Correlation between the Academic Performance of Students in Continuous Assessment and the National Examinations Council in English Language in Jos-South, Nigeria

Olutola A.T.¹* and Nini F. N.²

¹Department of Educational Foundations, Faculty of Education, Federal University Dutsin-Ma, Katsina State, Nigeria.
²FUDMA Staff School, Federal University Dutsin-Ma, Katsina State, Nigeria.

ABSTRACT

This study investigated the correlate between academic performances of students in continuous assessment and National Examinations Council English language in Jos-South, Local Government Area of Plateau State, Nigeria. The researchers used correlational research design in the study. Five hundred and six (506) students who sat for English language National Examinations Council (NECO) examination in 2016/2017 academic session in Jos-South of Plateau State public and private schools were selected as study sample through the use of simple random sampling technique. The sample consisted of 291 males and 215 females. Frequency, percentage, t-test and Pearson product correlation analysis were used to analyze the data collected for the study. The results of the study revealed no significant relationship between academic performance of students’ in Continuous Assessment (CA) English language and NECO English language. Also, no significant difference was found between male and female students’ academic performance in CA and NECO English language examination while significant difference existed between private and public school students’ performance in CA and NECO English language examination. It was recommended that school administrators should monitor the conduct of English language CA by their teachers in order to improve students’ performance in NECO English language examinations.

KEYWORDS: Performance, Continuous Assessment, Scores, National Examinations Council, English Language

Corresponding author: Olutola A.T, Email: aolutola@fudutsinma.edu.ng
1 INTRODUCTION

One of the compulsory subjects taught at all levels of education in Nigerian schools is English language and it is an essential subject for learning all other subjects. English language has become an important means of communication among different ethnic groups which has made it a lingua franca in Nigeria. It is a second language in Nigeria because of the important roles it plays in the Nigerian society. The importance of this subject led the Nigerian government to make it a compulsory subject in primary and secondary schools as well as a prerequisite for admission into tertiary institutions. Students read, write and express themselves in any given tasks using English language. English language involves four skills; speaking, listening, reading and writing (Marlow Venkata & Bhaskara 2011).

English language is a generally accepted language in Nigeria, because it serves as a language of communication between and among people from different linguistic and ethnic backgrounds. It is the official language that is used in all sectors or disciplines such as by the government, judiciary, mass media, business, and the language used to interact with people outside Nigeria. It has become the medium of instruction and a subject in the curriculum. The National Policy on Education stated that, government will see to it that the medium of instruction in the primary is initially the mother tongue or the language of the immediate community because it is the language close to the speakers in such speech community and then in a later stage, English language (Federal Republic of Nigeria 2014).

English language plays a central role in the school system and its objectives as revealed in the secondary school curriculum. Therefore, student’s assessment in English language is important to discover the level of acquisition and proficiency of students in this subject.

Assessment and certification are useful tools for monitoring and evaluation of educational system and serve as great motivation for teaching and learning processes. The role of assessment in the school setting cannot be overemphasized. Schools need to conduct examinations as yardstick for assessment and teacher’s always conducting various evaluation in the school to achieve different objectives, but this is essentially internal. This internal evaluation can be teacher- made test, continuous assessment, school-based assessment and local tests (Olutola 2015).

Continuous assessment is one of the internal evaluations which is basically a teacher made test. (Alonge 2003) defines CA as a mechanism whereby the final grading of a student in the cognitive affective and psychomotor domains of behavior takes into account in a systematic way all his performances during a given period of schooling. Continuous Assessment uses a variety of techniques for assessing the students because it considers all the three domains of learning, namely cognitive, affective and psychomotor. Apart from being formative in nature, a good Continuous Assessment system must be systematic, comprehensive, cumulative and guidance-inspiring or oriented. Some of the
advantages of continuous assessment are listed below:

Advantages of Continuous Assessment
1. It is used to determine student’s level of knowledge, skill and understanding when the subject/course is on-going;
2. It is used to diagnose students learning problems and difficulties;
3. It helps the teachers to know the next instructional step to take when the course is on-going;
4. It is used to evaluate the learning that has taken place in a lesson;
5. It assists the teachers to understand the students level of mastery in a particular subject;
6. It is teacher-student driven;
7. It helps the teachers to guide their students on occupational choices;
8. It aids students good study habits;
9. It helps the teachers to continuously monitor students’ progress in a subject or course;
10. It increase students motivation towards a course or subject;
11. It provides feedback that identifies strengths and weaknesses of students and teacher teaching methods (Olutola, 2019, p. 267).

