

International Journal

OF

SCIENTIFIC RESEARCH

IN

EDUCATION



ISSN: 1117-3259

Volume 4(3&4), NOVEMBER 2011

International Journal of Scientific Research in Education

Volume 4(3&4), NOVEMBER 2011

ISSN: 1117-3259

IJSRE. IS INDEXED IN EBSCO PUBLISHING. Providers of *EBSCOhost*

Publisher's website: www.ijsre.com

Email: editor.ijsre@gmail.com, editor@ijsre.com, submission.ijsre@gmail.com

Copyright ©

Copyright for articles published in this journal is retained by the authors, with first publication rights granted to the journal. By virtue of their appearance in this online journal, articles are free to use, with proper attribution, in educational and other non-commercial uses.

Published by

Ololy Consulting Company
Research, Education Effectiveness and Quality Improvement Consultants
P. O. BOX 135, Ahaoda, Rivers State, Nigeria.

INSTRUCTION FOR AUTHORS

The **International Journal of Scientific Research in Education (IJSRE)** is a meeting point for the dissemination and explanation of research findings by practitioners, researchers and academicians to the multifaceted problems associated with education. The journal is written and published for an international audience of practitioners, researchers and academicians. IJSRE [invites the submission of manuscripts](#) with a strong applied orientation on any topic in education and non-education domains applicable to education. Manuscripts may be, but are not limited to, empirical articles and theoretical and methodological papers. Applied value and other innovative formats are also considered. IJSRE is published quarterly on the Web. Our goal is not simply to provide an Internet accessible version of a journal that appears in print. Rather the journal intends to exploit the electronic medium to its fullest degree. Authors are highly encouraged to submit their manuscripts as attachments via e-mail to the editor-in-chief editor.ijsre@gmail.com, editor@ijsre.com, submission.ijsre@gmail.com or to the managing editor admin@ijsre.com. The journal's [instructions for authors](#) should be consulted. Paper submissions are accepted but not encouraged. Only in a few, well-justified exceptions will the journal accept submissions in paper form with an enclosed file on a diskette or other digital media.

Originality

Prospective authors sending papers for consideration and possible publication in **IJSRE** should note that only original and previously unpublished manuscripts will be considered. Submission of manuscripts implies a certification that no part of the manuscript is either copyrighted or under review by any other publication. It is the primary responsibility of authors to obtain proper permission for the use of any copyrighted materials in their manuscript prior to submission.

Formatting information

On a separate sheet the author should include the following: a title that indicates exactly but as briefly as possible the subject of the article, the names, present professional affiliations, addresses as well as telephone, fax number and e-mail addresses of authors, an abstract, preferably no longer than 150 words, and a minimum of five key words for referencing.

The main body of the work should begin on a separate sheet than the title, abstract, key words etc. The author's names should not be included anywhere in the manuscript, except on the cover page. Please use Arial 12-point font for the title, which should be in bold upper and lower case.

Use Times New Roman 12-point font for the remainder of your article. Tables and figures should be 10-point font. Tables, drawings, diagrams and charts with a clear title should be presented and numbered with Arabic numerals. These materials should be placed in their exact positions in the manuscript. First level headings should be in bold upper case, and second level headings in bold upper and lower case.

Fully formatted manuscripts should be submitted electronically to editor.ijsre@gmail.com or editor@ijsre.com or to the managing editor admin@ijsre.com. They are to be single-spaced and justified on A4 paper only. Allow adequate "white space" in the margins to allow for reviewing (at least 1" on the four margins). Contributors are asked to use MS Word 5.0 or a later version. The main body of the e-mail message should contain the title of the article and the names, affiliations and addresses of all authors.

Style

Papers should be written in a clear, concise style appropriate to an international readership. Familiar technical terms may be used without explanation. Acronyms and abbreviations are likely to need full presentation at least once. Please write your text in good English (American or British usage is accepted, but not a mixture of the two). Authors should edit and proofread the language of their work before submission. Manuscripts may be between 5000-9500 words in length.

Manuscripts should be prepared in the latest [American Psychological Association \(APA\)](#) editorial style. References should relate only to material cited within the manuscript and should be listed in alphabetical order by authors' name, year of publication, complete title of the cited work, title of the source, volume, issue and pages cited. Please do not include any abbreviations. See the following examples:

- Single author periodical publication
Nwagwu, N. A. (1997). The Environment of Crises in the Nigerian Education System. *Comparative Education*, 33(1), 87-95.
- Multiple authors periodical publication
Maehr, M. L. & Midgley, C. (1991). Enhancing Student Motivation: A Schoolwide Approach. *Educational Psychologist*, 26(3 & 4), 399-427.
- Single author text (book) publication
Naylor, J. (1999). *Management*. Harlow: Prentice Hall.
- Multiple authors text (book) publication
Austin, H., Dwyer, B. & Freebody, P. (2003). *Schooling the Child: The Making of Students in Classrooms*. London & New York: RoutledgeFalmer.

Review process

The review process is expected to take approximately 8-12 weeks and the author will be notified of the status of the review as soon as the process is complete. All correspondence will be directed to the lead author of multi-authored manuscripts. It is the responsibility of the lead author to communicate the status of the review process and editorial recommendations to other contributing authors.

To ensure a high quality of published material, the [IJSRE](#) provides content and writing experts to review submitted manuscripts. Manuscripts are judged by the Editor-in-Chief for focus and format upon receipt. Suitable submissions are assigned at least two reviewers selected from the Review Board based upon the particular content involved. Both the original manuscripts and the reviewers' comments are sent to an associate editor for a final recommendation. Manuscripts with potential for publication will be returned to the author for revision, though requests for re-writes do not guarantee acceptance of the manuscript for final publication. Revised manuscripts will be reviewed again by the original review panel and one additional reviewer. Final recommendations will be based upon the quality of the revision and comments of reviewers and associate editors.

All contributions and correspondence should be addressed to:

Editor-in-Chief of International Journal Scientific Research in Education

Dr. Nwachukwu Prince Ololube
Department of Educational Foundations and Management
Faculty of Education, University of Education
P. M. B. 5047, Port Harcourt
Rivers State
Nigeria.
editor.ijsre@gmail.com, editor@ijsre.com, submission.ijsre@gmail.com

NOTE: IJSRE publication cost is covered by the author's (US\$200 for each paper within 9,500 words and \$50 for additional words/pages). IJSRE may grant discount fees for authors who are student. IJSRE publication fees are extremely competitive and are amongst the lowest of any journal offering open access publication. Fees are paid when your paper has been accepted after the blind review process is complete.

Call for Papers

The **International Journal of Scientific Research in Education (IJSRE)** publishes article that promotes the advancement of education at all levels, encompassing all domains of teaching and learning. The primary mission of the **IJSRE** is to serve as a medium for initiating, collaborating, analyzing, synthesizing and evaluating original and ground-breaking contributions to the theory, practice and research in education applicable to kindergarten, primary, secondary and higher education. The journal serves as a platform for researchers whose work is applicable to education, and for non-education researchers from other disciplines (such as political science, sociology, psychology, accounting, marketing, management, government policy, ICT etc) whose work can be applied to the education context. Thus the objective of this international journal is to disseminate scholarly papers from multiple disciplines as applied to education globally.

The [journal welcomes contributions](#) from an empirical and/or conceptual point of view. If you would like to submit a paper for consideration to **IJSRE**, please send an e-mail with the manuscript as a file attachment in Microsoft Word or RTF to the editor-in-chief editor.ijsre@gmail.com, editor@ijsre.com submission.ijsre@gmail.com or the managing editor admin@ijsre.com. Contributors will receive acknowledgement of the receipt of the manuscript within three working days. The main body of the e-mail message should contain the title of the manuscript and the names, affiliations and addresses of all authors. Manuscripts should be in English. The author's names should not be included anywhere in the manuscript, except on the cover page. Manuscripts must also be accompanied by an abstract of 100-150 words, succinctly summarizing the aims and objectives of the manuscript. Authors should kindly consult the [instructions for authors'](#) page for style and format requirements.

Papers are solicited that address these issues (but are not limited to):

Art of teaching	Instructional methodologies
Case studies from schools around the world	Instructional supervision
Change management and education quality	Knowledge and education
Citizenship education	Leadership in education
Classroom management	Lifelong learning and development of competences
Computers in educational administration	Management in higher education
Differing cultural perceptions of management in education	Management of e-education
Distance education and multimedia environments	Managing the curriculum
Early Childhood Education	Marketing in education
Economics of education	Method courses in education
Educational administration	Organizations as learning communities
Education environments (political, social, legal, cultural)	Policy analysis and evaluation of institutions
Educational leadership	Principles and practices of public administration
Educational policy and management	Principles of development administration
Educational systems planning/strategic planning	Public policies management
E-education / E-learning	Quality improvement
Entrepreneurial development	Research methodology (Quantitative/Qualitative)
Equity and education	School business administration
Finance and accountability in education	School effectiveness
Globalization and education	School plant planning and management
Human resources management	Special Education
Individual professional learning portfolio	Staff professional growth and development
Information Communication Technologies (ICT) in Education	Teacher education
Information systems for education and training support	Teacher effectiveness
Information systems management	Theories of educational management

Editor-in-Chief

Dr. Nwachukwu Prince Ololube
Department of Educational Foundations and Management
Faculty of Education
University of Education, P. M. B. 5047, Port Harcourt, Nigeria.
editor.ijsre@gmail.com or editor@ijsre.com

Associate Editors

Asso. Prof. Princely Ifinedo
Cape Breton University, Canada
ifinedo@yahoo.com or princely_ifinedo@cbu.ca

Dr. Daniel Elemchukwu Egbezor
University of Port Harcourt, Nigeria
deegbzor@yahoo.com

Advisory/Editorial Board members

Dr. Richard Wamai
Harvard University, USA
rwamai@hsph.harvard.edu

Dr. Ravinder Rena
Eritrea Institute of Technology, Eritrea
drravinderrena@gmail.com

Dr. Pedzani Perci Monyatsi
University of Botswana, Botswana
monyatsip@mopipi.ub.bw

Prof. David A. Adewuyi
Albany State University, USA
david.adewuyi@asurams.edu

Dr. Chi Kim Cheung
The University of Hong Kong, Hong Kong
cheungck@hkucc.hku.hk

Dr. Nneka Nora Osakwe
Albany State University, USA
nneka.osakwe@asurams.edu

Dr. Dwedor Morais Ford
Winston-Salem State University, USA
forddw@wssu.edu

Dr. Reggie Davidrajuh
University of Stavanger, Norway
reggie.davidrajuh@uis.no

Dr. Bhattacharya Maumita
Charles Sturt University, Australia.
maumita.bhattacharya@ieee.org

Review Board Members

Dr. Chi Kim Cheung, The University of Hong Kong, Hong Kong

Dr. Dwedor Morais Ford, Winston-Salem State University, USA

Prof. Faith-Michael Uzoka, Mount Royal University, Calgary, Canada

Dr. Nneka Nora Osakwe, Albany State University, USA

Prof. Charles Korede Ayo, Covenant University, Ota, Nigeria

Dr. Pedzani Perci Monyatsi, University of Botswana, Botswana

Asso. Prof. Princely Ifinedo, Cape Breton University, Canada

Dr. Ravinder Rena, Eritrea Institute of Technology, Eritrea

Dr. M. Azath, VMKV Engineering College, India

Dr. Reggie Davidrajuh, University of Stavanger, Norway

Dr. Richard Wamai, Harvard University, USA

Prof. Charles Uwadia, University of Lagos, Nigeria

Dr. Alafuro Epelle, Rivers State University of Education, Nigeria

Dr. Smita Rajpal, ITM College of Engineering and Technology, Gurgaon

Dr. Bhattacharya Maumita, Charles Sturt University, Australia.

Dr. Wichian Sittiprapaporn, Mahidol University, Thailand

Asso. Prof. Norzaidi Mohd Daud , Universiti Teknologi MARA Malaysia

Dr. Daniel N. Nte, NOVENA University, Nigeria

Asso. Prof. Alexander E. Sobolev, Tver State Technical University, Russia

Dr. Erlane K Ghani, Universiti Teknologi Mara, Malaysia.

Mohd Nazri Ismail, Universiti Kebangsaan Malaysia

Prof. Arul Lawrence Selvakumar, RCE & Technology, Thrissur, India

Prof. C. Suresh Gnana Dhas, Vel Tech Multitech, India

Dr. Mahdi Salehi, Zanzan University, Iran

Dr. Mohamad Noorman Masrek Universiti Teknologi, Mara, Malaysia

Dr. Alakanani Alex Nkhwalume, University of Botswana, Botswana.

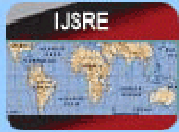
Dr. Erlane K Ghani, Universiti Teknologi, Mara, Malaysia

Dr. Shamira Malekar, Aruna Manharlal Shah's Institute of Management and Research, India

Dr. Latisha Asmaak Shafie, Universiti Teknologi MARA Perlis, Malaysia

CONTENTS

- 142 Religious Freedom in Educational Institutions: Do Students Know their Rights?**
Rammolai, M.
- 151 Investigating Students' Achievement in Mathematics through Non Technological Game Based Teaching**
Mustafa, J., Khan, A., & Ullah, A.
- 165 Understanding the Social Studies Teachers' Experiences: Conceptions of Citizenship in Botswana**
Mhlauli, M. B.
- 181 The Effects of Use of Learning Strategies Training on Students Foreign Language Vocabulary Learning**
Fallahchai, R.
- 190 Training and Availability of Skills for Sustenance of Standard in Classroom Assessment Practices among Lesotho Teachers**
Phamotse, T., Nenty, H. J., & Odili, J. N.



Religious Freedom in Educational Institutions: Do Students Know their Rights?

Mogadime Rammolai¹

Department of Agricultural Economics Extension and Education
Botswana College of Agriculture
mrammola@bca.bw

Abstract

The constitution of Botswana recognizes the right to religious association in all spheres of life this freedom is reinforced by Botswana's Vision 2016, which contemplates a moral and tolerant nation that no individual is discriminated. However, religious liberty could be infringed in educational institutions due to student's ignorance of the existence of legal instruments. This paper investigates religious discrimination students may experience within institutions of higher learning. A questionnaire was used to collect data from the Botswana College of Agriculture (BCA) students for this descriptive survey. The analysis revealed that students are often ignorant of their fundamental religious rights because there are no students' charters that articulate these and there is no forum to report infringements. Conclusions made suggest students need to be informed about their fundamental rights to realize the benefits of a democratic country. In addition, worship days recognized nationally and endorsed by the college should not be used to examine students for this violates some student's religious freedoms.

Keywords: Religious freedom, religious discrimination, religious liberty, Vision 2016 and educational rights

Reference to this paper should be made as follows:

Rammolai, M. (2011). Religious freedom in educational institutions: Do students know their rights? *International Journal of Scientific Research in Education*, 4(3&4), 142-150. Retrieved [DATE] from <http://www.ij sre.com>.

INTRODUCTION

The government of Botswana has invested heavily in the provision of education and is committed to Vision 2016 which was initiated in 1996 where Botswana should be among many others, an educated, an informed and a tolerant nation (National Development Plan 9 2003/04- 2008/09). The government of Botswana has invested heavily in the provision of education for its citizens as evidenced by the ministry of education's budget allocations that over the last twenty years had been over 20 %, but in the 2002/2003 financial year it soared to a record 28% (National Development Plan 9 2003/04-2008/09). Botswana's commitment to educating the nation is also encapsulated in Vision 2016. The vision anticipates that Botswana would be an educated, an informed and a tolerant nation. However, the provision of education to the nation has other challenges that have to be met to satisfy the learners in all spheres of their lives. Among such challenges is the learners' religious freedom, which cannot be ignored, as one of the democratic principles that Botswana is committed to uphold. Educational institutions are not religion free zones neither should these institutions discriminate against religious expression as religion is part of our traditions.

The constitution of Botswana under section 3 provides for freedom of conscience, of expression and assembly and association (ICERD, 2005). This provision is in line with article 18 of the Universal Declaration of Human Rights that also emphasises the right to freedom of thought, of conscience and of religion to all humanity (United Nations, 1948).

Administrators and students in educational institutions throughout the world have to avoid conflicts between academic requirements and the religious rights of students because of pluralistic faiths within societies. However, the 1st Amendment of the US constitution seeks to maintain church-state separation and guarantees that teachers and principals of public schools are to be neutral in religious issues; “they may not promote a particular religion as being superior to any other; they may not promote religion in general as superior to a secular approach to life; they may not promote secularism in general as superior to religious approach to life; they may not be antagonistic to religion in general or a particular religious belief in particular, and they must neither advance nor inhibit religion” (US Federal Guidelines for Religious Expression in Public Schools). This interpretation of the 1st Amendment to the US constitution could serve to further reinforce the separation of church and state in Botswana particularly in a country that is nominally Christian and where prejudice against other faiths may exist even though there are legal safe guards. Botswana are generally not a litigable society and have the propensity to bear discriminatory instances without recourse to the law. This could happen in educational institutions, as students may not understand how far the constitution safeguards their religious freedoms in education.

The constitutional provisions for religious freedom in Botswana have to be interpreted to set cogent guide of the law regarding religious freedom in the schools because teachers / educators may impose discriminatory practices that may prejudice students’ enjoyment of religious freedoms in schools.

Acts of religious intolerance in some countries around the world in violation of article 18 of the Universal Declaration of Human Rights make void the principles of democracy or even provide a paradigm shift in matters of religious freedoms of the marginalised in our societies. The French governments’ banning of the wearing of religious apparel or symbols in state-run schools serve to illustrate this point. This law banned large crosses, Jewish skullcaps, Sikh turbans and Muslim headscarves (Colvin, 2004). The government argued that the move was not a restraint on religious freedoms of individuals, but the preservation of the secular nature of the state and that “it is not a violation of religious freedom because the ban extends to prominent display of religious symbols by members of all faiths” (Colvin, 2004). Perhaps if it singled out certain faiths the French government’s law could be considered discriminatory, but laws could be inclusive and still violate religious freedoms of all within a society. In spite of justification by its proponents, this law is a violation of the right to religious practice of all religious faiths in France.

Religious intolerance and discrimination still exist in many parts of the world today. In 1991, the International Federation of Human Rights approved an agenda that sought to eliminate all forms of discrimination of religion (Murano, 1988). In spite of all these efforts, religious intolerance and discrimination still prevail in many countries around the world in educational institutions.

Purpose and Objectives

This study sought to determine the degree to which students feel free to exercise their religious freedoms at tertiary level education. The specific objectives of this study were to:

1. Describe the respondent selected personal demographic characteristics
2. Determine the respondent’s level of awareness about religious freedom at BCA.
3. Determine the extent to which lecturers’ perceptions hinder religious freedom of their students.
4. Determine religious freedom facilitation by the BCA administration.
5. Determine how students’ social expectations hinder religious freedom among themselves.

LITERATURE REVIEW

Religious freedom is a vital part of every nation even though in some parts of the world it is restricted and controlled closely by the state. In democratic countries, religion and politics are separate. In these countries, the constitution guarantees the basic religious freedoms for its citizens. The United States of America guarantees religious freedom through its First Amendment. This review is based on incidents of religious discrimination in educational settings throughout the world that impinge on religious freedoms in educational institutions because of misinterpretations of constitutions or mere oppression by countries.

The First Amendment of the Constitution of the United States (US) in the “Establishment Clause” states, “Congress shall not make no law respecting an establishment of religion” (Freedom of religion in the United States). This law when interpreted correctly means that the federal government is prohibited from endorsing any religion or forming any national church and this restriction is applicable to government as well. The “Free Exercise Clause” prohibits Congress from prohibiting the free exercise of religious practices, but this free exercise is not total as the court stated that “laws are made for the government of actions ...they cannot interfere with mere religious belief and opinions, they may with practices” (Federal Guidelines for Religious Expression in Public Schools, 2005). This prohibition protects religious beliefs, but does not protect the practice that is considered inappropriate and illegal by law.

Even though constitutions in democratic countries throughout the world have made it their express intention to safe guard religious freedom in all its forms there are cases in educational institutions that have been taken to court as result of religious violations. In the US, the law states that no student should be harassed by teachers for his/her religious faith. However, in March 2005 a fourth grader Muslim pupil filed a religious harassment claim with the Civil Rights Division against the Cape Henlopen, Delaware School District in which the school was ordered to introduce religious tolerance programmes for both teachers and students (United States Department of Justice). Religious dress is yet another area in which discrimination exists in schools. Some governments like the Republic of France do not allow Muslim students to wear the headscarf because of terrorism fears. In the US, there was a case between Hearn and United States versus Muskogee Public School District. The Civil Rights Division intervened in the case, in which a Muslim girl was told she could not wear a headscarf required by her religion to school. It was found out that the school was enforcing its uniform policy inconsistently and the case was settled by consent decree in 2004 (United States Department of Justice, [n.d]). In some counties, these kinds of cases would not have even been taken to court even if religious violations have occurred. If such cases are recorded in US courts known for their laws regarding church and state separation then other countries that have similar laws cause some problems for minorities in such societies particularly if they do not have the inclination towards challenging such religious violations.

The problem of educational rights violations based on religion in the US has been addressed during Bill Clinton’s presidency in 1995 and have been updated to reflect some court decisions then. Among other guidelines that govern religious expression in public schools included the following; local school authorities have “substantial discretion” to impose rules of order, but may not structure the rules to discriminate against religious activity or speech; teachers and administrators are prohibited from either encouraging or discouraging religious activity and from participating in such activity with students, students may display religious messages on clothing to the same extent they may display other comparable messages”(Simpson 2000, p. 1). These guidelines reinforce religious expression as they help teachers and students understand the extent of their religious freedom as interpreted from the first amendment. In countries where no such guidelines exist, problems of violations may start to manifest themselves in schools as teachers could interpret the laws to oppress students of other faiths or minorities.

The South African constitution safeguards the religious freedoms of its nationals without discrimination; this protection also includes educational institutions that could be prone to religious denial of religious freedom in other countries. The South African Policy on Religion and Education promotes the role of religion in education, there is a recognition that “... the public school has an educational; responsibility for teaching and learning about religion and religions ... but it should do so in ways that are different from the religious instruction and religious nurture provided by the home and family...” (National Policy on Religion and Education 2003, p. 2). These similar principles safeguard religious freedom in education in Botswana that is espoused through the Education Act (Government Printer). Even though these laws exist, discrimination on religious grounds is always evident in schools where a framework of religion and education has not been fully understood. Nine boys in South Africa were suspended from their school for wearing dreadlocks as they claimed that to be Rastafarianism adherents that requires them to grow dread lock hair-style (Religious Freedom Report 2003). They were later reinstated by the Department of Education that stated that they should be allowed to wear dreadlocks if they belong to the Rastafarian religion. The ruling hinged on the National Policy on Religion and Education based on core values that include equity, tolerance, multilingualism, openness, accountability, and social honour (Religious Freedom Report, 2003).

METHODOLOGY

Study Design

The study was a descriptive survey carried out at the Botswana College of Agriculture in Sebele, Botswana.

Study Population

This study adopted a quantitative research paradigm to determine religious freedom of students at the Botswana College of Agriculture (BCA). The population for this study consisted of first year students at BCA both pre-service and in-service. A total of 218 students formed the population for this study. Among the population, only 105 responded to the questionnaire.

Research Instrument

The students had to respond to the questionnaire by ticking the statement they preferred on a five point likert scale, graduated as follows; 1= Strongly Agree; 2 = Agree; 3 = Not sure; 4 = Disagree and 5 = Strongly Disagree. Percentages would be used to report and interpret the data. On the other hand, using percentages, 50% and above would denote agreement with the statements while below 50% would denote disagreement with the statements. The first eight questions determined the student's perceptions of religious freedom. The second category of questions determined the student's perceptions about hindrances on religious freedom (seven questions). The next category of questions determined student's perceptions about the extent to which the BCA Administration facilitated religious freedom (five questions) and, the last category determined student's exercise of religious freedom among the student body (four questions).

Sampling Technique

A convenient sampling technique was used because the researcher had access to all first year students who have registered for Communication and Study Skills (GEC 112), a common course for all first year students at BCA. Focus on these students was precipitated by the researcher's interest in their transition from secondary school to an institution of higher learning that is radically different from high school. Even though the results cannot be generalized (Bryman & Bell, 2003) to the whole population of students at BCA, "but it could provide a springboard for further research or allow links to be forged ... [with future research into this area] (Bryman & Bell, 2003, p. 198).

