

Towards a holistic and relevant educational assessment in primary schools in Uganda

John Mary Vianney Mitana^{1,2*}, Anthony Mugagga Muwagga¹ and Cornelius Ssempala¹

¹College of Education and External Studies, Makerere University, P. O Box 40390, Kampala, Uganda.

²Luigi Giussani Institute of Higher Education, Kampala, Uganda.

Accepted 8 May, 2018

ABSTRACT

This paper sets out to explore the knowledge and skills assessed at Uganda's primary school level and its relevance to the current and future needs of the learners. Using a descriptive case study design, the paper draws on documentary and empirical evidence from key players in educational assessment in Uganda. The paper reveals that the current educational assessment in Ugandan primary schools is mainly in the form of the traditional pen and paper tests, measuring rote learning of few bits of intelligence at the expense of high order thinking skills. This was found unfair to pupils who possess high levels of intelligence that are not tested by the currently used assessment measures. Some pupils may be unfairly judged as weak or even "failures" when in reality they are very strong in certain intelligences which are not tested. This paper proposes the use of multiple assessments such as observations, group projects, journal reports, peer rating and teacher rating to measure learners' multiple intelligences. Pupil-friendly assessment tools and processes which clearly differentiate among learner differences, skills and experiences should be used. The study further recommends the assessment of non-cognitive skills and intelligence such as socio-emotional skills at both school and national levels. This will encourage teachers to intentionally include them in their daily pedagogical work including school-based continuous assessments. It will also make assessment more holistic and that pupils are assessed on the skills required to face life within and outside the school.

Keywords: Educational assessment, multiple intelligence, soft skills, assessment in Uganda.

*Corresponding author. Email: mitanavianney@yahoo.com, j.mitana@lgihe.org. Tel: +256 772991953, +256701504068.

INTRODUCTION

The recent decades have witnessed a remarkable shift of attention from school inputs such as enrolment rates, infrastructure and teacher recruitment to learning outcomes in terms of knowledge, skills, attitudes and competencies (Altenyelken, 2015; UNESCO, 2000). The increasing focus on learning outcomes comes with a profound attention to the quality and use of educational assessment as an indicator of educational quality (Wagner, 2011). This growing interest in educational assessment suggests a desire to understand the quality and relevancy of learning outcomes to the constantly changing and evolving local and international contexts. Unfortunately, recent study reports such as Allen et al. (2016) and Ministry of Education and Sports (MoES,

2017a) indicate that educational assessment in Uganda neither meets the current and future needs of Ugandans nor is responsive to the country's social, political and economic contexts. Furthermore, the recent symposium report on assessment and examinations in Uganda shows that Uganda's assessment system concentrates on pupils' recall of information and rote learning of what is easily quantifiable, but neglects other intelligences such as the interpersonal and intrapersonal intelligences which are considered crucial to the life of the learners within the 21st century (MoES, 2017b).

The concentration on rote learning seems to suggest an essentialist epistemological assumption that all learners require the same knowledge, skills and

intelligence to optimally function in their respective communities. Yet, to the contrary, each learner is faced with unique and ever-changing circumstances in which rote learned information cannot be of any enduring solution. Rather, what learners need in such a case are high order thinking skills (HOTS) such as critical thinking, creative and imaginative thinking, problem-solving, strategic decision making and interpersonal relationship skills in order to optimally face their immediate and future life situations with positivity and meaning. Moreover, the neglect of some of the learners' intelligences seems to suggest an epistemological assumption of a single intelligence, yet scientific and psychological research has proven that the human mind is capable of multiple intelligences (Gardner, 1983; Gardner and Hatch, 1989). These multiple intelligences include the hard skills and soft skills which enable people to "navigate their environment, work well with others, perform well, and achieve their goals (Lippman et al., 2015:4).

Despite the growing evidence that holistic and relevant assessment goes beyond the measurement of a single intelligence and what is easily quantifiable (McKenzie, 2002), policy-makers and educators seem not to have leveraged that fact. Hence, the implications of holistic and relevant assessment on educational practice remain unclear. Nevertheless, the unsupported assumption has been that policy-makers and educators understand the value of holistic and relevant assessments, but do not have concrete strategies and reliable assessment tools that incorporate learners' multiple intelligences (Gardner, 1983; McKenzie, 2002). These concerns provide scope for exploring possibilities of a holistic and relevant assessment that incorporates learners' multiple intelligences including soft-skills while taking care of learners' individual differences and contexts.

The claim for a holistic and relevant assessment which considers multiple intelligences arises from the growing evidence which attests that employers consider multiple skills and a range of intelligences beyond academic grades or IQ test scores (Awada, 2014). Thus, this paper adopts the idea of holistic and relevant assessment of learning outcomes. A holistic and relevant assessment goes beyond the existing traditional assessments in Uganda which mostly concentrate on testing a single intelligence or a few selected intelligences and therefore are neither comprehensive enough to encompass learners' multiple intelligences nor capable of testing learners' ability to intelligently live and work in the 21st century. The intent of this study was thus to explore holistic and relevant educational assessment approaches suitable for primary schools in Uganda. Specifically, the study sought to explore the skills and or intelligences assessed by the current assessments used at the primary education level in Uganda. The study also sought to examine the relevancy of the current assessments used at the primary education level to the current and future needs of Uganda.

