due to his workload he had to hand the organization of the project over to one of his Heads of Departments (H.O.D) and that I should visit the school any time to speak to her.

I telephoned the H.O.D on 1 February 2005 to confirm a meeting for that day. The H.O.D explained that Mr. G had had no time to explain the programme and thus she had no information regarding it. I explained the programme to the H.O.D, as well as my commitment to the school for the duration of the programme. The H.O.D stated that the educators were having a staff meeting the following week and invited me to attend this in order to promote the programme. In addition she informally discussed the problems they were having with two learners.

However, on 7 February 2005 the H.O.D called me to explain that the school was having a sports day on that day, and, as a result, the staff meeting was cancelled. She requested that I attend the meeting the following week. I arrived at the school on 15 February 2005. The meeting was conducted with the Grade eight and nine educators only, as this was what the principal had instructed. While two of the educators slept during the meeting, the others appeared to not be listening. One female educator asked if there would be certificates issued, while another educator asked for information about the programme. Both the H.O.D and the Deputy Head Principal used the time to ask whether the programme would be able to identify and remediate learners. This was done as a way of promoting the programme to those educators who appeared to be not listening. At the conclusion of the meeting the H.O.D requested that I attend the following week's Grade 10, 11 and 12 staff meeting in order to promote the programme further.

I arrived at the school on 22 February 2005 at 14h00 and waited at the staffroom for 30 minutes as only three educators were present. At 14h30 another educator arrived and apologized for the missing educators, saying there were other meetings taking place at the same time. Six educators arrived thereafter and the programme was explained. One male educator requested if certificates would be issued. I responded to the question by emphasizing the importance of his commitment to the year's programme.

The H.O.D explained to me that as educators they would be very busy until the end of the term and advised that the program commence on 12 April 2005. I arrived at the

school on 12 April and discussed the programme with the educators, establishing dates and times of the workshops and a letter was drawn up (see appendix B, page 68).

Workshop one took place on 19 April 2005. The goal of this workshop was to negotiate the programme dates and content for the year. The participants were asked to fill in a survey of their personal experiences at school (see appendix B, page 69). They were then asked to indicate which factors may have interfered with their learning at school. Their information was then transferred onto a large, single sheet comprising of the same material. A discussion was then held regarding the information collected and the factors that they felt had played a role in each answer. The discussion was recorded on an A3 piece of paper by grouping their answers into similar themes. These themes would later be the basis of the EAGO presentation.

A discussion ensued based on the fact that the old education system, which was based on exclusive education, was founded on the medical model approach to learning. The participants were then asked to think about how effective they considered this approach to be. They were then introduced to the ecosystemic approach to learning. However, no headings or theory was given as it was necessary to allow them to start developing an understanding of the ecosystemic approach. The participants then filled in evaluation reports based on the workshop (see appendix B, page 70).

The goal of workshop two was to introduce the participants to the ecosystemic approach. The information collected from workshop one regarding the participants' opinions of their school experience was revised in workshop two. Each group of information was given an ecosystemic heading. For example, 'Political and Social Structures' was the heading supplied for 'lack of access to libraries and lack of resources.'

The ecosystemic approach was then explained to the participants using their prior knowledge of systems theory. The participants were introduced to Harcombe's EAGO as a tool for understanding learners in an ecosystemic way.

A case study of 'Jabu' (see appendix B, page 72) was then read to the participants and together they filled in Harcombe's EAGO as best as they could with my assistance. Once again an evaluation form was supplied at the end of workshop two (see appendix B, page 76).

The goal of workshop three was to gain an understanding of learners' emotions and how these emotions promote or hinder learning. This workshop began by revising the EAGO of 'Jabu,' which had been filled in the previous week. The participants were then asked to discuss what stressors they thought they and Jabu might have had at school. This information was recorded on an A3 piece of paper. They then discussed the different emotions children and adults may have as a result of these stressors, as well as the types of methods children and adults may use to defend themselves against these emotions, such as anger and anxiety. I then handed out information packs regarding defense mechanisms and what these mechanisms really mean, as well as ways of understanding and assisting these learners. Evaluation forms were handed out at the end of workshop three and participants were asked to fill them in (see appendix B, page 78).

Workshop four began by revising the stressors and defense mechanisms children use in the form of focus groups and their information was collected by the researcher (see appendix D, page 105). I put up 'Jabu's' EAGO and this case study was revised. The participants agreed that Jabu's environment and learning conditions affected his ability to succeed at school. This led into a discussion of the different types of cognitive processing styles, namely successive and simultaneous processing, and what each style means. Examples of each type of processing style were discussed and a story based on Disney World was read to the participants. The participants had to write down as much information that they could remember after the story had been read. A discussion then ensued regarding the amount of information they had remembered relating to their cognitive processing styles and how this was related to their previous knowledge of Disney World. Finally, an evaluation form was handed out for the participants to fill in (see appendix B, page 80).

The goal of workshop five was to introduce and facilitate new ways of assessing learners' reading in an informal manner. The workshop began by grouping the participants into small groups and requesting they discuss and then feedback to the larger group what they had remembered about successive and simultaneous processing (see appendix D, page 107). The different type of cognitive processing styles was then linked to reading. We then discussed how they assess a learner's reading and this was linked to the informal reading process (see appendix B, page 82-82). The informal reading process

occurs by firstly choosing books relating to the learner's grade level, language style and interest level. Secondly, the learner is allowed to pick one book of his choice to read from, whilst the educator records the learner's reading and fills in the learner's miscues. These miscues were explained to the participants and they were given a chance to try this by reading to each other.

Participants were asked to informally assess a learner's reading in order to utilize it for workshop six. However, when I arrived for workshop six, I discovered that the participants were very stressed and anxious. They explained to me that there were a number of learners who were not succeeding academically and they were unable to provide the necessary assistance. An informal discussion ensued around the type of resources available and the ways in which they could assist these learners with the knowledge they had already acquired and the knowledge they had gained through the workshops.

Workshop seven began by the participants revising the informal reading process and discussing how they had experienced the assessment of their learners. Some of the participants had forgotten to do this. The participants who had forgotten to do this were then asked to informally test the other participants in order to gain a better understanding of how the process works. Once this was done, the participants discussed their feelings and findings of the learners they had assessed.

The goal of workshop eight was to complete Harcombe's EAGO done on the learners that had been assessed by filling in the results from the informal reading assessment, as well as any new knowledge gained over the previous weeks, such as the learners' defense mechanisms or the learners' cognitive processing styles. Once Harcombe's EAGO were completed the participants and I discussed ways of supporting these learners. Thirdly links between the school and the community were beginning to be established.

Workshop nine was aimed at establishing whether the participants were able to identify learners with barriers to learning using Harcombe's EAGO. The session began with the participants bringing in background information of learners experiencing difficulties, as well as an informal reading assessment of that learner. These learners were

not ones previously identified. Participants worked in small groups to identify these learners and areas where they could render support.

Five follow-up groups were held, which allowed the participants to identify learners who had barriers to learning and were not previously identified. These groups involved the participants bringing in background information, as well as an informal reading assessment based on the learner. The participants used the information to fill in Harcombe's EAGO in order to identify and assist the learners. However, I did not contribute much to these follow-up groups, but rather observed and supplied information when necessary. The reason for this was that it was important to see whether the participants had successfully understood the content of the workshops (for an example of the EAGO's filled in by the participants see appendix D, page 93-94).

3.4 Data collection

Data was collected using four types of methods, namely continuous evaluations, focus groups, Harcombe's EAGO and participant observation. Evaluation forms, evaluating both content and perceptions, were handed out to the participants at the conclusion of workshop 1, 2, 3 and 4. Participants filled them in anonymously, which helped guide the planning for the next workshop (see appendix C, pages 70, 71, 76, 77, 78, 79, 80 and 81).

Focus groups were held at the beginning of workshops 4 and 5. The participants were asked to get into two small groups and recall the information on defence mechanisms, stressors children face, simultaneous and successive processing. This information was taught during workshops 3 and 4. This was written down and discussed as a large group (see appendix D, page 105 and 107).

Participants were asked to fill in Harcombe's EAGO based on the learner being identified. These EAGO's were then collected by me at the end of workshops 8 and 9 as well as at the end of the 5 follow up groups (see appendix B, page 75 & appendix D, page 93-94). (See appendix A, page 54-56 for further details)

Lastly I wrote down informal observations at the end of every workshop and follow up group. This was done in order to record any information that would be useful in

evaluating whether the intervention was successful or not (see appendix D, page 97, 100, 103, 105, 107, 108, 110, 112, 114, 116, 119 and 121).

3.5 Data analysis

The method chosen to analyse the evaluation forms, the EAGO, the focus groups as well as the observations was comparative analysis. This strategy involves taking various pieces of data from different sources and triangulating them in order to provide sufficient evidence to answer the research questions (Babbie & Mouton, 2003; Glaser & Strauss, 1967). For this study, I compared the evaluations of the participants and my own. In this way, I was able to find out how effective collaborative consultancy is for delivering support to the participants of the study.

Each question from the evaluation forms, focus groups, EAGO as well as my observations were analysed by assigning each to the research question it answered. In this way, evidence was provided for each research question and I was able to assess the effectiveness of the researched intervention regarding identifying learners with barriers to learning.

3.6 Ethical considerations

The starting point of ensuring ethical measures in the research process was to fulfil the University of Witwatersrand's standards of ethics set for research (see appendix C, page 84). In doing so the person and the property of all participants is respected. The researcher obtained permission from the Department of Education (see appendix C, page 85 and 86) to conduct this study as well as from the principal of the school (see appendix C, page 87).

Contact with the participants and the associated facility only commenced once ethical clearance from the University and the Department of Education had been obtained. Participants were informed from the outset that they would be utilising graphic organisers and supporting data in order to answer the research questions.

The subject information form (see appendix C, page 88 and 89) was given to the participants. Although participants were informed that the decision to participate was

entirely voluntary, certificates (see appendix C, page 90) were given for participating in the study.

Confidentiality was assured under all circumstances. In addition any recording of the data was done without reference to the person's names. Thus, anonymity can only be assured in terms of the biographical questionnaires, evaluation forms and EAGO, as no names appeared on the forms. In addition, all participants were volunteers.

No deception of any nature was used in the research process, as participants were informed of the exact nature of the study.

CHAPTER 4: FINDINGS

The aim of this study was twofold, namely to examine the usage of Harcombe's EAGO as an alternative strategy for identifying learning needs and secondly to examine the effectiveness of using a collaborative consultancy approach in support of educators in their usage of Harcombe's EAGO.

In this chapter the two strands of findings of this study are presented. Both sets of findings were obtained by means of the following techniques: Harcombe's EAGO that the participants filled in, focus groups, participants' comments, researcher's observations and evaluation sheets. Data revealed that firstly the educators found Harcombe's EAGO to be effective in identifying the learning needs of their learners. Secondly findings revealed that the collaborative consultancy was an effective strategy for delivering support to the participants of the study in their usage of Harcombe's EAGO.

4.1 Findings regarding Harcombe's EAGO

The effectiveness of Harcombe's EAGO in identifying learner's individual needs was demonstrated by (4.1.1) participants' ability to fill in the EAGO effectively and (4.1.2) by their understanding of the concepts that underpin the EAGO.

4.1.1 Participants' ability to fill in the EAGO effectively

It was evident from the researcher's observations, conducted after each workshop and follow-up groups, and from the participants completed EAGO sheets, as well as from the participants' evaluation comments (obtained from workshops seven, eight and the five follow-up groups) (see appendix D, page 95-100), that the participants demonstrated an improvement in their ability (i.e. during the time of the intervention) to fill in the EAGO effectively. Initially both groups struggled during workshops seven and eight, as well as during follow-up group one. They all left out vital information and required my assistance in filling out the EAGO. They would continuously ask what each statement meant and what they were supposed to fill in.

During follow-up groups one and two, they all seemed to have gained an understanding of what was required, as they were able to show an understanding of the various subheadings, but they all still struggled to fill in the information they had

gathered. By the end of the follow-up groups a noticeable shift was seen in how the participants filled in the EAGO as they were able to fill in the EAGO effectively and required no support from me (see appendix D, page 93-94 for examples). It was clear from the way they filled in Harcombe's EAGO that the participants were able to understand the learners in a holistic manner as well as demonstrating an understanding of individual learners' developmental needs.

4.1.2 Understanding of the concepts that underpin the EAGO

It was evidence from the researcher's observations and participants' evaluation sheets from workshops one, two, three and four, Harcombe's EAGO and follow up groups (see appendix D, page 101-110) that the participants were able to demonstrate an adequate understanding of the concepts that underpin an ecosystemic approach to understanding learning and developmental diversity.

