Abstract:

Curriculum modifications can be put into practice for different purposes ranging from altered content knowledge, conceptual difficulty, educational goals, to instructional methods and assessment. Nevertheless, curriculum modification still remains an ambiguous concept especially in relation to the concept of special needs learners, special educators, and to some extent curriculum implementers. This paper will endeavour to discuss the concept of curriculum modifications in order to understand its nature and potentials. It will also analyze some categorizations of curriculum modifications as suggested by King-Sears (2001), which include, accommodation, adaptation, parallel curriculum outcomes, overlapping curricula on a continuum and to see to what extent these modifications can be applied efficiently and effectively to meet the needs of special needs learners in Botswana. The paper will hence make some recommendations regarding the best curriculum modification(s) that can be used by special educators to harness the potentials of special needs learners. Changes in the curriculum mandate changes in assessments based on the curriculum. This paper will therefore also discuss the accompanying changes in assessment to enhance a quality education for learners with special needs.
Introduction

There is no one accepted definition of curriculum modifications as researchers are still grappling with the exact meaning of the concept. Nevertheless, there are some definitions which tend to shed some light into the concept. Curriculum modification involves change to a range of educational components in a curriculum, such as content knowledge, the method of instruction, and student's learning outcomes, through the alteration of materials and programs (Comfort, 1990; King-Sears, 2001; MacMackin & Elaine, 1997; Reisberg, 1990). 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. However, the way that we interpret curriculum influences our understanding of curriculum modification. Reisburg (1990) lists 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. To this end, all of these teaching events should be considered as examples of curriculum modification.

Categories of Curriculum modifications suggested by King-Sears and their implications for Special Needs Learners in Botswana

The national curriculum in Botswana is inclusive. An inclusive curriculum is meant to afford all learners equal opportunities to lifelong education. However, not recognising that special measures have to be in place for the learners with special needs would be denial of reality. Modifying the curriculum to accommodate those with special needs in inclusive classrooms as is the case in Botswana is to avoid a “watered-down” curriculum which usually accompanies exclusive schools. In this century there is talk of quality education and this education is seen as one that will develop learners holistically by recognising their individual potential. The curriculum modifications
that are proposed are to be done within the context of quality education. The following discussion is based on King Sears suggestions for modifying the curriculum.
Accommodation

The term 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. These techniques can benefit learners in the inclusive settings in Botswana and can target special needs learners who are, for example, visually impaired, learning disabled, and hearing impaired. For example, the use of a Brailler in writing and spelling competitions, enlarged test copies, the use of closed circuit television (CCTV) or use of a magnifying glass may be made for a visually impaired student. The intention is that the content and difficulties of tasks remain the same as the tasks in which other learners in the regular class would embark on. Switlick (1997) listed other examples of accommodations, such as requiring completion of every other word problem on a math worksheet, and providing for oral performance instead of written. 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.
Adaptations

According to King-Sears (2001), 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 is a concept that usually require more teacher effort and time rather than simply changing instructional methods and strategies or access as in an accommodation, but it is a goal-driven process whereby teachers 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 may be practices in inclusive classrooms often occur when teachers differentiate instruction especially when teachers decide to conduct lessons, mathematics or writing, which meet individual learner’s unique needs by having work on adapted assignments. Under these conditions, learners with special needs may work on their assignment in small groups with the support of the teacher. King-Sears (2001) suggests that a variation of this type of lesson can be providing learners with special needs fewer or less work and points out that reducing the amount of tasks seen in an accommodated instruction should be differentiated from that provided in adapted instruction. In Botswana, learners who are visually impaired, mentally retarded can benefit from this arrangement whereby they may be asked to work in groups in problem solution and as they work in groups the teacher monitoring and support may also be maximized. Hence, the 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.

Parallel Curriculum Outcomes (Parallel Instruction)

The other category of curriculum modification proposed by King-Sears is known as parallel curriculum outcomes which are modifications to the delivery of instruction and intended goals of learner performance. They (parallel curriculum outcomes) do not change the content knowledge and the underlying principle of the educational
goals for individual learners just like adaptations. However, their differentiation lies in the extent of change in conceptual difficulty, that is, in adaptation changes are slightly made in the conceptual difficulty of curriculum, whereas in parallel curriculum outcomes there is a significant or very tangible change of 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. This type of modification can be used with learners who are gifted and talented as they usually require more advanced and or challenging conceptual difficulties in instruction and application. This is sometimes referred to as enrichment. In a nutshell parallel curriculum outcomes do not change the general content knowledge but only changes the conceptual difficulties for these kinds of learners which eventually create a learning environment conducive to broaden the idea of inclusion.

