# Curriculum modification as a critical approach to assist learners with special needs in institutions of higher learning in Zimbabwe

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Abstract: The current research was undertaken in order to explore how the curriculum of institutions of higher learning could be adapted to include learners with disabilities in inclusive education settings. Curriculum modification particularly curriculum adaptations and augmentations, have been identified as important to enable learners with disabilities to achieve access to and progress in the general curriculum. This paper adopted the qualitative approach and used a case study design that relied largely on interviews and document analysis. The semi-structured interviews were used to collect data from lecturers, learners and principals of higher learning institutions. The study concluded that adapting instructional strategies is a method that allows educators to meet the needs of all learners according to their strengths, ability levels, and needs, without separating learners homogeneously. The study recommended that educators need to know how to differentiate instructions in order to make the curriculum more accessible for learners with disabilities through adaptations accommodations.

Keywords: Adaptation, curriculum differentiation Curriculum, Curriculum modification, learners with special needs, special needs, Special needs education,

# I. INTRODUCTION

differentiating instruction for diverse learners means planning and implementing curriculum based on each student's level of readiness. Appropriate curriculum development for learners with special needs involves differentiation of content, teaching and learning strategies, and learner products in a learner-centred environment. Curriculum modifications can be put into practice for different purposes ranging from altered content knowledge, conceptual difficulty, educational goals, to instructional methods and assessment. Curriculum modification is an educational strategy that allows special needs students to have better access to information and resources. It consists of the adjustments educators make to curriculums to make them accessible for students with special needs. Educators classify curriculum modification as a type of educational strategy. In a nutshell, they're a set of resources designed to allow special needs students to have better access to information. This paper sought to critically assess how curriculum modification may assist learners with special needs in institutions of higher learning in Zimbabwe.

# 1.1 What is curriculum modification?

A curriculum modification is a change to the classroom activity or materials in order to facilitate or maximize a student's participation in planned activities, interactions, and routines. Increased access to the curriculum will lead to a higher level of participation, which provides the student with a greater opportunity for learn. It also maximizes social interactions between students. Curriculum modification consists of the adjustments educators make to curriculums to make them accessible for students with special needs. Educators classify curriculum modification as a type of educational strategy. In a nutshell, they're a set of resources designed to allow special needs students to have better access to information.

Koga & Hall (2004) define curriculum modification as modified contents, instructions, and/or learning outcomes for diverse student needs. In other words, curriculum modification is not limited to instructional modification or content modification but includes a continuum of a wide range of modified educational components. Examples of the modifications of content, such as teaching learning strategies, simplifying concepts or reading levels, teaching different sets of knowledge and skills needed by students, and setting up specific objectives and examples of modifications to instructional methods, including reducing distractions, altering the pace of lessons, presenting smaller amounts of work, clarifying directions, and changing input and response modes.

Curriculum Modifications involve combinations of altered content, conceptual difficulty, educational goals, and instructional method versus building scaffolding and bridges between existing curriculum and people involved in the educational process. In other words, curriculum modification is not limited to instructional modification or content modification but includes a continuum of a wide range of modified educational components. Similarly, Comfort (1990) defines curriculum modification as the adapting or interpreting of a school's formal curriculum by teachers into learning objectives and units of learning activities judged most reasonable for an individual learner or particular group of learners.

Curriculum modification is not limited to instructional modification or content modification but includes a continuum of a wide range of modified educational components.

In this study the categorization of curriculum modification suggested by King-Sears (2001) has been considered. King-Sears identified four types of curriculum modification: (a) accommodation, (b) adaptation, (c) parallel curriculum outcomes, and (d) overlapping curricula on a continuum. This categorization represents the relation between modified curriculum and general curriculum in terms of differences and similarities in educational input including content knowledge and conceptual difficulty, educational output including educational goals, and methods of instruction.

# 1.2 Components of curriculum modification

# 1.2.1. Accommodation

Accommodation refers to the delivery of instructional materials or the methods of learner's performance which does not change the content or conceptual difficulty of the curriculum (King-Sears 2001). Teachers as well as the learners play a major role in the changes of instructional strategies in order to achieve the same intended instructional outcomes suggested in the overall or general curriculum. These can include incorporating different types of teaching and learning methods and techniques, such as audio-visual materials, projectors, and pictorial representation among others and modifying the amount of input, changing or modifying the time frame for learning and teaching, and the amount time devoted to the support for individual learners needs. It is therefore important to note that accommodation is not a change of educational input crafted for overall or general curriculum, but it is a modification of instructional methods and strategies which are targeted to meet individual learner's needs.

