

TEACHERS' INSTRUCTIONAL QUALITY AND EVALUATION PROCEDURE AS CORRELATES OF STUDENTS' LEARNING OUTCOMES IN SECONDARY SCHOOLS IN SOUTHWESTERN NIGERIA

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Abstract

The study investigated teacher instructional quality and evaluation procedures as correlates of students' learning outcomes in secondary schools in Southwestern Nigeria. The focus of most previous studies was on cognitive learning outcomes whereas this study proceeded beyond cognitive learning outcomes to non-cognitive learning outcomes (affective domain) in English language and Mathematics. The descriptive survey research design of ex-post type was used for the study. Multi stage probability proportionate to size, simple stratified, purposive sampling techniques were used to sample 342 teachers of 5,688 and 3420 students of 366,998. Three research questions were raised and one hypothesis generated and tested at 0.05 level of significance. The findings revealed high level of students' perception of teachers' instructional quality with the weighted means of 3.36 and 3.24 and evaluation procedures with weighted means of 3.32 and 3.30 for English language and General Mathematics respectively. The result of the study also indicated significant relationship between teachers' instructional quality ($r=0.076$; $p<0.05$ & $r=0.77$; $p<0.05$); Evaluation procedures ($r=-0.216$; $p<0.05$ & $r=0.047$; $p<0.05$) for English language and General Mathematics respectively and students' academic achievement. It was recommended that efforts should be made by government to ensure that teachers' promotion, leave bonus and annual increment are duly paid from time to time. The school managers should encourage the use of innovative teaching methodologies and teachers' discretion in selecting the appropriate ones for their lessons should be encouraged.

Introduction

The future development of the world and of individual nations hinges more than ever on the capacity of individuals and countries to acquire, adapt and advance in knowledge. This capacity depends on the extent to which the population has attained the cognitive skills. To increase the pace of economic and social development in developing countries, teachers must teach students the essential skills in secondary school curriculum because advanced education and training rest on the solid foundation of primary and secondary education, especially, in the core subjects such as English language and General Mathematics. It is expected that output of teachers needs to be improved and this will invariably improve the academic performance of the students (Tobih, Akintaro & Osunlana, 2013).

English language is the single most important subject in the secondary schools curriculum. This is so because it is the tool through which information, concepts, skills and values in all other subjects are transmitted (Saleh, 2007). Observation shows that English language teacher's accessibility to students has impact on student academic achievement in the subject (Akinwumi, Oladipo, Abiodun-Oyebanji & Akinyemi, 2019). Also, the importance of General Mathematics in all areas of life has made its teaching and learning become a major focus and source of concern to the stakeholders (Daniels and Strauss, 2010). However, records available show that most secondary schools learners who sat for the ordinary level examination, failed every year. Musa, Nwachukwu & Ali (2016) confirmed that West African Examinations Council (WAEC) and the National Examinations Council (NECO) almost every year highlight the abysmal poor performance

of students at the Senior Secondary School Certificate Examinations. However, students' persistent poor performance has been partly ascribed to poor instructional quality of teachers (Omwirhiren and Ibrahim, 2016).

To achieve the targeted educational objective, the teachers teaching process – instructional quality and evaluation procedures assume an enviable position in the curriculum implementation at any level. Adeyemi (2009) maintained that it is the teacher that translates policies and programmes into action. Again, Nwogu & Esobhawan, (2014) stated that teachers serve as catalysts for the intellectual, socio-economic, scientific, technological, cultural, growth and development of any society. The researcher added that the teacher is the initiator of the learning process, facilitator of the learning skills, the coordinator of the learning sequences, the assessor of the learning efficiency and indeed the pivotal element of educational development. Adeyemi (2009) explained that the concept of learning is, therefore, paramount in explaining the place of teacher instructional quality and evaluation procedures in the educational development of any nation. Active participation of teacher in the classroom is a key element to improve students' learning outcomes in English language and Mathematics (Odunlade, 2013).

Oladebo (1986) likened the success of educational system to a "tree"; teacher education is its root, university education is its stem, secondary, primary, special and technical education administrators and students are roots, branches and leaves. If the root is harmed, the stem shrinks, the branches wither, the leaves fall and tree dies. The Nigerian educational system is

collapsing because the root of the educational tree is harmed. Moreover, the researcher buttressed that the strength of any educational system must largely depend on the quality of its teachers' instructional and evaluation procedures. The value of education to the students is determined by the teachers' instructional quality and evaluation procedures.