It was evident from all the observations of the workshops; the comments of the participants during the workshops and from the completed EAGO's that the participants took time to move from a medical model viewpoint to an understanding the principles that underpin an ecosystemic approach. This was evident during early workshops when the majority of the participants were clearly thinking in a medical model mode as many considered that learners with special needs should be placed in a special school and that a learning disability was the result of brain dysfunction (see appendix D, page 101). As the workshops progressed the principles that underpin a systemic way of thinking were discussed and applied using Harcombe's EAGO. Once again observations and participants evaluative comments indicated that participants at the end of the intervention understood why learners should be placed in inclusive education settings, showing how they had moved away from a medical model towards thinking ecosystemically. For example, in workshop 4 one participant commented that he always thought students were bad spellers because they were lazy and did not practice their spelling. He added that he now understood that such learners are not lazy but might be bad spellers due to being inadequate successive processors.

Another reason why participants made the shift towards systemic thinking was because they started to develop an understanding that the interactions between a person

and external factors as depicted on Harcombe's EAGO, such as economic conditions, social support, background history and traumatic events promotes or prevents learning and development. For example one participant commented that he had never had assistance with his homework, and he was confused as to why the same reason would affect other learners' ability to learn. When it was discussed the participant stated that he had never thought that different learning styles could affect learners' learning, and stated that perhaps the difference in learning, together with not receiving homework supervision, was causing the learner to fail.

Participants also showed an adequate understanding of how interactions between external factors such as social support and internal factors such as temperament can result in barriers to learning and development. For example when the discussion on how interactions can cause emotions to function as a promoter or barrier to learning the participants were very enthusiastic and excited. For example they enjoyed looking at which defence mechanisms they use and continuously related the information to both themselves and their learners (my observations). I noticed that the participants understood how emotions could act as either a promoter or barrier to learning, and in the following workshop the majority commented on how much knowledge they had gained during the previous workshop (see appendix D, page 105). They added that they felt enriched during the week, as they were able to start understanding why the learners were behaving in certain ways.

Another example of participants understanding of the interactions between internal and external factors was when discussions focused around simultaneous and successive processing as a promoter or barrier to learning. I observed that the participants enjoyed learning about the different cognitive processing styles as it enabled them to better understand their learners and themselves and how these styles affect learning and teaching. I observed in workshop four that the participants were able to understand the different processing styles on a fairly deep cognitive level but it took them a long time to do so, and many examples had to be used.

The final example of how participants understood the interactions between internal and external factors was when links were established in workshop five between cognitive processing and literacy instruction and the development to barriers to literacy

learning. For example in workshop five one participant commented, “Does this mean that many of our learners are poor successive processors and this is the reason they spell badly.” He added, “In what ways can then we assist them?” (see appendix D, page 108) This then lead onto the informal reading assessment as a method to assess their reading and cognitive processing style. I noted the eagerness that the participants exuded during this workshop. The participants commented on how they were going to assess their learners’ reading, and what an effective technique this was. In addition, they were noticeably shocked at how easy the method was and that it did not require a standardised assessment to be purchased (see appendix D, page 108) In addition, the participants were linking other internal factors together in relation to teaching and learning. For example, in workshop four educators noted how often their teaching styles do not match learners learning styles, which explain why many learners were not learning well.

4.2 Findings regarding collaborative consultancy

Findings revealed that the collaborative consultancy was an effective strategy for delivering support to the participants of the study in their usage of Harcombe’s EAGO. This was demonstrated by the following behaviours that were noticed in the educators: (4.2.1) participants’ ability to understand and use collaboration and (4.2.2) participants’ ability to apply the concepts of collaborative consultancy to supporting each other when using Harcombe’s EAGO.

4.2.1 Participants’ ability to understand and use collaboration

It was evident from the researcher’s observations, conducted after each workshop and follow-up group, as well as the evaluation comments, obtained from the first four workshops, that participants enjoyed working collaboratively with myself and found collaboration an effective way of learning Harcombe’s EAGO concepts (see appendix D, page 111-116). During the workshops, for example, all twelve participants reported positively that they found the collaborative manner in which I presented the workshops ‘stimulating,’ ‘interesting,’ ‘accommodating,’ ‘open’ and ‘understanding’. Overall they reported that they thoroughly enjoyed the workshops, adding that I was ‘supportive,’ as well as ‘encouraging discussion’ amongst the participants, which indicates that they

appreciated the collaborative approach. Evidence to support their appreciation was obtained from my observations as some participants would come early in order to discuss certain learners that were causing behavioural or academic difficulties. Other participants would stay after the workshop had ended and some would use the workshop for discussion of their learners' problems.

It is interesting to analyze the process of these workshops showing how the participants became used to the collaborative approach and then how they began to appreciate it. At the beginning of the workshops the participants would stop talking when I approached their group to facilitate discussions or ideas. It appeared that they were concerned whether I was going to correct or interrupt them, as an educator might do to her learners. After a few sessions, however, the participants continued to talk and included me in their discussion, or asked me a question. They appeared to be more at ease with the idea of collaboration and realised that I was merely there to stimulate further discussions or steer the conversation onto the right path. By the end of the sessions it was clear from observations that the participants were very comfortable with the collaborative process and benefited from using it.

The following extracts from workshop evaluation sheets indicate how all the participants enjoyed the collaborative process. For example, all twelve participants commented favourably in one way or another on the collaborative atmosphere in the sessions: "today's discussion really got me going;" the facilitator is "stimulating, encourages participation and debate;" "accommodating, well-prepared, facilitating between groups;" "very accommodating, very open. Uses practical examples to clarify some answers;" "not only speaking but also gave us a chance to speak;" "helpful in explaining things, involves us all the time;" "very supportive, up-to-date, very helpful and very friendly."

Another example of how participants valued collaboration and supporting each other was how participants valued working in groups. For example, eight participants in workshop one and ten participants in workshop two commented that they felt they were able to work better and gain a better understanding of concepts when placed in groups (see appendix D, page 117). In addition nine participants in workshop one and ten

participants in workshop two stated that they are able to better understand the work when they work in groups.

Another of the benefits of working collaboratively is that people are able to make optimal use of each other's expertise. This was shown in this study as the twelve participants were able to access my expert knowledge without feeling threatened. In one way or another they expressed that they appreciated the knowledge and expertise I portrayed throughout the workshops. For example, they described me as being "very well informed," "pleasant and informative," "very informative, very friendly person" and "Knowledgeable and clear" (see appendix D, page 111).

Similarly, since I was working collaboratively with them it was clear, from my observations, that they perceived that I valued their knowledge and expertise. This attitude often enabled the participants to access their own knowledge and expertise in relation to the new knowledge presented in the workshops, which empowered them and enabled them to learn better. This was made clear to me in a workshop discussion (see appendix D, page 116) where they commented that far too often people came to lecture them on certain methods and techniques and very often these people were unaware of the community with which they are involved as well as not taking cognizance of their knowledge. The participants reported that this often resulted in the speakers' techniques not working, nor was there any time allowed in the lectures to report this. In comparison my collaborative teaching style encouraged the participants to report anything that they felt was necessary, which made them feel part of everything as well as ensuring that Harcombe's EAGO process was effectively implemented. It also enabled them to construct new knowledge based on the knowledge they had to begin with, *a la* constructivist theory (see 4.1.2 above)

It is also clear from my observations and participants' evaluations that they constructed a sophisticated understanding of the collaborative consultancy approach as for example they were able to favourably compare it to other ineffective approaches (see appendix D, page 116). In addition they were able to use the approach effectively in the workshop situation.

Overall these results suggest that the collaborative approach used in the workshops was very effective. The participants felt they were part of the intervention

process; that their expertise was valued in relation to my expertise. It was also clear that they developed a sound knowledge and understanding of this collaborative approach as they were able to use the approach during the workshops. Working collaboratively also enabled them to build on prior knowledge and to develop a sound understanding of Harcombe's EAGO. For these reasons it is suggested that the collaborative approach was very helpful for these educators in building their knowledge and practice for the accommodation of the learning diversity present in their classrooms.

4.2.2 Participants' ability to apply the concepts of collaborative consultancy to supporting each other when using Harcombe's EAGO

It was evident from my observations and from the participants' completed EAGO's, obtained during the last two workshops and the five follow-up sessions, which were devoted to working with Harcombe's EAGO, that the participants used the collaboratively consultancy approach effectively to help each other (see appendix D, page 117-121).

There were a fair number of indicators showing that the participants had internalised working collaboratively in these sessions. For example, six male participants commented on four different occasions, especially during workshops that did not include activities which offer adequate opportunities to do work in groups, that they would like all group members to interact more. Considering that the workshops were conducted in the afternoon, a contrasting view could be that the participants preferred group activities because they were tired, and their minds could not take anything that required intense concentration. However, my observations indicate that in this study the participants acquired a sense of interdependency. In other words, they appeared to realise that the responsibility for planning for diversity accommodation (i.e. when using Harcombe's EAGO in this instance) can never be successful without the involvement of relevant parties.

It was also clear from my observations (see appendix D, page 119 and 121) during the intervention that the participants were able to utilise each other's opinions and work collaboratively when completing Harcombe's EAGO's. This enabled them to complete the EAGO's more effectively thereby helping them to understand the systems that

affected the relevant learners' learning and developmental diversity. For example, if a participant knew the learner under discussion he/she was able to add information and if he/she did not know the learner he/she were then able to question the other members of the group to elicit further information. In addition, this enabled them to see more clearly that the learners were not being 'lazy,' but were rather not being stimulated or assisted at home.

Overall these results suggest that the participants were able to work in a collaborative manner when completing Harcombe's EAGO. They were able to verbalise their ideas and experiences and thus contributed to more accurate completions of Harcombe's EAGO, thereby providing a better understanding of the factors that promote and prevent optimal development and learning.

Overall summary of study results

The results of this study provide qualitative evidence to support the efficacy of using an ecosystemic approach for helping teachers identify the learning needs of learners in a secondary school setting. . Furthermore, participants were able to demonstrate a shift away from using a medical model towards an understanding of ecosystemic thinking, especially in terms of how the various systemic interactions can promote or hinder learning and development. In addition, Harcombe's EAGO was found to be effective in terms of helping educators identify and understand systemic interactions and their link to learning and development. Finally, evidence was found which suggests that using a collaborative consultancy approach for helping educators develop ecosystemic thinking and practice was effective.

CHAPTER 5: DISCUSSION

The results of this study are set in the context of the findings of the studies reviewed in chapter two. As hypothesized, the participants in this study appeared to find the ecosystemic approach studied as helpful in identifying learning needs, which suggests that this approach may be a viable alternative to using intelligence testing as a means of identifying learning diversity and needs. In addition, as hypothesised, using a collaborative consultancy approach for helping educators develop ecosystemic thinking and practice proved effective.

5.1 Using an ecosystemic approach for identifying and understanding learning diversity and needs

Many studies have found that using a psycho-medical, intelligence-testing approach to identifying and understanding learning differences is too simplistic a method (Vellutino, Scanlon & Lyon, 2000; Lyon, Fletcher, Shaywitz, Shaywitz, Torgesen, Wood, Schulte & Olsen, 2001; Bradley, Danielson & Hallahan, 2002; Donovan & Cross, 2002; Warner, Dede, Garvan & Conway, 2002; D'Angiulli & Siegel, 2003). In fact, many of these studies suggest that contextual and systemic interactions are far more likely to cause learning difficulties than cognitive factors alone (Shuttleworth-Edwards, Kemp, Rust, Muirhead, Hartman & Radloff, 2004; Garlick, 2003; Gorey, 2001; Torgesen, Alexander, Wagner, Rashotte, Voeller & Conway, 2001; Espy, 2000; Fagan, 2000). Accordingly, it was decided to test an ecosystemic approach to identifying learning differences, even though only one study was found using a similar approach for the identification of behavioural problems (Tyler & Jones, 2000).

On the whole, the educators in this study, like those in the Tyler and Jones study (2000), found that the ecosystemic approach used was effective in helping them to practically identify and understand how ecosystemic interactions promoted or hindered learning and development. In other words, like the participants in the Tyler and Jones study (2000), these participants demonstrated a practical understanding of the causes of delays and /or advances in learning and development. For example, some findings from this study suggest that educators understood that the interactions between extrinsic factors, such as economic structures, caregiver support and intrinsic factors, such as

emotions and cognitive processing, as well as literacy experience, can promote or delay learning and development.

On the other hand, only a minority of the participants in this study were able to demonstrate a theoretical understanding of an ecosystemic approach, which confirms the findings of Tyler and Jones (2000) that systemic theoretical ideas are difficult to understand. Together, the findings of Tyler and Jones (2000) and this study suggest that educators intuitively find a systemic approach congruent with their experience, and therefore they find it a practical vehicle for understanding the causes of learning and development promotion and delay. It is also suggested by the findings of this study that using a graphic representation of systemic interactions, such as Harcombe's EAGO, could promote a practical, applied understanding of ecosystemic theory.