*Overlapping Curricula (Overlapping Instruction)*

This is the last category of curriculum modification suggested by King-Sears. The modification of curriculum in this case creates overlapping or common goals for learning outcomes of learners from diverse backgrounds and which involves incorporation of specific individual goals and expectations for learners with special needs enabling them to be involved in regular or general education curriculum activities by promoting the idea of partial participation. In most cases, the components of curriculum, such as background knowledge, conceptual difficulties, and methods of instruction, for special needs students are designed very differently from those for general education backgrounds. 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.
Best Curriculum Modifications Practice in Botswana for Special Educators and Special Needs Learners (Recommendations)

In Botswana, the Revised National Policy on Education (RNPE 1994), states that the Government is committed to the education of all children including the disabled ones and therefore will intensify efforts to increase access to education for disabled children. It is with this idea in mind that efforts are being made to achieve a well balanced and accessible instructional systems based on modified curriculum to meet the needs of learners from diverse backgrounds. This will ensure that the special needs learners are taken on board as far as access to curriculum is concerned. These learners need more encouragement in order to achieve the aims and objectives of an educational instruction which will go a long way in ensuring and sustaining their self-esteem and self-worth which are key issues when learners are in an inclusive environment. In Botswana, even though the policy recognises the need for curriculum that is compliant with the learners needs, attention must be directed to its implementation in order that curriculum may not only be flexible but also accommodative to all learners with a wide range of diversities.

Changes in Assessment: Towards Enhancing Quality Education for Special Needs Learners

Curriculum on its own cannot tell anyone what has been achieved in the education system. What is needed is to translate the curriculum into manageable entities that can be used in the classroom for instruction and for assessment. Curriculum and assessment though not always seen as such are key areas in the promotion of effective teaching and learning. The modified curriculum for learners with special needs, just like curriculum for any other learner, should have appropriate instruction plan and assessment plan.

The reliability and validity of the test scores can be compromised with some special needs learners. The difficulties can be in the form of communication styles (for example, the need for sign language interpreter for deaf learners), the length of the assessment, and also intentional problems. In order to overcome these and other problems associated with assessing special needs learners, accommodations and modifications in the testing procedure is important. These modifications should include but not limited to the following:
• Extending time limits – learners with learning difficulties e.g. reading comprehension can benefit from this arrangement.
• Individual administration - this allows for interaction with the examiner who is in a position to assess the learner’s strengths and weaknesses.
• Simplification of the language used – this is especially useful with hearing impaired and mentally retarded learners.
• Provision for audiotape, large prints or Braille materials.
• Changing the setting, e.g. moving to smaller and distraction-free settings.
• Use of type written rather than handwritten tests.
• Definitions of terms if its meaning is not being tested.
• Give more tests with fewer items as opposed to fewer, but longer items e.g. while using multiple-choice tests, reduce the number of choices to simplify the tests.

Conclusion
Curriculum modification is necessary for learners with special needs even when an inclusive curriculum is being followed. The suggestions posed by Sear are applicable in the case of Botswana. Botswana has an enabling environment for such modifications to be done given that government policies do recognise the need to educate equally all citizens. Accommodation, adaptation, parallel curriculum outcomes and overlapping curriculum as modification strategies would require that teachers have training in handling learners of diverse abilities and be committed to teaching. Special education teachers and the regular teachers would need to work together and this will be facilitated by having regular teachers also having some training on handling special needs learners. The support structures need to be strengthened to facilitate this cooperation. The assessment of such a modified curriculum will also benefit from the preparedness of teachers and the schools as well as the national curriculum unit. The suggested modifications of assessment procedures and materials need coordinated efforts on both the government side and that of service providers(teachers). Parents also have to be brought on board even more than for regular learners as they need to play a role to ensure that the special need child does not fall behind with their school work.
Recommendations

- Speeded curriculum and assessment modification in Botswana
- Training of personnel: Training of teachers needs to have a compulsory component in “teaching and assessing learners with special needs”. Similar in-service training is also needed for the already practicing teachers.
- Resources: There is a clear lack of resources in schools where special education students are found.
References


King-Sears, M. E. (2001). Three steps for gaining access to the general education curriculum for learners with disabilities. *Intervention in School and Clinic, 37*(2), 67-76.


Websites: