

Grade Twelve National Examination Assessments Practices for Learners with Visual Impairments in Selected Schools in Mwense and Lusaka Districts, Zambia

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Abstract

The study aimed at examining the practices at grade twelve level with respect to learners with visual impairments. The sample was drawn from Mwense and Lusaka districts of Zambia. The study was guided by the following objective: to establish the current practices of the grade twelve national examination assessment for learners with visual impairments in selected schools of Mwense and Lusaka districts, Zambia. The study was qualitative and a case study design was used. The study comprised twenty-two respondents consisting of four pupils, six school leavers, and six school specialist teachers, two school headmasters, two ESO in charge of special education and two officials from the Examination Council of Zambia (ECZ). Semi structured interviews were used to collect data. Thematic analysis was used to analyse data based on the themes that emerged in the study. The study findings revealed that learners who were totally blind wrote their examinations using braille format and enlarged print was used for those learners who were partially sighted. The findings of study also showed that the examination questions were modified into a descriptive form and by doing so learners were able to access the examinations. The study further revealed that learners were given extra time during the examinations, although this was not adequate. It was equally revealed that there were no special provisions that were considered when marking examination scripts for the visually impaired learners meaning their scripts were marked just like other scripts for learners without sight challenges. Based on the findings, it was recommended that the Examination Council of Zambia should come up with a marking centre where the script for the visually impaired could be marked to solve the problem of missing results among others.

Keywords

Visual Impairment, Assessment, National Examination

INTRODUCTION

Educational assessment can be formative or summative. The purpose of educational assessment includes; selection, placement, certification, rehabilitations, and obtaining scholarships (McCloughlin and Lewis, 2008). According to the Examinations Council of Zambia (2014) the grade 12 examination is a high stake school exit examination and the gateway to the world of tertiary education and employment. However, for the visually impaired learners to fully excel from examinations, the test items should be adapted to make it accessible. Therefore, the appropriateness of the examinations given to the visually impaired learners is dependent on the ability to be adapted by simply adapting written examinations into enlarge print or braille format (Willings, 2017). Additionally, appropriate educational assessment methods also need to be adopted for the learners with visual impairments (Ndhlovu, *et al.*, 2018). The examinations should be in a format that the learners use and are familiar with. Hence, it is important to understand each student's visual diagnosis and the

implications with regard to functional vision to make the appropriate adaptations in order to maximize the student's use of vision and access to the same examinations as their sighted peers (Betsy *et al.*, 2005).

In developed countries such as USA, the formats in which educational assessments are provided to the students with visual impairments vary widely depending on the unique nature of his or her disability. In accordance with IDEA 2004, an IEP must also detail how the student will be included in the state assessments in which all students must participate by clearly stating the accommodations which should be made to the examination item (Alden, 2016). Therefore, for students who are blind or have significant visual impairments, braille is considered the most efficient code used for reading and is widely accepted as an accommodation that can preserve the validity of an assessment (Carmen, 2017). However, with regards to examinations for the visually impaired at grade twelve in Zambia, very little is known.

In Zambia, out of a total number of one thousand four hundred and four (1,404) visually impaired pupils who sat for the grade 12 school certificate examinations between 1994 and 2004, only 0.008 per cent obtained full school certificates (Examination Council of Zambia, 2004). Nevertheless, the aforementioned benefits of assessments can only be realized when there are deliberate efforts to analyse assessment results and take special measures to prevent the national exams from becoming a barrier to progression of learners with visual impairment. However, with time, it has become evident that learners with visual impairments have continually been disadvantaged in the application of national assessments. It appears that national assessments have unconsciously and systematically been used as a barrier to the progression and excellence of persons with disabilities, especially those with visual impairments.

UNESCO (2015) argues that if assessment is discriminatory, persons with visual impairments would be at a disadvantage and the purpose of special education would be defeated. This essentially refers to prejudice against or disregard for the learners with visual impairments' needs and their rights. According to the UN Convention on the Rights of Persons with Disabilities article 5 sub-sections 3, it is stated that;

In order to promote equality and eliminate discrimination, states parties shall take all appropriate steps to ensure that reasonable accommodation is provided

This has caused a much larger number of people with visual impairments to be found in the street begging. Therefore, it becomes inevitable, to carry out this study in order to provide evidence to the barriers that affect the progression of learners with visual impairments in the national assessment.