# 1.2.2 Adaptation

Adaptation is a modification to the delivery of instructional methods and intended goals of student performance that does not change the content but does slightly change the conceptual difficulty of the curriculum. Adaptations of curriculum require more teacher effort and time rather than simply changing instructional methods and strategies or access as in an accommodation. It is a goal-driven process whereby teacher's usually first need to state specifically the intended goals for individual learners, like providing individual learner activities, individual homework and assessments or evaluations, and further using adapted or different instructional materials and strategies and activities for individual learners needs.

Adaptations in integrated general classrooms often occur when teachers differentiate instruction. For instance, teachers can create writing lessons that meet individual students' unique needs by having students work on adapted assignments. While some students are engaging in a writing assignment individually, students with learning disabilities may work on their assignment in a small group with teacher

support. Adaptation of curriculum may also include a slight change in conceptual difficulties that is later introduced to the learners. It is important to note that adaptation must take place within the same learning contents and must be put in place when teachers have come to a conclusion that a special needs learner is able to learn the same content knowledge as others.

Adaptation involves not only the modification of instructional methods but also includes a slight change in conceptual difficulties introduced to students. Like accommodation, adaptation occurs within the same learning content.

# 1.2.3 Parallel Curriculum Outcomes/Parallel Instruction

Parallel curriculum outcomes are modifications to the delivery of instruction and to intended goals regarding student performance. Like adaptation, parallel curriculum outcomes do not change the content knowledge and the underlying principle of the educational goals for individual students. The difference between adaptation and parallel curriculum is the extent of change in conceptual difficulty. The application and practice of parallel curriculum outcomes is contingent upon the educational contexts and individual learner's needs which are similar to accommodation and adaptation. There is a range of application to this type of modification and students with varying learner characteristics and abilities benefit from parallel curriculum outcomes.

Parallel curriculum outcomes do not change the broader content knowledge of a lesson but significantly change the *conceptual difficulties* for students.

# 1.2.4. Overlapping Curricula

Overlapping curricula is a modification to curriculum such that the modification creates overlapping or common goals for learning outcomes of diverse students. Overlapping curricula is not a direct modification of general curriculum. Rather, it is an incorporation of specific individual goals and expectations for students with diverse needs. Teachers can practice overlapping curricula when expectations for specific goal accomplishments in general education are presented. Overlapping curricula enables diverse students to be involved in general education curriculum activities and promotes the idea of partial participation.

Practicing overlapping curricula sometimes requires teachers to creatively design and provide shared educational activities, such as cooperative learning and peer-mediated interventions. In such shared activities, the educational goals and expectations for the students with diverse needs overlap with those for general education students (King-Sears 2001). This curriculum can best be used by learners with emotional disturbances and behaviour difficulties, among others, in which an Individualized Education Programme (IEP) may be developed to make them have appropriate interactions with peers in a small group setting.

Categorizing each type of curriculum modification is extremely useful for teachers to understand the nature and

potentialities of curriculum modification and to incorporate their understandings into actual classroom instructions.

# 1.3 Curriculum modification as an approach to assist learners with special needs in institutions of higher learning

Debates concerning access to curricula at higher education institutions for minority groups, particularly persons with disabilities, are characterised by a continued tension between merit and equality.

In institutions of higher learning curriculum modification is seen as a type of educational strategy. This implies that a set of resources are designed to allow special needs students to have better access to information about the programme they are doing. In this regard, the tutors have to be aware of the learners' individual differences when they're planning the class methodology, content, and assessment. They make the necessary changes to adapt their curriculum to the particular characteristics of that learner. The aim will be to make the content more accessible to learners with disabilities.