LITERATURE: CONCEPTUALISATION OF HOLISTIC AND RELEVANT ASSESSMENT

Holistic and relevant education cannot be discussed in isolation of holistic and relevant educational assessment. This is because educational assessment particularly high-stakes public/external examinations greatly influence what takes place in the classroom and how it happens (Altinyelken, 2015; Kellaghan and Greaney, 2004). Available studies and practical experience suggest that the current assessments and examinations in Uganda fall short of evaluating the quality and relevancy of education (Allen et al., 2016). Moreover, studies indicate that education cannot be limited to the knowledge or rote acquisition of literacy; numeracy and or science as learners are expected to master all the four pillars of learning: Learning to know, learning to do, learning to be and learning to live together (UNESCO, 2000). This suggests that education and its assessment should go beyond what Freire (1971) termed as the banking concept of education in which learners are expected to remotely 'store' certain concepts and reproduce them on demand – during examinations. UNESCO's pillars of learning may further suggest that learners should be helped to develop their emotional intelligences, interpersonal and intrapersonal skills and other relevant soft skills and competencies, beyond Intelligence Quotient (IQ), required by an individual to live and flourish in the 21st century. Therefore, without the acquisition of intelligences such as emotional intelligence, interpersonal intelligence, intrapersonal intelligence and other intelligences beyond the IQ, a person may not be ready to live and work intelligently in the 21st century. The needs of the 21st century thus presuppose that educational assessment incorporates the multiplicity of learners' intelligence and the respective contexts in which they live and operate.

Studies have variously expressed the need for assessments to go beyond the measurement of a single intelligence factor to include multiple intelligences – the person's ability to understand, rationally and effectively face life situations (Lippman et al., 2015). This suggests that assessments need to encompass relevant knowledge, skills and attitudes that an individual requires to navigate his/her environment and to achieve personal goals (Lippman et al., 2015). This has however exposed epistemologists and educational psychologists to an increasing challenge and debate to precisely define what to assess and how to assess it in such a way that the assessment process and assessment outcomes are holistic and relevant to the learners and their respective communities. This paper, therefore, adopts the terms "holistic" and "relevance" to emphasise the ability of an educational assessment to cater for all human intelligences and their significance to the learners' current and future needs as global citizens. This means that although functional literacy and numeracy are key

elements of the measure of the quality of education, they scarcely define holistic education as the latter includes all “outcomes of education such as the knowledge, skills, competencies, attitudes, and values that learners acquire” (Wagner, 2011:23). The understanding of multiple intelligences as the 21st-century skills informed the design of the study. Awareness of Uganda Ministry of Education and Sports Strategic Plan 2017/18-2018/20, the skilling Uganda Vision 2040, the Government White Paper (1992), the Sustainable Development Goals (SDGs) and Educational Agenda 2030 informed the understanding of the multidimensional skills that learners need in the 21st century and the need to assess and document them.

METHODOLOGY

The study employed a descriptive case study design in which both qualitative and quantitative approaches were used and this was because the design enables an in-depth explanation of educational assessment (Zainal, 2007). The choice of the study methodology was done to give a detailed exploration of the epistemological underpinnings behind the current educational assessment in primary schools in Uganda. This exploration was found relevant to the study as it was necessary to elucidate on nature of skills or intelligences assessed so as to explore suitable holistic and relevant assessment approaches to be used in primary schools in Uganda. Both inductive and deductive study techniques were applied in the interpretation of study findings.

Study population and sample size

The study population included school head teachers, teachers, pupils, parents, Ministry of Education and Sports (MoES) officials, Uganda National Examinations Board (UNEB) officials, and officials from private organisations involved in educational assessment at the primary school level. The private organisations included Uwezo-Uganda which undertakes basic literacy and numeracy assessments and Research Triangle Institute (RTI) internationals which undertakes Early Grade Literacy Assessment (EGRA) in Uganda.

The sample size included eighteen primary schools randomly selected from Kampala and Kabale Districts. A total sample of 126 out of 144 class teachers and 540 out of 720 pupils were selected from 18 primary schools to participate in the study. The study involved a sample of 540 pupils and 124 teachers, 10 parents, two District Education Officers (DEOs), one participant from MoES, one participant from UNEB, one participant from Uwezo-Uganda, and one participant from RTI-international. Of the 540 completed and valid questionnaires from pupils, 250 (46.3%) were from female respondents and 290

(53.7%) were from male respondents. All pupil respondents were aged between 9 and 17 years old and all were in either primary six or seven. Of the 124 teachers who filled out a self-administered questionnaire, 74 (59.7%) were female and 50 (40.3%) were male.

Sampling design

To come up with a manageable and meaningful sample of study participants from a fairly large population, a multi-stage heterogeneous sampling design was used to provide a maximum variation of cases relevant to educational assessment in Ugandan primary schools. The three-stage purposive sampling technique was used in the study. In the first stage, 18 primary schools from Kampala and Kabale districts because it allowed the researcher to handpick schools that had specific characteristics essential to the study. Specific criterion was used to select the schools. Firstly, the school should have had seven classes with a minimum of at least seven teachers. Secondly, the school must have had at least 20 pupils in primary six and 20 pupils in primary seven to at least 15 pupils per class. Thirdly, the school must have been registered by the Ministry of Education and Sports. The second sampling stage involved the selection of classes for the study. Primary six and primary seven classes were purposively selected for this study because the pupils of the two classes were found to be in a better position to respond to the study questions since the study was conducted in the English language. However, the selection of primary six and primary seven was limited to pupils rather than teachers. The last sampling stage involved the selection of the study participants, notably pupils, teachers and school administrators. Once the classes were selected, a systematic random sampling was used to select the pupils to participate in the study. The advantage with systematic sampling is that it minimises the sampling error (Mugenda and Mugenda, 2003) and thus the study results from the selected pupils would be generalised to other pupils in respect to their experiences about assessment in primary schools. To select the pupils, a list of their names were requested from the respective head teachers, arranged in a randomised (non-alphabetical) order and then pick every n^{th} number (depending on the number of pupils in the class) to get 15 pupils per class (P.6 and P.7) to participate in the study. A total of 30 pupils per school were selected to participate in the study. In total, 540 pupils participated in the study.

