CURRICULUM ADAPTATIONS FOR LEARNERS WITH LEARNING IMPAIRMENTS IN THE FOUNDATION PHASE

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Abstract

This study reports the findings of the doctoral studies on curriculum adaptations for learners with learning impairments. The researchers conducted a phenomenological study to examine how teachers apply curriculum adaptations for learners with learning impairments in the Foundation Phase through their teaching experience. The sample consisted of 20 Foundation Phase teachers and 22 learners. The authors Interviewed 20 teachers and observed interactions between teachers and learners as well as between learners. The findings suggested that although most teachers (18) claimed that they adapted the product, they in fact only adapted time and activities. The researchers recommends in-service training for teachers by Learning Support Advisors (LSAs) and Subject Advisors (SAs) on how to adapt curricula to the needs of learners with learning impairments in the Foundation Phase. The researchers designed a model on how Foundation Phase teachers could adapt the curriculum for learners with learning impairments in the Foundation Phase.

Keywords: curriculum adaptations, learners with learning impairments, barriers to learning, inclusive education and Foundation Phase.

1. INTRODUCTION

The White Paper 6 (Department of Education (DoE) 2001: 19) states that one of the most significant barriers to learning arises from different aspects of the curriculum. These aspects are:,- the content, the language as well as the language of learning and teaching (LoLT), how the classroom or lecture is organised and managed, the method and processes used in teaching, the pace of teaching and the time available to complete the curriculum, the learning materials and equipment that are used, and how learning is assessed. The DoE (2001: 33) further states that the emphasis of identification of barriers to learning will focus mainly on the Foundation Phase learners who may require support, for example by adjusting the curriculum, evaluation and presentation to suit learners' individual needs.

2. PURPOSE OF THE STUDY

The purpose of this study was to investigate and establish strategies Foundation Phase teachers could adopt to adapt the curriculum to the needs of learners with learning impairments.

3. SIGNIFICANCE OF THE STUDY

This study firstly, contributes to knowledge on how the curriculum could be adapted for learners with learning impairments. Secondly, it contributes to the body of knowledge by suggesting a model that Foundation Phase teachers could adopt and implement when adapting the curriculum for learners with learning impairments. Thirdly, it encourages future research on educational practices in the Foundation Phase.

4. STATEMENT OF THE PROBLEM

The problem underpinning this study is that teachers are experiencing difficulties in adapting the curriculum for learners with learning impairments in the Foundation phase. As a result, learners drop out of the education system.

5. RESEARCH QUESTIONS AND OBJECTIVES

Bird, Atton and Mackinnon (2004: 141) indicate that applying curriculum adaptations for learners with learning impairments involve making changes by eliminating or adapting parts of the curricula as well as the teaching and learning environment. For these curriculum aspects to be justified, one needs to, i) examine how teachers apply curriculum adaptations for learners with learning impairments; and ii) examine curriculum application model suitable for learners with learning impairments in the Foundation Phase. The objectives of this study were to analyse ways in which teachers apply curriculum adaptations for learners with learning impairments and to develop a model of how teachers could apply curriculum adaptations for learners with learning impairments in the Foundation Phase.

6. LITERATURE REVIEW

Turnbull, Turnbull and Wehmeyer (2007: 106 -107); Vaughn, Boss and Schumm (2007: 69); Smith, Polloway, Patton and Dowdy (2008: 137-141) and Hallahan, Kauffman and Pullen (2009: 199 - 201) assert that learning impairments are primarily described as deficits in academic achievement in reading, writing and mathematics and/or language (listening or speaking). However, learners with learning impairments may have significant problems in other areas, such as social interaction and emotional maturity, attention and hyperactivity, memory cognition, metacognition, motor skills and perceptual abilities, masking strategy and skills deficits. It should be mentioned that not all learners show all the manifestations of learning impairments, only some of them in a variety of combinations and intensities that vary from learner to learner. This implies that there is a need for teachers to apply curriculum adaptations for learners with learning impairments.