Constructivist thinking may also help explain why educators may find applied understandings easier than theoretical understandings. For example, expecting educators to move from a fairly simplistic psychomedical model of understanding learning differences to a complex, multifactorial systemic understanding of learning diversity, i.e. changing their conceptual understanding in the space of a few weeks' intervention, is too much to expect of most people. However, it is interesting to note that three of the twelve participants were able to make this shift, which supports the notion of differing individual conceptual development. In other words, a few of the participants shifted, to some extent, from understanding learning diversity from a psychomedical viewpoint towards a more complex systemic understanding. Constructively speaking, such participants' zone of proximal development (Vygotsky, 1987; Feuerstein & Rand, 1974) enabled them to construct meaning rapidly from the presentations, thereby enabling them to develop complex ecosystemic constructs. On the other hand, the majority of the participants' zone of proximal development made it difficult for them to bridge the gap conceptually to ecosystemic theoretical thinking.

In summary, the findings of this research tentatively suggest that using an ecosystemic approach to understanding learning differences is a valid way of assessing learning and developmental diversity. In addition, evidence suggests that using Harcombe's EAGO is an effective way of helping educators to analyse the differing ecosystemic interactions that affect learning and development.

5.2 Using a collaborative consultancy approach for helping educators develop ecosystemic thinking and practice

Although collaborative consultancy has not received as much research attention over the past five years as it had in the previous decade, the research found during this time period indicates that this approach is highly effective when support intervention programmes are provided (Amatea et. al., 2004; Hasbrouck & Sekaquaptwea, 2003; Meck & Barrow, 2005; Levac, 2004; Kennedy et. al., 2002). The findings of this study support this trend as all the participants responded very well to this collaborative approach. For example, it was clear that the collaborative approach of the researcher empowered the participants to participate and accommodate each other's needs. In addition, they were able to demonstrate effective collaborative group work, all of which promoted learning and laid a foundation for future collaborative work, which was one of the reasons for using this approach.

In fact, these findings support the notion researched in other studies, namely that collaborative consultancy is highly effective when used to deliver support. These findings are of particular importance to inclusive education which requires high levels of support provision (Harcombe, 2003; Donald, 2002; Department of Education, 2001). In addition, these findings suggest that using a collaborative approach together with an ecosystemic framework for understanding learning differences is highly effective, as learners need to be considered holistically, and this cannot be done unless a few educators collaborate together.

Constructivist approaches to teaching and learning were uniquely incorporated into the collaborative consultancy approach used in this study. Findings show that the participants responded well to the constructivist methods, as the teaching and learning styles used in the workshops were effective. The participants noted that they felt part of the intervention process and were therefore open to working collaboratively. In addition, the participants felt comfortable enough to question or comment on any topic raised. These reasons, along with the researcher's methods of basing the construction of new knowledge on the knowledge acquired already, suggest that the constructivist approach was helpful for these educators, and, as such, is an effective part of a collaborative

consultancy approach. Finally, it is suggested from these findings that though there was positive responses to constructivist methodology, only a minority showed theoretical understanding of the ecosystemic approach, although they did show practical understanding. It is suggested that a constructivist teaching and learning approach needs more time, and maybe even more individualized plans, for such teaching and learning to be optimal.

It is also considered that one of the major reasons why collaborative consultancy worked so well in this study is because the researcher and her supervisor established close links with the community before the intervention even started. It is possible that this earlier contact facilitated the effectiveness of the collaborative consultancy approach used in this study. This finding supports the conclusion that Lusky and Hayes (2001) made based on their collaborative consultancy intervention, which was that the consultant needs to develop a rapport with the people in the school community.

Thus, collaborative consultancy can be seen as an effective method for implementing support interventions for improved educator understanding of learning and developmental diversity.

CHAPTER 6: CONCLUSIONS AND LIMITATIONS

This study has demonstrated positive findings on many levels. It is interesting to note that this group of secondary school educators responded very favourably both to thinking ecosystemically about learning and developmental diversity and to a collaborative consultancy approach to support. Thus these findings suggest that using an ecosystemic approach to understanding learning diversity could work better than a psycho-medical intelligence testing based model. This conclusion is particularly pertinent to the South African situation due to the emphasis in using systemic approaches in inclusive education policy in South Africa. It is also pertinent due to the inadequacy of economic realities and the poor educational provision for the majority of South African learners.

However, though the findings of this ground-breaking study are positive in terms of thinking ecosystemically, and though it is suggested that such an approach could be effective and equitable for many reasons in a South African context, there is need for far more research to add evidence to this supposition.

There are also constraints to using this approach, which are similar to the constraints found in the Tyler and Jones study (2000). For example, though all participants were able to practically identify learners with barriers to learning using an ecosystemic approach, probably due to Harcombe's EAGO, they struggled to understand the theoretical framework underpinning the model. One of the reasons for this could be that this model takes time to internalise, as often educators have been taught to understand learning and developmental difficulties via a medical model approach. Changing one's way of thinking from a psycho-medical viewpoint to an ecosystemic approach, is a difficult process, and it takes time and support to effect the changes. It is suggested that support programmes aimed at moving participants from understanding learning differences from the psycho-medical model to an ecosystemic model need to be longer than many usually are in order to be effective. This means that instituting this approach can be costly in terms of effort, support and money, as it is considered that ecosystemic programmes should be conducted for at least 6 months.

The researcher's own conceptual and applied understanding of the ecosystemic approach could also be a constraint to using this approach, as many people, as this study

has demonstrated, take a fair amount of time and practice to attain this level of understanding. If the facilitator is not too clear himself or herself on this approach, then the participants are not likely to develop sound concepts either.

The results of this study demonstrated that a collaborative consultancy approach studied in other countries could be used as a methodology for the support of teaching the ecosystemic approach in South African inclusive education settings. Such an approach is considered to be of particular relevance to the South African context as the political and socio-economic structures of the country, generated by the previous government for a few generations, have not enabled and empowered educationalists, parents or learners in the school context to be part of problem-solving processes. Once again, however, it is acknowledged that far more research needs to be done to provide additional supporting evidence in a South African inclusive education setting.

It is also acknowledged that there are constraints to using collaborative consultancy in any context, as it is important to consider the amount of time a collaborative consultancy approach takes to successfully implement in any setting. For example, the facilitator needs to establish close contact with the participants before a collaborative consultancy project commences. Another consideration is that since a collaborative consultancy implies that all participants in the process are experts in their field, there needs to be mutual consent by these experts and the consultant, as well as mutual commitment, to the objectives. Thus when undertaking a collaborative consultancy project it is important to follow the correct procedures and respect all participants as being experts in their field and not assume the role of the expert.

It is also clear that the facilitator must have conceptual development and practical experience in this area, especially in a South African context, as a relatively paternal, authoritarian role has tended to be assigned to experts, and a more subservient role to educators, parents and learners in the educational milieu.

It is clear that more research is needed to add validity to using an ecosystemic approach to understanding learning diversity and barriers, as well as the need for using a collaborative approach in the process. It is also clear that constraints apply, as the process takes time, patience, expertise and money to implement. However, it is considered that there is enough positive evidence to support the notion that this, or a

similar systemic approach to diagnosing learning difficulties should work well in any context. It is also considered, based on the evidence, that it is a viable option to use instead of a psycho-medical, intelligence-testing based model of understanding learning and developmental diversity.

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APPENDIX A

Harcombe's Ecosystemic Assessment Graphic Organiser (EAGO)

It is interesting to note that an extensive survey of recent literature in the field of the identification of learning difficulties did not reveal any studies based on the ecosystemic framework. Thus this study utilised the Ecosystemic Assessment Graphic Organiser (EAGO), which was developed by Harcombe as a method of identifying learners with barriers to learning (Harcombe, 2003).

An important aspect of the ecosystemic approach is that cause and effect is seen as two-directional. Actions and relationships, therefore, both trigger and are triggered by one another in a cyclical pattern. It acknowledges a more dynamic interplay of intrapersonal, interpersonal and situational variables where learning differently is not seen as pathological but rather as being more/less competent in certain areas of functioning.

The EAGO method of identifying learners with barriers to learning highlights the areas of history, interpersonal characteristics, political status, socio-economic status, social structures and socialisation characteristics that are imperative in understanding a learning difference (Donald, 1996).

The EAGO proposes that a learning difficulty could be the result of a number of factors. When attempting to find that cause of a learning difficulty, one must look at a holistic picture of the learner. His/her life events or history could cause major problems such as complicated prenatal conditions or he may have been witness to a traumatic incident, which has affected him/her to the extent that it results in a learning difficulty (Adelman & Taylor, 1993.)

Once the history has been established the interpersonal characteristics must be examined. Interpersonal characteristics are viewed as the family support system; who the learner is living with and why; what type of family dynamics the learner experiences; the type of emotional support and the possible neglect or abuse the learner is suffering. All these characteristics place stress on the learner and studies (Brenner, 1989; Dubow & Tisak, 1989; Maccoby, 1988) have shown that this ongoing stress places the learner at risk for a developmental delay. Although schools provide a protective form of social

support for these learners, they are unable to totally remove the factors that may cause a learner to feel unprotected, unsafe and stressed (Harcombe, 2003.)

Thirdly, political structures of the country are important to take into account. In South Africa, apartheid caused many riots, school boycotts and protests which lead to damaged life styles, properties, lives and traumas. The political stress of a country is therefore very important in assessing the present day living conditions, familial structures and economic status of a family because it essentially caused these conditions (Adelman & Taylor, 1993.)

As stated above, apartheid policies influenced the economic structures of South African society, especially affecting the employment, education and housing of black South Africans. Thus the EAGO explains that the socio-economic status of the family must be taken into consideration. The socio-economic status refers to characteristics such as indwelling density and economic status. Findings have shown that people who are poorly educated and who are constantly changing employment are more likely to have children who perform unsuccessfully in academic areas (Harcombe, 2003). In addition, learners who live in lower socio-economic status conditions are more likely to develop illnesses and malnutrition. It is, thus, apparent how the socio-economic status of a family will affect the learner's learning potential (Harcombe, 2003).

Health care and schooling are sections of the social structures of South Africa that have also been affected by apartheid. Legislation was devised in such a way that it lead to minimal or non-existent health care facilities and a lower level of education (Bantu Education) for black South Africans (Donald, 1996.)

Finally, socialization characteristics are vital in explaining the ecosystemic approach to identify learners with barriers to learning because the values and beliefs the South African learners hold will be brought into the school environment. Evidence is offered suggesting that subtle attitudes and beliefs held by South Africans themselves is informed due to their status in society, and this therefore interferes with the way they adapt to their world.

To illustrate the EAGO model in the South African context consider a learner who does not comprehend what he reads, and many ecosystemic factors can therefore be explored to get an understanding of why he does not comprehend. Some of the many

reasons he does not comprehend could be related to literacy experience, English being his second language, undeveloped acquired knowledge and only being taught phonetic analysis. It is evident that this learner may have underlying factors affecting his reading which, inter alia, may not be related to developing at the correct maturational level; or a result of incorrect instructions regarding work given in the past; or a breakdown in the processing en route to the long-term memory store. An educator, if working from an ecosystemic perspective, would be correct in his/her assumption that there are other social factors that influence this learning difference. Accordingly, the intervention used would address the unique needs of each learner and focus on his/her specific growth.

Motivation for using a collaborative consultancy approach.

In order to effectively implement the ecosystemic approach in South African schools, an approach needs to be utilized where the educators work together with the researchers/psychologists. In this way educators do not feel inferior to the psychologists and the psychologists do not enter the school as ‘experts.’ Such an approach is the collaborative consultancy approach which is able to help educators meet the challenges faced by South African schools.

Since consultation has been used as a general term, it must be given defining characteristics in order for it to be understood. Consultation often refers to the process whereby a consultant assists another professional, the consultee, with regard to an area that the consultee is finding difficult. The consultant is there to problem-solve with the consultee in order to empower and render responsibility to the consultee. Thus, the consultation is portrayed as a triadic, interactive relationship among the consultant, the consultee and the client (Levac, 2004). In a secondary school environment, this triad may involve any learning or behavioural specialist (consultant) interacting in a professional manner with the educator (consultee) on a matter relating to the learners (client).

Although there are many models of consultation, such as the mental health or behavioural consultation model, the collaborative consultation model appears to be the most pertinent to the South African situation. The reason for this is that it takes into account people's history, culture, interactional practices and emotional lives, thus operating like the ecosystemic approach. It is a user-friendly approach that makes use of techniques and strategies commonly applied in behavioural and social science. The benefit of this approach is that it is presented in terms that both professionals and laymen can understand (Lusky & Hayes, 2001).

The collaborative consultation model starts off with the understanding that all principals, educators, educator assistants, community members, caregivers and support staff are experts in their field. Thus, in order for collaborative consultancy to be beneficial, there must be mutual consent by these experts and the consultant, as well as mutual commitment to the objectives. The approach implies that all collaborators solve problems by mutual negotiations. Then they jointly develop and implement the solutions

of the problem in such a way that the consultee learns how to handle future problems more sensitively and skillfully (Harcombe, 2003).

Much of this mutual consultation depends on the empathy, acceptance, social skills and problem-solving ability experienced and modeled by the psychologist, although other factors are also involved, such as the school and the consultant's availability to collaboration (Amatea et al., 2004).

