European Journal of Educational Sciences (EJES)

2017 / June

Publisher:

European Scientific Institute, ESI

Reviewed by the ”European Journal of Educational Sciences” editorial board *2017*

June 2017 edition vol. 4, no. 2

ISSN 1857- 6036

About The Journal

The European Journal of Educational Sciences is a peer - reviewed international journal which accepts high quality research articles. It is a quarterly journal published at the end of March, June, September and December and is available to all researchers who are interested in publishing their scientific achievements. We welcome submissions focusing on theories, methods and applications in educational sciences, both articles and book reviews.

Authors can publish their articles after a review by our editorial board. Our mission is to provide greater and faster flow of the newest scientific thought. EJES's role is to be a kind of a bridge between the researchers around the world. "EJES" is opened to any researchers, regardless of their geographical origin, race, nationality, religion or gender as long as they have an adequate scientific paper in the educational sciences field.

EJES provides immediate open access to its content on the principle that making research freely available to the public, supports a greater global exchange of knowledge.

Sincerely,
EJES, Team

Table of Contents:

The Possibilities of Assessing Students' Scientific Inquiry Skills Abilities Using an Online Instrument: A Small-Scale Study in the Omusati Region, Namibia

Linus Kambeyo
Doctoral School of Education, University of Szeged, Hungary

doi: 10.19044/ejes.v4no2a1 URL:http://dx.doi.org/10.19044/ejes.v4no2a1

Abstract

The objectives of this study were to; explore the possibilities and feasibilities of an online assessment of students' scientific inquiry skills; examine the psychometric properties of the test; ascertain the ability level of the 9th and 11th graders scientific inquiry skills. The sample consisted of the ninth and eleventh graders (N=118, 44 boys and 74 girls; age mean=16.42, and (SD) =1.25). In the test of scientific inquiry skills, students were required to use their cognitive skills to answer questions based on different subscales of scientific inquiry processes. The online assessment tool for scientific inquiry skills consisted of 99 items. The Cronbach alpha was .87 α, and two subscales emerged with better reliability of .93 α and .90 α respectively. No significant differences were found between grades and genders concerning performances. The online assessment instrument for students' scientific inquiry skills proved to be feasible and reliable. The findings indicate that online assessment may provide teachers with an easy-to-use instrument for monitoring the development of students' scientific inquiry and reasoning skills. However, for this to be realized in Namibian, the government should try to improve the ICT infrastructures in most public schools as per their blueprint.

Keywords: Technology-based assessment; scientific inquiry skills, science education; students' assessment.

Introduction

This study reports a small-scale study on assessing students' scientific inquiry skills using the online test instrument in Omusati region, Namibia. We live in an ever-changing world – demographic change, rise of automation and workforce structural change, globalization, and corporate change are some major driving forces that demand fundamental transformations in education and skills on an individual level (Bao &

Koening, 2012). Of late, many studies have emphasized the importance of technology-based assessment. Namibia being new in the international arena, the technology-based assessment is almost nonexistence. However, there exist a government policy on information communication and technology (ICT) in paper, but the implementation part is lagging behind. Namibia currently has few mechanisms below grade 12 end of school year examination, for measuring the performance of the system against international benchmarks (Ministry of Education, 2007), neither is there any effective mechanism for parents and other stakeholders to judge the performance of individual institutions. The assessments of scientific thinking and critical thinking have not yet been established.

Elsewhere in the world, organizations and research committees, for example, the Organization for Economic Corporation and Development (OECD) are advocating for the notions of critical thinking skills, problem solving skills, and creativity as some major components of the 21st century skills that need to be possessed by 21st century students. Among these, are the science process skills (SPS). The scientific method, scientific thinking and critical thinking are terms that have been used at various times to describe these science skills. These skills are defined as a set of broadly transferable abilities, appropriate to many science disciplines and reflective of the behavior of scientists (Padilla, 1990). The science process skills are grouped into two types; basic and integrated. The basic (simpler) process skills provide a foundation for learning the integrated (more complex) skills. Basic SPS include observations, inferring, measuring, communication, classification and making predictions while integrated SPS consist of controlling of variables, formulating hypotheses, interpreting data, experimenting and formulating models (Padilla, 1990).

In this paper, the terms scientific inquiry, scientific reasoning skills and thinking skills will be used interchangeably to refer to science processes skills needed to be acquired by the students in the 21st century. In his study, Padilla (1990) found that experimenting ability, one of the integrated SPS, is closely related to the formal thinking abilities described by Piaget. Thus, the instrument used is underpinned by Piaget formal thinking operation that students at this level are supposed to have acquired.

At the moment, no empirical data exist in the literature from Namibia about studies on these skills (scientific inquiry, scientific reasoning and general thinking skills, such as inductive reasoning) that are deemed critical in the 21st century. The demands on learners and thus, education systems are evolving fast (Csapó & Funke, 2017). In the past, education was about teaching people something, now; it is about making sure that students develop a reliable compass and the navigation skills to find their own way through an increasingly uncertain, volatile and ambiguous world. Therefore,

the purpose of this study was to explore the possibilities and feasibilities of online assessment of scientific inquiry skills, examine the psychometric properties of the test (Scientific inquiry skills test) and ascertain the ability level of the 9th and 11th graders, as well as to examine how the background variables (gender, grade, parents' level of education) affect performances.

Theoretical background

Scientific inquiry

Scientific inquiry has always been an integral part of scientific literacy (Bybee, 2009). Hence, scientific inquiry has been a long-standing area of research and discussion in science education (Fenichel & Schweingruber, 2010; Yeh, Jen & Hsu, 2012). Scientific inquiry is seen as a problem-solving task (Klahr, 2000). It can also be viewed as a circular process, where research questions and hypotheses are formulated, investigations are planned and carried out, and evidence is evaluated with regard to the hypotheses and the underlying theory (Mayer, 2007; Zimmermann, 2005). In order to achieve this circular process, various methodological and cognitive skills are inevitably important. Gott and Duggan (1998, p. 95), for example, mentioned the following skills that are needed to do science: 'generate own ideas, hypotheses and theoretical models or utilize those postulated by others; design and conduct experiments, trials, test, simulations and operations; and evaluate the resulting data'. These skills can further be divided into cognitive skills, i.e. generate hypotheses, and methodological skills, i.e. conduct an experiment. These definitions also resonates well with the (American Association for the Advancement of Science {AAAS}, 1993) which asserts, "Scientific inquiry is more complex than popular conceptions would have it. It is, for instance, a more subtle and demanding process than the naive idea of 'making a great many careful observations and then organizing them.' It is far more flexible than the rigid sequence of steps commonly depicted in textbooks as 'the scientific method.' It is much more than just 'doing experiments,' and it is not confined to laboratories. More imagination and inventiveness are involved in scientific inquiry than many people realize, yet eventually strict logic and empirical evidence must have their day. Individual investigators working alone sometimes make great discoveries, but the steady advancement of science depends on the enterprise as a whole" (p. 9).

To implement these aspects of scientific inquiry in school, governments worldwide have set standards or benchmarks for science education. These documents, although each nation has its own, have some common aspects concerning scientific inquiry (National Research Council, 1996). These standards forms a conceptual framework for teaching science. They include more detailed standards and objectives for each subject (for

biology/life science, and physical science {chemistry and physics}) that specify which aspects should be taught in the biology or in the physical science class (Bybee, 2009). In Namibia, the aims and objectives of the National syllabus for sciences are the same across. "Learning experiences in the natural scientific area aim at increasing the learners' knowledge and understanding of the physical and biological world of which they are part. This includes understanding how people use the natural environment to satisfy human needs, and how the environment may be changed in ecologically sustainable ways. Critical thinking, investigating phenomena, interpreting data, and applying knowledge to practical (experimental and investigative) skills and abilities are essential to understanding the value and limitations of natural scientific knowledge and methods, and their application to daily life" (Ministry of Education (MoE)., 2010, p. 2). The application of scientific knowledge and attitudes to health is of special relevance for the individual, the family and society as a whole. These set standards foregrounded scientific inquiry as one area of competence for the three science subjects. For each of these subjects, there is a description of scientific inquiry and some examples of which aspects should be taught.

The methods used for scientific investigations play an important part in scientific inquiry. Mayer (2007) mentions the following methods: observing, investigating, describing, comparing, classifying, experimenting and using models. These descriptions are similar to what is in the national syllabi for science subjects in Namibia. It also resonates well with what is in the national broad curriculum of education in Namibia and the country's *Vision 2030*, which sees Namibia as "developing from a literate society to a knowledge-based society, a society where knowledge is constantly being acquired and renewed, and used for innovation to improve the quality of life. A knowledge-based society requires people who are healthy, well educated, skilled, pro-active, and with a broad range of abilities" (MoE, 2009). Zimmerman (2005) describes activities for scientific investigations such as designing experiments, using apparatus and observing. Models can be used as an instrument for scientific investigations. Gilbert, Pietrocola, Zylbersztajn, & Franco (2000) claim that models and modelling should have a major impact on the learning of science in school.

Scientific reasoning and scientific inquiry

Scientific reasoning is one major components of scientific inquiry, as it contains thinking and reasoning skills (Zimmerman, 2005). Mayer (2007) describes scientific reasoning with the following processes: formulating scientific questions, generating hypotheses, planning investigations, analyzing data and making conclusions. Klahr (2000) on the other hand, describes scientific reasoning as a process of dual search, which includes

searching the 'hypothesis space' and the 'experiment space'. The 'evidence evaluation process' (Klahr 2000) mediates the two steps. Zimmerman (2005) describes it using similar aspects such as, asking questions, hypothesizing, recording and interpreting data. From their definition, three main process of scientific inquiry emerged. Three main processes are central to scientific reasoning: asking questions and formulating hypotheses, planning and performing an investigation, and analyzing data and reflecting on the investigation (Nowak, Nehring, Tiemann & Upmeier zu Belzen, 2013). Under these three main processes, many different skills of scientific inquiry can be found.

Furthermore, scientific inquiry is the way that natural scientists try to answer scientific questions. Scientific inquiry processes can be described as a problem-solving task (Klahr, 2000). As alluded to earlier, it is a circular process, in which questions are asked, investigations are carried out and evidence is evaluated (Mayer, 2007; Zimmerman, 2005). However, other researchers found that scientific inquiry is not a homogeneous construct (Lederman and Lederman, 2012). It consists of a variety of different processes such as methodological and cognitive skills. To be scientifically literate, one needs to understand how scientist work. Studies have shown that students have difficulties in thinking and working scientifically (Gott and Duggan, 1998; Klahr, 2000; Zimmerman, 2005).

Previous studies about scientific inquiry have focused on specific subject (Mayer, 2007), on one inquiry method (Hammann, Phan, Ehmer & Grimm, 2008), or on cognitive (Klahr, 2000) or practical aspects of scientific inquiry (Gott and Duggan, 1995). Other studies on scientific inquiry were about views and perceptions of either students or teachers towards scientific inquiry (Gaigher, Lederman & Lederman, 2014; Schwartz, Lederman & Lederman, 2008; Senler, 2015). Furthermore, many research studies on inquiry skills appeared to be dominated by a focus on classroom-based science investigations (Capps & Crawford, 2013; NRC, 2012). Chinn and Malhotra (2002) found that 'many scientific inquiry tasks given to students in schools do not reflect the core attributes of authentic scientific reasoning' (p. 176), and suggest that inquiry tasks should go beyond hands-on activities to also include evaluation of evidence, complex data and simulations. Additionally, most of the studies were conducted in the European or Asian countries. In this study however, these different aspects, which could influence students' abilities, are taken into account and the focus in this study is not on a specific subject but on general inquiry skills concerning science. Hence, during the tasks formulation the focus was on scientific reasoning using the inquiry skills test. The assumptions was that students should have acquired sufficient level of inquiry skills from all their science lessons i.e. from the 5^{th} grade through the 11^{th} grade. Both cognitive

(scientific reasoning) and practical skills of scientific inquiry were considered. To achieve these goals, a theoretical structure of scientific inquiry was developed that includes cognitive (scientific reasoning) and practical aspects (inquiry methods) applicable in the science education. Based on these, an online test items were developed to assess students' performance and abilities in scientific thinking.

Research Aim and objectives

The aim of this study was to pilot the on-line diagnostic instrument for the assessment of scientific inquiry skills using the cognitive skills (scientific reasoning skills) of the 9^{th} and 11^{th} graders. This study seeks to answer the following specific questions;

1. What are the psychometric properties of the scientific inquiry skills?
2. Is there statistical significant difference in performance between grades, gender and parents' level of education of students?
3. What is the ability and development level of students' scientific inquiry skills?

Methods

Participants

The sample of the study was drawn from a secondary school in Omusati region, northern part of Namibia. The school has grade 8 to 12, and accommodates students from nearby villages and around the whole northern part of Namibia. It is a multicultural (grammar) schools. Participants were the ninth and eleventh graders (N=118, 44 boys and 74 girls; age mean=16.42, and standard deviation=1.25. Forty-one students were grade 9s (17 boys and 24 girls), age mean=15.10; standard deviation=.67. The 77 students were eleventh graders (boys=27 and girls=50, age mean=17.13, standard deviation=.85). The school has a hostel (dormitory), and all the learners were accommodated in the school hostel at the time of the study. Table 1, showing the distribution of sample and their parents' level of education.

Instrument

This study was based on a test of scientific inquiry skills, where students are required to use their cognitive skills (scientific reasoning skills) to answer questions based on different sub construct of scientific processes.

The Hungarian based scientific inquiry skills test was adapted and used in the Namibian science context. The test is developed by the Magyar Tudomanyos Akademia (MTA) - research group of the Institute of education, University of Szeged, to assess Hungarian students' scientific

inquiry skills. Items were developed based on (Wenning, 2007) scientific inquiry skills framework model. The Wenning (2007) model was simplified to accommodate the basic skills required in the general school science curricula.(Nagy, Korom, Pásztor, Veres, & Németh, 2015), designed a simplified model that consist of seven sub constructs. The sub constructs are; data handling technique, identification of variables, setting research questions, hypothesis formulation, variable planning, and experimental plans and making conclusions. Tasks require students to apply their reasoning skills and recall the experiments/practical work/ investigations project they have done at school from grade 8 to 12. Since the tasks were developed in Hungarian context, a professional translator, (Molnar Edit) with, the help of people that are involved in the task development did texts translation from Hungarian to English. Tasks that were deemed not fitting in the Namibian scence context were removed and some were adapted. The online assessment tool for scientific inquiry skills consisted of 38 tasks with 99 items. Figure one and two show sample task from data handling construct and hypothesis formulation respectively.

Validation of the research instrument

In order to develop valid items for these scales, the author conducted content analysis of the science syllabi for grade 8-12 curriculum. A thorough study and comparing if the items content fit into the Namibian science curriculum was done. The test was also sent to the Chief Science Education officer at the curriculum development centre in Namibia, National Institute for Educational Development (NIED). Furthermore, two science education lecturers from the University of Namibia and three experienced teachers in science subjects were also asked to check the contents and the questions of the instrument. Their suggestions were positive and strong suggestion to improve the language was given. Tasks that were context/cultural embedded were replaced with the non-contextual tasks. However, science being a universal subject there were not many cultural embedded items, reviewees were looking forward to see how the students would perform.

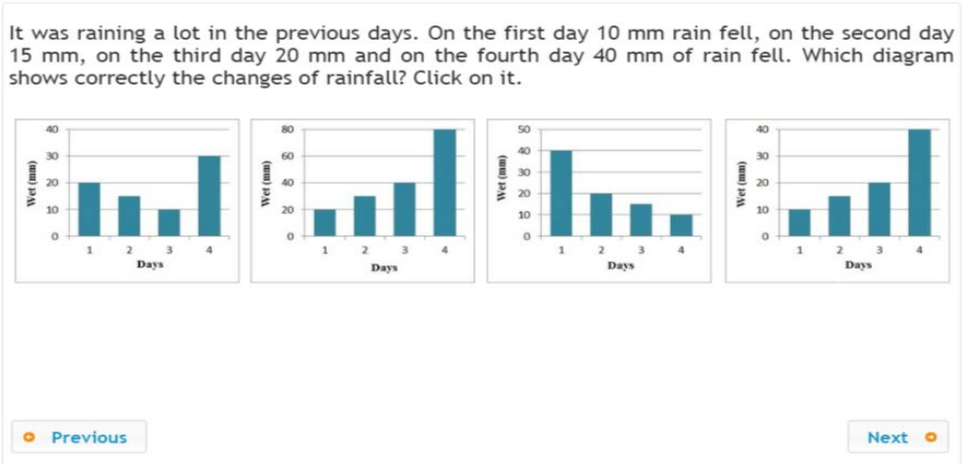


Figure 1. Sample item; Data handling (Nagy et al., 2015)

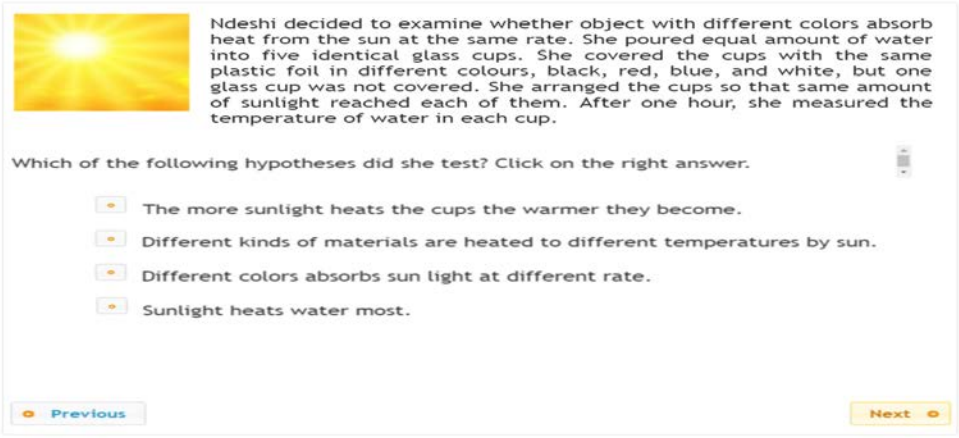


Figure 2. Sample item; Hypothesis formulation (Nagy et al., 2015)

Procedures

The online data collection was carried out through the eDia (Csapo, Lorincz, Molnar, 2012) platform in January 2017, via internet in the school's information communication technology (ICT) room. Each participants was assigned a number (participants ID) to log into the eDia system, after which the system interface displayed the instructions that students need to follow. Students entered their responses through the keyboard, choosing the right answer by clicking or by dragging and dropping figures on the screen with a mouse. The administration of the test took approximately 135 minutes.

Results and discussions

The psychometric properties and testing applicability

The reliability at the whole scale .87 Cronbach alpha, see table 1, was high, and two subscales with a better reliability of .93 and .90 respectively. However, the remaining five subscales reliability need improvement as their reliabilities stand at > .50 Cronbach alpha. The range of scores on the pilot test was 27 to 87 out of 99 possible answers. The test mean was 53.52 (54.10%) with a standard deviation of 11.31 and a standard error of measurement of 1.04. Our Cronbach alpha, almost matches the inquiry literacy test by (Wenning, 2007), when it was first piloted, (.88 α).

Table 1, show the reliability at a whole scale and subscales**.**

(RQs= Research questions)

Table 2, presents the correlation matrix showing bivariate relationships between the variables and the whole scale. Moderate correlations were found among the subscales. Strong correlations between the whole test and subscales was found. However, no significant correlation was found between experimental plans and data handling, experimental plans and identification of variables as well as experimental plans and hypothesis formulation. Therefore, further improvement on the organizing of items into appropriate subscale is needed in order to yield strong correlations between the subscales and to improve the reliability coefficients at the subscales level. A point to note is that at the whole scale level, there are strong positive correlations with the subscales and the internal consistency coefficient is reliably high.

Table 2, Correlations coefficients between 7 sub scales and the whole test.

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1. Data handling	1							
2. Identify variables	.28**	1						
3. RQs formulation	.38**	.44**	1					
4. Hypothesis formulation	.44**	.18*	.34**	1				
5.Planning of variables	.45**	.45**	.44**	.36**	1			
6. experimental plans	.17	.24**	.24**	.11	.36**	1		
7. Making conclusions	.43**	.31**	.37**	.22*	.40**	.22*	1	
8. Total scores	.68**	.62**	.68**	.56**	.51**	51**	67**	1

**Correlation is significant at p < .01

*Correlation is significant at p < .05

The relationships between the independent variables and the seven subscales was further explored through multiple linear regression analysis. Table 3 displays a summary of linear enter regression analysis for independent variables (all seven subscales) predicting scientific inquiry. Among the predictors, planning of variables contributed more to the scientific inquiry, with 28% of explained variances while the remaining six variables contributed moderately with < 26% explained variances.

Table 3. Summary of multiple linear regression analysis for independent variables predicting scientific inquiry skills with enter statistics

Independent variables	**Beta**
Data Handling	.171*
Identification of variables	.206*
RQ formulation	.214*
Hypotheses formulation	.184*
Planning of variables	.275*
Experimental plans	.198*
Making conclusions	.247*

Dependent variable: Scientific inquiry, (*p <. 05), RQ = research question.

Grades and gender differences

No significant differences were found between grades and genders concerning performances (see Tables 4 and 5 as well as figure 3 and 4). The internal consistency in each grade proved to be highly reliable in terms of the whole scale. Interestingly, grade 9 students performed better in terms of simple mean percentage (see table 4 and figure 3). This may mean that the teaching and learning of science at grade 11 focus more on examination than enhancing and incorporating the inquiry methods.

Grades

GRADE 9 (N=41)			**GRADE 11 (N=77)**		
Cronbach's α	Mean (%)	SD (%)	Cronbach's α	Mean(%)	SD (%)
.89	34.32	9.17	.86	32.25	.96

Table 4, shows the grade mean difference

	No. of items	**Cronbach α**	**Mean %**	**SD %**	**Min**	**Max**
Scientific inquiry skills	**57**	**.87**	**33.00**	**9.00**	**14**	**55**
Data handling	9	.51	7.00	1.65	2	9
Identify variables	6	.53	3.00	2.00	0	6
RQs formulation	8	.44	5.17	1.65	1	8
Hypothesis formulation	9	.50	6.21	1.65	0	9
Planning of variables	8	.90	1.74	2.54	0	8
Experimental plans	4	.93	1.92	1.81	0	4
Making-conclusions	13	.60	8.37	2.40	3	13

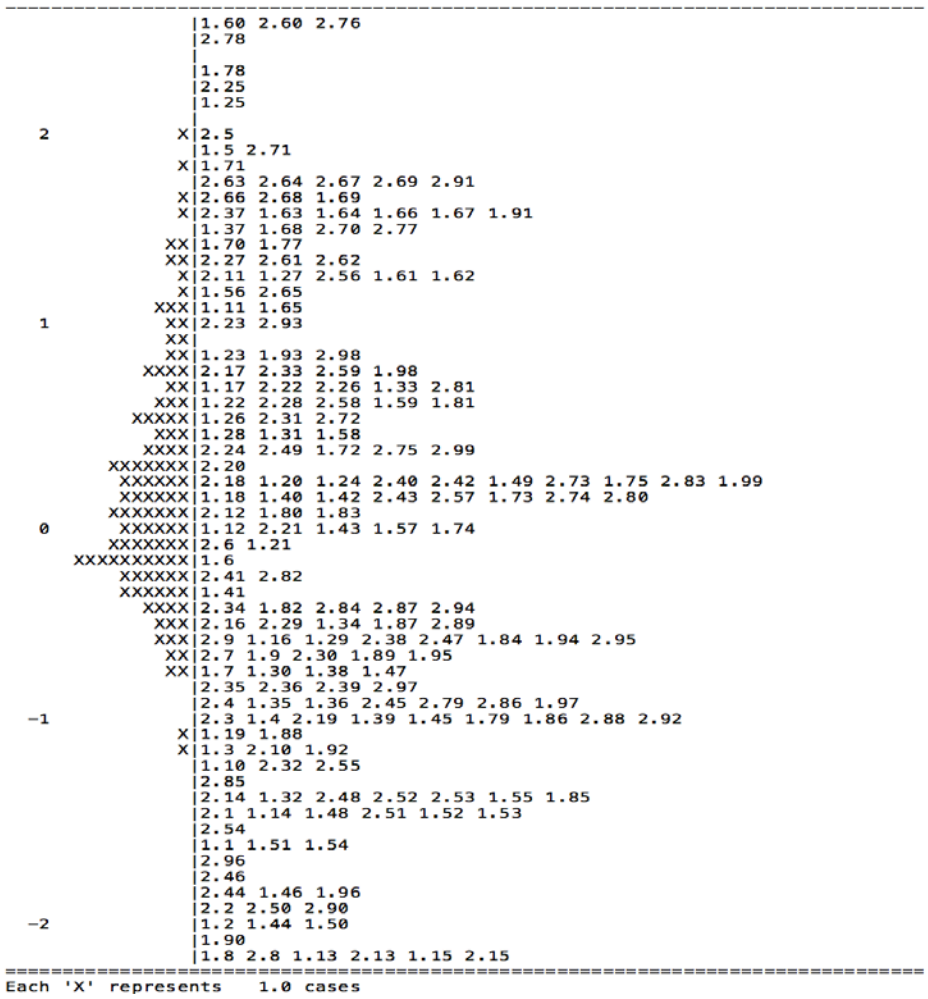


Figure 3, shows the grades performance on each item

Gender

Boys (N=44)		**Girls (N=74)**	
Mean (%)	SD (%)	Mean(%)	SD (%)
31.52	7.53	33.82	9.30

Table 5. Shows the gender mean difference

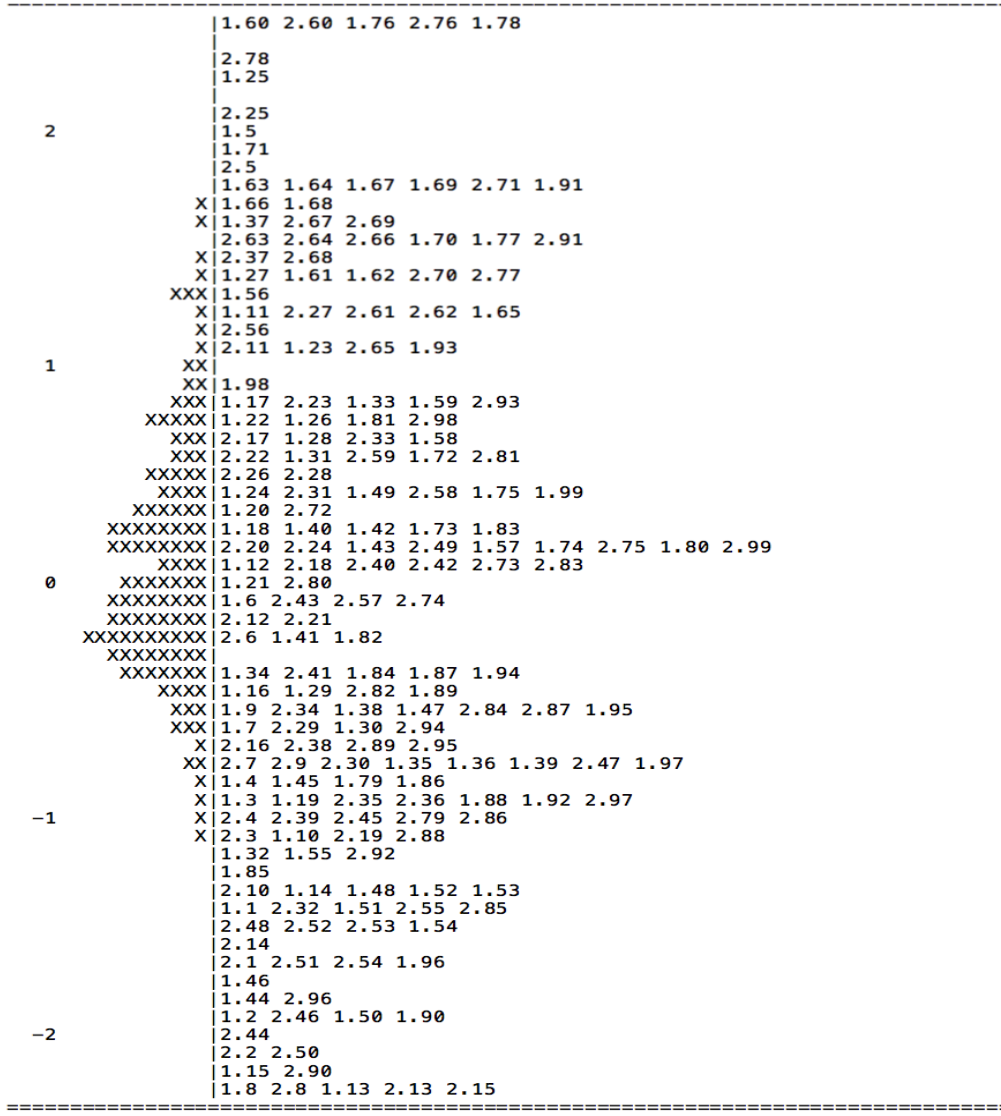


Figure 4. shows the gender performance on each item

Students' ability level

The person item map (Figure 5), indicates that the test is good to measure these cohorts of students in the region. However, further study need to be carried out with large sample for the results to be more generalizable. The distribution is normal, and more students could answer the test items with a probability of more than 50%. Fewer students would also answer all the items with easy and could score 100%. Item 60, 76 and 78 seems to be very difficult for the students (see Figures 3, figure 4 and figure 5), and a thorough review of these items is required.

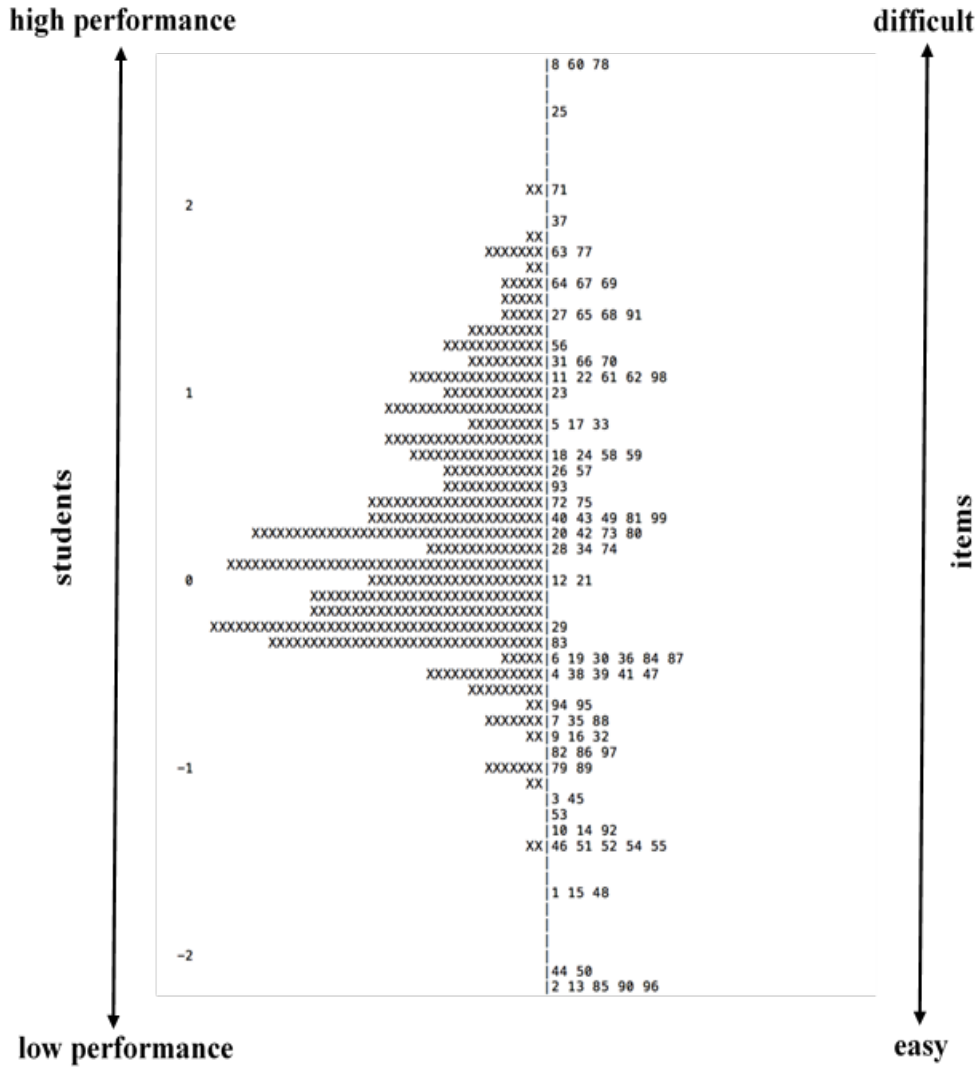


Figure 5. shows the person item map

With regard to the ability level (Figure 6), the interesting finding is that 9th graders (Mean ability difference of .22) has more ability level in answering the test correctly than the 11th graders. This may mean that the teaching and learning at grade 11, focus more on examination than enhancing and incorporating the inquiry methods in the teaching. Of late, our education system has become an examination-oriented, where passing examinations especially in the externally examined grades (grades 10 and 12) is the only benchmark for performance because there is less monitoring of learning achievements at other levels within the education cycle (Simasiku, Kasanda & Smit, 2015).

