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A case study of a learner's transition from mainstream schooling to a school for learners with special educational needs (LSEN): lessons for mainstream education

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Currently there is an international shift towards inclusive education, a means of education according to which the learner is schooled in the least restrictive environment possible, to overcome his or her challenges to learning and development. Bearing this in mind we considered the experiences of a learner with learning difficulties who transited from a mainstream school environment to a school for learners with special education needs (LSEN). Inclusive education and ecological systems were the theoretical underpinnings of this study. The findings revealed that the learner benefited from placement within the LSEN environment on psychological, social, and academic levels. It appears that these changes occurred as a result of being placed in an environment that provided valuable and necessary resources to meet his learning needs, which were lacking in the mainstream school environment. Therefore, it seems that while inclusive education may be a way forward to access quality education for all, it can be argued that the current South African socio-economic environment does not necessarily allow for its successful implementation, as further access to resources and facilities need to be made available. These findings provide useful lessons at regulatory, infrastructural, and instructional functional levels for what is needed for learners with special education needs to succeed in mainstream school environments.

Keywords: case study; ecological; inclusive education; LSEN (learners with special education needs); mainstream; systems; transition

Introduction and background

South Africa's system of education has changed markedly over the last 14 years of democracy as human rights began to feature as a new cornerstone of the country's policy imperatives, extending it to include the right to education, free of discrimination and prejudice.

While the world moved towards inclusive education South Africa moved toward democracy and with this emerged a new Constitution of 1996 and a Bill of Rights outlining a right to access quality education, shifting (although not eradicating) previous discourses to welcome a rights discourse. This meant a change from the medical discourse, which considered the learner from a deficit perspective, to the rights discourse, according to which the learner's right to learn, is paramount. Consequently, the corresponding South African Schools Act of 1996, states that all learners have the right to learn and receive quality education to meet their unique needs. In 1996, the National Commission on Special Needs in Education and Training (NCSNET) and the National Commission on Education Support Services (NCESS) began a

process of research into the field of special education and identified the need to integrate the separate systems of education to form a single comprehensive system to meet the needs of all learners. Subsequently, White Paper 6 was published in 2001, which outlined a route for South African education to move into the international trend of inclusion.

Inclusion is defined by Engelbrecht and Green (1999:6) as: "A shared value which promotes a single system of education dedicated to ensuring that all learners are empowered to become caring, competent and contributing citizens in an inclusive, changing and diverse society". In South Africa, recent policy documents such as the Guidelines for Inclusive Learning Programmes (2005c) provide classroom strategies for educators to make this vision a reality. To this end, the Department of Education has begun the conversion of 30 specially selected primary schools (representative of each school district) that will be made fully accessible to meet the requirements of learners who experience barriers to learning as "full service" schools. This pilot project will inform future inclusive education models and will include the training and empowerment of educators to identify, assess, support and intervene with learners that require additional support (Department of Education, 2001). Further policies develop strategies for the practical implementation of the White Paper, within a South African context, as well as outline funding to extend resources to all schooling environments. Some of these documents include the Conceptual and Operational Guidelines for the Implementation of Inclusive Education, Full Service Schools (2005b) and District Support Teams (2005a), the Guidelines for Inclusive Learning Programmes (2005c), and the Guidelines to Ensure Quality Education and Support: Special Schools as Resource Centres(2005d).

In 2008, the National Strategy on Screening, Identification, Assessment and Support (SIAS) was launched, providing strategies for educators to implement the main elements of an inclusive education system in a collaborative working relationship with parents and learners. The aim of this policy is to improve access to quality education in South Africa, and include educators, parents and learners in the process of assessment, which is seen as a process to provide clarity on the support each learner requires, as well as provide guidelines for learner admission to special education environments, aiding in the placement of learners in the least restrictive environment (DoE, 2008a).

Consistent with the changes in policy, changes in ideology emerged. Firstly, the shift towards postmodernism sees the learner as an individual with assets (Landsberg, Kruger & Nel, 2005), as opposed to the modernistic view that the problem is within the learner, consistent with the deficit approach of the past (Becvar & Becvar, 1996:145). Lindsay (2003) cites the findings of a national UK-based study on the principles of inclusive education including the following: all children can learn; support is important for all learners who should be guided according to their own pace of learning. While this study may have been conducted overseas, the applicability to the South African context in terms of inclusion should be considered in line with the vision of White Paper 6 (2001).

At this stage it should be noted that we are proponents of the inclusive education model and have been instrumental in the writing and implementation of policies for the Gauteng Department of Education (GDE), as well as the training of stakeholders, teachers and support staff at departmental and tertiary levels. It is from this perspective that we seek to deepen their understanding of the resources required in the mainstream level of teaching to best support the learning and developmental needs of learners. Donald, Lazarus, Lolwana (2002:19) define support as help "from within schools as well as to schools in areas such as school, health, social work, psychological and learning support, speech and hearing and physio/occupational therapy; and from other community resources". This suggests that inclusive education should be a school wide approach, characterised by a sense of community within the school environment. As such we approached this study as a means to uncover efforts which LSEN schools made to support learners that led to their academic success. It was hoped that in doing this lessons could be learnt from LSEN schools for the benefit of learners with special education needs in mainstream schools.