The key issue is that collaborative consultancy is not a process whereby experts advise other experts, but rather one in which ideas are shared in order to solve problems effectively. Thus, collaborative consultancy is not a universal cure for all ills and it does not resolve all problems, but it does provide a means for people to learn to handle their difficulties and formulate solutions.

Consultation can radically change a consultee's perceptions about his/her learners. The reason for this is that the consultee's learn to understand the learners' emotional and social functioning, as well as their learning. In this way they learn how to accommodate their teaching for better results.

However, collaborative consultancy can only be effective if the consultees are open to modifying their behaviour and in participating in the development and implementation of solutions. For a collaborative consultancy approach to work, educators must be open to the idea of change. They need not only to realise that they may need assistance, but also that there may be an idea, opinion or method that they are using that is not proving successful. Educators often see their work as being dependent on the amount of experience they have and not on the results. They can, therefore, misinterpret learners and their behaviours (Donald, 1996).

Another problem with the collaborative consultancy approach is that due to our history, South Africans are used to an authoritarian style of giving or receiving information. This may cause resistance as some schools may identify areas of need, but may require an "expert" to enter the school and "lecture" the staff on possible changes and solutions. In addition, educators may not have the time available to effectively participate in the collaborative consultancy workshops. They, therefore, may see it as a burden and therefore see it as unproductive.

Yet even with these hindering factors, a collaborative consultancy model can be adapted to South African conditions. Working collaboratively South Africans can pool their diverse expertise and experiences towards a common goal of developing consultation as a viable, effective solution to a number of educational problems. It has been proven that even with these difficulties, collaborative work within school staff can bring about a fundamental reform of teaching practices in the classroom (Levac, 2004).

The reason for this is that collaborative consultancy aims to change the social and personal dynamics of the situation so that it is non- competitive and non-exploitative, which at the same time enhances the lives of all those who engage in it. This approach strives to build positive working relationships, so that people from different backgrounds, who have different needs, can work harmoniously and productively to achieve their various goals.

APPENDIX B

Participants' Biographical Questionnaire

Could you please answer the following questions as they will aid in this research project. No names will need to be printed on this sheet, therefore guaranteeing anonymity.

▪ Male ☐ Female ☐

▪ Age _____

▪ What is your highest level of education?

▪ Where did you obtain this level of education?

i. How many years have you been teaching at Westbury Secondary School?
_____ years

▪ What roles and responsibilities do you have at Westbury Secondary School?

Participant information

Graphic organiser depicting participants background

Participant	Age	Sex	Qualifications	Qualification obtained at:	Position at Westbury	Years teaching at Westbury
1	58	Male	National Teachers Diploma (Technical) N1 to N5 technical certificate 3 Structural Draughtsman Diplomas	Witwatersrand Technical and Highveld College	Head of technical department Acting Deputy Principal	20 years
2	47	Male	Higher Education Diploma	University of Johannesburg	Educator	6 years
3	32	Male	Higher Education Diploma	University of Johannesburg	Educator Sports master Head of fund raising	9 years
4	26	Female	Higher Diploma in education	Johannesburg College of Education	Grade 9 & 10 mathematics educator	First year
5	34	Male	Higher Diploma in Education	University of Witwatersrand	Educator	First year
6	38	Male	Personnel Manager Diploma	Damelin	Educator Sports Coach	2 years
7	43	Male	Masters in Geography	University of Johannesburg	Outcomes Based Education facilitator Head of Grade Renders support to educators	17 years
8	31	Male	Bachelor in Education Honours in Technology	University of Johannesburg	Educator Sports committee School Assessment Team	3 years
9	36	Female	Higher Diploma in Education	Rand College of Education	Educator Head of Department Head of grade Renders support to learners	15 years

10	42	Male	Higher Education Diploma	University of Johannesburg	Educator Head of discipline	19 years
11	28	Female	Higher Diploma in Education	Johannesburg College of Education	Educator	1 year
12	40	Male	Honours in Education	University of Johannesburg	Educator	18 years
13	26	Female	Honours in Education (Ed. Psych)	University of Witwatersrand	Researcher	2 years
14	62	Female	Masters in Education (Ed. Psych)	University of Witwatersrand	Supervisor	2 years

Data Collection

The table below depicts the instruments that were used in order to collect data, as noted in the research design.

Graphic organiser depicting data collection

Name of method used	When the data was collected	How the data was collected
Continuous evaluations	Data was collected at the conclusion of workshop 1, 2, 3 and 4.	Evaluation forms, evaluating both content and perceptions were handed out to the participants who filled them in anonymously. This guided the planning for the next workshop (see appendix B, pages 70, 71, 76, 77, 78, 79, 80 and 81).
Focus groups	Focus groups were held at the beginning of workshops 4 and 5.	Participants were asked to get into two small groups and recall information from the previous workshop. This was written down and discussed as a large group (see appendix C, page 105 and 107).
Harcombe's EAGO	Harcombe's EAGO was collected at the end of workshop 8 and 9 as well as the 5 follow up groups.	Participants were asked to fill in Harcombe's EAGO based on the learner being identified. These EAGO's were then collected by me at the end of the workshop or follow up group (see appendix B, page 75 & appendix D, page 91-94).
Participant observation	This was done by the researcher during and at the end of each workshop and follow up group.	I wrote down informal observations in order to record any information that would be useful in evaluating whether the intervention was successful or not (see appendix D, page 97, 100, 103, 105, 107, 108, 110, 112, 114, 116, 119 and 121).

Pre-intervention process

The table below depicts the pre-intervention process

Table 2: Graphic organiser depicting the process of implementation

Date	Pre-intervention process
11 March 2004	Initial meeting in Westbury Dr. A, Mrs. H, Mr. N and the Educational Psychology Masters degree students met with the principals of the schools in the area.
18 March 2004	Meeting with the school principals The students met with the school principals in order to express any concerns, opinions and beliefs regarding the work to be done.
25 March 2004	Needs Analysis and mapping the community A needs analysis was conducted with the educators who then took the researchers on a visit of the community in order to map it.
6 May 2004	Community project commences Workshops took place on a Thursday after school ended for 1 hour 30 minutes for a period of 8 weeks.
27 May 2004	Community project ends and another needs analysis is conducted

Intervention process

The following table depicts the intervention process.

Table 3: Graphic organiser depicting the intervention process

Workshop	Date	Intervention process
Discussion	19 January 2005	Contact is established I contacted the principal of school W to establish contact and organise dates and times for the year. The principal handed the organization over to one of the Heads of Department (H.O.D)
Discussion	1 February 2005	Meeting with the H.O.D I held a meeting with H.O.D in order to inform her of the project as well as to establish dates and times. H.O.D requested that I come speak to the staff the following week.
Discussion	7 February 2005	H.O.D. cancelled the meeting with researcher due to a sports day
Discussion	15 February 2005	I meet Grade 8 and 9 educators I met the Grade eight and nine educators and informs them of the research to be conducted.
Discussion	22 February 2005	I meet Grade 10, 11 and 12 educators I met the Grade ten, eleven and twelve educators and informs them of the research to be conducted.
Discussion	12 April 2005	Research commences The programme is discussed with the educators establishing dates and times of the workshops and a letter was drawn up (see appendix B, page 68).
1	19 April 2005	Goal: Negotiate programme dates and content Participants filled in survey of their personal experiences at school (see appendix B, page 69) Answers were then discussed as a large group and grouped into themes. These themes informed the content of the intervention programme. Discussed exclusive education and its links to the medical model. Introduced the ecosystemic model. Evaluation reports filled in (see appendix B, page, 70-71).
2	26 April 2005	Goal: Introduce participants to the ecosystemic approach The information collected in the survey during workshop 1 was revised and headings were given for each theme captured. Ecosystemic approach was then explained. Harcombe's EAGO was supplied to the participants and explained

		A case study of Jabu was read (see appendix B, page 72-74) and Harcombe's EAGO (see appendix B, page 75) was filled in together as a group. Evaluation report filled in (see appendix B, page 76-77).
3	3 May 2005	Goal: Understanding learner's emotions as a promoter/barrier of learning Revised Harcombe's EAGO of Jabu from workshop 2. Discussed what stressors participants thought they and Jabu might have had at school. Discussed emotions children and adults might go through and defence mechanisms used. Hand out was given regarding defence mechanisms and their meaning. Evaluation report filled in (see appendix B, page 78-79).
4	17 May 2005	Goal: Successive & simultaneous processing as a promoter/barrier to learning Focus group: Revised stressors and defence mechanisms from workshop 3 (see appendix D, page 105). Discussed Jabu's case study in order to introduce different cognitive processing styles. Discussed simultaneous and successive processing Read Disney World story to participants and allowed them to write down as much information as they remembered as possible. Linked this to their cognitive processing style. Evaluation report filled in (see appendix B, page 80-81).
5	24 May 2005	Goal: Informal reading assessment part 1 Focus group: Revised cognitive processing styles (See appendix D, page 107) Linked different cognitive processing styles to reading Explained informal reading assessment process Participants assessed each other's reading for practice and were asked to assess a learner and bring the information for the following workshop.
6	31 May 2005	Goal: Informal reading assessment part 2 Participants arrived stressed and anxious due to certain difficult learners they were dealing with. Therefore this workshop was postponed for the following week and an informal discussion ensued around the resources available for these learners and ways in which the participants could assist these learners with the knowledge they had gained in the workshops.
7	7 June 2005	Goal: Informal reading assessment part 2 Participants were asked to discuss the findings of their informal reading assessments they had done. Those who had forgotten to do this were asked to assess each other.

8	14 June 2005	Goal: Fill in an EAGO Participants were asked to fill in Harcombe's EAGO based on the learner they had assessed. Ways of supporting the learner were discussed and links between School W and the community started being established. Participants were asked to informally assess other learners' reading, who were having difficulty learning
9	21 June 2005	Goal: Identifying learners with barriers using Harcombe's EAGO Participants were asked to fill in Harcombe's EAGO based on the new learner they had assessed. Participants worked in small groups to identify these learners and areas in which they could render support.
5 Follow up groups	19 June 2005 26 June 2005 2 August 2005 16 August 2005 23 August 2005	Goal: Identifying learners with barriers using Harcombe's EAGO Participants were asked to identify learners who had barriers to learning and were not previously identified, using Harcombe's EAGO.

Letter to participants informing them of workshop date and times

22 April 2005

Dear Westbury Staff

RE: Dates and Times for Tuesday Afternoon Workshops

Thank you for attending and participating in Tuesday 19 April 2005 Workshop.

The following dates and times are as discussed (12 April 2005). Please note that they will be adhered to unless negotiated:

Date	Time
26 April 2005	14h00-15h30
3 May 2005	14h00-15h30
17 May 2005	14h00-15h30
24 May 2005	14h00-15h30
*7 June 2005	12h30-14h00
**14 June 2005	12h30-15h30
**21 June 2005	12h30-15h30

* Please note the time change

** These dates will combine 2 workshops into one day

Please can you supply me with a list of dates that you will not be able to attend workshops.

These workshops will involve training on how to think ecosystemically and its application to identifying learning differences, understanding learners' emotions and cognitions; learning how to assess informal reading; as well as accommodating learning styles, emotions and developmental needs in an inclusive classroom.

A certificate is offered, which will indicate that you have been part of this programme. Educators who wish to obtain a certificate should attend at least 8 out of the 10 workshops as well as 5 follow up groups in the 3rd term. These follow-up groups will be held on Tuesdays at 14h00-15h30 in which we will analyse learners' behavioural and learning difficulties.

Please feel free to contact me if there is anything I can assist you with.

Thanking you

Nicci Blumenthal
Educational Psychologist (Intern)
084 400 9621
484 1734 (w)

Survey of Personal Experience at School

I loved/hated school	Loved					Hated
	100	75	50	25		0
I felt happy/anxious/angry at school most of the time (choose one)	Happy					Anxious
						Angry
I felt clever/stupid at school	Clever					Stupid
	100	75	50	25		0
I was liked/disliked by teachers at school	Liked					Disliked
	100	75	50	25		0
My learning style matched the teaching style	Matched					Did not match
	100	75	50	25		0

Please tick the following things that may have interfered with your learning at school.

- Second/third/fourth language
- Few literate family members
- Little access to books
- Little experience i.e. did not go anywhere or do anything unusual
- No-one read me books when I was younger
- Teacher was poorly trained

Workshop 1 Evaluation Form

Fill in the following sheet by ticking the appropriate block.

STATEMENT	<u>VERY</u> <u>MUCH</u>	<u>MUCH</u>	<u>NEUTRAL</u>	<u>LITTLE</u>	<u>VERY</u> <u>LITTLE</u>
1. Learners who have learning difficulties should be in a special school.					
2. Learning disability / dyslexia is a result of a brain dysfunction.					
3. Sometimes a learner is battling to learn due to problems in his external world.					
4. Children who fail at school are too lazy to ask for help.					
5. The Medical Model helps us to understand learners' educational problems.					
6. Circumstances can cause children not to care about learning.					
7. I had problems at school myself because I had a learning disability/dyslexia.					

