

IN SEARCH OF AFRICAN EPISTEMOLOGIES IN ASSESSMENT TESTS FOR PRIMARY SCHOOL CHILDREN WITH LEARNING DISABILITIES IN HARARE AND CHITUNGWIZA PROVINCE, ZIMBABWE

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ABSTRACT

The purpose of this study was to determine the extent African epistemologies were reflected in the Shona and English assessment tests used for children with learning disabilities in Harare and Chitungwiza province in Zimbabwe. A qualitative research using a case study design was employed to collect data. Purposive sampling was used to select the schools and teachers. The sample consisted of 44 Shona and English remedial teachers from 27 primary schools. Semi structured interviews and document analysis were used to collect the data. Teachers' data was verified by 7 Remedial Tutors, and 3 Educational Psychologists. The findings show that the English tests did not reflect African epistemologies adequately. However, schools still used them to identify the children. Mostly foreign tests were used to identify children in the private schools. The study recommended the adaptation of foreign tests to include local content which is linked to classroom intervention. It also proposed the setting up of national and local test committees to develop tests and review the current tests which are being used and ensure that they incorporate appropriate African epistemologies. The study further recommended that future research focuses on the development of home grown instruments reflecting African epistemologies.

Keywords: African epistemologies, Assessment tests, children with learning disabilities, remedial.

INTRODUCTION

Assessment is a very important area of the teaching and learning process as it provides answers to pertinent educational questions. The use of appropriate tests is important as teachers and other stakeholders depend on their results to make valuable educational decisions (Cosford, 1990; McLoughlin and Lewis, 1989; Pumfrey; 1984). Since the independence of Zimbabwe in 1980 questions have been asked on the relevance of the formal testing of African children who form the bulk of the recipients of the remedial programme. How has the use of foreign tests impacted on the identification of these children? How have these been made relevant to the assessment of children with LDs? How sure are we that they are identifying the correct children with LDs? Can we brand all foreign tests as irrelevant to the Zimbabwean context in this global village? Educational psychologists point out tests need to be culture- fair or culture- free if their results are to be of value to the teacher and children (McLoughlin and Lewis, 1989; Fontana, 1988). Such a situation has created problems of interpretation between the professionals and the teachers or practitioners in the primary schools. Both are beginning to dispute the validity of the instruments being used and the entire testing process for all children. The use of adopted foreign tests in Mathematics and English to screen grade four children has been available since 1980 (Tambara, 2001). However, the experience in the Zimbabwean situation presented interesting reactions from teachers who in many instances disputed the screening results claiming that most of the children being labelled as having learning disabilities were not in that category. Omari (1977) says the problem often encountered in

African countries is lack of appropriate screening and assessment tests depicting the local environment and cultural realities.

The following research questions guided this study:

- What African epistemologies are reflected in the assessment tests used for children with learning disabilities?
- How can we ensure that the assessment tests reflect African epistemologies?

LITERATURE REVIEW

Epistemology is concerned with the theory of knowledge. Knowing which is derived from knowledge is made up of concepts and criteria peculiar to a particular culture. The focus of this study was on African epistemologies; those aspects the Nziramasanga Commission (1999:9) calls ‘the best of our heritage and history.’ The issue of appropriate epistemologies for African education has taken centre stage in Africans’ quest for an African identity (Kaputa, 2011; Higgs, 2006; Nyamnjoh, 2004). Epistemology as stated by Wong (2008) is the branch of philosophy that examines the nature of knowledge and the processes we use to acquire it and value it. The nature of knowledge and its processes in an African epistemology according to Nyamnjoh, (2004) would involve the real and the unreal, the physical and the metaphysical, the visible and the invisible of our being. An appropriate African epistemology means something which is right or suitable for certain activities. In our case the creation of assessment tests suitable for children with learning disabilities (LDs). Nyamnjoh (2004: 178) claims the Western epistemology has survived because ‘it suits the purpose of the agents of Westernisation than because of its relevance to understanding African situations’. If education is to be meaningful in its mandate to develop African countries then the curriculum must reflect its vision and aspirations for the future; who are its children. It is proper that the assessment models, their tests and strategies should either be home grown or adapted to suit local conditions. Mpfu and Nyanungo (1998) concur that Zimbabwean educational psychologists, should advocate for this thrust in test development citing colonial education as one factor which caused the adoption of Western assessment tests.

Mpfu and Nyanungo (*ibid*) proffer the reasons that the behaviours depicted in the tests are different from the culturally accepted ones and the competences solicited are not suitable to African communities. Woolman (2001: 31) writes that ‘Western schooling strived to eliminate students through failure on tests whilst traditional [African] education strives to include children in their community.’ Foreign formal assessment tests and strategies have been at the cornerstone of most screening strategies for children with LDs in all African countries including Zimbabwe. In America assessment for identifying disabilities has historically been clocked with controversy because most of the children identified for special education placement have been black (NABSE, 2002). A recent study shows that Black and Hispanic children’s reading scores are below those of white children (Planty, Hussar, Snyder, Kena, KewalRamani, Kemp, Bianco, Dinkes, 2009).The issue of language is central to assessment practices. Sattler (1985) points out those tests should be administered in the student’s language. Sattler (1992) advocates for the use of culture fair tests with multicultural students. Mpfu (1991) and Sattler (1989) cite court cases where parents have advocated for the removal of the segregatory nature of the tests used in the assessment. Greaney and Kellaghan (2008) write in their report on assessing national achievement levels in education that in South Africa indigenous students had language difficulties because tests did not take into consideration South African English. Are such issues also prevalent in Zimbabwe? In Zimbabwe English is the media of instruction although not all children are proficient in it. This is bound to create

learning difficulties in these children who may later be identified as having LDs. British and American epistemologies in the foreign tests inform the assessment processes of the identification of LD children in Zimbabwe. Although Mpofu (1999) says that local tests are used he acknowledges that Zimbabwean tests are foreign (Mpofu and Nyanungo, 1998). How much African epistemology in the form of local content is evident in the tests and strategies used to identify children for remediation and how relevant is it to the Zimbabwean situation. The curriculum given to children is the basis of the assessment of children. The assessment instruments should be a reflection of the existing curriculum if they are to provide accurate and relevant results. Interventions based on such results should be relevant and help to develop children with a meaningful education which is relevant to the needs of their country. Woolman (2001) in a paper titled 'Educational reconstruction and Post-Colonial curriculum development: A comparative study of four African countries' recommends that schools should study and preserve indigenous cultures, languages and arts. These issues Woolman (ibid) mentions are the epistemologies which should be incorporated in assessment practices. It is with this position in mind that this study sort to identify the presence of African epistemologies in the assessment tests to improve current remedial provision for children with LDs.

METHODOLOGY

A case study design was used in line with the qualitative paradigm. According to Baxter and Jack (2008) a qualitative research paradigm is based on a constructivist philosophical view which says that reality is subjective thus the world exists but different people construct it in very different ways. This study saw these constructs as important in illuminating the nature of the assessment tests being used in the schools. Qualitative data was therefore generated in the field on the assessment tests and viewpoints of the participants. Purposive sampling was used to identify the participants in the field as the research progressed (Oliver 2006). Forty four (44) remedial teachers (24 for English and 20 for Shona remediation) from twenty seven (27) primary schools (7 Districts) in Harare and Chitungwiza Province were selected and interviewed. Seven remedial tutors and three educational psychologists verified the data from the participants from the schools. The research consisted of a total of fifty four (54) participants. Schofield (2006) describes it as a method whereby whoever is available and willing takes part in the study. This is both expedient and less costly. Purposeful sampling enabled the identification of knowledgeable people from the relevant government department, government schools and private schools offering remedial services for children with learning disabilities.

These participants were typical of the persons who would be able to discuss the conditions prevailing in their schools pertaining to the assessment of children with LDs. Semi structured interviews were held with remedial teachers, remedial tutors and educational psychologists. A document analysis instrument was developed for the tests and syllabi used during the assessments and interventions. The data was analysed using global analysis strategies (Legewie, 1994 in Flick, 2009), and thematic coding by Rudestam and Newton (2001) and Flick (2009) which prescribed steps to data analysis and interpretation. The principles of research ethics were followed one of which was that during the entire research duration the researchers should conduct themselves professionally and respect all those being interviewed (Dench, Iphofem and Huws, 2004). Permission for carrying out the study was solicited from the Ministry of Education Sport and Culture, Schools Psychological Services and the individual institutions concerned. Consent was solicited from all the participants. All information was treated with confidentiality and anonymity was assured to all the participants.

RESULTS

African Epistemologies Reflected in the Tests

The generated data showed the varied nature of the province. The seven districts had varying race representation as shown by the different schools. The government schools which were mainly in African high density urban areas had different responses as compared to those in the former white low-density urban areas whose majority schools were private and others trust schools as they are also known. The responses show that eleven out of the twenty-four English remedial teachers felt that the English tests did not depict the children's environments; seven avoided answering the question. Six out of the seven teachers from the Trust schools with remedial departments felt that the tests they used were appropriate for their environments. Nine out of the twenty Shona remedial teachers felt it was not a depiction of the children's circumstance; three were non-committal. The findings showed that there is little awareness of African epistemologies in most of the tests. The statements of the teachers are in Figure 1.

The English test is foreign to the children because the vocabulary and children's language are at variance.
 Not much African content in the test, children cannot relate and understand the concepts
 Tests need to be made to suit the country.
 Local content is not 100% in the graded word reading list
 Some areas of the Shona test are outdated e.g. Shona riddles
 Children are affected by the environment especially in language [Shona test].

Figure 1: Teachers Responses on African Epistemologies in the Tests

The purpose of assessment is to identify the type of knowledge the children or the learner has learnt. This content consists of local and world knowledge depicting the child's culture and any relevant schema the child brings to the teaching and learning encounter. The teachers felt that the content of the English test was difficult for the children especially those in high density and peri-urban areas. The content was difficult at two levels; first in terms of representation from their syllabus and secondly in terms of their world knowledge. They questioned the representation of African epistemologies within the English tests. Foreign content tends to be outside the children's schema and ends up distorting the children's performance. Despite the child knowing the answer this is rendered irrelevant by the use of foreign words and practices. Some constructions in the English tests were obscure or depicted alien cultures to the children. For example one teacher in a high density school said:

The English test asks about cars to grade 3 or 4 children who have no idea of how a car works. Most of their parents do not even own one. Children are not familiar with the English used in the test.

The syllabus reflects the type of knowledge the country would like to impart to its children. In an African setting the assumption is that a nation would thus focus on the vital aspects of its traditions and culture in the form of their philosophy, religion, art and values as represented in the syllabuses. How much of these were covered in the tests? Teachers felt that the language tests did not reflect aspects of the syllabus children have learnt or are learning. The test items were compared to the Primary school syllabi for grade 3 and 4 for English and grades 1 to 7 for Shona (Ministry of Primary and Secondary Education Zimbabwe, 1989). The tests did not show the links between themselves and the syllabi. For example in the Shona test, it was difficult to

ascertain the sources of the different subsections which were too numerous for this age group. The 'Zvirahwe'(riddles) subset is not in the syllabus for the grade 4 children. The tests being used in identifying children for remediation received varied responses of approval from teachers. The responses clearly show that teachers are not conversant with these tests. The teachers may not also know what is expected of them so they tend to respond in any manner. The remedial tutors who are the experts in this area also tended to be mixed up in their identification of local African epistemologies in the tests. This also may be attributed to the type of knowledge and skills they may have concerning the African epistemologies and test development.

Ensuring That Tests Reflect African Epistemologies

The literature on indigenous knowledge systems shows that there is need to acknowledge the role of indigenous knowledge in the education of children (Nziramasa, 1999). This is pertinent at the assessment stage because that is when we determine what has been learnt or not learnt. Teachers declare that for a test to be effective it has to focus on the child's culture or on issues that are globally accepted. The educational psychologists confirmed that they were not satisfied with the types of tests being used in the remedial programme also. However there is no provision for the development of assessment tests at both the local and national level. They proffered that the creation of test committees at both the school and national level would enable experts to develop appropriate tests for correct educational decision making in the country.

DISCUSSION

The issue of African epistemologies in the tests is more acute in the languages. The use of Shona names in the English tests does not make it represent the multicultural nature of Zimbabwe. Some studies point out that there is no need for culture specific tests since the world is now a global village and ideas are not culturally bound. This study revealed that all the teachers including those from the private schools felt that tests should be culture sensitive. This is in agreement with Higgs (2007), Nyamnjoh (2004), NABSE, (2002) and Planty et al (2009) who are advocating for the use of culture sensitive assessment tests for all children. I believe that good aspects of African heritage, culture and traditions should be depicted in our syllabuses and the tests we construct. The subtle differences between our environments should be seen and appreciated in all our endeavours.

The development of African epistemologies or knowledge systems should permeate all sections of our culture. I believe that our education system has absorbed many foreign practices some of them good and others negative; effects which may be responsible for some of the deteriorating moral standards and behaviours in our African societies. The Unhu, Ubuntu which we are proud of should be reflected in our activities to the minute levels. There are some schools of thought which believe that tests and models are universal and should remain so. This should not be the case because it results in the domination by other epistemologies thus reducing our own self-identity as African people. Foreign influences in many forms have permeated our culture since the coming to our lands of Arabs, and Europeans. It is obvious that their influences in the form of products and other cultural influences will continue to be with Africans. I believe that we should look at how we can shape them to suit our circumstances. The issue of culture raises the need for the creation of culture fair and culture free assessment tests as suggested by Fontana (1988) and McLoughlin and Lewis (1989). Thus the tests should reflect what is happening in the children's society.

CONCLUSIONS

The following conclusions were made:

- Teachers across the different school types felt that African epistemologies in the language tests especially the English were not adequately represented as they tended to depict more Western images and culture than local ones.
- Teachers were not conversant with the assessment tests being used in the government schools.
- There was no provision for the development of tests nationally.

THE RECOMMENDATIONS

- Foreign tests should be adapted to local needs. The foreign tests should also be used as models in the development of culturally fit assessment tests for Zimbabwean students.
- Teachers must be capacitated in the use and development of classroom tests.
- National and local test development committees should be created to develop local tests and also review the current foreign tests in use. Their terms of reference should be to ensure that African epistemologies are evident in all tests. There should be agreement on what should be included in these tests in recognition of the children's varying environments.
- Further research must focus on security of assessment tests in schools so that they are not invalidated by misuse.

REFERENCES

- Baxter, P and Jack, S. (2008) Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544-559. <http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf> 14.03.12.
- Chief Education Officer's Minute No.12 of 1987. *Institutionalisation of the Remedial Programme*. Harare: Government Printers.
- Cohen, L. and Manion. L (1989) *Research Methods in Education* (3rd Edition), London: Routledge.
- Cosford, Q. (1990) *Remedial Teaching: A Practical Guide for Class Teachers and Students*, Second edition. Cape Town: Maskew Miller Longman.
- Dench, C., Iphofem, R. and Huws, U. (2004) An EU code of Ethics for Socio -Economic Research. Brighton Institute for Employment Studies, www.employment-studies.co.uk
- Flick, U. (2009) *An Introduction to Qualitative Research* Edition 4. London: Sage Publications Ltd.
- Fontana, D. (1988) *Psychology for Teachers*. Hampshire: The British Psychological Association and Macmillan Publishers Ltd.
- Greaney, V. and Kellaghan, T. (2008) *Assessing National Achievement Levels in Education*. Washington: The World Bank. www.worldbank.org 27.02.12.
- Higgs, P. (2007) Towards an Indigenous African Epistemology of Community, in *Higher Education Research*, *South African Journal of Higher Education*, Vol. 21 No.4 retrieved 16.07.08 <http://www.ajol.info/viewarticle.pdf?>
- Kaputa, T.M. (2011) An Appropriate Epistemology in African Education. *Zimbabwe International Journal of Open and Distance Learning*, International Research Conference Edition 2011. Pp 67-75.
- McLoughlin, J.A. and Lewis, R.B. (1986) *Assessing Special Students* (2nd Ed.) Columbus: Merrill.

- Ministry of Primary and Secondary Education Zimbabwe (1989) Primary English Syllabus Grade 3. Harare: Curriculum Development Unit.
- Ministry of Primary and Secondary Education Zimbabwe (1989) Primary English Syllabus Grade 4. Harare: Curriculum Development Unit.
- Ministry of Primary and Secondary Education, Zimbabwe (1989) Primary Shona Syllabus Grades 1 – 7 (inclusive). Harare: Curriculum Development Unit.
- Mpofu, E. (1999) Learning Disabilities: Theories, Practice and Application in Zimbabwean Schools. In M. Peresuh and T. Nhundu (Eds) Foundation of Education for Africa, Harare: College Press.
- Mpofu, E. (1991) Testing for Teaching. Harare: Longman Zimbabwe.
- Mpofu, E. and Nyanungo, K.R.L. (1998) Educational and Psychological Testing in Zimbabwean Schools: Past, Present and Future, European Journal of Psychological Assessment, 14 Pp. 71-90.
- National Alliance of Black School Educators (NABSE) (2002) Addressing Over representation of African American Students in Special Education: The Prereferral Intervention Process. Washington: Council for Exceptional Children.
- Nyamnjoh, F.B. (2004) A Relevant Education for African Development- Some Epistemological Considerations. CODESRIA Africa Development, Vol. XXIX, No. 1, pp. 161-184.
- Nziramasanga, C.T. (1999) Zimbabwe Report of the Presidential Commission of Inquiry into Education and Training. Harare: Government Printers.
- Omari, I. M. (1977) The Young Child in Tanzania 0 to 7 years, 7-15 years. Vol I and II. Dar es Salaam: Tanzania Scientific Research Council.
- Planty, M., Hussar, W., Snyder, T., Kena, G., KewalRamani, A., Kemp, J., Bianco, K., Dinkes, R. (2009). The Condition of Education 2009 (NCES 2009-081). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Pumfrey, P. D. (1985) Reading Tests and Assessment Techniques Second Edition. Kent: Hodder and Stoughton.
- Rudestam, K.E. and Newton, R.R. (2001). Surviving Your Dissertation 2nd Edition, Thousand Oaks: Sage Publications Incorporate.
- Sattler, M. J. (1985) Assessment of children's Intelligence and Special Abilities 2nd Edition. Massachusetts: Allyn and Bacon.
- Sattler, M. J. (1992) Assessment of children revised and Updated 3rd Edition. San Diego: J.M.S. Publisher Incorporate.
- Schofield, W. 2006. Survey Sampling. In R. Sapsford and V. Jupp. (Eds) Data Collection and Analysis 2nd Ed. London: Sage Publications.
- Tambara, C.T. (2001) The Possibilities and Challenges in Teaching Students with Learning Disabilities. In R. Chimedza and S. Peters (Eds) Disability and Special Needs Education in an African Context. Harare: College Press.
- Wong, Y. L. (2008) Epistemology and Education. [http://www.encyclopedia.com/ Philosophical+reflections+for+Educators/publication.aspx?pagenumber=1](http://www.encyclopedia.com/Philosophical+reflections+for+Educators/publication.aspx?pagenumber=1).
- Woolman, D.C. (2001) Educational Reconstruction and Post Colonial Curriculum Development: A Comparative Study of Four African Countries. International Education Journal Vol. 2, NO. 5, 2001 WCCES Commission 6 Special 2001 Congress Issue.