Validity

Specialists in the subject matter within the AEE department were used to validate the questionnaire before it was administered to the respondents. The feedback received was thorough and sufficient to enhance the administration of the questionnaire.

RESULTS AND DISCUSSION

Demographic Characteristics of the Respondents

Demographic characteristics of respondents are displayed in Table 1. A larger percentage of them were males (60%) and (40%) females. The majority of respondents were single at (87.7 %) and a minority was married at (13.3%). A larger percentage of the respondents were aged between 18–20 years at (67%) followed by those between 21- 28 years at (25.7%) the rest of the students were aged between 33-36 years at (8.6%) and the older respondents from 40-41 years at (1.9%). A larger percentage of the respondents are studying for degree programmes in Agriculture Education (17.1%), Crop Science (15.2%), BSc Agriculture (14.3%), BSc Animal Science (12.4%) and the rest are studying for Higher Diplomas in Agriculture, Education, Forestry and Range. The respondent's religious orientation reveals a dichotomy between Christians in the majority at (83.8%) and non-Christians at (16.2%). Botswana is predominantly a Christian country with other religions like Islam and traditional religions in the minority. This accounts for non-Christians making a smaller percentage in the sample, refer to table 1 below.

Determination of student's perceptions of religious freedom

Table 2 below reveals student's perceptions of religious freedom. An overwhelming majority of the respondents (86%) agreed with the statement "religious freedom means that I could worship what I want without coercion from anybody." This shows that students understand that every Motswana is free to worship what they want as provided for by the constitution. The second statement "religious freedom means that my religion is more

important than others” received 77.4% disagreement. This indicates that students are aware of the fact that all are equal before the law regardless of their religious persuasion. The third statement states that “my religious freedom has no limits imposed by my institution” received 73.3% agreement. This reveals what the students have experienced since they might not have been asked by the administration to make a choice that is religiously restrictive since enrollment into the college. The fifth statement “my religious freedom is protected by the constitution of my country– Botswana” received 72.4% agreement which reveals a thorough understanding that the constitution of Botswana proffer to its citizens religious liberty. About 45% of the respondents disagreed with the statement my “my religious freedom rights are clearly described by my institution in student charters (BCA Prospectus). It is interesting to observe that 30.5% of the respondents were not sure about the statement. This uncertainty might be due to the fact that the respondents are still new to the college and do not fully understand their religious rights. Statement number eight “my religious freedom gives me the liberty to do what I want” received 46.7% disagreement from the respondents indicating an understanding that religious freedom does not provide a license to do what one wants in the name of religion. It also indicates that students would not be inclined to acts of religious intolerance even though 46.7% agreed with the statement. It is therefore clear from these statements that first year students at Botswana College of Agriculture understand their religious freedom.

Table 1: Demographic Characteristics of the respondents

Characteristics	Frequency (f)	Percentage (%)
Gender		
Male	63	60
Female	42	40
Total	105	100
Program of study		
BSc Agric Education	18	17.1
BSc Agriculture	15	14.3
BSc Animal Science	13	12.4
BSc Crop Science	16	15.2
BSc Agricultural Mechanization	10	9.5
BSc Soil and Water Conservation	9	8.6
High Diploma Agriculture	4	3.8
High Diploma Forestry and Range Ecology	5	4.8
High Diploma Horticulture	1	1.0
High Diploma Animal Health and production	6	5.7
Total	105	100
Age		
18 -20	67	63.8
21-28	27	25.7
33 - 36	9	8.6
39-40	2	1.9
Total	105	100
Marital Status		
Married	14	13.3
Single	91	86.7
Total	105	100
Religious Orientation		
Christian	78	83.8
Non-Christians	17	16.2
Total	105	100

Table 2 Students' perceptions of religious freedom

	SA	A	NS	D	SD
Religious freedom means I could worship what I want without coercion from anybody	58% (55.2)	28% (26.7)	1% (1.0)	6% (5.7)	3% (2.9)
Religious freedom means that my religion is more important than others'	5.7% (6)	10.5% (11)	4.8% (5)	26.7% (28)	51.4% (54)
My institution safeguards my religious freedom.	1.0% (1)	11.4% (12)	28.6% (30)	17.1% (18)	4.8% (5)
My religious freedom has no limits imposed by my institution	13.3% (14)	49.5% (52)	22.9% (24)	6.7% (7)	3.8% (4)
My religious freedom is protected by the constitution of my country- Botswana	24.8% (26)	47.6% (50)	18.1% (19)	5.7% (6)	2.9% (3)
My religious freedom rights are clearly described by my institution in student charters(BCA prospectus)	7.6% (8)	14.3% (15)	30.5% (32)	19.0% (20)	26.7% (28)
My religious freedom gives me the liberty to do what I want	18.1% (19)	28.6% (30)	10.5% (11)	30.5% (32)	11.4% (12)

- Frequencies are recorded in parenthesis

Determination of student's perceptions about lecturers' hindrance of their religious freedom

Table 3 below reveals the respondents perceptions about the lecturer's hindrance of their religious freedom. "Lecturers disregard my worship day; I have to write tests and exams on Saturdays and Sundays and on other religious days" the statement received a total of 67.6% agreement by students. Even though this could be happening, it does not however mean that the college endorses a policy to have students tested on their religious worship days. The Religious Obligations regulation (1.10.2) provides for special examinations for students who are unable to sit for exams because of religious reasons (Botswana College of Agriculture prospectus 2010/2011). The regulation states "some written examinations will be held on *Saturdays* and *Sundays* where this is unavoidable. Under an existing adhoc arrangement, candidates unable (for religious reasons) to write examinations at the scheduled time may apply to have their examination time re-scheduled." This indicates that lecturers and students are not conversant with this regulation that is meant to protect students against religious infringement and academic freedom.

"Lecturers prohibit the wearing of religious items in their classes; for example, religious badges and other such items from our religious denominations." A total of 71.4% of the respondents agreed with the statement. This statement reveals that lecturers might be hindering the religious freedom of expression that is contrary to the constitution of Botswana. This therefore reveals a state of religious intolerance by the lecturers at BCA. But let it be noted there has never been reports of such cases of religious intolerance by students to the administration. Perhaps these are just isolated cases first year students encounter with various lectures through the departments at BCA.

"Lecturers criticize our religious persuasions as inferior." A total of 60% of the respondents agreed with this statement. When there is exchange of ideas with students on religious issues by lecturers, they should not explicitly criticise student's religious persuasion as this could infringe student's religious freedom. Another religious hindrance students perceived is that "lecturers influence the administration to disregard our worship days as they test us on such days" A total of 62.9% of the respondents disagreed with this statement. This means that lecturers do not influence the administration to disregard student's worship days nor test them on such days. A total of 74.2% of the respondents agreed with the statement that "lecturers do not have to teach that any religious group is superior." This clearly indicates the right understanding that religion and education should be kept separate and education should not influence religion or the other way round. An overwhelming majority of the respondents 83.8% agreed with the statement that "lecturers do not have to show intolerance to any religious following within the teaching and learning situation." This indicates a deeper understanding by the respondents that religious intolerance could be a hindrance to religious liberty within educational settings. Another overwhelming majority of respondents 84.7% agreed with the statement "lecturers have to be supportive of students' religious freedom in all situations." The support of religious freedoms of students by

lecturers could engender a special relationship between them that could facilitate greater understanding between the two groups in religious issues.

Table 3: Perceptions of religious freedom hindrances

	SA	A	NS	D	SD
Lecturers disregard my worship day; I have to write tests and exams on Saturdays and Sundays and on other religious days	13.3% (14)	13.3% (14)	2.9% (3)	37.1% (59)	30.5% (32)
Lecturers prohibit the wearing of religious items in their classes; e.g. religious badges and other such items from our denominations	8.6% (9)	7.6% (8)	12.4% (13)	35.2% (37)	36.2% (38)
Lecturers criticize our religious persuasions as inferior.	5.7% (6)	14.3% (15)	19.0% (20)	30.5% (32)	29.5% (31)
Lecturers influence the administration to disregard our worship days as they test us on such days	3.8% (4)	11.4% (12)	20.0% (21)	38.1% (40)	24.8% (26)
Lecturers do not have to teach that any religious group is superior	39.0% (41)	35.2% (37)	8.6% (9)	6.7% (7)	7.6% (8)
Lecturers do not have to show intolerance to any religious following within the teaching and learning situation	55.2% (58)	28.6% (30)	7.6% (8)	1.9% (2)	5.7% (6)
Lecturers have to be supportive of students' religious freedom in all situations	37.1% (39)	47.6% (50)	9.5% (10)	1.9% (2)	3.8% (4)

- Frequencies are recorded in parenthesis

Determination of religious freedom facilitation by the BCA administration

Table 4 presents results based on the administration's (Botswana College of Agriculture) facilitation of student's religious freedom. It is interesting to note that the students disagreed with most of the statements and agreed with only one statement that states that "the BCA administration denies us the opportunity to use their facilities for religious purposes." This statement received an overwhelming majority of 84.7%. This perception by the respondents contradicts the practice at BCA as the administration allows students to use certain halls within the college for religious purposes by students of all religious persuasions. The respondents went on to disagree with the statement "the BCA administration sponsors some religious groups over others." This is indeed true because the administration does not favour or support any religious group over others this could be perceived as unfair and prejudicial to other groups. The respondents also disagreed with the statement that "the BCA administration interferes with our religious freedom by not providing guidelines regarding religious freedom within the college." A total of 52.4% of the respondents disagreed with this statement. Even though no religious freedom guidelines are provided by the Botswana College of Agriculture, the respondents did not perceive that as a hindrance to their religious liberty because they could articulate their religious freedoms freely. The respondents disagreed 65.7% with the statement that "the BCA administration prohibits the expression of religious freedom by not allowing the wearing of religious regalia." It is clear that the BCA administration facilitates religious freedom of the students in all the chosen areas discussed above. However, the students perceived a constraint in the use of college's facilities for religious purposes.

Table 4: BCA administration facilitation of students' religious freedom

	SA	A	NS	D	SD
The BCA administration denies us the opportunity to use their facilities for religious purposes	37.1% (39)	47.6% (50)	9.5% (10)	1.9% (2)	3.8% (4)
The BCA administration sponsors some religious groups over others	2.9% (3)	5.7% (6)	18.1% (19)	36.2% (38)	28.6% (30)
The BCA administration interfere with our religious freedom by not providing guideline regarding religious freedom within the college	5.7% (6)	6.7% (7)	34.3% (36)	27.6% (29)	24.8% (26)
The BCA disregards our worship days by scheduling final exams during those days	5.7% (6)	21.0% (22)	30.5% (32)	26.7% (28)	15.2% (16)
The BCA administration prohibits the expression of religious freedom by not allowing the wearing	3.8% (4)	4.8% (5)	22.9% (24)	38.1% (40)	27.6% (29)

- Frequencies are recorded in parenthesis

Determination of how student’s social expectations hinder religious freedom

Table 5 presents perceptions of student’s exercise of religious freedom among themselves (the student body). The respondents here disagreed with only one statement that states that, “being voted into any SRC position means a student should hold religious beliefs that others agree with.” A total of 68.5% of the respondents disagreed with the statement. This shows that students appreciate their religious and political beliefs are separate and independent of each other and should not be used as criteria for a political position in the Student Representative Council.

They agreed with the statement that said “if a student’s religious freedom has been violated by other students, he/she has to report the incident to the college authorities.” A total of 54.3% agreed with the statement. This indicates that student’s religious freedom should not be violated with impunity, the case should be reported and appropriate steps taken. They also agreed 55.7% with the statement that said “students do not report religious freedom violations because they do not know what religious freedom they have.” Students have to be given guidelines about issues pertaining to religious violations so that they could exercise their religious freedom unequivocally.

Table 5: Perceptions of exercise of religious freedom among fellow students

	SA	A	NS	D	SD	Mean	SD
Some students are intolerant of others’ religious beliefs	22.9% (24)	39.0% (41)	9.5% (10)	7.6% (8)	2.9 (3)	1.74	1.248
Being voted into any SRC position means a student should hold religious beliefs that others agree with	3.8% (4)	10.5% (11)	16.2% (17)	31.4% (33)	37.1% (39)	3.85	1.199
If a student’s religious freedoms have been violated by other students, he/she has to report the incident to the college authorities	16.2% (17)	38.1% (40)	28.6% (30)	10.5% (11)	5.7% (6)	2.49	1.092
Students do not report religious freedom violations because they do not know what religious freedom they have.	25.7% (27)	30.0% (41)	21.0% (22)	7.6% (8)	5.7% (6)	2.26	1.127

- Frequencies are recorded in parenthesis

CONCLUSIONS

The following conclusions have been reached from the study:

1. A larger percentage of the respondents are male and most are religious.
2. Students’ religious freedoms are clearly articulated by the institution. This is not evident as the college does not have religious freedom policy in place, neither do the students have any student charters in place to regulate religious liberty.
3. There is an understanding that religious freedom does not give any one the freedom to do what he /she wants. Religious tolerance is an understood reality among the students.
4. There are some perceived religious hindrances experienced by students at Botswana College of Agriculture:
 - a. Students’ religious freedom is curtailed by the lecturers, for they use student’s worship days like Saturday and Sunday for writing tests. However, there is a regulation that takes into account special religious days that students could ask for a waiver to sit for examinations on religious grounds.
 - b. Student’s religious freedom of association is curtailed by the administration, as students are not allowed to use BCA facilities for religious purposes.
5. Students are protected by the religious obligations regulation not sit for examinations that fall on Saturdays or Sundays, but could have the examination time rescheduled. However, it is clear that both lecturers and students need to be conversant with this regulation to avoid infringement of student’s religious freedom.
6. Students are aware that their religious orientation does not make them more important than other students.
7. Students realize that lecturers should not exhibit religious intolerance towards them and that they should be supportive of student’s religious freedoms.
8. Students acknowledge that there is a degree of religious intolerance among the student body.

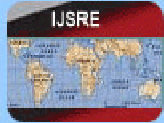
9. Students acknowledge that cases of religious violations among students should be reported to the administration and that their religious life should be separate from their political inclinations.

REFERENCES

- Botswana College of Agriculture Prospectus. (2010/2011).
- Bryman, A., & Bell, E. (2003). *Business research methods* (2nd ed.) Oxford University Press, Oxford
- Federal Guidelines for Religious Expression in Public Schools (2005). Retrieved August 31 2009, from www.adherents.com/misc/fed_guidelines.html
- Freedom of religion in the United States. Retrieved August 26 2009, from <http://en.wikipedia.org/wiki/freedom>
- Government Printer (n.d). *Education, Chapter. 58:01*. Gaborone; Botswana Government Printer.
- Murano, G. (1988). Religious freedom and european institutions. Retrieved June 01 2009, from <http://www.religiousfreedom.com/conference/Germany/>
- National Development Plan 9. (2003/04-2008/09). Ministry of Finance and Development Planning. Gaborone: The Government Printer.
- National Policy on Religion and Education (2003). Retrieved November 09 2009, from www.wced.wcape.gov.za/document/religion
- Simpson, K. (2000). Federal Guideline for Religious Expression in Public Schools, Retrieved August 31 2009, from http://www.adherants.com/misc/fed_guidelines.html
- United Nations (1948). *Universal Declaration of Human Rights*. Retrieved August 31 2009, from <http://www.un.org>
- United States (n.d).Department of Justice, Religious Discrimination in Education. Retrieved August 31 2009 <http://www.usdoj.gov/crt/religdisc//ff>
- Viljoen, C. T., & van der Walt, J. L. (2003). Being and becoming: Negotiations on educational identity in South Africa. *South African Journal of Education*, 23(1), 13-17

 © IJSRE

ⁱ Dr. Mogadime Rammolai is a lecturer in the department of Agricultural Economics Extension and Education. His research interests revolve around educational issues pertaining to tertiary institutions, social and developmental issues related to education. I lecture in the following areas; Sociology of Education and Communication and Academic Literacy Skills. I am also interested in collaborating with other researchers in the field of educational. Email: mrammola@bca.bw



Investigating Students' Achievement in Mathematics through Non Technological Game Based Teaching

Javed Mustafaⁱ

Senior Science Teacher in Elementary &
Secondary Education Peshawar, KPK, Pakistan
jm_khattak@yahoo.com

Alam Khanⁱⁱ

Department of Education
International Islamic University Islamabad, Pakistan

&

Atta Ullahⁱⁱⁱ

Department of Education
International Islamic University Islamabad, Pakistan

Abstract

This paper shows the results of an experimental study about games-based teaching approach, carried out in a third world country. This paper describes how a non-technological game "Guess and Tell" was used as a source of teaching mathematical concepts of 'Mean' and 'Mode' to grade eight children. The paper focused on the questions (1) is the game 'Guess and Tell' effective in improving students' achievement? (2) has the game different effect on male and female' achievement? Based on the results of this study, it can be said that non technological games can play a vital role in improving students' achievement in mathematics and it is equally important for male and female students. The pre-test and post-test results of this research reveal that variation exists in the achievement level of male and female students but these are not statistically significant. On the basis of the findings, the researcher suggests, to investigate more dimensions in using the game, 'Guess and Tell' in the class room.

Keywords: Games based teaching, Guess and Tell Game, Non-Technological game, Students' Achievement

Reference to this paper should be made as follows:

Mustafa, J., Khan, A., & Ullah, A. (2011). Investigating students' achievement in mathematics through non technological game based teaching. *International Journal of Scientific Research in Education*, 4(3&4), 151-164. Retrieved [DATE] from <http://www.ijres.com>.

INTRODUCTION

Learning is a complex process due to the complexity of human nature. Rose and Conner (2006) stated that, "learning is a discursive activity that involves social and material resources. Difference in the human nature causes different learning requirements for learning. Different people have different perceptions and process information differently (Miller, 2001). Different students have different learning styles. In order to improve students' performance having various learning styles, there is often a need .to explore various learning opportunities which can address the

complexity of learners in the classroom to capture pupils' interest and purpose and it should be for fast, average and slow learners (Ediger & Rao, 2000).

Learning occurs with the utilization of various resources and utilization of resources is the ability of a person (Lujan & DiCarlo, 2006). The increase in learning happens when the student is enjoying the process (Miller, 2001). The guarantee for real learning is the creation of joy, excitement, and love for learning and these are created through games and it is a way of learning (Haramati, 2000).

Through games-based teaching education can be imparted affectively in all fields particularly in mathematics, as "games have educational values and are played for enjoyment and pupils enjoy games in mathematics" (Ediger & Rao, 2000, p.152). Games are transformed in a particular form when they are used for educational purposes. They are still games but they are used for specific aim to learn particular things, and to develop certain strategies or abilities, (Barbara, Mattson & Chu, 2008). Designing educational games for facilitating games-based learning is highly emphasized in the literature (O'Neil & Fisher, 2004).

Games can be used as a tool in the classroom to engage students. As according to Corti (2006), games engage people psychologically and physiologically and the people engaged in the games can have emotional experiences. Games are the ideal tool for imparting education to students and are helpful in accommodating multiple learning styles and offer decision and interactive context (Holland, Jenkins, & Squire, 2003). Games are means for promoting the interaction, increasing motivation, and advancing students' thinking skills (McFarlane, Sparrowhawk & Heald, 2002).

Games help to create and provide an environment for the users in which they learn the process of explanation, description, construction, assessment, and the evaluation of advanced problem solving skills (Corti, 2005). From the above discussion, it can be concluded that games are considered to be an unavoidable factor for enhancing and accelerating the teaching learning process. With the acceleration of teaching learning process, students' achievement will also be improved in all their respective subjects including mathematics. Here in this paper, achievement in the subject of mathematics refers to the academic performance of students in solving the mathematical questions by the concepts presented in their mathematics textbooks.

Regarding the role in teaching learning process, Barbara & Chu (2008) stated, "Games are effective tools for learning because they offer students a hypothetical environment in which they can explore alternative decisions without the risk of failure". Games are the sources of students' engagement, which can be valuable, and they have a role in learning (Eck, 2006). Research studies support that games can be used effectively for instructions in the teaching learning process (Squire, 2005, Shaffer, 2006). An experimental study conducted by Chuang & Chen (2009) shows that the computer based video games can promote students' learning and performance.

Need of Games-based teaching and learning

It is the age of advanced technology. Whenever there is discussion about games-based teaching and learning, it is considered as technological games or computer games. Technological games are such games in which electronic devices in any form are used. On the other hand such games, in which there is no use of any kind of electronic devices in any form are considered as non-technological games. Here in this paper the game, "Guess & Tell" (Appendix A) is a non-technological game.

Technological Games

The games played through technology in the classroom have their own significance and advantages. For instance, video games have great benefits in the classroom and various subjects can be taught through video simulation games (Deubel, 2006). Such video games provide opportunities to students for exercising practice skills in the classroom. These are helpful for students, in exploring the solution of the new problems they face in life. Creativity of students can be accelerated and sound learning principles can be utilized through good video games (Gee, 2003, 2007).

Various studies in different perspectives had been conducted for evaluation of games-based teaching learning process (see e.g. Lisi & Wolford, 2002, Funk, 2001). Most of the evaluation of games based teaching and learning emphasized the psychological and behavior aspects of learners (Provenzo, 1991, Squire, 2003). Whatever the aspects may be, besides the benefits of the games based teaching, numerous other critics have also criticized it (Connolly, Stansfield & Hainey, 2007). For example Gros (2007) reports that playing videogames provide many undesirable things to learn.

These varied opinions about games-based teaching and learning realize the need to research various dimensions and methods in which the integration of games in the learning process can be possible (Eck, 2006). Some of the researchers justify the need of research in regard to games based teaching and learning and are of the opinion that the evaluation of the effect of the games-based learning approach is limited and in many cases nonexistent (Connolly, Stansfield, & Hainey, 2007). Most of the studies carried out about evaluating and searching out the effect

of games-based teaching and learning are in the context of technological games. No efforts have been made regarding the studies about the effectiveness of non-technological games.

Non-technological games

In fact the need and benefits of technological games will always exist and it is fruitful in teaching learning process. However, ground reality shows that in this global world technological games are not available everywhere. Millions of people in this global village lack basic facilities like water, food, shelter, and electricity and obviously there will be limited or no chance of incorporating technological games for teaching learning process.

It can be said that in spite of all the benefits of technological games, being the citizens of a global village, it is the challenge for all those who are involved in teaching learning process to think about those students who have no technological facilities. In such a situation the need of games with out technology will always exist. So the non-technological games of low cost or no cost can meet the needs of those students who have no technological games in schools. Particularly when non-technological more specifically non-computer based games have the same potential function as of the computer based games (Hamey, 2003).

Generally, it is believed that through game-based teaching the learner needs to be engaged personally in performing the activities himself/herself. The learner should not receive readymade results presented by some one else. Rather he/she should be directly involved in the process for exploring the results (Bransford, Brown & Cocking, 2002). This non-technological game “Guess & Tell” was developed for the purpose of engaging learner himself/herself in performing the activities. The game developed was the modified form of the traditional game which youngster often play for entertainment in the local area. It was about the utilization of thinking and guessing power of the students.

The aim of the game was to check its impact in perspectives other than learners’ psychological and behavioral aspects, cited in the literature (Provenzo, 1991; Squire, 2003; Lisi & Wolford, 2002; Funk, 2001). This game was intended to see its role in enhancing students’ achievement in mathematics. It was used for teaching mathematical concepts of ‘mean’ and ‘mode’ to the eight grade students. Before using an experiment, the game was tested in a situation other than the target sample.

Purpose of the study

This study was carried because of the following objectives;

- 1- To evaluate the effect of non-technological game based teaching on students’ achievement in mathematics.
- 2- To compare the difference in the achievement level of male and female students through the use of non-technological game in teaching mathematics.

Hypothesis

To achieve the objectives, the following null hypotheses were tested:

Ho₁: There is no significant difference between the pre test and post-test scores of the whole male & female students.

Ho₂: There is no significant difference between the pre-test post-test scores of male students.

Ho₃: There is no significant difference between the pre-test post-test scores of female students.

Ho₄: There is no significant difference between the achievement level of male and female students.

METHOD

Sample

A total of 39 (thirty-nine) grade eight students having an average age of fourteen years of government middle school in rural area of District Karak in the province of Khyber Pakhtoonkhwa (KPK) were selected for the study. The students comprised 16 males and 23 females. Permission from the parents of the students who took part in this study was not taken, as in Pakistan normally permission from parents is not needed.