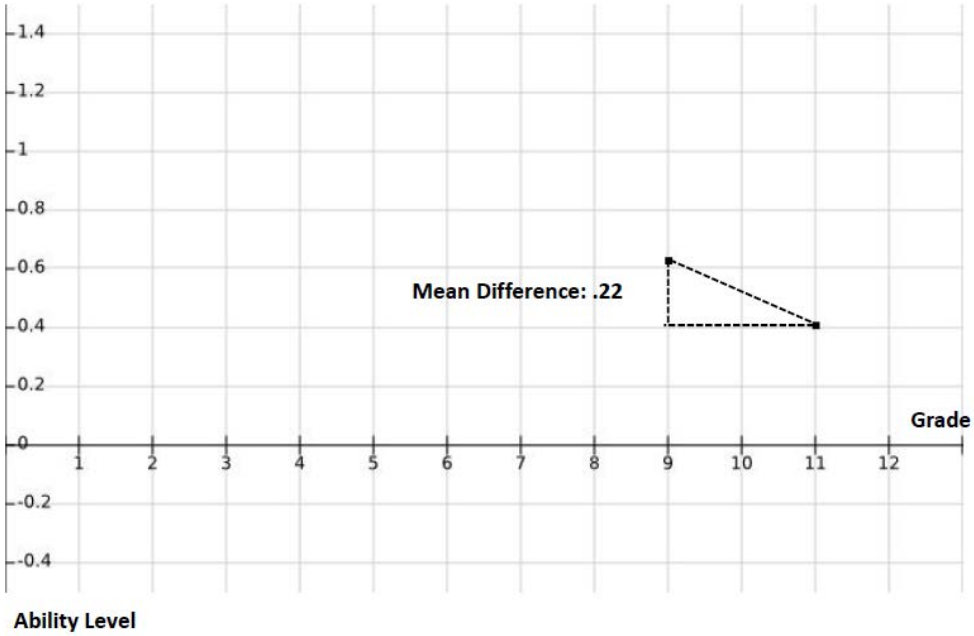


Figure 6. Ability level growth in scientific inquiry skills

Parents' level of education on students' performance

One way ANOVA was used to find out if parents level of education have significant influences on the children's performances. There was no statistically significant difference found between students whose mothers attained secondary education level and higher education level, as well as those whose mothers did not go to school, $p > .05$. However, students whose mothers did not finish primary school, performed significantly better than whose mothers have reached secondary education and higher education level, $F(4.189) = p < .05$. Fathers have no significant influences on students' performances. Rasch model analysis was also used to indicate the effect of mothers' level of education on students' performance at each item (see table 6 and Figure 7).

Table 6, showing the parents' educational level

	Mothers		**Fathers**	
	Frequency	**Percentage %**	**Frequency**	**Percentage %**
Did not go to school	3	2.5	4	3.4
Did not finish primary school	4	3.4	2	1.7
Primary education	10	8.5	7	5.9
Secondary education	56	47.5	36	30.5
Higher education	45	38.1	55	46.6
PhD degree	-	-	3	2.5
I do not know	-	-	11	9.3
Total	**118**	**100.0**	**118**	**100.0**

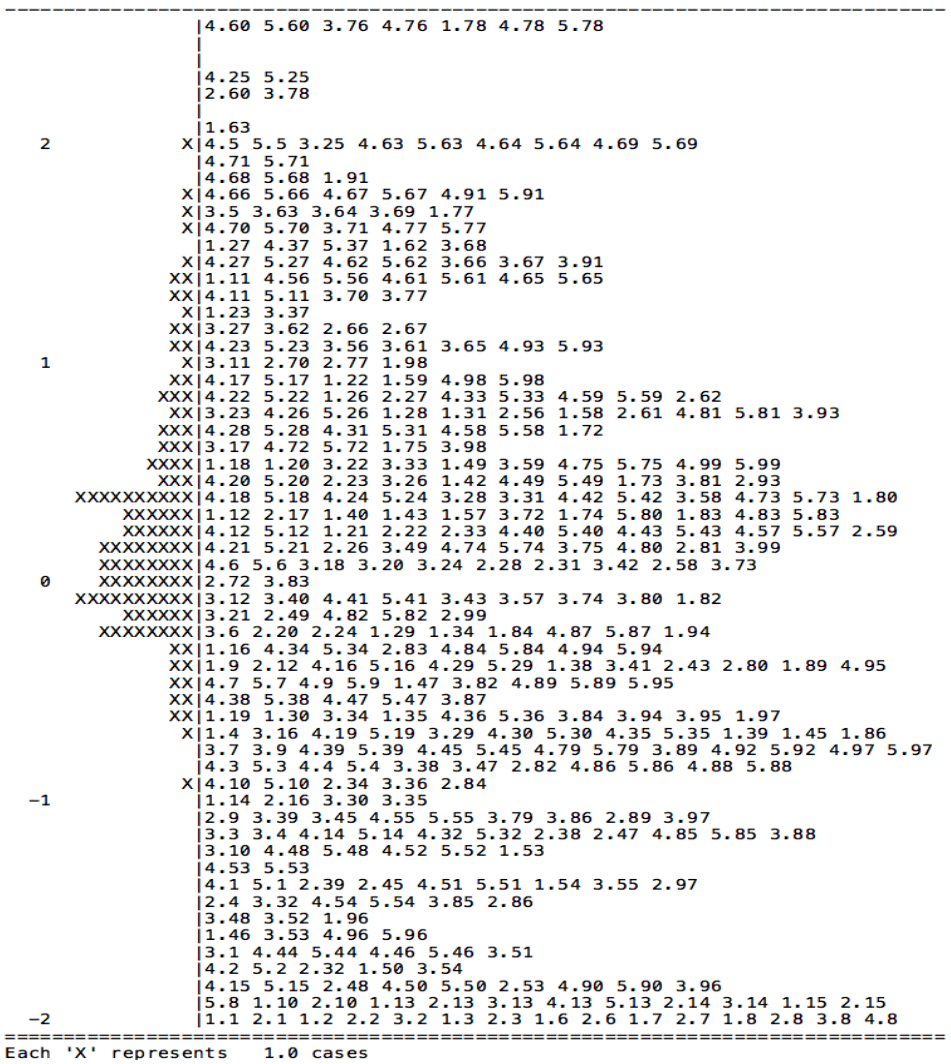


Figure 7. Effect of mothers' education level on students' performance on items

Conclusion

The online assessment instrument for scientific inquiry skills proved to be reliable regarding the whole test but at its subscales, only two (planning of variables and experimental plans) have high reliability, the remaining five subscale have internal consistency of ≤ .52 Cronbach alpha. This means that, the items organizations at subscales level need to be relooked at. Regardless of that, research have indicated that advantages of technology-based assessment, such as online test administration and automatic calculation of scoring, reduced the time and cost of the testing process (Pasztor, Molnar & Csapo, 2015). Considering these characteristics, the first steps to be

undertaken is to make the instrument suitable for everyday school practice and for possible large-scale assessments in Namibia. The findings indicate that online assessment may provide teachers an easy-to-use instrument for monitoring the development of students' scientific inquiry skills and reasoning skills, and may contribute to the development of effective teaching and learning methods. The question yet to be answered is that, are the stakeholders in the education fraternity ready to improve the ICT infrastructures in most public schools as per their blueprint? (MoE, 2001-2006). From the personal experience of being a teacher in public schools for quite sometimes, it is recognized that not all public schools have reliable internet connectivity and functional ICT rooms. Schools that have ICT rooms, the internet connection may be either weak or no signals at all.

The correlations between the subscales proved to be significant. This means that with further development, the test could be used to effectively assess the abilities of students' scientific inquiry skills. Furthermore, students' mean performance was moderate but it could be improved with further training on scientific inquiry skills during the teaching and learning. One question that rose at the back of the mind was, do teaching and learning science in Namibia involve the enhancement and inculcating of the inquiry skills to students, as it is prescribed in the Namibian national syllabi for natural sciences subjects? Mean performances between the two grades and genders was not statistically significant different. With regard to genders differences, some science education researchers have reported that gender influenced students' understanding and their attitudes toward science (Al-Zoubi, El-shar'a, & Al-Salam, 2009; Dimitrov, 1999; Lappan, 2000; Valamides, 1996). The study results conformed to other research that no significant difference was found in performance between genders. Recent research by (Piraksa, Srisawasdi & Koul, 2013) indicated that gender does not significantly influence students' scientific reasoning ability. Therefore, the findings point to the fact that there is critical area for improvement of students' scientific inquiry skills and reasoning ability. This also implied that instructional pedagogy in science classroom should emphasize more on how to: (i) reason casually based on hypothesis generation, and (ii) design well thought science experiment, in order to enhance the development of students' scientific inquiry skills and reasoning ability.

There is consistent evidence that parents' education predicts children's educational outcomes, alongside other distal family characteristics such as family income, parents' occupations, and residence location (Eccles & Davis-Kean, 2005). Other current research also echoed the same sentiments, e.g. significant positive relationship between parents' education level and academic achievements of students in India (Asad khan, Iqbal & Tasneem, 2015). Interestingly, the results indicate the opposite. Students

whose mothers did not finish primary education outperformed those students whose mothers have attained secondary and higher education levels. One explanation for this is that, in Namibia, children from low-income society tends to work harder than those from affluent society, because they want to come out of poverty level and live a better life. On the other hand, children of parents having better education do not seem to see the need to work hard, since they are provided with almost everything they want. However, this needs to be proven with scientific research in order to shed more light.

Educational implications

The items tested in this study could be used to assess students' abilities in scientific thinking and reasoning using inquiry methods. According to this diagnosis of students' abilities, specific learning environments can be created to promote students' inquiry skills. One goal of science education is to produce scientifically literate people with both content knowledge and knowledge of inquiry methods (Lederman and Lederman 2012), which is achievable. In school, content knowledge structured according to specific subject topics is not the only way of teaching science subjects, as this subjects-specific content knowledge could also be structured according to the inquiry methods. Because no method seems to be more complex for students at this age, teachers can choose the method that fits the topic well to foster the students' abilities in this inquiry method (Nowak et al., 2013).

Limitations for the study

Online assessment and computer usage might be new to most of the students in Namibia. Since they may not be familiar with technology-based assessment, this research instrument may not be able to give accurate ability and developmental level of the students. Another limitation is related to sample size in the current study. The sample is relatively small and do not represent average students within the country. Overall, in order to get accurate structure of scientific inquiry skills and provide better explanations, a paper and pencils approach may be employed in future studies with larger sample from different region across Namibia. Such an approach can help determine students' ability and developmental level of scientific inquiry, and the differences between regions could be determined.

Acknowledgements

The author of the paper is on; Stipendium Hungaricum Scholarship program and the Namibian government financial support (Namibia Students Financial Assistance Fund, NSFAF).

References

Al-Zoubi, T., El-shar'a, I., & Al-Salam, M. K. (2009). The Scientific Reasoning Level of Students' In the Faculty of Science In Al-Hussein Bin Talal University and Its Affection of Gender, Teaching level, and Specialization. An-Najah University Journal for Research - Humanities, 23(2), 401-437.

American Association for the Advancement of Science (1993). Benchmarks for Science Literacy. New York: Oxford University Press.

Asad khan, R. M., Iqbal, M., & Tasneem, S. (2015). The influence of parents' educational level on secondary school students' academic achievements in district Rajanpur, Journal of Education and Practice, 6 (16), 76-79.

Bao, L., & Koenig, K. (2012). TI21: A Technology Enhanced Inquiry Framework for Developing and Assessing 21st Century Skills, iSTARAssessment.org.

Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., & Rumble, M. (2010). Defining 21st century skills. Retrieved from http://atc21s.org/wp-content/uploads/2017/03/25-Defining-21st-Century-Skills.pdf.

Bybee, R. W. (2009). The BSCS 5E Instructional Model and 21st Century Skills. National Academies Board on Science Education, Washington, DC: Retrieved March 25, 2017. from: https://www7.nationalacademies.org/bose/1Bybee_21st%20Century_Paper.pdf.

Capps, D. K., & Crawford, B. A. (2013). Inquiry-based instruction and teaching about nature of science: Are they happening? Journal of Science Teacher Education, 24, 497–526.

Chinn, C. A., & Malhotra, B. A. (2002). Epistemologically authentic inquiry in schools: A theoretical framework for evaluating inquiry tasks. Science Education, 86, 175–218.

Csapo, B. (1997). Development of inductive reasoning: Cross-sectional measurements in an educational context. International Journal Behavioural Development. 20(4). 609-625.

Csapó, B., Lorincz, A., & Molnár, G. (2012). Innovative assessment technologies in educational games designed for young students. In D. Ifenthaler, D. Eseryel & X. Ge (Eds.), Assessment in game-based learning: foundations, innovations, and perspectives (pp. 235–254). New York: Springer.

Csapó, B. and Funke, J. (eds.) (2017), The Nature of Problem Solving: Using Research to Inspire 21st Century Learning, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264273955

Dimitrov, D. M. (1999). Gender differences in Science Achievement: Differential Effect of Ability, Response Format, and Stans of Learning Outcomes. School Science and Mathematics, 99(8), 445-450.
Eccles, J. S. and Davis-Kean, P. E. (2005). Influence of parents' education on their children' educational attainments: the role of parent and child perceptions. London Review of Education, 3(3), 191-204.
Fenichel, M., & Schweingruber, H. (2010). Surrounded by science: Learning science in informal environments. Washington, D. C.: National Press.
Gaigher, E., Lederman, N., & Lederman, J. S. (2014). Knowledge about Inquiry: A study in South African high schools, International Journal of Science Education, 36(18), 3125-3147.
Gilbert, J. K., Pietrocola, M., Zylbersztajn, A. and Franco, C. (2000). Science and Education, Notions of Reality, Theory and Models. In Developing Models in Science Education, edited by Gilbert, J. K and Boulter, C. J. 19–40. Dordrecht: Kluwer.
Gott, R., & Duggan, S. (1998). Understanding Scientific Evidence – Why it Matters and How It Can Be Taught. In M. Ratcliffe (Ed), ASE (The Association for Science Education) Guide to Secondary Science Education, (pp. 92–99). Cheltenham: Stanley Thornes.
Gott, R., and Duggan. S. (1995). Investigative work in the science curriculum. Buckingham: Open University Press.
Hammann, M., Phan, T. T. H., Ehmer., M., & Grimm, T. (2008). Assessing Pupils' Skills in Experimentation. Journal of Biological Education 42 (2): 66–72.
Klahr, D. (2000) Exploring Science: The Cognition and Development of Discovery Processes. Cambridge, MA: MIT Press.
Lappan, G. (2000). A Vision of Learning to teach for the 21st Century. School Science and Mathematics, 100(6), 319-325.
Lederman, N., & Lederman, J. (2012). Nature of scientific knowledge and scientific inquiry. In B. J. Fraser, K. Tobin, & C. J. McRobbie (Eds.), Second international handbook of science education (pp. 335–359). Dordrecht: Springer.
Mayer, J. (2007). Inquiry as Scientific Problem Solving. In D. Kruger & H. Vogt (Eds). Theories in Biology Didactic, (pp.177–186). Heidelberg: Springer.
Ministry of Basic Education, Sport and Culture,. (2001). ICT policy for education. Windhoek: Polytechnic Press.
Ministry of Education. (2007). Education and training sector and Improvement program. Windhoek: Government Press.
Ministry of Education. (2009). Physical Science Syllabus Grades 8-10. Okahandja: NIED.

Ministry of Education. (2010). National Curriculum for Basic Education. Okahandja: NIED.
Molnar, G., Greiff, S., & Csapo, B. (2013). Inductive reasoning, domain specific and complex problem solving: relation and development. Thinking skills and Creativity, 9(8), 35-45.
Nagy, L.-né., Korom, E., Pásztor, A., Veres, G., & B. Németh, M. (2015). A természettudományos gondolkodás online diagnosztikus értékelése [Online diagnostic assessment of scientific reasoning]. In B. Csapó, E. Korom, & Gy. Molnár (Eds.), A természettudományi tudás online diagnosztikus értékelésének tartalmi keretei [Framework for the online assessment of scientific reasoning] (pp. 35–116). Budapest: Oktatáskutató és Fejlesztő Intézet.
National Research Council. (1996). National Science Education Standards. Washington, DC: National Academies Press.
National Research Council. (2012). A framework for K-12 science education: Practices, crosscutting concepts and core ideas. Washington, DC: National Academy Press.
Nowak, K. H., Nehring, A., Tiemann, R., & Upmeier zu Belzen, A. (2013) Assessing students' abilities in processes of scientific inquiry in biology using a paper-and-pencil test, Journal of Biological Education, 47(3), 182-188
Padilla, M. (1990). The Science Process Skills. Paper presented at the annual meeting of the National Association for Research in Science Teaching, French Lick, IN.
Pásztor, A., Molnár, Gy., & Csapó, B. (2015). Technology-based assessment of creativity in educational context: the case of divergent thinking and its relation to mathematical achievement, Thinking skills and Creativity, 18, 32-42.
Piraksaa, C., Srisawasdi, N., & Koul, R. (2014). Effect of gender on students' scientific reasoning ability: a case study in Thailand, Procedia - Social and Behavioral Sciences 116, 486 – 491.
Senler, B. (2015). Middle school students' views of scientific inquiry: An international comparative study Science Education International, 26(2), 166-179
Schwartz, R. S., Lederman, N., & Lederman, N. (2008, March). An instrument to assess views of scientific inquiry: The VOSI questionnaire. Paper presented at the international conference of the National Association for Research in Science Teaching. Baltimore, MD.
Simasiku, L., Kasanda, C. & Smit, T. (2015). Teaching subjects matter through English as the Medium of instruction in the Namibian English second language classrooms, European Scientific Journal Special edition, vol.1 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431

Valamides, N. C. (1996). Formal Reasoning and Science Teaching. School Science and Mathematics, 96(2), 99-107.
Wenning, C. J. (2007). Assessing inquiry skills as a component of scientific literacy. Journal of Physics Teacher Education Online, 4(2), 21-24.
Yeh, Y., Jen, T., & Hsu, Y. (2012). Major strands in scientific inquiry through cluster analysis of research abstracts. International Journal of Science Education, 34, 2811-2842.
Zimmerman, C. (2005). The Development of Scientific Reasoning Skills: What Psychologists Contribute to an Understanding of Elementary Science Learning.

The Effect of Transformational Leadership on Middle School Students' Intrinsic Motivation and Expectancy-Value in Physical Education

Minhyun Kim
Bridgewater College, USA
Glenn Hushman
Lauren Holzberg
University of New Mexico, USA
Hosung So
California State University San Bernardino, USA

doi: 10.19044/ejes.v4no2a2 URL:http://dx.doi.org/10.19044/ejes.v4no2a2

Abstract

The leadership practices exhibited by physical education teachers have been found to have a significant impact on promoting students' learning. The main purpose of this study was to explore the relationship between physical education teachers' transformational leadership and middle school students' expectancy-value and intrinsic motivation. To conduct this study, a total of 295 middle school students participated in this study through a convenience sampling technique, and 262 questionnaires were used for the data analyses. Data collected were analyzed by descriptive, and multiple regression. According to regression analyses, transformational leadership had a positive impact on students' expectancy-value and intrinsic motivation. Additionally, based on multiple regression, intellectual stimulation was a common factor that positively affected students' expectancy-value and intrinsic motivation. The results of the study supported the importance of transformational leadership that affects middle school students' intrinsic motivation and expectancy-value in physical education. It is recommended that physical education teachers be able to understand and display appropriate leadership, in particular transformational leadership.

Keywords: Transformational Leadership, Intrinsic Motivation, Expectancy-Value.

Introduction

Leadership is important in many venues, including business, the military, the sports world and school systems, and has the potential to enhance the effectiveness of an organization greatly. The concept of leadership also has drawn attention as an important concept to enhance the quality of education. Katzenmeyer and Moller (2001) defined teacher leadership as "teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice" (p.5). Great teachers are ones who know how to teach, as well as to lead students because the holistic approach of education is not only to transcend academic knowledge, but also to help students seek meaning and purpose of life.

Traditionally, in leadership in physical education more likely displayed an authoritarian style than in any other subject areas (Templin, Woodford & Mullin, 1982). In addition, as most physical education teachers experience a role conflict as both teacher and coach, it is difficult for them to display effective leadership and teaching styles accordingly (Kwon, Pyun & Kim, 2010). Thus, the importance of leadership should be recognized in physical education as teachers are considered leaders in their own classrooms (Peterson & Cooke, 1983).

The leadership practices exhibited by physical education teachers have been found to have a significant impact on promoting students' learning (Chelladurai & Saleh, 1980). More importantly, as the current teaching practices of physical education trends are no longer focusing on simple sports training (Sallis & McKenzie, 1991), the role of physical education is to not only means of education related to teach general knowledge and skills in sports and physical activities, but also a holistic approach of quality of learning health benefits of physical activity, social behavior management and enjoyment (Wersch, Trew, & Turner, 1992). As a consequence of the educational changes in physical education, the leadership capacity of each physical education teacher has become more important. Understanding of how to be leaders enables teachers to employ various teaching styles to reach goals and objectives, as well as to motivate students and to enhance classroom management.

Transformational Leadership

Transformational leadership initially was proposed by Burns (1978). Daft (2008) defined transformational leadership as "characterized by the ability to bring about significant change in followers and the organization" (p. 356). Transformational leadership is conceptualized as involving a series of behaviors designed to inspire, empower, and motivate others to transcend

and achieve higher levels of goals and missions (Avolio & Bass, 2004; Hunt, 1999).

The efficiency and benefits of transformational leadership have been documents extensively, in particular as applied to education (Kirkbride, 2006). According to Burns (1978), transformational leadership can allow leaders as well as followers to elevate their morality and motivation. Specifically, transformational leadership can be carried out by providing clear and compelling goals (Kim, 2010), displaying as a role model and motivating followers to accomplish the goals. Bass (1985) introduced four dimensions of transformation leadership: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The description below provides more in-depth information about each dimension.

Idealized influence. Idealized influence implies that followers consider their leaders as role models who practice ethical conduct that inspires respect and trust (Barling, Christie, & Hoption, 2010). Transformational leaders resist pressures of immoral and unethical behaviors, by demonstrating highly ethical behavior and extensive personal rapport such as respect, trust, honesty, dignity, enthusiasm, responsibility and influencing positive behaviors, the transformational leader is able to instill critical life virtues into followers.

Inspirational motivation. Inspirational motivation takes place when leaders share a vision and goal with the organization and followers (Pounder, 2003). Transformational leaders identify and set clear visions and realistic goals as they relate to followers' goals and enthusiasm (Bass & Avolio, 1994). This can be done by communicating clearly with followers, and encouraging and supporting them.

Intellectual stimulation. Intellectual stimulation involves promoting followers' curiosity, problem-solving, and novel ways of thinking by stimulating followers' intelligence. According to Daft (2014), "people admire leaders who awaken their curiosity, challenge them to think and learn, and encourage openness to new, inspiring ideas and alternatives" (p. 142). Transformational leaders recognize all types of issues and problems and help followers to solve problems in creative and innovative ways.

Individualized consideration. Individualized consideration takes place when leaders seek and respond to followers' specific needs and capabilities (Bass & Avolio, 1994). By listening and caring about followers' concerns and issues, transformational leaders should be able to help and support properly (Avolio & Bass, 1998). Being effective communicators implies multiple important aspects, such as skill in building an intimate relationship, and listening and providing proper reinforcement.

Research Methodology:

Purpose of the Study

The purpose of this study is to investigate the impact of transformational leadership on students' intrinsic motivation and expectancy value in physical education among middle school students. This research will examine the relationship between each transformational component as it relates to motivation and the expectancy value. These two variables were chosen because they represent students' success in physical education (Goodboy & Myers, 2008). Furthermore, this study also will investigate the four components of transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, individual consideration) in relation to middle school students' motivation and expectancy value toward physical education.

Research Design and Procedures

The study was conducted as quantitative research by participating middle school students. Due to constraints of time and accessibility, a convenience sampling method was applied in this study (Lohr, 1999). Copies of the survey and consent form were prepared and distributed to the students during school visitations. To ensure the confidentiality of the survey, anonymous setting was created by allowing enough space between students, and the physical education teacher was out of the classroom during the survey. Answers from students reflected their individual experiences and opinions of their physical education class and were not be judged as right or wrong. After the physical education teacher left the classroom, the researchers distributed a survey package to the students. The survey package included a cover letter and the four questionnaires. The survey took approximately 15-20 minutes to complete. After the students complete their answers, they returned the survey package to the researcher

Population and Sample

The population for the study was in a large school district (District-5) in Albuquerque, New Mexico in the United States. The sampling frame for this study was 295 middle school students from two private middle schools located in Albuquerque.

Results:

Description of Subjects

Two local private middle schools were selected in this study. A total of 295 students participated in this study. Of the surveys collected, 33 surveys with missing or duplicate surveys were excluded in this study, which resulting in yielding 262 usable surveys for the data analysis. Demographic

description of the sample follows: Subjects consisted of 122 male (46.6%) and 140 female (53.4%). There were 76 sixth grade students (29%), 106 seventh grade students (40.5%), and 80 eighth grade students (30.5%). In regard to ethnicity, there were 75 Hispanic (28.6%), 155 Caucasian (59.2%), 12 African American (4.6%), 10 Asian (3.8%), and 10 other (3.8%). Table 1 shows the demographic information.

Table 1. *Descriptive Statistics for Demographic Variables*

Variable	**Category**	**Frequency**	**Percent (%)**
Gender	Male	122	46.6
	Female	140	53.4
Grade	6^{th}	76	29.0
	7^{th}	106	40.5
	8^{th}	80	30.5
Ethnicity	Hispanic	75	28.6
	Caucasian	155	59.2
	African American	12	4.6
	Asian	10	3.8
	Other	10	3.8

In order to explore the effects of transformational leadership on middle school students' intrinsic motivation and expectancy-value in physical education, and multiple regression analyses were employed.

According to Table 2, four transformational leadership behaviors, including idealized influence, had a statistically significant effect on middle school students' expectancy-value. Specifically, the results of regression analysis showed: individualized consideration (β=.36, *p<.001*), inspirational motivation (β=.35, *p<.001*), intellectual stimulation (β=.41, *p<.001*), and individual consideration (β=.32, *p<.001*) had significant positive effects on expectancy-value.

Table 2. *The Regression Analysis for Transformational Leadership on Expectancy-Value*

Dependent Variable	Predictor	β	*T*	*p*
	II	.36	6.27	.000
Expectancy-Value	IM	.35	6.98	.000
	IS	.41	7.22	.000
	IC	.32	5.55	.000

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration

In addition, multiple regression analysis was employed, the results of this analysis provided that intellectual stimulation accounted for 19% of the variance in middle school students' expectancy-value levels (R^2 =.19, F (2, 257) = 14.77, p <.01) (see Table 3).

As seen Table 4, four transformational leadership behaviors, including idealized influence, had statistically significant effect on middle school students' intrinsic motivation. The results of multiple regression

indicated that individualized consideration (β=.40, *p<.001*), inspirational motivation (β=.39, *p<.001*), intellectual stimulation (β=.44, *p<.001*), and individual consideration (β=.39, *p<.001*) had significant positive effects on expectancy-value.

Table 3. *Multiple Regression Analysis for Middle School Students' Expectancy-Value According to Teachers' Transformational Leadership*

Dependent Variable	Predictor	*SE*	β	*t*	*p*	VIF
	(Constant)	.23		10.87	0.00	
	II	.08	.14	6.27	.16	3.08
Expectancy-Value	IM	.08	.08	6.98	.41	3.14
	IS	.06	.29	7.22	.01*	1.91
	IC	-.09	.09	5.55	.76	3.16
	D-W=1.886, R^2=0.19, *F*=14.77, *p<.01					

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration

Table 4. *The Multiple Regression Analysis for Transformational Leadership on Intrinsic Motivation*

Dependent Variable	Predictor	B	*t*	*p*
	II	.40	7.12	.000
	IM	.39	6.90	.000
Intrinsic Motivation	IS	.44	7.91	.000
	IC	.39	6.81	.000

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration

Furthermore, multiple regression analysis showed that intellectual stimulation accounted for 29% of the variance in middle school students' expectancy-value levels (R^2 =.27, *F* (4, 257) = 24.06, *p* <.01) (see Table 5).

Table 5. *Multiple Regression Analysis for Middle School Students' Intrinsic Motivation According to Teachers' Transformational Leadership*

Dependent Variable	Predictor	*SE*	β	*T*	*P*
	(Constant)	.32		8.51	0.00
	II	.13	.15	6.27	.19
Intrinsic Motivation	IM	.08	.10	6.98	.39
	IS	.28	.29	7.22	.01*
	IC	.05	.07	5.55	.59
	D-W=1.814, R^2=0.27, *F*=24.06, *p<.01				

Note. II=Idealized Influence, IM=Inspirational Motivation, IS=Intellectual Stimulation, IC=Individual Consideration

Discussion:

This study attempted to examine the effects of physical education teachers' transformational leadership on middle school students' expectancy-value and intrinsic motivation. The results indicated that four components in

transformational leadership positively influenced middle students' expectancy-value and intrinsic motivation. This finding is consistent with the past study that there transformational leadership had a positive impact on students' perceptions regardless of age, gender, and skill level in physical education (Yang, 2007). Particularly, it was revealed that out of four transformational components, intellectual stimulation was one of the powerful common components that affects middle school students' expectancy-value and intrinsic motivation.

In fact, the result of this study is somewhat different from a previous study. According to Jung, Pyo, and Kim (2008), idealized influence and individual consideration were shown to be strong factors that enhance middle school students' motivation. However, this study posited that intellectual stimulation was one of the most important factors. The result of the current study demonstrates the importance of providing interesting, age and developmentally appropriate class activities. Based on the results of this study, it is important to meet both genders' interest and physical skill levels as female students' physical competence and intrinsic motivation showed fairly lower than male students. In fact, according to Fernandez-Balboa (1993), physical education remains a male-dominated terrain where gender biases are reproduced and typically unchallenged. For example, curriculum and equipment is mostly provided to accommodate male students. In addition, oftentimes, the physical education class environment is too competitive for girls, which prevents them from participating in activities. Thus, it is necessary for middle school physical teachers to understand various physical activities that can embrace both genders and promote their interest and participation.

By seeking and providing new perspectives of positive teaching methods and strategies, middle school physical education teachers can maximize their teaching and boost students' learning and motivation. Furthermore, the curriculum is one of the major factors that influence students' learning in physical education. In this regard, providing appropriate curricula has strong impact on middle school students' learning and participation. In particular, since middle school students' skill levels are highly associated with their motivation, curricula should incorporate all skill levels by providing age and developmentally appropriate framework. Effective curricula entail comprehensive, inclusive, progressive activities and guide developmentally appropriate physical education. Additionally, since there is a variety of ability and interest among middle school students, it is absolutely essential to provide varied activities. These activities are derived from areas such as team and individual activities, gymnastics, rhythm and dance, outdoor challenge and pursuits, aquatics, and cooperative activities (Metzler, 2000).

Conclusion:

The main role of physical education teachers is to educate students about various physical movements and physical activities. Beyond good teaching, providing effective leadership has positive impacts on student outcomes (Day et al., 2010). The results of the study support the importance of transformational leadership that affects middle school students' intrinsic motivation and expectancy-value in physical education. Thus, it is recommended that physical education teachers be able to understand and display appropriate leadership, in particular transformational leadership. The future of physical education classes may depend upon teachers' effective leadership. Physical education teachers should continuously strive toward effective leadership.

References:

Avolio, B. J., & Bass, B. M. (2004). Multifactor leadership questionnaire: Third edition manual and sampler set. Redwood City, CA: Mind Garden.

Barling, J., Christie, A., & Hoption, A. (2010). Leadership. In S. Zedeck (Ed.), Handbook of
industrial and organizational psychology (pp. 183-240). Washington, DC: American Psychological Association.

Beauchamp, M., Barling, J., Li, Z., Morton, K., Keith, S., & Zumbo, B. (2010). Development
and psychometric properties of the transformational teaching questionnaire. Journal of Health Psychology, 15(8), 1123-1134.

Browne, J. (1992). Reasons for the selection or nonselection of physical education studies by
year 12 girls. Journal of Teaching in Physical Education, 11, 402-410.

Burns, J. M. (1978). Leadership. NY: Harper & Row.

Carlson, T. B. (1995). We hate gym: Student alienation from physical education. Journal of Teaching in Physical Education, 14, 467-47.

Chelladurai, P., & Saleh, S. D. (1980). Dimensions of leader behavior in sports: development
of a leadership scale. Journal of Sport Psychology, 2, 34-45.

Daft, R. L. (2008). The leadership experience (4th ed.). Mason, OH: SouthWestern.

Day, C., Sammons, P., Leithwood, K., Hopkins, D., Harris, A., Gu, Q., & Brown, E. (2010). Ten strong claims about successful school leadership. Nottingham: NCSL.

Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. (2004). Transformational
leadership and team performance. Journal of organizational change management, 17(2), 177-193.

Eccles, J. S., & Wigfield, A. (1995). In the mind of the achiever: The structure of adolescents' academic achievement related beliefs and self-perceptions. Personality and Social Psychology Bulletin, 21, 215–225.
Fernandez-Balboa, J. (1993). Sociocultural characteristics of the hidden curriculum in physical education. Quest, 45(2), 230-254.
Goodboy, A. K., & Myers, S. A. (2008). Relational maintenance behaviors of friends with benefits: Investigating equity and relational characteristics. Human Communication, 11, 71-86.
Graham, G. (2008). Teaching children physical education: Becoming a master teacher (3rd ed.). Champaign, IL: Human Kinetics.
Jung, S, Pyo, N., & Kim, M. (2008). Influence of Physical Education Teacher's Transformational Leadership on Trust and Class Satisfaction. Journal of Fisheries and Marine Sciences Education, 25(2), 526-537.
Katzenmeyer, M., & Moller, G. (2009). Awakening the sleeping giant: helping teachers develop as leaders. Thousand Oaks: Corwin Press.
Kim, B.Y. (2010). Application of Transformational Leadership: The Case of Hiddink Leadership. The Korean Association of Sport Law, 13(1), 11-37.
Kirkbride, P. (2006). Developing transformational leaders: the full range leadership model in action, Industrial and commercial training, 38(1), 23-32.
Kwon, H. H., Pyun, D., & Kim, M. (2010). Perceived leadership behavior of physical education teacher-coaches: When they teach vs. when they coach. Journal of Teaching in Physical Education, 29,131-145.
Lohr, Sharon L. (1999). Sampling: Design and Analysis. Albany: Duxbury Press.
McAuley, E., Duncan, T., & Tammen, V. V. (1989). Psychometric properties of the Intrinsic Motivation Inventory in a competitive sport setting: A confirmatory factor analysis. Research
Quarterly for Exercise and Sport, 60, 48-58.
Metzler, N.W. (2000). Instuctional models for physical education. Needham Heights, MA: Allyn & Bacon.
Pounder, J. S. (2003). Employing transformational leadership to enhance the quality of management development instruction. Journal of Management Development, 22, 6-13.
Sallis, J. F., & McKenzie, T. L. (1991). Physical education's role in public health. Research Quarterly for Exercise and Sport, 62, 124–137.
Templin, T., Woodford, R., & Mulling, C. (1982). On becoming a physical educator: Occupational choice and the anticipatory socialization process. Quest, 34, 119-133.
Wersch, A. V., Trew, K., & Turner, I. (1992). Post-primary school pupils' interest in physical
education: Age and gender differences. British Journal of Educational Psychology, 62, 56-72.

Yang, Y. (2007). A study of the relationship between students' perceptions of goal orientation and physical education teacher leadership styles in Taiwan. Unpublished Doctoral dissertation. Spalding University, Kentucky

Educational Video Games Enrich Underprivileged Children's Social Skills in Saudi Arabia

AlJohara Fahad Al Saud
An Assistant Professor-Education Policies and Kindergarten Section
College of Education, King Saud University

doi: 10.19044/ejes.v4no2a3 URL:http://dx.doi.org/10.19044/ejes.v4no2a3

Abstract

The current study attempts to explore the effect of the educational video games on enriching the social skills of underprivileged children in Saudi Arabia. It compares the social skills of underprivileged children who do and do not have access to educational video games through IPads. To accomplish the goals of the study; twenty underprivileged kindergarten's children who do not have IPads aged five years old were chosen randomly from one of the public schools in Riyadh city (school 56 for girls) to participate in the study. Ten of them were given access for the first time to educational video games through using Android IPads to enrich their social skills. The other ten children were in the control group without an access to educational video games. The researcher downloaded ten educational video games on to the IPads, which are suitable for the sample's age, culture, and study purpose. Ten IPads were given to the ten underprivileged families whom their child is an experimental group's member in this study. The sampled children were required to play these educational games for two hours daily for three months at home and for one hour at school under the supervision of their parents and teachers. The researcher used the Child's Social Scale CSS (Abdul Magsood &Al-Sarsee,2007) as a pre-post measurement to assess the level of the underprivileged Children's Social Skills. Results showed that the underprivileged children become more sociable, saying goodbey, thank you,excuse me,sorry when apologising to others, following rules and appreciating each other. In light of the results of the research, the researcher recommended schools in Saudi Arabia to use videogames to improve children's social skills either rich or poor. In addition, she recommended the commercial companies of IPads to pay attention to the underprivileged children in the country through producing economical IPads with low prices to enable them to own their personal IPads which will enhance their social skills alongside rich children.

Keywords: Video games, IPads, underprivileged children, Social Skills, Saudi Arabia

1. Introduction and Background

The use of digital media has formed our lives and the mode we live and interact with others. Children are no exclusion to this rule. Today's children of all ages are living in a highly media influenced environment with access to a variety of digital electronic devices which are accessible both at home and elsewhere including school. They spend most of their leisure time interacting with computers and playing video games. With the rapid introduction of computer and web into life, the field of education also benefits from these technologies. The effects of these technologies on issues such as student success, attitude, motivation and social skills, have been investigated in different fields. When looked at the studies conducted to investigate the effects of computer and web in social skills, it is seen that all these studies highlight that using computers and web in education provides more effective learning compared to traditional methods, increases the motivation of the learner, develops positive attitudes in students, and improves their social skills (Chuang&Chen,2007)

The benefits of developmentally appropriate technology have been documented (Couse & Chen, 2010). Specifically, purposeful use of technology can encourage the cognitive and social growth of young children (Haugland, 1992; Clements & Sarama, 2002,AlShaiji,O,2015). Thus, the conversation has generally moved from whether or not technology should be used to how it should be used (Clements & Sarama, 2002). As a reality, children develop their social skills and learn through play. To promote learning there are different curricular options available for children including technology devices that they can use in partnership with adults, such as the IPads. However, this technology is not available to all children, especially those from low-income families. IPads have enabled learners to access knowledge in new ways, using techniques that are different from traditional methods but also complementary. This technology facilitates autonomous learning in any setting, La Greca & Mesibov (1979). Socio-cultural awareness can also be facilitated by IPads' applications that depend on the learners' interacting with their social environment, (Paivio,2006).

Findings from a number of research studies indicate that appropriately designed educational video games enhance students' learning performance in science, mathematics, social skills, and languages skills (Gee, 2003). Previous studies indicate that the educational video games have important factors that can motivate, challenge, increase curiosity and control, and promote imagination and socialization in children (Uzun, 2009). According to the published statistics, three quarters of children play

regularly, but it is not clear whether this is harmful or beneficial and whether children learn while they are playing (Kirriemuir & McFarlane, 2004). So it is not surprising to see that today, most teachers in the world are using video games for teaching children (Gee,2003). Recently, video games' presence and popularity have been ever-growing, and game developers and researchers have started to investigate video games' impact on kids' social skills (Bottino, Ferlino & Travella, 2006). For example, Agudo (2007) conducted a study investigating the influence of video games on children's subsequent performance on social tasks .The study found that video games enhance children's fine motor skills, alphabet recognition,concept learning, numerical recognition, social skills, and self-esteem or self- concept (Agudo ,2007).

The educational video games may be effective on every age group and in any place by shaping them appropriately during the developmental period (Donmus, 2010,AlShaiji,O.2015).In saudi Arabia ,AlShaiji(2015) conducted a study to investigate the impact of video games and their role on promoting Saudi Kids' English vocabulary retention. The study attempted to answer whether there was a statistically significant difference (α=0.05) between the Saudi children's subjects' mean score on the English vocabulary test due to using video games activities in Kindergarten or not. The researcher used a random sample of (60) female Saudi children from a kindergarten in Riyadh; (30) students to represent the experimental group, and (30) students to represent the control group. In the experimental group a selected group of video games was used from the official site of the British Council to teach vocabulary, whereas in the control group English vocabulary was taught through traditional methods. At the end of the teaching period, the participants' performances were compared. Those children sat for a pre and post-tests of vocabulary which was prepared to suite the sample's ages. The results indicated that the mean score of the children in the experimental group was significantly higher than those in the control group, indicating the positive effect of using Video Games in teaching English vocabulary to children.

On the other hand, previous research supports the developmentally appropriate use of other forms of technology with young children supporting both cognitive and social learning (Haugland, 1992; Haugland, 1999; Clements, 2002; Clements & Nastasi, 1988). VanderScoter, Ellis, & Railsback (2001) explained how the technology is used, especially with young children. They recommend selecting technology applications that allow children opportunities to improve their social skills. Programs should support the child's thoughts, emotions, and physical well-being (Hillman & Marshall, 2010). The development of newer, more interactive touchable interfaces may be more suitable for children, because they allow for physical

manipulation that encourages curiosity, creativity, self-expression, and discovery (Plowman & Stephen, 2003). The touchable interface is one feature of the IPad, and similar tablets, which makes the tool potentially suitable for young children to learn through playing purposeful educational video games.

The IPad is a tool that young children can navigate and use independently. Many studies (Clements&Sarama,2002;Kubba,2004;Couse&Chen,2010,Bahatheg,2015) indicated that children can develop their social skills through using the IPad. Using the IPad frequently becomes a social activity for young children as they often talk and work together while using the tool (Labbo's,1996). It is possible that the mobility of the IPad contributes to the socialization that takes place, because children can see the screens of other children easily and can operate the touchscreen in groups. In light of these possibilities, the IPad could be a talented instructional tool for early childhood educators to improve their students' social skills (Clements & Sarama, 2002).

In Saudi Arabia, Bahatheg(2015) conducted a field study to find out how technology influences various developmental aspects of normal and special needs children at the preschool stage. She tried to find out the effect of iPad on school preparedness among schoolchildren with hearing impairment. The study sample was divided into control (7) and experimental (8) groups. Children in the experimental group used the iPad for 15 weeks. Results showed improvement of the experimental group in all measured areas. The control group improved in both their kinetic and social areas. In addition, differences were found between groups on post measurement favoring experimental group. The study recommended conducting more experimental and longitudinal studies to further delve into the effects of using IPads on preschools children.

In addition, Keskin & Metcalf (2011) proposed that children's social skills are affected by different variables, such as low socioeconomic status and poor family support. Providing a wide range of support to underprivileged children has been proven to lead them to overcome the disadvantages they experience, and leading to academic and life success. Nicholas &Geers (2007) proved that higher levels of support do correlate with personal satisfaction. To this end, the current study tries to investigate the effect of the educational video games among Android Ipads on improving the underprivileged children's social skills; such as greeting, extending and responding to invitations to join peer activities, cooperating, assisting and conversing with peers, which are very crucial from the early age of the child. Kubba (2004) demonstrated a link between the extent of low social skills and the level of family income. It was found that the

underprivileged children of poor families tended to be unproductive later in life, due to a poorer education and reduced employment prospects.

1.2. Question of the Study

The current study tries to answer the following question:

Are there any statistically significant differences at (α=0.05) between the social skills of the Saudi underprivileged children in the experimental and control groups due to the use of the educational games among Android IPads?

1.3. Significance of the Study

This study might provide an insight to change the negative image of using technology in social interaction among underprivileged children. It might also help teachers to adopt a more developmental attitude towards the smart electronic devices in classrooms, which could be used effectively through adopting educational video games to improve children's social skills.

In addition, this study might provide supervisors and teachers of children, including the underprivileged children, with teaching and communicative techniques of using new technology to improve the social skills of the children in Saudi Arabia. This study would hopefully show whether underprivileged children would benefit from the educational video games on IPads to improve their social skills, or not. The teachers who participated in the study might benefit in developing their own procedures and techniques in improving children's social skills.

Moreover, depending to the limited knowledge of the researcher, there is a lack of local studies in this field that led the researcher to investigate the effect of using video games on IPads to improve the social skills of the Saudi underprivileged children from low income families. Hopefully, findings of the present study would be useful in helping decision makers in determining the need for the continued development and expansion of the use of IPads' educational video games in all Saudi schools.

1.4. Terms

- **Underprivileged children:** MacIntosh (2015) defined the underprivileged children simply as children who descended from families that having less money, education, etc., than the other people in a society **:** having fewer advantages, privileges, and opportunities than most people **:**poor or disadvantaged. On the other hand, the researcher defined the unprivileged children in Saudi Arabia operationally as children related to families with low monthly income; between 300-500

$.They have more than four children. The number of qualified males is very minimum; as a result, their job opportunities are very low.

- **IPad**: A smart portable tablet with a touch screen .It has the ability to operate the digital games. Also, it has an access to internet.
- **Educational Video Games**: According to Agudo (2007) a video game is a rule based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values. Educational video games are activities that provide students the opportunity to reinforce the previous knowledge by repeating it in a more comfortable environment. They are software that helps students to learn the lesson subjects and to develop their problem solving skills and their social skills by using their desire and enthusiasm to play (Ang & Zaphiris, 2008).

1.5. Limitations of the Study

Although this study is helpful in illuminating the possibilities of the IPad as an instructional tool for early childhood teaching, it has a number of limitations. The participants in the study were a homogeneous group of kindergarten children. Thus, it would be beneficial to conduct a similar study in a setting with a more diverse group of children. In addition, the teachers in this study were willing, and even excited, to integrate the IPad into their instructions. Many teachers, particularly early childhood teachers, may not be as willing, or feel as able (Wood, Specht, Willoughby& Mueller, 2008), to integrate technology into their teaching. Also, this study was limited to low-income families in Riyadh–Saudi Arabia. Moreover, the study involved the underprivileged children in the kinder garten only at one of the public schools of Riyadh city in Saudi Arabia. It was also confined to social skills of underprivileged children. Finally, the study was limited to ten educational electronic games downloaded from http://www.al3ab5l5l.com/learning-games.html.

1.6. Validity and Reliability of the Instruments

A jury of Four Child Education Professors, and Four kinder garten teachers, and three Psychologists were asked to write their comments on the suitability of the Child's Social Skills CSS pre-post measurement in addition to validating the electronic educational games. Their comments were taken into consideration in preparing the instruments. In response to the jury's comments, some games were deleted from the IPads of the experimental group. CSS validity and reliability were improved by the researchers (Abdul Magsood &Al-Sarsee,2007) .CSS aims at determining the level of social skills among children. It measures 34 sub social skills. Each paragraph includes a component response of three-verbal (Sometimes-

always, rarely). Meeting these requirements of trustworthiness protected the dependability, reliability and authenticity of this research.

2. Method

2.1. Sample

As this study was a quasi-experimental one (Yin,2008), The study sample was chosen purposefully from a low-income society which had not previously an access to an IPad before this experiment. The researcher chose two groups; the experimental group which used the IPads to play ten electronic educational games, and the control group which had no IPad. Twenty underprivileged children aged five years, from low-income families participated in this project. There were ten children in the experimental group and ten other children in the control group. All the children were observed pre and post the experiment using the Child's Social Skills CSS measurement which was prepared by Abdul-Magsood&Al-Sarsee (2007). Data were collected and analyzed using the SPSS statistical program.

2.1. Procedures

After choosing the sample and divided it into two groups randomly, the researcher downloaded (10) educational games from one of the kids' official educational sites (http://www.al3ab5l5l.com/learning-games.html) on the IPads of the experimental group. Then the researcher gave each of the participants an IPad to use at home and school. The games were the following: (letters, numbers, greetings, apologizing, seasons, clock, visiting grandma, travelling, Write with me in Arabic 2,permission). Then, the researcher contacted the participants' families through visiting them at their homes to discuss the idea of the experiment in order to allow their children to use the IPad's educational video games for three hours a day for three months at home and for one hour at school. The children were observed at school only, and the communication with their teachers was at classroom.

2.2. Data Collection

The researcher used the Child's Social Skills' CSS observation checklist. This tool measured children's social skills (skills and behaviors in social interaction; friendship and communication; enjoying playing with others, isolation and mood when playing alone) before and after the experiment.

2.3. Data Analysis

Child’s Social Skills measurement, CSS, was conducted two times, pre and post the experiment. Means and Standard Deviations were calculated for the four social skills (skills and behaviors in social interaction; friendship

and communication; enjoying playing with others, isolation and mood when playing alone) for the experimental and the control groups .To determine whether the differences are statistically significant an ANCOVA analysis was performed.

3. Findings

This part of the study was devoted to present the pre-post observation findings of the Children's Social Skills CSS tool. Table1 presented means and standard deviations of CSS of underprivileged children.

Table1

Means and Standard Deviations of Children's Social Skills CSS of the Underprivileged Children Pre -Post Observations

Children's Social Skills CSS	Group	Obs.	Mean	Std. Deviation	Number
Skills and Behaviors in Social Interaction	Cont.	Pre	15.5000	3.16228	10
		Post	15.8750	4.05101	10
	Exper.	Pre	15.2222	3.6	10
		Post	18.2222	4.4	10
Friendship and Communication	Cont.	Pre	14.6250	4.06	10
		Post	15.4000	4.44	10
	Exper.	Pre	14.4444	3.84	10
		Post	21.1111	5.41	10
Enjoying Playing with Others.	Cont.	Pre	21.145	2.26	10
		Post	23.3750	2.50	10
	Exper.	Pre	20.4444	3.28	10
		Post	22.5556	2.45	10
Isolation and Mood when Playing Alone	Cont.	Pre	17.1250	3.45	10
		Post	18.0000	1.60	10
	Exper.	Pre	18.0000	1.00	10
		Post	17.4444	1.50	10

As it is obvious from Table1, there was a difference in the average responses of the experimental group in the pre- and post observations in all four skills of CSS. The average responses for the experimental group in the post observation were higher than the average responses of pre-observation. However, there was no difference between the average responses of the control group in the pre- and post observations. To determine whether the differences are statistically significant, an ANCOVA analysis was performed, Table 2 presented ANCOVA results.

Table 2 ANCOVA Analysis of CSS of Underprivileged Children Pre and Post Observation

Source	Dependent Variable	Type II Sum of Squares	Mean Square	F	Sig.
Group	Skills and behaviors in social interaction	301.422	301.422	20.459	.000
	Friendship and communication	419.187	419.187	20.718	.000
	Enjoying playing with others	29.779	29.779	4.171	.050
	Isolation and mood when playing alone	.216	.216	.127	.724
Observation	Skills and behaviors in social interaction	24.121	24.121	1.637	.211
	Friendship and communication	105.004	105.004	5.190	.030
	Enjoying playing with others	9.438	9.438	1.322	.259
	Isolation and playing individually	.212	.216	.127	.724
Total	Skills and behaviors in social interaction	13752.000			
	Friendship and communication	17024.000			
	Enjoying playing with others	17297.000			
	Isolation and mood when playing alone.	2044.000			

Table 2 shows statistically significance differences at (α=0.05) between the average responses of the experimental group members for skills and behaviors in CSS; friendship and communication; and, enjoying playing with others. However; there were no statistically significant differences at (α=0.05) for isolation and mood when playing alone. The average difference between the two groups is presented in Table 3.

Table 3 Means and Standard Deviations of CSS Pre-Post Observations of the Underprivileged Children

Social Skills	Observation	Mean	Std. Deviation
Skills and behaviors in social interaction	Pre	16.21	3.56
	Post	20.10	4.40
Friendship and communication	Pre	16.00	3.84
	Post	21.35	5.41
Enjoying playing with others	Pre	20.34	3.28
	Post	22.40	2.45
Isolation and mood when playing alone	Pre	8.03	1.00
	Post	7.45	1.50

Table 3 presented the significant results of the pre-post observations of the CSS assessment tool among the underprivileged children in Saudi Arabia. The results show a relationship between the use of the educational games on IPads and the development of the social skills among them. The results showed no significant statistical differences at (α=0.05) between the average responses of the experimental and control groups in the areas of enjoying playing with others and isolation and mood when playing alone.

Remarkably, the suggested educational video games did not impact on these criteria. To discover whether these differences were statistically significant a T-test analysis was performed. Results are presented in Table 4.

Table 4 T-test of CSS of Underprivileged Children

Social Skills	**t.**	**D.f**	**Sig. (2-tailed)**	**Mean Difference**	**Std. Error Difference**
Skills and behaviors in social interaction	4.34	19	.000	5.86528	1.13495
Friendship and communication	4.102	19	.000	7.01472	1.47341
Enjoying playing with others	2.012	19	.052	1.77500	.82963
Isolation and mood when playing alone	-.323	19	.727	-.13972	.55269

Table 4 presented a significant statistical difference at (α=0.05) between the control and experimental group for skills and desired behaviors in social interaction and friendship and communication. This result indicated the effectiveness of using the IPad to play educational games among the underprivileged children on improving their social skills. However, Table 4 showed no statistically significant differences between the experimental and control groups in the areas of the skills of enjoying playing with others and isolation and mood when playing alone. This result designated that the suggested educational IPad's games are not useful in this regard.

4. Discussion

The purpose of this research was to demonstrate the effectiveness of IPad's educational video games on underprivileged children's social skills. Simms &Thumann (2007) noted that underprivileged children have not often been the target of general education research. As a result, this research tried to introduce those children for further study. Vincenta (2007) contended that the Social environmental factors include elements such as the support and attitudes of family and friends, whereas physical environmental factors refer to natural elements or technology. Through connecting the physical and social environment, this research found that IPad's video games assist in the development of underprivileged children's social skills. Nonetheless; they did not help to develop underprivileged children's skills in enjoying playing with others.

The importance of social skills is emphasized by Hay& DeLuzio (2004), and Kennedy (1989), who debated that children's engagement in

social interaction during their play with other children contributed to their social, emotional, and academic development. Furthermore, when unprivileged children integrated with rich children at school, they play together using IPads. ,Deluzio&Girolamet(2011).

The current study found that underprivileged children can make all behaviours that are essential to successful social interaction. For instance;they can make friends and comunicate with them through asking them how to play games using the IPads. Also, these children become more sociable, saying thank you, apologising to others, following rules and waiting for a turn (Nicholas &Geers,2007;Preisler, Tvingstedt & Ahlstrom,2002).In this research ,it is found that playing educational games on IPads can facilitate communication between underprivileged children and rich children.

It was noticed that the underprivileged children's social skills and behaviors and friendship and communication were improved. However, these children still preferred to spend most of their time playing alone and did not report enjoying playing with others. Bat-Chava&Deignan (2001) agreed that socialization's abilities in children can progress at different rates. It is acknowledged that underprivileged children vary in their ability to accomplish social tasks (Preisler,2002;Antia & Kreimeyer,1996).In addition, Rieffe & Terwogt,2006;Drew &Temblay,1979; Bruner ,1966; Burton & Lybarger ,1998,Levy-shift&Hoffman,1985) have reported that forming friendships in the classroom setting is more difficult for underprivileged children, Antia (2010). This is a difficulty that does not only relate to friendships involving underprivileged children and their rich peers, it is also the case in friendships,(Arthur,1993; Antia, 1982;Munes, et.al.,2001;Kennedy,1979).It is thought that difficulties with friendships may stem from these children's more limited grasp of social rules and the goals of friendship, or from a tendency to feature negative intentions to their peers (Amy& Lederbreg ,1987).

To conclude**;** The educational video games have positive effects on improving the underprivileged children's social skills in kindergarten classes of Saudi Arabia. Using the educational video games among the IPad in the classroom results in facilitating social interaction among underprivileged kindergarten's children. Children's socialization becomes much more enjoyable.

The classroom was often energetic with low chatter amongst the children, including those working with IPads, during the experiment time. The communication between children when utilizing the IPad was the biggest difference. Even when children were working individually with the IPad, children would still engage in meaningful conversations with the children around them, often asking one another, "What are you doing?".

However, the teachers often had the students work together in pairs or small groups that helped the children to manipulate the screen to see what was happening and offered suggestions and ideas.

This kind of increased socialization of the children in taking turns and being involved without it officially being their turn is a good step in improving the underprivileged social skills and self-confidence.

Children were also able to solve problems together, a kid teaching other kids. It was witnessed that children would often want to watch how their peers were using the tool and offer suggestions and ideas, even if they were not the one using the IPad. Thus, children frequently worked together and spoke with one another for a variety of purposes, including inquiries regarding how to solve a problem or to provide ideas.

However; the underprivileged children in this study revealed a preference for playing alone and had a difficulty in interacting and taking turns during play, as shown in Tables 4 and 5. It was also observed that the children did not want to listen to one another, or participate in dancing or singing activities because of their low self-esteem. They also did not pay attention to rules and avoided following them, thus, in spite of the intervention, they found it easier to play alone.

5. Recommendations

Based on the findings of this study, the researcher recommended the commercial companies who produce IPads to pay attention to this group of underprivileged children and produce a cheap device to help them own their personal IPads to use them in playing educational games, which will develop their social skills alongside with rich children. Future research may focus on technology integration with a more diverse group of children, with more specific uses of IPads, or other forms of technology, for improving their social skills.

Acknowledgment

This is a research project that was supported by a grant from the Research Center for the Humanities, Deanship of Scientific Research at King Saud University, 2016.

References:

Abdul Magsood,A.&Al-Sarsee,A.(2007).Child's Social Interaction Scale CSIS, Egypt: The Egyptian Anglo Press

Agudo, J.; Sanchez, H. & Rico, M. (2010). Playing games on the screen: adapting mouse interaction at early ages. In Proceedings of the 10th IEEE international conference on advanced learning technologies, Washington, DC, USA.

Agudo, J.; Sanchez, H. & Sosa, E. (2005). Adaptive hypermedia systems for social learning at pre-school. Recent research developments in learning technologies 1, 66-73.
Agudo, J.; Sanchez, H.; & Rico, M. (2006). Adaptive learning for very young learners. Child Development Quarterly12,34-45.
Agudo, J.; Sanchez, H.; Holguin, J.& Tello, D. (2007). Adaptive Video Games for teaching and learning in early childhood. In Proceedings of the third international online conference on teaching and research, The Reading Matrix Inc., United States.
Agudo, J.; Sanchez, H.; Rico, M. & Dominguez, E. (2007). Foreign Language learning at primary levels using adaptive Video Games. In Proceedings of world conference on educational multimedia, hypermedia and telecommunications, Chesapeake, VA: AACE.
Agudo, J.;Dominguez, E.; Pain, M.; Curado, A. & Cumbreno, A. (2007). Adaptive hypermedia usability for social learning at preschool. ICT for Child's learning Journal 33,123-129.
AlShaiji,O. (2015). Video Games Promote Saudi Children's English Vocabulary retention, EDUCATION Journal,vol.136,no.2.pp.123-133.
Amy ,R.& Lederberg,E.(1987).Temporary and long term friendships in hearing and hearing-impaired preschoolers, Merrill-Palmer Quarterly 33,515-533.
Ang, C. & Zaphiris, P. (2008). Video Games and language learning. In T. T. Kidd & H. Song (Eds), Handbook of research on instructional systems & technology, Hershey, PA: IGI Global.
Antia, J.(2010). Social interaction,Education,23,pp.12-18.
Antia,Sh.(1982).Social interaction of Kindergarten children, American Educational Studies,vol. 127,18-25.
Antia,Sh.&Kreimeyer,K.(1996).Social interaction and acceptance of underprivileged children:A comparison of social skills ', International Journal of Social Studies, 98,pp. 157-180.
Arthur,N.;Schildroth,B. & Sue, A.(1993). Ipads to improve social interaction, American Child Education Journal, 138,171-178.
Bahatheg,R.(2016). The Effect of IPad on School Preparedness among Preschool Children, International Education Studies (IES),vol.8,no.12.
Bat-Chava,Y.&Deignan,E.(2001).Peer relations of children, Journal of Child Education Studies 6,186-199.
Bottino, R.; Ferlino, L.; Ott, M. & Travella, M. (2006). Developing strategic and reasoning abilities with Video Games at primary school level. Computers & Education 49(4),96-119.
Bruner,J.(1966).Toward a Theory of Instruction. Cambridge: Harvard University Press.

Burton,T.,&Lybarger,R.(1998).An attributional analysis of aggression among children who are poor, Journal of Human Studies 31,10-22.
Chuang, T. & Chen, W. (2007). Effect of digital games on children's cognitive achievement. Journal of Multimedia 2,78-89.
Clements, D. (2002). Computers in early childhood mathematics.Contemporary Issues in Early Childhood, 3(2), 160-181.
Clements, D.& Nastasi, B. (1988). Social and cognitive interactions in educational computer environments. American Educational Research Journal, 25(1), 87-106.
Clements, D.& Sarama, J. (2002).The role of technology in early childhood learning. Teaching Children Mathematics, 8, 340-343.
Clements, D.& Sarama, J. (2003). Young children and technology: What does the research say?. Young Children, 58(6), 34-40.
Couse, L. & Chen, D. (2010). A tablet computer for young children? Exploring viability for early childhood education. Journals of Research on Technology Education, 43(1), 75-98.
DeLuzio,J.&Girolamet,L.(2011). Peer Interactions of Preschool Children. Journal of social Research 54,1197-1210.
Donmus, V. (2010). The use of social networks in educational computer-game based foreign language learning. Procedia Social and Behavioral Sciences 9,25-34.
Drew A.& Tremblay,A.(1979).Interaction of rich and underprivileged pre school children', Journal of Communicative Research 12, 245-251.
Gee, J. (2003). What video games have to teach us about learning and literacy. New York: Palgrave/Macmillan.
Haugland, S.(1992). The effect of computer software on preschool children's developmental gains. Journal of Computing in Childhood Education, 3(1), 15-30.
Haugland,S.(1992) .The effect of computer software on preschool children's developmental gains. Journal of Computers in schools, 25(4), 256-270.
Hay,D.(2004).Peer relations in childhood, Journal of Child Psychology and Psychiatry 45, 84-108.
Kamil, P.; Mosenthal, P; Pearson,A. &Barr,R.(2008). Handbook of Reading Research, UK: Oxford press, 425-454.
Kennedy,A.(1989).Technology in child education, British Journal of Educational Research 65,11-18.
Kennedy,P.(1979).Longitudinal sociometric and cross and cross-sectional data on mainstreaming hearing-impaired children: implications for pre school planning', The Volta Review 78,pp.71-81.
Kert, S. & Kuzu, A. (2006). Computer game preferences and game playing characteristics of kindergarten school students. 6th International Educational

Technology Conference. Eastern Mediterranean University, Famagusta, North Cyprus.
Keskin, N. & Metcalf, D.(2011).The current perspectives, theories and practices of mobile learning, Turkish Online Journal of Educational Technology 10 ,202-208.
Kirriemuir, J. (2002). Video Games and Gaming Consoles. The relevance of Video Games and gaming consoles to the Child Education learning experience. Retrieved from:http://www.jisc.ac.uk/index. cfm?name=techwatch ,in October19th,2016.
Kirriemuir, J. & McFarlane, A. (2004). Literature review in games and learning. Future lab, On-line.Retrieved from http://www.futurelab.org.uk/research/lit_reviews.htm, in November 2nd ,2016.
Kubba,H.(2004).Children social skills and poverty. International Journal of Childhood education 43,123-125.
La Greca, M& Mesibov,G.(1979).Social skills intervention with pre school children: Selecting skills and implementing training', Journal of Clinical Child Psychology 8,pp. 234-241.
Labbo, L. & Reinking, D. (1999). Negotiating the multiple realities of technology in research and instruction. Reading Research Quarterly, 34(4), 478-492.
Levy-Shift,R.&Hoffman,M.(1985).Social behaviour of underprivileged and rich pre schoolers, British Journal of Educational Psychology 55,111-118.
MacIntosh,R. (2015). Perceptions of Prospective Computer Teachers Toward The Use of Video Games With Educational Features in Educating underprivileged chidren. Unpublished Master Thesis, Middle East University, Ankara.Retrieved from:http://www.MEU.edu.tur,libr=index03,in October 2nd,2014.
Munes,T., Pretzlik,U., &Olsson,J.(2001).Underprivileged children's social relationships in schools, Education International 3,123-136.
Nicholas,J.&Geers,J.(2007).Will they catch up? The role of Ipads in the socialization development of children, Journal of Child Education 50,1048-1062.
Paivio,A.(2006).Dual Coding Theory And Education', in proceedings of Conference on 'Pathways to Literacy Achievement for High Poverty Children' The University of Michigan School of Education,U.S.A,pp.1-20.
Plowman, L. & Stephen, C. (2003). A 'benign addition'? Research on ICT and pre-school children. Journal of Computer Assisted Learning, 19, 149-164.
Preisler,G.(2002).A study of poor preschool children using technology in learning. Child Care and Development Journal 28,403-418.