Writing about cultural adaptation of curricula, Nkoane (2006) argues that each learner with special needs in institutions of higher learning requires a curriculum that speaks to his or her own issues and taps into his or her areas of creativity and strength. With specific reference to individuals with disabilities, there should be adaptations in terms of teaching approaches as well as the modification of the physical arrangement of classroom, the if (Habulezi&Phasha 2012).Education must be flexible and adaptable as there are constant changes in the challenges and needs of learners. All education systems and education programmes and campaigns must take the diversity of learners and their needs into consideration (Lohrenscheit 2002). Laurillard (2013) notes that there is no method or programme that is complete and fits all learners and teachers, and teachers have the freedom to develop their own battery of different programmes, methods, skills and knowledge to select from in making and revising curricula for individual learners and classes.

Curriculum modification involves differentiated instruction which needs tutors to change their practices from a programme-based pedagogy to a learner-based pedagogy. Tutors endeavour to adapt pedagogical interventions to the needs of each learner, admitting that each learner varies in interests, learning profile and level of functioning. Differentiated instruction may facilitate high levels of both learner engagement and curricular achievement (Reis et al. 2011).

# II. STATEMENT OF THE PROBLEM

Education has to be of quality that keeps learners motivated and interested in learning. To provide a quality education there is need to be policies and plans to deliver such services, including appropriate curriculum modification for learners with special needs. Inclusive Education is concerned with removing all barriers to learning and provides quality

education especially to learners who experience barriers to learning and development. Increasing diversity in today's institutions of higher learning and the problems encountered in efforts to accommodate learners with disabilities in inclusive set up, tutors must address the needs of a wide learners by using modifications variety of accommodations appropriate for individuals with different backgrounds, learning styles, abilities, and disabilities in widely varied learning contexts. This study sought to critically assess how curriculum modification may assist learners with special needs in institutions of higher learning in Zimbabwe.

# 2.1Purpose of the study

The purpose of the study was to investigate how curriculum modification need to be implemented to ensure successful inclusion of learners with special needs in institutions of higher learning in Zimbabwe and to explore the knowledge that lecturers have in supporting learners with special needs in their classes. The study aim to provide guidelines to assist the lecturers in adapting curriculum in order to accommodate learners with special needs in institutions of higher learning in Zimbabwe.

# 2.2 Research questions

- How does curriculum modification assist learners with special needs in institutions of higher learning in Zimbabwe?
- What curriculum adaptations need to be done to ensure the successful inclusion of learnerswith special needs in institutions of higher learning in Zimbabwe?

# III. METHODOLOGY

This paper adopted the qualitative approach and used a case study design that relied largely on interviews and document analysis. The design gives in-depth details and narrative accounts from learners, Lecturers and principals on the adaptation of the curriculum for the inclusion of learners with SEN in selected Tertiary institutions in Bulawayo. The semi-structured interviews allowed the researchers to get first-hand information about the adaptation of the curriculum for the inclusion of learners with SEN in selected institutions of higher learning in Bulawayo, thus enabling them to understand the descriptions, thoughts and meanings that participants attributed to their curriculum adaptation (Kuada 2012).

# IV. RESEARCH FINDINGS

The need to adapt the curriculum in inclusive classrooms is currently widespread and involves careful decision-making by educators. Modifying curricular content might involve applications as straightforward as: reducing the number of vocabulary words assigned to an individual learner; having a learner complete only the odd-numbered problems on a mathematics assignment; or affording learners the choice of restructured concept-based teaching.

The participants of the study mentioned that specific adaptation of the curriculum is a strategy for ensuring effective curriculum delivery to learners with disabilities. These adaptations refer broadly to the modification or adjustment of lessons, activities and materials to make them suitable for the different needs of deaf learners. According to one of the participants

'curriculum modifications are a key strategy for responding to the needs of learners with disabilities in institutions of higher learning'.

Curriculum modifications can be done at the level of content, instructional strategies, instructional materials and assessment. It is the responsibility of educators to ensure that the content is adapted at the level of the individual learner within the institution.

The participants pointed out that curriculum modification require more educator effort and time than simply changing instructional method or access if learners with disabilities are to be assisted. In order to decide curriculum modification, lecturers need to outline their indented goals individual learners with disabilities, as each learner has individualised learning outcomes that may be at different levels within the same curriculum area (Bornman& Rose 2010).

The participants agreed that educators often seem confused or frustrated when they find out that a learner with hearing loss will be included in the mainstream class. The following remarks were made by the participants:

'Some educators can be scared, they will not know how to handle the situation, and like a lot of people normally do and they can get confused or frustrated'.