In this school, co-education is offered. Co- education refers to the education of male and female studying in the same institute and class as well. The class under consideration is unique, as due to the social norms of Pakistani culture and religious constraints there is no trend of co-education in the public sector institutions at elementary and secondary level. As the religious and cultural limitations, discourage parents from sending their daughters to mixed gender schools (Khan, 2008).

Research design

In this study one group pretest-posttest (Best & Kahn, 2003) experimental design was used. Symbolic presentation of the design is;

$$O_1 \quad X \quad O_2$$

Where O_1 = Pre-test and O_2 = Post-test

The independent variable in this study was the game ‘Guess & Tell’ and the dependent variable was students’ achievement in mathematics. The measurement has been made prior to the exposition to the game and after the implementation of the game. The teaching through this game was carried through a period of two weeks. The duration of period varied from 40 to 55 minutes per working day.

Instrument

Two instruments were used in this study. The first instrument was the game, ‘Guess & Tell’ which was used as an instructional tool for teaching mathematical concepts ‘mean’ and ‘mode’. Second instrument was students’ achievement test (pre post-test). Tests were used with the intention to evaluate students’ achievement in mathematics. For pre test, the achievement test was prepared from the textbook (NWFP, 2006) on the basis of the previous knowledge of the students with the consultation of concerned teacher. In the post-test for determining the achievement level of the students, questions were selected from the chapter taught to the students through game based teaching entitled 'Information handling (chapter 4) from the 8th grade Mathematics text book. Furthermore, the test was prepared both by the researcher and the concerned teacher in collaboration.

Procedure

A pre-test prepared by the teacher was administered for finding the existing achievement level of students. After the pre-test, students of the whole class were divided into two groups, named Gulab Team and Yasmin Team. In each team there were mix gender students. Then the game “Guess & Tell” was applied in the classroom for two weeks in three different forms for teaching the concepts of ‘Mode’ and ‘Mean’ to the students. Before administering the game in the classroom, one week training was given to the teacher about how to use the game in the classroom. The teacher played double role in the whole process. On one side he became a participant in game playing and on the other side he taught mathematics to the students. After finishing two weeks games-based teaching, a post-test was administered for determining the effect of the game in improving students’ achievement in mathematics.

Data analysis

For the analysis of data, paired sample t-test was applied. For applying paired sample t-test, statistical software SPSS version16.0 was used.

RESULTS & DISCUSSION

Results of the whole class

On the whole the post-test mean score of male and female was higher than pre-test score (Table 5-a) and there was a strong positive correlation between the pre-test post-test scores of the students as a whole (Table 5-b). The analysis shows that there was a significant change in the students’ achievement in post-test scores. Using paired sample test at the significance level of 0.05, $t(37) = 5.091$ at $p=.000$ (Table 5-c) enable us to reject our null hypothesis H_{01} , that there is no difference between the post-test pre-test scores of the students. So by correcting ourselves, we can say that there is a significant difference between post-test pre-test scores and it can be concluded that game ‘guess & tell’ has positive effective on students’ achievement in mathematics.

Table 5-a

		Paired Samples Statistics			
Pair 1		Mean	N	Std. Deviation	Std. Error Mean
	Post-test	16.4211	38	6.82852	1.10773
	Pre-test	12.6053	38	6.08294	.98678

Table 5-b

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Post-test & Pre-test	38	.750	.000

Table 5-c

Paired Samples Test									
		Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post-test – Pre-test	3.81579	4.61991	.74945	2.29726	5.33431	5.091	37	.000

Male Students' Results

Like the whole class results, the male students' mean achievement score in the post-test was higher than their pre-test mean score (table 6-a) and there was positive correlation (.617) between male students' pre-test post-test scores (Table 6-b). A paired sample t-test showed a statistically reliable difference between the post-test and pre-test scores of male students at $t(14)=3.579$, $p=0$, at the significance level of 0.05 (table 6-c). This implies that the non- technological game 'Guess & Tell' had positive effect on male students achievement in mathematics. So the null hypothesis H_{02} that there is no difference in the pre-test post –test scores of male students cannot be accepted.

Table 6-a

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Post-test	17.9333	15	5.90964	1.52586
	Pre-test	12.8667	15	6.55599	1.69275

Table 6-b

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	PostTest & PreTest	15	.617	.014

Table 6-c

Paired Samples Test									
		Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
					Lower	Upper			
		5.06667	5.48331	1.41578	2.03011	8.10322	3.579	14	.003

Female Students' Results

A difference in the means of post-test pre-test scores of female students achievement was noted as 3.00 (table 7-a), and a positive correlation 0.850 between their post and pre-test scores (Table 7-b) was also observed. There was a significant difference between female students pre and post-test scores with $t(22)=3.715$, $p=0.001$ at 95% confidence level (Table 7-c). This result suggest to reject the null hypothesis H_{03} that there is no significant difference in female

students' pre & post test-test achievement scores. So the game 'Guess & Tell' helped in improving female students' achievement in mathematics.

Table 7-a

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Post-test	15.4348	23	7.32261	1.52687
	Pre-test	12.4348	23	5.89935	1.23010

Table 7-b

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Post-test & Pre-test	23	.850	.000

Table 7-c

Paired Samples Test									
		Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post-test - Pre-test	3.00000	3.87298	.80757	1.32520	4.67480	3.715	22	.001

Differences in Male and Female Students' Achievement Scores

Results reveal (table 8a & table 8b), that there was no significant difference in male and female achievement scores. A t-test didn't show a statistically reliable difference between the mean achievement that male students have (M=5.0667, SD=5.48331) and that female students have (M=3.00, SD=3.87298), $t(36) = 0.181$, at $p < 0.05$ confidence level. These results compel us to retain the null hypothesis H_{04} that there is no significant difference in male and female achievement scores.

Table 8-a

Group Statistics					
Test Difference	Gender	N	Mean	Std. Deviation	Std. Error Mean
Test Difference	Male	15	5.0667	5.48331	1.41578
	Female	23	3.0000	3.87298	.80757

Table8-b

Independent Samples Test										
		Levene's Test for Equality of Variances			t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Test Difference	Equal variances assumed	1.958	.170	1.363	36	.181	2.06667	1.51576	-1.00745	5.14078
	Equal variances not assumed			1.268	23.040	.217	2.06667	1.62991	-1.30474	5.43807

DISCUSSION

The overall impact of the game, 'Guess & Tell' was very positive on students' achievement in mathematics. Performance of male and female students both improved as a result of the treatment of the game. Gender has an important role in playing and selecting a game (Joseph & Kinzie, 2008) and hence generally it is supposed that games based teaching will differently affect the achievement of male and female students. Yet in this experiment, there was no statistically significant difference between male and female students' achievement. However, pre-test and post-test achievement scores (Appendix B & C) show that male students made more progress than their counterpart.. Also the mean difference between pre-test and post-test score of male students was 5.06 and between female students was 3.00. This research supports the research studies that games and simulation are helpful for both genders (Vogel et al, 2006).

Teaching through games play different roles in teaching learning process. It motivate students and help them to develop skills, abilities, strategies (Barbara Martinson, ChiaLing Hsieh Mattson and Sauman Chu,2008) . Similarly this game, Guess & Tell' play an important role in the improvement of students achievement in mathematics. The results of this study support the video games-based teaching findings of Chuang & Chen (2009) study that game has positive effects on the students' achievement while teaching mathematics at elementary level. The game used in the class room for teaching the concept of 'mode' and 'mean' to the students helped to expose each student for engagement practically in solving mathematical concepts 'mode' and 'mean' during teaching. This led to a better understanding of mathematics which enabled the students to achieve better scores after teaching through, "Guess and Tell" game. Hence its results strengthen the idea that game playing is a successful pedagogical approach (Thiagarajan & Parker, 1999).

Limitations of the study

There were several limitations in this study. The two groups control and experimental would more better for this study, but due to the unavailability of more students in the same school and such mix gender public school in its near surroundings. So the use of a single group experimental design was limitation of the study. The students' achievement pre and post-tests were developed by the researcher in collaboration with the classroom teacher and were not statistically tested for reliability. Hence teacher made test was limitation of the study. Time of the game was not observed and was also limitation of the study.

CONCLUSIONS

Contrary to the practices made in the previous studies, in which mostly the effect of technological games was examined on students' performance in different perspectives. This study was developed to investigate the role of non-technological games in the enhancement of students, achievement in mathematics. Based on the results and limitations stated earlier the following conclusions were drawn.

The results of this study provide evidence that non-technological games can facilitate students' improvement in mathematics achievement. It can play the role similar to that of technological games in teaching learning process. Students can be uplifted academically through non-technological games without using technology. Such games are the alternatives for the areas where there is no availability of technological games. Further more, such games provide equal opportunities for male and female students to elevate their understanding in mathematics.

This study may be a base for teachers to discover more such type of games in their surroundings and use these games in teaching of their respective subjects. The game used in this study can work as a catalyst for preparing teachers to create their own games for teaching of all the subjects including mathematics. The study also impart the message to the teachers training institutions to establish research cells for the preparation and making of such kind of games.

This game is potentially capable to create more occasions for classroom interaction among students and between students and the teacher. Although the classroom interaction factor was not the focus of this study, however it gives the notion that such kind of games can improve classroom interaction among students particularly between male and female in a mix gender classroom.

Implications for Further Studies

Consequently, it creates the implication for further studies to find the impact of this game on students' interest in mathematics. This game can be used for further studies on the improvement of classroom interaction among students and between students and teachers. This game also provides opportunity for further studies to find its role in lessening gender discriminatory behavior of students in co-educational institutions.

REFERENCES

- Barbara, M., & Sauman, C. (2008). The impact of learning styles on achievement when using course content delivered via games based learning object. Retrieved April 25, 2008, from <http://www.inms.umn.edu/gravel/proposals/Ma>
- Best, J. W., & Kahn, J. V. (2003). *Research in education* (9th ed.). Pearson Education, New Delhi, India.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.).(2002). *How people learn: Brain, mind, experience, and school*. Washington, DC, National Academic Press.
- Chuang, T., & Chen, W. (2009). Effect of computer-based video games on children: An experimental study. *Educational Technology & Society, 12*(2), 1 – 10.
- Connolly, T. M., Stansfield, M., & Hainey, T. (2007). An application of games-based learning with in software engineering. *British Journal of Educational Technology, 38*(3), 416-428.
- Corti, K. (2006). Games based learning: a serious business application, PIXELearning Limited. Retrieved May 6, 2008 from <http://www.pixelearning.com>
- Corti, K. (2005). *The Serious Games Summit Game Developer Conference 2005*. San Francisco PIXEL earning Limited.
- Deubel, P. (2006). Game on! [Electronic version]. T.H.E. Journal, 1/1/2006. Retrieved April 20, 2008, from <http://www.thejournal.com/articles/17788>
- Eck, R. V. (2006). Digital game-based learning: it's not just the digital natives who are restless *EDUCAUSE Review, 41*(2), 43--51.
- Ediger, M., & Rao, D. B. (2000). *Teaching mathematics successfully*. New Delhi: Discovery Publishing House.
- Funk, J. B. (2001). Children and Violent video games: Are there “high risk” players? Retrived on March 30, 2010 from:<http://culturalpolicy.uchicago.edu/conf2001/papers/funk1.html>.
- Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan.
- Gee, J. P. (2007). *What video games have to teach us about learning and literacy*. (Revised and updated edition) New York: Palgrave Macmillan.
- Gros, B. (2007). Digital games in education: The design of games based learning enviornments. *Journal of Research on Technology in Education, 40*(1), 23 – 38.
- Hamey, Leonard, G.C. (2003).Teaching secure communication protocols using a game representation, Proceedings of the fifth Australian Conference on computing education, 20, 187–196, Retrieved on May 4, 2010 from <http://portal.acm.org/citation.cfm>.
- Haramati, A. Teaching physiology: filling a bucket or lighting a fire? *The Physiologist, 43: 117–121, 2000.*[Medline].
- Holland, W., Jenkins, H., & Squire, K. (2003). Theory by design, In B.Perron & M.Wolf (Eds.), *Vedio game theory*. London: Routledge.
- Joseph, D. R. D., & Kinzie, M. B. (2008). Gender differences in game activity performance of Middle School students' children: Implications for educational game design, *Educational Technology, Research and Development, 56*(5-6), 643 – 663.
- Khan, R. E. A. (2008). Gender analysis of children's activities in Pakistan. *The Pakistan Development Review, 47*(2),169 – 195.
- Lisi, R. D., & Wolford, J. L. (2002). Improving children's mental rotation accuracy with computer game playing. *The Journal of Genetic Psychology, 163*(3), 272 – 282.
- Lujan, H. L., & DiCarlo, S. E. (2006). Too much teaching, not enough learning: what is the solution? *Advances in Physiology Education, 30*(1), 17-22.
- McFarlane, A., Sparrowhawk, A., & Heald, Y. (2002). Report on the Educational Use of Games. TEEM, Cambridge Retrieved September 12, 2008, from http://www.teem.org.uk/publications/teem_gamesined_full.pdf
- Miller, P. (2001). *Learning styles: The multimedia of the mind*. (ERIC Document ED 451 140).
- O'Neil, H. F. Jr., & Fisher, Y. C. (2004). A technology to support leader development: Computer games, In D.V.Day, S.J.Zaccaro, & S.M. Halpin (Eds.), *Leader development for transforming organizations* (pp.99-121), Mahwah, NJ: Lawrence Erlbaum Associates.
- NWFP Text Book Board (2006). Kazmi Printers, Peshawar, Pakistan.
- Provenzo, E. F. (1991). *Video Kids: Making sense of nintendo*. Cambridge, MA: Harvard University Press.
- Rose, M. Z., & Annamarie, C. (2006) Beyond Motivation: Exploring mathematical modeling as a context for deepening students' understanding of curricular mathematics *Educational Studies in Mathematics, Springer, 89-112*.
- Shaffer, D.W. (2006). *How computer games help children learn*. New York: Palgrave Macmillan.
- Squire, K. (2003). Video games in education, *Journal of Intelligent Simulations and Gaming*, Retrieved April 20, 2010 from <http://website.education.wisc.edu/kdssquire/tenure-files>.

- Squire, K. (2005). Changing the game: What happens when video games enter the classroom? Retrieved November 24, 2009, from <http://www.innovateonline.info/index.php>.
- Thiagarajan & Parker, (1999). Teamwork and Teamplay. New Jersey: Pfeiffer & Co.
- Vogel, J. J., Vogel, D.S., Cannon, Bowers, J., Bowers, C., Muse, K., & Wright, M. (2006). Computer gaming and interactive simulations of learning: A meta Analysis. *Journal of Educational Computing Research*, 34(3), 229-243.

Appendix A

Over view of the Game:

Each team contained both male and female students. Five colors were given to Yasmin team and the students of Gulab team were asked following question, “Guess and Tell which color is in my hand?” There were four chances for guessing. If the answer was correct in the first chance, the students were given 10 scores, in the second chance 8 scores; in the third chance 6, scores in the fourth chance 2 scores other wise Zero was awarded. In each chance the students of the winner team were clapping. During this process one student was writing the score of the team on the black board and the rest of the students were asked to write down the score in their notebooks. After doing the game twelve times, the score of the team was shown on the black board as is in table 1.

Table-1 Score of Gulab Team

No of games	Score gained
1	2
2	6
3	8
4	6
5	10
6	0
7	6
8	8
9	2
10	6
11	2
12	6

Students were asked to tell which score the Gulab team has more frequently gained? They answered that the score 6 has mostly repeated hence it has gained score 6 more frequently. So a prize of six bubbles was given to each student of Gulab team. The teacher explained the students that the most repeated number in any data is called mode, hence in this game the mode was 6 because the number 6 was mostly repeated.

The same game was repeated but this time the students of Gulab team asked the students of Yasmin team the same question, “Guess and Tell which color is in my hand?” After doing the game twelve times on the same procedure as discussed earlier, the score of Yasmin team was shown on the black board in table 2.

Table-2 Score of Yasmin Team

No of games	Score gained
1	10
2	8
3	6
4	6
5	8
6	10
7	2
8	6
9	8
10	10
11	10
12	2

The students were again asked to tell the scores that is repeated most of the time in the table 2. The students answered 10. The teacher told that the ‘mode’ of this game is 10 and ten bubbles were given to each student of Yasmin team as a prize.

The time for playing the game was 40 minutes. This game was carried on for four days. In the next two days, the teacher taught the method of finding ‘mode’ through solving examples given in the textbook. The questions about finding ‘mode’ were solved by students as well.

In the next week, the same game was carried on in the same manner. However, this time in each turn, bubbles equivalent to the score gained by a team were given to a student. At the end one student calculated the sum of the score on the black board (Table 3). The other student reckoned all the bubbles in hand and the remaining students were asked to sum up the scores in their notebooks. The sum was found as 86. The students were asked to divide the sum 86 by the number of games that is 12. One student on the black board and others in their notebooks divided the total score by the total number of games. The answer was told as 7.13, which the teacher told as the mean of the score. To each student 7 bubbles were given for actively participating in the

game. The teacher told the students that the symbol ‘ x ’ is for score gained; ‘ Σ ’ is for sum and ‘ \bar{x} ’ for mean. At the end the teacher explained the method of finding mean by simple formula i.e. total sum of the score divided by total turns. Mathematically

we write it
$$\bar{X} = \frac{\sum x}{n}$$

Table-3 Finding mean of the score gained

No of games	Score gained X
1	10
2	8
3	6
4	6
5	8
6	10
7	2
8	6
9	8
10	10
11	10
12	2
Total no. of games i.e $n=12$	Sum of total score i.e $\sum X=86$

Formula for mean is,
$$\bar{X} = \frac{\sum x}{n}$$

$$\bar{X} = 86/12 = 7.13$$

This game was repeated for few days. Later on the teacher taught the process of finding ‘mean’ from the students’ textbook and students also practiced of solving questions about finding ‘mean’ themselves.

For the purpose of finding mean through other formula, the same game “Guess & Tell” was again carried on with little modification. Before starting the game, the students were divided into groups such that each group had different number of students. The numbers of students in each group were as follows:

- Group 1= 8 students
- Group 2= 5 students
- Group 3= 7 students
- Group 4= 1 students
- Group 5= 9 student
- Group 6= 4 students
- Group 7= 3 students
- Group 8= 2 students

This time the teacher himself asked the groups to guess and tell which color was in his hand. The score procedure was the same as mentioned in the first game. However, the score gained by the group was also considered as the individual score of each student of the group (see table 4). The teacher explained the students that number of students in a group is called its frequency and it is represented by the symbol ‘ f ’. The symbol ‘ X ’ for score and ‘ \bar{x} ’ for mean were also explained again. The teacher told the students the method of finding the mean through this formula. He told that the ‘mean’ can be obtained by dividing the total sum of

‘ $f x$ ’ ($\sum f X$) by the total sum of frequency ($\sum f$). i.e.
$$\bar{X} = \frac{\sum fx}{\sum f}$$

Table 4 Finding mean in a group data

Name of the group	Number of students in the group(frequency)=f	Score of the group=x	fx
Group 1	8	10	80
Group 2	5	6	30
Group 3	7	4	28
Group 4	1	10	10
Group 5	9	2	18
Group 6	4	8	32
Group 7	3	10	30
Group 8	2	8	16
	Total sum of frequencies i.e $\sum f=39$		Total sum of fx i.e $\sum fx=244$

Formula for Mean in this case is $\bar{X} = \frac{\sum fx}{\sum f}$

So Mean = $244/39$
=6.25

After using the game for few days, the questions on the above pattern in the textbook were solved by teacher in the classroom and the practices of such questions was done by the students themselves in the remaining days of the week. At the end of the game, in the next week the post-test for determining the achievement level of the students was administered in the classroom.

Appendix B

Note: All the students' names are pseudonym. In the pre-test , post test achievement tests the students score is out of 30 marks because the test in both the cases were of 30 marks.

Male' Pre test Score.

Name of students	Askar	sabir	Najam	Sehar	Akbar	Uzair	Zabeel	Murad	Asif	Hamid	Ghalib	Jawad	Laiq	Rahim	Sarwar	Faiz
Pre test n=16	03	20	16	10	14	26	21	11	18	14	09	07	12	05	04	10

Male' Post test Score

Name of students	Askar	sabir	Najam	Sehar	Akbar	Uzair	Zabeel	Murad	Asif	Hamid	Ghalib	Jawad	Laiq	Rahim	Sarwar	Faiz
Post test n=15	10	19	20	26	12	24	27	13	19	21	14	Absent	20	06	18	20

Appendix: C

Female' Pre test Score:

Name of students	Sraa	Zara	Fatma	Subia	Aisha	Pinki	Leema	Bano	Rukia	Jamila	Sakia	Mamila	Nazi	Mala
Pre test n=39	08	16	10	13	13	21	07	09	09	05	25	03	14	09

Faila	Eshal	Debra	Shamsa	Nigara	Kalma	Asifa	Hadija	Arzu
11	08	10	12	25	09	21	16	12

Female' post-test scores

Name of students	Sraa	Zara	Fatma	Subia	Aisha	Pinki	Leema	Bano	Rukia	Jamila	Sakia	Mamila	Nazi	Mala
Post test n=38	14	18	15	12	20	27	11	13	07	03	28	08	12	16

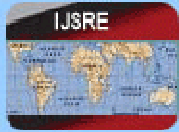
Faila	Eshal	Debra	Shamsa	Nigara	Kalma	Asifa	Hadija	Arzu
08	09	18	24	29	07	25	17	14

ⁱ Dr. Javed Mustafa worked in the department of Elementary & Secondary Education Peshawar KPK for 12 years. Remained a teacher trainer in second science education project for two years and trained thousands of science teachers in the subject of mathematics. He supervised BEd and MEd students of Allama Iqbal Open University Islamabad, Pakistan. He received professional trainings during his service in Pakistan and abroad. He recently completed PhD in Education from International Islamic University Islamabad. During his PhD studies he participated in international conferences in various countries.

ⁱⁱ Mr. Alam Khan is a research scholar in the department of Education International Islamic University Islamabad, Pakistan. He completed his MPhil in Education from the same university. He is currently a Ph.D. scholar at International Islamic University Islamabad, Pakistan.

ⁱⁱⁱ Mr. Atta Ullah is a research scholar in the department of Education International Islamic University Islamabad, Pakistan. He completed his MPhil in Education from Kohat university of Science and Technology Kohat. He is currently a Ph.D. scholar International Islamic University Islamabad, Pakistan





Understanding the Social Studies Teachers' Experiences: Conceptions of Citizenship in Botswana

Mavis B. Mhlauliⁱ

Department of Primary Education
Faculty of Education, University of Botswana
mhlaulim@mopipi.ub.bw

Abstract

The advent of globalization problematizes and challenges the notion of bounded citizenship as conceptualized and perceived among established democracies and nations of the world. It threatens to undermine the key characteristics of the nation-state such as sovereignty, autonomy and democracy. The major purpose of this study was to explore the social studies teachers' conceptualizations and experiences on citizenship through the teaching of social studies in primary schools in Botswana. Anchored within post colonial theory, the study was qualitative and employed the naturalistic inquiry paradigm. Qualitative methods were used to collect data. Data were analyzed using grounded theory through the constant comparative technique. The findings of the study revealed that social studies teachers' conceptualize citizenship in multiple ways. The findings lead to the conclusion that citizenship in Botswana is fluid and not homogeneous as one might have thought given the national aspirations of social harmony, unity and nation building that were adopted at independence in 1966. The study recommends that citizenship be re-imagined in schools in an effort to deconstruct the master narratives that are often western oriented.

Keywords: Citizenship Education, Social Studies, Globalization, Naturalistic Inquiry, Post Colonial Theory.

Reference to this paper should be made as follows:

Mhlauli, M. B. (2011). Understanding the Social Studies Teachers' Experiences: Conceptions of Citizenship in Botswana. *International Journal of Scientific Research in Education*, 4(3&4), 165-180. Retrieved [DATE] from <http://www.ij sre.com>.