Eggen and Kauchak (2007: 371) argue that classroom management entails the teachers' strategies that create and maintain an orderly learning environment through developing learner responsibility, creating a positive classroom climate and maximizing opportunities for learning. Prater (2007: 238) indicates that the learning environment includes physical outlay of the classroom, the number and grouping of learners as well as the physical environment such as temperature, time of the day, light and noise. These elements are the requisites for teachers to adapt the learning content accordingly.

Dettmer, Thurston, Knackendoffel and Dyck (2009: 244); Miller (2009: 457); Smith et al. (2008: 168); Smith (2007: 18) and the Department of Education (2005: 34) regard content adaptations as adapting what is taught as well as how learners are given access to what they need in order to learn. Adapting what is taught may include a completely different curriculum (such as substituting the curriculum) or an adaptation in curricular goals (alternative goals). Content changes may also involve the amount of work and difficulty level of work. Prater (2007: 237-238); Dettmer et al. (2009: 250-251) and the Department of Education (2005: 34) suggest that text material can be adapted by: using voice-recorded materials, simplified versions of the classroom text, changing the modality of text input, reading the text aloud or on audio file, allowing a peer to read the text to a learner, and decreasing the amount or density of content. This implies that teachers who adapt the curriculum for learners with learning impairments should follow a process.

Dettmer et al. (2009: 244) stipulate that process adaptation include using multisensory approach for presenting material, providing a written copy of material on a chalkboard, reducing the amount of material on paper, decreasing the pace of instruction and having a learner follow the text by listening to a recorded version. On the other hand, Prater (2002: 238) contends that process adaptation centres on how the content will be taught and learned. Process accommodation involves how the teacher instructs, how much support a learner receives, how much time is allotted to instruction, the degree of sophistication of the instruction and the teacher's various activities as well as strategies adapted to the individual learner. This process enables teachers to adapt their instructions effectively.

Miller (2009: 437) and Smith et al. (2008: 108) contend that the time allotted for learning, completing activities and individual assistance, need to be adapted. On the other hand, Dettmer et al. (2009: 244) and Nieman and Monyai (2006: 70) maintain that by adapting instructional strategies, teachers could use concrete objects to demonstrate concepts, voice changes to stress points and repeat important information. The DoE state (2001: 18) distinguishes that in mainstream education, differentiated teaching strategies should be prioritized in order for learners to access the curriculum.

Nieman and Monyai (2006: 70) and Dettmer (2009: 244) maintain that the product can be adapted by allowing a learner with learning impairments to respond to the instruction by answering verbally instead of writing down answers. Miller (2009: 457) concurs that learners with learning impairments should be allowed to speak answers into a voice recorder rather than writing responses. The DoE (2002: 16) recommends amanuensis (reader and scribe), multiple choice and short questions rather than long questions. Gibson and Blandford (2005: 65) suggest that extra time should be given to a learner with learning impairments. This should enable teachers to grade their learners fairly as their assessment will be reliable, fair and valid.

Prater (2006: 245) indicates that grading communicates information to learners and their parents about the learner's academic progress in the classroom. Prater (2007: 246) further states that grades can be adapted by adjusting grade weights, modifying learning outcomes, modifying the work programme, grade improved performance, adding written comments, assigning pass or fail grades and using checklists. The Department of Basic Education (2011: 3) stresses that concessions for learners who experience barriers to learning and other barriers that impact on the learner's learning can be implemented by allowing the learner: to pass one of the required two official languages on the First Additional Language level at least; to obtain a Moderate Achievement (Level 3) in that language:, to obtain an Elementary Achievement (Level 2) in the Second Official Language; and to comply with other Foundation Phase requirements.