Content based pedagogical knowledge (Gokkurt Ozdemir and Soylu, 2017) can be described as practical knowledge of teaching. It includes knowledge of approaches to school topic, teachers' knowledge to teaching procedures such as effective strategies for planning classroom practices, behavioural management techniques, classroom organizational procedures, motivational techniques, different ways of presenting and assessing facts. He described pedagogical knowledge of teachers as special interest because it identifies the distinctive bodies of knowledge for teaching. It represents the blending of content and pedagogical understanding of how particular topics, problems or issues are organized, represented and adopted to the diverse interests and abilities of learned and presented for instruction. However, Babalola (2011) noted that a professional teacher is expected to display 5Cs of conscientiousness, critical thinking, and competences (in subject matter and pedagogy), community spirit and commitment to professional standards and best practices. He stated further that all these are entrenched in the national policy on education as the five specific objectives of teacher education in Nigeria. The most single critical element in the education process is the teacher who plans, organizes, designs, directs, motivates and inspires others to learn, using standard teaching

techniques to impart knowledge (Okolocha & Onyeneke, 2013).

Adeyemi (2009) pointed out that teacher could have all the qualifications but could cause poor learning outcomes of his/her students if he/she has poor method of teaching. Kukuru (2009) noted that teachers must build a stock – pile of knowledge, method and practice that they may draw from any time. Also Kukuru, (2009) observed that it is not luck but “method” that brings success. He noted that teachers' concern should be to create positive environment, manage classroom physical environment to ensure decency or cleanliness; materials such as seats and desks, educational technology or teaching media; electronic, printed media, real objects for free movement, comfortable writing and use. The teacher him/herself should manage attitudes, skills and competences, their intelligence, attitudes, emotion and anything that may disturb them psychologically,. However, teacher practices variables represent a process view of teacher variables which might more aptly be described as instructional quality. The specific teacher's tasks, according to Goe and Stickler (2008), include the alignment of instruction and assessments, clear learning objectives and performance expectation. The government, schools and parents are expected to make available important and necessary instructional materials to teachers of English Language and Mathematics for enhanced teaching and improved achievement of students in the both subjects (Abdu-Raheem, 2016).

The choice of this title was facilitated and motivated by the fact that previous studies have not been able to identify the teacher teaching process – instructional quality and evaluation procedures that are most likely to improve students' learning

outcomes. Unfortunately, this is the information that educational policy makers need most. This justified the desire to break this ground so as to extend the frontier of knowledge in order to help improve the unimpressive students' academic achievement in English language and General Mathematics in Southwestern, Nigeria.

Nothing better illustrates the declining quality of the nation's educational system than the growing rate of mass failure in English language and General Mathematics among secondary school students in their final WAEC and NECO examinations. It is a fact that the levels of students' academic achievement in the two core subjects have generated a concern for the stakeholders. And for educational goals to be accomplished, the teachers need to exhibit some qualities in their instructional quality and evaluation procedures in the classroom. It was against this background that the study investigated teacher instructional quality, evaluation procedures and students' cognitive learning in secondary schools in Southwestern Nigeria.

Research Questions

- (1). What is the students' perception of teacher teaching process (Instructional Quality and Evaluation Procedures) on the teaching of English language and General Mathematics?
- (2). What is the level of students' achievement in English language and General Mathematics?

Hypotheses

H₀₁: There is no significant relationship between teacher teaching process

(Instructional Quality and Evaluation Procedures) and students' academic achievement in English Language and General Mathematics.

H₀₂: There is no relative contribution of Instructional Quality and Evaluation Procedures to students' academic achievement in English Language and General Mathematics.

Methodology

The descriptive survey research design of *ex-post fact type* that adapted correlational approach was used for the study. The study population comprised all the SS3 English language and General Mathematics teachers and students of all senior secondary schools of 138 Local Government Areas (six states) of South-west geo-political zone of Nigeria. The participants for the study were selected through a multi stage probability proportionate to size sampling techniques. Simple random sampling was used to select southwestern geo-political zone. Stratified sampling was used to select three states out of six states of the Southwestern Nigeria. All the senatorial districts of the three states were considered for the study. Stratified random sampling technique was used to select local government areas while simple random sampling technique was used to sample 30 per cent of schools in the sampled local government areas. All the English language and General Mathematics teachers were also considered in the sampled schools. Purposive, stratified and simple random sampling techniques were used to select twenty (20) SS3 students from each of the secondary schools sampled.