8. My group cooperated well in this session.					
9. I find I understand the work better when we work in groups.					
10. Children who have learning disabilities/dyslexia don't do well in school.					

11. I understood the following:

12. I would like more help with understanding the following:

13. I found the facilitator

14. What other aspects would you like to be added to the content of this course?

15. What can be done to make the workshops more interesting / stimulating for you?

Jabu Case Study

Taken from Harcombe (2003, p.54).

a) According to his teacher

Mrs. S. is very annoyed with Jabu, who is 8 years old and in Grade 2. She says he never does his work properly in class and the work he does is usually wrong. He causes a distraction while the other children are trying to work, because he doesn't have stationery. He keeps promising to bring stationery but never does, and so he gets punished. You would think that he would have learnt to bring his stationery to school by now. He also doesn't do his homework. Jabu is often absent from school, which doesn't help his learning. He is very aggressive and often hurts other children in the class. Sometimes he falls asleep in class. This is not good enough. He must take some responsibility for his education or else he is going to end up as one of the many unemployed in this country and he will probably turn to crime. He can't read properly either, and he can only write a few letters very poorly. He hardly seems to know anything. He should go to a special school. I can't help him. He just doesn't listen.

b) Jabu's life out of school

Jabu is an 8 year-old who lives in an informal semi-urban township in South Africa. He is the oldest of five children and shares a small room with his siblings. Jabu's parents do not earn much money and, because of this, there is often not enough food for the family. The children often go hungry. Jabu's mother attended school for four years but left when she failed Grade 2 for the second time. She only has limited reading, writing and arithmetic skills, which make it difficult for her to find work. She tries to bring in a little money by growing and selling vegetables. This means that she is out of the house much of the time and, since Jabu is the eldest, he often has to look after the younger children. Though he wants to help, he also gets angry because he is doing 'women's work.'

As there is little work in this area, Jabu's father often has to go away to find work. He has no formal or technical training and is not skilled in any particular field. He can only find 'piece jobs' and only works for short periods of time. Sometimes he sends money home, but he usually doesn't. When Jabu's father does not come home, his

parents mostly fight about money. His mother accuses his father of spending all his wages on alcohol. Jabu's father gets furious and often beats his mother during these fights. He also beats the children when they make him angry. Jabu is quite scared of his father.

Jabu does attend school, but it is quite far away and he has to leave early to get there on time. This is difficult on cold winter mornings or after a night of the baby keeping him awake. When Jabu arrives late for school he is punished. Jabu doesn't go to school very often. Sometimes he has to stay at home to help his mother and at other times he just doesn't feel like it. Jabu's mother does not care if he does not go to school. She likes it when he stays home to help her.

Both of Jabu's parents care about him to some extent and would like him to do well at school and get a better education. On the other hand, they are both just managing to survive and so have little time or energy to spend in worrying about whether he has done his homework or goes to school. Jabu knows school is important but he doesn't really like going. There are many naughty children in the class and the teacher just seems to scream and shout all day. Jabu constantly gets into trouble for not having the right stuff or for talking. He struggles to read and write and the teacher never seems to have time to help him. The classes are overcrowded and there are not enough books to go round.

Jabu would like to learn to read and write properly. He likes making the shapes of letters. But the teacher told the children that they must have their own books and pencils for writing. Jabu's family does not have money for this. Sometimes Jabu can borrow a pencil and some paper but this does not happen often because his teacher says, "No, you may not borrow. I told you to bring your own pencil. You are naughty. Now you can just sit there and do nothing. Maybe that will teach you to bring your pencil to school." At home, Jabu practices his letters by scratching them with a stick in the sand. When he sees other children with plenty of food and clothes and the right things for school he gets angry and ashamed and longs to be grown-up and to help provide better for himself and his family. He is also aware, however, that unless he does better at school, his dreams are not likely to come true and then he often feels completely hopeless.

c) According to an observer

The school Jabu attends is very inadequately provided with necessary resources such as a Resource Centre, enough chairs and tables, enough text books or reading books, a Photostat machine etc. The classes are too large and the teachers overworked and discouraged. The support for the Provincial Education Department is minimal and what contact there is, is not supportive but tends to be very authoritarian. In addition, Mrs. S. was not trained very well as a teacher and her methods of teaching are not very helpful for her learners. She does try, however, and generally means well towards her class. But the overwork, the large numbers of learners, and the insecurity in her work (she is only a temporary teacher, though she's been at that school for five years) all combine to be too much for her at times, and then 'naughty' boys like Jabu feel her wrath. The young people who go to Jabu's school are also unhappy, as many of them have similar backgrounds to Jabu and so unhappiness and maladjustment is evident.

Harcombe's EAGO

Please refer to PDF file "Harcombe's EAGO Picture 1."

Evaluation sheet for workshop 2

Fill in the following sheet by ticking the appropriate block.

STATEMENT	<u>VERY</u> <u>MUCH</u>	<u>MUCH</u>	<u>NEUTRAL</u>	<u>LITTLE</u>	<u>VERY</u> <u>LITTLE</u>
1. One needs to take into account the resources available to learners before developing projects.					
2. Learners who do not have food at home cannot concentrate during the school day.					
3. Learners who are supported at home tend to perform better at school.					
4. Learners' environments influence the way they think.					
5. Thinking ecosystemically allows us to get a better picture of a learner's behaviour and work skills.					
6. This way of thinking is time consuming and has very little positive outcomes.					

7. My group cooperated well in this session.					
8. I find I understand the work better when we work in groups.					

9. I understood the following:

10. I would like more help with understanding the following:

11. I found the facilitator

12. What other aspects would you like to be added to the content of this course?

13. What can be done to make the workshops more interesting / stimulating for you?

Evaluation sheet for workshop 3

Fill in the following sheet by ticking the appropriate block.

STATEMENT	<u>VERY</u> <u>MUCH</u>	<u>MUCH</u>	<u>NEUTRAL</u>	<u>LITTLE</u>	<u>VERY</u> <u>LITTLE</u>
1. Stressors at home/school can cause negative emotions.					
2. Some learners experience more emotions than others.					
3. If learners experience high emotion they often cannot concentrate or learn.					
4. Different stressors can affect learners differently.					
5. Adults can help learners deal with their negative emotions.					
6. Learners shouldn't think about home stressors at school.					
7. If learners are prepared for tests, they should not be anxious.					
8. High school learners should be able to express their anger verbally & not physically.					

9. Repressing / denying negative emotions can be bad for your mental health.					
10. Learners must keep their anger out of the classroom.					

11. I understood the following:

12. I would like more help with understanding the following:

13. I found the facilitator

14. What other aspects would you like to be added to the content of this course?

15. What can be done to make the workshops more interesting / stimulating for you?

Evaluation sheet for workshop 4

Fill in the following sheet by ticking the appropriate block.

STATEMENT	<u>VERY MUCH</u>	<u>MUCH</u>	<u>NEUTRAL</u>	<u>LITTLE</u>	<u>VERY LITTLE</u>
1. Learning difficulties are the result of learners learning differently.					
2. Learners do not listen correctly in class causing them to fail.					
3. Teachers sometimes teach differently to how learners learn.					
4. Poor successive processors struggle to pay attention to detail.					
5. Bad behaviour / laziness is caused by learners not being taught the way they prefer to learn.					
6. Poor simultaneous processors struggle to gain meaning from the work.					
7. Good successive processors achieve better results because they learn best from the way teaching is done these days.					

8. It is most learners' fault they don't do well.					
9. Learners must adjust their learning styles to suit my teaching methods.					
10. Poor successive processors struggle with spelling.					

11. I understood the following:

12. I would like more help with understanding the following:

13. I found the facilitator

14. What other aspects would you like to be added to the content of this course?

15. What can be done to make the workshops more interesting / stimulating for you?

Informal Reading Assessment

HOW TO DO AN INFORMAL READING ASSESSMENT

By: Elaine Harcombe

1. Choose 5 books in the learners' interest areas and some exciting stories:
 - Some learners only like stories, others like facts. Choose appropriately.
 - Check that the language is natural for the learner.
 - Check that the content is suited to the culture.
 - Check that the pictures and text are used in the context usefully.
2. The text levels need to vary in the choice of books i.e. from easy for the learner to difficult, so that you have an idea of what they can and cannot read. These levels are:
 - Independent: A book they can read without your help
 - Instructional: A book they can read with some support.
 - Frustrational: A book they cannot read, even with support
3. Have a small tape recorder in the room for the learner to read into.

4. PROCESS

- I. Ask the learner to choose one of the books for them to read to you and get them to do so into the tape recorder. Supply the words where necessary for meaning or if the learner asks. It is important to keep this process happy and moving so not to increase their anxieties.
- II. Then choose one of the other books that is opposite to the one chosen by the learner i.e. usually the learner chooses a book that is very easy for them to read. Therefore you choose one that is difficult for them or one that is grade appropriate. Once again get the child to read into the tape recorder. Assist them as you did before.
- III. Photocopy the relevant pages of the books that they have read. Listen to the tape recorder and record the learner's miscues in an acceptable manner. It is

important to write the learner's actual words they misread and not omission, etc.

5. Then ask the learner a few questions based on the book in order to establish whether they understood what they were reading or not. Remember to include:

Literal Questions: Things they can understand directly from the text.

Figurative Questions: Integrating information from the text

6. ANALYSIS

I. Work out:

Number of words read	100
Number of miscues	1

If the percentages is above 75% then it is grade appropriate or above.

APPENDIX C

Permission letter from Humanities Faculty.

Please refer to PDF file “permission from faculty picture 2.”

Permission letter from Department of Education

Please refer to PDF file “Permission from Department of Education Picture 3.”

Permission letter from School

Please refer to PDF file “permission from school picture 4.”

Subject Information Sheet

Dear teacher or Head of Department,

Invitation to participate in research at Westbury High School

My name is Nicole Blumenthal and I am presently completing my Masters degree in Educational Psychology at the University of Witwatersrand. I am conducting research on ways of identifying learning needs to suit learners with barriers to learning, using an ecosystemic approach. These needs were identified, as two of your important needs during the needs analysis meeting that was conducted on the 22 April 2004. I am aware that since the South African government has moved towards an inclusive policy in education, many educators would like further clarity on the identification and accommodation of learners' varying needs. It is hoped that participation in this intervention and study will be a collaborative experience for all parties, as all of us are informed on different aspects of the problem, and together should have resources to develop equitable and practical solutions. Participation in this research is purely voluntary and you may exercise your right to withdraw at any point throughout the process. In addition you have the right to not participate.

In order to implement the program and conduct the research I will be facilitating nine consecutive workshops, beginning in the third teaching term and running into the middle of the fourth teaching term, as was discussed at the needs analysis. These workshops will take place on Thursday afternoons, when school has concluded. The workshops will involve training on how to think ecosystemically and its application to identifying learning differences, understanding learners emotions and cognitions as well as learning how to assess informal reading; accommodating learning styles, emotions and developmental needs in an inclusive classroom.

Evaluation forms will be handed out at the end of most workshops so that the process can be evaluated and adjusted to suit your needs in your school. Teachers will be asked to access certain learner's records in order to facilitate learning, however, no names or identifying information will be utilized in order to ensure anonymity of the learners. Anonymity for you can only be assured in terms of the questionnaires, as no names will appear on the forms. Confidentiality is assured under all conditions, since the workshops will not be recorded in any way. However since you will know each other's identities, you may convey opinions in the course of the workshop.

In addition a few follow up workshops will take place early in 2005 to discuss if additional support is required. If it is I will liaise with other students for additional workshops, as Westbury is a site for ongoing research, at the university until the end of 2005.

I wish to invite you to participate in this process and look forward to our interaction.

Thanking you in anticipation,

Nicole Blumenthal (Ms.)
Cell: 084 440 9621

Elaine Harcombe (Supervisor)
(011) 717 8331
harcombe@umthombo.wits.ac.za

Example of the certificates issued

Please refer to PDF file “certificate example picture 5.”

APPENDIX D

Examples of evaluation form the participants filled in

Please refer to “evaluation form examples picture 6.”

Examples of Harcombe's EAGO the participants filled in

Please refer to "Harcombe's EAGO example picture 8."

Please refer to PDF file “Harcombe EAGO example picture 8.”

RESEARCH QUESTION 1: Was the EAGO effective in helping the participants identify learners' individual needs?

In order to answer this question adequately data was obtained using Harcombe's EAGO from workshop seven and eight and the follow up groups. Examples of these EAGO's can be found in the appendix on page 91-94. The themes for this research question were extracted from the above mentioned data.

Theme 1: Demonstrates the ability to fill in the EAGO effectively

Researcher's evaluative comments on the Ecosystemic Assessment Graphic Organisers

Group	Ecosystemic Assessment Graphic Organisers						
	Workshop 7	Workshop 8	Follow up group 1	Follow up group 2	Follow up group 3	Follow up group 4	Follow up group 5
A: Consisting of participant 1, 2, 3, 4, 5 and 6	- Life events not completed appropriately - No political structures filled in. - No socioeconomic status filled in. - Although filled in factors promoting and hindering development and learning as well as signs of stress, not adequately done.	- Life events adequately completed. - Political structures filled in inadequately - Economic and social structures filled in inadequately - No factors promoting or hindering development and learning as well as signs of stress filled in.	- Life events not completed appropriately. - Has developed adequate understanding of socialisation characteristics - No factors promoting or hindering development and learning as well as signs of stress filled in.	- A great deal of information was gathered for life events but not written down. - Not enough information gathered for learner's values and temperament - Not enough information gathered for factors promoting and hindering development and learning and signs of stress	- Although background information not filled in adequately, questions written down as to what information is still needed. - All information filled in adequately except for signs of stress. - Educators opinion of learner affected their ability to fill in the EAGO	- Background information filled in well. A lot of information was gathered on this learner but not all could be filled in. - Political structures need to be improved on.	Information gathered on the learner displays educators ability to understand and fill in the EAGO adequately.

Researcher's evaluative comments on the Ecosystemic Assessment Graphic Organisers

Group	<i>Ecosystemic Assessment Graphic Organisers</i>						
	<i>Workshop 7</i>	<i>Workshop 8</i>	<i>Follow up group 1</i>	<i>Follow up group 2</i>	<i>Follow up group 3</i>	<i>Follow up group 4</i>	<i>Follow up group 5</i>
B: Consisting of participant 7, 8, 9, 10, 11, 12	- Political structures not filled in appropriately - Economic and social structures not filled in. - Not enough information gathered on learner, such as his values, beliefs and temperament - No factors promoting or hindering development and learning as well as signs of stress filled in.	- Political structures not filled in appropriately - Economic and social structures not filled in. - Not enough information gathered on learner, such as his values, beliefs and temperament - No factors promoting or hindering development and learning as well as signs of stress filled in.	- Political, economic and social structures not filled in. - Not enough information gathered on learners, such as her temperament, motivation and learning styles. - No factors promoting or hindering development and learning as well as signs of stress filled in.	- Political structures not filled in appropriately - Economic and social structures not filled in. - Not enough information gathered on learner, such as his values and beliefs. - Although filled in factors promoting and hindering development and learning as well as signs of stress, not adequately done	- Political structures not filled in appropriately - Not enough information gathered on learner, such as his values, beliefs and temperament - Although signs of stress are filled in adequately, no factors promoting or hindering development and learning filled in.	- Political structures filled in adequately. - Signs of stress need more attention.	- Educators worked well together in order to gather information on this learner. - EAGO filled in well except for signs of stress

Researcher's observations

Initially the participants required a lot of assistance in filling out the EAGO and would continuously ask what each statement meant and what they were supposed to fill in. However, by the end of the fifth follow-up group the participants were able to fill in the EAGO's requiring little assistance. Thus, a noticeable shift was seen in how the participants filled in the EAGO for the learners. The participants were now able to understand the learners in a holistic manner. In addition, the participants were linking the workshops together. For example, they were linking the defence mechanisms to the learners' cognitive processing and maintaining that the learner was defensive against learning as they were not teaching according to that learner's cognitive processing style.

The participants were able to utilise each other's opinions and work collaboratively. They realised that it did not matter if they knew the learner or not, as they would be able to add value to the group anyway. If they knew the learner they were able to add information and if they did not know the learner they were then able to question the other members of the group. In this way further information could be obtained. In addition, they seemed to be hopeful about assisting the learners as they realised that the learners were not being 'lazy,' but were not being stimulated or assisted at home. They were therefore able to concentrate on methods of assisting these learners, such as utilising the Special Education Department at the University of Witwatersrand. All in all, the EAGO enabled the educators to effectively identify learning needs.

Theme 2: Ability to identify systematic interactions that are causing school failure.

Researcher's evaluative comments on the Ecosystemic Assessment Graphic Organisers

Group	Ecosystemic Assessment Graphic Organisers						
	Workshop 7	Workshop 8	Follow up group 1	Follow up group 2	Follow up group 3	Follow up group 4	Follow up group 5
Consisting of participant 1, 2, 3, 4, 5 and 6	Not enough background information was collected for this learner. Thus, the educators did not have an adequate understanding of the learner himself. Thus the educators were not able to identify the systematic interactions that were causing this learner to fail.	Although the educators display a better understanding of this learner as opposed to the learner from workshop 7, there is not enough information regarding the learner's life events. Thus the educators were still unable to identify the systematic interactions causing school failure.	The educators have started to gain an understanding of the systematic interactions that are causing school failure. This is apparent from the suggestions made by the educators. However, it is important to remember that the researcher facilitated this discussion.	Since the educators gathered a vast amount of information on this learner, they were able to understand her in an ecosystemic manner. Thus they were able to identify the systematic interactions causing school failure. Although the researcher facilitated for this focus group, her input was minimal.	The educators had an emotionally difficult day and were working on a particularly difficult learner. They therefore were able to gather the required information but struggled to identify systematic interactions affecting this learner.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.

Researcher's evaluative comments on the Ecosystemic Assessment Graphic Organisers

Group	<i>Ecosystemic Assessment Graphic Organisers</i>						
	<i>Workshop 7</i>	<i>Workshop 8</i>	<i>Follow up group 1</i>	<i>Follow up group 2</i>	<i>Follow up group 3</i>	<i>Follow up group 4</i>	<i>Follow up group 5</i>
B: Consisting of participant 7, 8, 9, 10, 11, 12	Not enough background information was collected for this learner. Thus, the educators did not have an adequate understanding of the learner himself. Thus the educators were not able to identify the systematic interactions that were causing this learner to fail.	Although the educators display a better understanding of this learner as opposed to the learner from workshop 7, there is not enough information regarding the learner's life events. Thus the educators were still unable to identify the systematic interactions causing school failure	The educators display a better understanding of the learner and begin to identify systematic interactions that are causing school failure. However, a vast amount of facilitation between the group and the research occurred in order to assist the educators understand the learner ecosystemically.	The educators required the researcher to facilitate the required information. Although the educators were developing an understanding of the systematic interactions that affect learners', they still needed to be guided.	Not much information was gathered on the learners' political, social and economic structures and temperament etc. However the educators were able to identify the systematic interactions causing school failure.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.

Researcher's observations

Initially, the participants utilised the Graphic Organisers as a means of communicating their frustrations about certain learners. During these sessions the participants identified the learner as being 'lazy' or having 'a negative attitude to life.' It was only when those participants were prompted to think about the causes of the learner's attitude that they were able to link the background information to the learner himself. Thus it was during the follow-up groups that the participants were able to start linking the systemic interactions to the learners. One participant commented that he had never had assistance with his homework, and he was confused as to why the same reason would affect other learners' ability to learn. When it was discussed the participant stated that he had never thought that different learning styles could affect learners' learning, and stated that perhaps the difference in learning, together with not receiving homework supervision, was causing the learner to fail. It was through conversations such as these that I was able to assess the ability of the participants to identify systematic interactions that could cause school failure with the learners.

RESEARCH QUESTION 2: Were the participants able to demonstrate an understanding of the concepts taught that underpin the EAGO?

In order to answer this question adequately data was obtained using the evaluation forms from workshop one, two, three and four, Harcombe's EAGO, focus groups and the researcher's observations. Examples of the evaluation forms can be found in appendix B on page 70 and 71 as well as 76-81 and examples of Harcombe's EAGO can be found in appendix D on page 91-94. The themes for this research question were extracted from the above mentioned data.

Theme 1: Ecosystemic approach to understanding learning difficulties

The following key applies to the presented table unless otherwise specified:

- 1 – Very much
- 2 – Much
- 3 – Neutral
- 4 – Little
- 5 – Very little

Participants' rating of the evaluation sheets

Participant	Evaluation Sheet 1		Evaluation Sheet 2		Total
	<i>Learner's who have a learning difficulty should be in a special school</i>	<i>Learning disability/dyslexia is a result of brain dysfunction.</i>	<i>Learner's who have a learning difficulty should be in a special school.</i>	<i>Learning disability/dyslexia is a result of brain dysfunction.</i>	
1	Very much (1)	Neutral (3)	Very little (5)	Neutral (3)	3
2	Neutral (3)	Little (4)	Neutral (3)	Much (2)	3
3	Much (2)	Little (4)	Little (4)	Little (4)	3,5
4	Neutral (3)	Much (2)	Little (4)	Much (2)	2,75
5	Much (2)	Little (4)	Little (4)	Little (4)	3,5
6	Neutral (3)	Neutral (3)	(absent)	(absent)	*
7	Much (2)	Neutral (3)	Much (2)	Little (4)	2,75
8	Little (4)	Much (2)	Much (2)	Neutral (3)	2,75
9	Much (2)	Neutral (3)	Very little (5)	Neutral (3)	3,25
10	Neutral (3)	Little (4)	(absent)	(absent)	*
11	Little (4)	Neutral (3)	Neutral (3)	Neutral (3)	2,75
12	Neutral (3)	Much (2)	Very much (1)	Very much (5)	2,75
Median	Neutral (3)	Neutral (3)	Between neutral and little (n = 3, 3)	Neutral (3)	

* As this participant did not attend the workshop, he/she cannot be rated in the score.

Researcher's evaluative comments on the Ecosystemic Assessment Graphic Organisers

Group	<i>Ecosystemic Assessment Graphic Organisers</i>						
	<i>Workshop 7</i>	<i>Workshop 8</i>	<i>Follow up group 1</i>	<i>Follow up group 2</i>	<i>Follow up group 3</i>	<i>Follow up group 4</i>	<i>Follow up group 5</i>
A: Consisting of participant 1, 2, 3, 4, 5 and 6	Not enough background information was collected for this learner. Thus, the educators did not have an adequate understanding of the learner himself. Thus the educators were not able to identify the systematic interactions that were causing this learner to fail.	Although the educators display a better understanding of this learner as opposed to the learner from workshop 7, there is not enough information regarding the learner's life events. Thus the educators were still unable to identify the systematic interactions causing school failure.	The educators have started to gain an understanding of the systematic interactions that are causing school failure. This is apparent from the suggestions made by the educators. However, it is important to remember that the researcher facilitated this discussion.	Since the educators gathered a vast amount of information on this learner, they were able to understand her in an ecosystemic manner. Thus they were able to identify the systematic interactions causing school failure. Although the researcher facilitated for this focus group, her input was minimal.	The educators had an emotionally difficult day and were working on a particularly difficult learner. They therefore were able to gather the required information but struggled to identify systematic interactions affecting this learner.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.

Researcher's evaluative comments on the Ecosystemic Assessment Graphic Organisers

Group	Ecosystemic Assessment Graphic Organisers						
	Workshop 7	Workshop 8	Follow up group 1	Follow up group 2	Follow up group 3	Follow up group 4	Follow up group 5
B: Consisting of participant 7, 8, 9, 10, 11, 12	Not enough background information was collected for this learner. Thus, the educators did not have an adequate understanding of the learner himself. Thus the educators were not able to identify the systematic interactions that were causing this learner to fail.	Although the educators display a better understanding of this learner as opposed to the learner from workshop 7, there is not enough information regarding the learner's life events. Thus the educators were still unable to identify the systematic interactions causing school failure	The educators display a better understanding of the learner and begin to identify systematic interactions that are causing school failure. However, a vast amount of facilitation between the group and the research occurred in order to assist the educators understand the learner ecosystemically.	The educators required the researcher to facilitate the required information . Although the educators were developing an understanding of the systematic interactions that affect learners', they still needed to be guided.	Not much information was gathered on the learners' political, social and economic structures and temperament etc. However the educators were able to identify the systematic interactions causing school failure.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.	The educators were able to complete the EAGO and identify the systematic interactions causing the learner to fail with no facilitation from the researcher.

Researcher's observations

It was evident at the beginning of the sessions that the participants were very entrenched in thinking that learners with barriers to learning should be separated from mainstream learners. During discussions, however, the participants were challenged on this way of thinking and slowly started wrestling with the idea that all learners should be placed in mainstream schools. The participants started to develop an understanding that external factors, such as economic conditions, parental interactions, background history and traumatic events can play a role in a learner having a barrier to learning, which is implied in the ecosystemic framework.

Theme 2: Emotions as a promoter or barrier to learning.

The following key applies to the presented table unless otherwise specified:

- 1 – Very little
- 2 – Little
- 3 – Neutral
- 4 – Much
- 5 – Very much

Participants rating of the evaluation sheets

Participant	Evaluation Sheet 3								Total
	Stressors at home/school can cause negative emotions	Some learners experience more emotions than others	If learners experience high emotions they often cannot concentrate or learn.	Different stressors can affect learners differently.	Adults can help learners deal with their negative emotions	If learners are prepared for tests, they should not be anxious. 1 – very much 2 – much 3 – neutral 4 – little 5 – very little	High school learners should be able to express their anger verbally and not physically. 1 – very much 2 – much 3 – neutral 4 – little 5 – very little	Repressing/denying negative emotions can be bad for your mental health.	
1	Very much (5)	Very much (5)	Very much (5)	Much (4)	Very much (5)	Very much (1)	Very much (1)	Very much (5)	3,875
2	Very much (5)	Very much (5)	Much (4)	Very much (5)	Very much (5)	Very much (1)	Very much (1)	Very much (5)	3,875
3	Very much (5)	Much (4)	Very much (5)	Very much (5)	Much (4)	Much (2)	Much (2)	Much (4)	3,875
4	Very much (5)	Very much (5)	Much (4)	Neutral (3)	Little (2)	Neutral (3)	Very much (1)	Very much (5)	3,5
5	Neutral (3)	Much (4)	Neutral (3)	Much (4)	Very much (5)	Much (2)	Very much (1)	Very much (5)	3,375
6	Very little (1)	Very much (5)	Much (4)	Very much (5)	Little (2)	Very little (5)	Much (2)	Neutral (3)	3,375
7	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Very much (1)	Very much (1)	Very much (5)	4
8	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Neutral (3)	Very much (1)	Very much (1)	Very much (5)	3,75
9	Very much (5)	Much (4)	Very much (5)	Very much (5)	Neutral (3)	Very little (5)	Neutral (3)	Neutral (3)	4,125
10	Much (4)	Much (4)	Neutral (3)	Much (4)	Very much (5)	Very much (1)	Very much (1)	Very much (5)	3,375
11	Very much (5)	Much (4)	Very much (5)	Much (4)	Much (4)	Little (4)	Very much (1)	Very much (5)	4
12	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Much (4)	Very much (1)	Very much (1)	Much (4)	3,75
Median	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Much (4)	Between very much and much (Between 1 & 2)	Very much (1)	Very much (5)	

Focus groups

Participant											
1	2	3	4	5	6	7	8	9	10	11	12
Group 1						Group 2					
Question: Write down as many defence mechanisms as you Remember? Answer: Denial, Projection, repression, undoing, displacement, Avoidance, recreation.						Question: What stresses did you or your learners have last week and what emotions or defence mechanisms sis you use? Answer: Homework, revision, tests and portfolios all caused the learners to be fearful, anxious and nervous. Arriving late to school, bunking, being absent, hungry and traveling to school made some learners happy and others sad. In addition it made them panic that they would be in trouble and they tended to avoid the teachers.					

Researcher's observations

The participants were very enthusiastic and excited about this workshop. They seemed to thoroughly enjoy the handouts as well as the information they received. They enjoyed looking at which defence mechanisms they use and continuously related the information to both themselves and their learners. It became evident that the participants understood how emotions could act as either a promoter or barrier to learning, and in the following workshop many commented on how much knowledge they had gained during the previous workshop. They added that they felt enriched during the week, as they were able to start understanding why the learners were behaving in certain ways.

Theme 3: Successive and simultaneous processing as a promoter or a barrier to learning.

The following key applies to the presented table unless otherwise specified:

- 1 – Very little
- 2 – Little
- 3 – Neutral
- 4 – Much
- 5 – Very much

Participants rating of evaluation sheet

Participant	Evaluation Sheet 4							Total
	<i>Learning difficulties are the results of learners' learning differently.</i>	<i>Teachers sometimes teach differently to how learners learn.</i>	<i>Poor successive processors struggle to pay attention to detail</i>	<i>Bad behaviour/laziness is caused by learners not being taught the way they prefer to learn.</i>	<i>Poor simultaneous processors struggle to gain meaning from the work</i>	<i>Good successive processors achieve better results because they learn best from the way teaching is done these days.</i>	<i>Poor successive processors struggle with spelling</i>	
1	Much (4)	Much (4)	Little (2)	Little (2)	Much (4)	Very much (5)	Little (2)	3,286
2	Very much (5)	Very much (5)	Much (4)	Much (4)	Much (4)	Much (4)	Much (4)	4,286
3	Much (4)	Much (4)	Very much (5)	Neutral (3)	Very much (5)	Much (4)	Much (4)	4,123
4	Very little (1)	Neutral (3)	Very much (5)	Neutral (3)	Neutral (3)	Neutral (3)	Very much (5)	3,286
5	Very much (5)	Very much (5)	Very much (5)	Much (4)	Much (4)	Very much (5)	Little (2)	4,286
6	Neutral (3)	Very much (5)	Very little (1)	Neutral (3)	Very little (1)	Neutral (3)	Neutral (3)	3,714
7	Very little (1)	Very much (5)	Little (2)	Very much (5)	Very much (5)	Very much (5)	Neutral (3)	3,714
8	Very much (5)	Very much (5)	Very much (5)	Much (4)	Very much (5)	Very much (5)	Neutral (3)	4,571
9	Very much (5)	Very much (5)	Very little (1)	Neutral (3)	Very much (5)	Very much (5)	Much (4)	4
10	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Very much (5)	Much (4)	4,857
11	Very much (5)	Very much (5)	Very much (5)	Much (4)	Very much (5)	Very much (5)	Very much (5)	4,857
12	Very much (5)	Very much (5)	Very much (5)	Much (4)	Much (4)	Very much (5)	Much (4)	4,571
Median	Very much (5)	Very much (5)	Very much (5)	Much (4)	Between much and very much (4 , 17)	Very much (5)	Much (4)	

Focus groups

Participant											
1	2	3	4	5	6	7	8	9	10	11	12
Group 1						Group 2					
Question: Write down as much information as you remember on successive processing? Answer: Successive processors think from the bottom up. This is the way most teachers teach. These people gather information in steps and are analytical. Simultaneous processors pay no attention to detail and they need to see the big picture before replying. They think from the top down.						Question: Write down as much information as you remember on Simultaneous processing? Answer: Simultaneous processors do not pay attention to detail and they cannot concentrate. They need to see the bigger picture before they are able to reproduce details. Their attention span is very short and they think from the bottom to the top. Successive processors are the opposite.					

Researcher's observations

I observed that the participants enjoyed learning about the different cognitive processing styles as they remained interested during the entire workshop, maintained concentration and attention, asked questions and linked it to their learners. This enabled them to better understand their learners and themselves. Although the participants were able to understand the different processing styles, it took them a long time to do so and many examples had to be used.

Theme 4: The participants' ability to establish links between cognitive processing and literacy development and the relationship to barriers to learning

Researcher's observations

The participants were organised into groups and asked to recall as much information as they remembered on each type of cognitive processing. The participants struggled initially to do so and required prompting from me. Once this was given they were able to recall the differences. Although some of the participants seemed to become anxious, it allowed me to link their emotions to the type of cognitive processing they use themselves.

One participant commented, "Does this mean that many of our learners are poor successive processors and this is the reason they spell badly." He added, "In what ways can then we assist them?" This then lead onto the informal reading assessment as a method to assess their reading and cognitive processing style. I noted the eagerness that the participants exuded during this workshop. The participants commented at how they were going to assess their children's reading and what an effective technique this was. In addition they were noticeably chocked at how easy the method was and that it did not require a standardised assessment to be purchased.

RESEARCH QUESTION 3: Were the participants able to demonstrate a shift from a medical model to an ecosystemic model of understanding barriers to learning?

In order to answer this question adequately data was obtained using the evaluation forms from workshop one, two, three and four. Examples of the evaluation forms can be found in appendix B on page 70 and 71 as well as on pages 76-81. The themes for this research question were extracted from the above mentioned data.

Theme 1: Ability of participants to demonstrate a shift from a medical model to an ecosystemic model of understanding barriers to learning.

The following key applies to the presented table unless otherwise specified

- 1 – Very little
- 2 – Little
- 3 – Neutral
- 4 – Much
- 5 – Very much

Participants rating of the evaluation sheets

Participant	Evaluation Sheet 1					Evaluation Sheet 2					Evaluation Sheet 3		Evaluation Sheet 4			Total
	<i>Sometimes a learner is battling to learn due to problems in his external world</i>	<i>Children who fail at school are too lazy to ask for help</i>	<i>The medical model helps us to understand learners' educational problems</i>	<i>Circumstances can cause children not to care about learning</i>	<i>Children who have a learning disability / dyslexia don't do well in school</i>	<i>Sometimes a learner is battling to learn due to problems in his external world</i>	<i>Children who fail at school are too lazy to ask for help</i>	<i>The medical model helps us to understand learners' educational problems</i>	<i>Circumstances can cause children not to care about learning</i>	<i>Children who have a learning disability / dyslexia don't do well in school</i>	<i>Learners shouldn't think about home stressors at school</i>	<i>Learner must keep their anger out of the class</i>	<i>Learners do not listen correctly in class causing them to fail</i>	<i>It is most learners fault they don't do well</i>	<i>Learners must adjust their learning styles to suit my teaching method</i>	
	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	1-Very much 2-Much 3-Neutral 4-Little 5-Very little	
1	Very much (5)	Neutral (3)	Very much (1)	Very much (5)	Very much (1)	Very much (5)	Much (2)	Very much (1)	Very much (5)	Neutral (3)	Very much (1)	Very much (1)	Little (4)	Little (4)	Little (4)	3
2	Much (4)	Neutral (3)	Little (4)	Much (4)	Neutral (3)	Very much (5)	Neutral (3)	Very much (1)	Very much (5)	Very much (1)	Very much (1)	Very much (1)	Much (2)	Neutral (3)	Neutral (3)	2,87
3	Very much (5)	Little (4)	Little (4)	Very little (1)	Little (4)	Very much (5)	Neutral (3)	Very little (5)	Much (4)	Little (2)	Neutral (3)	Neutral (3)	Much (2)	Neutral (3)	Very little (5)	3,53
4	Very much (5)	Neutral (3)	Neutral (3)	Much (4)	Little (4)	Much (4)	Neutral (3)	Much (2)	Very much (5)	Much (2)	Neutral (3)	Neutral (3)	Very little (1)	Neutral (3)	Neutral (3)	3,2
5	Very much (5)	Very little (5)	Little (4)	Very little (1)	Much (2)	Much (4)	Little (4)	Very little (5)	Much (4)	Much (2)	Much (2)	Very much (1)	Very much (1)	Little (2)	Little (4)	3,07
6	Much (4)	Very little (5)	Little (4)	Much (4)	Neutral (3)	(absent)	(absent)	(absent)	(absent)	(absent)	Neutral (3)	Neutral (3)	Little (4)	Little (2)	Very little (5)	*
7	Much (4)	Much (2)	Neutral (3)	Very much (5)	Neutral (3)	Much (4)	Little (4)	Much (2)	Very much (5)	Neutral (3)	Little (4)	Very much (1)	Very little (5)	Neutral (3)	Very much (1)	3,27
8	Very much (5)	Little (4)	Very much (1)	Much (4)	Very much (1)	Very much (5)	Neutral (3)	Very much (1)	Very much (5)	Very much (1)	Neutral (3)	Very much (1)	Very much (1)	Neutral (3)	Very little (5)	2,86
9	Very much (5)	Very little (5)	Neutral (3)	Very much (5)	Neutral (3)	Very much (5)	Very little (5)	Very little (5)	Very much (5)	Neutral (3)	Very little (5)	Neutral (3)	Little (4)	Very little (5)	Very little (5)	4,4
10	Neutral (3)	Very much (1)	Neutral (3)	Very much (5)	Neutral (3)	(absent)	(absent)	(absent)	(absent)	(absent)	Very much (1)	Very much (1)	Much (2)	Little (4)	Very much (1)	*
11	Very much (5)	Very little (5)	Neutral (3)	Very much (5)	Little (4)	Very much (5)	Little (4)	Neutral (3)	Very much (5)	Neutral (3)	Neutral (3)	Much (2)	Very little (5)	Very little (5)	Very little (5)	4,13
12	Very much (5)	Very much (1)	Much (2)	Very much (5)	Very much (1)	Very much (5)	Very much (1)	Very much (1)	Very much (5)	Very much (1)	Very much (1)	Much (2)	Neutral (3)	Little (4)	Very little (5)	2,8
Median	Very much (5)	Between neutral and little (Between 3 & 4)	Neutral (3)	Between much and very much (Between 4 & 5)	Neutral (3)	Very much (5)	Neutral (3)	Much (2)	Very much (5)	Between neutral and little (Between 3 & 4)	Neutral (3)	Between very much and much (Between 1 & 2)	Between much and neutral (Between 1 & 2)	Neutral (3)	Between little and very little (Between 4 & 5)	

Researcher's observations

At the beginning of workshop one it was evident that the participants had a medical model view of learning disabilities. They viewed learners with barriers to learning as being 'lazy' and having a bad attitude towards learning at school. They commented that they themselves had come from the same background as these learners, yet, they viewed the world and education differently. They added that the reason they needed intervention was to assist them on changing these learners' perceptions about life and education in general. This workshop allowed me to focus on listening and utilising the participants' background information in order to understand and assist them in understanding the differences between themselves and their learners.