For effective conduct of continuous assessment in the school setting, teachers must understand the different types of continuous assessment techniques that can be used. CA can be organized and implemented by using different assessment methods. Assessment methods or techniques used during CA includes:
1. Tests;
2. Quizzes;
3. Assignments;
4. Projects;
5. Self-assessment;
6. Peer-assessment;
7. Observations;
8. Portfolio Assessment;
9. Group work;
10. Questions and answers during the lesson;
11. Home-work and class work;
12. Student response during a lesson;
13. Anecdotal records;
14. Assessment of prior knowledge and
15. Oral presentation and debate (Olutola, 2019, p. 269).

Different modes of assessment can be used during CA practice in order to guide and improve the students’ learning and performance. Furthermore, different examination bodies involves in the conduct of external examinations, however, Nigeria have examination bodies that conduct external examinations and award certificate at various educational levels (Olutola 2015). There are three major public examination bodies responsible for certification of candidates at the senior secondary school level in Nigeria. These examination bodies are: The National Examinations Council (NECO) and the West African Examinations Council (WAEC) and National Business and Technical Examination Board (NABTEB). They are the bodies authorized by the Nigerian law to conduct the Senior School Certificate Examinations (SSCE), General Certificate Examinations (GCE) and other exams. NECO, NABTEB and WAEC carry out summative evaluation of the Criterion Referenced Tests. However, the
researchers explained only Examinations Council (NECO), which is one of the examining bodies in Nigeria.

In April, 1999 the Federal Government of Nigeria promulgated a decree establishing the National Examinations Council (NECO) and its take-off from 26th April, 1999 with Minna, Niger State as its headquarters. NECO is responsible for the conduct of senior secondary school certificate examinations (SSSCE) (NECO 2015). NECO claims that it award of senior secondary school certificate (SSSC) is based on the written examination which takes ratio 70 and continuous assessment with ratio 30 (Wilmut & Yakasai 2006). Despite the claim of NECO of their assessment on ratio 70:30, the students’ academic performance in SSSCE English language is not encouraging.

However, in Nigeria, there is abundant evidence that our senior secondary school students find it difficult to attain high academic performance in English language. There is need to investigate the correlate between academic performances of students in continuous assessment and their grades in NECO English language examination since the students’ performance in CA English Language is expected to be similar to their performance in NECO English language examination. This study is designed to examine correlate between academic performances of students’ in continuous assessment and National Examinations Council English language in Jos-South, Nigeria.

1.1. Statement of the Problem

English language is a compulsory subject to be offered in all the secondary schools in Nigeria. The importance of English language in Nigerian educational system cannot be underestimated because any individual seeking admission into tertiary institutions must have a credit in NECO, WAEC or NABTEB. English language examination before he or she can be given admission into any Nigerian University, Polytechnic, and College of Education.

Moreover, in Nigeria, there is abundant evidence attesting to senior secondary school students’ difficulty in attaining high academic performance in NECO English language examination. For instance, in 2003, 31,476 candidates wrote the examination, and only 2.622% of the candidates passed at credit level. In 2004, out of the 26,279 candidates that wrote the examination only 2.93% passed at credit level. In 2005, 35,793 students wrote the examination and only 1.80% passed at credit level and in 2006, 25,733 students wrote the examination and 2.74% of the students passed at credit level. In 2007, out of the 1,275,466 candidates, 325,754 represent 25.5% passed at credit level. In 2008, 188,442 representing 13.76% passed at credit level. In 2009, out of 1,373,009 candidates, 356,981 representing 25.9% passed at credit level, and in 2010, out of 1,351,557 candidates that enrolled for the exam, only 337,071 representing 24.9% passed at credit level (Alufohai 2016). In addition, stakeholders in education are concerned with the declining performance of students’ in English language. Scholars have made concerted efforts at investigating the factors responsible for the poor level of students’ achievement in English Language (Ayodele 2002 & Adegbite 2005).
Since the students’ performance in CA is expected to be similar to their performance in NECO English language examination. However, this study was designed to see whether CA English language is a good predictor of academic performance of students’ in NECO English language. Therefore, this study investigated the correlate between academic performances of students’ in continuous assessment and National Examinations Council English language in Jos-South, Nigeria.

1.2. Objective of the Study

The main objective of this study was to investigate the correlate between academic performances of students’ in continuous assessment and National Examinations Council English language in Jos-South, Nigeria.

Specifically, the study sought to find information on:
1. correlate between academic performances of students’ in continuous assessment and NECO English language examinations,
2. Whether significant difference exist between academic performance of students’ in continuous assessment English language based on gender
3. Whether significant differences exist between male and female students ‘academic performance in NECO English language.
4. Whether significant difference exist between academic performances of students’ in continuous assessment English language based on school type.
5. Whether significant difference exist between academic performances of students’ in NECO English language based on school type.

1.3. Research Questions

In order to achieve the objective of the study, the following research questions were raised to guide the study.
1. What is the frequency distribution of students’ CA scores in English language?
2. What is the frequency distribution of students’ NECO grades in English language?

1.4. Research Hypotheses

Five research hypotheses were formulated and tested in the study.
1. Students ‘academic performance in CA and NECO English Language examinations will not have significant correlation
2. Male and female students’ academic performance in CA English Language will not be significantly different.
3. Male and female students’ academic performance in NECO English Language examination will not be significantly different.
4. Private and public students’ academic performance in CA English Language will not be significantly different.

Private and public students’ academic performance in NECO English Language examination will not be significantly different.
2. RESEARCH METHODOLOGY

In this study, the researchers adopted correlational research design. All the public and private senior secondary school students’ in Jos- South Local Government Area of Plateau State constituted the population while the target population was made up of senior secondary school three (SSS3) students in public and private secondary schools in Jos- South Local Government Area who sat for the English language NECO SSC examinations in 2016/2017 academic session. The researchers used simple random sampling technique to select ten (10) secondary schools for the study. The population used for the study was made up of the following; male and female students from the sampled schools, eight mixed schools, one boy’s school, and one girl’s school.

The researcher used simple random sampling technique to select ten (10) senior secondary schools which is 6% of the total number (169) of senior schools in the Local Government Area. However, three thousand six hundred and sixteen (3,616) senior secondary school students sat for NECO English language in 2016/2017 academic session in Jos South Local Government Area. Out of this population (3,616), 14% were selected to participate in the study. Thus, a total of 506 students’ scores in CA and NECO grades in public and private schools were used for computation in this study.

In this study, researchers-designed instrument titled ‘Mark Collection Forms (MCFs)’ was used to collect data for the study. The MCFs consists of three sections; section A – C. Section ‘A’ contained the personal information of the respondents such as name of school, age and gender. Section B consists of Students’ CA Score Form (SCASF) in English language while Section C contained Students’ NECO Grade Form (SNECOGF) in English language. The conversion table used for students NECO examination results/grades is shown below:

Table 1: Table Showing Grade Weight of NECO Examination Results

| S/N | Grade | Grade Weight |
|-----|-------|--------------|
| 1.  | A₁    | 8            |
| 2.  | B₂    | 7            |
| 3.  | B₃    | 6            |
| 4.  | C₄    | 5            |
| 5.  | C₅    | 4            |
| 6.  | C₆    | 3            |
| 7.  | D₇    | 2            |
| 8.  | E₈    | 1            |
| 9.  | F₉    | 0            |
Face and content validities of the instruments were determined by the experts in English language. Each of the items in the instruments were examined in relation to the information, it is intended to elicit. In administering the instruments, the researchers personally collected data from each of the school selected for the study; this gave the researcher opportunity to answer relevant questions that were raised by the school authority and the respondents. The data collected for this study were analyzed using frequency count, percentage and Pearson Product Correlation statistics.

3 RESULTS & DISCUSSION

3.1. Answer to Researcher Questions
1. What is the frequency distribution of students CA scores in English Language in Jos-South of Plateau State?

Table 2: The Frequency Distribution of Students CA Scores in English Language in Jos-South of Plateau State

| S/N | CA scores  | Frequency | Percentage |
|-----|------------|-----------|------------|
| 1   | 0-39       | 55        | 1.0        |
| 2   | 40-49      | 59        | 11.7       |
| 3   | 50-59      | 182       | 36.0       |
| 4   | 60-69      | 166       | 32.8       |
| 5   | 70 & above | 94        | 18.6       |
|     | Total      | 506       | 100.0      |

Figure 1: Bar Chart of Frequency Distribution of Students’ CA Scores in English Language
Table 2 figure 1 reveals that 55 (1.0%) of the students sampled scored between 0-39%, 59 (11.7%) scored between 40-49%, 182 (36.0%) scored between 50-59%, 166 (32.8%) scored between 60-69% while 94 (18.6%) scored between 70 and above.

2: What is the frequency distribution of students NECO grades in English Language in Jos-South of Plateau State?

Table 3: Frequency Distribution of Students NECO Grades in English Language

| NECO Grades | Frequency | Percentage |
|-------------|-----------|------------|
| 0 (F9)      | 1         | 0.2        |
| 1 (E8)      | 25        | 4.9        |
| 2 (D7)      | 42        | 8.3        |
| 3 (C6)      | 149       | 29.4       |
| 4 (C5)      | 153       | 30.2       |
| 5 (C4)      | 92        | 18.2       |
| 6 (B3)      | 28        | 5.5        |
| 7 (B2)      | 15        | 3.0        |
| 8 (A1)      | 1         | 0.2        |
| Total       | 506       | 100.0      |

Figure 2: Bar Chart of Frequency Distribution of Students’ NECO Grades in English Language

Table 3 figure 2 shows that 1 (0.2%) of the students sampled had F9, 25 (4.9%) had E8, 42 (8.3%) had D7, 149 (29.4%) had C6, 153 (30.2%) had C5, 92 (18.2%) had C4, 28 (5.5) had B3, 15 (3.0%) had B2 and 1 (0.2%) had A1.
3.2. Hypothesis Testing

Five hypotheses in the study were tested using t-test and Pearson Product Correlation Analysis.

**Hypothesis One:** Students’ academic performance in CA and NECO English Language examinations will not have significant correlation.

Table 4: Pearson Product Moment Correlation Analysis showing the Relationship between Students Academic Performance in CA and NECO English Language examinations

| Variable                                      | R, Sig. of P. & No. | CASSEL | NECOSGEL |
|-----------------------------------------------|---------------------|--------|----------|
| Continuous Assessment Students Scores English Language (CASSEL) | Pearson Correlation | 1      | -.077    |
|                                               | Sig. (2 tailed)     | .083   | 506      |
| National Examinations Council Students Grade in English Language (NECOSGEL) | Pearson Correlation | -.077  | 1        |
|                                               | Sig. (2 tailed)     | .083   | 506      |

In Table 4 no significant correlation was found between academic performance of students’ in CA and NECO English Language examinations in Jos-South of Plateau State. Thus, students’ academic performance in CA English Language is not a good predictor of their performance in NECO English Language.

**Hypothesis Two:** Male and female students’ academic performance in CA English Language will not be significantly different.

Table 5: t-test Analysis Showing Students’ Academic Performance in CA English language Based on Gender.

| Gender | N   | Mean   | SD    | DF | Cal t-value | Sig. (p) | t-value | R     |
|--------|-----|--------|-------|----|-------------|----------|---------|-------|
| Male   | 291 | 60.6873| 11.7397| 504|.518          | .604      | Not significant |
| Female | 215 | 60.1302| 12.2280|    |             |           |         |       |

Table 5 indicates that male and female students’ academic performance in CA English Language was not significantly different (t = .518, df = 504) p = .604). Thus, students’ gender in Jos-South are not significantly different in their performance in CA English Language.

**Hypotheses Three:** Male and female students’ academic performance in NECO English Language examination will not be significantly different.
Table 6: t-test Analysis Showing Students’ Academic Performance in NECO English language Based on Gender.

| Gender | N   | Mean  | SD    | DF  | Cal. t-value | Sig. t-value (p) | R     |
|--------|-----|-------|-------|-----|--------------|-----------------|-------|
| Male   | 291 | 3.7732| 1.2932| 504 | .009         | .993            | Not significant |
| Female | 215 | 3.7721| 1.3703|     |              |                 |       |

The result from table 6 reveals that male and female students’ academic performance in NECO English Language examination was not significantly different (t= .009, df = 504, p = .993). Therefore, students’ in Jos-South are not significantly different in their performance in NECO English Language examination based on gender.

**Hypothesis Four:** Private and public students’ academic performance in CA English Language will not be significantly different.

Table 7: t-test Analysis Showing Students’ Academic Performance in CA English language Based on School Type.

| School Type | N   | Mean  | S.D  | DF  | Cal. t-value | Sig. t-value (p) | Remark |
|-------------|-----|-------|------|-----|--------------|-----------------|--------|
| Private     | 423 | 61.9858| 12.1600| 504 | 6.816        | .000            | Significant |
| Public      | 83  | 52.6265| 6.5587|     |              |                 |        |

The result from table 7 shows that private and public school students’ academic performance in CA English Language was significantly different (t = 6.816, df = 504, p = .000). From the analysis, private school students’ performance better with the mean of (61.9858) than their public schools mates with the mean of 52.6265

**Hypothesis Five:** Private and public students’ academic performance in NECO English Language examination will not be significantly different.

Table 8: t-test Analysis Showing Students’ Academic Performance in NECO English language Based on School Type.

| School Type | N   | Mean  | S.D  | DF  | Cal. t-value | Sig.t-value (p) | Remark |
|-------------|-----|-------|------|-----|--------------|-----------------|--------|
| Private     | 423 | 4.0189| 1.2542| 504 | 10.384       | .000            | Significant |
| Public      | 83  | 2.5181| .9020 |     |              |                 |        |
The result from table 8 shows that private and public school students’ academic performance in NECO English Language examination was significantly different (t=10.384, df =504, p = .000). Hence, students’ from the private school performed better in NECO English language examination (Mean = 4.0189) than their counterpart in public school (Mean = 2.5181).

### 3.3 Discussion of Findings

The findings in hypothesis one reveals no significant correlation between students’ performance in CA English language and their grades in NECO English language examination. This means that students’ performance in CA English language cannot predict their performance in NECO English language. The finding is not in agreement with (Faleyé & Afolabi (2004) result which indicates that students’ performance in JSCE English Language and Mathematics have capacity to predict their performance in SSCE English Language and Mathematics. (Attah & Binda 2001) which reported high strong positive correlation between CA and end of term examination in English language disagree with the findings of this study.

The results in hypothesis two reveals no significant difference between male and female students’ academic performance in CA English language. Thus, students’ in Jos-South are not significantly different in their performance in CA English language based on gender. (Akande 2001) and (Spence 2004) who reported no significant effect of students’ performance supported the findings of this study.

Results of the study in hypothesis three shows that male and female students’ academic performance in NECO English Language examination will not be significantly different. Therefore, hypothesis three is accepted. Thus, students’ academic performance in Jos-South are not significantly different in NECO English language examination based on gender. The finding of (Okwo & Otunba 2007) who reported that male students do well in English language than female students did not support the results of hypothesis three.

The results in hypothesis four shows that significant difference was found in the students’ performance in CA English language based on school type (private and public). From the analysis, students in private school perform very well with the mean of 61.9858 than their counterpart in public schools with mean of 52.6265. The result of the study conducted by (Okon & Archibong 2015) supported the result of this study. They results show secondary school students in private school performed very well in Social Studies than their counterparts in public schools.

The result of the study in hypothesis five shows that private and public students’ academic performance in NECO English Language examination is significantly different. Thus, private school students perform better in NECO English language examination (mean = 4.0189) than their counterpart in public school, (Mean= 2.5181). The findings is not supported by (Alimi, Ehinola & Alabi 2012) which reported that students in public and private senior secondary schools in Ondo State
were not significant different in their academic performance.

4. CONCLUSION & RECOMMENDATIONS

This study investigated the correlate between academic performances of students’ in continuous assessment and National Examinations Council English language in Jos-South, Local Government Area of Plateau State, Nigeria. From the findings of this study the researchers concluded that, students’ academic performance in CA English language is not a good predictor of their performance in NECO English language examination. This means that students’ performance in CA English language is not a credible prerequisite for their performance in NECO English language examination. In addition, no significant correlation was found between students’ academic performance in CA English language and their grades in NECO English language examination. Also, no significant difference in the students’ academic performance in CA and NECO English language examination based on gender but students’ are significantly different in their academic performance in CA and NECO English language examination based on school type.

4.1. Recommendations

The researchers recommends that:

1. School administrators should monitor the conduct of English language CA by their teachers in order to improve students’ performance in NECO English language examinations

2. Qualified English language teachers should be employed to teach English language in senior secondary classes regardless of school type in order to improve students’ performance in CA and NECO English language examinations,

3. Government should organized in-service trainings for English language teachers to broaden their knowledge in CA skills and techniques and

4. English language teachers should be competent in continuous assessment skills in order to assist the students to improve their performance.

ACKNOWLEDGMENTS

The researchers gratefully acknowledged the co-operation of the Principals of the selected schools and other people that participated in this study during the collection of data.

REFERENCES

Adegbite, W 2005, ‘Curriculum development in English studies in Nigerian secondary schools’ in A Dada, A Abimbade & CO Kolawole, (eds), Issues in Language Communication and Education, pp.110-124. Constellation Books, Ibadan.

Akande, FF 2001, Effects of academic values clarification and peer competition on academic achievement motivation and academic performance among secondary school students, Ph.D. Thesis, University of Ilorin.
Correlation between the Academic Performance of Students in Continuous Assessment and the National Examinations Council in English Language in Jos-South, Nigeria

| Author(s)                  | Title                                                                 | Source                                                                 |
|---------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|
| Alimi, OS, Ehinola, GB & Alabi, FO, 2012 | ‘School types, facilities and academic performance of students in senior secondary schools in Ondo State, Nigeria’ | *International Education Studies*, vol. 5, no. 3, pp. 44-48. |
| Alonge, MF 2003 | Assessment and examination: The pathways to educational development. 9th *Inaugural Lecture*. University of Ado-Ekiti. [21 August, 2003]. | |
| Alufohai, PJ 2016 | ‘School-Based Factors Affecting Senior Secondary School Students’ Achievement in English Language in Edo State’ | *European Journal of Research and Reflection in Educational Sciences*, vol. 4, no. 9, pp. 36-43. |
| Attah, GB & Binda, SIA, 2001 | ‘Correlation analysis of continuous assessment and examination marks in mathematics’ in PN Lassa & JA Aghenta (Eds), 26th *Annual Congress of the Nigerian Academy of Education*, University of Jos, p. 210. | |
| Ayodele, SO 2002 | The use of English in educating Nigerian youth: from the problem to the solution. *Inaugural Lecture*, Institute of Education, University of Ibadan, Power house press and publishers, Ibadan. | |
| Ayodele, S. O. (2002). | The use of English in educating Nigerian youth: from the problem to the solution. An inaugural lecture delivered at the University of Ibadan, Ibadan: power house press and publishers Bamgbose, A. (2008). South-west. | |
| Faleyeh, BA & Afolabi, ERI, 2004 | ‘The predictive validity of Osun State junior secondary certificate examination’. | *Electronic Journal of Research in Educational Psychological*, vol. 3, no. 1, pp. 131-144. |
| Federal Republic of Nigeria 2014 | *National policy on Education* (revised edition) Lagos. National Education Research and Development Council (NERDC) Press. | |
| Marlow, E, Venkata, D & Bhaskara, R, 2011 | *Teaching English Successfully*. Discovery Publishing House, Dynamic Printers, Delhi. | |
| National Examination Council 2015 | *National examinations Council. Available from* http://www.info@neconigeria.com.service@neconigeria.org [20 May 2015]. | |
| Okon, CE & Archibong, UI, 2015 | ‘School type and students’ academic performance in social studies in junior secondary certificate examination (JSCE)’ | *Academic Journal of Interdisciplinary Studies*, vol. 4, no. 2, pp. 421-426. |
| Okwo, F A & Otunba, S, 2007 | ‘Influence of gender and cognitive styles in science achievement in physics essay test’ | *Journal of Science Teachers Association of Nigeria*, vol. 42, no. 1&2, pp. 85-88. |
| Olutola, AT 2015 | ‘Item Difficulty and Discrimination Indices of Multiple Choice Biology Tests’, *Liceo Journal of Higher Education Research*, vol. 11, no. 1, pp. 16-30. | |
Olutola, AT 2019, ‘Continuous Assessment as a Strategy for Enhancing Teaching and Learning in Schools’ in AD Kankia, OL Badaki & MU Sanda (eds), A Guide to Teaching Practice, pp. 264-274. Ndahi Prnting and Publishing Company Nigeria, Kaduna.

Spence, DJ 2004, Engagement with mathematics courseware in traditional and online learning environments: relationship to motivation, achievement, gender and gender orientation, Unpublished PhD thesis, Emory University. Available from: http://www.des.emory.edu/mfp/Spence Dissertation 2004. [17 March 2007].

Wilmut, J & Yakasai, MI 2006, A brief review of the assessment of student achievement in Kaduna, Kano and Kwara States of Nigeria. DfID/World Bank SESP Preparation Mission.