7. RESEARCH METHODOLOGY

The research methodology that the researchers implemented include a phenomenological study, which according to McMillan and Schumacher (2010: 24) describes the meaning of a lived experience. The researchers purposefully sampled the Foundation Phase teachers because these teachers are engaged in curriculum adaptations in their daily teaching, as almost all learners in the Foundation Phase experience barriers in one way or another. Schools were selected on the basis of referrals to the Site Based Support Teams (SBSTs), which aids the understanding of learning impairments. A Qualitative research approach was employed, 20 teachers were interviewed and observed while they were presenting lessons. Twenty-two learners were also observed in the teaching-learning situation. The researchers used semi-structured interviews, observations and field notes to collect data. The research was conducted in the natural setting, which is the classroom. After data had been collected, it was analysed by first coding, categorising and then interpreting to provide insight.

Gay and Airasian (2003: 141) and Gay, Mills and Airasian (2009: 378) regard reliability as the degree to which a test consistently measures whatever it measures. Reliability according to McMillan (2012: 137) is the extent to which participants' scores are free from errors. In other words, reliability is the consistency of scores.

The researchers chose only the areas of interest and the order of questions which were predetermined to ensure that the semi-structured interview instrument was reliable. In order to ensure validity, Gay et al. (2009: 376) indicate that a "peer debriefer" can be used in order to test one's growing insights through interactions with other professionals. Maree and Van der Westhuizen (2007: 38) name a "peer debriefer" as the external coder. The researchers also used a "peer debriefer" in order to ensure validity.

Prior to the research, approval was granted by the Free State Department of Education. A written request to conduct the research in different schools was forwarded to the principals and relevant teachers were informed that participation was voluntarily and anonymity assured.

8. ETHICAL CONSIDERATIONS

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Leedy and Ormrod (2005: 150) believe that there is usually no single "right'" way to analyze the data in qualitative study. Nieuwenhuis (2007: 81) expresses the opinion that in most qualitative research studies, the aim is to engage in research that probes for deeper understanding of the phenomenon and not to search for casual relationships. In this study, data presentation, analysis and findings were presented in words and in numbers.

9. FINDINGS

In response to the question how to adapt the curriculum for learners with learning impairments, the majority of participants (18) indicated that they adapted the product, which includes time for doing activities (14), assessment (eight), reducing activities (seven) and adapting the material (three). Participants mentioned content adaptations which included materials 15 times. Process adaptations included pace (eight), instruction with tone (one), presentation (one), methods (one), language (one), drill (one), reading for learners (one), visual pictures (one) as well as teaching and learning time (one). Two teachers were not sure of the correct answer. One of the teachers had this to say "extra time, ke, ke, mofe mosebetsi o monyane daily, motivation, bo dinalidinyana, bo dipongpongnyana". Verbatim translation: "extra time, I, I give him few work daily, motivation, some stars, some sweets". Another teacher said "I will give them alphabets to study at home; sometimes they must show the letters".

The researchers determined through field note that the number of learners in most classrooms ranged from 35 – 75 which made it difficult for teachers to assist learners with learning impairments.

Learners with learning impairments were grouped into their separate groups of between four and sixteen learners per group, which according to the researchers was unfair. All 20 teachers used a demonstrative teaching strategy, thus narrating or lecture method when presenting their lessons. Twelve teachers moved to groups of learners where they explained the content after they had taught the whole class. Teachers spent the rest of their time on learners with learning impairments. The researchers regarded the latter as time consuming because the periods were only 40 minutes long. In one class the teacher did not take care of learners with learning impairments. The teacher only considered learners with learning impairments as part of the class by the time other learners were engaged in activities. The teacher also gave impaired learners totally different activities to do. In the Grade 2 class, some learners identified as experiencing barriers to learning, were given grade R work.

The researchers made the following observations in the classroom. In 12 classrooms teachers gave learners the activities but the numbers differed; for example, they gave eight sums to the learners in three groups learners. They also gave in two groups six sums and only four sums in the other two groups. During activity time, teachers facilitated and helped those with learning impairments. Teachers gave learners the same activities in eight classrooms. When the researchers evaluated the product, all 22 learners completed the activities as no end time was scheduled for the completion of the activities.