When I arrived for workshop three I found the educators stressed and emotionally distressed. They commented about how they had had a difficult day with certain disruptive and 'disobedient' learners. This affected the results of workshop three as their emotions hampered their ability to understand the workshop.

Through the last four workshops and the follow-up groups it became evident that the participants had begun to shift their thinking from the medical model to the ecosystemic view of barriers to learning. Although the participants did not appear to have incorporated this thinking into their teaching methodologies, they were able to demonstrate an ability to understand the learners from an ecosystemic approach. For example, in analysing a learner, one participant commented that this learner lives with his grandparents who never completed their schooling. He added that the learner does not have his own bedroom as he shares with it with his cousins. He concluded that the learner therefore needs assistance with homework as well as having his own space to learn in the afternoons and suggested that the learner should perhaps receive homework supervision from one of the educators after school on the school premises. This was particularly useful information because this participant had discussed this learner previously, saying that the learner was merely 'lazy' and if the learner applied himself he could do better at school.

RESEARCH QUESTION 4: Were the participants able to understand and use the collaborative consultancy approach?

In order to answer this question adequately data was obtained using the evaluation forms from workshop one, two, three and four. Examples of the evaluation forms can be found in appendix B on page 70 and 71 as well as on pages 76-81. The themes for this research question were extracted from the above mentioned data

Theme 1: Participants perception of the researcher's learner-centred teaching style

Participants' evaluative comments on the researcher's teaching style

Participant	<i>Evaluation Sheet 1: I found the facilitator...</i>	<i>Evaluation Sheet 2: I found the facilitator...</i>	<i>Evaluation Sheet 3: I found the facilitator...</i>	<i>Evaluation Sheet 4: I found the facilitator...</i>
1	Very clear		Helpful, resourceful	
2				Better than previous weeks as today's discussion really got me going.
3	Great, clear and directed	Good		
4		Excellent	Stimulating, encourages participation and debate.	Stimulating, interesting
5	Very well informed		Explanations very satisfactory	Excellent
6			Knowledgeable and clear	
7	Pleasant and informative	Accommodating, well prepared, facilitating between groups.	Encouraging	Very explanatory
8	Very accommodating, very open. Uses practical examples to clarify some answers.	Very interesting and very helpful. Uses a lot of interesting ideas to make us understand.	Open and understanding	Very helpful and accommodative
9	Not only speaking but also gave us a chance to speak.	Okay, understanding	Helpful in explaining things, involves us all the time	Good
10	Very stimulating and encourages participation.		Informative, explanatory, exciting, friendly.	Satisfactory
11				Understanding, explaining
12	Very exciting and very well prepared, skilled and well read.	Very supportive, up-to-date, very helpful and very friendly.	Friendly, informative, well read, open and intelligent	Very informative, very friendly person

Researcher's observations

At the beginning of the workshops the participants would stop talking when I approached their group to facilitate discussions or ideas. It appeared that they were concerned whether I was going to correct or interrupt them, as an educator might do to her learners. After a few sessions, however, the participants continued to talk and included me in the discussion, or asked her a question. They appeared to be more at ease with the idea of facilitation and realised that I was merely there to stimulate further discussions or steer the conversation onto the right path. At times, the participants would use me to ask questions regarding their own children or learners, and during these times I would respond briefly and steer the conversation back onto the topic at hand.

Theme 2: Participants' perception of the researcher's knowledge and expertise

Participants' evaluative comments on the researcher's knowledge and expertise

Participant	<i>Evaluation Sheet 1: I found the facilitator...</i>	<i>Evaluation Sheet 2: I found the facilitator...</i>	<i>Evaluation Sheet 3: I found the facilitator...</i>	<i>Evaluation Sheet 4: I found the facilitator...</i>
1		More exciting and clear in her explanation of the guidelines.	Helpful, resourceful	To be informed in the field, interesting
2	Well knowledgeable and willing to further extend my current thinking or mid-frame. Let's hope the rest of the sessions go the same way.	Very well versed in today's topic. Always coming up with different scenarios for our group to work on.	Very well informed about today's subject	Better than previous week's as today's discussion really got me going.
3	Great, clear and directed		Informed, clear	
4	Well trained		Stimulating, encourages participation and debate	Stimulating, interesting
5	Very well informed		Explanations very satisfactory	Excellent
6	Very knowledgeable and excellent communicating skills. Presentation is clear and informative.		Knowledgeable and clear	
7	Informative	Accommodating, well prepared, facilitating between groups.		Very explanatory
8	Uses a lot of practical examples to clarify some answers.	Very interesting and very helpful. Uses a lot of interesting ideas to make us understand.		
9		Okay, understanding	Helpful in explaining things. Involves us all the time	Good
10	Very stimulating and encourages participation.		Informative, explanatory	Satisfactory
11				Understanding, explaining
12	Very exciting and very well prepared, skilled and well read	Very supportive, up-to-date and very well informed.	Informative, well read, open and intelligent.	Very informative

Researcher's observations

It was evident that the participants found me to be knowledgeable in the content covered in the workshops, as they continuously asked questions both related and unrelated to the topic of the workshop. Some participants would come early in order to discuss with me certain learners that were causing behavioural or academic difficulties. Other participants would stay after the workshop had ended and some would use the workshop for discussion of their learners' problems. I was always willing to provide answers and would ask whether she could reply to certain topics the following week, as she sometimes needed to gain further information in order to answer the participants' questions adequately.

Theme 3: Participant's perception of the researcher's constructive teaching style.

Participants' evaluative comments on the researcher's constructive teaching style

Participant	<i>Evaluation Sheet 1: I found the facilitator...</i>	<i>Evaluation Sheet 2: I found the facilitator...</i>	<i>Evaluation Sheet 3: I found the facilitator...</i>	<i>Evaluation Sheet 4: I found the facilitator...</i>
1	Very clear.	Clear n her explanation of the guidelines.	Helpful, resourceful	Interesting
2	Well knowledgeable and willing to further extend my current thinking or mid-frame. Let's hope the rest of the sessions go the same way.	Well versed in today's topic. Always coming up with different scenarios for our group to work on.	Very well informed about today's subject	
3	Great, clear and directed.	Good	Informed, clear	
4	Well trained	Excellent	Stimulating, encourages participation and debate.	Stimulating, interesting
5	Very well informed			Excellent
6	Excellent communicating skills. Presentation is clear and informative.			
7	Pleasant	Accommodative, facilitating between groups.		
8	Uses a lot of practical examples to clarify some answers	Very interesting and very helpful. Uses a lot of interesting ideas to help us understand.	Open and understanding	
9	Not only speaking but gave us a chance to speak.	Okay	Involves us all the time	Good
10	Very stimulating and encourages participation.		Exciting, informative, explanatory	Satisfactory
11	Great		Good	Understanding, explaining
12	Very exciting and very well prepared, skilled and well read.	Very supportive, up-to-date and very well informed. Very helpful and understanding.	Informative.	

Researcher's observations

The participants enjoyed the constructivist teaching style as it involved them participating in discussions and being part of the process. They commented that far too often people come to lecture them on certain methods and techniques and very often these people were unaware of the community with which they are involved. This resulted in their techniques not working, but they usually did not have the time in the lectures to report this. My teaching style allowed them to report anything that they felt was necessary, and in turn they felt part of the process. It also enabled them to construct new knowledge based on the knowledge they had to begin with, *a la* constructivist theory.

RESEARCH QUESTION 5: Were the participants able to use the collaborative consultancy approach to support each other when using Harcombe's EAGO?

In order to answer this question adequately data was obtained using the evaluation forms from workshop one, two, three and four. Examples of the evaluation forms can be found in appendix B on page 70 and 71 as well as on pages 76-81. The themes for this research question were extracted from the above mentioned data.

Theme 1: The ability of the group to work collaboratively

The following key applies to the presented table

- 1 – Very little
- 2 – Little
- 3 – Neutral
- 4 – Much
- 5 – Very much

Participants' rating on evaluation sheet

Participant	Evaluation Sheet 1		Evaluation Sheet 2		Total
	<i>My group co-operated well in this session</i>	<i>I find I understand the work better when we work in groups</i>	<i>My group co-operated well in this session</i>	<i>I find I understand the work better when we work in groups</i>	
1	Very much (5)	Very much (5)	Very much (5)	Very much (5)	5
2	Very much (5)	Very much (5)	Very much (5)	Very much (5)	5
3	Very much (5)	Much (4)	Very much (5)	Much (4)	4,5
4	Very much (5)	Much (4)	Very much (5)	Very much (5)	4,75
5	Very much (5)	Much (4)	Very much (5)	Much (4)	4,5
6	Very much (5)	Neutral (3)	(absent)	(absent)	*
7	Much (4)	Much (4)	Very much (5)	Very much (5)	4,5
8	Much (4)	Very much (5)	Very much (5)	Very much (5)	4,75
9	Very much (5)		Very much (5)	Very much (5)	5
10	Much (4)	Very little (1)	(absent)	(absent)	*
11	Neutral (3)	Very much (5)	Very much (5)	Very much (5)	4,5
12	Very much (5)	Very much (5)	Very much (5)	Very much (5)	5
Median	Very much (5)	Much (4)	Very much (5)	Very much (5)	

* As this participant did not attend the workshop, he/she cannot be rated in the score

Participants' evaluative comments on collaboration

Participant	<i>Evaluation Sheet 1:</i> <i>What can be done to make the workshops more interesting/stimulating for you?</i>	<i>Evaluation Sheet 2:</i> <i>What can be done to make the workshops more interesting/stimulating for you?</i>	<i>Evaluation Sheet 3:</i> <i>What can be done to make the workshops more interesting/stimulating for you?</i>	<i>Evaluation Sheet 4:</i> <i>What can be done to make the workshops more interesting/stimulating for you?</i>
1	More involvement from the rest of the group.		More group work	
2		More interaction would definitely be welcome.	More active group involvement	More active participation from the rest of the group
3	If all the educators participate in the discussions			
4				
5				
6				
7		More interaction		
8				
9		Nothing		
10				
11	Group work			
12				More ideas from different people

Researcher's Observations

I observed that the participants thoroughly enjoyed the group work activities. This was evident especially during the workshops where there was limited group work and the participants commented on how they “would have preferred to do more of the work in groups.” The group work seemed to assist those educators who had had a challenging day and were tired. It enabled them to sit back and listen or to get them involved, depending on the group they were in, i.e. to collaborate effectively.

Theme 2: The participant's perceptions of the researcher's facilitative and collaborative style.

Participants' evaluative comments on researcher's style of presentation

<i>Participant</i>	<i>Evaluation Sheet 1: I found the facilitator...</i>	<i>Evaluation Sheet 2: I found the facilitator...</i>	<i>Evaluation Sheet 3: I found the facilitator...</i>	<i>Evaluation Sheet 4: I found the facilitator...</i>
1	Very clear		Helpful, resourceful	
2				Better than previous weeks as today's discussion really got me going.
3	Great, clear and directed	Good		
4		Excellent	Stimulating, encourages participation and debate.	Stimulating, interesting
5	Very well informed		Explanations very satisfactory	Excellent
6			Knowledgeable and clear	
7	Pleasant and informative	Accommodating, well prepared, facilitating between groups.	Encouraging	Very explanatory
8	Very accommodating, very open. Uses practical examples to clarify some answers.	Very interesting and very helpful. Uses a lot of interesting ideas to make us understand.	Open and understanding	Very helpful and accommodative
9	Not only speaking but also gave us a chance to speak.	Okay, understanding	Helpful in explaining things, involves us all the time	Good
10	Very stimulating and encourages participation.		Informative, explanatory, exciting, friendly.	Satisfactory
11				Understanding, explaining
12	Very exciting and very well prepared, skilled and well read.	Very supportive, up-to-date, very helpful and very friendly.	Friendly, informative, well read, open and intelligent	Very informative, very friendly person

Researcher's observations

The participants informally voiced their approval regarding my collaborative approach. They pointed out that other consultants who had assisted the educators with problems they were facing tended to lecture them as if they were experts, and tended to assume that the educators have little or no knowledge on the topics. They explained that these 'lecturers' would come and talk on a topic and not ask whether they had any information to contribute. The 'lecturers' would discuss the topics from a basic understanding and at times the participants found this uninteresting as they already knew the information being conveyed. They added that during these times they did not participate, but rather attended the meetings in silence. The reason for this is that they feel that they have studied for a number of years and have some knowledge in their field, and that these 'experts' do not utilise their knowledge, but rather instruct them as how they can change or improve. The participants felt that this expert approach created a feeling of animosity on their part towards the presenters. They explained that they felt comfortable to participate in the current workshops presented by me, as they were aware that their input was important and useful to me. One participant stated that he "really enjoyed being part of the process as he felt his opinions were important." The participants agreed with this stating that they "were comfortable" to participate in the discussions as they knew their opinions were welcomed.