Teachers were handpicked because they were deemed informative about assessment in their respective schools. Class teachers are in charge of coordinating assessments and examinations at a classroom level and thus they possess particular information that enriches the study. The researcher selected six class teachers per

school to participate in the study. A total of 126 teachers from 18 primary schools were selected to participate in the study.

The officials from the MoES, UNEB, Research Triangle Institute (RTI) International and Uwezo were purposively selected because of the richness of information they have accumulated over time from their profound experience in educational assessment in primary schools. The richness of the information gathered from the purposively selected participants improves the validity, usefulness and relevance of the knowledge generated from the current study and the possibility of a significant contribution to policy in educational assessment.

Data collection techniques and tools

Since the study objectives required the collection of quantitative and qualitative primary and secondary data, various data collection techniques were used. Quantitative data were collected using a questionnaire technique while qualitative data were collected through documentary reviews, in-depth key informant interviews, observations and Focus Group Discussions (FGD) (Ressel et al., 2002). The researcher paid profound attention to in-depth key informant interviews because “they provide an opportunity for detailed investigation of each person's personal perspective” (Lewis, 2003:58) which is profoundly essential in exploring philosophical assumptions underpinning educational assessment used in primary schools in Uganda. Below is a detailed description of how each of the techniques was used with the respective data collection tools. The instruments used were: structured questionnaire, documentary analysis guide, observational forms, interview guides and Focus Group Discussion guides.

Structured questionnaire

Questionnaires are a common tool used in research. The advantage of the questionnaire is its ability to address a specific objective or question of the study (Mugenda and Mugenda, 2003) and in this current study, a questionnaire was used to generate information from pupils and teachers about their fundamental epistemological assumptions about assessment. A 5-point Likert scale with 1= Strongly disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, and 5= Strongly agree was administered to 124 teachers from 18 primary schools in Kampala and Kabale Districts. A questionnaire with multiple choice options of 1-4 and 1-2 was administered to 540 pupils in 18 primary schools in Kampala and Kabale Districts. Eighteen head teachers filled out an open-ended questionnaire whose responses were later coded according to the study objectives and then analysed.

Documentary analysis guide

The analysis of documentary is a relevant and major method of social research strategy (Jwan and Ongondo, 2011) and it was used in this current study because of the need to analyse the forms of knowledge (intelligences) assessed, how they are assessed and the assumptions behind the said assessments in Uganda. To generate the required information for the current study, the documents analysed were 10 teachers' schemes of work, 10 lesson plans, sample question papers set and used by teachers at school and those set and administered by UNEB; primary six and seven curricula and; assessment reports including NAPE (2012, 2015) and Uwezo (2013, 2015).

Observational form

Observations were made to allow the researcher get first-hand information and experience on how teachers carry out assessment during the teaching and learning process. This was done using an observation template with guiding 1-4 scale whereby 1=unclear, 2=somewhat clear, 3=clear, 4=very clear. The scale was meant to guide the researcher to categorise teachers' assessment practices during the teaching and learning process and to analyse the prevailing teachers' assumptions about educational assessment. Besides the guiding scale on the observational forms, the researcher remained open to any emerging observations related to teachers' practices and assumptions on educational assessment. Overall, out of the 18 sampled primary schools, 10 classroom observations were made in 10 primary schools.

Structured interview guide

Structured interview guides were used to collect data from 18 primary school administrators, the MoES, NCDC, and UNEB officials as well as participants from Uwezo and RTI International. A key informant interview guide was instead used to collect data from officials from the MoES, UNEB, NCDC, Uwezo and RTI International. This was found relevant to the study because it allowed the researcher to interact with the study participants in which case the researcher was able to explore key information about the study objectives while paying attention to emerging issues that could enrich the study findings.

Focus group discussion guide

A FGD guide was used to collect data from four primary schools out of the total 18 schools under the study. Designed according to the study objectives, FGD guides were used to explore in-depth information from the study

participants. As a whole, eight FGDs were conducted, four with teachers and the other four with pupils with six participants at each FGD.

Validity and reliability

Validity refers to the extent to which research instruments are able to measure what they are supposed to measure. It is the criteria appropriateness of the “rigour”: internal validity (isomorphism of findings with reality), external validity (generalizability)” (Guba and Lincoln, 1994:114). To ensure internal validity (of the of the research instruments), expert opinion was sought from the supervisors, educationists and other experts in the areas of educational assessment, philosophy of education and educational research. Their inputs were of great help in identifying errors; modifying and improving the instruments. External validity was kept by ensuring high rigour of the sampling techniques and maintaining high ethical standards so that the study findings are reputable and thus generalisable to other populations.

