A Whole School Development Paradigm in Inclusive Education: A Case Study in the Vhembe and Umlazi Districts

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KEYWORDS Eco-systemic Perspective. Structural Cognitive Modifiability. Teacher Attitudes

ABSTRACT The study focuses on inclusive education (IE) and concomitant challenges or special education needs experienced in two rural schools in the Vhembe district and five urban schools in Kwa-Zulu Natal. The learners who have “special educational needs” are those children with challenging behaviour, children with intellectual disabilities, those with learning disabilities, physical disabilities, sensory disabilities, autistic spectrum disorders and children with medical conditions. A modified LSEN (Learners with Special Educational Needs) questionnaire was given to two schools in Vhembe district and the data was analysed quantitatively. The LSEN questionnaire was further modified and used as interview questions which were conducted in five schools in KwaZulu–Natal (KZN). The data was analysed quantitatively and qualitatively for the Vhembe schools and the Umlazi respectively using a dual framework: the Eco-systemic perspective and Feuerstein theoretical framework. The results indicate that teachers are inadequately trained for IE. Infrastructure and teacher attitude exacerbate the implementation of IE at mainstream schools. Further government and parents are the keepers of IE policies and therefore must ensure schools adhere to these policies.

INTRODUCTION The development of IE may be seen as part of the Education for All (EFA) campaign by UNESCO when they declared that education enables people to live with dignity, develop their full capacities, participate fully in development and improve the quality of their lives. It also has a role to play in promoting ‘the ideals of peace, freedom and social justice’ (UNESCO 1996; Miles and Singal 2010). Inclusive Education is based on providing education that is appropriate to the individual needs of children, irrespective of the cultural, socio-political and economic backgrounds. It also aims at providing quality education to learners with learning barriers, whether these barriers are physical and/or cognitive. Two watershed conferences, namely the Jomtien conference in Thailand in 1990 (Ahuja 2005) and the Salamanca conference in Spain in 1994 (UNESCO 1994) led to the development of an international policy document on special needs education.

The South African government is promoting a society where human rights are supreme and diversity is celebrated and embraced. The change to an inclusive education system is part of the government’s initiatives to eradicate all forms of injustice from all sectors of society (Landsberg et al. 2014). The education system is a reflection of society in general. The values of society shape education and education can be employed to shape the values within society. Most importantly as emphasized in the Index to Inclusion (Booth et al. 2011), inclusion is a commitment to particular values which account for a wish to overcome exclusion and promote participation. Booth et al. (2011) further state that values are fundamental guides and prompts to action which give a sense of direction and define a destination. Thus, the pursuit of Inclusion is not represented by conformity or “instructions from above” (Booth et al. 2011).

In 2001 the government published the White Paper No.6 on Inclusive Education. This government’s approach to IE is more encompassing and in keeping with the Salamanca agreement in that the White Paper does not restrict the meaning of inclusion to those with or without disabilities. It mentions ameliorating barriers such as gender, race, disability, health (HIV positive people), language, and socio-economic standing. This is in line with the Constitution of South Africa (Act 108 of 1996) that promotes equal rights and access to all its citizens. The White Paper No. 6 proposed a 20 year strategy for implementation of a fully inclusive educational system. The implementation was not envisaged to be easy (Engel Brecht et al. 2001).
Theoretical Framework

To analyse the data of the study two frameworks were utilised. The first was the eco-systemic perspective which aims at analysing the implementation of IE in schools, and the second is the Structural Cognitive Modifiability Model developed by Feuerstein, which looks at why IE should be encouraged and promoted. The reason these two frameworks have been chosen is because of the predominance of two models of inclusion such as the medical deficit model or the social model, which defines disability as caused by barriers that society creates for an individual and thus imploring society to change its practices to meet the individual’s needs, which is in keeping with the eco-systemic perspective (Sharma and Das 2015).

Eco-systemic Perspective

The framework that was adopted for this small scale study was the eco-systemic perspective (Donald et al. 2010). This perspective was developed as a combination of the ecological and systems theories. It aims at explaining how different people and organisations are interrelated and interact. For the purposes of this paper, this perspective, as it is related to the school and the classroom will be briefly discussed.