Rieffe,C.&Terwogt,M.(2006).Anger communication in underprivileged children, Cognition and Emotion, 20,1261-1273.
Simms, C&Thumann,J. (2007). Click and turn the page: An exploration of multiple storybook. Reading Research Quarterly, 36(2), 152-183.
Simms,L.&Thumann,H.(2007).In search of a new linguistically and culturally sensitive paradigm in child education, American child Education Quarterly 15,302-311.
Uzun, L. (2009). An evaluative checklist for Video Games used for foreign language vocabulary learning and practice: voca. word sample. Novitas-ROYAL, 3(1).
VanderScotter, J.; Ellis, D. & Railsback, J. (2001). Technology in early childhood education: Finding the balance. Evaluation, 27(2), 237-246.
Vincenta,A.(2007) Creative curriculum (5th ed.). Bethesda, MD: Teaching Computing in Childhood Education, 3(1), 15-30.
Vincenta,C.,Deaudelina,I&Hottonc,M.(2007).Pilot on evaluating social participation following the use of an assistive technology designed to facilitate face-to-face communication preschoolers, Technology and Education19,153–167.
Vincento, J.(2007). Technology in early childhood education: Finding the balance. Portland, OR: Northwest Regional Educational Laboratory.
Wood, E.; Specht ,J.;Willoughby,T. & Mueller, J. (2008). Integrating computer technology in early childhood environments: Issues raised by early childhood educators. The Alberta Journal of Educational Research, 54(2), 210-226.
Yin, R. (2008) .Case study research: Design and Methods. Thousand Oaks, CA: Sage.
Yin, R. (2008). Case study research: Design and Methods. Thousand Oaks, CA: Sage.

The Saudi Little Leaders: The Current Status of Child's Participation Through Class and School Councils "Alshura Council" in Saudi Arabia

Bulquees Ismail Abdul Majid Daghistani
Professor of Educational Policies and Kindergarten Education
College of Education, King Saud University, Saudi Arabia

doi: 10.19044/ejes.v4no2a4 URL:http://dx.doi.org/10.19044/ejes.v4no2a4

Abstract

The objective of this study is to describe The current status of the Saudi Childs' participation through Class and School Councils "AlShura Council" as a way of increasing child rights in participation at a school level and democracy at a national level. The central two questions that guide this research are: How are the class and School Councils "AlShura Council" organized and operated at Saudi schools in relation to student participation? and, what are the experiences of student participation through Class and School Councils "AlShura Council" from the perspective of students? As the study design was a qualitative one-case study-, qualitative analysis is used to analyze the results. The results show that the establishment of Class and School Councils "AlShura Council" involves students in real decision-making processes. The students' voices are taken into consideration and that they are a part of decision-making processes at the school. Overall, the results seemed to suggest that by giving the children a chance of participation will benefit the students themselves, the school as a whole as well as the country in the work towards fulfilling the goal of increased democracy. Based on the results of this study, it is recommended that the prospects of initiating Class and School Councils "AlShura Council" at other schools in Saudi Arabia, as a way of increasing student participation, are both possible and achievable.

Keywords: Student, Participation, Class, School, Councils, Saudi Arabia, Child Rights, AlShura Council.

1. Introduction and Background

Increasing participation is about extending the goal of democracy to ensure that all citizens are prepared and able to contribute to shaping their own lives and their community. The culture of democracy implies that

people learn to argue for their opinions and listen to the arguments of others, that they are prepared to change their views or to accept defeat in a vote. The earlier this is practiced and learnt, the better a democratic culture is established (Rubenson,1999). The United Nations Convention on the Rights of the Child (CRC), established in 1989, is usually described as a moral action plan where school is an arena for implementing children's rights and improving children's everyday life in school (Thelander,2009). A common abbreviation on the CRC is the child's right to provision, protection and participation, usually referred to as "the three pillars" can be seen as a starting point for working on the meaning and content of CRC (Bequele 2010; Wickenberg, 2009; Habashi , 2010). The right to participation, as defined in article 12, is one of the core principles of the CRC and is referred to as the "democracy article".

Childs' participation is beneficial both for children in their process towards becoming responsible and autonomous adults, as well as for the society as a whole (Corsaro, 2005). In this sentence, school as an institution plays a fundamental role in children's development and their incorporation of values and norms, as well as in promoting children's rights to participate in decision-making (Ehlers & Frank, 2008; Thelander, 2009).

According to the CRC, article 12, child participation is defined as the right to take part in decision-making processes affecting one's life and the life of community in which one live capture the interactive and democratic aspects regarding participation. A democratic responsibility is reached only through practice and involvement and does not suddenly arise without involving children from the beginning to become competent and participating citizens (Matthews&Limb, 1999).

Education plays a fundamental role in the overall development of a nation. Student consultation and participation is a way of improving the overall physical environment in schools. Particularly, in young democracies with young populations, schools are an important arena in the development of democratic values (Rasmusson,2011). Through active participation in schools, students can develop a feeling of being important, feeling welcomed and appreciated (de Winter, 1999).

Class and School Councils are a way of giving students an opportunity to participate in decision-making and to develop creative life skills, such as team-working, problem-solving, communication, negotiation and citizenship, which alter in good confidence and self-belief (Flutter, 2006). Students who are reporting that their school have effective Class and School Councils generally have a very positive attitude towards the overall social and academic aspects of school life, (Kirby&Woodhead , 2003).

1.1. What is the School Council ?

Flutter (2006) defined the School Council as a representative group of students who have been proposed and elected by their peers to represent their views and raise issues with the Senior Managers and Governors of their school. The School Council can also propose and take forward initiatives and projects on behalf of their peers, and be involved in strategic planning and processes such as the School Development plan, governing body meetings and staff appointments.

Kirby&Woodhead (2003) stated that the object of an effective School Council is to help children and young people to:

- Enjoy and feel empowered by their education
- Feel that their school responds to their needs and views
- Have the opportunity to let adults know their feelings and opinions about things that affect them
- Have a say about decisions, and to play an active role in making their school a better place
- Develop life skills through participation.

1.2. What are the duties of the Students Council?

The duties of the Students Council include organizing events, programs and projects, encouraging democratic participation and striving to promote good citizenship by example. While Students Councils are generally given some autonomy in these duties, the school faculty will reserve the right to veto decisions or activities that run counter to the interests or policies of the school. (Rasmusson,2011).

The events, programs and projects arranged by Students Council's bodies might include any of the following:

- Food or clothing banks in the community
- Adopt-a-grandparent schemes
- Projects to improve the appearance of the school or grounds
- Tutoring programs
- Letter-writing campaigns (for example, to soldiers on Saudi borders)
- Events to raise funds and aid for disaster victims

Besides setting a good example for their peers, the other duties of Students Councils members depend on their specific title. The general members, or representatives, often simply have the responsibility of reporting back to the council from their homeroom. The Treasurer has the duty of maintaining financial records, and will work closely with the Secretary and an advisory member of the school faculty. The Secretary is responsible for official correspondence and taking notes during council meetings to keep a record of what has been said. The President, meanwhile,

conducts the meetings with the assistance of their Vice President, who also assumes the President's role in case of absence.

The Saudi children are not away from these councils. They have AlShura Council, which has its own regulations. Most of the Saudi schools have AlShura council which is elected school students**.** The Council consists of a president, vice-president and secretary-general, and assistant secretary-general, and members (representatives) of the council. The Council hold its regular bi-weekly in the break, at the headquarters of the Council. The Council holds in some cases an emergency special session if the presence of two-thirds of its members is available. The Council relies on voting in taking its decisions, so that secret vote supporters of the resolution of the votes of the opposition, and in the event of a tie cuff is likely the voice of President of the Council, where the resolution shall be considered once the vote thereon. President of the Council put to a vote, does not participate in the voting, except when an equality of votes, then separates the two teams.

All topics for discussion in the Council should not exceed the affairs of the school, and it is obligatory to prevail over the official stamp of the Council meetings, and a commitment to the zenith, and idealism in the debate among members. The Council has the right to question the school board members, and faculty members, after a request from the President of the Council through the Secretary-General or his assistant of the President of the Advisory Council (educational leader for primary section) or the Secretary General of the Advisory Council and General Supervisor of Students Councils Affairs, before three days of holding Council meeting. Discussions are in the Council with faculty or staff members Board of Directors, in accordance with laws and regulations, so that members adhere to politely dialogue with respondents.The functions of the Secretary-General is to raise the initial reports for each meeting of the AlShura Council, to be evaluated before implementation,(Mohammad,2015).

Members of AlShura Council preside the following specialized committees:

1- Committee of Courses and Educational Attainment Affairs.
2- Committee of School Activity Affairs.
3- Committee of School Cafeteria Affairs.
4- Committee of Learning Environment Affairs.
5- Committee of Student Counseling Affairs.
6- Committee of Culture Affairs .
7- Committee of Student Affairs.
8- Public Relations Committee.

These committes have different functions and responsbilities to succeed the efforts of the school;for example:

1- Committee of Courses and Educational Attainment Affairs is responsible about:
a- discussing all matters relating to the decision of the school curriculum in all subjects.
b- claiming the application of innovative ways to explain the lessons of some subjects.
c- activating the role of the teacher in motivating students to some symbolic gifts, and the application of the principle of reward.

2- Committee of School Activity Affairs is responsible about:
a- discussing all matters relating to the school for extracurricular activity.
b- proposing a number of activities that suit the school environment.

3- Committee of School Cafeteria Affairs is responsible about:
a- discussing all matters relating to the school canteen of the pros and cons, and organize the ranks of a queue.
b- assessing the meals provided, and make suggestions about improving for the students' interest.

4- Committee of Learning Environment Affairs is responsible about:
a-discussing all the educational environment of the school campus and outdoor arenas and stadiums, courtyards and internal and external school.
b-submitting of proposals to protect and care for those facilities from tampering with, or neglected image that reflect the civilized face of the school compound, the education, and the appearance of students.

c-taking care of school garden,watering methods so as to maintain normal life.
d- putting the draft to educate school students need to take care of and attention to public utilities for the school.

5- Committee of Student Counseling Affairs is caring about:
a-discussing all topics related to student guidance counselor with the student in school.
b-following daily duties letters for students, and discussing the pros and cons, with the student advisor.
c-presenting proposal tables for final exams, and tests at the middle of the season.

6- Committee of Culture Affairs is responsible about:
a- discussing all topics relating to culture.

b- discussing the status of wall newspapers in the courtyard of the school, and make appropriate proposals about it .
c- expressing an opinion about the school library, and make proposals to improve their conditions.
d- discussing the conditions of the morning school broadcast.

7- Committee of Student Affairs is responsible about:
a- discussing all matters pertaining to the students in the school
b- providing students with appropriate assistance after coordination with official persons in school.
c- submitting proposals to activate the stimulus side of the teachers and administration, for outstanding students
d- submitting proposals to activate the stimulus side of teachers and administration, for outstanding students in the activity.

8-Public Relations Committee is responsible about:
a- discussing all matters relating to public relations, outside the school environment.
b- inviting parents to attend some sessions, and inform them about the role of the Council.
c- constructing with the family in the community to provide the good image of the school.
d- organizing the educational forums for the members of the Council out of the school.

To sum up, all of the previous committees are working together to maximize the students' participation at school.They help to raise children's awareness about different school issues which leads to increase the feeling of loyalty and responsibilty twards their school and their country.

2. Method

2.1. Design

The current study design is a case study as it offers a great opportunity of understanding a phenomenon and explaining *why* some results can occur, more than just find out what those results are (Denscombe, 2009). Al-Rae'd Schools in Riyadh is chosen as one of the Saudi schools that has Student and School Councils "AlShura Council" to be studied deeply to explain why some results are occurred. The school has been concerning Class and School Councils "AlShura Council", for five years. Al Raed School is populated with approximately 1200 Saudi and Arabic students, graded from 1^{st} -12^{th}.

Observation is an important way of getting to know the school environment. Flutter (2006) states that it is important that the researcher tries

to understand the subject's actions by putting oneself into the observed context. During a six-week period, the researcher attended the school approximately two to three times per week. Furthermore, she did more systematic observations. In addition, another major method of collecting data was through creating focus groups of students and conducting semi-structured interviews with them. The two focus groups were; 1) Students who were representatives at the School Council "AlShura Council". 2) Students who were not representatives at the School Council "AlShura Council". Each focus group was combined of 5-8 students between the ages of 6 to 8 years old. The focus group interviews were to create open discussions by initiating each meeting with different themes, like School Council "AlShura Council", and student participation.

2.2. Questions of the Study

1- How are the Class and School Councils "AlShura Council" organized and operated at Saudi schools in relation to student participation?
2- What are the experiences of student participation through Class and School Councils "AlShura Council" from the perspective of early elementary students (Grade 1to 3)?

2.3. Purpose of the study

The purpose of the current study is to describe the current status of Class and School Councils "AlShura Council" at the Saudi schools. By describing and analyzing student participation, the researcher attempts to understand the meaning of participation and how the Class and School Councils "AlShura Council" are organized and operated in relation to the school activities regarding student participation in Saudi Arabia.

2.4. Statement of the Problem and Significance of Study

Saudi Arabia has been one of the participant countries, which has chosen to work towards increasing student participation in line with CRC article 12. Recently, Class and School Councils "AlShura Council" have been established in most schools of Saudi Arabia. But, the process of increasing democracy is not a straightforward process as it disrupts conventional expectations about power, authority and the role of children through nominating their members. With the lack of research on child participation within the field of education, the researcher tries to draw attention to the importance of student participation at schools as a way of increasing democracy in Saudi Arabia.

3. Results and Discussion

The overall experiences presented by the participants were very positive and all participants indicated of a very positive change since the establishment of the Class and School Councils "AlShura Council" .

1- **Question#One:** How are the Class and School Councils "AlShura Council" organized and operated at Saudi schools in relation to student participation?

At the target school, students organize the Class and School Councils "AlShura Council" in a way that every student is a part of it. The Class Council is described as a council, which is combined with students in a specific class. Every class forms its own Class Council with its own chairperson and secretary. Each and every student in democratic means, as they are called, elects these class representatives, in each class. In the election process, which is held once a year as new students are entering the school, every student writes down the name of the person they want to be their class representative. The winner becomes the chairperson and the one who gets the second most votes becomes the secretary. Further, the two class representatives from each class form the School Council "AlShura Council". This means that every class and grade from 1^{st} to 12^{th} is represented within the School Council "AlShura Council" through two representatives. In total, the School Council "AlShura Council" at the target school consists of 70 class representatives. The School Council "AlShura Council" has its own chairperson, vice chairperson, secretary, vice secretary and other executive members. As well as with the Class Council representatives, the executive members within the School Council "AlShura Council" are democratic and secretly elected by every student. The way it works is that the School Council "AlShura Council" representatives are running a one-day campaign each year where they present themselves in every class and the following day an election is held.

According to the order of the meetings of the School Council "AlShura Council" representatives, the School Council "AlShura Council" meetings are held three times per term. A typical Class Council meeting goes for approximately 45 minutes to one hour depending on the topics discussed. Normally, the meetings are held during school hours immediately after a break, usually on Wednesdays. The chairperson is in charge of the Class Council meeting; he or she is responsible to prepare, open and present the agenda of the day and taking down the notes.

After every Class Council meeting has been held, the 70 class representatives meet in the school hall as the School Council "AlShura Council" to speak on behalf of their classes, commonly on Sundays. The role of the School Council "AlShura Council" meetings is for the representatives to report what they have been discussing in their class. One by one, they

represent the problems that their classes are facing and the achievements they want to be made. The duration of the School Council "AlShura Council" meetings is depending on the discussions held in the classes and the agenda of the day. The chairperson is responsible for holding and organizing the meeting. The secretary is responsible for publishing the discussions being held and the decisions that are made at all meetings. The School Council "AlShura Council" committee of executive members normally meet the following Monday after the School Council "AlShura Council" meeting. The committee is the one to meet the head of the school to report what have been discussed and the changes students want to be made. Further, the committee is responsible to bring up issues that the students are facing as they arouse in school. In collaboration with the head, they have to come up with a solution and decide, "How the school should be run".

Question #2: What are the experiences of students' participation through Class and School Councils "AlShura Council" from the perspective of the students?

All participants expressed themselves in very positive terms to the concept of student participation and the establishment of class and School Councils "AlShura Council". They were happy to share the many positive changes that have been taken place. The Class and School Councils "AlShura Council" are given the students a platform to "air their views". This was expressed by the students, both in- and outside the School Council "AlShura Council". Through the Class and School Councils "AlShura Council" "everybody is free to express him/her self and it helps students to participate in important school matters" as expressed by the students.

The Class and School Councils "AlShura Council" enable students to make suggestions on how to develop the school to be a better school. This can be linked to Shier's (2001) opportunity stage of commitment, level two, where children are actually being supported in expressing their views. For the students outside the School Council "AlShura Council", student participation means that all students are able to participate and being well aware of what the school is facing. It also means that students are able to share their opinions and problems with the School Council "AlShura Council", to bring the issues to the head.

The Class and School Councils "AlShura Council" seem to give students the opportunity to be a part of different decision-making at school which moves student participation to the opportunity stage of commitment (Stern, 2006). The students expressed that they were involved in most decision-making at the school. This means that the students are becoming someone who can exercise influence and are in control of one's own situation. As students are becoming more involved, it changes the power structure at school from a top-down to a bottom-up perspective (Habashi,

2010). The students themselves explained that they were a part of every decision-making concerning the school itself, except the things only considering teachers.

4. Conclusion

As a conclusion, it seems that student participation through Class and School Councils "AlShura Council" at the target school do not only contribute to increase democracy, but also enrich the students' current situation by seeing them as key-contributors in the improvements of the school. In addition, student participation is guided and encouraged in a number of activities at the school; at lessons, through debates, workshops and clubs.

5. Recommendations

Based on the results of this study, it is recommended that initiating Class and School Councils "AlShura Council" at other schools, as a way of increasing student participation, are both possible and achievable.

Acknowledgment

This is a research project that was supported by a grant from the Research Center for the Humanities, Deanship of Scientific Research at King Saud University 2016

References:

Bequele, A. (2010). Monitoring the commitment and child-friendliness of governments: A new approach . Child Abuse & Neglect. Vol. 34 (1), pp 34-44.

Corsaro, W. (2005). The sociology of childhood. (2nd Ed.) Thousand Oaks: Pine Forge Press.

De Winter, M. (1999). Enabling children: Participation as a new perspective on child – health promotion. Child: Care, Health and Development. Vol. 25 (1), pp 15-25.

Denscombe, M. (2009). Child's Participation through Class Council. Lund: Student literature Journal,Vol.20(1),pp27-35.

Ehlers, L. & Frank, C. (2008). Child Participation . In Sloth-Nielsen, J. (Ed.), Children's rights , a legal perspective. Burlington, VT: Ashgate Pub. Company.

Flutter, J. (2006). This place could help you learn: student participation in increasing better school environments. In Education Review. Vol. 58 (2), pp 183-193.

Habashi, J. (2010). Constitutional Analysis: A Proclamation of Children's Right to Protection, Provision and Participation. In International Journal on Children's Rights. Vol. 18 (2), pp 267-290.
Kirby, P.&Woodhead, M. (2003). Children's participation in society. In Montgomery, H.; Burr, R.; Woodland, M (eds.) Changing childhoods: local and global. Haddington: Scotprint.
Matthews, M. & Limb, M. (1999). Defining an agenda for the geography of children: review and prospect. In Progress in Human geography. Vol. 23 (1), pp. 61-90.
Mohammad,A.(2015).Regulations of the Consultative Council at Saudi Schools.EDUCATION Vol.38.(3),pp45-53.
Rasmusson, B. (2011). Mentor's report. In Advanced International Training on Child Rights, Classroom and School Management 2009-2010". Lund University: Education/SIDA.
Rubenson, B.(1999). The rights of the child in Swedish Development Cooperation. Stockholm: Sida Press.
Shier, H.(2001). Pathways to Participation: Openings, Opportunities and Obligations in Children and Society. Vol. 15 (2), pp 107-117.
Stern, R. (2006). The Child's Right to Participation: Reality or Rhetoric? Uppsala: Uppsala University Press.
Thelander, N. (2009). We are all the same, but.. Swedish school children's views on children's rights. Karlstad: Karlstad University.

Efforts of NNCAE in Repositioning Adult and Non–Formal Education for Relevance in Nigeria: The Gender Perspective

Oluwatoyin Dorcas Ayimoro, Ph.D
Department of Adult Education,
Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria

doi: 10.19044/ejes.v4no2a5 URL:http://dx.doi.org/10.19044/ejes.v4no2a5

Abstract

Adult and Non-formal education provides the opportunities of responding to individual and societal needs through relevant training and education especially, as being challenged by constant technological change and novel knowledge. Adult Education is thus, problem solving. A major problem solving component of Adult Education is the potentials inherent in lifelong learning. The Nigerian National Council for Adult Education anchors both academic and practice of Adult Education in the nation initially, before a seeming decline in its activities. But since the split between the academic and practical practitioners had occurred, Adult Education had received a setback in its programmes. The question is, at a time of high level of inequality, unemployment and underemployment which may be connected with societal inhibitions and the skills received at various educational institutions of which women are the most vulnerable, what are the efforts of NNCAE in redeeming its professional ethics of providing the right education to the citizenry at a dire need? It is in response to these that this paper assesses and critiques the efforts of NNCAE in repositioning Adult and Non – formal Education for relevance in Nigeria.

This paper posits that NNCAE is capable of enhancing a better recognition for Adult Education discipline in Nigerian Universities through its "town gown" activities as it will educate the people on the need for gender equity and enhanced skills that could stem unemployment under employment and gender inequity in the society.

Keywords: NNCAE, Adult and Non – formal Education, Gender inequity, Unemployment and underemployment.

Introduction

No doubt, Education is salient to the development of a nation. The Nigerian National Council of Adult Education is a major body providing Adult and Non –formal Education programmes and activities to the people of Nigeria. Adult and Non-formal education provides the opportunities of responding to individual and societal needs through relevant training and education especially, as being challenged by constant technological change and novel knowledge. Adult Education is thus, problem solving. A major problem solving component of Adult Education is the potentials inherent in lifelong learning that could assist in reducing inequality, unemployment and underemployment which result in weak democracy, poverty, crime and conflict as we can see today. These also pose a great threat on the stability and development of the nation where women are the most vulnerable.

There had been a shift from formal education and schooling to lifelong education because of its potential of being able to harness the potentials of the people better as it combines the formal, non-formal and informal patterns of education, continues throughout life and a guiding principle of universal education. Lifelong learning is indicative of growth, the understanding of oneself and the world. It breeds new skills and powers in discovering reality, being able to create things alone and in group for the renewal and development of the individual and the society.

Women have a profound and pervasive effect on their immediate families, communities, nation and world through the traditional roles they play as nutritionists in giving care and maintaining the health of the people which also have culminating effect on the environment. The Nigerian economy had so much implicated on the people that there had been increase and additional roles for women. Rather than augmenting the household income, majority of females have taken the roles of household heads irrespective of their level of education. Thus, female labour is salient in reducing inequality, poverty and underdevelopment in the society.

Women in developing economies, irrespective of their education are very creative, innovative and agents of change since time immemorial. They farm, produce food, manufacture products like soap, detergents, textiles, ornaments and engage in political processes when given the opportunity. However, majority are yet to reach the threshold of financial industrialists in their entrepreneurship engagement and impact maximally in decision-making in the society. According to Alese (2010, 2012, 2014 and 2016) women have not been able to maximize their potentials because of the non – conducive environment, inequalities in the distribution of power and decision – making, the rigidity of status and distrust of new ideas, low technology and infrastructure, poor organization and the like in which women operate their

chosen engagements. The problem solving nature of adult education could assist in solving these societal anomalies.

The NNCAE as an association came into being in 1971 through the effort of Governmental and Non-Governmental Organizations out of the need for the universalisation of access to education and the innovative movement for the survival of Adult Education both as a movement and an area of academic discipline in Nigeria involving University academics and Adult Education practionners as a brainchild of government and non-governmental bodies. (NNCAE, Newsletter 1974 in Gidado, 2006). Adult and Non-formal Education activities had been in existence before 1971 but, these activities were neither recognized nor coordinated until the emergence of this body.

Although, the NNCAE ensured the inclusion of Adult and Non-formal Education programmes at various stages of the academic cycle which yielded positive results and gave a boost through financial support from the Federal government, State allocations and UNDP, the activities were not well spread to provide for major societal developmental inhibitions that could assist in reducing ills like inequality. Three university centers were designated to provide training for experts at various governmental and provisional levels which later spread to over fifteen institutions of higher learning and many Non-Governmental Organizations across the country by 1995 (NNCAE, 1995 in Gidado, 2006). These also brought the emergence of skilled Adult Education practitioners in Nigeria.

The NNCAE was later met with difficulties and it began to decline in its activities. Splinter groups arouse which threatened the international recognition as well as funding of the organization among others. (NNCAE, 1995 in Gidado, 2006). Nonetheless, the council is picking up its pieces. Adult Education is multidisciplinary and a ready response in need time as this. In the face of the rising level of poverty, unemployment, underemployment, inequity, crime and insecurity among the citizenry where relevant education and training could be made to reduce such and where women potentials could thrive better through lifelong learning, this study sets to critique NNCAE's efforts in repositioning Adult and Non-formal Education for relevance in the nation.

Literature Review

The Nigerian National Council of Adult Education

The NNCAE was established on the 27th March, 1971 at a conference of Adult Educators and Practitioners in Kano (NNCAE Newsletter, 1974 in Gadado, 2006). The main goal was to promote Adult Education and Community Development at National, State and Local levels in the Federal Republic of Nigeria. At inception it was a virile and growing organization

involving university academics and adult education practitioners. That is, Governmental and Non-Governmental bodies (Gidado, 2006).
The NNCAE further had specific goals of:

- Promoting a means of communication for those interested in adult education;
- Representing the best interests of adult education in working with various levels of government;
- Promoting cooperation among adult education, community development and other agencies and the coordination of their programmes;
- Stimulating training programmes and the development of needed literature.
- Identifying problems on which research may be needed and to initiate and support such research projects; and
- Publishing an Adult Education journal to disseminate information and research throughout Nigeria and the world, (NNCAE, 1974:5).

Also, because there was neither order nor coordination of the activities of adult education before the birth of NNCAE, the founders believe in

- Making Adult Education an academic discipline that will compete favorably alongside other academic disciplines in the University;
- Encouraging government to support people to participate in Adult Education programmes as a discipline and a profession; and
- Making the discipline more refined and positioned as well as advocated at the various levels of government. (Gidado, 2006)

NNCAE achieved almost all the goals outlined within a span of time as it became a 'voice' for Adult Education discipline and practice in Nigeria. For instance, the NNCAE wrote a proposal for the National Adult Education programme for inclusion in the Third National Development Plan (1975 – 1980) which yielded positive results and favorable comments from Federal, States and UNESCO. Also, there was the establishment of departments and units of Adult Education in Universities, Federal Ministries of Education, State Agencies for Mass Education and units in Local Government Areas where specialists became directors (Gidado, 2006). Between 1970s and 1990s, adult educators emerged. There were special budgets for adult education at the University and government levels. Nigeria adult education was registered under UNESCO and African Adult Education Association (AALAE) emerged.

NNCAE facilitated the support of UNDP in Adult Education programmes in the 1950's. Journals and materials for the advancement of adult education were produced. The NNCAE was responsible for the inclusion of Adult and Non – formal Education in the Nigeria National

Policy of Education (Gidado, 2006). NNCAE received annual subvention and grants from the Federal Ministries of Education. Her aggressive campaign led to a strong National Mass Literacy Campaign in 1980 with massive government support. (Gidado, 2006). Adult Education became deeply rooted in the academic and political landscape of Nigeria and the international community within twenty years. (Gidado, 2006). Over fifteen institution of higher learning and many Non – Governmental Organization run various adult education programmes and projects across the country as at 1995 (NNCAE, 1995 in Gidado, 2006).

However, the NNCAE met with challenges which led to its decline. It became more academic rather, than the initial flexibility nature of academic and practice. The academic members hijacked the affairs, this made the practitioners to take their leave and establish a rival association with the name Non – Governmental Association for Literacy Support Services (NOLGASS). There were accountability problems and accusations of mismanagement of resources, bad and closed – style of leadership, the international support for NOLGASS and crisis between the members of University of Ibadan that had been a leader in NNCAE activities. ABU Zaria discontinued its programmes (Gidado, 2006).It is equally sad to note that the NNCAE has not been registered with the Corporate Affairs Commission in Nigeria since inception.

Adult and Non-formal Education

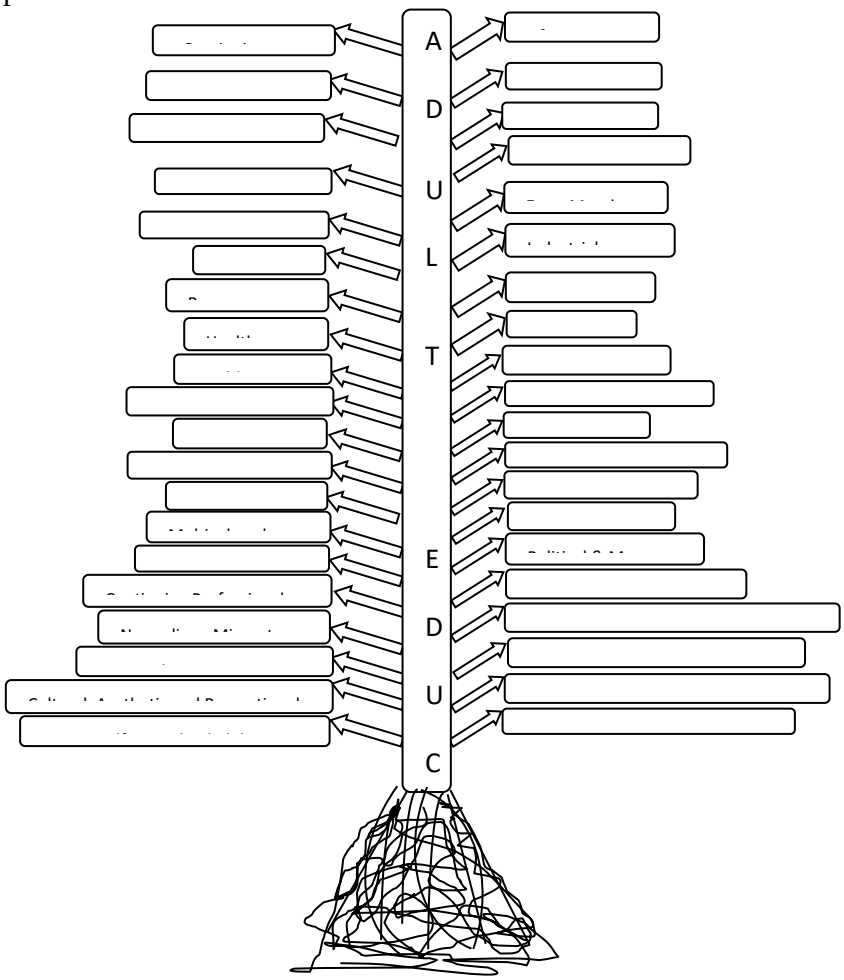
Adult and Non-formal Education avails people the opportunities of responding to individual and societal needs through continuing education at any level and in various forms Eheazu (1998) asserts that:

> The strongest and desirable role Adult Education can and does play (is) in redressing injustice, deprivations, and repression suffered by victims of pseudo-egalitarianism and insincerity of purpose in the provision made for the general good in the education, training and functional learning. Adult education is therefore, a tool for resolving situational problems in any given society.p3

Adult Education is conceptualised as an educational activity relatively planned and purposefully organised for people, irrespective of their age, location and socio-economic background, those who desire to learn in order to cope more satisfyingly with real life problems. (Nyerere, 2006 and Egunyomi, 2015).UNESCO further defines it as

The entire body of organized educational process whatever the content, level and method, whether formal, or otherwise, whether they prolong or replace initial education in schools, colleges and Universities as well as in apprenticeship, whereby persons regarded as adults in the society to which they belong develop their abilities, enrich their knowledge, improve their technical or professional qualifications and bring about changes in their attitudes or behaviour in the two fold perspective of full personal development and participation in balanced and independent social, economic and cultural development.

Adult and non-formal education covers a variety of activities. It enhances peace, security of lives, civic participation, creativity, innovativeness, novelty, survival of the people and sustainable development. The scope of Adult Education is represented in the tree below. Egunyomi, 2015 p6



The salient characteristics of Adult Education are the richness, comprehensiveness, wideness, multidisciplinary and interdisciplinary scope. Perhaps the reason why it was re-conceptualised in Hamburg 1997 as:

> *The key to twenty-first century: Both a consequence of active citizenship and condition for full participation in society. A powerful concept for fostering sustainable development, for promoting democracy, justice, gender equity and scientific, social and economic development, and for building a world in which violent conflict is replaced by a dialogue and a culture of peace based on justice.... (Hamburg Declaration paragraph. 2)*

According to Bhola (1979) Non-formal education covers all out-of-school education programmes like agricultural extension and cooperative education, political, community development and environmental education.

Non – Governmental Association for Literacy Support Services [NOLGASS]

Non – Governmental Organizations (NGOs) are service bodies that have been in existence before and after the creation of Nigeria (Biao and Adesina, 2006). These NGOs provide both emergency and enduring solutions to economic, political and social problems existing in Nigeria. Recent developments of the national NGOs include NOLGASS.

The Non – Governmental Association for Literacy Support Services (NOLGASS) which is an umbrella body for Non – Governmental Organizations (NGOs) supporting literacy delivery in Nigeria has the mission of all round literacy and development for all the people of the nation especially, at the grassroots level. It upholds the Right – Based Approach of Education for All (EFA).The service of NOLGASS both as an NGO and a Civil Society Organization (CSO) include, literacy delivery, lobbying and advocacy through Right – Based – Approach among Ministries, Agencies, Departments, National and State members. They share information and mobilize for campaign.