According to Guba and Lincoln (1994), the reliability of a study is measured by its levels of stability and objectivity. To ascertain the reliability of the instruments, the researcher conducted a pre-test survey in Pader and Tororo Districts which were not part of the study sample. The reliability of the study instruments was confirmed through re-testing the same instruments in different settings and the instruments were found to give similar and consistent results. Questions that were found to be giving divergent information were discussed with the supervisors and assessment experts, corrections were made and refined for the study.

Statistical analysis

The questionnaire responses were entered into pre-designed data templates using EpiData (version 3.1), which provides for validity checks during data capture (Kedir, 2017). The data were then exported to statistical analysis software –SPSS (version 10) for merging, editing and cleaning, and eventual data analysis. Descriptive statistics were used to calculate frequencies, descriptive and cross tabulations. For qualitative data, the researcher identified initial themes and classified them according to the study objectives as well as keeping an open mind towards emerging themes, concepts, or categories. Following the study objectives, the researcher categorised qualitative data according to how the assessment was handled in primary schools; and the need for pragmatic approaches to educational assessment in primary schools in Uganda. The data were indexed and then labelled so that parts of the data that referred to more than one theme or category were multi-indexed. The data were then sorted by theme, synthesized and presented in thematic charts so that key

points of each piece of data were summarized for easy analysis. This involved detection, categorization, and classification of data for easy interpretation (Ritchie and Spencer, 2003).

FINDINGS

The study set out to examine pragmatic epistemological assumptions underpinning educational assessment in Ugandan primary schools. The study confirms the usual official purposes of Primary Leaving Examinations (PLE) notably certification, selection and placement of learners in appropriate educational courses, standardising educational achievements nationally, and accountability to various stakeholders. However, it is revealed that today PLE has been inappropriately used for instance in the ranking of the best schools and learners, rewarding and sanctioning of learners, teachers and head-teachers through promotions, transfers and demotions. The underlying epistemological assumption is that passing the final examination is a mark of quality teaching and learning without any consideration of conditions of the teaching and learning process, learners’ background, desires and aspirations.

However, pupils were found to have varying epistemological assumptions about learning and passing of final examinations. It is revealed that pupils prefer teachers who prepare them for their future needs and aspirations rather than just passing examinations. Pupils’ perception about the best teacher indicates that they prefer a teacher that teaches them what helps them in life, something that is pragmatic rather than merely passing of examinations. For example, 242 (44.8%) of the pupil respondents preferred teachers helping them to cope with life, 228 (42.2%) preferred teachers preparing them for end of cycle examinations, 53(9.8%) preferred teachers who enable them understand the topic while 17 (3.1%) preferred teachers that attract them to love the subject. Deducing from pupils’ responses, it shows that they desire to be assessed on aspects relevant to what they do in their life. The desire for a pragmatic approach to assessment was equally echoed by other interviewed participants who noted that much as the current PLE faithfully serve their purpose of selection, certification and accountability, they rest on the false assumption that all pupils who sit for PLE do continue to the next educational levels especially the secondary education.

The analysis of sample PLE papers (2005 to 2016) indicates a strong bend towards cognitive abilities which points to a planned move to assess pupils’ preparation for secondary education. Much as experience shows that some pupils do not continue to secondary education after PLE, the examination is prepared in a way that favours pupils that will continue to secondary education. The pupils that join vocational and technical institutions and those who join the world of work are not considered by the current PLE.

Additionally, PLE greatly influences classroom practices towards teaching for grades. This arises from teachers' perceptions of what is likely to be examined. It is revealed that continuous assessment in primary schools which ought to be aimed at informing the teaching and learning processes is also greatly influenced by end-of-cycle examinations (PLE). Consequently, the curriculum aspects that are not examined in the PLE are not assessed by teachers during the continuous assessment. Thus, promoting continuous assessment at the lower Primary level, through formative assessment would contribute to better learning outcomes. However, the growing public demand for end-of-cycle assessment limits the use of other forms of assessment. Despite being central to curricula implementation, the teacher today is insufficiently empowered to undertake an effective and comprehensive assessment of learners. Yet, assessment can be an indicator of learners' progress, teacher effectiveness and a means of involving parents in the education of their children.

It is on this premise that some of the interviewed participants noted that there is need to change the manner in which assessments at primary school level are handled. For instance, one of the interviewed parents noted as follows:

Our children are stressed because they want to pass but life is not only about passing exams but getting to be the best one can be in life...a school should, for example, tell us about how a child participates in activities like football, how he/she interacts with others because social life is very important.

Most assessments are in a pencil-and-paper format and the test items call for low-order thinking skills: reproduction of facts. The study describes the current assessment as a competition-driven assessment whereby parents, teachers, pupils and even government officials look out for the "best" ranked instead of how individual pupils are prepared to face life outside school. This perception was echoed by one of the interviewed participants, who said:

...this is what schools are doing because of competition. They don't care about life skills, how children are going to perform in life but what children are taught is how to pass exams but life is not all about passing exams. There are many people who pass exams but when they go to work, they do not know what to do...they do not know how to deal with people, how to work in an organisation...

This was differently echoed by one of the interviewed parents who noted thus:

Our children are stressed because they want to pass but life is not only about passing exams but getting to be the best one can be in life...a school should, for example, tell us about how a child participates in activities like football, how he/she interacts with others because social life is very important...