Whole School Development and Inclusion

Whole school improvement is a dynamic process that requires commitment from the entire school community (Hawe et al. 2015). Schools will always have strengths as well as areas for improvement. It is important that schools prioritize their growth areas with the ultimate goal being to maximize student performance. The level and effectiveness of the interaction in the classroom is determined by the various other parts of the system. Davidoff et al. (2002) list the various components of the whole school development (WSD) paradigm that must be examined when assessing whether a school is an inclusive school: Social context, the culture of the school, the school’s identity, the school’s strategy, its structures and procedures, the technical support it receives, its human resources, and leadership, management and governance.

These various components of WSD may be reduced, for the purposes of this study into two broad categories: Human Resource Development – which will interrogate the attitudes of staff, their experience, training and the management of the process; and the infrastructure, which will cover areas such as physical facilities on the campus as well as learning aids for learners with special needs.

The eco-systemic perspective expects that development and intervention should be both people centred (developing people skills and knowledge base) and environment centred (developing policies, resources and processes of the school) and it should invite dialogue.

The people centered/psychosocial environment is the culture and milieu that reflects the general ethos of inclusivity. The environment needs to be free of prejudice and negative attitudes. Relationships need to be based on mutual respect and sensitivity towards other people and their cultures, beliefs and learning barriers. Fullan (1992) describes staff development as the process that is meant to improve the skills, attitudes, understanding and/or performance of teachers. Donald et al. (2007) elaborate that although initial training is important for an educator, continuous in-service education is just as if not more important to keep teachers in touch with the latest trends as well as to enskill them to cope with changes in education. Principals in effective inclusive schools believe that there should be “a broad range of opportunities for learner centered professional development” to provide teachers with assistance in promoting IE (McLeskey and Waldron 2015).

The Physical Environment/Infrastructure refers to the entire school campus and includes whether there is access to the buildings and grounds for people with disabilities or limited mobility. It also looks at issues such as lighting, enlarged prints, placement in class and ablution facilities.

Feurstein Theory of Brain Plasticity

The brain can be shaped and even increased through various kinds of interventions (Detterman et al. 1982 as cited in Kozulin et al. 2000). This modern belief coincides with Feuerstein’s theory of Structural Cognitive Modifiability which does not see intelligence as static or fixed. With mediation, the brain can be shaped and there is room for cognitive modifiability. With
knowledge in Inclusion Policies and practices and the theory of structural modifiability we want to ascertain whether there can be a paradigm shift in teachers thinking and attitudes towards learners who have barriers to learning and whether teachers will change.

Neurosciences have also generated compelling evidence about neuroplasticity. The plasticity of the brain lies at the basis of cognitive modifiability which is highly dependent on the amount and quality of interactions with the human environment—ecology—of the individual (Lebeer et al. 2008). The new findings on brain functioning depict the brain as a constantly changing system, changing structurally and functionally, as a response to its environment, depending on activation and mediation and this has some important implications for education, rehabilitation and child guidance (Lebeer et al. 2008).

Research Objectives

To develop a set of indicators for IE in the Vhembe and Umlazi districts with the following objectives:

- To monitor developments in IE
- To provide coverage of selected areas in IE
- To identify key areas in IE where further work needs to be done

METHODOLOGY

This study used an integrated approach utilising both qualitative and quantitative methods to glean information from the educators in the study so that a clearer picture will be derived (Leedy et al. 2005). Selective sampling of schools was performed in terms of rural and urban environments and being previously disadvantaged. Quantitative and qualitative study was performed on the Vhembe rural schools and the urban Umlazi schools respectively. The qualitative study on Umlazi schools was motivated by the fact that the schools were situated in an area where IE is being implemented.

From the literature above and theoretical framework six indicators were identified for the IE study viz policy, implementation, classroom management, teaching and learning, role of special schools, teacher training.

Quantitative Study of Vhembe Schools

A sample of 2 schools was taken from Vhembe district in Venda. The schools were comprehensive and co-educational. Schools were primary and secondary schools.

A questionnaire was administered to the sample and the teachers were given opportunities to elaborate on their answers during the structured interview.

The quantitative study used the survey method for schools in Vhembe district. The survey was based on a study by Nel (2011). After a pilot study the survey consisted of a modified LSEN questionnaire constructed in terms of the theoretical framework and conditions existing at the schools. These questions were categorised in the following indicators: Policy issues, implementation of IE in school, classroom management, role of special schools, teacher training, and teaching and learning. The questions affirmed the IE concepts and principles. The responses were tallied in terms of a Likert scale.