Situation of Women in Nigeria

Men and Women play salient roles in every society including Nigeria. The traditional Nigerian society was predominantly agrarian and socially organized around production. Gender discriminatory practices and exploitation through forced marriage, widowhood, and heritage rights was evident among the people. Although, literature also has it that, the acclaimed oppression of women in pre-colonial African State was not conclusively cosmopolitan. There were women like Iyalode of Ibadanland, Efunsetan Aniwura, Efunroye Tinubu, Funmilayo Ransome kuti, Ekpo, Queen Amina, Queen mother of Ashante in Ghana, the female heads of the Merde in Sierra

Leone, the Edo in Benin, the Sagi and Sonya of Nupe in Nigeria who refused to be confined to traditionally assigned gender defined roles (Olayinka, 2013).

With colonianism gender function segregation was pronounced. There were distinctions between who function in the public and private domain Sudarkasa (2005) especially, because of western education. The education of the" Girl child" was not enhanced. The few that had formal education then, received education to function as good wives 'victorian education (Alese,2016a). There was also a lowering and in some cases total loss of means of livelihood for women as they could not cope with mechanized farming introduced by the westerners because of lack of skills (Olayinka, 2013).

Post colonialism and the present scene did not fair better. Although, there had been a few changes in the situation of women, the situation is yet to get to a significant level. Statistical data on global gender gaps in all significant spheres are proves of invisibility of women especially, in developing economies. The considerable discrepant gap in male and female education is a major factor affecting women. Recently, more women are being exposed to education at all levels but it will take time to bridge the gap. More so, since a high percentage of Nigerian men despite education are still patriarchal. The National Gender policy of 2006 which is expected to assist in addressing issues of inequality is only playing lip service to the issue.

According to Alese (2016) and Olayinka (2013) poverty is highly feminized. Nigerian women form sixty – five percent out of the seventy that live on less than US $ 1 a day. The World Bank Gender Action plan aimed at economic empowerment of women is yet to be achieved (CEDAW NGO Coalition Shadow Report, 2008). Past governments have implemented several programmes aimed at economic empowerment of women which yielded tangential effect (Alese, 2010, 2012, 2014).The gender gap between Nigerian men and women in all spheres of life is still very large. For instance, the Global Gender Gap Report (GGGR) (2011) is enough evidence. Table I – III is self explanatory.

Table I: Economic Participation and Opportunity

	Rank	Score	Sample average	Female	Male	Female – to – male ratio
Economic participation and opportunity	93	0.596	0.588	-	-	-
Labour force participation	115	0.53	0.68	40	75	0.53
Wage equality for similar work	14	0.77	0.65	-	-	0.77

Estimated earned income (PPP US$)	112	0.41	0.52	1,283	3,119	0.41
Legislators, senior officials and managers	-	-	0.26	-	-	-
Professional and technical workers	-	-	0.64	-	-	-

Table II: Educational Attainment

	Rank	Score	Sample Average	Female	Male	Female – to – Male ratio
Educational Attainment	125	0.809	0.928	-	-	-
Literacy rate	122	0.69	0.86	50	72	0.69
Enrolment in primary education	125	0.90	0.98	58	64	0.90
Enrolment in secondary education	124	0.77	0.90	22	29	0.77
Enrolment in tertiary education	111	0.70	0.86	8	12	0.70

Table III: Political Empowerment

	Rank	Score	Sample average	Female	Male	Female – to – Male ratio
Political Empowerment	121	0.038	0.185	-	-	-
Women in parliament	124	0.04	0.22	4	96	0.04
Women in ministerial positions	90	0.11	0.18	10	90	0.11
Years with female head of state (last 50)	52	0.00	0.16	0	50	0.00

Even the present Buhari administration reveals the prevalence of inequality. It is impressive the way women turn out during political rallies and campaign, women are used and dumped immediately aspirants had won political seats. According to Gberevbie and OvieSogue (2013) females between ages twenty and above constitute 50 –60 percent of the nation's

population, yet their representation in decision- making has created a 'near - exclusion'.

Women Entrepreneurship

Globally, the role of women in development cannot be over emphasized. The growth of economies of nations including the developed world is due to increasing participation and involvement of women in entrepreneurial activities. The Global Entrepreneurial Monitor (GEM, 2011) estimate 388 million new entrepreneurs in the world in 2011 and 163 million of these were women while 98 million run established businesses (GEM, 2012 Women's Report).

Although, record for Nigerian women is not captured. It is estimated that women produce and process about eighty percent of the national food output (Alese, 2016a). Women in sub Sahara Africa have been widely involved in various agricultural productions especially, in areas of food crop farming, poultry and food processing. In their own informal way they have been manufacturers and industrialists, productive contributors to the economy but their access to knowledge, skills, resources and opportunities still remain rather low. Perhaps, the reason the International Labour Organization puts it succinctly that:

> *society's ability to accept new economic roles for women and the economy's ability to create decent jobs to accommodate them are the key prerequisites to improving labour market outcomes for women as well as economic development as a whole (ILO, 2008).*

Women's Creativity and Innovation.

Women's creativity and innovation can be determined through their activities and that of women entrepreneurs. Both creativity and innovation are dependent on each other. It is impossible to develop a truly innovative organization if creativity is ignored. Similarly, without effective process in place to transform creative ideas into practical, real world, value added application; creativity cannot attain commercial value (Rigie and Harmeyer, 2009 in Alese, 2010). Internationally, women are very creative. They have a history of combining both creativity and innovation to effect positive change in the society though women in developing countries operate under low technology.

The creative and innovative abilities of women can be seen from the entrepreneurial skills they possess. They produce various meals as finished products from agricultural products like yam flour, cassava flour, corn meal, palm oil, smoked fish and the like. Ornaments from beads, adire from textile to mention a few. Creativity and innovation are keys to success in industries if adequately enhanced through technology.

Enhancing Women Skills through Lifelong Learning

According to Sarumi, (2011) Adult education makes use of initial skills, changes wrong values and attitudes, updates knowledge and offer people lifelong learning through further training and its multidisciplinary component. As such, Adult Education and Lifelong learning assist in building the capacity and ability of individuals, institution and societies to perform functions and solve problems in a sustainable way.

It is important to note that although; women are endowed naturally to exhibit their Creative capacities, the sustainability especially in a knowledge-based world is incapacitated of which lifelong learning can assist in remediating. Lifelong learning is about acquiring and updating all kinds of abilities, interest, knowledge and qualification from pre-school years to post-retirement. It promotes the development of knowledge and competencies to enable citizens adapt to the knowledge based society (Alese, 2016a). In essence, the potentials of lifelong learning to promote women's creativity is high. It is then left for NNCAE to partner and collaborate with necessary resource persons and institutions since Adult Education itself is multi and interdisciplinary.

NNCAE, NOLGASS, Adult and Non formal Education through Lifelong Learning

In order to take steps away from worldwide 'education crisis' that is said to allow for disparity between educational systems and the environment, Non – formal education was seen to be able to address issues of improved productivity, health, politics, education etc (Jegede, 2006). Lifelong learning is Non – formal in nature as it presents a wider view of learning than that enshrined in schooling and gives more scope to self development.

The NNCAE was more academic in its practice. However, this is not to say that NNCAE did not contribute to lifelong learning but the situation is that it was not done under a unified structure and strength that would have engender more successes. In essence, the efforts of both NOLGASS and NNCAE will be treated.

Adult Education is known to be rich, wide, comprehensive, multidisciplinary and interdisciplinary in scope as well as solves societal problems. In other words, apart from being academic, its practice enables a healthy town and gown relationship. According to Sarumi (2011) a renewed town and gown relationship could only be realized through adult and non – formal education strategies and structures in the skills of community relationship, community development, active citizen participation, and mobilization strategies in programmes like community diagnosis felt needs, vocational education, and human sensitivity skills among others. Adult and Non – formal Education covers the activities of mankind. Sarumi (2011)

affirmed that adult and Non – formal education provided expertise in the reduction of the nation's illiteracy rate, the reduction of HIV/AIDS and the revolution of Information Communication Technology among others.

Adult and Non – formal Education in Nigeria promotes continuing education opportunities. Workshops, seminars, training sessions and symposia are organized to impact on the people and the society through technical support from NNCAE and NOLGASS. Here people keep abreast of new skills where relevant up to date knowledge and information are passed.

NNCAE, NOLGASS, Lifelong Learning and Women Entrepreneurship

The contribution of NNCAE/NOLGASS to lifelong learning and women entrepreneurship will be treated from the perspective that at inception members of NNCAE are University academics and practitioners who belong to Non – Governmental Organization before the split. These are called Non – Governmental Association for Literacy Support Services (NOLGASS).

The NNCAE/NOLGASS enjoyed the support of the government, individuals and international organizations though in a token towards disseminating their services to the people and society. For instance, the Department of Adult Education, University of Ibadan and University of Port Harcourt had the UNESCO chair which is impacting positively to the life of the people. UNESCO is known to promote human development programmes especially, in developing countries. It does this through skill acquisition, training and retraining to foster University and community cooperatives.

The University of Ibadan through UNESCO has established vocational and skill acquisition centres for the community and members of the larger society to benefit from skills training such as tie and dye, soap making, stove – thread making, beading and the like (Sarumi, 2011). In collaboration with other donors, UNESCO has been able to support NNCAE in providing education holistically to the people, be it in women education, early childhood education, scontinuing education in the context of lifelong learning (Sarumi, 2011). At the University of Ibadan, the Centre for Literacy Training and Development Programme for Africa (CLTDPA) also organized computer training programmes for the people.

In collaboration with NNCAE, UNICEF is providing capacity building to rural dwellers through community vocation education and skill development programmes (Sarumi, 2011). Also, the International Foundation for Education and Self Help (IFESH), is assisting the University academia especially, University of Ibadan through the NGO called the University Village Association (UNIVA) to work in partnership with the people in the community to embark on projects that will improve the living standard of the people. A micro – credit scheme was attached to this project and it enabled

participants to float small scale businesses. Mechanics, artisans, street children, and market women have benefited immensely from this arrangement.

The Ibadan Adult Education skills acquisition centre train and certificate people in vocation of their choice, computer technology and the internet (Sarumi, 2011).

NNCAE and Functional Education.

The provision of micro credit facilities is important to enhance the performance of these skills.

No doubt, functionality in education is the practical application of what is learnt as such, the education and training received by individuals should be such that meet the needs of the individual and the society through its practicability. Bamiro (2015) affirmed that there is an apparent disconnect between acquired skills of the product of the University system and the requirements of the Nigerian industry as the system still operate the curriculum laid down by the colonizers whereas the World Bank (2009) posits that tertiary education in general is fundamental to the construction of knowledge, economy and society in all nations. NNCAE need to correct this anomaly through Adult Education multidisciplinary components.

NNCAE has not collaborated with NOLGASS to enhance the skills of women from inception, the desire on their part to impact knowledge especially in the areas of crafts and local technology will be sustained with good collaboration. The situation where females are known for particular skills is not good enough. The percentage of women bricklayers, auto mechanics, painters, and the like should be improved upon. When women engage in more skillful and life skills they will be able to compete favourably with their male colleagues globally.

NNCAE must sensitize the society on the need for equity among the people from the beginning. Although, the policy of the nation states that there is equality of opportunities for everyone, this is more on paper than practice. Till now resources are not evenly distributed. Heritage rights still favour male children than the females whereas, empirical evidences support the fact that women are more prudent and pay back loans better than men. (Alese, 2010). NNCAE need to educate the society on the need for attitudinal change.

NNCAE should as a matter of urgency assist in improving the representation of women in decision – making by teaching skills on political education and sensitizing the people on the importance of this in the society.

Conclusion

It was established in this study that Adult Education has potentials inherent in lifelong learning that could assist in reducing inequality, unemployment and underemployment which has resulted in weak democracy, instability of governance, poverty, crime and conflict of which women are the vulnerable in Nigeria. This also provides a conceptual framework for institutional analysis, linking the elements of the action (Adult and non-formal education, NNCAE, NOLGASS, situation of women in Nigeria ,women's creativity and innovation, and women entrepreneurship).

The traditional Nigeria society was predominantly agrarian and socially organized around production. Gender discriminatory practices and exploitation through forced marriage, widowhood, and heritage rights was evident traditionally and pronounced during colonization among the people. The gender gap between Nigerian men and women in all spheres of life is still very large.

The growth of economies of nations is due to increasing participation and involvement of women in developmental activities as listed above. In their own informal way, women have been manufacturers and industrialists, productive contributors to the economy and the society. When women engage in more skillful and life skills they will be able to compete favourably with their male colleagues globally.

NNCAE should as a matter of urgency assist and collaborate with relevant institutions in improving the lot of women by sensitizing and educating the people on the need for gender equity and enhanced skills that could stem unemployment, underemployment and gender inequity in the society. In doing these, NNCAE would have fulfilled its 'town gown' responsibility and redeemed its professional ethics of providing the right education to the citizenry at a dire need.

References:

Alese, O. (2010). Influence of the National Poverty Eradication Capacity Acquisition Programme on Women Empowerment in Oyo State, Nigeria. Ph.D Thesis Department of Adult Education, University of Ibadan, Ibadan, Nigeria.

Alese, O. (2013). Capacity Building and Skill Development among Female Entrepreneurs in Ido zone, Nigeria: Implications for Adult Education in S.O Odebode and M.M Umukoro (Eds) Gender and Higher Education in Africa: Emerging Issues. Proceedings of the First International and Interdisciplinary Conference March, 12 – 14. The Conference Centre, University of Ibadan, Ibadan Nigeria.

Alese, O. (2016a). Entrepreneurship education and women graduates productivity in Ondo State Nigeria: available option in Lifelong skill approach. Proceedings of the international academic forum conference on Education, 2016, Dubai held at the International Festival City Event Centre February 26th – March 1st, 2016. www.iafor.org

Bamiro, O. A. (2015). The Nigerian University System and the Challenges of Catalysing and Nurturing Entrepreneurially – Gown Enterprises in the Nigerian Economy. A paper presented at the First International Conference of the Faculty of Education on Promoting Entrepreneurship Opportunities for Sustainable Development in the 21st Century. Nelson Mandela Hall Adekunle Ajasin University Akungba – Akoko, Nigeria 27 – 30 July, 2015.

Bhola, H.S. (2000). Inventing a Future for Adult Education in Africa in the State of Adult and Continuing Education in Africa. Indabawa, S.., Oduaran, A.., Afrik, T.., and Walters, S. (Eds) Namibia. The Department of Adult and Non – formal Education, University of Namibia.

Coombs, P.H (1968). The world education crisis: A system analysis, London Oxford University Press.

Egunyomi, D.A (2015). Balancing Life Equation with Continuing Education. An Inaugural lecture delivered at the Trenchard Hall University of Ibadan, Ibadan, Nigeria. 02/07/2015

Gidado, T. (2006). Nigerian National Council for Adult Education in the Current Millenium: A rear-view mirror in Abiodun Okedara (ed.) Adult and Non-formal Education in Nigeria. Emerging Issues, NNCAE Annual conference, Ibadan, Nigeria, November 27- December 1, 2005.

Jegede, S. (2006). The compulsory, free Universal basic Education Act of 2004: The need for NNCAE to act in Abiodun Okedara (ed.) Adult and Non-formal Education in Nigeria. Emerging Issues, NNCAE Annual conference, Ibadan, Nigeria, November 27- December 1, 2005.

Nyerere, J.K. (2006). Adult Education and Development IIZ/DVV No 67

Olayinka, W. (2013). Gender inequality: African Feminist fiction reflecting scientific data in Stella Odebode and Mathew Umukoro (eds). Gender and Higher Education in Africa: emerging Issues. Proceedings of the first international and interdisciplinary conference centre, University of Ibadan, Ibadan March, 12-14,2014.

Sarumi, A. (2011). Contemporary Issues in Historical Foundations of Adult Education. Franco – Ola Printers Ibadan, Nigeria.

"Citizenship" in Curricula of Saudi Kindergartens "A Comparative Study"

Raja Omar Bahatheg
An Associate Professor of Educational Policies and Kindergartens
Department of Educational Policies & Kindergartens
College of Education, King Saud University, Saudi Arabia

doi: 10.19044/ejes.v4no2a6 URL:http://dx.doi.org/10.19044/ejes.v4no2a6

Abstract

This study tried to investigate the occurrence of the four dimensions of citizenship (national affiliation, socio-family affiliation, socio-school affiliation, and media affiliation) among three different curricula (Self – Learning, Montessori, and Bawakeer) which are taught for children enrolled in public and private kindergartens in Riyadh-Saudi Arabia. In other words, this study aims at identifying the impact of these educational curricula on instilling and developing citizenship among children. The study sample was 167 children (63 male and 104 female); 73 children were taught using the Self-Learning curriculum, 43 children were taught using a Bawakeer curriculum, and 51were taught the Montessori curriculum. Results showed statistically significant differences at (α=0.05) in Self-Learning curriculum group compared to the other two curricula. The study did not reveal gender-based differences in citizenship. In light of the results of the current study, the researcher recommended all kindergartens in Saudi Arabia to adopt Self-Learning curriculum to ensure loyalty of the future generation to their country. On the other hand, she encouraged other researchers to explore the importance of developing loyalty among children through different curricula in use. More over, she suggested conducting longitudinal studies to investigate citizenship development among gender at various age levels in order to provide deeper understanding regarding the effectiveness of kindergartens' different curricula.

Keywords: Kindergarten, children, Saudi Arabia, citizenship, curricula. Introduction and Background.

Introduction

Childhood is considered one of the most appropriate stages to cultivate concepts and knowledge. This is especially true for citizenship as

an important component in children's personal attitudes and future behavior. Schools' curricula play a vital role in spreading the culture of citizenship and in educating children on their rights and duties. The viewpoints of educators vary regarding the goals of citizenship cultivation in preschool-aged children. Some educators agree that it leads to direct children's energies towards constructive engagement in working within community and strengthen their feelings about humanitarian concerns (Ali, 2013).

Public and private Kindergartens in Saudi Arabia use and provide varied curricula, educational activities, and opportunities for children. As stated in Article 33 of the Education Policy of Saudi Arabia, these curricula and educational experiences are intended to represent an integrated system of goals, processes, procedures, and values to produce good citizens. The General Administration of Curricula at the Saudi Ministry of Education, designs kindergarten's curricula "Self-Learning" and relevant texts based on the educational goals of the stage. These goals are derived from the educational policy of the country, such as; providing students with Islamic values and ideals, giving them knowledge and various skills, developing constructive behavior, developing society economically, socially and culturally, and preparing its children to become useful members of their community (Ministry of Education, 2006). Therefore, the state, represented by its system of education, aims to cultivate and develop the values and concepts of citizenship in children. These aims must be adopted by educational curricula, following its clear message: to raise the Saudi children as citizens and teach them how to apply the principle of citizenship in practice. Thus, the curricula have an important message: raise students and teach them the cultural heritage of the country; teach them their rights, duties and responsibilities; introduce them to state institutions and forms of governance and authority; teach them how to serve their homeland; and understand their duties.

Kindergarten's Curricula in Saudi Arabia

A- Public Kindergartens

- Self-learning Curricula

Public kindergartens in Saudi Arabia use Self-Learning curriculum. It was developed in 1994, according to an agreement between the General Authority for Girls Education and the Arabian Gulf Program. This curriculum contains central text and theoretical and educational frameworks that must be used by a female teacher during the educational process. This type also contains a guide for female kindergartens teachers regarding the Self-Learning curriculum and five detailed books for five educational units (Water, Sand, Food, Housing, and Hands). The sixth book contains five further educational units (Clothing, Family, Friends, My Health and Safety,

and My Book). Each unit contains the general objectives of the unit, special goals, basic concepts, tools and means used in the lessons, and a detailed description of the activities carried out by the female teacher during the daily program.

B-Private Kindergartens

Two types of curricula were used at private kindergartens in Saudi Arabia;Bawakeer and Montessori curricula. Following is a brief description of each:

- Bawakeer Curriculum
  The main goal of Bawakeer curriculum is developing child's growth and learning through a range of activities practiced by him/her under the guidance of the teacher. These activities are carried out to achieve various general and particular outcomes. Bawakeer has developed 10 educational foundations, such as; family integration, and its participation in the programs of child-rearing as well as the foundation of practices based on brain research. It also includes 39 educational units within six levels starting from the pre-school stage to the third grade.
- Montessori **Curriculum**
  Maria Montessori developed this curriculum. She devised her own educational environment where every aspect was accurately and systematically designed. Each tool in her environment was designed to suit the characteristics of the growth of children. The Montessori environment depends on Childs' freedom to learn and respect their individuality and abilities. Its tools are ranked from the simplest to most complicated one and from learning through the child's five senses to moving gradually to abstract logical thinking. Montessori class tools are divided into sensorial educational tools, practical educational tools, mathematics, science, geography, and history. In addition, the Montessori curricula of learning are well known for the placement of different aged children in one class, as Montessori depends on the children teaching of each other. Montessori depends on three main factors: child, learning environment, and guide or teacher.

Question of the Study

The current study tries to answer the following question:

Are there any statistical differences at (α=0.05) the occurrence of the four dimensions of citizenship (national affiliation, socio-family affiliation, socio school affiliation, and media affiliation) among three different curricula (Self –Learning, Montessori, and Bawakeer) which are taught for children enrolled in public and private kindergartens in Riyadh-Saudi Arabia?

Significance of the Study

- Theoretical Significance

This study may help in directing the attention of researchers, educators, and decision-makers to the importance of developing the concept of citizenship in different kindergarten curricula. Nowadays, the importance of cultivating citizenship emerges to preserve the identity of each community and the Saudi society in particular. It is very critical to teach kindergarten children to love and be loyal to one's country, and how to assume the responsibilities to preserve it. Furthermore, the study is significant in directing more scientific and educational research to kindergartens to contribute to their development and progression, especially in terms of the implementation of the concepts of citizenship.

- Practical Significance

The practical significance of this study lies in the fact that it may be useful for officials who are in charge of the preparation of kindergarten curricula to intensify the development of practical and theoretical applications of national kindergarten education. This research casts light on the four dimensions of citizenship, looking at three different curricula, which are used in the Saudi Kindergartens as a random sample of different curricula to find out their role in improving the concept of citizenship among the Saudi children. This paper tries to convey decision-makers and those responsible for teaching curricula to the strengths and weaknesses of each curriculum regarding the concept of citizenship. Furthermore, this research aims to strengthen the curricula in order to benefit the Saudi children.

Limitations

This study is limited to three curricula from a large number of other curricula that are used in Saudi kindergartens. More over; it is limited to compare four dimensions of citizenship. Finally, it is limited to a random sample of children who were studying at Riyadh kindergartens in their first year of study.

Theoretical Framework

Al-Habak (2010) defined citizenship as the affiliation to one's nation and homeland. Al-Ka'bi (2011) described it as a unified feeling of affiliation to a homeland involving individuals of different religions, cultures, ethnicities, and geographical location. It happens when a group of people share a common history, fate, and future, and are unified in the form of a single state.

Elewa (2005) stated that citizenship is the connection between a group of people who has similar affiliation and loyalty to one's homeland. Homeland is a specific area of land that is related to a group of people who is connected

historically, geographically, socially, economically, and politically. This homeland has a symbol, flag, and national anthem. As noted in the previous definitions, citizenship is embodied in the sense of an affiliation to a homeland that is defined in terms of history, culture, entity, and geographic location.

Eshak (2004) defined citizenship as a concept which consists belonging of the individual to the country in which he or she lives, and from which he or she takes the nationality. Eshak's definition added to previous definitions the enjoyment of rights and the absence of class differences between members of the same society. Tupper (2002) agreed with this by saying that the most important aim of citizenship is the development of loyalty and affiliation to the homeland in which the individual lives positively.

The *Global Arabic Encyclopedia* (1996) defined citizenship as, "a term referring to the affiliation to a nation or a homeland." The *Dictionary of Sociology* states that it is a status or a social relationship existing between a natural individual and a political society (state) and through this relationship the first party offers loyalty and the second party offers protection. The relationship between the individual and the state is determined by law (Ghaith, 1995).

To sum up, the concept of citizenship has been expanded to include a sense of homeland and the value and seriousness of being affiliated to it; that is, the strength of the connection that a good citizen has to his or her homeland. This is represented through belonging to homeland, its culture, history, language, traditions, duties, responsibilities, and rights as a citizen and as an individual without a distinction among others. The current study defines citizenship as the development of interactions and connections between individuals and their society in all aspects (e.g., social, economic, political, cultural, and educational), and individuals' understanding of their roles as citizens, without discrimination based on any criteria and enjoying equal rights and duties.

Dimensions of Citizenship

In this study, to measure the extent of the occurrence of the concept of citizenship among kindergarten children, citizenship is defined as having four dimensions (The Arab Center for Educational Research for the Gulf States, 2011):

1. *National Affiliation Dimension*: Includes some of the indicators to engage in voluntary work such as the ability to give, the desire to help others to integrate into the community, and awareness of problems.

2. *Socio-family Dimension*: Embraces the duties of family in educating their children, shouldering responsibility, saving the environment, introducing their children to civilization history, their culture, and political, economic, and moral systems.
3. *Socio-school Dimension*: Comprises the responsibilities of the society in preparing students to recognize their cultural heritage, preserve it, learn, follow traditions, follow and harmonize with the values encountered in the growth stage.
4. *Media Dimension:* Represents child's participation which is connected with media preferences at national level.

Fereha (2004) added a Cognitive-Cultural dimension, where "knowledge is a means made available to the citizen to build his/her skill and efficiency he/she needs, and that the national education stems from the people's culture, taking into account the cultural specificity of each community". AlKa'bi(2011) also included a Religious–Moral dimension, referring to justice, equality, tolerance, freedom, and consultation.

Literature Review

Although researchers argued about the importance of studying citizenship, there is still a lack of researches addressing citizenship among five years old children (Clough &Nubrown, 2004; Croll&Moses 2000). The current research focuses on the curricula and citizenship in early childhood education. The time children spend in preschool is an extremely an important period in their lives, and also, curricula for early childhood education vary in their objectives, evaluations, methods, and perspectives (Oberheumer, 2005; Karlsson &Pramling,2003). Hamdan (2008) and Osler &Starkey (1998) emphasized that school must work through its programs and teach children about their rights, duties, responsibilities and identity.

In addition, Rashdan & Al-Qa'oud (2011) studied the effectiveness of an educational program proposed to develop the concepts of citizenship among kindergarten children. Results showed that kindergarten children had little knowledge about citizenship concept in all its aspects. Posttest results showed statistically significant differences in the development of the concepts of citizenship among kindergarten children. Thus, the results showed the effectiveness of the proposed educational program presented by the researchers which was consistent with Hamdan (2008) recommendations.

Barahma (2008) conducted a study regarding the characteristics of good citizenship and found that current teaching curricula for the upper-basic stage in Jordan contained scant reference to the characteristics of good citizenship. Furthermore, the results showed that the group exposed to the additional teachings on citizenship had a better understanding of the concept than those who were not. The previous two studies show the importance of

amending the current educational curricula and introducing particular concepts to develop and activate citizenship among school students from an early age.

Gurkaynak (2007) critically analyzed the content of teaching curricula regarding citizenship in Turkey. The results of the study indicated that citizenship education in Turkey is a critical part of the nation's central modernization project. The existence of a separate national educational curriculum that aims to create good citizens is relatively unique. Consequently; educators must study the Turkish plan in developing the concept of citizenship and take advantage of it in our educational curricula. This agreed with research argument such as Can (2007). With reference to studies related to citizenship, it is confirmed that both formal and informal education plays a vital role in enriching the citizenship of children.

Zidan (2005) conducted a study to identify the extent to which the national education curricula for first to sixth graders takes into account the qualities of a good citizen. The study concluded that the curricula do not take into account the qualities of a good citizen. The results of Zidan were similar to those of Rashdan & Al-Qa'oud (2011) and Barahma (2008). All three studies state that greater emphasis should be placed on the concepts of citizenship in school curricula, which is verified by the Turkish curricula.

Roh's study (2004) analyzed and compared the national education curricula of Australia and South Korea. The study concluded that the citizenship values of tolerance, respect, sense of community, and responsibility were more common in the Australian curriculum than in the South Korean one. Furthermore, the results explained that teachers' lack of awareness of citizenship values was the major reason behind the failure of both countries to achieve the objectives of citizenship. The teachers' preparation and their understanding of citizenship education for students and how to deliver it were found to be the main components in the integration of curricula in students' lives and the development of citizenship among them.

Hussein (1991) conducted a study which aimed to determine the age group in which children begin to realize the concept of citizenship. The results showed that children can recognize their national identity at an early stage, and thus their awareness of the concept of citizenship and national identity increase, as they grow older. This result is important for further research on the development of the concept of citizenship among children, and should be included in kindergarten curricula.

Method

Methodology

A comparative descriptive method is used in this study to compare the extent of occurrence of the four dimensions of citizenship (national

affiliation, socio-family affiliation, socio-school affiliation, and media affiliation) among a sample of kindergarten children from Riyadh, taught through three different curricula (Self-Learning , Bawakeer , and Montessori).

Sample

A sample of 167 children was selected randomly from three kindergartens in Riyadh-Saudi-Arabia; one was public and the other two were private kindergartens. Self-Learning curriculum was implemented in the public kindergarten; however, Bawakeer and Montessori curricula were implemented in the private kindergartens. These curricula were chosen randomly since it was expected that they were improving the citizenship concept among children in kindergartens. Table 1 illustrates the division of the study sample regarding the three curricula, as well as the sample distribution according to gender.

Table 1:Description of the Study Sample According to the Gender Variable

	Gender		
Curricula	Male	Female	Total
Self-Learning curricula	24	49	73
Bawakeer curricula	21	22	43
Montessori curricula	18	33	51
Total	63	104	167

Instrument

*Citizenship Concept's Scale **(CCS)***

The Citizenship Concept's Scale (CCS) was prepared by a team of researchers commissioned by the Arab Center for Educational Research for Gulf States. The scale was designed to identify the characteristics of the concept of citizenship in childhood (4–6 years old) in the Saudi environment. The scale consists of 30 terms and 4 dimensions: national affiliation, socio-family affiliation, socio-school affiliation, and media affiliation. Because kindergarten-aged children have difficulty in responding with verbal expressions, verbal expressions were reproduced as photo expressions with explanatory phrases under each picture. The scale was applied on an individual basis where the implementation of the scale for each child takes 20–30 minutes.

Validity and Reliability

CCS internal consistency validity was adopted since it measures the extent of cohesion between vocabulary and scale. The team calculated the degrees of the citizenship scale and the coefficient of the internal consistency of the scale in the Saudi environment. The scores of the dimensions of the citizenship photo scale were calculated for the children as well as the

correlation coefficient according to the total degree of the scale. Table 2 clarifies the correlation coefficients and levels of significance.

Table 2: Correlation Coefficients of Photo Citizenship Concept's Scale for Children

The dimension of the citizenship scale	The correlation coefficient	Level of significance
National affiliation dimension	8890	.0001
Socio-family dimension	.719	.0001
Socio-school dimension	.755	.0001
Media dimension	.794	.0001

Statistically significant at α= .01

It is clear from Table 2 that the coefficients of the photo CCS among the sample of children are consistent. This proves the scale's validity.

Reliability

The confidence coefficient of CCS was calculated using Cronbach Alpha. The confidence coefficient was 0.80 using the split-half method (.799), representing a high level of confidence.

Results

This portion of the study is dedicated to present the results of the implementation of photo CCS on the sample of the study which includes 167 child who were taught three different curricula in Riyadh public and private kindergartens. The study tries to find out if there are any statistical differences at (α=0.05) between the extent of the occurrence of the four dimensions of citizenship (national affiliation, socio-family affiliation, socio school affiliation, and media affiliation) among three different curricula (Self –Learning, Montessori, and Bawakeer) which are taught for children enrolled in public and private kindergartens in Riyadh-Saudi Arabia. Following are the results of CCS:

1-National Affiliation

Table 3 shows that the total value of F was approximately 11, which is statistically significant at (α=0.05). Thus, there is a significant variance among the three curricula under investigation in terms of national affiliation.

Table 3:National Affiliation Dimension in Self-Learning, Bawakeer and Montessori Curricula

National affiliation		Sum of squares of deviation	Degrees of Freedom	Variance average	The calculated F value	Significance level
	Between Groups	35.690	2	17.845	11.444	.000
	Within Groups	255.721	164	1.559		
	Total	291.411	166			

To identify which curricula best promoted national affiliation, the least significant digit (LSD) curricula was used and the results are shown below in Table 4.