Table 1: Summary of Sampled Geo-Political Zone, States, Senatorial Districts, Local Government Areas, Schools, English language and General Mathematics Teachers and Students in Lagos, Oyo, and Ekiti States of Southwestern Geo-Political Zone of Nigeria

S/N	States	Senatorial District	Local Govt. Areas	Sampled Secondary Schools		Sampled Secondary School Teachers		Sampled Secondary School Students	
				Public	Private	Public	Private	Public	Private
1	Lagos	3	7	29	37	58	74	580	70
2	Oyo	3	10	59	16	118	32	1180	320
3	Ekiti	3	6	20	10	40	20	400	200
Total		9	23	108	63	216	126	210	1260
Grand Total		9	23	171		342		3420	

Source: Fieldwork, 2019

Three research instruments were used for this study. They were: Teachers' teaching process questionnaire for the teachers. Teachers' teaching process Questionnaire for the students and Students' cognitive ability tests in English language and General Mathematics teachers. The face content and construct validity of the instruments were established with experts and the test-retest

reliability coefficients of 0.82, 0.85, and 0.78 confirmed the reliability of the instruments. The descriptive statistics such as frequency count, simple percentage, means and standard deviation were used to answer research questions. Inferential statistics namely, Pearson product moment correlation coefficient was used to test the hypotheses.

Result

Research Question 2: What is the level of students' perception of teachers' teaching process on the teaching of English language and General Mathematics?

Table 2: English Language Teachers Instructional Quality
N = 3420

S/N	Items	SA(4)	A(3)	D(2)	SD(1)	Means	Std	Std
1	Teachers keep student record of performance by the use of mark book.	101 (3.0)	126 (3.7)	837 (24.5)	2356 (68.9)	359	.702	.012
2	Teachers inform students about their performance so as to encourage and motivate them.	105 (3.1)	153 (4.5)	1115 (32.6)	2047 (59.9)	3.49	.724	.012
3	The teachers encourage/motivate the students to participate during teaching period.	29 (0.8)	171 (5.0)	1307 (38.2)	1913 (55.9)	3.49	.633	.011
4	The teachers' oral expression is okay and they put their point	58 (1.7)	57 (1.7)	1489 (43.5)	1816 (53.1)	3.48	.620	.011

	across clearly, convincingly and concisely.							
5	Teachers mark and grade students corrections to ensure students' compliance.	119 (3.5)	112 (3.3)	1253 (36.6)	1936 (56.6)	3.46	.723	.012
6	The explanation provided by the teachers helps students to understand what they teach.	47 (1.4)	177 (5.2)	1422 (41.6)	1774 (51.9)	3.44	.658	.011
7	The teachers assist and encourage both the weak and fast learner.	213 (6.2)	253 (7.4)	1005 (29.4)	1949 (57.0)	3.37	.869	.015
8	The teachers' supervision of students is thorough	171 (5.0)	268 (7.8)	1121 (32.8)	1860 (54.4)	3.37	.830	.014
9	Teachers encourage the spirit of team work among students.	154 (4.5)	238 (7.0)	1455 (42.5)	1573 (46.0)	3.30	.787	.013
10	The teachers are well organized, business like and task oriented.	147 (4.3)	197 (5.8)	1627 (47.6)	1449 (42.4)	3.28	.758	.013
11	The teachers are stimulating and imaginative, anticipate problems and develop solution in advance.	187 (5.5)	147 (4.3)	1697 (49.6)	1389 (40.6)	3.25	.777	.013
12	The teachers use instructional materials effectively.	267 (7.8)	129 (3.8)	1683 (49.2)	1341 (39.2)	3.20	.838	.014
13	The teachers always insist on the quality of the students' work.	415 (12.1)	97 (2.3)	1429 (41.8)	1479 (43.2)	3.16	.959	.016
14	The teachers' teaching methods and classroom management are effective and okay.	212 (6.2)	222 (6.5)	2112 (61.8)	874 (25.6)	3.09	.751	.013
Weighted Mean = 3.36; Data in parentheses are percentage of the respondents								

Source: Fieldwork, 2019

The weighted means score of 3.36 revealed that on the whole, students' perception of English language teachers' instructional quality is very high in the senior secondary schools selected.

Table 3: General Mathematics Teachers' Instructional Quality
N = 3420

S/N	Items	SA(4)	A(3)	D(2)	SD(1)	Means	Std	Std Error
1	Teachers keep student record of performance by the use of mark book.	101 (3.0)	126 (3.7)	837 (24.5)	2356 (68.9)	359	.702	.012
2	Teachers inform students about their performance so as to encourage and motivate them.	105 (3.1)	153 (4.5)	1115 (32.6)	2047 (59.9)	3.49	.724	.012
3	The explanation provided by	29	171	1307	1913	3.49	.633	.011

	the teachers helps students to understand what they teach.	(0.8)	(5.0)	(38.2)	(55.9)			
4	The teachers are stimulating and imaginative, anticipate problems and develop solution in advance.	58 (1.7)	57 (1.7)	1489 (43.5)	1816 (53.1)	3.48	.620	.011
5	Teachers encourage/motivate students to participate during teaching period.	119 (3.5)	112 (3.3)	1253 (36.6)	1936 (56.6)	3.46	.723	.012
6	The teachers' oral expression is okay and they put their point across clearly, convincingly and concisely.	47 (1.4)	177 (5.2)	1422 (41.6)	1774 (51.9)	3.44	.658	.011
7	Teachers mark and grade students corrections to ensure students' compliance.	213 (6.2)	253 (7.4)	1005 (29.4)	1949 (57.0)	3.37	.869	.015
8	The teachers always insist on the quality of the students' work.	171 (5.0)	268 (7.8)	1121 (32.8)	1860 (54.4)	3.37	.830	.014
9	The teachers assist and encourage both the weak and fast learner.	154 (4.5)	238 (7.0)	1455 (42.5)	1573 (46.0)	3.30	.787	.013
10	The teachers use instructional materials effectively.	147 (4.3)	197 (5.8)	1627 (47.6)	1449 (42.4)	3.28	.758	.013
11	Teachers encourage the spirit of team work among students.	101 (3.0)	126 (3.7)	837 (24.5)	2356 (68.9)	3.59	.702	.012
12	The teachers are well organized, business like and task oriented.	105 (3.1)	153 (4.5)	1115 (32.6)	2047 (59.9)	3.49	.724	.012
13	The teachers' supervision of students is thorough	29 (0.8)	171 (5.0)	1307 (38.2)	1913 (55.9)	3.49	.633	.011
14	The teachers' teaching methods and classroom management are effective and okay.	58 (1.7)	57 (1.7)	1489 (43.5)	1816 (53.1)	3.48	.620	.011
	Weighted Mean = 3.36; Data in parentheses are percentage of the respondents							

Source: Fieldwork, 2019

The weighted means score of 3.24 revealed that students' perception of General Mathematics teachers' instruction quality is very high in the senior secondary schools sampled.

Table 4: English language Teachers' Evaluation Procedures
N = 3420

S/N	Items	SA(4)	A(3)	D(2)	SD(1)	Means	Std	Std Error
1	Teachers inform students about their performance so as to encourage and motivate them.	101 (3.0)	126 (3.7)	837 (24.5)	2356 (68.9)	359	.702	.012
2	Teachers mark and grade students' corrections to ensure students' compliance.	105 (3.1)	153 (4.5)	1115 (32.6)	2047 (59.9)	3.49	.724	.012
3	Teachers align instruction with assessment in the classroom.	29 (0.8)	171 (5.0)	1307 (38.2)	1913 (55.9)	3.49	.633	.011
4	Teachers display positive relationship between learning objective and students' learning outcome.	58 (1.7)	57 (1.7)	1489 (43.5)	1816 (53.1)	3.48	.620	.011
5	Teachers give students intellectually challenging tasks and assignments.	119 (3.5)	112 (3.3)	1253 (36.6)	1936 (56.6)	3.46	.723	.012
6	The teachers embark on regular evaluation of students via test, assignment and examination.	47 (1.4)	177 (5.2)	1422 (41.6)	1774 (51.9)	3.44	.658	.011
7	Teachers' assignment techniques are effective.	213 (6.2)	253 (7.4)	1005 (29.4)	1949 (57.0)	3.37	.869	.015
8	Teacher use formative types of assessment for their students.	171 (5.0)	268 (7.8)	1121 (32.8)	1860 (54.4)	3.37	.830	.014
9	Teachers praise and reward students appropriately.	154 (4.5)	238 (7.0)	1455 (42.5)	1573 (46.0)	3.30	.787	.013
10	Teachers give mark, grade and return assignments regularly to their students.	147 (4.3)	197 (5.8)	1627 (47.6)	1449 (42.4)	3.28	.758	.013
Weighted Mean = 3.36; Data in parentheses are percentage of the respondents								

Source: Fieldwork, 2019

The weighted means score of 3.32 indicates that students' perception of English language teachers' evaluation procedure is very high.

Table 5: General Mathematics Teachers' Evaluation Procedures
N = 3420

S/N	Items	SA(4)	A(3)	D(2)	SD(1)	Means	Std	Std Error
1	Teachers give students intellectually challenging tasks and assignments.	101 (3.0)	126 (3.7)	837 (24.5)	2356 (68.9)	359	.702	.012
2	Teachers inform students about their performance so as to encourage them to improve.	105 (3.1)	153 (4.5)	1115 (32.6)	2047 (59.9)	3.49	.724	.012
3	The teachers embark on regular evaluation of students via test, assignment and examination.	29 (0.8)	171 (5.0)	1307 (38.2)	1913 (55.9)	3.49	.633	.011
4	Teachers mark students' scripts properly in line with the marking guide.	58 (1.7)	57 (1.7)	1489 (43.5)	1816 (53.1)	3.48	.620	.011
5	Teachers' assignment and techniques are effective.	119 (3.5)	112 (3.3)	1253 (36.6)	1936 (56.6)	3.46	.723	.012
6	Teachers use formative types of assessment for their students.	47 (1.4)	177 (5.2)	1422 (41.6)	1774 (51.9)	3.44	.658	.011
7	Teachers display positive relationship between learning objective and students' learning outcome.	213 (6.2)	253 (7.4)	1005 (29.4)	1949 (57.0)	3.37	.869	.015
8	Teachers align instruction with assessment in the classroom.	171 (5.0)	268 (7.8)	1121 (32.8)	1860 (54.4)	3.37	.830	.014
9	Teachers give mark, grade and return assignments regularly to their students.	154 (4.5)	238 (7.0)	1455 (42.5)	1573 (46.0)	3.30	.787	.013
10	Teachers praise and reward students appropriately.	147 (4.3)	197 (5.8)	1627 (47.6)	1449 (42.4)	3.28	.758	.013
Weighted Mean = 3.36; Data in parentheses are percentage of the respondents								

Source: Fieldwork, 2019

The weighted mean score of 3.30 indicates that students' perception of General Mathematics teachers' evaluation procedure is very high.

Research Question 2: What is the level of students' learning outcomes in English language and General Mathematics?

**Table 6: The Level of Students' Achievement in English language
N 3420**

Raw Score	Opposite in meaning			Best Complete			Interpretation			Nearest in	
05	Freq	%	Cumulative	Freq	%	Cumulative	Freq	%	Cumulative	Freq	%
00	52	1.5	1.5	122	3.6	3.6	54	1.6	1.6	169	4.9
01	146	4.3	5.8	614	18.0	21.5	348	10.2	11.8	591	17.3
02	1078	31.5	37.3	425	12.4	33.9	1383	40.4	52.2	744	21.8
039	766	22.4	59.7	444	13.0	46.9	414	12.1	64.3	514	15.0
04	590	17.3	77.0	781	22.8	69.8	265	7.7	72.0	406	11.9
05	788	23.0	100.0	1034	30.2	100.0	956	28.0	100.0	996	29.1
Total	3420	100.0		3420	100.0		3420	100.0		3420	100.0

Source: Fieldwork, 2019

The study shows the level of students' cognitive ability in English language test revealing the achievement of students in each aspect: *opposite in meaning*, *best complete*, *interpretation* and *nearest meaning*. The table also shows the frequency of each score, the percentage and the cumulative percentage. The table shows that 1276 students representing 37.3 percent failed the section of *opposite in meaning* while 2144 representing 62.7 percent passed. For the section of *best complete*, 1161 students representing 33.9 failed while 2259 representing 66.1 percent passed; 1785 representing 52.2 percent failed *interpretation* while 1635 representing 47.8 percent passed; and 1504 representing 44.0 percent failed *nearest in meaning* while 1916 representing 56.0 percent passed.

Table 7: The Level of Students' Cognitive Ability in General Mathematics

Raw Score	Opposite in meaning			Best Complete			Interpretation			Nearest in	
05	Freq	%	Cumulative	Freq	%	Cumulative	Freq	%	Cumulative	Freq	%
00	3	1	1	530	15.5	15.5	48	1.4	1.4	19	6
01	5	1	2	614	18.0	33.5	1130	33.0	34.4	806	23.6
02	7	2	4	1040	30.4	63.9	684	20.0	54.4	953	27.9
039	509	14.9	15.3	763	22.3	86.2	835	24.4	78.9	945	27.6
04	2660	77.8	93.1	205	6.0	92.2	340	9.9	88.8	234	6.8
05	236	6.9	100.0	268	7.8	100.0	383	11.2	100.0	463	13.5
Total	3420	100.0		3420	100.0		100.0			100.0	

N=3420 Source: Fieldwork, 2019

The study shows the level of students' cognitive ability in General Mathematics test revealing the learning outcomes of the students in each aspect: *numerical ability*, *ability to interpret*, *ability to simplify* and *ability to calculate*. The table also shows the frequency of each score, the percentage and the cumulative percentage. The table shows that 15 students representing

4.0 percent failed in *numerical ability* while 3405 representing 96.0 percent passed; 2184 students representing 63.9 failed *ability to interpret* while 1236 students representing 36.1 percent passed; 1862 students representing 54.4 percent failed *ability to simplify* while 1558 students representing 45.6 passed and 177 students representing 52.0 percent failed *ability to calculate* while 1642 students representing 48.0 passed.

Table 8: Descriptive Statistics on the Level of Students' Cognitive Abilities in English language and General Mathematics
N=3420

N = 3420					
	Means	Standard Errors	Standard Deviation	Means Ranking	Subjects
Opposite in meaning	3.19	.022	1.297	2 nd	English Language
Best complete	3.24	.027	1.595	1 st	
Interpretation	2.98	.025	1.466	4 th	
Nearest in meaning	2.99	.028	1.624	3 rd	
Weighted Mean = 3.1					
Numerical Ability	3.91	.008	0.495	1 st	General Mathematics
Ability to Interpret	2.09	.024	1.400	4 th	
Ability to Simplify	2.42	.023	1.364	3 rd	
Ability to calculate	2.57	.022	1.303	2 nd	
Weighted Mean = 2.75					

Source: Fieldwork, 2019

The study shows the means scores, standard deviation and the ranking order of students' cognitive learning outcomes in English language and General Mathematics. It was revealed that students were weak in English language in the *areas of interpretation and ability to identify words that are nearest in meaning*. *Interpretation* has the mean score of 2.98; standard deviation of 1.466, standard error of 0.025 and ranked fourth. The *nearest in meaning* has the mean score of 2.99; standard deviation of 1.624, standard error of .028 and ranked third. The students' learning outcome was very good in words that are *opposite in meaning* has mean score of 3.19; standard deviation of 1.297; standard error of 0.22 and ranked second.

Best complete has the means score of 3.24 standard deviation of 1.595; standard error of 0.27 and ranked first. For General Mathematics, students were good in *numerical ability* and weak in their *abilities to interpret, simplify and calculate*. *Numerical* has the mean score of 3.91; standard deviation .495 and standard error of .008 and ranked first. *Ability to interpret* has mean score of 2.09. standard deviation of 1.400, standard error of .024 and ranked fourth. *Ability to simplify* has a mean score of 2.42; standard deviation of 1.364, standard error of .023 and ranked third. *Ability to calculate* has a mean score of 2.57, standard deviation of 1.303, and standard error of 0.022 and ranked second.

Hypothesis: There is no significant relationship between teacher teaching process (Instructional Quality and Evaluation Procedures) and students' learning outcomes in English language and General Mathematics

Table 9: Pearson Correlation of Teachers' Teaching Process Variables and Students' Learning Outcomes in English language

Variable	X ₁	X ₂	X ₃
X ₁	1.000		
X ₂	.451 Sig (.000)	1.000	
X ₃	-.076 Sig (.000)	-.216 Sig (.000)	1.000

X₁ = Teachers' Instructional Quality, X₂ = Teachers' Evaluation Process, X₃ = Students' Cognitive Ability in English language

*Significant at P<0.05

The findings show that teachers' instruction quality ($r=-.076$; $P<0.05$) and teachers' evaluation procedures ($r=-.216$; $P<0.05$) have negative but significant relationships with students' cognitive learning outcome in English language. This shows that teachers' teaching process; instructional quality and evaluation procedures did not tend towards a good level of performance in students' cognitive learning outcome in English language. However, they are significant. Hence, hypothesis two is rejected.

Table 10: Pearson Correlation of Teachers' Teaching Process Variables and Students' Learning Outcomes in General Mathematics

Variable	X ₁	X ₂	X ₃
X ₁	1.000		
X ₂	.349 Sig (.000)	1.000	
X ₃	-.077 Sig (.000)	-.047 Sig (.000)	1.000

X₁ = Teachers' Instructional Quality, X₂ = Teachers' Evaluation Process, X₃ = Students' Cognitive Ability in Mathematics

*Significant at P<0.05

The study reveals that teachers' instructional quality ($r=.77$; $P<0.05$) and teachers' evaluation procedures ($r=.047$; $P<0.05$) have positive, weak and significant relationship with students' Cognitive Learning outcome in General Mathematics. This means that students' cognitive learning outcome in General Mathematics is influenced to some extent by teachers' instructional quality and evaluation procedures. Hence hypothesis two is rejected.

Discussion

For any student to achieve better result in English language he or she must do well in dealing with the four main grammatical sections covered in the

cognitive test. These findings corroborate with the findings of Ige (2007) when he concluded that the higher the quality of the teachers, the higher the success of education. For any student to achieve better result in General Mathematics he/she must be able to do well in dealing with numbers in term of carrying out the basic operations like addition, subtraction, division and multiplication successfully. They should also be able to make use of correct formulae. It should be noted that the students' ability to interpret the instruction is the main issue in solving Mathematical problems. There is no way the students can arrive at the answer if there is no proper interpretation, for this is what will 'make them choose the appropriate

methods, techniques and skills in solving the problems given. These findings corroborate with the findings of Onabanjo (2007), Ogunlade, (2013), Tobih, Akintaro & Osunlana, (2013), Akinwumi, Oladipo, Abiodun-Oyebanji and Akinyemi (2019).

The findings revealed the perception of students' on teacher teaching process (instructional quality and evaluation procedures). The moderately high weighted mean scores indicate high level of students' perception of teacher teaching process. From the hypothesis, it was discovered that teacher instructional quality and evaluation procedures had negative but significant relationship with students' cognitive learning outcomes in English language and General Mathematics. These findings on significant contributions/relationship are consistent with the findings of Akbari (2010), Adeyemi (2009), Kukuru (2009), MuNergeny (2007), Kola (2007), Barnabas (2007), Kola (2007), Odunlade (2013), Nwogu & Esobhawan, (2014). Musa, Nwachukwu & Ali (2016) observed that to meet individual differences in the classroom, the teachers must employ various types of aids that appeal to different senses. This also agrees with the psychology of instructional materials usage saying that *what I hear, I forget, what I see, I remember, what I do, I understand*.

Conclusion

The result of this study has established the fact that certain teachers; instructional quality and evaluation procedures have significant relationship with students' cognitive learning outcomes in English language and General Mathematics in Nigerian secondary schools. These variables are important in the prediction of students' learning outcomes. Our policy makers and other stakeholders need to pay serious attention to poor state of students' learning outcomes in English language and General

Mathematics in secondary schools in Nigeria.

Recommendations

Consequent upon the foregoing discussion, the paper recommends as follows:

Efforts should be made by the government and relevant authorities to develop plans to ensure that teachers take necessary coursework and receive the necessary professional development to teach the subject to which they are assigned. This could be done in such a way that they would realize their ability for creative achievement.

The school managers should encourage the use of innovative teaching methodologies and teachers' discretion in selecting the appropriate one for their lessons.

Similarly, efforts should also be made by government and relevant authorities to ensure that teachers are promoted and leave bonus, and annual increment are duly paid from time to time.

At least once in every two years, every teacher should be entitled to one or two month – paid training leave to update his/her knowledge, skills and attitude to work. This should be organized by the school management or the ministries of education at all levels.

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