Each teacher was given a questionnaire to complete. They were informed about the objectives of the study and were also given the assurance that their participation was voluntary, in confidence and would not prejudice them in any way. The teachers were also informed that they may decide not to answer certain sections or choose to withdraw from the study at any given time. The researchers also promised to provide a summary of findings to the participants.

Qualitative Study in the Umlazi Schools

Qualitative study was used for forty educators who were selected randomly. Forty educators were interviewed clinically. The interview was recorded using a tape recorder and paper and pencil responses. The responses were evaluated qualitatively using the theoretical framework expounded above.

The qualitative study included personal details, training, teaching learners with special educational needs, infrastructure, in service training for special education needs and teacher attitudes. The interview questions consisted of three questions from each category from the LSEN questionnaire. The interviews were recorded and then transcribed. They were then collat-
ed in terms of the categories and related questions.

RESULTS

Two Schools in the Vhembe District

The completed questionnaire data was tabulated as percentages below using the LSEN 6 indicators and Likert scale as follows:

1- strongly agree
2- agree
3- undecided
4- disagree
5- strongly disagree

Since the questions under each category affirms the IE concepts and principles, for the purpose of the study, it was convenient the researchers class 1 and 2 as “agree” and 3, 4 and 5 as “disagree” in the Likert scale. Hence from Table 1 the researchers deduce the following:

1. Policy: Approximately 54 percent “agree” on the policy issues but 46 percent “disagreements”.
2. Implementation: 49 percent agree on the implementation and 51 percent disagree
3. Classroom management: 45 percent agree and 55 percent disagree
4. Role of special schools: 51 percent agree and 49 percent disagree
5. Teacher Training: 48 percent agree and 52 percent disagree
6. Teaching and Learning: 49 percent agree and 51 percent disagree

Five Schools in the Umlazi District

The interview protocols were analysed using the following indicators: Age, Training, teaching LSEN learners, infrastructure, in service training and teacher attitudes. Excerpts of the interview were recorded if it reveals further dimensions to the study.

Personal Details

Age Range

Fifty-six percent of the respondents were over 40 years of age. This could herald a limited time for a majority of the teachers who are being trained in ELSEN as they would retire before the targeted date for White Paper 6. This is succinctly articulated by Teacher X who stated that: “It’s all very well that we have to start this process, but the younger teachers are not being trained in college or varsity and there will be a huge gap when we start leaving the profession.”

Training

Highest Qualification

Table 2 indicates highest qualification of respondents.

Qualification in Teaching Special Needs Education

The researchers deduce only 20 percent (of the teachers have furthered their studies beyond the basic diploma/degree to post graduate level and noted only 5 (12.5%) have some qualification in special needs education (Table 3). There should be some concern that so few teachers are professionally trained to teach LSEN.

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching diploma (M+3)</td>
<td>13</td>
<td>32.5</td>
</tr>
<tr>
<td>Teaching degree (M+4)</td>
<td>19</td>
<td>47.5</td>
</tr>
<tr>
<td>Post graduate diplomas</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Honours degree or higher</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response option</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>87.5</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>100.0</td>
</tr>
</tbody>
</table>
It should be stated that during the interviews, teachers with longer training (n =8) have a better attitude to inclusion as a practice.

**Teachers’ Awareness of the Department’s Policies on Inclusive Education**

An alarming 42.5 percent of the educators interviewed in this pilot study did not have any knowledge of the department’s policies on inclusive education, and yet most of these teachers (97.5%) have learners with some learning challenge.

**Type of Challenge/Special Need**

Of all the challenged learners in these classes, the majority (65%) are learners with physical in capabilities that impinge on their learning. Teachers are more accommodating which is captured by a teachers’ comment:

“It’s all about attitude – when you think of these children as different, you are overwhelmed, especially with CAPS (the curriculum). Its only when you realise that these children have different needs and how can I best help this child will you see it’s almost like teaching a mixed abilities class...”

It must be stated that the most volunteered response with regards to the type of disability and the teacher’s attitude towards it was surprising from the researchers’ viewpoints. Most teachers felt it was better having a physically challenged learner in the class than having a conduct disorder child. The following comment confirms the above statement:

“With a physically challenged learner, we know her limitations and provided the infrastructure is there to assist her, she has an intact intellect. Children with behaviour issues don’t want to learn... so it’s better to have the first group of learners”.

**Infrastructure**

Does the infrastructure accommodate learners with special educational needs?

The researchers found that only 4(10%) of the respondents feel that the infrastructure at their schools are suitable for learners with special needs (Table 4). The majority of 90 percent (n = 36) feel that their schools are not adequately equipped in terms of infrastructure to deal with LSEN.

A teacher from a well-resourced school states:

“Both the management and the SGB (School Governing Body) do not place any emphasis on budgeting for these learners as many come impoverished backgrounds. It is more important for the SGB to replace cricket nets as compared to building ramps for wheelchair bound learners because we only have two wheelchair bound children. It’s really frustrating...”

**Table 5: Teachers’ attitudes towards IE (a summary)**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Likert scale</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learners with Special Educational Needs (LSEN) should be included in mainstream classes</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>LSEN delay the progress in mainstream classes</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>Teachers are well equipped to handle LSEN</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LSEN should be taught in classes with children who are similar to them</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>The infrastructure at my school is well suited for accommodating LSEN</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>The implementation of inclusion is successful at my school</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
However another teacher from a well-reourced school disagrees by saying that the parents of these children need “to come to the party – after all it’s their children that are being given a chance to be in our schools”.

In-service Training for Special Needs

The majority of the teachers (65%) have not been trained in teaching LSEN. Of the 35 percent (n = 14) who have been for some training, most (n = 12, 85.8%) have been for in service training lasting for three days or less. All believe that the training they attended was not adequate to equip them in their classes. A teacher who attended a 3 day work shop found that: “we were subjected to an advocacy campaign and then politics for two days. The remaining day was spent in putting us in groups to draw lesson plans for cognitively challenged learners... how did that help?”

Table 5 indicates teacher attitudes.

DISCUSSION

For the quantitative study in the Vhembe district there seem to be approximately 50 percent who support IE in mainstream school. However, significantly approximately 50 percent are not conscious or not interested in IE and its impact on society.

The qualitative study can be categorised as follows:

Years of Experience

Contrary to international research (Alghazo et al. 2004; Glaubman et al. 2001), the results of the interviews show more senior teachers are more positive about teaching learners with special needs. A teacher with 5 years of experience feels “frustrated that we must work with these children. I did not choose to teach children with special needs. I am a teacher of Maths. You either get it or don’t. I cannot help it if you can’t understand me because your hearing is impaired. Your parents should take you to a school (for) the deaf”.

This is in contrast with views of teachers from the age 40 to 49, of which teachers say that it is difficult but “these children didn’t ask to be like that. We choose this profession to help all children in our class. We must try to help them”, or as another teacher states, “Caps makes it very difficult, but we should be able to develop IEPs (Individual Education Programmes) for this children. Imagine if it was our child?”

It should be stated that during the interviews, teachers with longer training (n =8) have a better attitude to inclusion as a practice. This is in keeping with International research (Avramidis et al. 2007). A teacher, who holds a Master’s degree in educational management, is positive about inclusion in her school: “I ensure that my teachers are continuously trained in different aspects such as dealing with learners with ODD (oppositional defiance disorder) or ADHD (Attention Deficit with Hyperactivity Disorder) or CP (cerebral palsy). In this way we iron our problems and move forward. I have a large repertoire of readings about these and teachers are encouraged to read. I also engage the services of other professionals such as psychologists, etc...”

Perceptions of Educators

Unianu (2015) reports on a meta study that she completed stating that teachers’ attitudes play a very important role in the successful implementation of IE. Sixty percent of the teachers interviewed (n =24) indicate that they do not agree with learners with special educational needs (LSEN) being accommodated in mainstream classes (inclusive education). The same number of teachers feels that LSEN delay the progress in inclusive classes. Twenty-two respondents (55%) feel that the LSEN should be in classes with learners similar to them. Thirty-six of the respondents (90%) feel that their schools do not have the infrastructure to accommodate LSEN. Eighty-five percent of the teachers interviewed (n = 34) believe that the implementation of IE has been unsuccessful in their schools.

Teachers interviewed in this study reveal that they do not share a positive perception of the implementation of IE in mainstream schools. International research (Avramidis et al. 2007; Kalyva et al. 2007) state that in where staff has had experience with inclusive education, the attitudes of staff schools are more open and accepting of learners with special educational needs.

Infrastructure at Schools

Landsberg et al. (2015) advocate that “learners should, as far as possible, act independently
and move on their own”. This advocates a major issue that school infrastructure should be able to accommodate all learners on the site.

Ninety percent (n = 36) of the respondents felt that their schools did not have the appropriate infrastructure to accommodate LSEN. In addition to this, the majority of the teachers (57.5%) did not make any arrangements to accommodate LSEN in their classrooms.