Table 4: **Multiple Comparisons of National Affiliation Dimension**

Dependent variable Curriculum		**Differences average**	**Degree of Freedom**	**Significance level**	**95% Confidence interval**	**Confidence interval**
					Lower bound	**Upper bound**
Montessori	Bawakeer	.643*	.255	.013	.14	1.15*
	Self-learning	-.494-*	.229	033	-.95-	-.04-*
Bawakeer	Montessori	-.643-*	.255	.013	-1.15-	-.14-*
	Self-learning	-1.137-*	.238	.000	-1.61-	-.67-*
Self-Learning	Montessori	.494*	.229	.033	.04	.95*
	Bawakeer	1.137*	.238	.000	.67	1.61

*** Significance level at (α=.05).**

Tables 3 and 4 show that the differences between the average scores for National Affiliation of Bawakeer and Montessori are statistically significant at **(α=.05).**;however; Montessori curricula best promotes National Affiliation among the Saudi children. On the other hand, the differences between the average scores for National Affiliation of Montessori and Self-Learning are statistically significant at **(α=.05).**; Self-Learning curricula best promotes National Affiliation. Nevertheless; the differences between the average scores for National Affiliation of Bawakeer and Self-Learning curricula are statistically significant at **(α=.05).**; Self-Learning best promotes National Affiliation. Thus, the results of the statistical analysis of the National Affiliation dimension are in favor of the Self-Learning curricula, followed by the Montessori curricula and then Bawakeer.

2-Socio-Family Dimension

Table 5 shows that F value nearly reached 9, which is statistically significant at **(α=.05).** This shows that there is a significant variance among the three curricula under investigation in terms of the Socio-Family Dimension. To identify which curricula best promotes the Socio-Family dimension, the averages of the three curricula were analyzed using LSD .Results are shown in Table 6.

Table 5: Socio-Family Dimension in Self-Learning, Bawakeer and Montessori Curricula

Socio-Family Affiliation		Sum of squares of deviation	Degrees of Freedom	Variance average	The calculated F value	Significance level
	Between Groups	13.245	2	6.622	9.014	.000
	Within Groups	120.492	164	.735		
	Total	133.737	166			

Table 6: **Multiple Comparisons for the Socio-Family Dimension**

Dependent variable (Curricula)		**Differences average**	**Degree of Freedom**	**Significance level**	**95% Confidence interval Lower bound**	**Confidence interval Upper bound**
Montessori	Bawakeer	-.073-	.175	.677	-.42-	.27
	Self-learning	-.601-*	.157	.000	-.91-	-.29-*
Bawakeer	Montessori	.073	.175	.677	-.27-	.42
	Self-learning	-.528-*	163	.001	-.85-	-.21-*
Self-Learning	Montessori	.601*	.157	.000	.29	.91*
	Bawakeer	.528*	.163	.001	.21	.85*

- **Significance level at (α=.05).**

Tables 5 and 6 show that the comparison of the average scores for Bawakeer and Montessori in the Socio-Family dimension shows no significant differences at **(α=.05).**The differences between the average scores for National Affiliation for Self-Learning and Montessori and Bawakeer curricula are statistically significant at **(α=.05).**; Self-Learning was the best in promoting Socio-Family affiliation. In addition, the statistical analysis of the Socio-Family dimension is in favor of the Self-Learning curricula; the Montessori and Bawakeer curricula are of equal footing regarding this dimension.

3-Socio-School Dimension

Table 7 shows that the value of alpha ratio F was close to 0.04, which is statistically non-significant at **(α=.05)**. Thus, there were no significant differences among the averages of the three groups in Socio-School dimension.

Table 7: Socio-School Dimension: Comparison of Self-Learning; Bawakeer and Montessori Curricula

Socio – School Affiliation		Sum of Squares of Deviation	Degrees of Freedom	Variance average	Calculated (F) value	Significance Level
	Between Groups	.715	2	.357	.351	.705
	Within Groups	166.971	164	1.018		
	Total	167.686	166			

Table 8 : Multiple Comparisons for the Socio-School Dimension

Dependent Variable		Average of Differences	Degree of freedom	Significance Level	95% Confidence Interval Lower Bound	95% Confidence Interval upper Bound
Montessori	Bawakeer	-.130-	.206	-.530-	-.54-	.28
	Self-learning	.026	.185	.887	-.34-	.39
Bawakeer	Montessori	.130	.206	.530	-.28-	.54
	Self-learning	.156	.192	.417	-.22-	.54
Self-learning	Montessori	-.026-	.185	.887	-.39-	.34
	Bawakeer	-.156-	.192	.417	-.54-	.22

*Significance level at **(α=.05).**

Tables 7 and 8 show the following:

- A comparison of the average scores for Bawakeer and Montessori in the socio-school dimension shows no significant differences at **(α=.05).**
- The differences between the average scores for national affiliation for self-learning and Montessori are statistically significant at**(α=.05).**
- A comparison of the average scores for Bawakeer and Self-learning in the Socio-School dimension shows no significant differences at **(α=.05).**

The results of the statistical analysis of the Socio-School dimension are in favor of Self-Learning curricula ,followed by the Montessori curricula and Bawakeer curricula.

4-Media Dimension

The F value was approximately 34, which is statically significant at **(α=.05).** This is shown in table 9. Thus, there exists significant variance among the three groups in the Media dimension.

To identify the stronger curricula, the averages of the three curricula were analyzed using LSD. Table 9 and 10 show the results

Table 9: **Media Dimension: A Comparison of Self-Learning, Bawakeer and Montessori Curriculum**

Media Affiliation		Sum of Squares of Deviation	Degrees of Freedom	Variance Average	Calculated (F) Value	Significance Level
	Between Groups	106.691	2	53.345	33.840	.000
	Within Groups	258.531	164	1.576		
	Total	365.222	166			

Table 10: Multiple Comparisons in Media Dimension

Dependent Variable		Average of differences	Degree of freedom	Significance Level	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Montessori	Bawakeer	-1.443-*	.257	.000	-1.95-	-.94-*
	Self-Learning	-1.857-*	.230	.000	-2.31-	-1.40-*
Bawakeer	Montessori	1.443*	.257	.000	.94	1.95*
	Self-Learning	-.414-	.239	.085	-.89-	.06
Self-Learning	Montessori	1.857*	.230	.000	1.40	2.31*
	Bawakeer	.414	.239	.085	-.06-	.89

*Significance level at **(α=.05).**

Tables 9 and 10 show that the differences between the average scores for National Affiliation of Bawakeer and Montessori are statistically significant at **(α=.05).**level; Bawakeer best promotes Media Affiliation. On the other hand; the differences between the average scores for National Affiliation of Self-Learning and Montessori curriculum are statistically significant at **(α=.05)**; Self-Learning best promotes the Media affiliation. In addition; a comparison of the average scores of Bawakeer and self-learning in Media dimension shows no significant differences at **(α=.05).**

Thus, the results of the statistical analysis of Media dimension were in favor of Self-learning curricula, followed by Bawakeer curricula and Montessori curricula.

Regarding the existence of a statistically significant difference between males and females under Self-learning, Bawakeer and Montessori curriculum, the T values and their level of significance were calculated for the three curricula. Table 11 and 12 and 13 present the results of T test for the three curriculum; Self-Learning, Bawakeer, and Montessori.

Table 11: **T Value and its Statistical Significance Level for Differences Between Average Scores for Male and Female Students of Self-Learning Curricula**

Dimensions	Category	Average	Standard Deviation	T Value	Significance
National Affiliation	Males	17.41	1.047	0.370	0.712
	Females	17.29	1.373		
Socio-Family	Males	13.70	0.669	1.460-	0.149
	Females	13.89	0.387		
Socio-School	Males	13.04	0.759	0.462	0.645
	Females	12.93	1.021		
Media	Males	13.15	0.770	0.917	0.362
	Females	12.93	1.065		

Table 12: T Value and its Statistical Significance Level for Differences Between Average Scores for Male and Female Students of Bawakeer Curricula

Dimensions	Category	Average	Standard Deviation	T Value	Significance
National Affiliation	Males	16.32	1.211	0.573	0.569
	Females	16.9	1.474		
Socio-Family	Males	13.23	1.232	0.404-	0.688
	Females	13.35	0.714		
Socio-School	Males	12.85	1.449	1.560-	0.126
	Females	13.39	0.783		
Media	Males	12.68	1.041	0.402	0.689
	Females	12.52	1.563		

Table 13: T Value and its Statistical Significance Level for Differences Between Average Scores for Male and Female Students of Montessori Curricula

Dimensions	Category	Average	Standard deviation	T Value	Significance
National Affiliation	Males	17.00	0.970	0.713	0.480
	Females	16.76	1.251		
Socio-Family	Males	12.94	1.211	1.331-	0.189
	Females	13.36	0.994		
Socio-School	Males	12.83	1.103	0.932-	0.356
	Females	13.09	0.879		
Media	Males	11.11	1.491	0.156-	0.876
	Females	11.18	1.570		

It is clear from tables 11,12,13, that there are no statistical significant differences between average scores for male and female children in the three curricula.

Discussion

Results showed that Self-Learning curricula surpasses Bawakeer and Montessori curriculum in developing children's understanding of citizenship in all four dimensions. Self-learning curricula has been designed to meet the requirements of Saudi society, which includes instilling children with Islamic values, recognizing the colors of the national flag, and knowledge of historical sites and national and religious events. Statements of national affiliation included saluting the national flag at morning assembly, knowing the national anthem, supporting national sport teams, knowing the colors of the national flag, and recognizing historical monuments of the Kingdom. This result is in line with the results of Gurkaynak's (2007) study about citizenship and creating a good citizen is relatively unique.

Self-learning curricula addresses these topics and experiences. Different parts of the kindergarten were motivated during different events including the Kingdom's National Day. This may not be the case with Bawakeer and Montessori curricula, as Montessori follows a universal approach in its educational elements and assistive tools. Furthermore, under Bawakeer curricula, all activities are designed for all elements and all units. Thus, it rejects any additions or initiatives from the teacher. This affects both curricula concerning national affiliation, and provides Self-learning curricula with greater flexibility, which was clear from the results. This flexibility in the educational process teaches use provides an opportunity for the teacher to teach children on the concept of national affiliation, to acquaint them with national monuments, show them how to salute the flag, and to discuss certain national issues (Al-Ameel, 2002). Hence, schools that apply Bawakeer and Montessori curricula have to include certain concepts regarding religious and national events of the Kingdom to help children relate to their homeland on a national level. This agreed with Roh's (2004) study that concluded teacher's lack of the awareness of the value of citizenship. "Family" provides the basis to achieve children's psychological stability. It contributes to producing good citizens who love their homeland and act to promote it. A family can teach its children how to be active and productive citizens and to develop an intellectual and emotional affiliation with their homeland, because family is the first institution to develop children's rights and duties (Sa'di, 2012; Ghabish, 2006).

The results of the current research for the Socio-Family affiliation dimension show statistically significant differences for Self-Learning curricula but none between Bawakeer and Montessori . These results

suggest that self-learning develops children's concepts of citizenship through nourishing the citizenship spirit by helping in the house, defending family, participation in family events, speaking Arabic, and other such concepts. There may be less emphasis on these concepts under Bawakeer and Montessori curricula.

Family represents cohesion and the development of individuals' personalities and affiliations. This comes through helping others, caring for them, and taking care of the belongings of others. Thus, family develops a symbolic indication of society and culture and tries to teach individuals basic concepts such as supporting, assistance, and protection for individuals and the nation (Sa'di, 2012).

Kindergartens join the family in formulating children's social and political concepts. Both supply each other in achieving integrated development for children's personalities at all levels. A well-integrated personality leads to active participation in society. Children's interaction with their peers at kindergarten is a way to monitor their behavior, and reveals positive and negative traits. Hence, adults can ensure early interventions to address and adjust any negative behavior once identified (Sherif, 2007). In the Socio-school dimension of citizenship, statements concerned the following topics: my relationships with my friends are strong; I keep my kindergarten clean; I help my friends. These are social topics and national concepts that are taught to children from early childhood in public communities, and in the school community in particular. This explains the equality between the three curricula in this dimension, and the lack of statistical significant differences. However, there is a significant statistical difference between Self-Learning and Montessori; this may be related to the Montessori focus on individual learning rather than a social one (Bahatheg, 2010).

Kindergarten programs make a large contribution to children's social growth, as they typically provide children with essential social and behavioral skills and knowledge. These curricula also encourage children to engage in socially accepted behaviors and avoid unacceptable ones (Sasilla, 1999). In addition, many scientific theories, such as those of Piaget, Vygotsky and Montessori, focus on the child's social development and the cognitive construction of the individual. Thus, all kindergarten curricula have to take into account the development of these concepts for children from a very young age because of their effect on the growth of children's citizenship (Tupper, 2002; Gurkaynak, 2007).

Therefore, those working according to Bawakeer and Montessori curricula, which are applied in Saudi Arabia, must take the two dimensions of socio-family and socio-school into greater account. This could come through developing a plan to enhance the concept of citizenship in both

dimensions, as well as to raise good citizens. It is essential to look closer at the British and Turkish experiences in integrating the concept of citizenship into their curricula.

The results of the present study prove that both Self-learning and Bawakeer curricula perform better in terms of national affiliation. Media affiliation takes into account increasing knowledge about the nation, visiting national monuments, commitment to keeping streets clean, and being energy conscious.

Finally, when drawing a comparison between males and females in the citizenship dimensions among the three approaches, the research results show no significant statistical differences; that is, there are no gender-based differences in citizenship among children. This result confirms findings of previous studies (Al-Bakatushi & Al-Sawi, 2005; Al-Bassal, 2012). This result may be explained by the fact that children—males and females—practice similar roles at this age that do not differ with respect to their gender. In addition, children study in similar environments in terms of daily schedules, despite having different curricula and activities. Through these curricula and activities, a child, male or female, is committed to the rules and laws of the kindergarten, thus, learns self-respect and respect for others, independence, and how to work within a group while respecting the group's rules. Al-Bakatushi & Al-Sawi (2005) stress the importance of teaching children at kindergarten, human values, national affiliation, rights and duties, and rights of the others, and respect for others without discrimination based on color or gender.

Recommendations

In light of the findings of the current study, the researcher recommends other researchers to conduct more research to explore the importance of teaching love and loyalty, and how to assume the responsibilities to preserve them through kindergarten's curricula. In addition, it is recommended to conduct different types of studies. She also advises conducting more correlative research between parental skills, citizenship, and different curricula in use.in addition to implementing longitudinal studies to investigate citizenship development among gender at various age levels.

Acknowledgment

This study was supported by the Research Center of Humanities, Deanship of Scientific Research, King Saud University, 2016

References:

Al-Ameel, H. (2002). The effect of different types of pre-school curricula in some aspects of children experience and development in Saudi Arabia. PhD Thesis. Cardiff University.

Al-Bakatushi, J. & Al-Sawi, I. (2005). The effectiveness of a program based on the play to give the child the kindergarten concept of citizenship. Contemporary Education, 22(22), p 107-160.

Al-Bassal, E. (2012). The effectiveness of the program guide in the development of some of the values of citizenship among kindergarten children (4-6 years) Squatter areas at PorSaeed, Egypt, Journal of the Faculty of Education. University of Port Saeed, 12, 271-288.

Al-Habak,M.(2010).Citizenship among kindergarten children, Arab Studies in Education and Psychology, 33 (1). Retrieved in March 14th, 2014,from Arab Studies in Education and Psychology, 33 (1). Available at: http://eshsane.ahlamontada.com/t135-topic,

Al-Ka'bi, F. (2011). Education and citizenship education and its impact on children's culture. Journal of Childhood and Development, 5 (18), p 283-320.

Arab Center for Educational Research for the Gulf States. (2011). Measurement of the concept of citizenship photographer for kindergarten, Kuwait: Kuwait.

Bahatheg, R. (2010). How the use of Montessori Sensorial Material supports children's creative problem solving in the pre-school classroom. PhD Thesis. Southampton University.

Barahma, N. (2008). The development of national education curricula and civil in light of the characteristics of good citizenship and to measure its impact on the acquisition of the concepts of citizenship and attitudes towards it among the students of upper primary stage in Jordan. Unpublished Ph.D. Thesis, Yarmouk University.

Can, Y. (2007). Demokratik değerlerin benimsenmesinde sosyal çevre faktörü. Sosyoloji Dergisi, 18, 15-39.

Clough, P.&Nutbrown,C. (2004). Special educational needs and inclusive early education: Multiple perspectives from UK educators. Journal of Early Childhood Research, 2(2), 191–211. http://dx.doi.org/10.1177/1476718X04043015

Croll, P.& Moses,D. (2000). Ideologies and utopias: Education professionals' views of inclusion. European Journal of Special Needs Education 15(1): p 1–12. http://dx.doi.org/10.1080/088562500361664

Elewa, A. (2005). The challenges of the third millennium, and its impact on the education of the citizen. Journal of moral education, 5,19-25.

Eshak, G. (2004). Citizenship between concept and experience. Malysia:Gulana Press.

Khalil, M. (2004). Citizenship education from an Islamic perspective. College of Education Journal, Islamic University, Gaza.

Oberhuemer P. (2005). International perspectives on early childhood education curricula. International Journal of Early Childhood, 37 (1), 27-37. http://dx.doi.org/10.1007/BF03165830

Osler, A. & Starkey, H. (1998). Children's rights and citizenship: some implications for the management of schools. The International Journal of Child's Rights, 6, 313–333.

http://dx.doi.org/10.1163/15718189820494085

Purdue, K., Ballade,A. & MacArthuer, B. (2001). Exclusion and inclusion in New Zealand early childhood education: Disability, discourses and contexts. International Journal of Early Years Education, 9 (1) 37–49. http://dx.doi.org/10.1080/09669760120044178

Tupper, B. (2002). Education and Citizenship: Diagnosis of reality and reform strategies in the light of globalization, sociological analytical study of the relationship of education to citizenship to some educational institutions. Journal of the Science of humanity, 7 (43).

Rashdan, R. & Al-Qa'oud, I. (2011). The effectiveness of the educational program proposed in the national education and civil rights for the development of the concepts of citizenship to the children of kindergarten. Series of Humanities and Social Sciences, University of Mutah, 26(7), 305-344.

Roh, Y. (2004). Democratic citizenship education in the information age: A comparative study of South Korea and Australia. Asian Pacific Education Review, 5,167-177. http://dx.doi.org/10.1007/BF03024954

Sa'di, W. (2012). Contact prisoners and promote the values of citizenship. The book's first periodic journal Studies and Research University Djelfa entitled (the Arab nation and democratic transformations), University Ashour Xian.

Sasilla, R. (1999). Effective method of playing a role in the acquisition of social experiences in kindergarten. Unpublished MA Thesis. Damascus University.

Sherif, A. (2007). Social and religious education in kindergarten. Oman:Dar soft.

Tupper, J. (2002). The gendering of citizenship in social studies curricula, Canadian Social Studies, 36 (3).

Zaharan, S. (2012). A comparative study of the impact of some of the variables in shaping the identity of the affiliation of kindergarten children to the homeland era of globalization. Childhood Studies, 15 (55).

Zidan, Y. (2005). The extent to which national education curricula for qualities of a good citizen from the perspective of teachers. Unpublished MA Thesis, University of Jordan.

Fereha, N. (2004). Lebanese experience in the teaching of the concept of citizenship. A working paper submitted to the workshop of citizenship in the school curricula, and the Ministry of Education, Muscat, Oman.
Ghabish, S. (2006). Citizenship is not a numbers calculation formula to achieve what. Educational Culture Journal, 7, 136. United Arab Emirates.
Global Arabic Encyclopedia.(1996). Business enterprise Encyclopedia of Publication, Riyadh, KSA.
Gurkaynak, I & Cayir, K. (2007). The State of citizenship education in Turkey: past and present. Journal of Social Science Education, 6 (2): p50-58.
Hamdan, S. (2008). The role of family in developing citizenship values among youth in light of globalization challenges. Saudi Arabia: Jarir Press.
Hussein, E. (1991). Realization of national identity among the Egyptian child. Unpublished MA Thesis, Graduate Institute of Childhood, Ain Shams University.
Karlsson, M. & Pramling, I. (2003), Curricula for early childhood education: mirroring play, care and learning in cultural contexts, in: M. Karlsson Lohmander (Ed) Care, play and learning curricula for early childhood education (Early Childhood Research and Development Centre, Göteborg University).

The Perception of Absenteeism at School from View of the Teachers at Primary Schools in Cabinda in Angola

Vita Tomás
Instituto Superior de Ciências de Educação (ISCED - Angola), Angola
Inmaculada Aznar Díaz
Universidad de Granada, Spain

doi: 10.19044/ejes.v4no2a7 URL:http://dx.doi.org/10.19044/ejes.v4no2a7

Abstract

The information which this article wishes to clarify is the teachers' perception of truancy. The objective of this study, using an exploratory field research, with quantitative treatment, is to analyze the levels of perception of primary school teachers in rural areas in Cabinda regarding school absenteeism, causes and measures of overcoming this problem. In 10 primary schools, 27 questionnaires were applied to 5th and 6th grade teachers. The questionnaires were divided into three parts that allowed characterizing school absenteeism, causes and measures for overcoming, through interrogatory phrases. The data obtained was treated by descriptive statistics, with the aid of SPSS Software version 22. The problem of study is, what perception of primary school teachers in rural areas in Cabinda have on school absenteeism. The results indicate that the teachers' perception of absenteeism is: deliberate absence from school activities, lack of attendance at classes even at school and the absence at school without justification. The causes of school absenteeism are due to lack of motivation due to work conditions and low salaries, floods of people at the time of wages, rainfall, boredom due to bureaucracy of managers, personal problems and health. Measures of overcoming, opening up of more banks, improving wages, improving roads and placing public transportation in school zones with higher need.

Keywords: School absenteeism, causes of absenteeism, overcoming measures.

Introduction

The subject of school absenteeism stereotypes the thought of the physical absence of the student or teacher from the school. This absence has

implications in the realization of the process of teaching and learning at a desired quality. The focus theme is on the Perception of School Absenteeism from the Point of View of the Primary Teachers in Cabinda.The development of societies and the improvement of the quality of life begins with the process of education of its members. "The school conveys knowledge, builds the individual, provides the necessary support for the individual to become independent from the family and integrate into society. Provides the necessary tools for its internal and external members, such as students and their parents, to cope with Difficulties of society and accompany the rapid social evolution" (CARDOSO, 2014, p.9). The behavior of school absenteeism, does not facilitate the school to fulfill its social duty, influencing even the emergence of certain problems that lead to "social consequences, psychological and that can have lifetime effects, can affect the economy of a country, Making it difficult for the individual to enter the world of work" (Idem).

If the Angolan Education and Teaching Law, Law nº17 / 16 says that primary education and I cycle of secondary education is free and obligatory (REPÚBLICA, 2016), as teachers react in this obligation, since there are absentee behavior in schools? Why this behavior and how to overcome it?

The motivation for carrying out this study has to do with these formulated questions and because during some work visits, carried out in some primary schools in rural areas, it was found that in normal period of classes, some of these schools were without and, in other schools present pupils but absent teachers.

1. School absenteeism

Absenteeism is the absence at the place of the activity or form of withdrawal due to dissatisfaction of small undesirable situations, such as: working conditions, type of support, forms of leadership, participation in decision making, type of relationship between colleagues Eriksen quoted By (PENATTI, 2006). School absenteeism is the constant absence of the student in the school premises during the period in which the classes take place, it is the absence in which the absentee does not justify the reasons that led them to absent themselves, is the state by which at the moment of control, If and when someone is missing and no one knows where they are located, it is a deliberate absence of the student or teacher in the activities of the school. Absenteeism is also the lack of attendance classes within the school day (MALLAD, 2007) and is the lack of attendance in the fulfillment of a school duty (FERREIRA, 1999).

Absenteeism is the absence of the person engaged in the place of work or in the classroom, causing negative effects to the worker or the apprentice, besides being a discreditable behavior and has a double effect: For the

worker, the possibility of suffering a salary cut, resignation or related and administrative problems from the organizational point of view makes it difficult to perform work and losses. For students' it has the effect of not continuing with the studies, not being evaluated, and not having school success and hindering the pedagogical work of the teacher (PENATTI, 2006).

Well, if no one reacts to absenteeism, it is a sign that behavior is seen as normal. The approach around this subject is one of the ways to react against this behavior, which is not normal due to its negative effects and constraints.

Absenteeism is equivalent to non-participation, loss of course or course in relation to others, delay in the process and in the accomplishment of the activities and in the fulfillment of previously established programs and determined by the schedule, in addition to sometimes being a disobedience to the law.

In order, not to remain as a defaulting and disobedient agent, it is necessary for the absentee to collaborate with the law, so that the act of absenteeism does not become a punishable disorder and contestation of those that have an embarrassing effect.

When the absentee does not collaborate, or materialize the statute, it conflicts with the law. In Angola, Law nº17 / 16 in paragraphs 1 and 2 of article 12, it states that "the obligation of education translates into the duty of the state, society, families and companies to ensure and promote access and attendance to the System Of Education and Teaching to all individuals of school age, from the initiation to the primary education and I cycle of the secondary education " (REPÚBLICA, 2016).

If the law says that education is compulsory, then no one should fail to fulfill this obligation, so as not to be considered disobedient since absenteeism is disobedience in fulfilling an obligation. Tolerance and impunity for absenteeism is a clear gap between the law (obligation to fulfill duty) and absenteeism (disinterest in duty) that becomes a habit every year.

2. School absenteeism causes

For the absentee usually has his justification, of the cause that causes them to absent themselves. In many situations, absenteeism has known causes and others unknown. The known causes of absenteeism are: "vacations, marriages, births, deaths, changes of address, in some cases diseases". (PENATTI, 2006).

The process of schooling is a responsibility of all, which begins with the individual's willingness to participate in the activity. It is also the responsibility of families, society, institutions (schools, churches, organizations) and the state. If these social strata do not fulfill their

responsibilities, truancy will certainly be a fact. Personal and intrinsic problems can determine the unknown causes of absenteeism such as: illness, family problems, intentional delays or involuntary reasons or force majeure, voluntary misconduct for personal reasons; Financial difficulties, lack of transportation, poor motivation, poor leadership oversight, and inadequate organizational policies. According to Souto (1980) cited by (PENATTI, 2006).

Other causes of school absenteeism depend on the context or the environment where the absentee is located, since absenteeism in the city can be determined by the traffic congestion factors that influence the lack of transportation, the very demanding pedagogical work, the vandalism in the school and The in operation of administrative services, sanitation and accommodation conditions, while in the rural context the causes of school absenteeism have to do with the involvement in community activities at the time of classes, the prioritization of domestic activities and the field for subsistence Family, as well as the fulfillment of a traditional ritual etc.

The causes of school absenteeism have to do with: unattractive, uninteresting and uncaptivating teaching, lack of integration and social marginalization of the student, bad family influences, excessive family responsibilities and precarious economy, involvement of minors in family business, lack of School attendance of parents, little value given to school education (MALLAD, 2007). Other factors of school absenteeism are:

> Poor teacher competence and training, poor pedagogical planning, poor student and teacher evaluation and performance, poor school management, learning difficulties of students with special educational needs, demotivation and job dissatisfaction, weak language learning, violence Domestic work, domestic occupation, lack of teaching aids and teaching materials, difficulty in transportation, and lack of education inspection services beyond school supervision (Idem).

For quality education, it is necessary that many of the problems that have caused the absentees behavior are to be overcome. The purpose of teaching is seen in article 14 of Law 17/16, which shows that in the "exercise of educational activity, educational institutions must observe high standards of performance and achieve the best scientific, technical, technological and cultural results and Promotion of school success, quality, excellence, merit and innovation "(REPÚBLICA, 2016, p. 3955), Since in primary education one of the objectives is "[...] to ensure a harmonious and comprehensive quality training that enables the development of intellectual and labor skills.

If absenteeism is the physical absence of the student or the teacher from the school, these goals cannot be reached and in each moment that the objectives are not achieved the quality of the process of teaching and learning is low.

3. Overcoming measures

In order to overcome absenteeism, the procedures to be taken into account are: control, identification and registration of the absentee, communication to the authorities (police, managers, inspectors, guardians or others responsible) the existence of absentee behavior, contact the members of Families, to request the collaboration of social services (Psych pedagogues, Social Animators, Psychologists, Supervisors) tutors and the family, to carry out play activities at school and extracurricular activities, to record the frequency of absences and Call attention and publish the administrative measures (ESTEBAN, LOPEZ, & PERIS, 2001). These procedures can be come to any area or stratum of absenteeism.

There are also other measures that can be taken to overcome this behavior, since it preserves the idoneness of the institution and the people who depend on it, guarantees confidence for the public and improves quality in the various dimensions.

Some measures are:

> Procedural, administrative or disciplinary measures, hindering or facilitating the behavior of absence (such as the precariousness of employment, loss of salary and / or attendance premiums, supplementary sickness benefit paid by the company or not, (Eg periodic medical examinations, vaccination, training, personal protective equipment against occupational hazards, health education), preventive measures aimed at the environment Physical and psychosocial work in order to neutralize, reduce or minimize the discrepancy between the demands imposed by the work and the individual's capacity for response (such as the sustained creation of a healthy, safe and productive work environment, participation in work organization and In management, participation in the people management system) (PENATTI, 2006, P.4).

The solution to minimize absentee behavior should not only be taken by measures, but above all by raising awareness through meetings, conferences, so that both teachers and students are aware of the dangers and other disorders that can cause absenteeism.

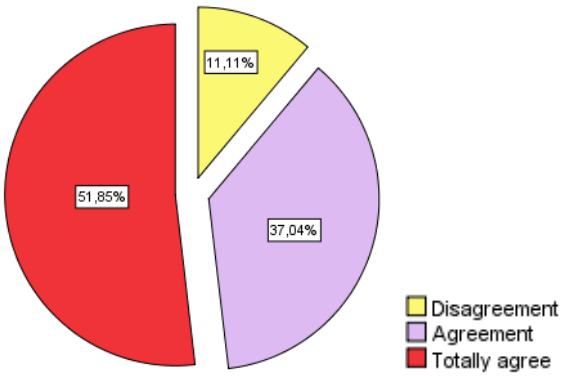
4. Methodology

The main issue that arose in this study was, What perception do primary school teachers in rural areas in Cabinda have on school absenteeism? The objective is to analyze the level of perception of primary school teachers in rural areas in Cabinda on school absenteeism, causes and measures of overcoming. It is an exploratory field research, with quantitative treatment. In 10 primary schools, 27 questionnaires were applied to 5th and 6th grade teachers. The questionnaires were divided into three parts that allowed characterizing school absenteeism, causes and measures of overcoming, through interrogatory phrases. The data obtained were treated by descriptive statistics, with the aid of SPSS Software version 22.

5. Results

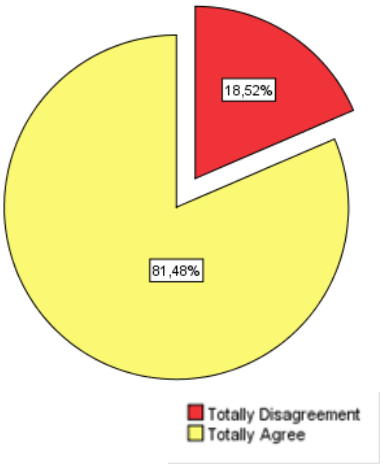
The results show that primary school teachers in rural areas in Cabinda perceive school absenteeism as the absence of school activities, the lack of attendance in classes; even while in school and absence at school without justification. School absenteeism has causes due to lack of motivation, due to working conditions and low salaries, ques, lack of banks, time of salary, constant rain, annoyance for the excessive bureaucracy of school management in solving problems, especially health problems, especially malaria , Typhoid fever, stomach pain and hemorrhoids. The measures to overcome these situations in the view of teachers are: opening of banks branches in villages and communities, improving salaries and compatible with the cost of living, conducting radio and television programs for competitions of knowledge or general culture because it will increase responsibility for the teacher and students, placement of playground equipment in the school to attract students, improvements of the roads and placement of public transportation in school zones with greater need and play games in schools.

Graph 1- Result of the answers about the absenteeism as a purposeful absence.



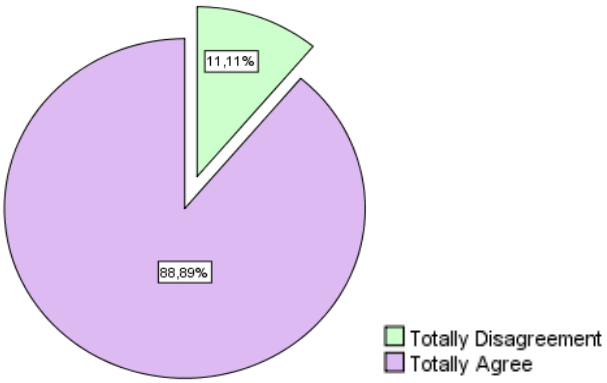
Source: Teacher consultation

Graph 2- Result of absenteeism responses such as lack of classroom assistance



Source: Teacher consultation

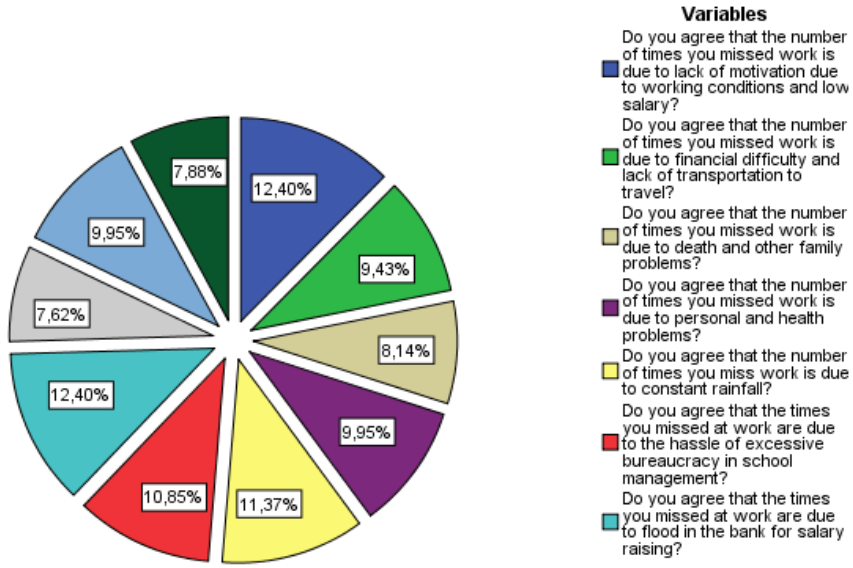
Graph 3- Result of responses on Absenteeism as absence without justification



Source: Teacher consultation

Figures 1, 2 and 3 present the results of the question that had the objective of knowing the teachers about their conception of truancy. Of the 27 questioned teachers, in graph no. 1, 51.85% of teachers completely believe that absenteeism is the purposeless absence in school activities and 11.11% disagree with the statement. In Graph 2 of the 27 teachers, 81.48% totally agree that school absenteeism is the lack of attendance classes even though they are in schools and 18.52% disagree completely and in graph 3 of the 27 teachers 88.89% fully agree that the School absenteeism is absence at school without justification and 11.11% disagree with this statement.

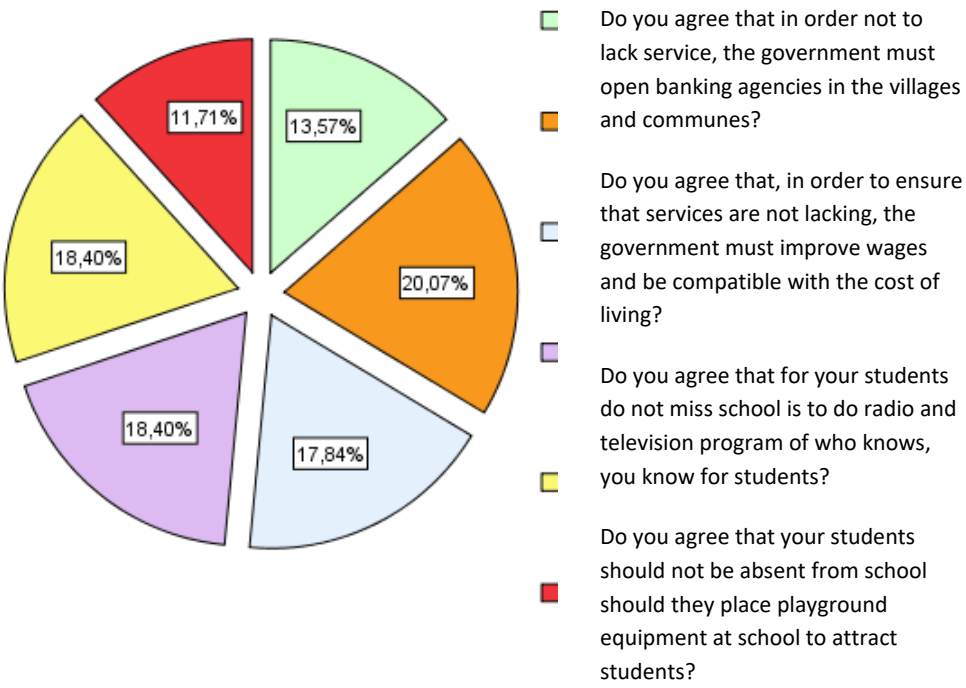
Graph 4 - Results of the agreed answers on the causes of school absenteeism



Source: Teacher consultation

Graph 4 shows the means of the descriptive analysis results through the SPSS Software, whose percentages highlight the degree of agreement of the question that had as objective the knowledge of the teachers the causes of school absenteeism. Of the 27 teachers questioned, 12.40% answered that the cause of school absenteeism has to do with the lack of motivation due to the working conditions and the low salary they receive, 9.43% are the financial difficulties and the lack of transportation to go to the school, 8.14% stated that for reasons of death and resolution of other problems in the family, influence to absenteeism 9.95% is due to personal problems mainly health, 11.37% is due to constant rainfall, 10.85% is due to the annoyance due to the excessive bureaucracy of school management in solving problems, 12.40% think that the cause of absenteeism has to do with crowds at the bank at the time of wages, 7.62% is due to the fatigue caused by intense political or religious activities, 9.95% believe that malaria and typhoid fever and 7.88% stomach and hemorrhoid pain are the diseases that influence school absenteeism.

Graph 5 - Results of the agreed answers on Strategies to overcome school truancy.



Source: Teacher consultation

Graph 5 presents the results of the descriptive analysis in SPSS, whose percentages the questions had as objective to know the strategies of overcoming truancy. Of the 27 questioned teachers, 13.57% said that one of the ways to overcome absenteeism, is to open banks in the villages and communities, 20.07% pay attention to improving wages and is compatible with the cost of living. , 84% suggest that radio and television programs should be conducted for knowledge or general education competitions, 18.40% believe that placing playground equipment at school to attract students. This may also increase teachers' responsibilities for the control of students in school. 18.40% suggest improvements in the roads and placement of public transportation in school zones with greater need help to overcome absentee behavior and 11.71% think that playing games in schools helps to overcome truancy.

6. Discussion of results

Considering the studies on school truancy, the application of questionnaires arouses the attention of teachers and motivates them to the

answer, because the reality they live in and that they find as an opportunity to expose what constitutes their problems and challenges.

The answers given by the teachers make it easy to understand from the results that their conception of school absenteeism is the purposeless absence in school activities, the lack of attendance at classes even at school and absences from school without justification. In addition to these and other reflections, what some absentee teachers may not know is the fact that when they are absent from school purposely, not attending classes and neither justifying or satisfying their absence, the absentee teacher can be considered as the uncompromised with science, ethics and professional deontology.

It is known that the profession of the teacher is a profession of pedagogues and being a pedagogue means being according to the etymology of the word "slave" and "servant". This means that the mission of being a teacher requires obedience, respect, responsibility, and dedication to serve. An absentee teacher is one who does not want to be obedient and does not want to serve. Are many who are teachers prepared for this? This profession requires accepting challenges and sacrifices so that the vicissitudes of life are overcome and bring benefit to the students who are the direct consumers of the services that the teacher provides.

However, the reasons for this behavior may be several, but an absentee teacher, who purposely does not attend classes and does not give reasons for their absence and simply disappears from school and their work environment, gives the impression of being a weak teacher and being irresponsible and without discipline. Absentee behavior can lead to evils that will later be reflected in the life of the families and in the life of the teacher themselves.

School absenteeism, influence on curricular programs, poor assimilation of contents, incompatibility in assessments, educational delay, and many other social problems, such as; illiteracy, poor quality of teaching and learning and consequently the quality of life of society may also be low. The leadership of school administrators and other oversights by officials of the education system must be strong, cohesive, organized, prudent and attentive so that once absentee behavior is identified, administrative and sanctioning measures are taken to minimize absenteeism.

The results also show that the causes of school absenteeism are due to demotivation due to working conditions and low salary. In fact, this is a matter of conscience, because when something disturbs someone, the most correct thing is to present an action demanding the situations that constrain life and work, so that through the discussions, solutions are found together, rather than opting for the absenteeism. It really is very disturbing when the working conditions do not facilitate those who want to do their job, but do you have to take into account what working conditions are necessary?

Knowing, that in addition to the conditions that the institution provides, the teacher also has the responsibility to create their working conditions, so, that with the school, no task is put aside.

Other reasons for teacher absenteeism in Cabinda have to do with queues at the banks at the time of salary. constant rains, annoyance for the excessive bureaucracy of school management in solving problems, especially personal health problems, especially malaria, typhoid fever, Stomach ache and hemorrhoids. Certainly, in Cabinda and in many other provinces of Angola, the banalization of workers' wages brought some benefits but caused new problems, because the banking system did not meet the demand of its clients and services did not extend to rural areas. Which causes certain constraints.

In Cabinda, most banking services are centralized in the city and many teachers, in order to get money or even their salaries, have to travel more than 40 kilometers in the hope of getting the money in a rather bureaucratic, time-consuming and system. Sometimes the teacher's day ends in the bank queue and return home with no avail. If you can get the money you will not return to your area without shopping, this can lead to losing a day of work or more. This is where one of the concerns of teacher absenteeism really lies.

Life should not stop at the bank, one thing is money, another thing is work, it is the job that comes from the money and the absentee according to the Law can suffer a discount on the salary when they are absent to go to the bank to raise the salary if it is not by authorization. Life should be planned jointly, you must share certain responsibilities so that you are not the only one doing everything because you run the risk of failing to fulfill the duty that the prime element of a worker and when placed in the background means devaluation of work. Absenteeism can be this too; The lack of appreciation of school work due to personal interests.

Natural phenomena are unpredictable at a time when forecasts of meteorological services are not known. In Angola, the rainy season lasts approximately eight months, but it should not be a drizzle that influences absenteeism. When you want to work, the rain will not stop you from getting to school, but on days when there are heavy rains, that flood Houses and streets it is a different story. Cabinda for being part of the humid tropical climate and due to the rains, there are also cases of tropical diseases, so it is necessary that certain personal care is adhered to so that the disease is not one of the causes of absenteeism. If the most prevalent diseases (malaria, typhoid, hemorrhoids, and stomach pain) that lead teachers to absenteeism, what has to be done to stop from getting sick? Well, health care does not only depend on health, but it starts with the person himself, taking care of the hygiene, the water you drink, the use of mosquito nets and respect for the type and time of meals according to the needs of the body.

Some reasons for truancy should be investigated by police or school or labor inspectors in order to establish their truthfulness, once the truancy caused by truancy it becomes a criminal offense due to negligence. Accordingly, truancy can be considered as neglect of schoolwork. There are administrative legal measures of labor negligence that must be disclosed and responsible for those who fail to do so, except in the case of absences provided for in the General Labor Law:

> [...] Absence due to the worker's marriage, birth of the child, death of a direct family member, compulsory fulfillment of military service, provision of evidence in the case of worker-student participation in courses of improvement or professional qualification, impossibility due to illness, accident or Support to the direct family member in case of illness or accident, participation in sporting or cultural activities representing the country, participation in union activities as a member and the authorization of the employer. " Article 152 (ANGOLA, 2001, page 38)

The measures to overcome these situations in the view of teachers are: opening of more banks in villages and communities, improving salaries and compatible with the cost of living, conducting radio and television programs for competitions of knowledge or general culture because it will increase responsibility of the teacher and students, placement of playground equipment in the school to attract students, improvements of the roads and placement of public transportation in school zones with greater need and play games in schools.

7. Conclusion

Regarding the study and discussions about the conception of school absenteeism from the point of view of teachers in Cabinda, it was concluded that:

School absenteeism is the deliberate absence from school activities, lack of attendance in classes even while at school and absence from school without justification. To say this seems normal, but the actions that cause this behavior, especially that lower the quality of the student's school life and the increase social problems, such as illiteracy, poverty, poor quality, badly trained professionals and the low quality of social life.

The causes of school absenteeism are due to lack of motivation caused by poor working conditions and low wages, queues, lack of banks, time of salary, constant rains, annoyance of the excessive bureaucracy of school management in solving problems, personal problems mainly health with

Malaria, Typhoid, stomach pain and hemorrhoids. During the discussion of the results, we found that school absenteeism is also caused by poor teachers', awareness of their responsibilities in the fulfillment of their professional duties, they avoid school problems, lack of appreciation of school work due to personal interests, lack of courage to confront problems, work difficulties and the lack of care for the maintenance of health and diseases.

The measures of overcoming would be the opening of banks in villages and communities, improving salaries and that is compatible with the cost of living, conducting radio and television programs for competitions of knowledge or general culture because it will increase responsibility to the teacher and students, road improvements and placement of public transport in the school zones with greater need and realization of games in the schools.

8. Results

Fines and administrative, criminal, and judicial accountability should be intensified for the absentee teacher or manager who allows this behavior to be the norm in schools.

School absenteeism should receive special attention from school administrators, school and labor inspectors, the police and the government, so that this behavior can be overcome through an action project to solve the main problems that cause this behavior.

The constraints caused by school absenteeism should be addressed in conferences, lectures, discussions, public debates and even within churches so that they are seen not only an evil of the school but also of society itself and in order to change this evil habit.

References:

ANGOLA, G. d. (2001). Lei Geral de Trabalho. Luanda: Imprensa Nacional.

CARDOSO, S. I. (2014). Absentismo escolar: uma consequência individual ou do sistema familiar. Porto: Universidade Fernando Pessoa.

ESTEBAN, P. R., LOPEZ, B. G., & PERIS, F. S. (2001). Medidas y Estrategias para la Reducion del Absentismo Escolar. Granda.

FERREIRA, A. B. (1999). Século XXI O Dicionário da Língua Portuguesa. Rio de Janeiro: Nova Fronteira.

MALLAD, F. J. (2007 15-Maio). La Ausencia a Clase. Universidad António Nebrija, p. 2.

PENATTI, I. (2006). As Consequências na Gestão de Pessoas. III-Simpósi de Excelência em Gestão e Tecnologia, (p. 4). Rio de Janeiro.

REPÙBLICA, D. d. (2016). Lei de Base do Sistema de Educação e Ensino. Luanda: Imprensa Nacional.

Mental Ability of Junior Secondary School Students in Basic Technology Multiple Choice Objective Test in Nigeria

Yinusa Akintoye Faremi, Ph.D
Akinwarere, Kehinde C.
Department of Guidance and Counselling, Faculty of Education
Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria
Fakolujo, Abayomi Babatunde
Department of Arts & Social Science Education, Faculty of Education
University of Lagos, Akoko, Yaba, Lagos State, Nigeria

doi: 10.19044/ejes.v4no2a8 URL:http://dx.doi.org/10.19044/ejes.v4no2a8

Abstract

The study examined mental ability of Junior Secondary School Students in Basic Technology in Nigeria. The study adopted survey research design. The purpose of this study is to compare the mental abilities of junior secondary school students in basic technology in terms of age, sex and types of school (Urban and Rural). Two hundred students were selected from the target population in three senatorial districts of Ondo State using multi-stage sampling technique. Thirty multiple-choice objective test items were drawn from past questions in Junior Secondary School Basic Technology and administered on the selected students. One research question was raised, three hypotheses were formulated and tested at 0.05 alpha level. Data collected were subjected to descriptive and inferential statistics. Results of the analysis revealed that there was no significant difference between the performance of students between the age of 12-13, 14-15, and 15 years plus on basic technology multiple choice test. Also there was no significant difference between the performance of male and female students on basic technology multiple-choice test. Despite the fact that there was no significant difference between students performance in term of age, the mean value revealed that students at tender age (12-13 years) performed better than their counterparts who are older in age in basic technology multiple choice test. It was recommended among others that learning of basic technology and any other related subjects should commence from early stage of human development.

Keywords: Multiple-choice, Objective Test, Basic Technology, Mental Ability.

Introduction

Mental ability can be referred to as human intelligence or an individual ability to constructively solve problems in the environment without much instruction or assistance from another individual. Measurement of mental ability of students is a process of measuring the intelligence or cognitive ability of an individual because the brain has different compartments, each hogged to a specific ability upon which a test can be measured. The mental ability of any student can be measured by conducting cognitive ability tests. Cognitive ability tests assess abilities that involved thinking (e.g. reasoning, perception, memory, verbal and mathematical ability, and problem solving). Such tests pose questions designed to estimate applicants' potential to use mental processes to solve work related problems or to acquire new job knowledge (U.S. Office of Personnel Management, 2016).

Traditionally, the general trait measured by cognitive ability tests is called `intelligence' or `general mental ability'. However, an intelligence test often includes various item types which measure different and more specific mental factors often referred to as ''specific mental ability''.

Medical Dictionary (2016) viewed intelligence as an individual's ability to adapt and constructively solve problems in the environment. Wechsler (1939) cited in Medical Dictionary (2016) viewed intelligence not in terms of capacity, but rather in terms of performance since intellectual capacity cannot be seen nor its existence concretely verified and cannot be reliably measured but the achievement of any students can be reliably measured. Three scales on intelligence seemed to have been developed and subsequently revised by Wechsler to measure intellectual functioning of children and adult ability. These scales include:

i. Wechsler Adult Intelligence scale revised (WAIS-R) is designed for adults, age 16-74 years. The scale has eleven subtests which include information, digit span, vocabulary, arithmetic, comprehension, similarities, picture completion, picture arrangement, block design, object assembly and digit symbol;
ii. Wechsler Intelligence Scale for Children, third edition (WISC-III) is designed for children between age 7-15 years. The subsets of this scale include many of the same categories of subsets as the WAIS-R
iii. Wechsler Pre-school and Primary Scale Intelligence (WPPSI) is designed for children between age 4-6.5 years. The test is divided into six verbal and five performance subtests. The eleven subtests are presented in the following order. Information, animal house and

animal house retest, vocabulary, picture completion, arithmetic, mazes, geometric design, similarities, block design, comprehension and sentences. (Medical Dictionary, 2016).

Another measuring scale for students' mental ability was designed by Stanford-Binet called Stanford- Binet intelligence test that was revised from the original Binet-Simon scale by Lewis M. Terman, a psychologist at Stanford University. The Stanford-Binet intelligence scale is now in its fifth edition (SB 5) and was released in 2003. It is a cognitive ability or intelligence test that is used to diagnose developmental or intelligence deficiencies in young children. The test measures five weighted factors and consists of both verbal and nonverbal subsets. The five factors being tested are knowledge, quantitative reasoning, visual-spatial processing, Working memory and fluid reasoning (Wikipedia Encyclopaedia, 2016).

Measurement according to Kizlik (2016) referred to measurement as the process by which the attribute of dimension of some physical object are determined. One exception seems to be in the use of the word measure in determining the IQ of a person. The phrase ``this test measure IQ'' is commonly used. Before the mental ability of any student can be determined a test must be conducted by an expert. A test can be defined as a task used to obtain systematic observations presumed to be representative of educational or psychological trait or attributes (Gilbert, 1974). It is also an instrument for measuring systematic sample of an aspect of human behaviour which includes performance, knowledge, achievement, intelligence, skill, personality and aptitude. Kolawole (2001) defined test as a specific instrument or systematic procedures for observing one or more characteristics of a student using either a numerical scale or classification scheme.

Test may be classified as individual and groups tests. verbal and non verbal tests, performance, and pencil and paper tests, teacher made and standardized tests. Tests can be used for selection, for placement, for diagnostic, to provide feedback or knowledge of results, as a source of motivation to improve programmes and curricula and for theory development. Pencil-paper test can be grouped into two, the essay test and objective test. Objective test is the type of test in which the candidate expects to select answer from limited options. The testee select "his wanted'' answers from given option. According to Ogunmakin and Popoola (2003) objective test can be classified into two: the select types and the supply type. **Alternate** objective test can be regarded as the select types include multiple-choice, alternative response, matching, rank order, and pictorial while the supply types include short answer, complete, and association. Objective test is also a form of test constructed such that irrespective of who scores it, the score would be the same. The essay types of test are especially useful for

measuring those aspects of complex achievement, which cannot be measured by objective tests. These include:

i. Ability to apply rather than merely identify, rotation and application of data and
ii. The ability to select, organize and integrate ideas in a general ways on a problem.

The junior secondary school in Nigeria shall be both pre-vocational and academic. It shall be tuition free, universal and compulsory. It shall teach basic subjects which will enable pupils to acquire further knowledge and skills (Federal Republic of Nigeria (FRN), 2004). For student to transit from the three years of Junior Secondary School to Senior Secondary School, he/she must register for the Junior School Certificate Examination (JSCE) conducted by the state Ministry of Education or National Examination Council (NECO) in Nigeria for candidates in the Federal schools, Arm Forces Secondary Schools and other Federal establishment operating secondary school. Private schools also take part in the state or NECO Junior School Certificate Examination (JSCE) provided that they are permitted by their Ministry of Education. A candidate is expected to sit for a minimum of ten subjects and a maximum of thirteen in which Basic Technology is one of the subjects offered by the students. In this examination, students are made to face little of short answer essay test and more of multiple choice objective test in nearly all the subjects examined.

Multiple-Choice Objective Test

Nworgu (1992) described multiple choice test items as a test that consists of a stem and a set of response alternative. The multiple-choice test items usually consists of two parts (i) The stem which may be called the stimulus statement and (ii) a list of four (4) or five (5) suggested responses or options in which one of the option called the correct answer is referred to as the ‟key’’. Other plausible answer except the key are referred to as distracters, wrong responses, decays or foils.

Multiple-Choice Questions (MCQ_s) are subset of what is referred to as ‘objective questions’. These are questions which have one correct answer (usually only one). The term ``objective'' here means there is complete objectivity in marking the test. The construction, specification and writing of the individual questions (items) are influenced by the judgements of examiners as much as in any other test. The answere to the items of the test are already predetermined before they are exposed to the testees.

Multiple-choice items are considered to be among the most versatile of all item types. They can be used to test factual recall as well as levels of understanding and ability to apply learning. Multiple choice can also provide an excellent basis for post-test discussion, especially if the discussion

addresses why the incorrect responses were wrong as well. The correct responses were right. Unfortunately, multiple choice items are difficult and time consuming to construct (Ben and Esperanza, 2001).

In the present scientific and technological way, there is proliferation in the number of schools especially at the lower middle and upper primary schools I.e. junior secondary as a result of the need for more education for all school going age children worldwide, to meet the targets of the millennium development goals. The proliferation in the number of schools presupposes an increment in those that are located in the rural and urban areas (Bot, 2009). Daramola. (2009) explained that teaching and learning, whether is the rural or urban society, cannot take place in isolation. The increasing urbanization of societies has brought about a lot of challenges in the teaching and learning processes, there challenges notwithstanding, teaching and learning processes continues to benefit from ICT programmes.

In a research carried out by BOT (2009) revealed that the schools in rural and urban locations are underachieving in mathematics, the urban schools are doing better compared to the rural schools. He also stressed that rural students are behind urban students in mathematics achievement, which calls for effective teaching and learning of mathematics with emphasis on improving mathematics achievement especially among junior secondary schools students in rural areas.

Science and Technology

Science and technology merged in the pursuit of knowledge and solutions to problems that require the application of scientific understanding and product design. Solving technological problem demands scientific knowledge while modern technologies made it possible to discover new scientific knowledge. In a world shaped by science and technology, it is important for students to learn how science and technology connect with the demands of society and the knowledge of all content areas (Marine Department of Education Regulation 131, 2007).

A number of secondary school students have difficulties in their technology related subjects such as Basic electricity, Basic electronic, Building technology, Wood-work technology, Auto-mechanic, Technical drawing which lead to their poor performance in their Senior Schools Certificate Examination as a result of their deficiency in understanding the basic concept of basic technology at the Junior Secondary School level, this is not because they lack the aptitude but they have never acquired certain fundamental skill in basic technology. It is possible that the inability of the technical instructors or basic technology teacher to identify the difficulty level of the test and to examine the test item that can discriminate better between the upper and lower group students that took the test. It is possible

that the inability of the students to relate what they have learnt in the classroom to real life situation or solves some practical problems in the basic technology could also be one of the contribution to the problem mentioned above which may negatively affect the performance of students' in basic technology.

Bamiro, Elekwa, Okolie, Onyedinma, Okorie & Anyabolu (2001) stated that lack of proper technological orientation in our educational programme that is responsible for our great dependence on foreign technology, plant, machinery and man power. This is largely responsible for our huge external debt. The world has become a global village as we watch on our television sets events as they are happening in far and near places in the world. Machine has continued to replace human beings in place of work (Bamiro etal, 2001). Technology is a term that may be new to us but it is describing something which is not new at all. Technology affects our daily life. We see its effect around us everyday, even though we may not know what it is (Elekwa, Bamiro, Oluyide, Nurudeen, Akuru and Olopade, 2007). The scientific body of knowledge includes concepts, principles, facts, laws, ad theories about the way the world around us works. Despite the disasters caused by science and technology, their mistaken approach to the truth, and their failure to bring human happiness, they cannot be condemned outright and become pure idealists. Science and technology do not bear the full responsibility for humanity being devalued, thinking or reasoning being seriously weakened. (The Way to Truth, 2000).

The increasing focus on the development of conceptual understanding and the ability to apply science process skills is closely aligned with the emerging research on the theory of constructivism. Constructivism is the idea that learning is active process of building meaning for oneself. Thus, students fit new ideas into their already existing conceptual frame works (William, 2000). Some evaluators have not embark on the use of these conventional methods the educational reform movement has prompted school officials to turn to evaluation to answer the difficult questions about redesigning their vacation programmes at the state and local levels (Halasz, 1989). In order to know the level of recall of any students a test must be conducted. It is clear that technology means processes (methods) and products (materials) that make life easy and stress free (Elekwa etal, 2007). Developed technology involves the use of moderns and equipment to do things.

Concept of Basic Technology

Technology requires the use of human operators and understanding human capacities and limits essential for implementing technological advances. Nevertheless, psychology is often excluded from the list of core

disciplines responsible for scientific and technological progress (American Psychological Association (APA), 2016). Science, technology, engineering and mathematics (STEM) initiatives in education and training enhance capital by providing:

i. Scientists and engineers who continue the research and development that is central to the economic growth of our country;
ii. Technologically proficient workers who are able to keep pace with rapidly developing scientific and engineering innovations and
iii. Scientifically literate voters and citizens who make intelligent decisions about public policy and who understand the world around them (APA, 2016).

Technology is the application of knowledge to the practical aims of human life or to changing and manipulating the human environment. Technology includes the use of materials, tools, techniques, and sources of power to make life easier or more pleasant work more and be more productive. While science concerned with how and why things happens, technology focuses on making thing happens (Webster, 2013). Nneji, Okon, Nwachukwu, David and Ogbuanya (2013). viewed technology as open knowledge or ideas, skills and procedures for making, doing or using things in specifiable and repeatable ways. Nowadays, it is technology that creates work to enable every person to have occupational calling and identify. In Nigeria, technology is raising the standards of living for all. Basic technology was organized around the following themes. You and Technology; Safety; Materials and Processing; Drawing Practice; Tools and Machine; Applied Electricity and Electronics; Energy and Power Maintenance; and Building (Nneji etal, 2013).

Introductory technology was changed to Basic Technology as a result of Basic Education Curriculum that was restructured for primary and junior secondary school in line with the Universal Basic Education (UBE) Programme by the Nigerian Educational Research and Development Council (NERDC). Introductory Technology is a pre-vocational subject offered at junior section of post primary education (Uwaifo, 2011). The main purposes of pre-vocational education previously referred to as and hence that of introductory technology include: requisition of basic technical skills, exposing students to career awareness by exploring understanding of the increasing complexity of technology.

Ivowi (1995) cited in Uwaifo (2011) stated that the following objectives of introductory technology are:

- to provide students with technology literacy required for everyday living

- to provide pre-vocational orientation for future development of employable skills and training in technology
- to stimulate creativity.

The purpose of this study is to compare the mental ability of Junior Secondary Students in Basic Technology in term of age, sex and types of schools (urban and rural).

In attempt to measure the mental ability of Junior Secondary School Students in basic technology multiple-choice objective test, one research question was raised and three hypotheses were formulated and tested at 0.05 level of significance.

Research Question one

Is there any disparity in the performance of students within the age range of 12-13 years, 14-15 years and 15 years plus in basic technology multiple choice objective test?

Research Hypotheses

The following null hypotheses were formulated to guide the study:

H_{o1}: There is no significant difference between the performance of students between age of 12-13, 14-15 and 15 years plus in Junior Secondary School Basic Technology multiple-choice objective test.

H_{o2}: There is no significant difference between the performance of male and female students in Junior Secondary School Basic Technology multiple-choice objective test.

H_{o3}: There is no significant difference between the performance of students from rural and urban junior secondary schools in basic technology multiple-choice objective test.

Methodology

The study adopted survey research design. The population for the study consisted of the entire Junior Secondary School (JSS) students in Ondo State, Nigeria while the target population consisted of the JSS III students preparing for the State Junior Secondary School Certificate Examination. Two hundred students were drawn from the public junior secondary school using multistage sampling technique. In the first stage, the state was categorised into three senatorial districts Ondo Centre, Ondo North and Ondo South using stratified random sampling technique. Each senatorial district consists of six local governments which consist a total of 18 local government areas in the state. In stage two, two local government were selected from each senatorial district to make a total of 6 local governments for the study using simple random technique. In stage three, one urban school and one rural school were selected from each of the two local

governments selected for the study in Ondo Centre, Ondo North and Ondo South to make a total of six schools using simple random technique. In stage four, proportional stratified random sampling was adopted to select the 200 students for the study due to the existing number of arms and student in each school.

Method of Data Collection

Students were tested on the junior secondary school basic technology syllabus. The researcher prepared 30 items in basic technology selected from the 2012, 2013 and 2014 junior secondary school National Examination Council (NECO) past questions. The set of questions called multiple-choice objective test items of five (5) options were drawn from the past questions based on the syllabus of JSSIII and sampled all the various aspect of basic technology. The examinees were instructed to circle the correct key or answer inside the question paper. The 30 test items in basic technology were administered on the 200 students selected for the study for 45 minute under the supervision of basic technology teachers in each school selected for the study.

Research Question One: Is there any disparity in the performance of students within the age range of 12-13 years, 14-15 years and 15 years plus in multiple choice objective test items.

Table 1: *Mean and standard deviation of multiple-choice*

Format	Age	N	Mean	Standard Deviation
Multiple-Choice	12-13	78	37.61	4.38
14- 15	118	37.32	5.06	
15 Plus	4	36.50	4.12	
Total	200	37.42	4.77	

From the result presented in table one, it showed the mean and standard deviation of the performance of Junior Secondary students in basic technology. Students that fall under 12-13 years of age in multiple-choice showed a mean of 37.61 and standard deviation of 4.38. For students within the ages of 14-15 years in multiple-choice test showed a mean of 37.32 and standard deviation of 5.06. For the students within the age range of 15 years plus in multiple choice showed a mean of 36.50 and standard deviation of 4.12.

Hypothesis One

There is no significant difference between the performance of students between the age of 12-13, 14-15 and 15 years plus in junior secondary school basic technology multiple-choice objective test.

Table 2: *ANOVA Summary of Students' Performance in Multiple- Choice by Age.*

Source	**SS**	**Df**	**MS**	**F**	**Sig**
Between Group	7.496	2	3.748		
	0.163	0.850			
Within Groups	4531.224	197	23.001		
Total	4538.720	199			

p> 0.05

Table two showed that there is no significant difference between the performance of students between age of 12-13, 14-15, and 15 years plus in multiple choice (F2, 197 = 0.163, P> 0.05). The null hypothesis is therefore not rejected.

Hypothesis Two

There is no significant difference between the performance of male and female students in junior secondary school basic technology multiple-choice objective test.

Table 3: *t-test of students' performance in multiple choice objective test by gender.*

Group	N	Mean	SD	DF	t	P
Male	124	37.44	4.84			
		198	0.089	0.929		
Female	76	37.38	4.71			

P> 0.05

Table three showed that the t-cal. (0.089) is less than t-table value (1.960) at 0.05 alpha level. The null hypothesis is not rejected. This implies that there is no significant difference between the performance of male and female students on basic technology multiple-choice.

Hypothesis Three

There is no significant difference between the performance of students from rural and urban junior secondary schools in basic technology multiple-choice objective test.

Table 4: *t-test of difference in the performance of students from rural and urban junior secondary schools basic technology*

Group	N	Mean	SD	DF	t	P
Urban	124	34.81	4.82			
198	-1.093	0.276				
Rural	76	35.57	4.68			

P> 0.05

Table four showed that the students from rural Junior Secondary Schools had slightly higher mean in multiple-choice questions than the students from urban. However, the mean difference between the performance of the students from urban and rural junior secondary schools in basic technology multiple-choice questions is not statistically significant at P> 0.05 level (t = -1.093, P> 0.05). The null hypothesis is not rejected. This shows that students from both rural and urban junior secondary schools have the same potential towards the learning of basic skills in basic technology.

Discussion of Findings

The study revealed that the mean of the students' performance under the age of 12-13 and age of 14-15 years in basic technology multiple-choice formats is slight higher than that of the students under the age of 15 years plus which shows that students at tender age learn better than their counterparts who are older in age. This finding is not in agreement with the finding of Mathew (2014) which shows that older students recorded higher achievement in chemistry even though the average mean values do not vary widely. The findings of Ebenuwa-Okoh (2010) revealed that the younger students tend to be more focused on their academic pursuit than the older ones which are in conformity with the outcome of this study.

Despite the fact that the mean values of students within the age of 12-13 years is slightly higher than the students within 14-15 and 15years plus it was revealed that there is no significant difference between the performances of student based on age. In a study carried out by Ebenuwa-Okoh (2010) on influence of Age, Financial status and Gender on academic performance among students, the result of the study revealed that there is no significant difference based on age. Also the finding of Ebenuwa-Okoh (2010) who found no significant difference between undergraduates academic performance based on age.

The study revealed that there is no significant difference between the performance of male and female students. The findings of Downing, Chan, downing Kwong & Lian (2008) cited in Khawaileh and Zaza (2011) revealed the relationships between gender on a level scores and scores on the Learning and Study Strategies Inventory (LASSI) of undergraduates based on gender.

The study also revealed that there was no significant difference between the performance of students from rural and urban junior secondary schools. This study is not in agreement with the findings of BOT (2009) which revealed that the schools in rural and urban locations are underachieving in mathematics, the urban schools are doing better compared to the rural schools in mathematics. In a study carried out by Mathew (2014) which revealed that school location has significant effect on students

achievement in chemistry which is not in conformity with the finding of this study that shows no significant difference between the performance of students from rural and urban in Introductory Technology.

Conclusion

The study established the mental ability of junior secondary school students in basic technology multiple choice objective test items. It was revealed that the mean of the students' performance under the age of 12-13 and age of 14-15 years in basic technology multiple-choice formats is slight higher than that of the students under the age of 15 years plus which shows that students at tender age learn faster than their counterparts who are older in age in basic technology multiple choice test. This is an indication that young set of students assimilate faster than adult because they are not mentally occupied like adult. The study also concluded that there was no significant difference between the performance of male and female students. Moreover, the junior secondary school attended either urban or rural is not a determinant of students' performance in basic technology multiple choice test items.

Recommendations

The following recommendations were made to guide this study based on the findings of this study.

1. Learning of basic technology and any other related subjects should commence from early stage of human development since the study revealed that those students within the ages of 12-13 years and 14-15 years perform better than those students from 15 years plus.
2. During the teaching learning process, the teachers and instructors should not discriminate between male and female students. Teachers should have the belief that female students have the potential to acquire knowledge in basic technology like their male counterparts.
3. Students in both rural and urban schools should be exposed to the same technological skills that can develop their mental ability in developing the interest in studying engineering and technology courses within or outside Nigerian tertiary institutions.

References:

American Psychological Association (APA) (2016). Psychology as a core science, technology, engineering and mathematics (STEM) discipline. Retrieved from http://www.apa.org/pubs/info/reports/stem-discipline.aspx.

Bamiro, O. A., Elekwa, I., Okolie, C. A., Onyedinma, A. C. B., Okorie, O. O. & Angabolu, I. C. (2001). Introductory technology for schools and colleges student's Book2. Ibadan: Evans Brothers (Nigeria Publishers) limited.

Ben, C. S. & Esperanza, R. (2001). Is this a trick question? A short Guide to writing effective test questions. Kansas: Kansas Curriculum Centre Department of Education.

Bot, T. D. (2009). A comparative analysis of mathematics achievement in urban and rural junior secondary schools: A case study of Mangu. Nigeria Journal of sociology of Education, III (3), 105-117.

Daramola, C. O. (2009). Teaching and learning in urban society: The imperative of information and communication technology. Nigeria Journal of Sociology of Education, III (3), 36-43.

Ebenuwa-Okoh, E. E. (2010). Influence of age, financial status, and gender on academic performance among undergraduates. J. Psychology 1 (2): 99-103

Elekwa , I., Bamiro, O. A., Oluyide, A. O., Ladoye, D. I., Nurudeen, A., Akuru, I. O. & Olopade, O. L. (2007). Introductory technology for junior secondary school book 1. Lagos : Illus----EVAns Brothers (Nigeria publishers) limited.

Federal Republic of Nigeria (2004). National policy on education. Lagos: NERDC Press

Gilbert, S. (1974): Principle of educational measurement and evaluation. United State of America: Wad Worth Publishing Company.

Halasz, L. M. (1989). Evaluation strategic for vocation program redesign. ERIC Digests: ERIC Information Analysis Products (IAPS), 84.

Khwaileh, F. M. & Zaza, H. I. (2011). Gender differences in academic performance among undergraduates at the University of Jordan: Are they real or stereotyping? College Student Journal 45 (3)

Kizlik, B. (2016). Measurement, assessment and evaluation in education. Retrieved from http://www.adprima.com/measuremnt.htm.

Kolawole, E. B. (2001). Test and measurement. Ado Ekiti: Yemi Prints and Publishing Services.

Marine Department of Education Regulation 131 (2007). Science and technology. Retrieved from https://www.marine.gov/education/ires/pei

Mathew, C. (2014). Learning strategies, age, gender, and school-location as predictors of students' achievement in chemistry in Rivers State. Research Humanities and Social Sciences 14 (21), 121-127. Retrieved from www.iiste.org.

Medical Dictionary (2016). Wechsler intelligence test. Retrieved from http://medical-dictionary.thefreedictionary.com/wechster+intelligence+test.

Nneji, O., Okon, E. J., Nwachukwu, V. C., David, N. A. & Ogbuanya, T. C. (2013). Basic technology for junior secondary schools (Text Book 1). Lagos: learn Africa plc.

Nworgu, B. G. (1992). Educational measurement and evaluation theory and practice. Awka: Hallman publisher.

Ogunmakin, A. O. and Popoola T. A. (2003). Introduction to test and measurement. Akure: Layo- Ola Printers.

The Way to Truth (2000). The concept of science and technology. Retrieved form www.thewaytothruth.org/science/tehnology.

U.S Office of Personnel Management (2016) Assessment selection other assessment methods-cognitive ability tests. Retrieved from https://www.opm.gov/policy-data-oversight/assessment-and-selection/other-assessment-methods/cognitive-ability-tests/

Uwaifo. V. O. (2011). Schools based approaches to skill identification models in introduction technology under the universal basic education (UBE) system in Nigeria. Journal of Research in Education and Society 2(1). Retrieved from www.kidr.org/.... /schools-

Webster, M. (2013). What is technology? Retrieved from www.cantechletter. com/2013/0

Wikipedia Encyclopaedia (2016). Stanford-Binet intelligence scales. Retrieved from https://en.wikipedia.org/wiki:/stanfors%E2%80%93 Binet-intelligence-scales.

William, B. (2000). Method of assessment Ohio: public schools in Cleveland

Relevance of Entrepreneurship Education in Real Estate Practice for Sustainable National Growth

Mbazor David Ngwoke
Adebayo Michael Adedayo
Ige Victor Olutope
Department of Estate Management,
Federal University of Technology Akure, Nigeria

doi: 10.19044/ejes.v4no2a9 URL:http://dx.doi.org/10.19044/ejes.v4no2a9

Abstract

The study examined the relevance of entrepreneurial education to the practice of estate surveying by the graduates of Estate Management in becoming self-made entrepreneurs in their chosen field. Real estate is a multi-disciplinary field that comprises all areas of construction, design and management, such as property management consultancy, valuation services, agency administration, and real property development services. The study reviewed related literatures, such as real estate management, investment, entrepreneurship education in real estate business. The study used questionnaire, oral and telephone interview to collect samples, and the study population was centered on graduates of estate management practicing in various firms in Abuja. Some of the specific issues addressed include but not limited to current place of employment, level of satisfaction of the young graduates, willingness to go into full time practice by starting up their own estate firms. The study revealed that 94.2% of the respondents were strongly willing to start up their own private firm, while the remaining people had different sheds of opinions. Therefore, it was recommended among other things that government and good spirited individuals make a startup capital available for graduates of estate management who are willing to become real estate entrepreneurs. In addition, further training on business ideas will assist them in no small measure in actualizing their dreams of becoming employers of labour thereby contributing to the growth of the nation.

Keywords: Education, entrepreneurship, entrepreneur, real estate.

1.0 INTRODUCTION

Real estate which connotes land and housing is a field of human endeavour that cuts across all areas in construction business in general and

property business, such as property finance and management, valuation practice, agency services land administration and management and so on. As a result of man's constant desire for self sufficiency and comfort, real estate has become a major area of business globally. The major objective of real estate education in Nigeria and elsewhere in the world is to train and equip students sufficiently with the requisite skills to become entrepreneurs, self-sufficient, create wealth and consequently contribute in growing the nation. Also, the training helps them develop innovative mind to excel and be part of change agents who contribute to the growth of environment. World Economic Forum (2009) argued that entrepreneurship skills and educational attainment are two extraordinary opportunities and key issues that need to be leveraged and harnessed, if we are the so keen to develop the human capital needed for building the societies of the future. The position is based on the backdrop of the fact that entrepreneurship is the engine for innovation, wealth creation, employment generation, economic sustenance and national as well as regional development (Schweb, 2009). This suggests that the application of entrepreneurship elements in any given field of study, real estate inclusive, result in a total and comprehensive education. Entrepreneurship education in Nigeria seeks to provide students in tertiary institutions with the skills, knowledge and motivation to encourage entrepreneurial success in various disciplines. Varieties of entrepreneurship education are available at all levels of education in Nigeria and other nations of the world, from elementary school through the secondary level up to the University. It can best be described as a life learning process. The concept is essential to the competiveness of the knowledge economy of the entire world. This process applies to all levels of education and concerns all stages of life as well as different forms of skill acquisitions (Ojeifo, 2012).

From the forgoing, the step taken by the federal government through the Federal Ministry of Education to make entrepreneurship education compulsory in all areas of discipline in Nigeria, tertiary institutions should be applauded and seen as a right step in the right direction. This is meant to expose and inculcate into the mind of the students the spirit of self-reliance. This laudable development will not only address the hydra headed problem of unemployment and underemployment but would at the same time engender entrepreneurial human capacity for national development. There is hope that with the entrepreneurial education in our tertiary institutions, they will be properly positioned to become centers of excellence with proper equipment of technical workshops at all levels of education. This will put the nation on the path of joining other nations of the world that have overcome poverty through empowering the small scale businesses and harnessing the potentials of graduates.

Blankfein (2009) argued that there is enormous potential in investing in entrepreneurial education in order to nurture young talents and develop the generation of leaders and innovators who not only creators of jobs and value for the society, but also empower others to create a robust future. Wilson (2009) collaborated this assertion by stating that innovation and entrepreneurship provide a way forward for solving the global challenge of the 21st century, creating job opportunities, advancing human welfare, building sustainable development and renewed economic growth. Therefore, this study is out to examine the relevance of entrepreneurial education to estate surveying and valuation graduates to become self- reliant as well as employers of labour for sustainable national growth.

2.0 STATEMENT OF THE PROBLEM

Gradually, attention is paid to technical, vocational and entrepreneurial education in all the tertiary institutions in Nigeria. The reason is not farfetched, before now, the institutions that turn out graduates every year has not adequately prepared them to be self reliant after graduation even in the fields such as Estate Management, Architecture etc. that are seen to be professional in nature, rather the graduates after the National Youth Service queue for white collar jobs as the only option for their survival. Consequently, there are several graduates from institutions of higher learning in Nigeria who are not gainfully employed because they lack the entrepreneurial skills that would have been utilized for their self sustenance. They solely rely on their head knowledge to get them the job they desire. Therefore, there is need that students at all levels of education be exposed to entrepreneurial education early enough and while in the University so as to inculcate entrepreneurial spirit in them.

Entrepreneurship activities in Nigeria have developed enterprises in several areas such as agro-allied, real estate, construction, building, engineering, hospitality industry, etc. To this extent Nkechi, Emeh, and Okechukwu (2012), observed that despite the abundant human and natural resources in Nigeria, she is still ranked as one of the poorest countries in the world and consequently has one of the highest rates of youth unemployment in sub-Sahara Africa. Nkechi et al (2012) further observed that due to government's lack of interest in developing entrepreneurial innovations and skills that has resulted to misery and frustrations of the citizenry. This has foisted a state of hopelessness on majority of young and old people who have resorted to any means including crime to succeed in life. They resort to vices because they are not gainfully engaged. It is on the basis of this ugly situation that this study is poised to investigate the relevance of entrepreneurial education and skill acquisition among Estate Management

graduates of Nigeria tertiary institutions in the practice of the discipline, thereby reducing the rate of unemployment in Nigeria.

3.0 LITERATURE REVIEW

Entrepreneurship is seen as the process which involves the effort of an individual or individuals in identifying viable business opportunities in an environment and obtaining and managing the resources needed to exploit those opportunities. Mbaegbu (2008) opined that entrepreneurship refer to the activities of the entrepreneur as the initiator, organizer, innovator and risk bearer in production or business.

Okafor, Efobi, Salako (2008) described entrepreneurship as the willingness and ability of an individual to seek out investment opportunities and take advantage of scarce resources to exploit the opportunities profitably. It is the process of creating something new with value by devoting the necessary time and efforts, assuming the accompanying financial social risks at the end receiving resulting reward. Drucker (2010) noted that the concept of entrepreneurship has a wide range of meanings. On the one extreme, an entrepreneur is a person of high aptitude who pioneers change, possessing characteristics found in only a very small fraction of the population. On the other extreme of the definition, anyone who wants to work for him-self or her-self is considered to be an entrepreneur. The word entrepreneur originates from the French word, entreprendre, which means "to undertake". In a business context, it means to start a business. The Marriam-Webster Dictionary presents the definition of an entrepreneur as one who organizes, manages, and assumes the risks of a business or enterprise.

There are other words used to substitute the term entrepreneur, and they include innovation, enterprises, small businesses etc. This goes to suggest that entrepreneurship is about innovative thinking, creativity and problem solving.

Yunus (1983) argued that entrepreneurship is about solving problems and not making money. However, he stressed that the result of solving problem may lead to making lots of money. This view is shared in Long Man Dictionary of Contemporary English (2005) where entrepreneur is defined as "a person who starts a business or arranges financial risks". Other than these definitions, there are other approaches to the meaning of entrepreneurship. Stevenson and Jarrilo (1991) see entrepreneurship as "the pursuits of opportunity beyond the resources you currently control. This implies that entrepreneurship is an activity that results into creativity, growth and innovation.

European Commission (2008) observed that Innovative entrepreneurships come in different forms, pattern and shapes; the benefits

accrued are not limited to start-up innovative ventures or new jobs. It refers to an individual's ability to turn conceived ideas into reality; as such it is a key competence for all, helping youths and energetic individuals to be more creative and self confidence in their undertakings. To really understand the entrepreneurship concept, there is need to take a wide and a holistic view in order not to omit important components and treads in this rapidly growing movement (World Economic Forum, 2009). Generally, entrepreneurship refers to an individual's ability to convert ideas into reality. It includes creativity, innovation, and taking calculated risks as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in the day-to-day life at home and in the general society. Simply put, entrepreneurship is the process of starting and managing own business. That an individual becoming aware of business ownership as an option to a viable alternative. The greatest advantage of entrepreneurship is personal freedom, personal satisfaction, increased income and self esteem. However, the disadvantages are risk of loss of income, long and regular working hours, and personal discipline. It is emphasized that entrepreneurship is not the prerogative and the business of the chief executive or the director of a multinational corporation. It is also the concern and undertaking of a farmer who begins by farming as a means of his sustenance and livelihood. Entrepreneurship is a process consciously undertaking by an individual or group of individuals as an option to working for others. It is applicable in different spares of human endevours such as in the academia, agriculture, fashion and entertainment, trading, property management and many more others.

3.1 Who Is An Entrepreneur?

An entrepreneur is an enterprising individual who builds capital through risk and initiative. The term was originally a loanword from French and was first defined by the Irish-French economist Richard Cantillon (1680-1734). Entrepreneur in English is a term applied to a person who is willing to help launch a new venture or enterprise and accept full responsibility for the outcome. Jean-BaptisteSay, (1767-1832) coined the word "entrepreneur" in the 19th century. Jean-BaptistSay (1767-1832) defined an entrepreneur as one who undertakes an enterprise, especially a contractor, acting as intermediary between capital and labour. Pickle and Abrahamson (1990) introduced a compact definition of an entrepreneur: "An entrepreneur is one who organizes and manages a business undertaking, assuming the risk, for the sake of profit. The entrepreneur evaluates perceived opportunities and strives to make the decisions that will enable the firm to realize sustained growth.

The entrepreneur leads the firm or organization and also demonstrates leadership qualities by selecting managerial staff. It is important to note that management skill and strong team building abilities are essential leadership attributes for successful entrepreneurs and the growth of the business. From the viewpoint of growth-oriented innovative companies, one of the best definitions of entrepreneurship is found in Ronstadt (1984) "Entrepreneurship is the dynamic process of creating incremental wealth. The wealth is created by individuals who assume the major risks in terms of equity, time and career commitment to provide value for some product or service. The product or service may or may not be new or unique but value must somehow be infused by the entrepreneur by receiving and allocating the necessary skills and resources."

3.2 Economic Role of the Entrepreneur

An entrepreneur is an individual who establishes a firm; because of their importance in the modern economy, entrepreneurs should be at the heart of microeconomics. Entrepreneurs set up firms in response to economic incentives. In turn, firms create and operate markets that provide mechanisms of exchange for consumers. Firms also create and manage organizations that provide internal coordination and market interactions. The actions of entrepreneurs are the essential force that helps to drive the economy towards equilibrium. Entrepreneurs are endogenous to the economy in the general theory of the firm. The entrepreneur is, before anything, a consumer. The consumer becomes an entrepreneur by choosing to establish a firm. Consumers bring to the task of entrepreneurship their judgment, knowledge, and technology. Consumers decide to become entrepreneurs based on their personal characteristics and their judgment of available market opportunities. Entrepreneurs act rationally and purposefully based on maximizing their net benefits.

A firm is defined to be a transaction institution whose objectives are separate from those of its owners. All firms involve some combination of market mechanisms and organizational structures. A market is a transaction mechanism that brings buyers and sellers together. A market can be a store, a web site, a matchmaker, or an auction. An organization is a mechanism for managing nonmarket transactions inside the firm, including those between owners and managers, between managers and employees, and between employees, and for managing the firm's market transactions. An organization can involve hierarchies, bureaucracies, groups, teams, and networks.

3.3 Entrepreneurship In Relation To Real Estate Management Practice

- Real Estate refers to land and improvements such as building and other temporary or permanent attachments to land. It also includes every interest subsisting in the land. Specifically, real estate is the physical land and appurtenances affixed to the land e.g. structure (Appraisal Institute, 2001). It refers to those properties that cannot be moved; usually building and the things that are fixed on ground are natural part of land, such as trees and minerals. In addition, all permanent building attachments, such as plumbing, lift, plant and machinery, electrical wiring etc. are all known to be part of real estate. Kimmons (2016) noted that in real estate, property management, the property manager or management company has four major areas of responsibility:
- Marketing and Financial
- Tenant and Occupancy
- Facility
- Administration & Risk Management

The property manager is the owner's partner in maximizing returns on investment of the property through efficient performance of these four functional areas of responsibility. The property management firm acts in the best interests of the owner to maintain the property, keep it occupied with tenants, collect rents, budget improvements and maintain records. Many real estate professionals have looked at property management and changed their minds when the scope of the management tasks and record-keeping are fully understood. It's definitely a niche for the more detailed and responsive in the profession.

Marketing and Financial: Real estate property management involves understanding of operating expenses and budgeting. From this information, appropriate rental rates are set, balanced by the current market and what it will support in the way of rents. A firm knowledge of the area and competitive rental properties is required. The property manager may recommend marketing programs, special promotions and other advertising strategies to the owner in order to maximize occupancy and rental rates. Regular financial reporting to the owners is required. Understanding financial statement, profit and loss, income taxes and budgeting are all very important for property manager.

Tenant and Occupancy: Understanding the needs of the tenants is important for this function. Getting them to move in is only the beginning. The property manager must then respond to their requests, monitor their activities as regards the lease requirements, collect rent in a timely manner, and continually assess the tenants' satisfaction as regards the property's amenities versus those of competing rental properties in the area. The

unwelcome task of eviction for violations or non-payment is part of this function also.

Facility Management: Property management is also physical management of the structures and outdoor areas. Landscaping, electrical, plumbing, roof, walls, appliances, and much more are all part of the physical property. The property manager must maintain relationships with contractors and repair companies, budget capital expenditures, and monitor the quality of all repairs and maintenance. This function ties in with the financial piece, as some improvements will require significant capital expenditures and budgeting for them. It ties in with tenant and occupancy management because it is important to tenant retention to have well-maintained properties.

Administration and Risk Management: This is the files and records part of the property management function. Federal, state and local governments all have some jurisdiction over real estate property management activities. Certain reporting requirements must be met for all of them. Meticulous records for accounting and taxes are a must. For reasons of liability, all activities and tenant interaction must be recorded and maintained for specified periods.

However, it is important to state that other than property management, there are other several competent areas where real estate entrepreneur can develop his skills and innovations such as property valuation, real estate investment/development, real estate appraisal advice, etc.

3.0 RESEARCH METHODOLOGY

Questionnaires were distributed to respondents that were selected at a random. Simple random sampling technique was used because the entire population was manageable and convenient for the study. The samples include young graduates of estate management both male and female of varying ages working in Estate Management firms in the study area. The sample size of sixty used for this study was randomly selected from the total population of Estate Surveying firms in Abuja. They are young graduates who are employed either as pupil surveyors, IT students or Youth corps of which only 52 persons returned their questionnaires and the percentage was based on that. The sample selected was to obtain adequate and diverse views pertaining to the relevance of entrepreneurship education in real estate practice in Nigeria. Primary and secondary data were used in the study. The primary source of data was obtained through personal and telephone interview, observation and the use of questionnaires, while the secondary data was obtained from journals, internet and relevant text books.

4.0 DATA PRESENTATION AND FINDINGS

Table 1: Gender of the respondents

Sex	Frequency	Percentage	Valid percentage	Cumulative %
Male	20	38.5	38.5	38.5
Female	32	61.5	61.5	100
Total	52	100	100	

Source: Field survey 2016

Table 2: Age range of the respondents

Age	Frequency	Percentage	Valid percentage	Cumulative %
20-25	11	21.2	21.2	21.2
26-30	28	53.8	53.8	75
31 and above	13	25	25	100
Total	52	100	100	

Source: Field survey 2016

Table 3: Years of working experience since graduation

Years	Frequency	Percentage	Valid Percentage	Cumulative %
1-5	31	59.6	59.6	59.6
6-10	19	36.5	36.5	96.1
11 and above	2	3.8	3.8	100.0
Total	52	100	100.0	

Source: Field survey 2016

Table 1 shows the number of respondents by gender. The data indicated that 38.5 % are Male while 61.5% are Female, it could be concluded that the majority of those who filled the questionnaires are female, it further shows that there are more female graduates of estate management working in private estate firms. Table 2 shows the age range of the respondents. 21.2% of the respondents have the age range of 20 to 25 years, 53.8% have the age range of 26 to 30 years and 25% have the age range of 31 years and above. It will be concluded that the majority of the respondents have the age range of 25 to 30 years. The implication of this is that greater percentage of young graduates of estate management is not able to establish their own personal firms of practice. Table 3 shows the years of experience of the respondents. 59.6% have had between 1-5 years experience, 36.5 % of the respondents have between 6 and 10 year experiences while 3.8% of the respondents have had experience of 11 years and above. Therefore, it can be concluded that majority of estate management graduates working in a private estate firms have not had more than 5 years experience. The implication of this is that the entrepreneurial skills and training acquired in various tertiary institutions Nigeria coupled with the exposures in the industry are adequate

to enable the graduates of estate management to set up their own personal private firms.

Table 4: Educational qualification of respondent

Qualification	Frequency	Percentage	Valid Percentage	Cumulative %
National Diploma	8	15.4	15.4	15.4
BSc./HND	41	78.8	78.8	94.2
MSc/MBA	3	5.8	5.8	100
Total	52	100	100	

Source: Field survey 2016

Table 4 shows the educational qualification of the respondents 15.4% of the respondents are National Diploma holders, 78.8% of the respondents are BSc/HND holders and 5.8% of the correspondents are holders of MSc/MBA. With this, it can be inferred that the majority of the respondents are BSc/HND holders. The implication of this is that estate firms prefer the holders of first degree or HND to work in their firms.

Table 5: Cross Tabulation of the Relevance of Entrepreneurial Education in Real Estate Practice

			RELEVANCE			Total
			NR	LR	VR	
RESPONDENTS	Respondents who perceived entrepreneurship education has not having influence on real estate practice	Count	1	2	9	12
		% within RESPONDENTS	8.3%	16.7%	75.0%	100.0%
		% within RELEVANCE	33.3%	20.0%	23.1%	23.1%
		% of Total	1.9%	3.8%	17.3%	23.1%
	Respondents who perceived entrepreneurship education has having influence on real estate practice	Count	2	8	30	40
		% within RESPONDENTS	5.0%	20.0%	75.0%	100.0%
		% within RELEVANCE	66.7%	80.0%	76.9%	76.9%
		% of Total	3.8%	15.4%	57.7%	76.9%
Total		Count	3	10	39	52
		% within RESPONDENTS	5.8%	19.2%	75.0%	100.0%
		% within RELEVANCE	100.0%	100.0%	100.0%	100.0%
		% of Total	5.8%	19.2%	75.0%	100.0%

**(NR (1) = not relevant, LR (2) = less relevant, VR (3) = very relevant)*

Table 5 explains respondent's opinion of the relevance of entrepreneurship education to real estate practice. 3 (5.8%) of the respondents agreed that entrepreneurship education is not relevant, 10 (19.2%) believed it was less relevant while 39 (75.0%) agreed that entrepreneurial education received in their various Universities are relevant to the practice of Estate Management in Nigeria.

Table 6: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.231[a]	2	.891
Likelihood Ratio	.218	2	.897
Linear-by-Linear Association	.031	1	.861
N of Valid Cases	52		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .69.

From table 6, analysis shows that the critical value of chi-square χ (1) = 0.231 was lesser than the observed value of chi-square p = .891. This implies a statistically significant association between entrepreneurship education and real estate practice.

Table 7: Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.067	.891
	Cramer's V	.067	.891
N of Valid Cases		52	

Phi and Cramer's V are both tests of the strength of association. From the Table, it can be seen that the strength of association between the variables is moderately strong. Though, 1 would have been a perfect correlation.

Table 8: Embarking on real Estate Entrepreneurial activities improves one's standard of living?

Options	Frequency	Percentage	Valid percentage	Cumulative %
Strongly disagreed	1	1.9	1.9	1.9
Disagreed	1	1.9	1.9	3.8
Undecided	2	3.9	3.9	7.7
Strongly agreed	45	87	87	94.7
Agreed	3	5.7	5.7	100
Total	52	100	100	

Source: Field survey 2016

Table 8 illustrates that 5.7% of the respondents agreed that Real Estate entrepreneurship improves one's standard of living, 87% strongly

agreed, 3.9% undecided 1.9% disagreed and 1.9% strongly disagreed. With this, it can be inferred that, majority of the respondents strongly agreed that real estate entrepreneurship improves one's standard of living.

Table 9: Willingness to start up own private Estate practice?

Options	Frequency	Percentage	Valid percentage	Cumulative %
Strongly disagreed	0	0	0	0
Disagreed	0	0	0	0
Undecided	1	1.9	0	0
Strongly agreed	49	94.2	94.2	94.2
Agreed	2	3.9	3.9	100
Total	52	100	100	

Source: Field survey 2016

Table 9 illustrates that 3.9% of the respondents agreed that they are willing to set up their own firm of estate management practice, 94.2% strongly agree, 1.9% are undecided, 0% disagree and 0% strongly disagreed that the willingness to set up their own firm of estate management practice.

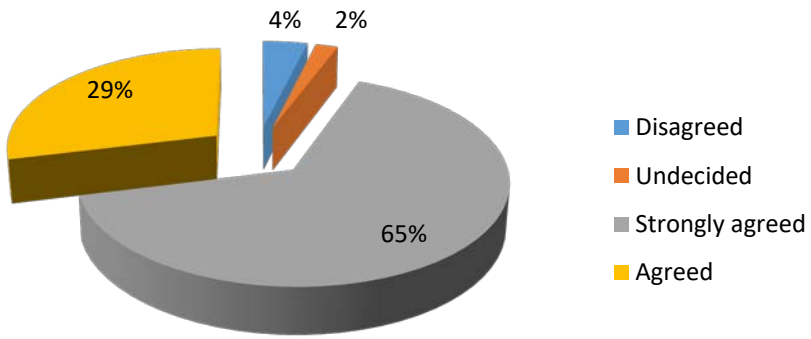


Fig 1: Respondent's opinion on whether Real Estate Entrepreneurship reduces unemployment and overdependence on family, friends and others

Figure 1 shows that, 29% of the respondents agreed that real estate entrepreneurship reduces the rate of unemployment and overdependence of graduates on family, friends and others, 65.4% strongly agreed, 2% are undecided and 4% disagreed.

4.1 SUMMARY OF FINDINGS

Entrepreneurial education in Nigeria tertiary institutions is relevant in practice. The finding shows that the various entrepreneurial skills the estate management students are exposed to in the University are relevant in the practice of Estate Surveying and Management. This is in line with the assertion that entrepreneurship education exposes students to useful skills in their chosen fields of endevour (Teru 2015).

A real estate entrepreneurship activity increases the level of standards of living. Estate Management activities through its trickle down effects has helped in alleviating the level of poverty and increasing the standard of living in the lives of many graduates of Estate Management. This is in affirmation with Abdullahi (2009) assertion that entrepreneurship activities contribute more to income earning, embarking on entrepreneurship affords people to earn good income.

After some years of practical exposure in the industry, graduates of Estate management would be willing to start up their own personal practicing firms. At this point they would have acquired as much experience to be able to stand on their feet.

Real estate entrepreneurship has helped in the reduction of the number of unemployment in the society and over dependency of graduates on family, friends and others.

5.0 CONCLUSION AND RECOMMENDATIONS

The Federal Government of Nigeria should make loan of no or low interest rate available to young graduates of Estate Management who have qualified as Estate Surveyors and Valuers to start up their own private firm of Estate Surveying and Management so that the problem of inadequate startup capital faced by young real estate entrepreneurs in the study area will be eliminated. Real Estate Entrepreneurship skills acquisition center should be introduced in all the state capitals in Nigeria, so that the intending entrepreneurs can acquire more skills relevant to them to be more effective and that will enhance their contribution to the economic growth and development of Nigeria. Old professionals in real estate management field should encourage the upcoming ones to establish their own personal firms in order to be self-reliant and employers of labour instead of allowing them to work for them continuously.

Professional linkage and association is very important, consequently aspiring estate entrepreneurs should endevour to be members of the Nigeria Institution of Estate Surveyors and Valuers. This will enable them to integrate well in the profession.

More awareness should be created on the importance of real estate entrepreneurship through educating our youths starting from primary school,

through the secondary level to higher institutions, which will encourage them to venture into real estate business with the aim of helping themselves and the economy.

References:

Abdullahi S. (2009). The transformation from entrepreneurship to technology entrepreneurship development in Malaysia. J. Chinese Entrep., 1 (3):240 -247.

Appraisal Institute (2001). Appraisal of Real Estate, 12th Edition, New York.

Blackfein, A (2009). Getting started as a Real Estate Entrepreneur. www.reiclub.com Accessed on 21/10/2016 at 11.56pm.

Drucker, P.F (2010). Entrepreneurship and Entrepreneurship Practice and Principles. New York, Harper Business.

Ikejiofor, C.U (2004). Information Land Delivery and Access to Land for the Poor in Enugu, Nigeria. University of Birmingham, England.

Kimmons J. (2016). Real Estate Property Management Areas of Responsibility.
https://www.thebalance.com/real-estate-property-management-areas-of-responsibility-2866512 accessed on 12/01/2017.

Mbaegbu DGE (2008). Entrepreneurship Development Theories: An Overview and Critique. In Proceedings of the first Chike Okoli International Conference on Entrepreneurship titled 'Entrepreneurship and Africa's quest for development. Published by Chike Okoli Centre for Entrepreneurship Studies, Nnamdi Azikwe University, Akwa Nigeria.

Mohammed Y. (1983). Entrepreneurship is Business Enterprise. Journal of Business Policy, 1-12 Nkechi, A., Emeh I.E.J., Okechukwu UF (2012). Entrepreneurship Development and Employment Generation in Nigeria: Problems and Prospects. Universal J. Educ.Gen. Study, 1(4):88-102

Okafor C, Efobi U, Salako IF (2008). Effect of Entrepreneurship Education on Students' Entrepreneurial Actions: A Study of Covenant University and Babcock University Students, Ogun State. The Niger Account Horiz., 2(2):52-63.

Schwab, A. (2009). African Award for Entrepreneurship. History of Entrepreneurship.
www.scribd.com/doc/23973286. Accessed 23-09-2016

Steveson and Jarrilo (1991). The Practice of Real Estate Management for the Experienced Property Manager. Institute of Real Estate Management, Chicago USA.

Teru S. (2015). Evaluation of the Impact of Entrepreneurship on Nigerian Economic Development. Pearl Journal of Management, Social Science and Humanities 1 (4), 69-77, August, 2015 ISSN 2449-1829 Research Paper http://pearlresearchjournals.org/journals/pjmssh/index.html, accessed on

23/09/2016 at 8.50pm World Economic Forum (2009). Education, the next wave of Entrepreneurial Capability to meet the global challenge of the 21st century. A report of the Global education initiative, Switzerland, www.weforum.org accessed 09/11/2016