STATEMENT OF THE PROBLEM

Although the Zambian government has made progress in the area of Special Education as evidence by the adoption of the 2012 Disability Act, 2011 Education Act and Policy Educational documents, the national examination assessment of learners with visual impairments seems to have received unfair treatment (Muzata, 2015). Even if several studies have been done on the education of the learners with visual impairment, challenges have persisted in the current national examination assessment (Mutonga *et al.*, 2016). In Zambia, the current practices in the educational assessment of learners with visual impairments have not been researched on. Therefore, the study seeks to examine the existing grade twelve national examination assessment practices for learners with visual impairments in Zambia.

THE PURPOSE OF THE STUDY

The purpose of the study was to examine the current practices in the grade twelve national examination assessments for learners with visual impairments in selected schools of Mwense and Lusaka districts, Zambia.

OBJECTIVES OF THE STUDY

The study was guided by the following objectives;

- 1) To establish the current practices of grade twelve national examination assessments for learners with visual impairments.
- 2) To ascertain the factors affecting the current practices in the grade twelve national examination assessments for learners with visual impairments.
- 3) To determine the measures which should be taken to improve the grade twelve national examination assessments for learners with visual impairments?

RESEARCH QUESTIONS

The study was guided by the following research questions;

- 1) What were the current practices of grade twelve national examination assessments for learners with visual impairments?
- 2) What were the factors affecting the grade twelve national examination assessment practices for learners with visual impairments?
- 3) What measures were suggested to be taken to improve the existing practices in the grade twelve national assessments for learners with visual impairments?

SIGNIFICANCE OF THE STUDY

It was hoped that the study would contribute to the existing literature on assessment practices for learners with visual impairments. Furthermore, the results of this study sort to implore government and other stake holders to design policies that should address the inequalities and inequities that exist between able bodied learners and those experienced by visually impaired learners during the national examination assessment. It was also hoped that Disabled People's Organisations would use the findings to advocate for the welfare of learners with visual impairments before, during and after the assessment periods.

Theoretical Framework

This study, was guided by the theory of assessment of learning which involves assessing the students' performance at the end of a given period through

achievement testing or public examine (Baku, 2008). Shirlee (2011) concurred that assessment of learning is used for accountability rather than improvement of the quality of teaching and learning. Therefore, assessment methods should be chosen that enable all pupils to demonstrate their learning achievements. Assessment of learning monitors the quality of the school system and evaluates educational policies. It is also used for placement of students, certification and measuring accountability. It advocates for the summative assessments such as the national examinations which should be provided in a format that suits the needs of the learners. Additionally, it is equally used to ascertain whether the money spent on education is yielding desired results. Assessment of learning is used to determine the fate of the students rather than improve their performance. It is a tool that is used to monitor learning, assess attainment and provide feedback to staff, pupils and parents.

The applicability of this theory is that it advocates that summative assessments such as national examinations should be provided in a format that suits the real needs of the learners. Thus, this theory was used to analyze the current practices on the grade twelve national examination assessments for learners with visual impairments. The theory of assessment of learning was found relevant for this study because for a long time the pupils with visual impairments have been disadvantaged when it comes to national examination assessments. Therefore, the theory of assessment of learning could be used to improve the current practices in the grade twelve national examination assessments for learners with visual impairments.

METHODOLOGY

Research Design

Kombo and Tromp (2006) define a research design as a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. A case study research design using the qualitative approach was used to allow the researcher to interact with the research participants in order to collect in-depth data.

Target Population

The target population for this study was made up of all the pupils with visual impairment in the grade twelve (12th) levels, visually impaired school leavers, special education teachers, headmasters from selected schools, ESO in charge of special education and the Examination Council of Zambia (ECZ) officials in charge of special education.

Sample Size

In this study, the sample comprised of 22 respondents of which 4 were pupils, 6 were school leavers, 6 were

school specialist teachers, 2 were ESOs and 2 officials from ECZ.

Sampling Techniques

The study employed purposive sampling procedure to select school head teachers, education standard officers special, specialist teachers, Examination Council of Zambia officials, and the pupils in this study. When selecting the visually impaired school leavers, snowball or chain sampling procedure was used. The selection of a sample under purposive procedure was based on the judgement of a researcher regarding the characteristics of a representative sample.

Data Collection Instruments

In this study, only one instrument was used in the collection of data from twenty two (22) respondents. This was semi-structured interview guides. To collect data from the pupils' focus group discussion guide was used and Semi-structured interview guides was used to collect primary data from the school leavers, specialist teachers, school headmasters, ESO Special officials and Examination Council of Zambia (ECZ) officials. The researcher used these instruments in the data collection because of the several advantages each one of them was capable of bringing to this kind of study. Such ranged from explanatory powers, representativeness, appropriateness to ability to ensure reliability and validity in the data generated to support this kind of study (Cohen *et al.*, 2000).

Data Collection Procedure

Before commencing the exercise of data collection in the field, permission was sought from the Research Ethics Committee from the University of Zambia. The researcher also obtained an introductory letter from the Assistant Dean (Postgraduate) of the School of Education, University of Zambia (UNZA). The DEBSs also wrote a letter of introduction to introduce the researcher to all the institutions where the data on the topic was collected. Finally, before administering any instruments, the researcher also asked all participants to fill in the consent form. Semi- structured interviews for the specialist teachers, school head teachers and visually impaired learners were administered during school time because this was the only appropriate time to get hold of these types of participants. On the part of the visually impaired school leavers, ESO special officers and Examination Council of Zambia (ECZ) officials, a detailed one-to-one interview approach was used to solicit for responses.

Data Analysis and Procedures

Thematic analysis was used to analyse the data in this study. According to Sidhu (2014) thematic analysis, helps to summarise several data collected about the research questions. Qualitative data collected from semi-structured interview guide was analysed through

thematic analysis by coding, grouping and meaningfully interpreting emerging themes reflecting both the specific research questions and objectives of the study. In this study, groups of questions that were interconnected and related were identified as themes for the purpose of analysing the views of the respondents on the grade twelve national examination assessments for learners with visual impairment in Mwense and Lusaka districts, Zambia.

Ethical Consideration

According to Creswell (2009) and Kombo and Tromp (2006) it is a mandatory that research participants get informed before they are approached for data collection. To comply with this, the researcher ensured that consent was obtained from the respondents and thoroughly explained the purpose of the research to ensure that the respondents participated voluntarily. Therefore, the names of the participants in the entire study were kept anonymous. Confidentially for all the information gathered was highly safeguarded.

FINDINGS AND DISCUSSION

Current Practices of the grade twelve National Examination Assessment for Learners with Visual Impairments in Zambia

The objective of the study was to establish the current practices of the grade twelve national examination assessments for learners with visual impairments in Mwense and Lusaka districts, Zambia

General Practice for the grade twelve National Examinations for the Visually Impaired Learners

Arising from the findings of this study, it was evident that the exams for the visually impaired learners were modified into two formats and these are; braille for the totally blind and enlarged print for the partially sighted learners. One Examination Council of Zambia official said;

We are using two practices; braille and enlarge print, they have a paper that we call a parallel paper which is different from the one that the mainstreams write. This paper is basically different to enhance it for them because it is first of all adapted where all the visual information is removed and made suitable for them in every way. This is the same paper that is

printed in two versions; Braille for the totally blind and enlarge print for the partially sighted learners

This is in line with what Cecil *et al.*, (2007) highlighted that learners with visual impairments cannot be assessed in exactly the same manner as the learners without visual impairments and hence; the exams should be modified in order to make them accessible to them. Additionally, Gebreslassie and Menggistu (2016) added that in most developed countries awarding Examination Bodies offer a range of assessment formats for students with visual impairments by modifying the examination papers into accessible formats. Additionally, the MoGE (2016) has a progressive policy which states; examinations shall be based on modified or alternative curriculum for learners with SEN. However, whilst the provision of modified examination papers may be a good approach, it appears that ECZ do not modify the examination papers according to the severity of each individual visual acuity. This may not be a good approach in that those with severe and profound visual acuity may not fully benefit from the way the exams are practiced since ECZ only make general modifications. Therefore, for the visually impaired learners to fully benefit from the way the examinations are modified, the adaptations should be made to suit the actual individual needs of each learner with visual impairments

It was also evident that at times the visually impaired learners were subjected to write papers prepared for the sighted learners when ECZ failed to send the modified papers and it was difficult for them to write. This is a similar picture with what Jaroslav (2012) found in some rural parts of South Africa, where the visually impaired learners were subjected to write exams through auditory channels because the Department of Education did not provide assessment in the appropriate format and the questions had to be dictated to the candidates. This may not be a very helpful approach because if the questions are dictated to them, the visually impaired learners may not fully understand the questions as compared to when they read for themselves and the chances are very high that these candidates may not request for the invigilators to read for them the questions over and over so that they apply what they understood.

Therefore, because the visually impaired learners did not understand the questions the chances are very high that they may answer the questions wrongly and if that happens they may be marked wrong without realising the mistake that was there. In line with the ECZ presentation that for ten years, less than 10 percent of the visually impaired learners passed very well, it might be argued that these poor exam administration may have contributed. Therefore, ECZ and other stake

holders like the PEO and DEBS offices should ensure that the modified question papers are distributed to the schools.

Modifications which are made to make the Examinations for the Visually Impaired Learners Accessible

The findings show that some modifications were made to the exams in order to make them accessible to the learners with visual impairments. The study also revealed that the questions in the examination papers were modified into a descriptive form and all the barriers that can hinder these learners from accessing the exams were removed. Additionally, the respondents added that all the visual information like charts, maps, pictures and diagrams were removed from the question papers as one of the modifications. One head teacher said;

For the visually impaired learners, the maps, diagrams and pictures are removed to suit the needs of the visually impaired learners

This is supported by what Jonathan (2010) states that nevertheless it should be noted that in order to make exams accessible for pupils with low vision, both large print and electronic versions of the paper should be provided and all the visual materials should be removed from the item. This is a very good approach especially that the visually impaired learners may access the questions without difficulties which may positively affect their performance rate with regards to the grade twelve exams.

Arising from this study, it was evident that at a school level, the visually impaired learners wrote their exams in separate rooms from the mainstream to avoid disturbances and their examination rooms were organised to suit their needs. For instance the tables and chairs were positioned to suit the needs of the learners because some learner's eyes were sensitive to light. This was supported by what Nesbit (2009) points out that the examination room must be arranged to suit the needs of the learners with visual impairment in order to eliminate all forms of hindrances towards accessibility to the assessment of the visually impaired learners. This approach of location accommodations is good because the visually impaired students are able write exams peacefully without the disturbances of external factors and since they are allowed to seat in position they are comfortable with, the chances are that these students are likely to perform well.

Added Time for the Visually Impaired Learners during the Final Exams

Emerging from this study, it was evident that when the learners with visual impairments are writing their final exams, there was an allowance of added time. This is similar to a study conducted by (Vaughn *et al.*, 2000) that in most developed countries, learners with visual impairments are given extra time to complete the exams since, learners who read braille need twice as much time as other learners and it is estimated that learners who read enlarged print need time and a half to complete an exam. The study revealed that twenty to thirty percent of extra time is added during exams, per examination paper and added time is not enough because reading and writing in braille consumes a lot of time.

One Examination Council of Zambia official commented;

Yes we give them 30 percent of the total time allocated in an examination paper and schools can demand for more added time if they have assessed that a visually impaired learner needs more than 30 percent of the added time for them to fully benefit from the examinations

This is similar to what (Graeme *et al.*, 2009) found that for example, the Netherlands and Czech Republic appear to have options for hundred percent extra time (i.e. double time), while other countries have less (e.g. Ireland and France report thirty three percent extra). Although there is no policy on extra time allocated to accommodate the needs of learners with disabilities during exams there is a directive from the Examinations Council of Zambia that a twenty five percent of extra time should be allocated to accommodate the needs of learners with disabilities. Further, the researcher found that the ECZ allows twenty five percent of extra time to candidates with Special Education Needs (ECZ, 2011).

However, the fact that the responses varied across the respondents in this study as to the extra time allowance is indicative of lack of awareness for the twenty five percent directive of added time from the Examination Council of Zambia. This therefore, calls for the need to come up with a policy on how best the needs of the learners with visual impairments could be accommodated to ensure some level of equity during the assessment process. The lack of awareness among the respondents has to a larger extent left the visually impaired learners at a disadvantage with regards to the passing rate.

Responses on the Extent to which the Visually Impaired Learners benefit from the Way Examinations are handled

The findings of the study revealed that to some extent the visually impaired learners did benefit from the way the exams were handled because their needs were catered for since their examinations were modified into braille and enlarged print and because they were also given added time. Contrary to this, the study also revealed that at times they did not benefit from the way the exams were handled because modified papers were sometimes not distributed to the schools and in such a case they were given examination papers designed for the sighted learners and the invigilators read for them. This greatly affected their pace of writing.

One head teacher respondent said;

No; the learners with visual impairment do not benefit from the way the exams are handled because time allocated is not enough for them to finish writing their exams

In addition, the study revealed that the learners with visual impairments were not given equipment like cubes and types to help them to solve mathematics and this affected the performance of learners with visual impairments. Additionally, the study revealed that the coverage of the syllabus was mainly concentrated on the ordinary learners and materials like text books were not provided in favour of the visually impaired learners. This therefore, is evident that there is less professionalism in the setting of exams and just the way the exams for the visually impaired learners were handled. This is similar to what Renfranz (2009) found out that tests for the visually impaired arrived late, the learners wrote before the material was covered in class and the exam had braille transcription errors that made questions unanswerable, and exam results for the visually impaired students were lost. In order for the visually impaired learners to excel in the national exams the government through the Curriculum Development Centre should ensure that text books are embossed into braille and adapted to enlarged print format as this may be very crucial in ensuring that the visually impaired learners adequately prepare for the final exams.

Responses on whether there are Specialised Teachers at Examination Centres with Expertise in Braille during the Final Exam

The study revealed that the expertises in braille were there in the examination centres but there were not enough to assist all the visually impaired learners. It was evident that in some centres, there were no specialised teachers with expertise in braille which

negatively affected the performance of the visually impaired learners.

One school leaver said;

We were given specialist teachers with expertise in braille, only that they were not enough and at times we were just given ordinary teachers who did not have a skill in braille to invigilate us

This is similar to what Ponchillia and Susan (1996) found out that the candidates with visual impairment perform poorly because they are not provided with specific support assistant that may give specific advice if the exams involve technical procedures that may be new to the candidates. Therefore, the absence of expertises in braille in the examination centres may be crucial for the visually impaired learners because in order for them to excel especially when using various devices, braille expertises should be adequate to assist all the visually impaired learners. Expertises in braille are also crucial when it comes to packaging of embossed brailled scripts in readiness for transcription at ECZ. Therefore, the Ministry of Education should ensure that expertises in braille are adequate in all the examination centres for the visually impaired learners to benefit in the way the exams are practiced.

Assistive Devices which are given to the Visually Impaired Learners to assist them when writing the grade twelve Examinations

With regards to the assistive devices which are given to the visually impaired learners to assist them when writing the grade twelve examinations, the study revealed that equipment for the visually impaired learners were not enough to assist all the visually impaired learners. It was evident that the visually impaired learners were not allowed to write their exams using computers. This is in line with what Jonathan (2010) and Nesbit (2009) found out that when writing exams, students with visual impairments do not have access to technology that will enable them to overcome their difficulties in the exams.