The above statements are a revelation of the view that Uganda's assessment system is not yet strong enough to respond to learners' interests and desires, present and future needs.

The study findings reveal that the current educational assessment does not respond to the needs and contexts of individual learners as they quest for the meaning of their life and existence. This was illustrated by one female participant, who noted that,

"...examinations especially PLE do not test learners' ability to deal with their daily life situations and challenges. The focus is put on grades and the ranking which I think is not so much helpful to our children. ... I would suggest a change in examinations so that learners' individual differences are put into consideration like the situation learner go through in villages is the difference from the one in towns..."

Consequently, they fail to provide holistic education which focuses on the mind, body and heart and all the aspects of the learner. This causes schools to spend a lot of time on tests in preparation for end-of-cycle examinations instead of teaching. This, in turn, leads to over assessment with a negative impact on learning. The implication is that education becomes a mere process of passing examinations instead of achieving competences. In the end, compromising learners' potentials to achieve relevant competences or achieve in different examinations.

The need to align assessment to pupils' social and cultural perspectives was asserted by one the interviewed participants, who said:

PLE is unfair because there are children who study under poor conditions especially those in UPE schools and they do the same exams like those studying in Kampala good private schools: some children go through hard times...

The study identified gaps in learning outcomes at lower primary as thematic curriculum prescribes instruction in local area languages. Yet assessments and examinations for these classes are programmed in English, which is only taught as a subject at that level. In response to the high stakes examinations pressures, teachers are spot teaching only with the aim of passing or achieving grades. Consequently, the syllabi or curricula prescribed

for specific levels are hardly completed or even followed. The study findings show that the assessment in lower primary school is inappropriate since it does not respond to the needs of the pupils nor the curriculum standards.

The commercialisation of examination has increased the cost of education not only per child but also for the school. Therefore, the learners who cannot pay for those examinations sometimes are excluded. The dependence on commercial examinations affects teachers' assessment and examinations setting skills. Parents are ill-informed about the curriculum and often do not know what is best or what they want for their children. The level of commercialisation of examinations was shown by pupil responses in which 272 (50.4%) noted there was special coaching at their schools (Figure 1).

The increasing levels of private coaching in primary schools were also found to be linked to the social pressure exerted by society on teachers and head teachers to produce high test scores and grades. As seen in Figure 2, 111 (90.3%) of the sampled teachers said they were on social pressure to drill pupils to produce high test scores. This was found to be affecting both national and school-based assessments and yet ideally, the latter should have been meant for informing the classroom practice as opposed to accountability and reporting purposes.

Due to the increasing social pressure for high test scores, the assessment system emphasises pen and paper examinations instead of soft and 21st-century

skills. All the sample assessment papers analysed to show that most questions require memorisation and recall of facts instead of higher-order thinking skills such as critical thinking, problem-solving, communication, and creativity. Besides, the study reveals the predominance of pen and paper with less attention paid to oral assessments, projects and portfolios. The inadequacy of teachers to holistically assess learners is attributed to both pressure to produce grades and limited assessment skills. For example, one of the interviewed study participants noted:

I personally do not think that teachers are well trained and prepared to handle assessment as it may be required today...teacher training institutions teach some components of measurement and evaluation but to me, it is not enough.

Teachers are not fully competent to conduct assessments and report on them; school examinations are not considered as reliable measure of students' learning outcomes; lack of teacher motivation, the low teacher-pupil ratios and large class sizes; these challenges impact on the teaching and learning process and practices, and the cost of monitoring at school levels. As result, teachers are compelled to compile past UNEB question papers and use them as teaching resources/materials instead of relying on their schemes of work and lesson plans.

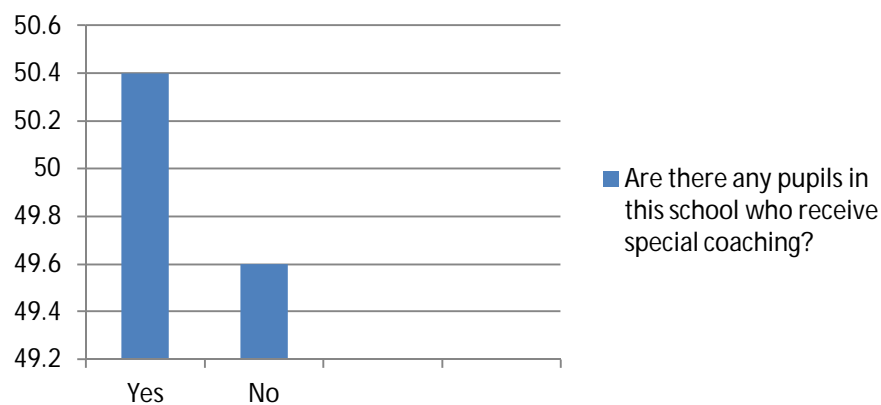


Figure 1. Level of private coaching in schools.

DISCUSSION

This section discusses the central concept of a holistic and relevant educational assessment in relation to pragmatic epistemology as applied to Uganda's current and future social, economic and political needs. While analysing the central pragmatic epistemological currents in Uganda's assessment at primary school education, the

study discusses key findings in respect to "experiential education" theory of John Dewey (1859 to 1952), and Multiple Intelligence (MI) theory of Howard Gardner (1983). Both Dewey's experiential education and Gardner's MI theory are articulated as a critique to traditional education that is based on essentialist epistemology which favours disciplined, step-by-step teaching of the accumulated body of knowledge and

Teachers are on social pressure to make pupils score high grades

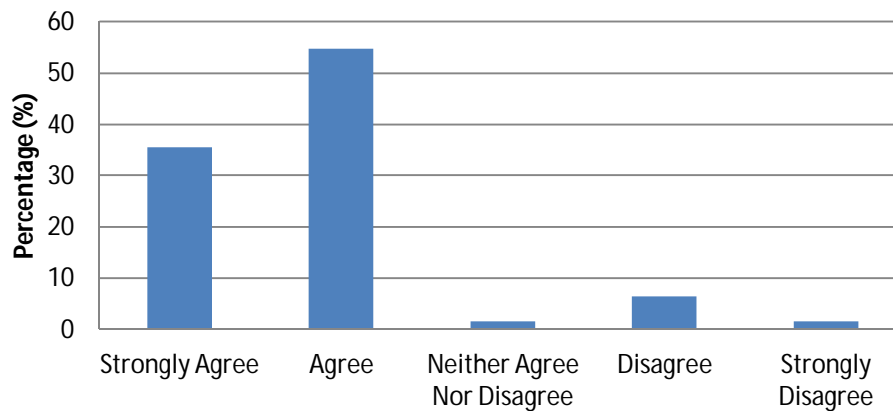


Figure 2. Social pressure for test scores.

civilisation, and children are expected to simply receive, accept and reproduce notions during examinations (Freire, 1971; Westbrook, 1999). Traditional education, they argued, developed in response to the demands of industrial capitalism which have created dualism of mind and body, and that of mind and world. In terms of educational assessment, traditional education favours psychometric intelligence at the expense of the demands of everyday life including the world of work (Bahare and Shahla, 2015). Critics of traditional assessment such as Gardner (1983) argue that the human person cannot be reduced to a reasoning being since a person is capable of multiple intelligences such as interpersonal, intrapersonal, musical, kinesthetic, naturalist, linguistic, logical, visual and existential (Gardner, 1999).

The study reveals that educational assessment used in Ugandan primary schools is based on a rationalist epistemology in which abstract thinking skills are more esteemed than the life skills that children require for their daily life. For example, it was observed that whereas the official primary school curriculum (NCDC, 2010, 2011), highlights Creative Arts and Physical Education (CAPE) subjects to be taught and assessed at the primary school level, this study reveals that the CAPE subjects are neither taught nor assessed at school and national levels. as The official primary school curriculum includes skills such as critical thinking, problem solving, assertiveness, self-awareness and communication skills (NCDC, 2011). However, these skills are equally neither formatively nor summatively assessed – not included in school-based assessments or end of cycle assessments. The study agrees with Allen et al. (2016) who argued that Uganda's assessment system does not focus on the skills which pupils need in real life but instead focuses on textbook knowledge which in most cases is never relevant to them. This situation fosters a complex phenomenon in which

teachers and pupils are focused on test scores and grades irrespective of the process through which these test scores and grades are achieved.

This underscores a fundamental and epistemological assumption which narrows education to easily measurable and quantifiable aspects of learning. It was, for example, revealed in this study that teachers often disregarded learning experiences that are hard to quantify or those that are not often demanded during the end of cycle examinations. For example, classroom observations indicated that classroom-based assessment during the teaching and learning process was often done in the fashion and format of the end of cycle examinations, PLE which assesses only traditional quantifiable knowledge and skills. This disagrees with Cefai et al. (2014) who argued that assessment should be widened to include a broader educational agenda, integrating the person's physical, social, emotional, artistic and spiritual development which Gardner (1983) termed as a person's multiple intelligences. Cefai et al. (2014) further argued that assessment should consider the individual's readiness for the world of work, or life beyond school to embrace the ability of learners to navigate life in the 21st century. This readiness for work would call for assessing the levels of learners' academic, social and emotional literacy. This three-fold kind of literacy is essential for learners to navigate their present and future environment with self-determination and autonomy, growth and self-actualisation, leading to active and meaningful participation and engagement in society. Stated differently, it calls for contextualisation of educational assessment in which pupils are assessed on their ability and readiness for life outside school. This also agrees with Kankaras' (2017) who argued that educational systems and assessments need to be refocused on measuring learners' skills and

competencies they need to cope with the present and the future instead of emphasising the past, thus going beyond the assessment of cognitive skills to include non-cognitive skills. Kankaras (2017) thus suggested assessment of non-cognitive skills and competencies such as self-concept, social-emotional competences, creativity, metacognition and grit which are essential skills for one to flourish in life beyond school.

On the contrary, the study reveals critical shortfalls in the assessments' ability to measure learners' readiness for life outside school. This means that the assessment in primary schools is built on an epistemological assumption which narrows down education to the academic content required by pupils for placement in secondary education. The situation at hand does not consider the plight of pupils who are not privileged enough to continue with the traditional educational ladders through secondary to university education. This disagrees with Lippman et al. (2015) who argued that there are more skills and competencies beyond cognitive skills also called hard skills. They asserted that an individual requires other skills, often termed soft skills, to be able to navigate the environment, work well with others and achieve personal goals. This, therefore, requires assessments beyond the traditional pen and paper tests and examinations. To this effect, Kankaras (2017) suggested alternative assessment approaches such as self-rating, peer-rating, parents-rating, behaviour observations, performance tasks, laboratory experiments and think-aloud protocols to measure learners' preparedness for life beyond school.