INTRODUCTION

Social studies is referred to in some countries as social education and in other countries it is taught as citizenship education (Ross, 2006). Numerous scholars in the field of social studies are in concert with regards to the role of social studies as being citizen preparation (Mhlauli, 2010; Ajiboye, 2009; Evans, 2006; Ross, 2006; Thornton, 2005). There is a widely held view that not all countries have policies requiring students to have instruction that prepares them to be citizens. Some countries such as the United Kingdom, Australia and Netherlands did not have any programs in their education systems that were deliberately aimed at teaching 'political education' or preparation of citizens (Hahn, 2001). The author further extols that in contrast, countries such as Denmark, Germany and USA have educational policies that are aimed at developing informed and participating citizens. However, there is considerable evidence to suggest that the citizenship education initiative is embraced globally. For example, the year 2005 was designated as the year of European citizenship through education. Furthermore, there is increasing interest in the discourse of citizenship education in Asia, in countries like Japan, China and Pakistan (Davies & Pike, 2009). In Great Britain, citizenship education is a contentious issue and still at its embryonic stages as it was officially introduced in 2000 and became mandatory at secondary school level from September, 2002 (Crick, 2007; Figueroa, 2004).

Historically the notion of citizenship was not recognized by the British Government until the September 11th attacks on the United States and the “Riots” in England in June 2001 (Figueroa, 2004). These incidents though taking place in different parts of the world (USA and England) acted as a wakeup call and a catalyst towards the rethinking of citizen preparation in Great Britain. Denmark on the other hand has an interesting program on preparing citizens in a democracy (Hahn, 1999). They have what is called the *folkskole* law which basically requires that schools should model democracy and students have weekly meetings where they discuss and resolve class problems, plan class trips and select topics for investigation in the class titled “contemporary studies”. Of recent “contemporary studies” has been replaced by “social studies” in Denmark schools (Hahn, 1999).

Citizenship education has always been regarded as a western concept within the African continent (Abdi, 2008; Mautle, 2000). This has exacerbated the narrow view that citizenship education is new as its approach in schools is often western oriented. In Botswana, the question of citizenship is a complex one as there are tensions brought about by the traditional and cultural make up of the society complicated by the advent of globalization and modernization that have permeated the society (Nyamnjoh, 2006). A citizen in Botswana can be identified by the legal documents such as *Omang* (Identity Card) which distinguishes him or her from foreigners. Furthermore, a citizen of Botswana has certain entitlements which include the right to obtain land for free and vote from the age of eighteen (Nyamnjoh, 2006; Preece & Mosweunyane, 2004). A citizen of Botswana has duties and responsibilities and these include being patriotic, respect for the constitution, paying taxes, participating in national activities, obeying and upholding laws of the country, protecting your country from enemies and voting during elections (Mhlauli, 2010). This legal conception of citizenship characterizes citizenship as understood within the school curriculum and is based on the western interpretations of citizenship, hence the need to decolonize knowledge to reflect our own ways of knowing.

Nyamnjoh (2006) provides a vivid picture of the state of affairs in relation to citizenship, identity and the politics of difference in Botswana. He argues that though there are legal provisions of equality of citizenship to all men and women in principle, in practice there are inequalities in citizenship as there is a hierarchy of citizenship that is fostered by the political, social and cultural inequalities. This hierarchy has resulted in some Batswana (people of Botswana) being of lesser Batswana than others. Running in parallel to this hierarchy is the acceptance and treatment of foreigners and immigrants as not all of them are welcome or accorded similar status, respect, privileges or rights. The tendency has been to scapegoat and label other Black Africans as *Makwerekwere*, a situation that denies them of a name of their choice. Their presence is as well dependent on the degree and is subject to renegotiation in different circumstances.

Nyamnjoh (2006) reminds us that being a rights-bearing *Motswana* (Citizen of Botswana) is dependent on the degree and power relations that one has, therefore indicating that nothing is fixed, not even the rhetoric of rights as they are dependent on context and issues at stake. The contention is that like many countries in Africa, Botswana is one of those countries where ethnic citizenship and belonging has almost disappeared in favor of a single political and legal citizenship and nation-building. As a result of globalization there are growing tensions of belonging and identity politics that are matched by a growing urge of differentiating between “ ‘locals’, ‘nationals’, ‘citizens’, ‘autochthons’ or ‘insiders’ on the one hand; and ‘foreigners’, ‘immigrants’, ‘strangers’ or ‘outsiders’ on the other, with the focus on opportunities, economic entitlements, cultural recognition and political representation” (Nyamnjoh, 2006, p.3). In recent years, Botswana has experienced tensions as marginalized ethnic groups have sought for equity, better representation and more access to national resources and opportunities. This scenario to some extent demonstrates not only the paradoxes and contradictions of globalization but also the limits of bounded notions of citizenship and belonging informed by the ‘nation-state’ and its hierarchies.

Social studies as citizenship education seek to provide students with the knowledge, skills, values, dispositions and attitudes which will enable them to actively participate as citizens in a democracy (Ajiboye, 2009). Since its introduction in the primary school curriculum in Botswana in 1969, there have been doubts as to whether the subject is achieving its major goal of developing good citizens. These doubts emanated from recent trends and evidence from studies that suggest that products of schools are exhibiting behaviors that are not in tandem with good citizenship as encapsulated in the social studies curriculum (Ajiboye, 2009; Preece & Mosweunyane, 2004). The National Commission on Education (1993) also documented an outcry from the Botswana public about the moral decay prevalent among the youths that was not aligned to the *Setswana* culture hence negating the efforts of developing good citizens that are ideal to Botswana.

The social studies teachers’ understanding of educating students for citizenship in a democracy is crucial to the achievement of the major goal of social studies since they are the ones at the frontline of any curriculum implementation and have a moral and social obligation of preparing future citizens. This view is in line with Thornton’s (2005) characterization of teachers as curricular-instructional gatekeepers which basically reflects their well known role as controllers of what is taught and how that is taught in their classrooms. Sim (2008) reinforces the teachers’ role by

asserting that a large part of how teachers tend the gates hinges on how they understand the subject, and in this case citizenship. Like in many developing countries, the discourse on citizenship education in Botswana is still to be implemented by teachers, yet very little is known about what social studies teachers' think and say and their understandings of citizenship within the Botswana context. It is therefore, critical that subject specialist teachers of citizenship and in this case social studies teachers understand what it means and be in a position to explain what they do best regarding citizenship. To explore the identified problems, this study sought to:

1. Explore the social studies teachers' understandings, ideas and conceptualizations of citizenship.
2. Find out from the social studies teachers what their experiences on citizenship are?
3. Find out what curricular implications can be drawn from the study?
4. Make recommendations pertaining to citizenship in schools.

RESEARCH QUESTIONS

The following broad research questions guided the study:

1. What are the social studies teachers' understandings and conceptualizations of citizenship as national identity?
2. What are the social studies teachers' understandings and conceptualizations of citizenship as participation?
3. What are the social studies teachers' understandings and conceptualizations of citizenship as responsibility?
4. What are the social studies teachers' understandings and conceptualizations of citizenship as self reliance?

THEORETICAL FRAMEWORK

In this article I use the post colonial lens to understand the teachers' ideas, conceptions and experiences on citizenship in their classrooms and to query how mainstream academic knowledge continues to suppress and marginalize other ways of knowing and knowledge construction. Mainstream academic knowledge is explained as knowledge that "reinforces traditional and established knowledge in the social and behavioral sciences, as well as the knowledge that is institutionalized in the popular culture and the nation's schools, colleges and universities" (Banks, 2008, p. 135). It is the form of knowledge that is seen to reinforce the status quo, perpetuates inequalities and the dominant power relationships in society in that it often carries with it the 'codes of power'.

Post colonial theory advocates for a number of issues in relation to education that range from "decolonizing knowledge and the production of transformative knowledge, mapping out the manifestations of the power of the west to the rest, and locates how the dichotomous representation of the world establishes a rigid division between local/global, citizen/foreigner, civilized/uncivilized, and also challenges the discourse of nationalism" (Subedi & Daza, 2008, p.2). This querying nature of post colonial theory makes it undoubtedly an invaluable tool for understanding the social studies teachers' conceptualizations and experiences on citizenship within the Botswana context.

I further use Banks' (2008) idea of transformative academic knowledge to interrogate the teachers' ideas, experiences and conceptions about citizenship. "Transformative academic knowledge consists of paradigms and explanations that challenge some of the key epistemological assumptions of mainstream knowledge" (Banks, 2008, p.135). It is said to challenge mainstream knowledge that seem to perpetuate and expand the historical and literary canon. Transformative academic knowledge is content that when presented challenges the traditional interpretations that are seen as universalistic and unrelated to human interests (Marri, 2008). It enables students to acquire information, skills, and values to challenge inequality within their communities, nations and the world; to develop cosmopolitan values and perspectives; and to take actions to create just and democratic multicultural communities and societies (Banks, 2008).

In studying transformative academic knowledge one is inclined to conclude that it is related to Said (1978) notion of contrapuntal criticism. Contrapuntal criticism is associated with a musical term for literary criticism and further emphasizes the issue of knowledge construction and how it impacts students (Rizvi & Lingard, 2006; Merryfield & Subedi, 2006). This view holds that students need to understand knowledge construction, the politics of mainstream academic knowledge, post-colonial efforts to rewrite or resist master narratives and the inheritance of imperial worldviews (Willinsky, 1998). It is this knowledge that is often viewed as the truth without any consideration of how it affects the recipients that needs to be unpacked and debunked. The idea of deconstructing western imperialist knowledge is in concert with Said's (1978) idea of hybridity and contrapuntal criticism.

LITERATURE REVIEW

Theories of Citizenship

Theories of citizenship as espoused in the literature on citizenship education tend to reflect a certain level of ambiguity and differences. Van Gunsteren (1998) identifies four theories of citizenship that seem to differ in terms of orientation and practice such as; *Liberal, Communitarian, Civic-Republican and Neo-Republican theories*. The first theory is that of liberal citizenship which is rights –based; civic republicanism which is responsibilities-based; the communitarian citizenship which is collectivist; and lastly the neo-republicanism which combines elements of civic republicanism and liberal views of citizenship (Evans, 2006; Van Gunsteren, 1998). According to Van Gunsteren (1998) the Liberal-Individualist theories view a citizen as a calculating holder of preferences and rights. Within this theory, citizenship is conferred on an individual by a state or nation. There exist a relationship between an individual and the state which includes both rights and responsibilities (Van Gunsteren, 1998). In the case of a democracy, the rights of an individual include the right to be heard and participate in their governance, equal protection of the law, the right to basic freedoms such as religion, speech and press. The responsibilities of the citizen include respect for the law and participation in activities of governance such as voting and joining interest and political parties (Engle & Ochoa, 1988).

Communitarian theories of citizenship view citizenship as more than a matter of rights and strongly emphasize that being a citizen involves belonging to a historically developed community (Van Gunsteren, 1998). Therefore, indicating that citizenship in the communitarian sense emphasize participation and identity (Preece & Mosweunyane, 2004). For communitarians a citizen acts responsibly if they stay within the limits of what is acceptable within the community. The community is seen as a representation of unity and the absence of community indicates conflict. The community is well respected as it denotes a cultural resource that fosters people’s relationships. It is this type of citizenship that promotes voluntarism, self reliance and a commitment to each other. It operates at micro level and simply implies community responsibility (Preece & Mosweunyane, 2004).

Civic-Republican theories of citizenship place a single community, which is the republic community, at the center of political life. This means that it places more responsibility on the civil society. It recognizes the republican virtues of courage, devotion, military discipline and statesmanship and shows too little appreciation for characteristic values and diversity of other communities (Van Gunsteren, 1998). Putman (2000) contends that a strong civil society leads to a stronger state through the promotion of active social action which privileges the state by not challenging the status quo.

Lastly, the neo-republican conception of citizenship includes elements of all the other three theories, communitarian, republican and liberal-individualist thinking. The elements of neo-republicanism can be summarized into three concepts: the public realm, organizing plurality, and action (Van Gunsteren, 1998). The belief is that the duty of citizens is “to transform a community of fate into a republic that can be willed by all who are involved as citizens” (Van Gunsteren, 1998, p. 27). To them citizenship is created and recreated by citizens in action. Citizens have to possess competence, a repertoire of skills, goodwill, consensus on norms and values, tolerance and respect, and good judgment (Van Gunsteren, 1998). Nevertheless, these theories provide a conceptual guidance and indicate the contradictions inherent in terms of the conceptual understanding of citizenship as they show the binaries created in terms of individualist versus collectivist; political rights versus social rights; as well as local versus global (Evans, 2006).

Teachers’ Perspectives on Citizenship Education

Anderson et al (1997) conducted an excellent study of how elementary and secondary teachers define citizenship education. As a result of this study four perspectives emerged as; critical thinking perspective, legalistic perspective, cultural pluralism perspective, assimilationist perspective. These perspectives are in tandem with Barr, Barth and Shermis’ (1977) traditions in which they describe contrasting approaches to social studies as; teaching social studies as citizenship transmission, teaching social studies as social science, teaching social studies as reflective inquiry. According to the critical-thinking perspective, teachers who hold this view believe that citizenship education should help students question the status quo, develop critical thinking and questioning skills and encourage open-mindedness and tolerance (Anderson, et al, 1997). This perspective is aligned to Barr, Barth and Shermis (1977) tradition of teaching social studies as reflective inquiry in that it emphasizes the analysis of values, development of skills and dispositions and decision making. Banks (2008) refers to this model as the transformational model in that it views citizenship as a process of socialization and counter socialization.

The legalistic perspective contends that citizenship should stress obedience to the law, teach the basic structure of our political systems and inform students about their rights and responsibilities (Anderson, et al, 1997). This perspective dovetails with the tradition of teaching social studies as a social science since it puts emphasis on teaching knowledge as it

is structured within the disciplines and on discovery and inquiry activities (Brophy, 1990). Teachers who fall within the cultural pluralism perspective define citizenship education as the celebration of diversity and pluralism. They believe that rather than teach about the basic structure of our political institutions, citizenship education should expose students to a range of ideologies (Anderson et al., 1997).

Teachers within the assimilationist perspective hold similar views with those of the legalist in that they explicitly reject the current ideas of “political correctness” and want to transmit to students the dominant values of the society. This perspective resonates well with the tradition of teaching social studies as citizenship transmission with emphasis on the inculcation of traditional values (Brophy, 1990). This perspective is similar to the transmission model as explained in Weistheimer (2007) where students are encouraged to learn about the structure and function of the government, rights and responsibilities of citizenship and participate in non threatening civic activities. He argues that this model is shared by the assimilationist and legalists and is the most common model of citizenship education presented in elementary schools. In assessing the various conceptual frameworks of citizenship education as offered by various scholars (Van Gunsteren, 1998; Anderson et al., 1997; Weistheimer, 2007), it becomes apparent that there is a lot of complexity and ambiguity surrounding citizenship education. However, these varied conceptions of citizenship education though conflicting at times offer understanding about what it means to educate for citizenship in a democracy.

RESEARCH METHODOLOGY

The study was qualitative in its approach and employed the naturalistic inquiry paradigm. Naturalistic inquiry is said to demand a natural setting (Guba & Lincoln, 1985). Lincoln and Guba (1985) further elaborate on the essence of a natural setting, that naturalist inquirers begin their research with the belief that constructions of realities cannot be separated from the world in which they occur or are experienced therefore emphasizing the relationship between time and context to understanding the phenomena under study. This study was undertaken among eleven social studies teachers in six primary schools in one of the big villages in the central district in Botswana which in this study is referred to as *Marethweng* village (pseudonym). Of the eleven teachers four were males and seven were females. The teachers’ age ranged between 30 and 55 years; where four teachers were between 30 and 35 years, three were between 36 and 45 years, two were between 46 and 50 and two were between 51- 55 years. Purposive sampling was used to select the participants. The major aim of purposive sampling also referred to as theoretical sampling is to “select information-rich cases for study in depth” (Patton, 1990, p.169). The naturalistic inquirer prefers purposive sampling because it allows for the increase of the scope and range of data and the likelihood that a full array of multiple realities will be uncovered; it also maximizes the researcher’s ability to devise grounded theory that “takes account of local conditions, local mutual shaping’s, and local values” (Lincoln & Guba, 1985, p. 40). In this study I used a type of purposive sampling known as snowball sampling to select the social studies teachers who participated in the study (Patton, 1990). These teachers were chosen on the basis that they are experts in their area of concentration which is social studies and are in a better position to explain what they do best.

Individual interviews, participant observations and focus groups were used as methods for data collection. The individual interviews were used to solicit more in depth ideas on their conceptualizations and experiences on citizenship; this was used to inform the observations and further interviews. Interviews have their own limitations, for instance, I interviewed teachers during break, lunch or after school. This at times made me rush over the interviews as teachers would either be in a hurry to go to the next class or tired after a long day of teaching. I observed the social studies teachers in different settings such as; classrooms and other outside activities in debate clubs, sports activities, staffroom and traditional music practices in an effort to understand what they do and why they do what they do in relation to citizenship development and to listen to their ‘normal’ chats and gossips. The data obtained through observations was used to construct follow up interview questions and vice-versa. Focus groups were used to enable both the participants and researcher to see the group dynamics and how the individual responses contributed during discussions differ from or reinforce those of peers. Focus groups have their limitations in that they compromise confidentiality. At times teachers were not free to say what they would have said if interviewed individually. However, they enabled me to get the socio-cultural aspects of the study in that I was able to observe them when they are together on issues they agree or disagree on.

Data were analyzed inductively using grounded theory and employed the constant comparative data analysis technique (Merriam, 1998, Patton, 1990) where I collected the data, transcribed, coded and categorized them in order to inform the next interviews and observations. In explaining constant comparative analysis it is stated that it “combines inductive category coding with a simultaneous comparison of all social incidents observed and coded” (LeCompte & Preissle, 1993, p.256). Data analysis took place at the same time with data collection and I constantly used the questions raised during transcription to shape the questions for the next interviews. This process allowed me to mine the data

thoroughly in order to exhaust all possible gaps. Pseudonyms were used to protect the confidentiality and anonymity of the participants.

FINDINGS AND DISCUSSIONS

The findings from this study indicated that teachers conceptualize citizenship in multiple ways as; national identity, active participation, collective responsibility and self reliance. There are a number of reasons that may explain why teachers conceptualize citizenship in multiple ways among them the notion of bounded citizenship and nation building, globalization and the economic realities of the nation itself. Firstly, it should be borne in mind that at independence in 1966, Botswana like many African nations emerging from colonialism opted for a form of citizenship that was political, legal, bounded and geared towards nation building as opposed to ethnic citizenship and belonging which was viewed as divisive. However, Nyamnjoh (2006) asserts that in recent years the country has experienced tensions of belonging and identity politics as various ethnic groups have sought equity, better representation and more access to national resources and opportunities. These identity politics tend to reject and query assimilationist policies of bounded national citizenship in favor of more differentiated ideas of citizenship which distinguishes between insiders and outsiders (Nyamnjoh, 2006).

Secondly, globalization with its accompanying agents of accelerated capital flow of goods, electronic information, diminishing borders and international migration have impacted Botswana negatively as they have exacerbated the insecurities and anxieties of both local and foreigners hence bringing about greater obsession with citizenship and belonging. This has led to the re-actualization of boundaries and differences; and the questioning of previous assumptions about nationality and citizenship (Nyamnjoh, 2006). Thirdly, since independence, Botswana's development has been guided by the national principles of democracy, development, unity and self reliance. The government of Botswana has been the main provider of education and employment. However, with the advent of the ongoing economic recession in the country and world, growing unemployment rates and lack of a diversified economy, it has become very clear that the government can no longer sustain such aspirations hence the need for citizens to seek alternative ways of survival. It is against this backdrop that there seem to be a shift of emphasis from a dependency on the government to self reliance initiatives.

Lastly, Botswana as a country since independence has experienced rapid economic growth and as such has attracted immigrant communities from different parts of the world such as Africa and Asia. The exodus of foreigners from other parts of the world has led to competition for jobs and this has also heightened the citizens insecurities as they believe that foreigners take up high profiled jobs in their country. This has provoked undesirable attitudes towards foreigners which have sparked notions of xenophobia. The economic realities of some of the neighboring countries such as Zimbabwe have also exacerbated the situation as their citizens come to Botswana illegally and create tensions and problems of illegal immigration. All the aforementioned accounts intersect to make the notion of citizenship complex and not a cut and dry situation. The findings are categorized according to research questions (RQs) and the themes generated are discussed below as: national identity, active participation, collective responsibility and self reliance.

RQ1 Citizenship as National Identity

All the teachers who participated in the study conceptualized citizenship as national identity. The teachers real names were not used for this study instead pseudonyms (Nkwe, Kabo, Kgabo, Kubu, Morubisi, Batho, Lorato, Neo, Mpho, Thato, Tau) were used to protect the confidentiality and anonymity of the respondents. National identity was explained in terms of belonging to a nation, possession of national documents and having pride in national symbols. During my initial interviews with teachers, I asked them "when you hear the word 'citizenship', what comes into your mind?" The teachers' responses varied and the results are as presented below.

Belonging to a Nation

All the teachers who participated in this research perceived citizenship as a sense of belonging to a particular nation or country as well as identity and being proud of whom you are as a Mswana. In explaining the meaning of citizenship Ms Kubu had this to say:

It means nationality, where you come from. But generally it means belonging to a certain country or nation. I believe as Batswana, we should be proud of who we are, that is our identity. We do not have to go around copying other people's cultures to the extent that we forget about who we are.

Ms Kabo defined citizenship as laid down in legal documents and had this to say:

The word citizenship and what it implies in my mind is that we are talking of individuals who belong to a certain state or country or they are members of the country by descent, origin or naturalization. If you are a foreigner and you adopt to become a citizen of Botswana you become a member of Botswana.

However, it was interesting to find that national belonging does not begin at national level as teachers felt that for one to belong to a nation they have to belong to a certain tribe or ethnic group in the country. This was interesting in that their conception of national identity and belonging was exclusionary as it totally left out ‘foreigners’ or ‘expatriates’ (as they are usually referred to in the country) who have naturalized as citizens. To emphasize the notion of national belonging as preceded by belonging to a tribe or ethnic group in Botswana Ms Lorato mentioned that:

But generally it means belonging to a nation or country by birth or origin. It should be understood that one becomes a citizen of Botswana because he/she belongs to a particular ethnic group in Botswana.

Mr Nkwe shared the same sentiments that:

A citizen of Botswana has to be defined as someone who is originally a *Motswana*, she has been born within any territory of Botswana and has lived there, went to school in Botswana..., you belong to a certain area of Botswana like your tribe is in Botswana, for example; I am a *Mokalaka* (ethnic group) because I have lived to be a *Motswana* because I belong to the central district which is an area controlled in the past by *Bangwato* (Ethnic group).

The findings on national belonging as an element of citizenship and national identity clearly indicate that teachers view national belonging as emanating from ones’ ethnic group or tribe. To them ethnic belonging precedes national belonging, therefore, indicating that for one to be a citizen of Botswana (*Motswana*), she/he should first be a member of one of the ethnic groups in Botswana. These views are not surprising given the recent appeals made by some ethnic groups who have been marginalized as they are now seeking equity and recognition.

National Symbols

The findings also revealed that teachers were in unison in seeing national identity as being expressed through national symbols such as the national anthem, the flag, the coat of arms, national colors. These national symbols to them are a form of national identity and express a sense of pride in who they are. Mr Morubusi in weighing on national symbols and citizenship had this to say:

In my teaching I require my students to bring national symbols such as the flag, t/shirts with national colors, coat of arms to basically show who they are and develop some pride in their country. I encourage them to show support to the national football team by wearing national symbols when they go to watch games. I believe doing so teaches the learners about who they are and develop some pride in their country.

Ms Kubu also talked about the significance of national symbols to national identity and said:

They (citizens) must have respect for the national anthem, you find that at times people just take things for granted where you find that children can use the national anthem during their play –this is not right. It should be respected because it identifies us as a nation and country from the rest of the world

They also saw national symbols as a unifying factor in terms of citizenship since people belong to different ethnic groups. Ms Lorato expressed the importance of national symbols to national identity and mentioned that:

Right now in our country we are from different ethnic groups and there is a flag which has got three colors that represent the country that we are living in. The blue color represents the sky, that we Batswana (people of Botswana) depend on rain because it is unreliable, the white color represents the white people that are also found in our country and black color represents Batswana and other Black Africans who live in our country.

It is not surprising that these teachers saw national symbols as national identity because they represent national unity and nation building as conceived at independence.

National Documents

National documents were also identified as elements of national identity. They mentioned that national documents such as *Omang* (National Identity Card), passport, birth certificate and drivers' license identified who you are. During their focus groups, Ms Neo emphasized the importance of having national documents and acquiring them through the right procedures in order to guard against corruption and nepotism and said that:

...You know, even national documents such as National Identity (*Omang*), people should not take it for granted that people will hear me speaking that I am a Motswana, carry it all the time and produce it when it is needed because these things are important. They show your identity, who you are, where you come from. These things can speak for you, you don't have to tell a person that you are a *Motswana*; you just take out these things and show them. Having a drivers' license, they should know that there are no short cuts to having such documents, procedures should be followed.