In addition, we recognise that South Africa is still growing and developing in the field of inclusive education and it appears that while some have accepted the ideology of inclusion, the reality is that South Africa, as a developing nation, is not equipped with resources and facilities required to meet the needs of inclusion. This considered it is still the trend in this country to refer to more specialised environments to meet the learner's best interests in providing learning support, therapeutic interventions and general learner support that cannot currently be provided within the mainstream school environment. This paired with the fact that many of the government LSEN schools are subsidised (more so than within the mainstream school environment), it would appear that the school fees at mainstream schools may not be sufficient to provide the facilities and resources that would be required for LSEN. There is the advantage of having available practitioners on site (such as speech therapists, occupational therapists and psychologists) to meet learners' needs as part of the school fee structure without the pressure for parents to transport learners to and from therapy in the afternoons when many parents are at work, of which, Mike Munch (pseudonyms are used for the participant and schools) is a case in point in this study.

Mike Munch was a nine-year-old learner who began his schooling in the mainstream school environment in Fraternity Primary School, a former Model C government school in Gauteng. In Grades R and 1, Mike experienced difficulties in a number of areas, including socialisation, concentration, handwriting and reading. These difficulties continued into Grade 2, and began to have a significant impact on Mike's progress. As a result, he was referred for assessment to an occupational therapist and an educational psychologist. The findings of these assessments revealed that Mike experienced difficulties in visual perception, auditory discrimination, that he had poor fine motor skills as a result of low muscle tone, poor focus and concentration, below average

concrete and logical reasoning as well as a low self-esteem and social difficulties. After the assessments were completed, the Institutional Level Support Team compiled an Individualized Education Programme (IEP) to support Mike's needs. This programme included in-class support such as the use of a computer and computer-based educational programmes, tape aids and the use of additional materials in class. The programme also included weekly learning support lessons, paired reading in co-operative learning groups with older learners, and private occupational therapy, which was conducted outside of school hours. Further referrals to an audiologist and pediatric optometrist were made, but were not completed by the parents due to financial and transport constraints. A general visual assessment was conducted at school, revealing no difficulties. From these interventions, it appeared that while Mike made some progress in literacy (particularly through the use of reading and spelling programmes), he did not progress sufficiently across the literacy, numeracy and life skills learning areas in order to be promoted to Grade 3. Moreover, Mike required regular, intensive occupational therapy, as the weekly sessions proved to be insufficient. As a result, the support team at the school referred Mike to Denver School, a government school for learners with special education needs (LSEN).

Typically, Denver School was equipped to meet the learning needs of learners of average to above average intelligence who required support with specific skills in order to realise their potential (such as additional reading support, amanuensis, speech therapy and the like). This school provided learners with intensive therapy and learning support in a smaller classroom environment (Fraternity Primary's class sizes varied from 28–31 children in each class, and Denver School's class sizes varied from 14–18 learners), with specifically trained staff. Furthermore, the school provided on site occupational therapy and speech therapy, as well as social skills group classes and counseling. The school was located near the parents' home and school fees were affordable, comparable to those at Fraternity. In the light of this, Mike was referred to the LSEN environment, where we studied Mike's experiences of transition.

Theoretical perspectives of the study

According to Visser (in Duncan, Bowman, Naidoo, Pillay & Roos, 2007:104), "Changes in human behaviour may be possible when patterns of social and organisational relationships change, or the physical environment changes". While much literature exists to explain the transition from school to work or from the special school² environment to the mainstream school environment, not much national literature covers the transition from the mainstream school environment to that of the LSEN school environment. Miller and Rice (in Billington & Pomerantz, 2004:48) indicate that the transition is one of "temporary boundary crossing", where learners take with them their loyalties, cultural and organisational meanings from the existing system into the new system, where they are visitors until they can internalize this information into

the new system. These transitions have academic, vocational and social consequences and the educational environment of the school plays a major role in the efficacy of the transition. Learners entering into less supported environments, especially in terms of vertical transitions, experience negative selfconcepts, poor socialization skills, stress and anxiety (Chadsey & Sheldon, 1998 in Greene & Kochhar-Bryant, 2003:9). In this case, Mike Munch moved toward a more supported environment which (based on the above statement) may infer that supported environments should provide learners with the opportunity to develop positive self-concepts, socialize more and feel more comfortable and at ease. Greene and Kochhar-Bryant (2003) indicate that most transitions affect a person's self-concept, their motivation, as well as personal development. According to the website Parentline Plus, "how a child copes with change can very much depend on the kind of support he/she receives". Furthermore, research (Newman & Blackburn, 2002; Engelbrecht et al., 2001, Donald et al., 2002) indicates that resilience may also contribute to a child's ability to cope with change. Donald et al., (2002: 204) indicate that resilience assists people to cope with change and define resilience as the ability to cope with difficulties and "bounce back".

We considered that Mike did not complete this transition without support, but was embedded within a support system that catered for his different learning needs (for example, he received occupational therapy, counselling, learning support, home and classroom interventions). According to Bronfenbrenner's theory of ecological systems, "an individual exists within layers of social relationships: the family, friendship network (micro-system), organisational, neighbourhood (exo-system) and culture and society (macro-system)". Each layer has an impact on other layers in an interdependent way (Visser in Duncan et al., 2007:106). The fundamental assumption of this theory is that "behaviour is the result of an interaction between individuals and the contexts that they are exposed to" (ibid., 103). Levine and Perkins (1997:113) explain the relevance of this type of approach: "to understand a tree it is necessary to study both the forest of which it is a part as well as the cells and tissue that are part of the tree" (in Duncan et al., 2007:103). The research focused on each level within the school context as it influenced Mike. An ecological systems approach provided a frame of reference for understanding Mike's experiences during the transition. Trickett (in Duncan et al., 2007:110) says that:

To think ecologically is to consider how persons, settings and events can become resources for the positive development of communities; ... to consider how these resources can be managed and conserved; and ... to approach [interventions] so that the effort expended will be helpful to the preservation and enhancement of community resources.

Using Bronfenbrenner's ecological systems approach we considered Mike's experiences of transition from an ecological systems approach, considering different levels within Mike's context, which influenced his progress from an individual, school, home and community perspective. The findings of this research were aimed at theorising Mike Munch's experiences to consider how

resources could be concentrated in mainstream school environments in order to maximise learning potential to the advancement of the school and the learning community.

Research design

We chose to conduct this study as a qualitatitive, single case study, which, according to Handel, (1991); Runyan, (1982) and Yin, (1994) in Babbie and Mouton, (2001:280), is an intensive investigation of a single unit. This design is useful in gaining understanding of a circumstance within a specific context (Henning, Gravett & Van Rensburg, 2002; Lundeberg, Levin & Harrington, 1999). Mike's experiences of transition were considered within a natural context, which allowed for us to gain a close, in-depth, and first-hand understanding of a situation by using direct observations to collect data in natural settings and to consider the "real-life context" of the case, which was a naturalistic case study (Yin, 2001; Naumes & Naumes, 1999). In this instance, we wished to uncover the meaning and experience of the transition on the learner from the perspective of his context and frame of reference and the case study design allowed them to consider the case from different aspects in an in-depth way (Babbie et al., 2001:282; Richard, Taylor, Ramasamy & Richards, 1999). In this study we aimed to consider the case of Mike Munch in detail using a holistic, multiperspective analysis of this transition. The voices of the participants as well as their interaction were considered and compared to various theories and methodologies mentioned earlier (Tellis, 1997).

Data collection

Data were collected from the two different school environments to determine Mike's experiences in transiting from the mainstream school environment to the LSEN school environment. In the mainstream school environment, Mike's teachers were interviewed in a focus group session. The teachers were asked the following question: "What is your perception of Mike's experiences in the mainstream school environment?" Following the transition, the teacher, the speech therapist and the occupational therapist (referred to as the multidisciplinary team) were interviewed as a focus group. The question: "What is your perception of Mike's experiences in moving from the mainstream school environment to the LSEN school environment?" was asked so as to uncover more detail about the transition taking place between the two environments. The participants were informed that their responses should be based on their actual interaction with and experience of working with Mike. Following these questions, the participants were asked probing questions to elicit detailed information until a point of data saturation was reached.

Mike's father was interviewed individually, using the same question as posed to the multidisciplinary team, in order to determine his perception of the transition from the home and family perspective.

As Mike Munch was a young learner who experienced difficulty in expressing himself verbally, we chose to use projective techniques to facilitate data