Despite the need to adapt assessment to learners' educational experience, this study reveals that the current educational assessment follows "a banking concept of education" as described by Freire (1971) in his 'Pedagogy of the Oppressed'. Most assessments are in a pencil and paper format and the test items call for low-order thinking skills: reproducing text-book materials which in most cases are not relevant to learners' needs, contexts and life experiences. The study describes the current assessment as a competition-driven assessment whereby parents, teachers, pupils and even government officials look out for the "best" ranked instead of how individual pupils are prepared to face life outside school. For example, one of the interviewed participants said:

...this is what schools are doing because of competition. They don't care about life skills, how children are going to perform in life but what children are taught is how to pass exams but life is not all about passing exams. They are many people who pass exams but when they go to work, they do not know what to do...they do not know how to deal with people, how to work in an organisation...

The study equally reveals that the current assessment measures rote learning through calling for low order

thinking skills instead of assessing pupils' critical thinking abilities and how they are able to deal with their environment and experiences. This agrees with Freire's (1971) banking concept of education in which according to Rugut and Osman (2013, p. 24); "the teacher deposits in the minds of the learners who are considered to be empty or ignorant, bits of information or knowledge, much like we deposit money in an [empty] bank account". Freire in his *Pedagogy of the Oppressed* criticized this method and type of education because he believed that it made learners passive objects and unable to deal with their immediate life challenges and situations (Freire, 1971). He argued for an education that would enable learners critically think about their world and be able to propose solutions to their own problems and challenges. This suggests that assessment should focus more on learners' high order thinking skills such as problem-solving, critical thinking, creativity and innovation instead of testing their ability to recall subject content that is often passively learnt.

The study reveals a 'narrow epistemological understanding of learners' knowledge and intelligence. The assessment concentrates on learners' cognitive skills, precisely their linguistic and mathematical skills at the expense of non-cognitive skills. This disagrees with Gardner (1983) who in his 'Frames of Mind', contended that every person is endowed with various forms of intelligences which develop at different rates and in different levels among people. He objects to the traditional education and its assessment that is majorly based on psychometric analysis of individuals' performance. He defines intelligence as a "biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture" (Gardner and Moran 2006 p.227). In respect to educational assessment, a Multiple Intelligence (MI) approach suggests a mind-shift among assessment practitioners and researchers: It suggests an interdisciplinary perspective, cultural sensitivity, and an interactionist-dynamic approach (Gardner and Moran, 2006). Thus, Gardner's theory supports this current study to suggest that assessment considers the social and cultural background of individual pupils and their future aspirations.

CONCLUSIONS

The study makes the following conclusions namely:

The current educational assessment in Ugandan primary schools is mainly in the form of the traditional pen and paper tests. This limits the assessment and measurement of multiple intelligences such as musical, interpersonal and intrapersonal skills, creativity and imagination which are critically becoming central in determining youth employability and their human

flourishing.

The current assessment is unfair to pupils who possess high levels of intelligences that are not tested by the currently used assessment measures. Some pupils may be unfairly judged as weak or even “failures” when in reality they are very strong in certain intelligences which are not tested. Moreover, the assessment unfairness is also depicted by the very fact that pupils are subjected to a one-time examination to test the knowledge, skills and competencies acquired over a period of seven years.

The assessment mainly measures rote learning at the expense of high order thinking skills and other forms of deep learning. This may have adverse effects on pupils' capacity for long-life learning, creativity and adaptability to life beyond school including further education and the world of work.

RECOMMENDATIONS

This study strongly recommends the use of alternative forms of assessments such as observations, group projects, journal reports, peer rating and multi-teacher rating. These in addition to the traditional pen-and-paper assessments would measure the intelligences of a learner which would otherwise be difficult to measure using a single form of assessment.

This study recommends the use of pupil-friendly assessment tools and processes which clearly differentiate among learner differences, skills and experiences. This could be done by introducing continuous assessments that go beyond pen and paper tests to include teacher-observations and reports. These could be compiled over time and then incorporated into the final summative assessment at the end of the primary school cycle. Moreover, it would also reduce the tendency of unfairly judging a pupil on the knowledge, skills and competencies acquired over a period of seven years using one-time examination.

The study recommends the use and application of higher taxonomy of assessment to test pupils' high order thinking skills. This would inevitably motivate teachers to adjust the classroom practices to focus on the acquisition of such skills instead of superficial learning. High order thinking skills such as critical thinking and problem solving, creativity and innovation are pivotal in helping pupils adapt to new situations including further education and the world of work.