Having national documents was also related to being a responsible citizen who obeys the laws and this was echoed by Mr Kgabo during focus groups when saying:

Being responsible, obeying your country's laws, following the constitution of the country and being responsible in whatever you do. Caring and loving your country. By being responsible according to people is for them to have national identity, passport whatever. They should do what is wanted by the law and not do things that are improper.

The possession of these national documents was also seen as a form of national identity in an effort to be able to differentiate between the nationals (Insiders) and foreigners (Outsiders). It appears they also see national documents as being able to help tell authentic from non authentic citizens. Ms Kabo in relating national documents to the politics of difference had this to say:

Citizenship means being a Motswana. As a Motswana you should have an identity card (*Omang*). The person must be born in Botswana and be able to speak Setswana. You have to belong to one of the ethnic groups in Botswana "*O seka wabo o le Motebele hela jaaka o ntse fa o bo ore o Motswana*" (when translated means that: "You should not be a Ndebele (ethnic group in Zimbabwe) as you are seated here and call yourself a Motswana (Referring to me)")

According to Ms Kabo possessing national documents was a way of differentiating between real Batswana (born and belonging to the main ethnic groups in the country) and non real Batswana that is those Batswana who might have acquired citizenship through naturalization like me and do not belong to anyone of the recognized ethnic groups in Botswana. In fact Ms Kabo gave me a reality check in that she used me as an example of a non authentic Motswana and for the first time I came to realize that I am not regarded as a *Motswana* in my own country of birth.

RQ2 Citizenship as Active Participation

All the teachers who participated in the study conceptualized citizenship as active participation and this involved taking part in political, community and national activities. In their view participating in various activities was related to 'good' citizenship and nation building.

Political Activities

Political activities were viewed in relation to elections and voting for the government of their choice. Teachers expressed the importance of participating in elections as a way of expressing their wishes and a sign of belonging. Talking about participation, Ms Mpho had this to say:

Taking part in elections, it is their own way of expressing themselves by choosing their leaders. Take part in activities that you are asked to take part in as long as they are the ones that will build your nation.

Ms Kubu equated participation in political activities to good citizenship as she saw it as an important aspect of decision making and self expression which basically qualifies someone to be a good citizen at the same time developing national pride and she had this to say:

Even when it comes to elections, its high time everybody stands up to choose the government she wants because at times things are changing. We do not have to be saying the one in power is mine so I don't need to vote. This makes you a proud citizen and knows that you have voted and were part of those who chose the government.

Ms Kubu was very critical about people who do not participate during elections and lamented on voter apathy as a negation of good citizenship. Mr Tau saw participation in politics as a gateway to leadership positions. He mentioned that:

Citizenship requires that as citizens we should participate in elections and vote for our leaders. As teachers we should teach our students good citizenship by encouraging them to aspire for higher positions and should not be afraid to take up leadership positions. If you are an adult, you are 18 years and above, you should be seen to be participating in elections, vote and be voted as members of the council or parliament.

However, the findings in this category took me by surprise to realize that teachers conceptualize political activities narrowly in terms of elections and voting. There was no mention of participation in political organizations for the youth, attending freedom squares and debating on issues of national interest or engaging in associations that are geared towards political education.

Community Activities

Active participation was also seen in relation to taking part in community or local activities that would help others. This would involve taking leadership positions that would benefit the community that they live in. Community activities that were mentioned included attending *kgotla* meetings, participating in village development committees (VDC's), Parents Teachers' Associations (PTA's), attending funerals and weddings, Drought Relief Projects (*Ipelegeng*) and crime prevention groups (*Twantsho borukuthi*). Teachers saw participating in such activities as ways of making one to belong to a certain community. Ms Thato had this to say when talking about community activities:

Citizens in Botswana should take part or participate in community activities like weddings, funerals and community projects such as drought relief projects (*Ipelegeng*), village development committees(VDC's) and Parents Teachers' Associations (PTA's). As they are to be good citizens they have to take part, say out their views, make their own decisions, so that they know and feel that they belong, they are part and parcel of the community.

Mr Tau had this to say:

Citizens must be seen to be participating in community services, attending *kgotla* meetings to see activities done and issues discussed. It is important to attend *kgotla* meetings in order to make decisions in the area you are living in, the ward, and the village. We should be peace loving society. If there are community issues to be discussed at a *kgotla* meeting, we should be raising them peacefully without any confrontations.

It was interesting to find that the community activities that the teachers discussed ranged from development activities such as VDC's and PTA's to social activities such as weddings and funerals. Botswana are popularly known for their kinship ties and associations and it was not surprising to find that funerals and weddings were mostly mentioned as important community activities because that is where social networks are created, and kinship ties rekindled and failure to attend renders one an outcast in the society and no one wants to be seen in that way. The notion of discussing issues properly, peacefully without any confrontation is an interesting one as it is pivotal to our understanding of the teachers' interpretations of participation, citizenship and democracy in Botswana.

National Activities (Volunteerism)

Active participation was also described in terms of being involved in national activities. Though teachers emphasized the difference between national and community activities it was quite difficult to draw a distinction between the two. In expressing their views on citizenship, active participation and national activities, Mr Kgabo insisted that:

Citizenship involves participating in national activities such as referendum, population census, conduct of elections on election day, have knowledge about the Independent Electoral Commission (IEC) and participate in its activities, how it operates, they must know about these things. They must engage in national drama groups that represent the country outside.

Ms Kabo shared the same sentiments when she elaborated on national activities that:

Citizens in Botswana should take part in national activities like national elections where they vote for their national leaders such as Members of Parliament, referendums to make decisions concerning their lives, crime prevention groups at national level. We should participate in national events like culture day...

Teachers also associated active participation with national activities and volunteerism which they saw as important aspects of good governance. Ms Batho had this to say:

Citizenship calls for responsible citizens and as a good citizen you must ascribe to good governance like if there are elections, elect those you feel should be elected. Volunteer a lot. We are also expected to participate in the national activities, for example, national elections, cleaning campaigns or voluntary work. We are also expected to say out our views through councilors and members of parliament.

The findings on citizenship as active participation did not surprise me as they depict a clear picture of how democracy and citizenship are practiced and understood within the Botswana context where elections and voting are seen as the most important aspects of good citizenship. These forms of citizenship follow the liberal model of citizenship which advocates for citizens rights and civic duties. This narrow conception of active participation being related to elections and voting maybe attributed to the confusion emanating from the understanding of democracy as it is not clear whether democracy should be taught from a Eurocentric view or Tswana traditional view or a combination of the two. Therefore, the way democracy is understood and practiced may be related to the confusion that surrounds the notions of citizenship in Botswana.

RQ3 Citizenship as Collective Responsibility

All the teachers spoke about citizenship as a collective enterprise involving the family and community as promulgators of moral and societal values and behavior. They saw citizenship in terms of moral values, peaceful coexistence and societal values and these were expressed in the form of *botho* as a source of collective and mutual interest within the family, community or nation.

Moral Values and Behavior

Moral values and behavior was expressed in terms of *Botho* and the family, school and community were seen as the main actors in inculcating the values of *botho* among children. Values associated with *botho* were articulated as compassion, cooperation, respect, and love for one another, sympathy, being open, peaceful and good behavior. Being asked to define *botho*, this is what teachers had to say:

Ms Lorato was quick to say that:

Botho means being honest with yourself, being honest with other people, self respect and respecting other people. Love for our country and respecting other people's rights. Respect for people young and old.

Mr Tau said:

...*Botho* is where we have to respect each other, care for one another, love one another and protect one another. Yes, *botho* relates to good moral values. We should display *botho* as this is what makes us to be who we are, being tolerant, peaceful and patriotic comes from the fact that we are taught to display *botho* wherever we go. *Botho* and social harmony are vital in our society.

The findings in this category clearly show that *botho* is regarded as an embrative concept that describes and embodies the attributes of an ideal Motswana. It is associated with virtues of humanness and compassion hence it is one of the pillars of the nation.

Peaceful-Coexistence and Unity

Citizenship was viewed in line with living peacefully and being united. Teachers emphasized that the notion of their country being regarded as peaceful lies in their ability as a nation to be able to tolerate one another. They believed that

students should be taught to be tolerant at an early stage in order for them to be able to live peacefully and maintain the prevailing peace and stability in the country.

Alluding to living in peace Ms Neo said:

I want to develop citizens who have tolerance, live in harmony, peace in order to maintain peace and stability that we have enjoyed over the years. We are known to be a peaceful country and we need to teach our children to preserve it.

Ms Mpho also emphasized the need to teach children good behavior and tolerance and her explanation was that:

What is typical about Batswana lies in their behavior, most Batswana are well behaved. One researcher once said that he was so surprised to see that Batswana are not arrogant, he was interviewing small children and they were well behaved, polite and used proper language. They like to solve problems peacefully rather than fighting. Batswana are peace-loving. They believe that “*Ntwakgolo ke ya molomo*” meaning that “It is better to jaw-jaw than war-war”.

Ms Kubu opines that:

Though we want peace, we should also be tolerant and accept that we are different but united. We should unite and reinforce development because “*Setshwarwa ke ntsa pedi ga se thata*” (Setswana proverb) meaning that, “when we are a joint effort in carrying out a certain task, it will be completed well in time”. In our communities we should participate in activities that promote peace.

The findings in this category not only speak to the notion of maintaining peace and unity but also about recognizing diversity in unity. This is an important feature in Botswana as the ideas of citizenship have always centered on national homogeneity as opposed to diversity. This marks a departure from national citizenship towards the politics of difference and identity. The other interesting point that keeps coming up is that of solving problems peacefully without any confrontations, this raises questions of complacency and good citizenship where people tend to accept views without challenging them in an effort to maintain peace.

Societal Values (helping each other)

Citizenship was also viewed in terms of communal responsibility where each one of the community members depended on the other in times of need. Teachers felt that students need to be taught the spirit of sharing and caring for one another which is entrenched in the Setswana culture. They also felt that students should be taught *botho* as it reflects one’s identity in the family and community. In expressing the need to help one another Ms Lorato had this to say:

As Batswana we should be just and caring, not look for support from you but to contribute in caring for others. We should be seen to be contributing towards helping other citizens. In our culture if I happen to have many cattle and my neighbor does not have any, culturally we borrow those without cattle some cattle to milk and plough with them in order to survive, this is called the “*Mafisa System*”. I would not like to see my neighbor suffering. We support those in mourning by making contributions and staying with them in times of need.

The notion of caring for other people was well expressed by Ms Kubu when saying:

In our communities there are needy people in different forms such as orphans due to HIV/AIDS, old people, terminally ill and the poor. As a good citizen you have to find out if you can be of assistance to your neighbor more so that our culture is a culture of extended relations. Know what is going on within your relatives. If one of your relatives is sick or dead, know that you have to assist with funeral arrangements.

Teachers also felt that children should be taught *botho* as a collective enterprise and this is what Mr Morubisi said:

A citizen of Botswana is somebody who has *botho*, somebody who values other people. *Botho* must begin at home because it is said that “charity begins at home”. The way you greet, talk, or carry yourself around should reflect who you are and the values of your family and community or society.

To further explicate the notion of collectivity in citizenship, Ms Kubu expressed her view thus:

Botho is one of the things that we expect a Motswana child to exhibit where ever he/she is. It is part of our culture and calls for one to behave in a certain manner in or outside the country. It is something that must be there in you, to know that the same respect that I give to my parents; I should accord it to any adult person in the community, meaning that children must know that they do not have to respect their parents only and that every adult is your parent.

The findings in this category reflect citizenship as a community enterprise as it focuses on behavior as determined by the family and the community. It is clear that an individual is viewed as a representative of the community she/he lives in and whatever they do mirrors the society they come from. Being a member of a particular community or village is very important in Botswana as one always identifies with where they come from and the notion of extended family is very crucial for everyone’s survival more especially in times of need. No matter how wealthy or successful someone is in life, they still have to maintain family and extended relations within the community that they come from. This view of citizenship marks a departure from the individualistic and autonomous view of citizenship that is usually fostered within the liberal democratic nations (Van Gunsteren, 1998) and provides an alternative view of citizenship.

RQ4 Citizenship as Self Reliance

Not all teachers in the study viewed citizenship as self reliance. All of the four male teachers and three female teachers associated citizenship with self reliance as they felt that the time has come for Botswana generally to start reducing their dependency syndrome on the government. They believe that citizens should be empowered and encouraged to develop entrepreneurial skills in order to generate self employment and produce commodities like food in their own country.

Citizen Empowerment

Citizen empowerment was listed as one of the important aspects of self reliance. Teachers felt that citizens need to empower themselves through getting the relevant education in order to develop skills that can sustain their livelihoods. Talking about empowerment Mr Tau who appeared very passionate about the issue had this to say:

In the Botswana context we are talking about empowerment, whereby people are taught how they can make a living rather than relying on the government, they are taught self reliance. It is one of the concepts that were brought by a man called Patrick van Ransburg when he brought up the idea of education with production...Whatever they have learnt must go and apply in their everyday life. However his ideas were not taken on board as they believed that he was a member of the opposition party.

Mr Tau further elaborated on the issue of self development by saying that:

Citizens of Botswana should develop themselves. Know what the country expects of them, it looks like most people are looking at the government to do something for them in order to develop. They need to develop themselves academically, find out what their abilities are so that they can bring more money into the country. They need to benchmark with other people who are doing very well, so that when they engage in projects, they have the background of such projects.

Mr Kgabo maintained that education should target people’s capabilities and be specialized rather than being mass production:

People need to understand that they need to develop themselves after identifying their abilities. You find that most of us do so many subjects at a go and at the end of the day; we benefit nothing out of them. Probably if people are good at engineering, they must do engineering so that at the end of the day we have engineers and other people doing different jobs, we have people doing electrical and other stuff. That is why I was talking education with production...

Ms Kubu weighed in by emphasizing the need for citizens to align their activities to the national principles as they guide citizens on what to aspire for. She said that:

As citizens we should respect the national principles. We should live and abide them because these things are important. The principle of Self Reliance, you will find that Batswana now do not want to do anything; they want to rely on the government hence it becomes very difficult for the government to fend for everyone. People should go out and plough, find jobs, work and help the government to pay for their school fees ...

The findings on citizen empowerment and self reliance provide a synopsis of the teachers concerns on the type of education that is provided in Botswana. They shed light on concerns about education that does not provide students with the relevant skills, knowledge and attitudes hence the lack thereof to develop and sustain themselves without overly-relying on the government to do everything for them, a situation that they believe should change.

Entrepreneurship and Education with Production

In discussing the issue of self reliance and entrepreneurial development, teachers felt that it was high time students were taught skills that will help them engage in small scale self help projects for commercial and subsistence purposes. In discussing the importance of developing entrepreneurial skills among students in order to reduce the citizens reliance on the government Mr Tau had this to say:

I encourage them to discuss issues of personal development whereby they develop themselves, self reliance so that they help in the production of food as suggested by Van Ransburg and his idea of education with Production. For students to be self reliant they need to read, learn how to manage finances and minimize getting loans.

Mr Morubisi emphasized the need for students to be taught to be independent and cautioned people on the overreliance on the government and urged them to be innovative and hard working said:

Yes, self reliance, where they have to be independent and help themselves and not to depend on the government as we are facing this era of recession. As good citizens we should help the government to develop this country by starting projects and creating employment for our fellow citizens rather than thinking that the government can do everything. We should be found to be putting effort into making our lives better through creating self employment and engaging in activities such as in agriculture and tourism. We should learn to be self reliant.

Ms Batho brought up an interesting point as she related self reliance to the global market that:

The world is a small village and people have to develop themselves basing at the abilities so that they can fit in every market not being confined to Botswana only. For this to happen it is important for these kids to have learned leadership skills so that they can be able to make decisions and informed decisions for that matter.

Teachers emphasized the need to equip learners with entrepreneurial skills as way to develop their country by providing self employment, engaging in food production and relieving the government from having to provide everything for its citizens. It is interesting that teachers brought up the idea of education with production which they believe has been ignored for political reasons. The notion of education with production in Botswana founded on the national principle of self reliance is an old one, however it is noteworthy that, 44 years since independence, it is still very shady and has not been aggressively taken on board as primary schools no longer provide vegetables through gardening like they used to in the past. Furthermore, Botswana is still insufficient in food production as it still imports most of its food from the neighbouring countries, more especially, South Africa.

CONCLUSIONS AND RECOMMENDATIONS

The discussion in this article revealed how citizenship is understood, perceived and interpreted within the Botswana context indicating that Botswana is not immune to the influences of globalization and how it is shaping citizenship and identities imagined or real. There is a clear indication that citizenship in Botswana is hierarchical and affects individuals and communities differently as informed by ethnicity, class and geography. Therefore, citizenship in Botswana is fluid and not homogeneous as one might have thought given the national aspirations of *kagisano* (social harmony), *popagano* (unity) and nation building that are purported to form the cornerstones of citizenship in an emerging nation like Botswana.

These national aspirations and their product of national citizenship founded on a legally bounded citizenship and belonging are facing the greatest challenge in Botswana today as they have been viewed to be exclusionary and discriminatory against certain *Merafhe* (ethnic groups). From these findings it can be discerned that citizenship as understood and interpreted by the social studies teachers is complex, not homogeneous and fluid. This is evidenced by the way teachers conceptualize citizenship as national identity, active participation, collective responsibility and self reliance. The study therefore, suggests the following recommendations for consideration by the teachers, teacher educators and policy makers:

1. The fact that Botswana is experiencing globalization resulting in identity politics nationally and also considered part of the global society there is need to conduct research to explore the extent to which teachers are conversant with the notion of global citizenship and whether or not they are taking it on board.
2. A study on an evaluation of social studies' teacher education programs is needed urgently to find out if they have incorporated mega trends on citizenship education as a field of study in an effort to insure that they prepare teachers who can compete globally.
3. Teachers need to be provided with workshop and engage in conferences on citizenship development to insure that they are up to date with information and trends in the social studies area.

IMPLICATION FOR RESEARCH AND PRACTICE


This study provides valuable information on citizenship education in primary schools in Botswana and has the potential to influence practice, research and policy formulation on social studies as a subject within which citizenship education is taught. The findings in this study have implications for teachers, teacher educators, and policy makers and the public. The study lays a foundation on citizenship education and provokes teachers to engage in action research in order to solve their day to day theoretical and pedagogical problems. Furthermore, the study is probably the first of its kind at this level of education in Botswana, therefore, forms a baseline for the re-conceptualization of citizenship education and its pedagogy among teachers and student teachers in general.

The study provides empirical evidence that is hoped to challenge teacher educators to revisit their curriculum to see the extent to which it has incorporated mega trends in the area of citizenship and global education if indeed they aim to develop teachers who can compete in a globally interconnected world that they live in today. This is important in light of the fact that the discourse on citizenship education has broadened in scope and focus from national bounded citizenship to global citizenship. The findings of the study reflect serious flaws in the way citizenship is perceived, conceptualized and interpreted among social studies teachers. Therefore, this study serves as a constant reminder to policy makers that democracy is not genetically inherited, it has to be learned, cultivated and practiced for it to prosper (Harber & Serf, 2006) and citizens do not spring from nowhere as they need to be taught desirable attitudes, values, beliefs, skills and knowledge requisite for them to become effective citizens in a democracy. The study further sets the platform for the rethinking and understanding of citizenship education within the Botswana context for the public as whole.

REFERENCES

- Abdi, A. A. (2008). Democratic development and prospects for citizenship education: Theoretical perspectives on sub-Saharan Africa. *Interchange*, 39(2), 151-166.
- Ajiboye, J. O. (2009). Strengthening civic education in Botswana primary schools: A challenge to traditional social studies curriculum. *The African symposium*, 9(1), 125-133.
- Anderson, C., Avery, P. A., Pederson, P. V., Smith, E. S. & Sullivan, J. L. (1997). Divergent perspectives on citizenship education: A Q-Method study and survey of social studies teachers. *American educational research journal*, 34, 333-364.
- Banks, J. A. (2008). Diversity, group identity, and citizenship education in a global age. *Educational researcher*, 37(3), 129-139.
- Barr, R. D., Barth, J. L. & Shermis, S. S. (1977). *Defining the social studies*. National Council for the Social Studies, Bulletin 51. Silver Spring: NCSS.
- Bradshaw, Y. & Ndegwa, S.N. (2000). *The uncertain promise of Southern Africa*. Bloomington: Indiana University Press.
- Brophy, J. (1990). Teaching social studies for understanding and higher-order applications. *The elementary school journal*, 90(4), 351-371.

- Castles, S. (2004). Migration, citizenship and education. In James Banks (Ed). *Diversity and citizenship education: Global perspectives* (pp. 17-48). San Francisco: Jossey-Bass.
- Chilisa, B. (2005). Educational research within postcolonial Africa: a critique of HIV/AIDS research in Botswana. *International journal of qualitative studies in education*, 18(6), 659-684.
- Crick, B. (2007). Citizenship: The political and the democratic. *British journal of educational studies*, 5(3), 235-248.
- Davies, I., & Pike, G. (2009). Global citizenship education: Challenges and possibilities. In Lewin Ross (Ed.). *The handbook of practice and research in study abroad: Higher education and the quest for global citizenship*. pp. 61-78. New York: Routledge.
- Engle, S. H., & Ochoa, A. N. (1988). *The citizen we need in a democracy*. Teacher's college press, 16-27.
- Evans, M. (2006). Educating for citizenship: What teachers say and what teachers do. *Canadian journal of education*, 29(2), 410-435.
- Evans, R. W. (2004). *The social studies wars: What should we teach the children?* New York: Teachers college, Columbia University.
- Figueroa, P. (2004). Diversity and citizenship education in England. In James Banks (Ed). *Diversity and citizenship education: Global perspectives*, (pp.219-244). San Francisco: Jossey Bass.
- Hahn, C. (2001). Democratic understanding: Cross-national perspectives. *Theory into practice*, 40(1), 14-22.
- Hahn, C. (1999). Citizenship education: An empirical study of policy, practices and outcomes. *Oxford Review of Education*, 25(1/2), 231-250.
- LeCompte, M. D. & Preissle, J. (1993). *Ethnography and qualitative design in educational research*. New York: Academic press.
- Lincoln, Y. & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills CA: Sage
- Marri, A. R. (2008). Connecting diversity, justice and democratic citizenship: Lessons on alternative US history class. In J.S. Bixby and J.L. Pace (Eds). *Educating democratic citizens in troubled times: qualitative studies of current efforts*. (pp. 58-80). Albany: University of New York.
- Mautle, G. (2000). Social studies in Botswana. In M.B. Adeyemi (Ed). *Social studies in African education*, pp. 157-168. Gaborone: Pyramid.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey- Bass.
- Merryfield, M. M., & Subedi, B. (2006). Decolonizing the mind for world-centered global education. In E. W. Ross (Ed). *The social studies curriculum: purposes, problems, and possibilities (3rd Ed)*. (pp. 283-298). Albany: State University of New York.
- Mhlauli, M. B. (2010). *Social studies teachers' perceptions and practices for educating citizens in a democracy in upper classes in primary schools in Botswana*. Unpublished PhD dissertation. Columbus: The Ohio State University.
- Mhlauli, M. B., Vosburg-Bluem, B., & Merryfield, M. M. (2010). Natural disasters in the lives of women living in poverty in Southern Africa. In Ooka-Pang, V., Fernekes, W. R., & Nelson, J. L. (Eds). *The human impact of natural disasters: Issues for the inquiry-based classroom*, (pp.57-62). *NCSS Bulletin 110*. Silver Spring: NCSS.
- Mudimbe, V.Y. (1994). *The idea of Africa*. London: James Curry.
- Nyamnjoh, F. B. (2006). *Insiders & Outsiders: citizenship and xenophobia in contemporary Southern Africa*. New York: Zed books.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods (2nd Ed)*. Newbury Park: Sage.
- Preece, J., & Mosweunyane, D. (2004). *Perceptions of citizenship responsibility amongst Botswana youth*. Gaborone: Light books.
- Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American community*. New York: Simon Schuster.
- Rizvi, F., & Lingard, B. (2006). Edward Said and the cultural politics of education. *Discourse: Studies in the cultural politics of education*. 27(3), 293-308.
- Ross, W. (2006). *The social studies curriculum: Purposes, problems, and possibilities (3rd Ed)*. Albany: State University of New York.
- Republic of Botswana (1993). *Report of the National Commission on Education*. Gaborone: Government Printer.
- Said, E. W. (1978). *Orientalism*. New York: Random House.
- Sim, Jasmine B-Y. (2008). What does citizenship mean? Social studies teachers' understandings of citizenship in Singapore schools. *Educational review*, 60(3), 253-266.