collection. The projective techniques conducted in the mainstream school environment as well as within the LSEN school environment were analysed in order to determine changes in Mike's experiences over the period of transition. Projective techniques such as the Columbus Projective Technique, the Drawa-Person technique, the Kinetic Family Drawing, Incomplete Sentences and a Projective Sandtray activity were conducted with Mike. The Columbus Projective Technique is made up of pictures on cards that are presented to the learner. The learner must tell a story with a beginning, middle and an end to explain each picture. This data provided researchers with an understanding of the learner's development from a psychological perspective. The Draw-a-Person (DAP) technique is a psychological projective personality test. We asked the learner to draw a person then asked him a series of questions based on the drawing. The tester was thus able to gather information about discipline and structure at home, as well as information about the learner's self-concept. Information about the dynamics within the learner's family was gathered using the Kinetic Family Drawing. Mike Munch was asked to draw a picture of himself and his family doing something together. The interviewer asked questions related to the drawing or the activity and also interpreted the drawing. Finally the learner had to complete incomplete sentences such as "I wish ..." using the Brink Incomplete Sentences technique. We used the sand tray technique to gather information from Mike's perspective about his experiences and interpretation of the two so-called "worlds", that of the mainstream school environment and that of the LSEN school environment. Hence, Mike "created" the "world" of Fraternity Primary School in the sand tray, whereupon we reflected on the symbols used and asked questions about each symbol. Similarly, Mike "created" the "world" of Denver Primary School in the sand tray, after which we enquired about the symbols and their representation.

We video-recorded the focus group, individual interviews and sand tray session with Mike, and took photographs of aspects of the sand tray session. The data were transcribed and analysed as indicated below.

Data analysis

The analysis of data for this inquiry was an ongoing, reflective process. We used manuals of interpretation to interpret the projective techniques and then interviewed the learner to verify themes present in his drawings. Manuals of interpretation are manuals used to assist assessors in interpreting projective material in a standardized manner. We recorded the interviews, transcribed and coded them according to themes using content analysis. According to Babbie *et al.* (2001:388), content analysis is "essentially a coding operation", which considers manifest and latent content coding. During manifest content coding a researcher considers the explicitly stated content, whereas in latent coding a researcher considers the underlying meaning. We considered both the manifest and latent content uncovered in the data analysis and coded them accordingly.

Trustworthiness

Strauss and Myburgh (2001:59) outline four pillars of trustworthiness in a study, namely, credibility, transferability, dependability and confirmability. In this study, we gathered data regularly and consistently from participants. The different methods of data collection and data obtained from different sources were triangulated and coded by us, while we remained reflexive of our aims.

Ethical measures

We obtained informed written consent from the participants (the teachers and therapists) as well as from the two different schools, Denver and Fraternity, which participated in the study. In addition, we received informed written consent for Mike, granted by his parents, as he was a minor. We received assent from Mike to proceed with the study by explaining each activity to him and giving him choices in the use of the assessment material. In addition, participants were able to withdraw from the study at any time without penalty. Finally we protected the identities of participants and schools' in the study through the use of pseudonyms.

Discussion of results

Three major categories emerged through the data collection, namely, psychological experiences, social experiences, and improved academic performance. These will be discussed to integrate the voices of the participants.

Mike's psychological experiences

The research findings revealed that Mike experienced the following psychological changes as a result of his transition between the two schools: improved self confidence, increased motivation and greater independence. Firstly, his self confidence grew since moving into the LSEN environment. His teachers in the mainstream environment described him as: "quiet and shy", saying that, "he lacked the confidence", even indicating that this lack of confidence was "pervasive" to all areas in the mainstream environment, despite positive reinforcement and attention in class. His behaviour in the LSEN environment was quite different, as noted by his class teacher:

"Now he can, he speaks. He is not afraid to talk to anybody";

"I think that he feels that 'I am coping, I am one of the best' has increased his confidence, which helps him to say, 'ok, now I want to try something else' and that is why he initiates something better where he wouldn't have done that earlier in the year."

This is perhaps as a result of receiving praise in this environment for progress made on an academic level and because the learning material was presented at his level of academic ability, thus enabling him to cope and progress, allowing him to experience success.

Mike's sand tray revealed his confidence after the transition, which teachers indicated that he did not present in the mainstream environment. The incomplete sentences activity indicated that Mike was beginning to take initia-

tive and recognised his potential to make choices as a result of being more confident. He said, "I feel like giving up when I want to", whereas previously he said "I can't". This may be because of a different approach to schoolwork and practical tasks in the LSEN environment which better suited his learning needs. This change of approach included an adapted curriculum; improved teaching resources, increased individual attention in class and in extra language lessons with the speech therapist. Further to this, Mike was given responsibilities in the classroom and this gave him confidence to develop tools to approach other learners and speak in front of the class. His father noted this in other contexts such as Sunday school, where he is able to "talk and teach". This confidence has led to a change in his approach to tasks, as he is "willing to try new things and progress further" than he was able to before the transition.

Mike also became more motivated to work at Denver Primary School. In the sand tray Mike indicated that the crab said he "just did not want to work although [he] did not know why". He was motivated by the positive reinforcement and goal-orientation of Denver School, and the learning material was pitched at a level that Mike could understand. Hence he was able to engage meaningfully in learning tasks, which he found interesting. His father indicated that "he wants to do more when he is doing his homework … when he gets home he does his homework and then he likes to read. In other words, there is that motivation". As can be seen Mike's increased level of motivation manifested itself in an intrinsic desire to complete tasks at home and at school to demonstrate his mastery and increase his levels of achievement.