Participants pointed out that educators need to keep in mind that some learners with disabilities such as deaf learners may take a longer time to complete their tasks than other learners. They agreed that they often need more time to understand the task and, therefore, to finish it.

# V. DISCUSSIONS

Adapting the curriculum involves differentiating instruction to provide learners with a variety of ways to process information and demonstrate what they have learned, in order to "match" the way in which each learner learns most effectively (Bashinski 2002). Learnerw with disabilities in an inclusive set up are given different options in presenting their work, so that every learner is assessed in terms of his or her strengths. Differentiation implies adjusting tasks to appeal to the various interests, needs, aptitudes, experiences and previous achievements of individual learners with disabilities.

Curriculum modification is a key strategy for responding to the needs of learners with diverse learning styles and disabilities. It involves processes of modifying, changing, adapting, extending, and varying teaching methodologies, teaching strategies, assessment strategies and the content of the curriculum. It takes into account learners' ability levels, interests and backgrounds. Westwood (2011) states that differentiation is also a strategy for accommodating learners with disabilities by removing some of the barriers to learning and development.

The participants highlighted that adapting instructional strategies is a useful tool for supporting learners with disabilities in mainstream classrooms of institutions of higher learning. They mentioned that lecturer and tutors need to consider the learning styles and individual abilities of learners with different disabilities. In modifying the curriculum, adapting instructional strategies for learners with disabilities involves the method of instruction, the nature of learners' participation in the lesson, and the interaction between educators and the learners.

The participants agreed that during the process of curriculum adaptation, educators should provide additional or simply different materials in a variety of modalities that learners with disabilities might use during the course of instruction. This means that adapting instructional materials involves making changes to the equipment and supplies to which learners with disabilities have access during the performance of tasks. This promotes comprehension of the given tasks, assists in the discrimination of words, phrases and sentences which, therefore, leads to enhancing the learning process.

# VI. CONCLUSIONS

The study concluded that in the light of inclusive education there is a need for educators to have worked out practical examples that they can be used to assist learners with disabilities in mainstream classes of higher institutions. These examples may especially help those educators who are not adequately trained to be less overwhelmed by all the challenges.

Adapting instructional strategies is a method that allows educators to meet the needs of all learners according to their strengths, ability levels, and needs, without separating learners homogeneously (according to their ability levels). Educators are able to create lesson plans based on educational objectives for the entire class, while modifying the delivery, product, or assessment for classroom learners. By providing instruction in this situation, learners recognise that they are all learning the same material; however, it is presented in the way that meets their unique needs (Gartin, Murdick, Imbeau&Perner 2002:12).

The study also concluded that the curriculum modified content needs to be differentiated in order to provide a variety of learning experiences to meet deaf learners' different learning needs. The findings showed that tasks and activities for learners with disabilities in institutions of higher learning need to be differentiated in order to provide a variety of learning experiences to meet the unique learning needs learners.

#### VII. RECOMMENDATIONS

Adaptation is presented as a strategy for ensuring effective curriculum delivery to all learners, particularly learners with disabilities. Adaptation refers broadly to modification and/or adjustment of lessons, activities and materials to make them suitable for different learner needs. Adapting instructional materials involves making changes to the equipment and/or supplies to which learners have access during the course of instruction. This involves a change in the formats through which information is represented to the learner or the learner's engagement with the curriculum during the course of instruction. It is therefore important to realise that educators of the regular institutions of higher learning must be appropriately supported to maintain their continuous involvement with learners with disabilities and learn strategies for working effectively with these learners in the inclusive classrooms. They need to know how to differentiate instructions in order to make the curriculum more accessible for learners through adaptations and accommodations.

It is not such a widely known fact that the physical environment can create barriers to adaptation of deaf learners in the inclusive classrooms. The physical environment includes aspects such as classroom spaces, classroom infrastructure, and arrangement of furniture, level of noise and class size. It is very important for educators to keep these factors in mind when trying to include deaf learners in mainstream settings.

Educators should use different visual aids such as boards, pictures, posters, overhead projectors and computers to assist deaf learners to grasp new concepts. In addition, supportive physical classroom environments need to be provided to cater for the needs of learners with disabilities.

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