- Subedi, B., & Daza, S.L. (2008). The possibilities of postcolonial praxis in education. *Race ethnicity and education*, 11(1), 1-10.
- Van Gunsteren, H. (1998). *A theory of citizenship: Organizing plurality in contemporary democracies*. Boulder: West view press.
- Weistheimer, J. (2007). *Pledging allegiance: The politics of patriotism in America's schools*. New York: Teachers College Press.
- Willinsky, J. (1998). *Learning to divide the world: Education at its empire's end*. Minneapolis: University of Minnesota.  © IJSRE
-

¹ Dr Mavis B. Mhlauli is a lecturer in the Department of Primary Education, Faculty of Education at the University of Botswana. She specializes in Social Studies and Global Education. Her research interests are in global citizenship, multicultural education, globalization, gender and post colonial scholarship. She can be reached on Address: Faculty of Education, University of Botswana, Private Bag 00702, Gaborone. Tel: 0267-355-5090 Fax: (267) 318-5096 E-mail: mhlaulim@mopipi.ub.bw



The Effects of Use of Learning Strategies Training on Students Foreign Language Vocabulary Learning

Reza Fallahchaiⁱ

Department of Psychology
Hormozgan University, Iran
rfallahchai@yahoo.com

Abstract

The purpose of this semi- experimental research design study was to better understand of the effects of phonological awareness and manner of rehearsal on recall and recognition of foreign vocabulary. 558 primary (6th grade) students (four groups of from sixteen intact classes) were selected by using cluster and random sampling. Four approaches to vocabulary instruction, a) vocal rehearsal+ phonological awareness training, (b) subvocal rehearsal+ phonological awareness training, (c) vocal and subvocal rehearsal+ phonological awareness training, and (d)no rehearsal and phonological awareness training were examined in this study and a comparison was made of their effects on students vocabulary acquisition. Pre-test and post-test vocabulary knowledge scale was administered and an ANOVA analysis was conduct to identify any significant difference among four groups. The results indicate that all three methods resulted in significant vocabulary gains. Furthermore, the difference between (a) group (vocal rehearsal phonological awareness training) and (b) group (subvocal rehearsal phonological awareness training) was not significant; participants in the third (c) group recalled and recognized significantly more target word than (a) and (b) groups .

Keywords: Learning Strategies, Rehearsal, Phonological awareness, Foreign language, Teaching vocabulary

Reference to this paper should be made as follows:

Fallahchai, R. (2011). The effects of use of learning strategies training on students foreign language vocabulary learning. *International Journal of Scientific Research in Education*, 4(3&4), 180-189. Retrieved [DATE] from <http://www.ij sre.com>.

INTRODUCTION

Learning a new language is a difficult job, especially when it is to be carried out in a foreign language situation; the reason being that a "foreign language situation" provides language learners with little authentic communication in the foreign language (Afkhani, 2000). For most learners, it is a long, painstaking process. In addition, interference from the learner's mother tongue, as well as the great difference between the native and the target language, render the task of language acquisition even more difficult.

One thing that students, teachers, materials writers, and researchers can all agree upon is that learning vocabulary is an essential part of mastering a second language (Schmitt, 2008). Vocabulary learning is central to language acquisition, whether the language is the first, the second or a foreign language (Decarrico, 2001). It is related to other aspects of learning and use. It is also crucial to the learner's overall language acquisition (Gao, 2003). Research has shown that vocabulary is the building block of all four language skills: reading, listening, writing, and speaking. Laufer and Sim (1985) found in their study that, among foreign language learners, vocabulary was needed more than subject matter knowledge and syntactic structure. Learning vocabulary in another language is an

incremental and recursive process. It involves the integration of different kinds of knowledge of a particular vocabulary item, which is demonstrated by the learner's ability to use that knowledge in communication at different levels (Gass, 1999). "Learning a word is a cumulative process involving a range of aspects of knowledge and that learners need many different kinds of meetings with words in order to learn them fully" (Nation, 2001; p. 4). Despite the many factors that may contribute to the low achievement among most EFL learners, research demonstrates that vocabulary plays a crucial role in learning a second /foreign language (L2), and for most students it takes substantial time and effort to acquire the target vocabulary, both receptively and productively (Nation, 2001). However, the best means of achieving good vocabulary learning is still unclear, partly because it depends on a wide variety of factors (de Groot, 2006). Therefore, one of challenging topics in language learning in general concerns vocabulary learning; that is, learning lexicon or words of specific language. Second language acquisition (SLA) researchers have become heavily interested in vocabulary acquisition, because many strongly believe that "vocabulary learning is central to language acquisition, whether the language is first, second, or foreign (Decarrico, 2001).

Second language (L2) learners at all levels are faced with the difficulty of learning vocabulary. The acquisition of new English vocabulary, one of the important skills necessary for English foreign language (EFL) learners, frequently involves much representational learning. In addition to needing a large number of lexical items, a learner must also know a great deal about each item in order to use it well. This is often referred to as the quality or 'depth' of vocabulary knowledge, and is as important as vocabulary size (Schmitt, 2008).

The ability to hear and apprehend a foreign word to be learned is crucial for several reasons. Firstly, in order to learn the word, it is necessary to hear it accurately, to be able to break the word down into its individual sounds and phonemes, and to rehearse the word. People can rehearse a foreign word aloud to themselves or as part of a class drill, but they can also do it silently, inside their heads, using their inner speech. During the initial stages of foreign language learning, this inner speech is primarily used to play with 'funny' sounding words and to rehearse words and utterances to be learned.

Rehearsal is the process by which phonologically encoded information is maintained and refreshed in the phonological loop until it can be stored in long-term memory. The ability to form phonological representations of words and rehearse them is crucial to learning foreign or novel words. Rehearsal of the target language can occur vocally or subvocally in inner speech, but the mechanisms for rehearsal are assumed to be the same. This study adopts a version of Baddeley's (1990) working memory model, which claims that auditory stimuli is automatically encoded and entered into the phonological loop where it is rehearsed in short-term memory (Baddeley, Gathercole, & Papagno, 1998). Subvocal rehearsal in the form of inner speech is viewed as one of the first and most basic functions of inner speech, along with language play, and which is key to foreign language learning (Guerrero, 2005).

If the phonologically encoded material is not rehearsed via vocal or subvocal rehearsal, it will decay within about two seconds and the words will not be correctly recalled. Inability to rehearse has been found to inhibit word learning. Phonological awareness (PA) is one aspect of metalinguistic awareness, and refers to sensitivity to units of sound (Yopp & Yopp, 2000). This sensitivity includes the ability to reflect on and manipulate these units. Skills that demonstrate PA include generating and recognizing (detecting) rhyming words and words with the same onsets, counting phonemes and syllables, and segmenting syllables, onsets, or rimes. It follows a developmental sequence, in which matching sounds (especially onsets) is an easier and earlier -developing skill, blending is more difficult, and segmenting requires even more skill and generally emerges later. Furthermore, the difficulty varies depending on the number of sounds, which sounds, and their order within a word (Yopp & Yopp, 2000). Phonological awareness, the ability to reflect on and manipulate speech sounds, has been consistently shown to relate to decoding and to word reading within language (Schatschneider et al., 2004) and across languages (Droop & Verhoeven, 2003; Gersten & Geva, 2003). In order to successfully comprehend connected text, accurate and fluent word reading is necessary. Therefore, there is not only a reciprocal relationship between PA and word reading, but PA is indirectly also related to reading comprehension via decoding skill. A small but solid body of evidence supports the efficacy of PA training for improving reading for EL (Gerber et al., 2004; Leafstedt, Richards, & Gerber, 2004; Vaughn et al., 2006).

Phonological awareness and decoding interventions have been demonstrated to be highly effective at improving reading outcomes for students at-risk of reading difficulty (e.g., Vadasay, Sanders, & Peyton, 2006), students with LD (Torgesen et al., 2001), and at-risk EL in both first (Gerber et al., 2004) and second language instruction (Leafstedt, Richards, & Gerber, 2004; Richards, 2004). For example, in a recent study, students in Spanish instruction schools at risk of reading difficulty received an intensive PA and decoding intervention (Vaughn et al., 2006). Instruction in this case included vocabulary and comprehension strategies using oral texts, so it is difficult to untangle constituent components. However, students who received the explicit, systematic intervention outperformed the control group on PA, fluency, decoding, and comprehension measures at post-test, indicating its efficacy.

Most people in fact associate learning a language with "words". However, foreign language vocabulary learning is often viewed as a solitary activity to be accomplished by the individual student. Vocabulary is rarely practiced systematically in classrooms. Students are left to learn vocabulary on their own and then are expected to apply

it in communicative activities in the classroom and perhaps in the target culture. But, to the frustration of students and teachers alike, there is often a large gap between the targeted and the actually learned vocabulary.

Most current studies of vocabulary learning have focused on aspects of incidental word learning, including reading and guessing (Huckin and Coady, 1999; Hulstijn et al., 1996); the role of cognates in vocabulary learning (Treville, 1996); the role of context in vocabulary learning (Hulstijn, 1997); the general process of vocabulary acquisition (Altman, 1997); vocabulary learning strategies (Kojic-Sabo and Lightbown, 1999); and vocabulary testing (Read, 1997). With the advent of constructive views, language theorists claim that, vocabulary, not grammar is at a heart of language learning, as language consist of grammaticalised lexis, not lexicalized grammar(Lewis, 1993).

Traditionally, the teaching and learning of vocabulary has long been neglected in second language acquisition (SLA) research (Zimmerman, 1997). The argument in SLA to focus on form in communicative classroom activities tends to put the acquisition of grammar in the spotlight (Long & Robinson, 1998). Therefore, in favor of syntax, vocabulary has generally been given a secondary place in the language curriculum (Nation, 2001). However, many L2 learners share the difficulties of learning vocabulary, and are often frustrated and discouraged by the unfamiliar words contained in reading texts.

A critical component of reading comprehension, highly interrelated with other component skills, is vocabulary knowledge (Muter et al, 2005). This broad construct includes some metalinguistic components of word analysis, and its relationship to other skills changes over time. Expressive vocabulary is among the most robust predictors of future reading scores, along with phonological awareness, sentence imitation, and story recall (McCardle, Scarborough, & Catts, 2001). Later in development vocabulary becomes increasingly important as a facilitator of word recognition and as a facilitator of reading comprehension (Muter et al, 2005). Vocabulary is an important contributor to second language reading comprehension, as well (Proctor, 2005).

Vocabulary instruction has been deemed critical for the reading development and reading success of ELLs (Gersten & Baker, 2000). Proficient reading depends on various subskills, and for students who have limited knowledge of word meanings, comprehension is greatly affected. Many researchers agree that if a student has a large vocabulary, the student will also have good comprehension of written material and if a student has a limited vocabulary, his or her comprehension level will also be limited (Maria, 1990). Research indicates that a balanced literacy approach includes direct, explicit, and systematic instruction in specific skills such as decoding, vocabulary, spelling, and comprehension; and content matter instruction in all relevant curriculum areas and that a whole new pedagogy is not necessary (Goldenberg, 2001). Much of the vocabulary research has suggested several different strategies to developing reading skills in English language learners. These strategies include explicit vocabulary instruction, repeated reading, classwide peertutoring, and previewing, but no specific approach to teaching vocabulary has been deemed superior.

Liao (2004) investigated the vocabulary learning strategies used by 625 Taiwanese EFL freshmen. Schmitt & McCarthy (1997) vocabulary strategy questionnaire was adopted for this survey. The results showed that metacognitive and social strategies were the two least used strategy categories. She argued that the possible reason for the low frequency use might be because English vocabulary learning was viewed as an individual learning process in general; therefore, students tended not to seek other's help when encountering unfamiliar words. Moreover, based on Gu and Johnson (1996) who indicated that metacognitive strategies can be a positive predictor of general proficiency, Liao concluded that the low frequency used in metacognitive strategies may be that these participants' general English proficiency was limited. By examining isolated strategies use, the researcher found that Taiwanese students preferred to use bilingual electronic dictionaries, write the word several times and study the sounds of the word.

It has also demonstrated the importance of explicit instruction and learning in helping students to acquire vocabulary of a foreign language (Laufer, 1997; Zimmerman, 1997). McCarthy (1990, cited in Laufer, 1997) asserts, "No matter how well the student learns grammar, no matter how successfully the sounds of L2 are mastered, without words to express a wider range of meanings, communication in an L2 just cannot happen in any meaningful way" (p. viii). Vermeer (1992, cited in Laufer, 1997) echoed the same point of view, "Knowing words is the key to understanding and being understood. The bulk of learning a new language consists of learning new words. Grammatical knowledge does not make for great proficiency in a language" (p. 147). Gass and Selinker (1994, cited in Laufer, 1997) simply put it this way: "The lexicon may be the most important component for learners" (p. 270).

There is comparatively little research to report on methods of presenting and practicing vocabulary in the classroom (Read, 2004). Therefore, vocabulary learning is an important topic that needs experimental studies to determine the best method of learning vocabulary for foreign language learners. Most current studies of vocabulary learning have focused on aspects of incidental word learning, including reading and guessing (Kost and et al, 1999); the role of cognates in vocabulary learning (Lotto and de Groot, 1998); the role of context in vocabulary learning (Hulstijn, 1997); and vocabulary testing (Read, 1997); But a few research was focused on vocabulary learning strategies.

In educational system of my country Iran, teaching English language is started at 6th grade formal education

and most of students have difficulty in learning English language. in this case no research or few research was conducted .The present study aimed to gain further insight into the effects different manners of rehearsal and phonological awareness training on foreign vocabulary learning of the beginning learners of English language. The purpose of this study was to examine three distinct approaches described above and compare their effects on vocabulary learning in Iranian primary school students. The findings from this research can expand our understanding of the optimal manner of rehearsing and phonological awareness training on foreign words to be learned. As a result, this study was guided by the following general research questions:

- Whether rehearsal strategies and phonological awareness training effects foreign vocabulary learning?
- To compare the effects of different manners of rehearsal and phonological awareness training on foreign language vocabulary recall and recognition, which form of rehearsal plus phonological awareness training is optimal for foreign vocabulary learning?

METHOD

Participants

The purpose of this study was to better understand of the effects of phonological awareness and manner of rehearsal on recall and recognition of foreign vocabulary. Five hundred fifty-eight primary students (6th grade) from sixteen intact general English (eight boys and eight girls) classes participated in the study. In order to determine the effect of manner of rehearsal and phonological awareness training on participants' ability to recall, recognize, and react to previously learned foreign words, each classes were randomly assigned to one of four rehearsal groups: (a) vocal rehearsal+ phonological awareness training, (b) subvocal rehearsal+ phonological awareness training, (c) vocal and subvocal rehearsal + phonological awareness training, and (d) no rehearsal and phonological awareness training.

Research Design

This study utilized a semi- experimental research design with four treatment groups. The study employed a pretest-posttest design carried out over a period of four months; this included a four-months training and practicing, which varied depending on the groups.

Measures

To assess participants' language background and homogeneity of students, a checklist of 85 words was designed for this study and administered among the students to assure that the words are new to the students. After all, only those words with which none of the students were familiar were included in the study.

Based on those words, two tests of recall and recognition were designed for this study and administered among the groups (pretest and posttest). Vocabulary recall was measured by a vocabulary (Word Recall Test) and vocabulary recognition was measured by a vocabulary (Word Recognition Test). Those tests prepared by the researcher himself and had been validated before. The Cronbach's alpha tests were performed to measure the reliability of two scales that were used in the study. The Cronbach's alpha for this scales were calculated to be at 0.91. The scores of the vocabulary posttests were used to measure the participants' vocabulary learning.

Data Analyses

Data from the present study were gathered and analyzed using the Statistical Package of the Social Sciences (SPSS16).

Procedure

The treatment involve training and practicing three manners of rehearsal and phonological awareness was conducted during the participants' regular class times, and required sixteen consecutive 50-minute sessions. The three manners of rehearsal plus phonological awareness training included in this study are (a) vocal rehearsal+ phonological awareness training, (b) subvocal rehearsal+ phonological awareness training ,(c) vocal and subvocal rehearsal + phonological awareness training, and (d)no rehearsal and phonological awareness training .All participating students were individually tested pre and post treatment. To assess students' vocabulary knowledge, a researcher-generated assessment was administered prior to training (pretest) and post of training (posttest).

RESULTS

This study was designed with two main objectives. The first objective was to investigate the various manner of rehearsal and phonological awareness training on foreign language vocabulary learning. Secondly, the study sought to determine which one manner of rehearsal was more effective than another in learning foreign language vocabulary. To answer this study's research questions, a statistical analysis were performed to determine:

- 1) Whether there were any significant differences between groups regarding their performance after the treatments,
- 2) Whether there were any significant changes within groups regarding their manner of rehearsal and phonological awareness training.

To examine the effect of the independent variables, first, the mean scores for the vocabulary (recall and recognition) tests were compared. Second, the raw scores on the vocabulary (recall and recognition) tests were submitted to a One Way Analysis of Variance ANOVA design. Third, when the ANOVA showed the significance for them, follow-up analyses were run on each of the groups. This part presents the results of this study according to the two dependent variables: recall of learned L2 vocabulary in the training period, and recognition of them (the vocabulary items) in sentences.

1- Participants' performance on the vocabulary recall and recognition test(Pretest)

The participants' language background was assessed. To assess the homogeneity of Vocabulary knowledge of students who participated in the study, two vocabulary tests (Recall and Recognition) were administrated. All of them took part in the tests.

Table 1: One Way Analysis of Variance ANOVA for performance on t the vocabulary recall and recognition test (Pretest)

Variables	d.f	F	Sig
vocabulary recall test	3	1.641	N.S
vocabulary recognition test	3	1.145	N.S

Note. N.S: No significant

One Way Analysis of Variance ANOVA was utilized to find whether the selected groups were almost homogenous. To do this, their scores in pretest of vocabulary recall and recognition tests were used. The ANOVA analysis did not show any significant effect for the general English test and vocabulary recall and recognition tests. The results in table 1 shows, F ratio (0.51), (1.64) and (1.145) doesn't exceed the F critical value (2.65) on the .05 level of the significance. This implies that there is no significant difference and four groups were almost homogenous.

2-Participants' performance on the vocabulary recall and recognition tests (Posttest)

To examine the effect of the independent variables, first, the mean scores for the vocabulary (recall and recognition) tests were compared. Second, the raw scores on the vocabulary (recall and recognition) tests were submitted to a One Way Analysis of Variance ANOVA design. Third, when the ANOVA showed the significance for them, follow-up analyses, the Scheffé post hoc comparisons for the posttests, were run on each of the groups. After the training phase, the vocabulary recall and recognition tests (Posttest) were conducted. The mean and standard deviation Recall and Recognition scores is displayed in Tables 2, broken down according to rehearsal plus phonological awareness training groups and control or no rehearsal plus phonological awareness training group.

Table 2: Mean and standard deviation of Words Recalled and Recognized by four Groups

Groups	Recall		Recognized	
	M	SD	M	SD
vocal rehearsal+ phonological awareness training	33.3	6.89	44.2	5.91
subvocal rehearsal+ phonological awareness training	35.7	6.18	45.3	3.41

vocal and subvocal rehearsal + phonological awareness training	40.3	8.76	51.7	6.05
no rehearsal and phonological awareness training	28.5	4.99	35.3	6.41

Regarding vocabulary recall and vocabulary recognition, table 2 shows that all of three treatment groups led to better results than control group. The highest overall recall was found for vocal and subvocal rehearsal + phonological awareness training group, and lowest overall recall was found for control group.

To test for main effects of treatment condition, One Way Analysis of Variance ANOVA (ANOVAs) were performed for each outcome variable. Differences in treatment group posttest scores were examined by computing ANOVAs for each variable. Recall scores were analyzed using ANOVA. Based on the results, there were some differences among the four groups. The main effect of Words Recall test (posttest) was F ratio (10.13) that exceeded the F critical value (2.65) on the .05 level of the significance and (3.88) on the .01 level of the significance.

Recognition scores were analyzed in a ANOVA. Based on the results, there were some differences among the four groups. The main effect of Words Recognition test (posttest) was F ratio (12.41) that exceeded the F critical value (2.65) on the .05 level of the significance and (3.88) on the .01 level of the significance.

Table 3: The Scheffe post hoc comparisons for the Words Recalled by four Groups

	Experimental 1	Experimental 2	Experimental 3	control
Experimental 1		0.67	2.81 *	4.05 **
Experimental 2			2.88 *	4.34 **
Experimental 3				7.29 ***
Control				

Note. * = $p < .05$, ** = $p < .01$, *** = $p < .001$

The Scheffe post hoc analyses vocabulary recall mean showed that the main effect for group was due to differences between the control group and the experimental groups. In posttest 1, all three experimental groups performed significantly better than the control group ($p < .01$, $p < .01$ and $p < .001$). However, the experimental groups 1 and 2 were not significantly different from each other, and the experimental group 3 was performed significantly better than the experimental groups 1 and 2 ($p < .05$ and $p < .05$).

Table 4: The Scheffe post hoc comparisons for Words Recognized by four Groups

	Experimental 1	Experimental 2	Experimental 3	control
Experimental 1		0.81	3.01 *	4.27 **
Experimental 2			2.78 *	4.86 **
Experimental 3				8.11 ***
Control				

Note. * = $p < .05$, ** = $p < .01$, *** = $p < .001$

The Scheffe post hoc analyses vocabulary recognition mean showed that the main effect for group was due to differences between the control group and the experimental groups. In posttest 2, all three experimental groups performed significantly better than the control group ($p < .01$, $p < .01$ and $p < .001$). However, the experimental groups 1 and 2 were not significantly different from each other, and the experimental group 3 was performed significantly better than the experimental groups 1 and 2 ($p < .05$ and $p < .05$).

DISCUSSION

The current research aimed to examine the various manners of rehearsal and phonological awareness training on foreign language vocabulary learning.

In this part, the results reported in the previous part will be discussed and evaluated in light of previous research on foreign language vocabulary learning, and data are discussed in detail, in terms of the research questions..

The major findings provided qualified support for the effectiveness and efficiency of all the various manner of rehearsal and phonological awareness training.

To determine the effect of the various manners of rehearsal and phonological awareness training on recall and recognition of foreign English language words, each participant took the two post-tests as a vocabulary learning measure.

Mean scores were calculated for the Recall task, the Recognition task. Statistical analysis revealed that there appeared to be differences between four groups on each of the two dependent measures. The effects of manner of rehearsal plus phonological awareness training on foreign vocabulary learning were examined. Findings suggest that manner of rehearsal plus phonological awareness training experience facilitates subsequent foreign vocabulary learning, and that different types of language-learning experience incur specific benefits.

The results of this research demonstrated that all manner of rehearsal plus phonological awareness training were successfully used by monolingual English speakers to learn novel foreign words. The findings from this study are consistent with research Guerrero (2005) indicating that, Subvocal rehearsal is one of the first and most basic functions of inner speech, along with language play, and which is key to foreign language learning.

It seems that the positive effects of vocal and subvocal rehearsal on vocabulary learning were due to vocal articulation or to the participants' ability to hear (and modify) their vocal production based on their own auditory feedback.

I had questioned whether one manner of rehearsal was more effective than another manner of rehearsal in learning foreign language vocabulary.

The results of this research were showed that the experimental groups 1 and 2 were not significantly different from each other, and the experimental group 3 was performed significantly better than the experimental groups 1 and 2

The findings from this study are consistent with research Leafstedt et al (2004) and Richards(2004) indicating that, phonological awareness and decoding interventions have been demonstrated to be highly effective at improving learning foreign language vocabulary. It has also demonstrated the importance of explicit instruction and learning in helping students to acquire vocabulary of a foreign language (Laufer, 1997; Zimmerman, 1997).

The paradigm used in this study may be extended to examine the rehearsal component of the phonological loop more closely. The working memory model suggests that in addition to a phonological store that maintains novel memory traces, rehearsal mechanisms that facilitate translation of a novel phonological trace into a long-term representation are fundamental for foreign vocabulary learning.

CONCLUSION

The first conclusion that can be elicited from the study is that the all the various manner of rehearsal and phonological awareness training had significant effects on recall and recognition of foreign language vocabulary and play an important role in second language acquisition.