Unfortunately at the school level, finances are “dwindling”. In an environment of restricted finances, budgets are geared towards the majority of learners and not the minority. Personal experience of one of the authors, who is a deputy principal at a school in KwaZulu Natal, is that the SGBs do not pay attention to LSEN especially if their children are mainstream learners.

Competency of Teachers

Das et al. (2013) describes studies that indicate that “the teachers are not adequately prepared for the implementation of inclusive education. …a vast majority of (school teachers in Delhi) had neither received training in special education nor had appropriate support services such as a special education teacher or a para-professional in their classrooms. These teachers also indicated a very low level of skills related to individualizing instruction for special needs children, classroom management and their ability to differentiate instruction”.

According to the current research most teachers (80%) only possess a 4 year or less qualification in teaching, with only 20 percent of the teachers having pursued post graduate studies. Only 5 (12.5%) have some qualification in special needs education. The general consensus amongst the sample was that the limited training that was provided by the department of education was inadequate.

The majority of the teachers in this study are professionally qualified teachers who have LSEN in their classes. The majority are not adequately or appropriately qualified or trained to teach LSEN. Teacher attitudes are not positive due to the above. Educators have not received formal training in respect of the implementation of inclusive education from either pre-service or district offices.

The researchers are of the view that quality and definition of service delivery is relative to the training and skills of educators. Educators are described in the Education White Paper 6 (DoE 2001) as the primary resource for achieving the goal of an inclusive education and training system. It must therefore be in the interests of education that educators are adequately trained for new demands in education. Knowledge and skills are two-fold. Educators need a knowledge base for inclusive education as, in the very least conceptualized by the policy documents. Moreover, they need knowledge and skills for teaching diversity in the classroom.

The latter includes an understanding of barriers in order to modify and adapt teaching methodology in the classroom. Educators need support from knowledgeable management teams at institution level, in order to implement inclusive education. Teachers are experiencing great challenges with the diverse learner populations in their classrooms in terms of:

- Challenges with teaching strategies that are appropriate in a diverse classroom.
- Teachers are lacking the background knowledge concerning teaching techniques and skills for differentiated teaching and for alternative assessment
- Working with the curriculum to meet the diverse needs of learners
- Teachers are under the impression that learners whose experience cognitive challenges (lower capability) need to achieve the same learning outcomes as their age-appropriate peers

It is recommended that teachers who are trained with this intervention (model) will:

- Perform better since they will be trained in the Theory of structural cognitive modifiability and this theory will be the basis for understanding “learners who experience barriers to learning”
- Learn to apply the first three criteria of Mediated learning (Feuerstein)
- Understand how human rights and inclusion are bound together
- Understand what the effects of “labelling” a child

The teacher will be exposed to skills and techniques that can possibly work for example, the role of peer tutoring, scaffolding as a technique and what differentiated teacher and assessment entails. The findings in this study indicate that a lot more work needs to be done both at policy levels, as well as at implementation levels for the ideal of inclusion to be successfully institution-
alised. It is obviously not an easy task but inclusive schools are:

“...the most effective means of combatting discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all” (UNESCO 1994).

CONCLUSION

The indicators described to a large extent the issues relevant to IE. The study differed from most studies on inclusive education in that it included inquiry into the availability of resources and infrastructure. It is conceded that resources and infrastructure for IE are not available at mainstream schools. The study indicates that it is crucial that government finance infrastructure for IE. In monitoring the developments in IE it is noted that there is a lack of consensus from teachers and will from management to drive the IE process in mainstream schools. The lack of will is in conflict with policy. The study indicates Government must drive the process that IE is an integral part of mainstream stream schools. It is government responsibility to educate every member of society in an eco-systemic perspective. Since schools are part of a community it is essential that government implements the whole school paradigm model. In providing coverage to teacher attitudes it was discovered teachers are not trained and equipped to deal with inclusive classes. They have little knowledge of the learning principles that are used for LSEN. Workshops on IE are inadequate. These are key areas where further work need to be done.

RECOMMENDATIONS

Teacher training colleges and Universities should include a module on IE. The module should include differentiated teaching, alternative assessment methods, and neuroscience and cognitive science models of behaviour. Parents of special needs children should be informed by schools SGBs of their rights on IE. They have a right to demand a whole school development for their children. Their rights are echoed in the white paper and the constitution.

REFERENCES