REFERENCES

- Allen, R. Elks, P. Outhred, R., and Varly, P. (2016). Uganda's Assessment System: A Roadmap for Enhancing Assessment in Education: An Assessment Report.
- Altinyelken, H. K., (2015). Evolution of Curriculum Systems to Improve Learning Outcomes and Reduce Disparities in School Achievement. Background paper prepared for the Education for All Global Monitoring Report 2015. Education for All 2000-2015: achievements and challenges. UNESCO.
- Awada, F. (2014). Assessment and Evaluation of University Students' Soft Skills: An Active Learning Alternative. A Thesis Submitted in partial fulfilment of the requirements for the degree of Master of Arts in Education: Lebanese American University.
- Bahare, S., and Shahla, S. (2015). The relationship between multiple intelligences and speaking skill among intermediate EFL learners in Bandar Abbas Azad University in Iran. *International Journal of Research Studies in Language Learning*, 4(2): 43-56.
- Cefai, C., Ferrario, E., Cavioni, V., Carter, A., and Grech, T. (2014). Circle time for social and emotional learning in primary school. *Pastoral Care in Education*, 32(2): 116-130.
- Freire, P. (1971). *Pedagogy of the oppressed*. Continuum, New York, London.
- Gardner, H., and Hatch, T. (1989). Multiple intelligences go to school: Educational implication of the theory of multiple intelligences. *Educational Researcher*, 18(8): 4-10.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, H. (1999). *Intelligence reformed: Multiple intelligences for the 21st century*. New York: Basic Books.
- Gardner, H., and Moran S., (2006). The science of multiple intelligences theory: A response to Lynn Waterhouse. *Educational Psychologist*, 41(4): 227-232.
- Government White Paper on Education (1992). Policy Review Commission Report: Education for National integration and Development Republic of Uganda. Kampala Uganda: Uganda Publications Corporation.
- Guba, E. G., and Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In Denzin N.K., & Lincoln Y.S., (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Jwan, J. O., and Ongondo, C.O. (2011). *Qualitative Research. An Introduction to principles and Techniques*. Moi University, Eldoret, Kenya.
- Kankaras, M. (2017). *Personality Matter: Relevance and Assessment of Personality Characteristics*. OECD Education Working Papers, No. 157, OECD Publishing, Paris.
- Kedir, A. (2017). EpiData: Data Entry and Documentation. Retrieved: <https://www.researchgate.net/publication/320695045>.
- Kellaghan, T., and Greaney, V. (2004). *Directions in Development Assessing Students Learning in Africa*. The World Bank. Washington, D.C.
- Lewis, J. (2003). Design Issues. In Ritchie, J. and Lewis J., (Eds.), *Qualitative Research Practice: A Guide For Social Science Students and Researchers*. (pp. 47-76). London/Thousand Oaks/New Delhi: Sage Publications.
- Lippman, L. H., Ryberg, R. Carney, R., and Moore, K.A. (2015). Key “Soft Skills” that Foster Youth Workforce Success: Toward a Consensus Across Fields. Washington, DC: USAID, FHI 360, Child Trends. Published through the Workforce Connections project managed by FHI 360 and funded by USAID.
- McKenzie, W. (2002). Gardner's Eight Criteria for Identifying Intelligence. Arlington Public School.
- Ministry of Education and Sports (MoES) (2017a). *The Education and Sports Sector Annual Performance Report (FY 2016/17)*. Ministry of Education and Sports, Kampala-Uganda.
- Ministry of Education and Sports (MoES) (2017b). *National Symposium on Assessment and Examinations: Present and Future Prospects*. Ministry of Education, Kampala- Uganda
- Mugenda, O. M., and Mugenda, A. M. (2003). *Research Methods: Quantitative and Qualitative Approaches*. African Centre for Technology Studies (ACTS) Press, Nairobi, Kenya.
- NAPE (2012). *The Achievement of Primary School Pupils in Uganda in Numeracy and Literacy in English*. UNEB, Kampala.
- NAPE (2015). *The Achievement of Primary School Pupils in Uganda in Numeracy and Literacy in English*. UNEB, Kampala.
- National Curriculum Development Centre (NCDC) (2010). *Primary Six Curriculum*. NCDC, Kampala.
- National Curriculum Development Centre (NCDC) (2011). *Primary Seven Curriculum*. NCDC, Kampala.
- Ressel, L. B., Gualda, D. M., and Gonzales, R. M. (2002). Focus group as a method of data collection in nursing research: An experiential

- report. *International Journal of Qualitative Methods*, 1(2): 1-25.
- Ritchie, J., and Spencer L. (2003).** Carrying out Qualitative Analysis. In Ritchie J & Lewis J., (Eds.), *Qualitative Research Practice: A Guide For Social Science Students and Researchers*, (pp. 221-263). London/Thousand Oaks/New Delhi: Sage Publications.
- Rugut, E. J., and Osman, A. A. (2013).** Reflection on Paul Freire and classroom relevance. *American International Journal of Social Science*, 2(2): 23-28.
- UNESCO (2000).** The Dakar Framework for Action. Education for All: Meeting Our Collective Commitments. UNESCO, Paris.
- UWEZO (2013).** Annual Learning Assessment Report. Are our children learning? UWEZO, Kampala.
- UWEZO (2015).** Annual Learning Assessment Report. Are our children learning? UWEZO, Kampala
- Wagner, D. A. (2011).** Smaller, Quicker, Cheaper: Improving Assessments for Developing Countries. UNESCO, Washington D.C, UNESCO.
- Westbrook, R. B. (1999).** John Dewey (1859-1952). *International Bureau of Education*, 13(1): 277-291.
- Zainal, Z. (2007).** Case Study as a Research Method. *Journal Kemanusiaan* bill 9, June 2017. Retrieved: http://psyking.net/htmlobj-3837/case_study_as_a_research_method.pdf.

Citation : Mitana, J. M. V., Muwagga, A. M., and Ssempala, C. (2018). Towards a holistic and relevant educational assessment in primary schools in Uganda. *African Educational Research Journal*, 6(2): 58-68.