The next conclusion is that the vocal and subvocal rehearsal along with phonological awareness training has the most positive effect on learning foreign language vocabulary.

The third conclusion that can be observed from the study is that the findings from this research expanded our understanding of phonological awareness training and the optimal manner of rehearsing foreign words to be learned. Similarly, future work may examine whether modality of rehearsal - auditory (vocal) vs. visual (written) - influences retention of foreign words differently at different levels of cross-linguistic overlap. For instance, it is possible that written rehearsal (writing the foreign word three times) would be a more efficient strategy than auditory rehearsal (saying the foreign word out-loud three times).

Further, a comparison between written and subvocal rehearsal is an interesting one to consider, since both involve more abstract phonological codes than vocal rehearsal, and thus may reveal whether activation of phonology during writing is qualitatively and quantitatively comparable to phonological activation during silent rehearsal.

Pedagogical implication

Foreign language vocabulary learning is not the same as memorizing words in the context of serial lists. To master a foreign language, words must be recalled and recognized in new and unexpected contexts.

Phonological awareness training has been successful at improving phonological awareness (De Jong et al., 2000) for at-risk learners and can be conducted as part of native language remediation or as part of the second or foreign language curriculum (Hodge, 1998).

There is a dearth of research on vocabulary instruction for EL, particularly EL at academic risk. The current study contributes to the literature by demonstrating that relatively sophisticated, content area vocabulary can be taught to EL very early in their reading development.

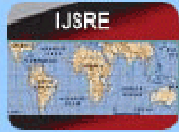
The results in the current study revealed that rehearsal strategies along with phonological awareness training influenced the student's vocabulary learning. Therefore, adopting vocabulary learning for vocabulary learning is necessary.

REFERENCES

- Afkhami, A. (2000). Sociolinguistic and grammatical competencies in EFL learners. *Journal of literature and humanity sciences of Tehran University*, 156, 519-536
- Altman, R. (1997). *Oral production of vocabulary: A case study*. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 69-97). New York: Cambridge University Press
- Baddeley, A., Gathercole, S., & Papagno, C. (1998). The phonological loop as a language learning device. *Psychological Review*, 105(1), 158-13.
- Decarrico, J. S. (2001). Reading for academic purposes: Guideline for the ESL/EFL teacher. In M Celce – Murcial (ED.). *Teaching English as a second or foreign language*. Boston :Heinle& Heinle.
- de Jong, P. F., Seveke, M. J., & van Veen, M. (2000). Phonological sensitivity and the acquisition of new words in children. *Journal of Experimental Child Psychology*. 76, 275-301.
- De Groot, A. M. B. (2006). Effects of stimulus characteristics and background music on foreign language vocabulary learning and forgetting. *Language Learning*, 56(3), 463–506.
- Droop, M., & Verhoeven, L. (2003). Language proficiency and reading ability and first- and second-language learners. *Reading Research Quarterly*, 38, 76-103.
- Gao, X. (2003). Changes in Chinese students' learner strategy use after arrival in the UK: a qualitative inquiry. In D. Palfreyman & Richard C. Smith (Eds.). *Learner autonomy across cultures: Language education perspectives*. (pp. 4 1-57). Great Britain: Palgrave Macmillan.
- Gass, S. (1999). Incidental vocabulary learning. *Studies in Second Language Acquisition*, 21(2), 319-333.
- Gerber, M., Jimenez, T., Leafstedt, J., Villaruz, J., Richards, C., & English, J. P. (2004). English reading effects of small-group intensive intervention in Spanish for K-1 English learners. *Learning Disabilities Research & Practice*, 19(4), 239-251.
- Gersten, R., & Baker, S. (2000). What we know about effective instructional practices for English-language learners. *Exceptional Children*, 66(4), 454-470.
- Gersten, R., & Geva, E. (2003). Teaching reading to early language learners. *Educational Leadership*, 60(7), 44-49.
- Goldenberg, C. (2001). Learning to read while learning English. *Education Week*, 20(34), 31.
- Gu, Y. & Johnson, R.K. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning*, 46, 643-679.
- Guerrero, M. C. M. de (2005). *Inner speech – L2: Thinking words in a second language*. (Educational Linguistics, Vol. 6). Springer Science + Business Media, Inc. New York, NY.
- Hodge, M. E. (1998). Teaching foreign language to at-risk learners: A challenge for the new millennium. *Inquiry*. 2(1), 68-78.
- Hu, C.F. (2003). Phonological memory, phonological awareness, and foreign language learning. *Language Learning*. 53(3), 429-462.
- Huckin, T., & Coady, J. (1999). Incidental vocabulary acquisition in a second language: A review. *Studies in Second Language Acquisition*, 21(2), 181-193.
- Hulstijn, J. H., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced foreign language students :The influence of marginal glosses, dictionary use, and reoccurrence of unknown words. *The Modern Language Journal*, 80(3), 327-339.
- Hulstijn, J. (1997). Mnemonic methods in foreign language vocabulary learning: Theoretical considerations and pedagogical implications. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 203-224). New York: Cambridge University Press.
- Kojic-Sabo, I. & Lightbown, P.M. (1999). Students' approaches to vocabulary learning and their relationship to success. *Modern Language Journal*, 83(ii), 176-192.
- Kost, C., Foss, P., & Lenzini, J. (1999). Textual and pictorial glosses :effectiveness of incidental vocabulary growth when reading in foreign language. *Foreign Language Annual*. 32(1), 89-113
- Laufer, B., & Sim, D. D. (1985). Measuring and explaining the reading threshold needed for English for academic purposes texts. *Foreign Language Annals*, 18, 405-411.
- Laufer, B. (1997). The lexical plight in second language reading: Words you don't know, words you think you know, and words you can't guess. In J. Coady, & T. Huckin (Eds.). *Second language vocabulary acquisition* (pp. 20-34). New York: Cambridge University Press.
- Leafstedt, J. M., Richards, C. M., & Gerber, M. M. (2004). Effectiveness of explicit phonological awareness instruction for at-risk English learners. *Learning Disabilities Research and Practice*, 19(4), 252-261.
- Lewis, M. (1993). *The Lexical Approach: The State of ELT and a Way forward*. Hove, England: Language Teaching Publication.
- Liao, Y. F. (2004). A survey study of Taiwan EFL freshman vocabulary learning strategies. *Journal of Pingtung*

- Teachers College, 21, 271-288.
- Long, M. H., & Robinson, P. (1998). *Focus on form: Theory, research and practice*. In Doughty, C. J., & Williams, J. (eds.). *Focus on form in second language acquisition* (pp. 15-41). Cambridge: Cambridge University Press.
- Lotto, L., & de Groot, A. M. B. (1998). Effects of learning method and word type on acquiring vocabulary in a unfamiliar language. *Language learning*, 48(1), 31-69.
- McCardle, P., Scarborough, H. S., & Catts, H. W. (2001). Predicting, Explaining, and Preventing Children's Reading Difficulties. *Learning Disabilities Research & Practice*, 16(4), 230-239.
- Maria, K. (1990). *Reading comprehension instruction: Issues and strategies*. Parkton, MD: York Press.
- Mehta, P. D., Foorman, B. R., Branum-Martin, L., & Taylor, P. (2005). Literacy as a unidimensional multilevel construct: Validation, sources of influence, and implications in a longitudinal study in grades 1 to 4. *Scientific Studies of Reading*, 9(2), 85-116.
- Muter, V., Hulme, C., Snowling, M. J., & Stevenson, J. (2004). Phonemes, Rimes, Vocabulary, and Grammatical Skills as Foundations of Early Reading Development: Evidence From a Longitudinal Study. *Developmental Psychology*, 40(5), 665-681.
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Patten, M. L. (2005). *Understanding research methods. An overview of the essentials* (5th ed.). Glendale, CA: Pyrczak Publishing.
- Proctor, C. P., August, D., Carlo, M., & Snow, C. (2005). Native Spanish-Speaking Children Reading in English: Toward a Model of Comprehension. *Journal of Educational Psychology*, 97(2), 246-256.
- Read, J. (1997). Vocabulary and testing. In N. Schmitt & M. McCarthy, (Eds.) *Vocabulary: Description, acquisition and pedagogy* (pp.303-320). Cambridge: Cambridge University Press.
- Read, J. (2004). Research in Teaching Vocabulary. *Annual Review of Applied Linguistics*, 24, 146-161.
- Richards, C. (2004). *Response to instruction: A study of phonological awareness instruction for kindergarten English learners*. Unpublished doctoral dissertation, University of California, Santa Barbara, Santa Barbara.
- Schatschneider, C., Fletcher, J. M., Francis, D. J., Carlson, C. D., & Foorman, B. R. (2004). Kindergarten prediction of reading skills: A longitudinal comparative analysis. *Journal of Educational Psychology*, 96(2), 265-282.
- Schmitt, N., & McCarthy, M. (Eds.) (1997). *Vocabulary: Description, acquisition, and pedagogy*. Cambridge: Cambridge University Press.
- Schmitt, N. (2008). Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), pp. 329–363
- Torgesen, J. K., Ann, A. W., Wagner, R. K., Rashotte, C. A., Voeller, K. K. S., & Conway, T. (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities*, 34(1), 33-58.
- Treville, M. (1996). Lexical learning and reading in L2 at the beginner level: The advantages of cognates. *Canadian Modern Language Review*, 53(1), 173-190.
- Yopp, H. K., & Yopp, R. H. (2000). Supporting phonemic awareness development in the classroom. *The Reading Teacher*, 54(2), 130-143.
- Vadasay, P. F., Sanders, E. A., & Peyton, J. A. (2006). Code-oriented instruction for kindergarten students at risk for reading difficulties: A randomized field trial with paraeducator implementers. *Journal of Educational Psychology*, 98(3), 508-528.
- Vaughn, S., Linan-Thompson, S., Mathes, P. G., Cirino, P. T., Carlson, C. D., Pollard-Durodola, S. D., et al. (2006). Effectiveness of Spanish intervention for first-grade English language learners at risk for reading difficulties. *Journal of Learning Disabilities*, 39(1), 56-73.
- Zimmerman, C. B. (1997). Historical trends in second language vocabulary instruction. In J. Coady & T. Huckin (eds.). *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 5-19). Cambridge University Press.

¹ Dr. Reza Fallahchai is a lecturer in the Department of Psychology, Hormozgan University, Iran. He can be contacted at Department of Psychology, Hormozgan University P. O. Box, 3995, Bandar Abbas, Iran. Email: rfallahchai@yahoo.com



Training and Availability of Skills for Sustenance of Standard in Classroom Assessment Practices Among Lesotho Teachers

Thabang Ishmael Phamotseⁱ
Qacha's nek High School, Qacha's nek, Lesotho

H. Johnson Nentyⁱⁱ
Department of Educational Foundations, Faculty of Education
University of Botswana, Botswana.

John N. Odiliⁱⁱⁱ
Department of Educational Foundations, Delta State University
Abraka, Delta State, Nigeria

Abstract

The study used an inferential survey design in which a validated questionnaire was used to gather and analyze the views and perceptions of a random sample of 146 primary and 102 high school teachers at Qacha's Nek district in Lesotho. These were with regard to the influence training in assessment has on the availability of skill to carry out effective classroom practices that sustain standards in educational assessment and hence enhance quality of education. The sample was made up of 119 male and 127 female teachers, 103 of them with certificates, 41 with diploma and 102 with bachelor's degrees. Some 92 of them had 1-5 years of teaching experience, 57 had 6-10 years while 97 of them had above 10 years of such experience. Among them they attended a mean of 0.706 assessment-related workshops. The study involved the use of a face validated six-option Likert-type questionnaire with two sets of items consisting of: (a) a list of assessment skills to which teachers were required to indicate the level to which they possess each of them; and (b) a list of classroom assessment practices, which teachers were expected to indicate the frequency to which they applied each of them. A Cronbach alpha analysis gave the alpha coefficient of the instrument as .772 and .764 respectively for the two parts of the instrument. A composite of the number of assessment-related courses taken, and seminars and workshops attended were developed to operationalize each teacher's level of assessment training. Based on this, 137 of them were found not to have any training in assessment at all, while 73 had a little training and 35 had some training in assessment.

Key words: Assessment in education, assessment standard, assessment training, teachers' assessment skills and practices, Bloom taxonomy, Lesotho.

Reference to this paper should be made as follows:

Phamotse, T. I., Nenty, H. J., & Odili, J. N. (2011). Training and Availability of Skills for Sustenance of Standard in Classroom Assessment Practices Among Lesotho Teachers. *International Journal of Scientific Research in Education*, 4(3&4), 191-201. Retrieved [DATE] from <http://www.ij sre.com>.

INTRODUCTION

The need for quality education cannot be over emphasized if African nations must achieved economic and technical development in the 21st century. Standard in assessment and hence quality education is closely tied to quality in classroom assessment. Classroom assessment is the fundamental means of developing human potentials; hence

effectiveness in classroom assessment provides a good foundation for such development. Effectiveness in classroom assessment depends, amongst others, on the quality of teachers' training on assessment. The regularity of teacher's exhibition of desirable assessment skills in the classroom cannot be achieved if teachers do not possess such skills in the first place. Learning in the classroom depends a lot on effective teaching which in turn depends on the exhibition of effective assessment skills during lessons. According to American Federation of Teachers (AFT), National Council of Measurement in Education (NCME) and National Education Association (NEA) (AFT, NCME & NEA, 1990), 'students assessment is an essential part of teaching and good teaching cannot exist without good assessment' (p. 3). Effective assessment involves the extent to which the teacher is able to use assessment to enhance learning by creating and maintaining a welcoming and conducive environment within which learners would want and like to learn (Nenty, 2007).

According to AFT, NCME and NEA (1990), standards for teachers' competence in educational assessment of students include skills in:

1. Choosing and developing assessment methods appropriate for instructional decisions.
2. Administering, scoring and interpreting the results of both externally-produced and teacher-produced assessment methods.
3. Using assessment results in making decisions about individual students, planning teaching, developing curriculum, and school improvement.
4. Developing valid pupil grading procedures which use pupil assessments.
5. Communicating assessment results to students, parents, other lay audiences and educators.
6. Recognizing unethical, illegal, and otherwise inappropriate assessment methods and uses of assessment information (pp. 30 - 32).

These competences subsume, among several others, the ability of developing and constructing good test items including writing items to measure all the cognitive levels of Bloom's taxonomy: conducting item/test analysis; performing test validation; and carrying out formative assessment. Stressing the importance of formative assessment in raising standards, Black and Wiliam (1998) noted that "Firm evidence shows that formative assessment is an essential component of classroom work and its development can raise standards of achievement, . . . Indeed, they know of no other way of raising standards for which such a strong prima facie case can be made" (p. 139).

Based on an extended analysis of what goes on in the classroom, Stiggins (1991) reported that "teachers spend a third to half of their professional time on assessment-related activities". And according to Nenty (1985), "next to teacher's skill on how to teach (method), and what to teach (content) is his/her skill on how to assess in order to maximize learning. And assessment is a part and parcel of every teaching method" (p.34). Hence one cannot be good at teaching if he does not possess some important fundamental assessment skills.

Bloom Taxonomy.

To know where to "begin in seeking to improve human thinking" and learning, we need to know more of the nature of human thinking (Houghton, 2004) and learning or human cognitive ability. Benjamin. S. Bloom and his colleagues (1956) provided education with this knowledge. They provided for a detailed hierarchical classification of human cognitive ability into six levels, from the lowest-order memorization skill through comprehension, application and analysis skills, to the highest-order creativity and evaluation skills. By doing this, they gave us an authentic tool for valid curriculum planning, instructional delivery and assessment (oz-TeacherNet, 2001). This arrangement has gone through some revisions towards perfection in our knowledge of human cognitive ability (oz-TeacherNet, 2001; Forehand, 2005).

Statement of the problem and purpose of the study

In developing countries like Lesotho, teachers' training institutions are very few and may not be well staffed in all teaching areas, especially in assessment. Thus, most teachers do not receive sufficient training on assessment. In secondary schools where trained teachers from these institutions are teaching the Cambridge Overseas School Certificate (COSC), pass rates have been low and declining. In these schools, assessment is examination- and not learning-focused and this tends to restrict aspects of education that might be of more value to young and developing minds. Teaching is directed towards memorization of facts which internal and external examination bodies are able to test in their examinations. There is little concern with the development of higher order cognitive skills, little encouragement to be creative or to challenge imparted knowledge (Ansell, 2002; Forehand, 2005).

This scenario is substantiated by the Ministry of Education's (1992) assertion that "The existing system of schooling suffers from critical problems including the decline of quality, lack of relevance to occupational and social realities and lack of effective quality owing to the nature of final examinations and the absence of other means of determining pupils' achievement from the national level" (p.4).

Given these problems, the present study seeks to find answers to the following questions: Firstly, what assessment skills do teachers in Qacha's Nek district possess and utilize during their classroom practices? Secondly, to what extent does their level of possession of relevant assessment skills influence their utility of such skills in the classrooms? And lastly, what is the influence of training on assessment on the availability and utility of assessment skills by teachers in this district?

Research hypotheses

To seek for answers to these questions, the following null hypotheses were tested:

1. Teachers at Qacha 's Nek do not possess to a significant level, the skill necessary to:
 - i. develop and construct good test items;
 - ii. write items to measure the cognitive levels of Bloom's taxonomy;
 - iii. conduct item review and item/test analysis;
 - iv. perform test validation; and
 - v. carry out formative assessment.
2. To a significant extent, teachers at Qacha 's Nek district do not regularly use the following classroom assessment practices:
 - i. develop and construct good test items;
 - ii. write items to measure the cognitive levels of Bloom's taxonomy;
 - iii. conduct item review and item/test analysis;
 - iv. perform test validation; and
 - v. carry out formative assessment.
3. The level to which teachers at Qacha's Nek possess relevant assessment skills does not significantly influence their assessment practices in the following areas:
 - i. test development;
 - ii. item analysis;
 - iii. cognitive levels of Bloom taxonomy;
 - iv. test validity and reliability; and
 - v. formative application of testing results.
4. There is no significant influence of training on assessment on the availability and utility of classroom assessment skills among teachers in Qacha's Nek district.

LITERATURE REVIEW

Studies on teachers' assessment practices revealed that teachers are not generally well prepared to meet the demands of classroom assessment due to inadequate training (Mertler, 2003; Vandeyar & Killen, 2007; Zhang & Burry-stock, 2003). In a study to better understand how new teachers experience curriculum and assessments, Kauffman, Moore, Kardos, Liu and Peske (2002) found that, despite the state's development of standards for statewide assessments, these new teachers received little or no guidance about what to teach or how to teach it. Left to their own devices, they struggled day to day to prepare content and materials.

Grimes (2010) studied the meaning teachers give to grades through a descriptive non-experimental dissertation study of middle school teachers in USA. These teachers were asked four questions related to: primary purposes of grades; attitude towards grading; assessment methods; and grading practices. Among several findings, projects, student exhibits, essays, and work for extra credits were found to be associated with higher level of performance, while norm-referencing, classwork, participation, and matching were negatively associated with grades.

In another study, Chapman and Snyder (1991) conducted classroom observations of 212 teachers in 34 junior secondary schools in Botswana. Results from the study revealed that the primary discrimination was between certificate (untrained) and diploma (teacher training) teachers. The function was defined primarily by teacher preparation, teacher's logical presentation of material during the lesson, and the teacher's emphasis on discipline. Untrained teachers appeared

to have done less preparation for the class sessions being observed. Diploma teachers appeared to give more logical class presentation and tended to emphasize student development over control in their use of discipline.

In a study to investigate whether any relationships exist between the types of classroom assessments used in secondary mathematics classrooms and high stakes state assessment programs, Ohlsen (2007) conducted a survey of a random sample of 668 members in nine states. However, since the survey were mailed to the respondents, only 278 completed surveys were returned. The results reflect that, teachers reported highest frequencies of use for teacher created assessments, major exams and quizzes. Student-centred strategies such as performance-based assessments, individual projects, and team projects were used sparingly if used at all by between forty to fifty percent of the teachers. Zhang and Burry-Stock (2003) conducted a study to investigate teachers' assessment practices across teaching levels and content areas, as well as teachers' self-perceived assessment skills as a function of teaching experience and measurement training. Data from 297 teachers on the Assessment Practices Inventory were analyzed in a MANOVA design. The findings from a factor analysis they used, revealed that the construct of assessment practices and self-perceived assessment skills overlapped to some extent in terms of the underlying dimensions they measured, yet each construct maintained a certain degree of uniqueness. The overlap between assessment practices and self-perceived assessment skills was also reflected in a Pearson product-moment correlation coefficient of .71 that explained 50% of the shared variance between these two constructs.

In another study, Chris (2003) investigated current classroom assessment practices by surveying teachers in New Zealand at Years 5, 7, and 9 on the assessments they use in the areas of English and mathematics, the purposes of the assessment, and the assessments that provide the most useful information. In both English and mathematics, the use of teacher- or school-developed tools and strategies were greater than the use of externally developed tools. The only externally developed tools to have high rates of use across all years were the Progressive Achievement Tests and Competition tests. In both subject areas, teachers in classes 1-3 schools used competition tests significantly less. In both subject areas, assessment was used most frequently for classroom purposes. Less use of assessment was done for purposes outside the classroom, but when used, it came more often from externally developed tools. The greatest number of tools and strategies that were rated as "useful" or "very useful" by more than 50% were for teaching and learning and monitoring progress.

Garrison (2004) considered how the instructional strategies of public school teachers interact with the achievement levels of their students. Slightly more than 1,000 teachers in schools, broadly representative of public schools in the USA, responded to a school climate survey. Analyses revealed interesting "uncommonalities" in instructional emphasis, in number as well as kind. Instruction in low achieving classrooms generally was less coordinated than in classes of average achieving students. Instructional strategies and lesson focus in classes of high achieving students were linked in ways that resulted in more continuity and greater productivity.

Using survey data from 191 primary school teachers from Gaborone district in Botswana, and 300 similar teachers from Delta State in Nigeria, Nenty, et al. (2007), found out that there is a significant discrepancy between the level to which, in the perception of the teachers, each of Bloom's level of cognitive behaviour enhances quality of education and the level to which their classroom assessment practices are able to provide for the development of such behaviour among learners.

METHODOLOGY

The study used an inferential survey design in which a validated questionnaire was used to gather and analyze the views and perceptions of a random sample of 146 primary and 102 high school teachers at Qacha's Nek district in Lesotho. These were with regard to the influence training in assessment has on the availability of skill to carry out effective classroom practices that sustain standards in educational assessment and hence enhance quality of education. The study involved the use of a face validated six-option Likert-type questionnaire with two sets of items consisting of: (a) a list of assessment skills to which teachers were required to indicate the level to which they possess each of them; and (b) a list of classroom assessment practices, which teachers were expected to indicate the frequency to which they applied each of them. A Cronbach alpha analysis gave the alpha coefficient of the instrument as .772 and .764 respectively for the two parts of the instrument. A composite of the number of assessment-related courses taken, and seminars and workshops attended was developed to operationalize each teacher's level of assessment training. Based on this, 137 of them were found not to have any training in assessment at all, while 73 had a little training and 35 had some training in assessment.

Data Analysis and Interpretation of Results

Using SPSS data analysis package, a population t-test was done to test the first hypothesis, Pearson correlation analysis (see Table 2) was done to test the second while one way analysis of variance (ANOVA) was done to test the third and fourth (see Table 3). A population t-test was done to determine if teachers in Qacha's Nek possess each of the assessment skills to a significant level. The results presented in Table 1 reveal that to a significant extent, teachers at Qacha's Nek lack the assessment skills to: construct and develop good test items ($t_{(244)} = -7.322$, $p < .05$), conduct item analysis ($t_{(247)} = -9.837$, $p < .05$), and perform test validation ($t_{(246)} = -7.682$, $p < .05$). On the other hand, they possess to a significant level the skill to use cognitive levels of Bloom's taxonomy ($t_{(244)} = 8.174$, $p < .05$) in their test construction endeavour and to carry out formative assessment ($t_{(244)} = 13.968$, $p < .05$). Except for possessing the skill to utilize Bloom taxonomy in testing, teachers at Qacha's Nek district do not possess any assessment skills to a significant level. Generally, they perceive themselves as lacking, to a significant level, the assessment skills necessary for the execution of the classroom assessment methods. Teachers at Qacha's Nek district do not possess to a significant level, assessment skills in the following areas:

1. Test development
2. Item analysis
3. Cognitive levels of Bloom's taxonomy
4. Test validation and reliability
5. Formative assessment.

Table 1: Population t-Test for the Significance of the Level of Possession and Level of Use of Assessment Skills by Teachers at Qacha's Nek (n = 248)

Variable	M	X	S _x	df	t-value	p<
1. Possession of skill in test development	15.00	12.33	5.72	244	-7.32	.000
2. Possession of skill in item analysis	5.00	3.58	2.29	247	-9.39	.000
3. Possession of skill to utilize Bloom taxonomy in test construction	15.00	17.79	5.34	244	8.17	.000
4. Possession of skill to validate test	7.50	4.45	4.20	246	-7.68	.000
5. Possession of skill to carrying formative assessment	12.50	15.70	3.58	244	13.97	.000
6. Utilization of test developing skill	15.00	10.40	4.92	245	-14.38	.000
7. Utilization of item analysis skill	5.00	2.89	2.24	247	-14.92	.000
8. Utilization of skill of writing items to measure each level of Bloom taxonomy	15.00	16.39	3.86	246	5.66	.000
9. Utilization of test validation skill	7.50	4.35	3.27	246	-15.14	.000
10. Utilization of formative assessment skill	12.50	13.56	3.58	246	4.66	.000

Similar trend in findings was observed for regularity of utilization of these skills in the classrooms. A population t-test analysis done to test these showed that there is significance in the regularity with which teachers use or do not use these classroom assessment practices. In other words as reflected in Table 1, the teachers, to a significant level, regularly utilize Bloom taxonomy in test construction and carrying out formative assessment. On the other hand, there is significantly regular non-utilization of the skills to construct and develop good test items, conduct item analysis, and perform test validation as classroom assessment practices by secondary school teachers in Qacha's Nek district of Lesotho. The results mean that, to a significant extent, teachers do not regularly use these classroom assessment practices.

To test the third null hypothesis, a Pearson bivariate correlation analysis was done (see Table 2) to determine the degree of relationship between the level of possession of assessment skills and the regularity of use of such skills during classroom assessment practices. The results led to a non rejection of the research hypothesis that there is a significant relationship between the level of possession of assessment skills and the regularity of use of classroom assessment practices. They revealed that all the practices significantly depend on the level of possession of the relevant skills. Hence the lack of exhibition of these practices is as a result of the actual lack of possession of such assessment skills.

Given the Pearson product moment correlation between the level of possession and the regularity of utilization of these skills, an attempt was made to determine the probability of utilizing each of these skills by teachers in Qacha's Nek district of Lesotho in assessment practices. The possession of the skill to develop test items relates $r = .498$ ($p < .01$, $df = 246$), and hence accounts for 25% of the variability in utilizing this skill in classroom assessment practices. Similarly, the possession of skill to perform item analysis ($r = .702$, $p < .01$) determines 49% of the ability to exhibit this

skill in teachers' classroom assessment practices. An r-value of .699 indicates that 45% of the variability in test validation as carried out by teachers is accounted for by the level to which they possess the relevant skill. Similarly, the relationship between possession of the skill to, and actual carrying out formative assessment was observed to be $r = .311$ ($p < .01$) and hence the former accounted for about 10% of the later. Finally using Bloom taxonomy, possession and utilization of assessment skill on this related $r = .301$ ($p < .01$), hence the level of possession of this skill was found to account for about 9% of the level of utilization of such skill. In general, among teachers in Qacha'a Nek district of Lesotho, the level of possession of each skill accounted significantly for the likelihood of utilization of such skill by teachers in classroom assessment.

These results mean that teachers often use those classroom assessment skills which they possess. Hence it is those practices which they perceive to have the skill to carry out that they actually carry out. For instance, if they believe their level of possession of skill to develop and construct test items is very high, then they will always develop and construct test items for their classrooms, otherwise they copy items from previous examinations. However, if their level of possession of skills is low, they would definitely avoid using such practices in their classrooms. Generally the level to which teachers in Qacha'a Nek utilize the different assessment skills in their classrooms is directly and significantly related to the level to which they possess such skills.

To test the final hypothesis, a one-way analysis of variance was done. This analyzed the variability in the level of availability and utility of important assessment skills across teachers with different level of training on assessment (see Table 3). Results reflect that the perception of teachers about their ability to execute some assessment tasks significantly ($p < .05$) depends on their level of training. This was shown on three out of five selected assessment skills of teachers namely; ability to develop tests, perform test validation and carry out formative assessment. Teachers with the highest level of training had a significantly higher mean on the perception of teachers' ability to develop and construct test items and perform test validation. This means that they perceive that they possess the assessment skills in these two areas significantly more than those without assessment training, while those with the lowest level of training had a significantly higher mean on carrying out formative assessment. With regard to the utilization of the classroom assessment

Table 2: Inter-correlation Matrix between the Level of Possession of Skill and the Level of Classroom Assessment Practice (n = 248)

Variables	1 ^a	2	3	4	5	6	7	8	9	10
Possession of skill to develop test item	1	.568**	.564**	.238**	.469**	.498**	.557**	.473**	.216**	.213**
Possession of skill to perform item analysis	.568**	1	.579**	.113	.446**	.515**	.702**	.502**	.105	.344**
Possession of skill to carrying out test validation	.564**	.579**	1	.158*	.448**	.441**	.643**	.669**	.126*	.220**
Possession of skill to carry out formative assessment	.238**	.113	.158*	1	.327**	.077	-.022	.018	.311**	.063
Possession of skill to use Bloom's taxonomy in testing	.469**	.446**	.448**	.327**	1	.148*	.338**	.259**	.174**	.301**
Utilization of test developing skill	.498**	.515**	.441**	.077	.148*	1	.724**	.615**	.336**	.406**
Utilization of item analysis skill	.557**	.702**	.643**	-.022	.338**	.724**	1	.688**	.199**	.431**
Utilization of test validation skill	.473**	.502**	.669**	.018	.259**	.615**	.688**	1	.196**	.298**
Utilization of skill to use Bloom taxonomy in testing	.216**	.105	.126*	.311**	.174**	.336**	.199**	.196**	1	.295**
Utilization of formative assessment skill	.213**	.344**	.220**	.063	.301**	.406**	.431**	.298**	.295**	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

^a Variables are numbered as named in the first column

Table 3: Analysis (ANOVA) of the Influence of Training on Possession and Regularity of Utilization of Assessment Skill in Classroom Practices Among Teachers in Lesotho (n = 248)

Variable	Teachers level of Training in Assessment	n	Mea n	Std. Dev.	Std. Error	Source of Variation	SS	df	MS	F	Sig.
Level of Possession of Test Development Skill	No	137	12.82	5.32	.454	Between Groups	447.29	2	223.6	7.20*	.001
	Little	72	10.29	5.38	.634	Within Groups	7422.83	239	31.06		
	Some	34	14.21	6.90	1.202	Total	7870.12	241			
	Total	243	12.26	5.71	.367						
Level of Possession of Skill To Conduct Item analysis	No	137	3.58	2.13	.182	Between Groups	27.69	2	13.85	2.70	.069
	Little	73	3.18	2.28	.266	Within Groups	1240.82	242	5.13		
	Some	35	4.26	2.72	.459	Total	1268.51	244			
	Total	245	3.56	2.28	.146						
Level of Possession of Skill to Utilize Bloom Taxonomy	No	137	18.12	3.57	.305	Between Groups	59.991	2	29.99	1.045	.353
	Little	72	17.00	7.83	.922	Within Groups	6859.133	239	28.699		
	Some	33	17.85	4.93	.858	Total	6919.124	241			
	Total	242	17.75	5.36	.344						
Level of Possession of Skill to Carry out Test Validation	No	136	5.41	3.69	.316	Between Groups	182.69	2	91.34	5.33*	.005
	Little	73	4.51	3.49	.408	Within Groups	4128.33	241	17.13		
	Some	35	7.29	6.45	1.091	Total	4311.02	243			
	Total	244	5.41	4.21	.270						
Level of Possession of Skill to	No	137	16.29	3.63	.310	Between Groups	188.82	2	94.41	7.80*	.001
	Little	72	14.31	3.27	.385	Within	2892.33	239	12.10		

						Groups					
	Some	35	15.91	3.29	.573	Total	3081.15	241			
	Total	244	15.65	3.58	.230						
Regularity of Utilization of Test Development Skill	No	137	10.93	4.41	.377	Between Groups	114.23	2	57.12	2.40	.093
	Little	72	9.38	5.07	.597	Within Groups	5702.62	240	23.76		
	Some	34	10.53	6.11	1.047	Total	5816.85	242			
	Total	243	10.41	4.90	.315						
Regularity of Utilization of Skill To Conduct Item analysis	No	137	2.66	2.08	.178	Between Groups	35.04	2	17.52	3.57*	.030
	Little	73	2.79	2.36	.277	Within Groups	1188.97	242	4.91		
	Some	35	3.77	2.41	.408	Total	1224.00	244			
	Total	245	2.86	2.24	.143						
Regularity of Exhibition of Skill to Utilize Bloom Taxonomy	No	137	16.53	3.82	.327	Between Groups	49.10	2	24.55	1.66	.192
	Little	73	16.51	3.84	.450	Within Groups	3549.87	240	14.79		
	Some	33	15.21	3.94	.686	Total	3598.96	242			
	Total	243	16.35	3.86	.247						
Regularity of Utilization of Skill to Carry	No	137	4.13	2.95	.252	Between Groups	22.09	2	11.05	1.06	.350
	Little	73	4.26	3.62	.424	Within Groups	2524.66	241	10.48		
	Some	34	5.03	3.47	.595	Total	2546.75	243			
	Total	244	4.30	3.24	.207						
Regularity of Utilization of Skill to Conduct Formative	No	137	13.81	3.56	.304	Between Groups	111.41	2	55.70	4.46*	.013
	Little	72	13.82	3.60	.423	Within Groups	3009.26	241	12.49		
	Some	35	11.89	3.29	.556	Total	3120.67	243			

Total	244	13.54	3.58	.230
-------	-----	-------	------	------

* Significant at .05

practices, the same table reveals that, teachers with different level of assessment training differed significantly ($p < .05$) in the utilization of only two classroom assessment practices, that is, conducting item analysis and carrying out formative assessment. Teachers did not differ significantly when it came to constructing and developing test items, conducting item analysis and using the cognitive levels of Bloom's taxonomy.

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

Firstly, the study found that generally teachers in primary and secondary school classrooms in Qacha's Nek district of Lesotho do not possess to a significant level some basic assessment skills and hence cannot utilize them in their classroom practices. To a significant extent, the level to which they possess relevant assessment skills was found to influence the level to which they utilize such skills in the classrooms. Hence, generally teachers in primary and secondary school classrooms in Qacha'a Nek district of Lesotho, do not possess, and therefore cannot utilize some essential classroom assessment skills. Finally, it was found that the level of training in assessment influences the level to which the teachers possess and utilize some essential assessment skills in their classroom practices.

Classroom assessment is a 'prime mover' of learning, and according to AFT, NCME and NEA (1990), good teaching cannot exist without good assessment, but most teachers in African schools are not trained even in the basic skills of classroom assessment. To Nenty (1997) "many persons are certified to teach with little or no training on basic assessment skills. Some teachers' training institutions do not offer courses that impart such skills at all, while some make such courses optional as if assessment is an optional duty of the classroom teacher" (p. 56). This is supported by some of the findings of this study. The consequences of this are that teachers are deprived of the skill with which to create and maintain a conducive classroom environment within which learners would want and like to learn (Nenty, 2007). Consequently, there is no efficient use of assessment to ensure effective teaching and learning in African classrooms. This is the situation in classrooms in Qacha'a Nek district of Lesotho where, to a significant level, teachers generally do not possess and hence cannot utilize essential classroom assessment skills. This does not augur well for learning in such classrooms.

There are a number of reasons why Qacha's Nek teachers do not possess assessment skills. One of the most significant of these is the quality of teacher training undertaken by the colleges of education in Lesotho. With only two training colleges in the country, the classes are overcrowded and teachers do not spend enough time with the trainees to make sufficient impact on learning and skill development especially in general subject area like assessment. According to Fred (1991), the poor quality of those joining the teaching service results from lack of observable impact of pre-service training in teachers' classroom assessment. Furthermore, this may result from the effect of perceived misalignment between what is taught in terms of assessment skills and techniques, and what teachers actually practice in the schools (Farr & Griffin, 1973; Gullickson, 1986). According to Chapman and Snyder (1991), until recently in many African countries, primary teacher's training was an option pursued mostly by primary school graduates who did not have adequate credentials to continue to secondary schooling. Given the low salaries and unfavorable teacher assignment policies, those going into teaching were often students who lacked skills that would secure them a job in the private sector or a better paying government position (p. 3).

This finding is not unlike those of others cited earlier in the literature review section. For instance, Kauffman et al. (2002) found that despite the state's development of standards and statewide assessments, the new teachers were without assessment skills and received little or no guidance about what to teach or how to teach it. Left to their own devices, they struggled day to day to prepare content and materials. This low quality of teachers' training in classroom assessment is of great concern, because competence in classroom assessment has been identified as being significant to successful teaching and assessment constitutes a large part of teachers' professional activities (Stiggins, 1997).

Moreover, the theory of validity postulates that the assessment should not be too narrow and hence fail to include important dimensions of the construct. On the other hand it should also avoid being too broad, thereby containing excess reliable variance associated with other distinct constructs as well as method variance such as response sets or guessing propensities that affects responses in a manner irrelevant to the interpreted construct. This validity concerns call for teachers who are well skilled in measurement concepts, that is, teachers who possess assessment skills to a significant level. This is because, without such ability, teachers will always find themselves engaged in assessments that under-represent or over-represents the focal construct while simultaneously contaminating the scores with construct-irrelevant variance.

The significant relationships between levels of possession and of utilization of some basic assessment skills were not unexpected. In each case, the level to which relevant skill is possessed accounts for a sizeable and significant proportion of the variability in the level to which such skill is utilized. In other words, utilization of any skill depends on the extent to which such skills are in ones mental custody. In the absence of such skills, practices become a quack. Standard in assessment cannot be ensured, let alone, maintained through professionally quack practices, hence the low standard and lack of assessment-related effectiveness in African education.

In the perception of teachers at Qacha's Nek district, the regularity of use of assessment practices in the areas of test development, item analysis, test validation, estimation of reliability and formative application of testing results significantly depend on the level of possession of assessment skills in those areas. Thus, teachers who indicated a high level of possession of assessment skill also reported a regular deployment of such assessment skills through relevant practices in their classrooms. While those who were shown to have low level of assessment skill also reported that they do not employ such practices regularly in their classrooms. This is not surprising because teachers, who believe to possess little or no assessment skills, feel very incompetent to use relevant assessment procedures of which they are not skilled in. In this situation, they opt to remain in the comfort zone that is, avoiding the employment of some of the new and efficient assessment practices which could improve their classroom situations. For all the five skills considered here, level of possession of such skill was found to account for a significant proportion of the level to which such skill was utilized in the classroom. This finding supports that of Zhang and Burry-Stock (2003) who in their study found the overlap between assessment practices and self-perceived assessment skills to be reflected by a Pearson product-moment correlation coefficient of .71. This was interpreted to explain 50% of the shared variance between these two constructs. This therefore shows that the relationship between classroom assessment practices and teachers' assessment skills is evident in the existing literature on classroom assessment.

Teachers with different levels of assessment training were found to differ significantly in their perception regarding their possession of assessment skills. This is not intriguing as the efficacy and value of training should be reflected in the teacher's confidence in their ability to engage in assessment related activities. Again, teachers with little or no assessment training are less likely to feel confident and to see themselves as having the assessment skills. It is this confidence that drives the teachers into the habit of using different classroom assessment methods.

Surprisingly, with regard to teachers' utilization of assessment practices, those with differing levels of assessment training differed significantly in the practice of item analysis and carrying out formative assessment, but did not differ significantly with regard to other practices. This can be explained by a number of factors. One of the reasons can be the fact that teachers who have some training in assessment tend to be ostentatious about the knowledge they think they possess and as a result, they end up disregarding some of the important concepts they have learnt. The quality of training acquired by those teachers who claimed that they are trained in assessment might not be such that would make a significant difference in their everyday classroom assessment practices when compared to those who never went through such training.

To a significant level, due to lack of relevant skills, teachers at Qacha 's Nek district do not use assessment practices like developing and constructing tests, conducting item analysis, conducting test validation and estimating reliability, writing items to measure the cognitive levels of Bloom's taxonomy. Also, they do not carry out formative application of testing results regularly in their classrooms. These findings are consistent with one of the findings of Ohlsen (2007), who stated that "student-centered assessment strategies are used very little if at all by between forty and fifty percent of the teachers. This lack of use of assessment practices stems from a number of factors. One of the significant factors is that most teachers are not skilled in measurement concepts and practices. Teachers are without the skills necessary for the execution of proper assessment practices, as a result, they remain hesitant to use assessment strategies of which they lack the confidence to implement a fair assessment of student performance" (Ohlsen, 2007). Therefore, in a situation like this, teachers fall back to assessment practices that were used when they were students or those used by their cooperating teachers. As a result, they find it more a comfortable and natural reaction to stay within the comfort zone of traditional testing models. Teachers without adequate training in assessment do not understand the place of assessment in learning and because they lack the skill to develop and validate assessment instruments, they readily fall back on items used in previous examinations for their classroom assessment purposes.

Another important explanation given by Chapman and Snyder (1991) is that low quality of work life impedes the quality of teachers' performance, reduces teachers' openness to innovation, and increases teacher attrition. This is in fact true, and it is a worse situation in rural districts of the country. Environments in which untrained staff operates are

alarmingly very poor. There is a complete lack of relevant facilities, resources and funds to support test revision and printing of tests. Teachers actually go out of their way to provide some basic facilities to enable their students learn. As a result, in situations like this, teachers cannot be expected to use effective assessment practices regularly in their classroom. This relationship also alerts us on the issue of content validity. The theory on this postulates that validity reflects how well the quality and quantity of course content (together with intended behavioral outcomes) have been specified, sampled and transformed into test items. This means that a content- valid test is the one that its items are a good representative of the entire course content, taking adequate consideration of the relative importance of the different sections, topics and cognitive skills implied in the syllabus. However, when the positive relationship between teachers' assessment skills and classroom assessment practices is not maximized, it will always be difficult for teachers to engage themselves in regular use of valid assessment practices.

If we want to stop paying lip service to standard in classroom assessment and hence to the quality of education in our schools, Lesotho government should ensure that all our classroom teachers have adequate training on assessment. Given the all important role assessment serves in teaching and learning, facilities and resources should be provided for the two teachers' training institutions in the country in order that they may do a better job at training teachers, especially in equipping trainee-teachers with relevant skills in assessment.

REFERENCES

- AFT, NCME, & NEA (1990). Standards for teacher competence in educational assessment of students. *Educational Measurement Issues and Practice*, 9(4), 30-32.
- Ansell, N. (2002). Secondary education reform in Lesotho and Zimbabwe and the needs of rural girls: Pronouncements, policy and practice. *Comparative Education*, 38(1), 91-112
- Black, P., & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80,139-149.
- Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, Toronto: Longmans, Green
- Chapman, D., & Snyder. C. (1991). *Is training association with teachers' classroom behaviour? A study of Botswana Junior Secondary School Teachers*. New York: United States Agency for International Development.
- Chris, M. (2003). *Classroom assessment practices in English and mathematics*. Strafford: Marston
- Embretson, S. (1983). Construct validity: Construct representation vs. nomothetic span. *Psychological Bulletin*, 93, 179-183.
- Farr, R., & Griffin, M. (1973). Measurement gaps in teacher education. *J. Res. Deve. Educ*, 7(1), 19-28.
- Forehand, M. (2005). Bloom's taxonomy: Original and revised. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology*. Retrieved from <http://projects.coe.uga.edu/epltt/>
- Fred, S. (1991). Schooling without learning: Thirty years of cheating in high school. *Adolescence*, 26 (104), 840.
- Garrison, W. (2004). Profiles of classroom practices in U.S. public schools. *School Effectiveness and School Improvement*, 15(3), 377-406
- Grimes, T. V. (2010). *Interpreting the meaning of grades: A descriptive analysis of middle school teachers' assessment and grading practices*. Unpublished doctoral dissertation, Virginia Commonwealth University, Virginia.
- Gullickson, A. R. (1986). Teacher education and teacher-perceived needs in educational measurement and evaluation. *J. Educ. Measurement*, 23(4), 347-354.
- Hills, J. R. (1991). Apathy concerning grading and testing. *Phi Delta Kappa*, 72(7), 540-545
- Houghton, R. S. (2004, March 17). The basic idea: Bloom's taxonomy – overview. *Communities Resolving Our Problems (CROP)*: Retrieved from <http://www.ceap.wcu.edu/houghton/Learner/think/bloomsTaxonomy.html>
- Kauffman, D., Moore, J., Kardos, S., Liu, E., & Peske, H. (2002). "Lost at sea": New teachers' experiences with curriculum and assessment. *Teachers College Record*, 104(2), 273- 300.
- Mertler, C. A. (2003). *Pre service versus inservice teachers' assessment literacy: Does classroom experience make a difference?* Unpublished doctoral dissertation, Bowling Green State University, Bowling Green, Ohio
- Ministry of Education, Kingdom of Lesotho. (1992). *Educational sector development plan*. Maseru, Lesotho: GOL
- Nenty, H. J. (2007). Tackling assessment-related obstacles to education for all (EFA) and the realization of millennium development goals (MDGs) in African countries. A paper prepared for presentation at 2007 12th Biennial

- BOLESWANA International Symposium on Educational Research, National university of Lesotho, 23rd to 25th July, 2007. *Global Journal of Educational Research*, 6(1&2), 29-34.
- Nenty, H. J. (1997). Assessment as a means of enhancing improved quality of life through education. In C. Magagula, E. Mazibuko, & S. Zwane (Eds.). *Educational research for quality of life*. Retrieved from <http://boleswa97.tripod.com/index.htm>
- Nenty, H. J. (1985). *Fundamentals of measurement and evaluation in education*. Unpublished Monograph, University of Calabar, Calabar, Nigeria
- Nenty, H. J., Adedoyin, O. O., Odili, J. N., Major, T. E. (2007). Primary teacher's perceptions of classroom assessment practices as means of providing quality primary/basic education by Botswana and Nigeria. *Educational Research and Review*, 2(3). 74-81.
- Ohlsen, M. (2007). Classroom assessment practices of secondary school members of NCTM. *American Secondary Education*, 36(1), 4-16
- Oz-TeacherNet. (2001). Oz-TeacherNet: Teachers helping teachers: Revised Bloom's taxonomy. Retrieved from <http://rite.ed.qut.edu.au/oz-teachernet/index.php?module=ContentExpress&func=display&ceid=29>
- Stiggins, R. (1997). *Students centered classroom assessment*. Trenton, New Jersey: Merrill Upper Adda River
- Stiggins, R. (1991). Relevant classroom assessment training for teachers. *Educational Measurement: Issues and Practices*, 1, 7-12
- Vandeyar, S., & Killen, R. (2007). Educators' conceptions and practice of classroom assessment in post-apartheid South Africa. *South African Journal of Education*, 27(1), 101–115.
- Zhang, Z., & Burry-Stock, J.A. (2003). Classroom assessment practices and teachers' self-perceived assessment skills. *Applied Measurement in Education*, 16(4), 323-342.



© IJSRE

ⁱ Mr Thabang Ishmael Phamotse has a masters' degree in research and evaluation of Botswana, Botswana, under the guidance and supervision of Prof. H.J. Nenty. He works as an associate specialist instructor at the Lesotho teaching service. He can be reached at the Department of English, Qacha's nek High School P.O.BOX 170, Qacha's nek 600, Lesotho. Contacts: cell; +26658922238 <Tel:22950785>

ⁱⁱ Prof. H Johnson Nenty is Co-ordinator of Research & Evaluation Section in the Department of Educational Foundations, University of Botswana. Nenty has published widely in international journals and conference proceedings. He can be reached at Department of Educational Foundations, University of Botswana; Private Bag UB 00702, Gaborone, BOTSWANA. Phone: +267-355-2411 (office). Email: hjntenty@yahoo.com

ⁱⁱⁱ John Nwanibeze Odili, PhD, is an Associate Professor of Educational Measurement and Evaluation. He lectures at Delta State University, Abraka, Delta State, Nigeria