One school leaver said;

Madam the time we wrote our exams, we were just given braille slates, Perkins and type writers and the equipment were not enough to cater for every one especially the Perkins and type writers

However, this is consistent with the findings by (Allan, 2009 and Connell, 2008) who argues that the devices such as magnification devices which include eyeglass-mounted magnifiers, free standing or handheld magnifiers, and electronic equipment such as the closed circuit television (CCTV) or a computer that

has text enlargement software installed do not provide a student with an unfair advantage, rather they are devices that the student requires to access print, and they should be allowed as standard accommodations for the visually impaired learners to fully access the exams. However, the implication is that when the visually impaired learners are subjected to use the devices they are not comfortable with, the chances are high that they may not perform well in the national examinations. Therefore, when writing exams, students with visual impairments should have access to technology that will enable them to overcome their difficulties. The visually impaired learners should be allowed to use the technologies they are comfortable with for them to excel in the national exams.

Marking of Examination Scripts for the Visually Impaired Learners

Emerging from this study, it was evident that there was no special training that was given to the markers concerning how to mark scripts for the visually impaired learners and that some brailled scripts were marked by the general markers in various marking centres. It was revealed that there were no special provisions when it came to the marking of scripts for the visually impaired learners, which meant that their scripts were marked just like any other scripts.

One of the teachers said;

He said it's a pity that markers are not trained to specifically mark scripts for the visually impaired learners and the scripts for the visually impaired learners are marked in various centres after they are transcribed by the transcribers at the Examination Council of Zambia

This was similar to what Waterfield and West (2008) found out that there are no special provisions considered when marking the scripts for the learners with visual impairments which affect their performance in the national high stake exams. However, this may not be a good approach because students with visual impairments may present their work poorly if they are unable to re-read their own work which may affect their performance in the national examinations. Therefore, the government through the Examination Council of Zambia should engage special education teachers in the marking scripts for the visually impaired learners and marks should not be deducted when they make grammatical errors.

The outcomes in objective one were in collaboration with assessment of learning theory propounded by Baku (2011) which postulates that the national assessment is used for accountability. This therefore, means that the examining board of each nation has a legal responsibility to modify the national

examinations for the learners with disabilities to access the examinations with little or no difficulties.

CONCLUSION

This study found that that the learners with visual impairments wrote their examinations using two formats and these were; braille for the totally blind and enlarged print for the partially sighted learners. Furthermore, the study confirmed that some modifications were made to the examination papers in order to make them accessible to the learners with visual impairments but at times, these learners were subjected to write examination papers for the sighted learners when ECZ failed to send some modified papers. Additionally, the study also established that all the visual information like charts, maps, pictures and diagrams were removed from the question papers as one of the modifications. This brings justification that the national examinations should be provided in a format which suits the needs of the learners, advocated for by assessment of learning theory propounded by (Baku, 2008 and Shirlee, 2011). In line with this, the research findings revealed that when the learners with visual impairments were writing their examinations, there was an allowance of added time.

In this regard, the modifications made to the examinations for the visually impaired learners brings justifications that the national assessment is used for accountability, advocated for by assessment of learning theory propounded by (Baku, 2008 and Shirlee, 2011). This therefore, means that the examining body of each nation has a legal responsibility to modify the national examinations for the learners with disabilities to access the examinations with little or no difficulties.

RECOMMENDATIONS

1. The Examination Council of Zambia should employ braille transcribers on a permanent basis to be responsible for the transcription of brailled work for the visually impaired learners.
2. The Examination Council of Zambia should engage subject specialist special education teachers with expertise in braille in the transcription and marking of scripts for the visually impaired learners.
3. The Examination Council of Zambia should come up with a marking centre specifically dedicated to marking scripts for the visually impaired learners.
4. The Examination Council of Zambia should ensure that a percentage of added time is indicated on the modified question papers to

assist the invigilators to add the actual percentage of additional time.

5. The Examination Council of Zambia should ensure that added time is indicated on the modified question papers to avoid biases.
6. The Curriculum Development Centre should make sure that text books in all the subjects and other relevant materials are modified into braille and enlarged print so that the visually impaired learners can adequately prepare for the exams in all the subjects.
7. At a school level it will also be very helpful to ensure that pupils with visual impairments are made computer literate so that in future they can type examinations on their own.

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