Further to becoming more confident and motivated, Mike has also become more independent. Data revealed that he needed assistance and supervision to complete tasks required in the mainstream environment, (his father noted that: "It was really hard for him to work by himself, like independently") but this changed in the LSEN environment over the year as noted by the occupational therapist: "Give him something and he can move on once he gets the idea and he can create on his own" and so "that much of support is not needed". At Fraternity Primary he sat in the front row in the classroom and required individual support to complete tasks, whereas at Denver School he sat near the back of the class and was able to work autonomously, as he was able to understand and proceed with the work without waiting for assistance from the teacher. It would appear that the individual attention Mike received in a smaller class environment, paired with different resources, manifested in a greater degree of independence, as he was able to move from the zone of proximal development and was able to complete tasks by himself (Thomas, 2000:150). According to Vygotsky, the zone of proximal development may be explained as the guidance given by a more experienced person so that "what a child can do with assistance today she will be able to do by herself tomorrow" (Vygotsky in Skidmore, 2002:65). His mastery of learning tasks and an increased level of confidence have helped him to feel more competent to work individually and act independently in academic, personal and social situations. Despite the emergence of the theme of independence, it appears that at times Mike was dependent on others and this created some conflict for him: "There is a door and they're selling in the bushes. They are selling flowers, toys and food. There is a small boy who lives there by himself. His brother helps. His brother lives with him, together" (Columbus Projective Technique, Card 24).

This indicates that while Mike is moving toward independence and autonomy, he had not yet moved away from dependence entirely.

Mike's social experiences

Mike became more sociable and began making new friends. According to Alerby (2003), relationships between friends are very important and can have positive or negative influences on childhood development. Fordham and Stevenson-Hindle (1999) indicate that friendships increase a person's self-worth, which has been noted in Mike's increased level of confidence in his ability to succeed academically, but also contributed to Mike's feeling of being accepted by his peers. It is apparent that Mike felt more accepted in the LSEN environment because he felt competent. According to Slee (2001:79), "the exclusion and 'othering' of young people in education is endemic". In mainstream education, the focus is often on the academic performance and meeting the expected level of performance of the grade, as opposed to the learner's individual needs, contrary to the Conceptual and Operational Guidelines for the Implementation of Inclusive Education: Full Service Schools (2005b:45) and Guidelines for Inclusive Learning Programmes (2005c:89), which indicate that educators should develop lesson plans based on learners' previous successes to ensure that they reach their potential, at their own pace. The educators in the mainstream environment indicated that Mike was excluded because he could not cope with the level and pace of work required: "it was difficult because he often did different things"; "he liked the older boys but he didn't really relate to his friends"; "he seemed to have an understanding that he was a little bit different to the others". However, when he was placed in an environment in which he was accepted and was able to achieve success, his father noted that he felt more at ease and was able to develop socially: "Now he is able to socialize, in other words, he can play with other kids. He has got friends *now*". The multidisciplinary team noted this improvement at Denver school. The occupational therapist stated, "Even on the playground, the confidence is there", as did the speech therapist who said

"he is a lot more confident in therapy, he used to just sit down and do his work, now he will sit and chat to Kevin in between. The other thing is that when one of the other two in the group don't know something, the other will be like 'ha ha, I know that', he never does that, he is proud of himself that he can do it and he will go on, but he never ever will make anyone else feel like they can't do something and he can".

In addition the multidisciplinary team integrated Mike into the class in small group therapy sessions that were oriented to teaching learners to develop social skills. These social skills gave him the tools to develop relationships with learners and as Mike was only expected to interact with a few learners

at a time, it was less anxiety-provoking for him. It appears that these formations of small groups contributed to the development of a class identity and a feeling of belonging for Mike.

Improved academic performance

Mike was referred to the LSEN School because he was not meeting the academic expectations of the mainstream environment as consistent with the Grade 2 curriculum and required greater support and consistent intervention. In the mainstream environment, his father noted that he found tasks like handwriting and workspace organisation difficult and did not cope with the academic curriculum: "he just found simple things difficult, especially things like handwriting and setting out his work" and "he found even organizing you know, his um, stationery and books and that difficult". However, the data collected from the LSEN environment revealed that he was better able to meet expectations set by the multidisciplinary team from an emotional, social and academic point of view, perhaps as a result of a graded approach to tasks, where levels were scaffolded according to his progress. His teacher stated that "constant input and the nurturing helps him to feel like okay, I am not that bad, I am okay". Mike used the crab figure that he created in the sand tray, to indicate that he was "the cleverest in Denver school and they (teachers) give him the hard work". In Fraternity the crab said "he did not know and was left to play and failed". This indicates that Mike had learned that by demonstrating previous knowledge, he was able to progress to more complex tasks, presenting higher expectations. However, one needs to note that the multidisciplinary team expressed concern that the expectations were still too low for Mike, as presented by the occupational therapist "... rather let them repeat in mainstream where the expectations are higher and where they can be pushed and they have the potential"; "sometimes they can do better in mainstream and not just here because the expectations are higher". This was probably related to the streaming of the classes, where Mike was performing at a higher level than the others (as he was in the lowest class) and not receiving sufficient additional work to meet his abilities. This may have slowed down his educational development and could have been avoided by placing him in another class with a quicker work pace or by reviewing his IEP sooner and introducing additional work to meet mainstream expectations while maintaining LSEN level resources and facilities. Hence plans are being discussed by the team to raise the expectations so that he could be encouraged to achieve more, as noted by the occupational therapist: "we must grade within the phase so that we are giving the kids that are here the maximum expectation so we can get as much as we can out of them".

Mike received additional support in Denver School, and this paired with the realistic expectations of his abilities enabled him to better meet the academic expectations in Denver School. This theme of support emerged strongly in both environments. Support in this context refers to academic (teachers), professional (occupational therapists, speech therapists and psychologists) as well as parental support. The teachers from the mainstream environment felt

that support was lacking: "... a lot of time was wasted waiting for the support. He needed more", and hence made the referral to the more specialised environment. The Department of Education's White Paper 6 states, "all children can learn and all children and youth need support" (2001:6). Thus it is the responsibility of the school and staff to provide support to learners where necessary and possible. This support in turn allows children to learn and reach their potential. In the LSEN environment, Mike had access to more support, which resulted in academic, physiological, emotional and social development as he progressed in language enrichment, occupational therapy, developed social skills, improved on his academic abilities and progressed in therapy, the occupational therapist noted that "It is a supported environment, he goes to Speech, OT and his teacher is working at his pace"; in addition his teacher said "they benefit from the nurturing and support that comes with the remedial school environment, the therapy support, the teaching support".

Mike required consistent input and intervention to meet his needs. In the mainstream school environment he received therapy on an inconsistent basis (as it was accessed privately and based on availability of transport and finances): "Mike was not going regularly (to therapy)" whereas at Denver this was scheduled regularly as part of the school day: "he receives input from the therapists twice a week and from me [the teacher]. It is not a case that just when I have time I give input". He was thus able to make more progress in a shorter period of time than in the mainstream school environment.

Discussion

Overall, the results indicate that on a psychological level, Mike became more confident, motivated and independent as he adapted to changes in the new learning environment. Socially, he made more friends and felt safer and more accepted in the new environment, whereas academically he experienced more consistency and structure at school, encountered different expectations and experienced increased support. From an ecological systems perspective one can see that Mike's personal experiences boosted his self-confidence and independence, which in turn improved his social relationships with peers, teachers and other family members. The changes he experienced at the personal and social levels also contributed to his academic achievements and *vice* versa. It is clear that the LSEN environment positively influenced Mike and he in turn influenced his environment — an essential component of ecological systems theory. In this case study it is also apparent that changes in the micro-systems level (in Mike, classroom), meso-systems level (family, peers) and macro-systems level (school, community, church) are all interdependent — another important aspect of ecological systems theory. Furthermore one may argue that a whole school development approach was necessary for Mike's positive experiences in the LSEN school environment — here all the teachers, therapists, the school support team and Mike's parents collaborated in supporting Mike to improve his learning ability.

Therefore we postulate that in order for learning to occur optimally in inclusive education the ecological system of the learner should be considered.

As can be seen from this case study, each level of the system supported Mike's progress. At the micro-system level, Mike was given individual attention in the classroom, the curriculum was adapted to meet his learning needs and additional materials were used to enhance his learning. In addition to this, Mike's teacher at Denver School was trained in providing learning support and was able to identify his difficulties and address those using different strategies. At the meso-system level, the teacher and multidisciplinary team guided Mike's family (particularly his father who was the primary care-giver in the afternoons) in giving Mike additional tasks that would improve his fine motor co-ordination, reading and speech. Mike grew emotionally and socially in Denver Primary School as he met new friends (who experienced similar learning difficulties) and this renewed sociability enhanced his confidence and self-esteem, as he was not "different" to the others. On a macro-systems level, the school's whole school approach (including their vision and mission statements and underlying ethos to support learners who experience barriers to learning and development) included Mike.

An analysis of Mike's experiences in transiting from the mainstream school environment of Fraternity Primary School to the LSEN school environment of Denver Primary School reveals that in order for learning to be optimized all levels of the system of the learner need to be considered and utilized by the school. White Paper 6 (2001:6) indicates that inclusive education and training is defined as "acknowledging that learning also occurs in the home and community and within formal and informal settings and structures". Educators need to draw on this and develop support at each level of the system, from the individual through to the district level. In light of this, we have chosen to make recommendations for mainstream classrooms based on the case of Mike Munch.

Recommendations

While we remain supportive of the policy of inclusive education, it seems that South Africa's mainstream school environment does not yet provide the necessary structure to address learners with special education needs adequately. The case study of Mike Munch has revealed experiences that have had positive consequences in terms of his development and learning in the LSEN environment.

We propose that certain lessons could be learnt from Mike's experiences in the LSEN school to facilitate inclusive education in mainstream schools. We argue that this could be best accomplished through an integration of Mike's experiences into the following three levels of functionality: regulatory, infrastructural, and instructional. However, we caution that by no means do we intend to generalise Mike's experiences to that of other LSEN learners noting that this is just a single case study.

Regulatory functionality

The policies, procedures and governance of inclusive education need to be based on South Africa's current socio-economic reality, which means consi-

dering access to quality care (which includes resources that provide learner support to facilitate progress such as learning support material, adaptations to the curriculum, professional support and the like) on a regular basis for learners that require intervention, taking into account transport cost, the availability of resources as well as the cost of these services.

In the LSEN environment, Mike received support such as more individual attention from a teacher trained in special education. He also had access to a teaching assistant. He received therapy from specialist staff on a regular basis. In addition to this, the staff within this environment were required to meet regularly as a multidisciplinary team and liaise with parents with regard to the learner's development.

These experiences highlight the need for staff training and development to prepare teachers for inclusive education as well as to equip them with the skills to identify learning barriers, how to address these barriers and the skill to grade tasks to provide for mastery and achievement of the learner, regardless of their level of ability. The Conceptual and Operational Guidelines for the Implementation of Inclusive Education: District Support Teams (DoE, 2005a) clearly outlines the need for training of educators to support learners in overcoming barriers. The school management and stakeholders should be involved in this training, which can be provided by non-governmental organizations, public service, District Support, and may be offered as formalized in-service training or workshops but also informally, based on teachers' every-day experiences (DoE, 2005a). We suggest that this training (formal or informal) could form part of weekly meetings to develop the staff as a collaborative team. Moreover, this training could be evaluated using the Integrated Quality Management System (IQMS), to evaluate teachers according to their classroom management, performance and training expertise, which qualifies them for an annual monetary bonus.

While the SIAS document proposes the involvement of parents in the education of their children, further provision should be made at a school policy level to enforce this. Initially this could include a parent-teacher devised IEP to meet the learner's needs using the resources that are available. Thereafter, regular meetings with parents or caregivers should be held to determine progress according to this plan. Further to this, formal individual parent meetings should be held as opposed to the present trend of parent evenings, where parents are not afforded the time to speak to the teacher at length regarding their child's progress and performance. The Guidelines to Ensure Quality Education and Support: Special Schools as Resource Centres informs parents of their rights, and this information should be disseminated to parents to empower them in their decision-making and involvement in their child's education (DoE, 2005d). As a result of parental involvement, Mike was able to make progress quickly in his transition into the new environment. Therefore, further policies facilitating greater flexibility of referral to more restrictive environments may result in a more efficient process of addressing barriers to learning and development.

We are cognizant of the fact that while we make recommendations of parental involvement to facilitate effective learning and development, the current South African context presents many challenges in this regard. For many reasons, South African parents are often unable to be actively involved in their child's learning, sometimes due to financial, transport or logistical factors. In addition to this, South Africa has a high rate of child headed households, due to children being orphaned (Pillay & Nesengani, 2006, Streak, 2006). In the light of this, we recognize that parental involvement may not be possible in all cases, but should be encouraged to facilitate learner development. The Guidelines for Inclusive Learning Programmes (2005c) suggest strategies for including parents in the curriculum or support of learners where possible. According to Landsberg *et al.* (2005:459), "parents and teachers working together can produce more effective changes in a learner's behaviour than either party can when grappling with the problem alone."

Where there is little or no parental involvement, we suggest that extra classes be made available to learners, so that they are guided in a library programme and school facilities are made available for homework in the afternoons, so that learners may have additional support from teaching/administrative library staff to guide their work. Furthermore, caregivers or community workers can become involved through community service projects, where additional academic, emotional or social support can be provided to enhance learning (for example, paired reading initiatives, co-operative learning strategies, homework classes and social skills training).

Infrastructural functionality

Mainstream schools require similar resources and facilities in order to meet learning needs as the current LSEN environment provides. Within the LSEN environment, Mike was afforded the privilege of on-site therapists, a remedial teacher and a wealth of support materials to aid learning. For this to happen in mainstream schools greater funding for Learner Teacher Support Material (LTSM), to provide teachers and learners with different means to learning tasks at different levels in the most appropriate way, will be needed. Moreover, infrastructural functionality includes the provision of human resources, so that mainstream schools have access to multidisciplinary therapy teams to meet the needs of learners. This would mean that offices, group therapy rooms and equipment would be required on site so that therapists can offer social skills groups and individual or group therapy sessions on a regular basis during the school day. Alternatively, mobile therapist clusters could be formed to service different schools within Education Districts to assess and intervene where learners experience learning difficulties as well as to support teachers in meeting learner needs within the classroom.