10. DISCUSSION OF COMBINED RESULTS

Data collected from observing 20 teachers and 22 learners, and field notes confirmed the findings reported on how teachers apply curriculum adaptations for learners with learning impairments in the Foundation Phase in the Thabo Mofutsanyana District. The majority of teachers (18) mentioned that they apply curriculum adaptations by adapting the product, the content (15) and the process (eight). Teachers seemed to be aware of how they could apply curriculum adaptations for learners with learning impairments in the Foundation Phase, but practically, it is still a problem to be addressed. That is why the researchers designed a model on how teachers can apply curriculum adaptations for learners with learning impairments in the Foundation Phase.

The research has shown that there are many components of the curriculum that can be applied by teachers when adapting the curriculum for learners with learning impairments in the Foundation Phase. The majority of teachers (18) are aware of their roles in applying curriculum adaptations for learners with learning impairments but do not carry out these roles in practice. Both teachers and learners do not adhere to the allocated time slots for instruction and engagement. Teachers regard their roles when applying curriculum adaptations as: adapting the product, which entails assessment, additional time and activities, content and the process which includes instruction.

The DoE (2001: 19) asserts that one of the significant barriers to learning arises from different aspects of the curriculum such as the content, the language or the Language of Learning and Teaching. The other factors that contribute to barriers to learning include, how the classroom or lecture is organized and managed, the methods and processes used in teaching, the pace of teaching and the time available to complete the curriculum. Furthermore, Subject Advisors (SAs) and the Learning Support Advisors (LSAs) should be trained by their Chief Education Specialist so that they in turn are able to conduct oint training for Foundation Phase teachers on how to apply curriculum adaptations for learners with learning impairments.

The following is the recommended model for teachers when applying curriculum adaptations for learners with learning impairments in the Foundation Phase:

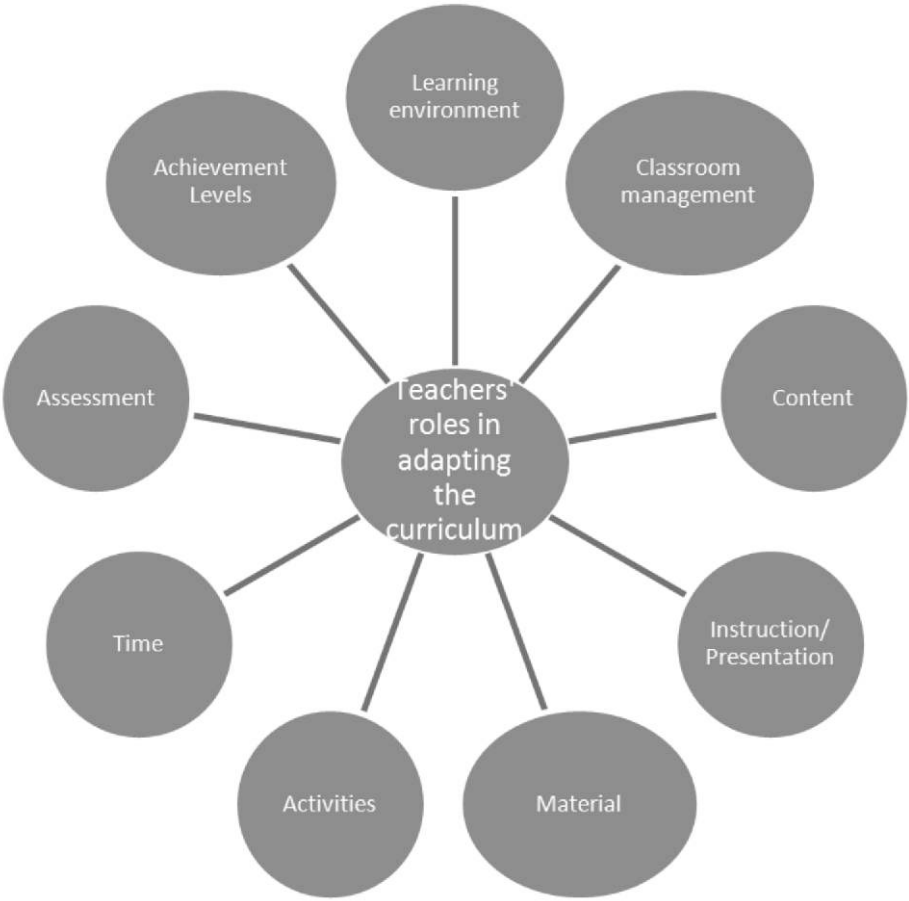

Figure 1: Curriculum Adaptation Model

The model indicates how teachers can apply curriculum adaptations for learners with learning impairments. The different components of the model follow below:

10.1 **The learning environment** includes seating arrangements, environmental factors such as, the volume of the sound and the lighting, the teaching processes, how learners are motivated, skills of learners and involvement of learners.

10.2 **Classroom management** enables the teacher to carry out certain management activities and should promote opportunities for interaction as well as acceptance. Teachers should manage the classroom in such a way that the atmosphere promotes success through various types of behaviours and attitudes. Teachers should allow extra time to complete the task. The tables should be organized in such a way that learners face a direct lighting.

(Below are examples of how a Grade 3 Mathematics topics could be adapted for learners with learning impairments).

10.3 **Content** should be divided into a topic first: numbers, operations and relations. It is imperative that the content should consider the learner's learning style and the level of the learner.

10.4 The teacher should vary the **method of instruction,** the format of the lesson and the level of abstraction to suite the learner's abilities. The presentation should consider the learner's strength and needs. The first 15 minutes of each Mathematics lesson should be devoted to activities involving the whole class and focus on Mental Mathematics.

10.5 Regarding **whole-class presentation** learners are asked questions such as: How many legs do five cows have? (Auditory). The teacher then draws the problem on the chalkboard (visual).

4 + 4 + 4 + 4 + 4 = 20
The teacher writes down 4 + 4 + 4 + 4 + 4 = (visual learners). He/she introduces learners to the number sentence 4 x 5 = 20 (auditory and visual learners). He/she lets learners determine how much five groups of four and add up to to get the total. (kinesthetic). He/she repeats the exercise using groups of 2, 3, 5 or 6.

10.6 The teacher's **teaching material** should cater for all learning styles. Concrete objects should be used together with practical activities for a longer time.

10.7 All learners who need adaptations they should make up and complete five activities of their own, using any numbers. They should do any of the activities that have been done already.

Learners with a short-attention span could write one activity and bring it for marking or have a rest time between activities. The number of activities could be reduced without compromising the concept and skills that should be addressed. Concrete objects should be used together with practical activities for a longer time.

10.8 More **time** should be given for retention of the concept taught and for completing the task. Resting time should also be given for those learners with a short-attention span.

10.9 When the learner is being **assessed** he/she should respond verbally instead of written responses using a scribe for written responses. Amanuensis (reader and a scribe) could be assigned to read and write for the learner. Answers could be demonstrated by using hands, computers or calculators.

10.10 The **achievement level** of learners with learning impairments should pass one official language that is the Language of Learning and Teaching at level 3 and the first additional language at level 2. As for Mathematics, the learner should obtain level 3.

11. CONCLUSION

It is necessary for Foundation Phase teachers to be able to adapt the curriculum to cater for learners with learning impairments in mainstream classrooms. Ideally curriculum adaptations should be implemented whilst learners are still in the lower grades in order for them to improve their academic performance and not end up in special schools. Teachers' skills should be improved to enable them to reach a wide range of learners in the classrooms. This could be achieved by training teachers to adapt the curriculum for learners with learning impairments.

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