While this would be the ideal for all schools, White Paper 6 (2001) makes provision for these materials to be provided at resource centres that will be designated to provide material and support to schools in the area to facilitate inclusive education.

Instructional functionality

As noted, teachers require training in order to meet the needs of learners. The Guidelines for Inclusive Learning Programmes (2005c) propose that teachers

use multi-level teaching strategies and accommodate multiple intelligences and various learning styles in their teaching.

Mike was afforded the opportunity to develop in a smaller classroom environment which allowed for more individualised attention from the teacher as well as the teaching assistant. Also, the teacher had training in learning support and this paired with the approach of the school facilitated the development of an IEP with emphasis on the learners' style of learning as well as strengths. These assessments conducted by the therapists who could assist in the development of such programmes informed the programme. Similarly, the smaller classroom environment and multidisciplinary meetings lend themselves to positive reinforcement of learner achievement as well as delegation of duties to learners that could be supervised adequately within a classroom environment.

Approaches should include a multiple intelligence perspective, so that learners are taught using a variety of learning strategies to meet a variety of learning needs. This (together with effective classroom management techniques) should be tailored to positively reinforce the learner in a classroom environment. There should be a shift from punishment for poor behaviour to reward for good behaviour that will motivate the learner to behave well as opposed to simply avoiding behaving poorly.

In addition, teaching assistants are necessary, particularly in the mainstream school environment where the class size is much greater than that of the LSEN environment. Where possible, it may be appropriate to group learners according to their activities or work pace. Further to this, stronger learners may be called upon to assist weaker learners. Similarly, co-operative learning strategies could be used since they are likely to increase socialization in groups where learners function on the same level.

Individual Education Programmes should form the basis of lesson planning for each learner's achievement and these should be plotted onto a graph to determine learner progress and development. It is important to eliminate a "ceiling of achievement" where the expectations fall below the learner's abilities.

Teachers should give learners special responsibilities in the classroom as was the case with Mike. This may include allocating duties to learners or providing them with the opportunity to engage in different tasks in order to learn responsibility and build on their strengths. In addition it is important to establish a sense of community in the classroom so that learners feel accepted. Learners should be made to feel that they belong. Finally, the classroom and school day should be structured and predictable for learners, with routines that provide them with a sense of security.

Concluding remarks

The case study has served to inform us (and the reader) of the experiences of a learner in transiting from a mainstream school environment to an LSEN school environment, from which we learnt valuable lessons. These lessons have been framed as recommendations based on regulatory, infrastructural

and instructional levels of functionality. These levels are appropriate for an ecological systems approach, which we believe was instrumental in bringing a holistic understanding of Mike's psychological, social and academic experiences. While we have used Bronfenbrenner's model to frame Mike's context, it should be noted that this model has limitations. One of the primary limitations noted by Engler (2007) is that the model neglects the important influence of resilience in overcoming adversities that may be present in the system. As a result we have considered resilience as an additional factor that may have assisted Mike to cope as part of his own sense of agency.

We reiterate our support of inclusive education but argue that its full implementation in South Africa at this stage requires greater economic investment and greater consideration of the ecological system and resilience of the learner. While some may argue that the recommendations we have made are out of reach for the average South African school, we indicate that the present government has allocated more funding for education so resources could be mobilised and used to the benefit of learners such as Mike Munch. Furthermore, many of the policy documents mentioned in this article provide the opportunity for learners such as Mike to be supported in mainstream schools.

We acknowledge that the study is limited to a single case and reiterate that the findings cannot be generalised to other learners with special education needs. However, a more detailed study of a similar nature with more participants would probably add value to the lessons that could be learned about implementing inclusive education in mainstream schools. This should be considered, as the number of LSEN schools in South Africa is limited, resulting in few learners having access to this type of education. It should be noted that this study is not focused on the reintegration of learners into mainstream environments following LSEN intervention, but rather the lessons to be learned from LSEN environments (which promoted psychological, social and academic development in this case) to inform mainstream learner support and to promote the success of inclusion. We feel that if these lessons manifest in mainstream school environments, the reintegration of learners such as Mike Munch may be possible and successful and South Africa may take a further step towards realising the dream of inclusive education.

Notes

- The term "learners with special educational needs" (LSEN) refers to learners who, for whatever reason, need additional help and support in their learning (Western Cape Education Department, 2008:2).
- Schools equipped to deliver education to learners requiring high-intensive educational and other support either on a full-time or a part-time basis (DoE, 2005c:5).

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