



## Evaluation of Financial Accounting Teachers' Competencies in Assessing Students' Cognitive Achievement in Senior Secondary Schools in Rivers State

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**Abstract:** The study evaluated financial accounting teachers' competencies in assessing students' cognitive achievement in senior secondary schools in Rivers State. The study adopted evaluation research design. The particular model of evaluation used in this study was the CIPP model as developed by Daniel Stufflebeam in 1971. However, the study applied only the Process component of the model in the present evaluation of financial accounting teachers' competencies as it is related to the variable under investigation. The population of this study consisted of 66,164 senior secondary school students in Rivers State. A sample size of 398 students was fixed using the Tsaro-Yamen formula. Thereafter, the simple random sampling technique was adopted in selecting the sample size. In this study, a self-structured rating scale of 50-items was used for data collection titled: "Financial Accounting Teachers' Competencies in Assessing Students' Cognitive Achievement Rating Scale". The instrument was face and content validated by an Accounting Education Lecturer in Rivers State University and two other Measurement and Evaluation experts in Rivers State University and Ignatius Ajuru University of Education. To establish reliability, the instrument was trial tested using the test re-test method. A reliability coefficient index of 0.79 was obtained using Pearson's Product Moment Correlation which indicated that the instrument was reliable and as such acceptable. Descriptive statistics of mean and standard deviation were used to answer the research questions, while the hypotheses were tested at 0.05 alpha level using the inferential statistic of Analysis of Variance. The study found that there is no significant difference in the mean rating of students in the three senatorial districts on the extent to which financial accounting teachers' subject knowledge, use of test blue print, and knowledge of instrument validation as aspect of teachers' competencies influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State. It was therefore, recommended among others that financial accounting teachers should design and use test blue print in the preparation and development of their test items in a bid to cover the various contents in their scheme of work and then ensure effective assessment of students' cognitive achievement.

**Key words:** Financial Accounting Teachers' Competencies, Students' Cognitive Achievement, Senior Secondary Schools, Rivers State

## **Introduction**

The school environment has a strong positive relationship with students' ratings of their overall school satisfaction, students' self-esteem, and academic performance (Lasley, Siedentop & Yinger, 2016). Teachers' competency enhances his ability to create an environment that is fair, that ensures understanding, and accepting of diverse students, ideas, experiences, and backgrounds. Teachers have been found to be the most important factor influencing students' cognitive achievement. A study of teachers' classroom practices as they relate to students' cognitive achievement is important for several reasons (Cochran-Smith, 2012; Kaplan & Owings, 2012). Competence according to Lewis (2015) is the ability of a teacher to do a job properly. It is a set of defined behaviours that provide a structured guide and enable the identification, evaluation and development of the behaviours in a student (Lewis, 2015; Anobi, 2016). Competency is sometimes thought of in terms of action in a situation and context that might be different the next time a person has to act. In emergencies, competent people may react to a situation following behaviours they have previously found to succeed.

A teacher's competency in 21<sup>st</sup> century according to United Nations Education, Scientific and Cultural Organization (2018) is that such teacher should have firm/sound knowledge of the curriculum of his/her subjects, and to use the available technological gadget to improve the curriculum. Olarewaju (2015) stated that formal system of education depends on three components that are curriculum, students and teacher, thus financial accounting teachers' role is to impart accounting knowledge to the students and ensure that it builds the society. Anobi (2016) opined that reliability of a work depends upon its competency, and competency depends on consistency of the work. The benchmark for financial accounting teachers' competencies entail; the acquisition of a degree in accounting (B.Sc., B.Ed. or its equivalent), membership of Teachers' Registration Council of Nigeria, membership of professional accounting bodies (House, 2010).

Financial accounting teachers are to hold a Bachelor or Honorary degree in Accountancy. They get into the teaching profession, not by design or circumstance but by choice (Olarewaju, 2015).

Owolabi (2013) described a financial accounting teacher as an instructor responsible to teach, direct control, interpret and instruct the learner for better attainment of financial accounting knowledge, concepts and conventions. In the view of Ikoh (2017), financial accounting teachers' competencies are a big factor in the cognitive achievement of the students. Included under teacher competencies are teaching effectiveness, professional recognition and awards, membership and participation in professional organizations, scholarly abilities and creative productiveness, and university and community service (Ikoh, 2017).

Financial accounting teachers are said to have an important influence on their students' cognitive achievements and they also play crucial role on students' educational attainment because the financial accounting teacher is ultimately responsible for translating policy into action and principles based on financial accounting practices during interaction with the student (Afe, 2011). Many studies have revealed that students' cognitive achievement is enhanced where teachers possesses adequate knowledge of the subject matter and a good command of pedagogical skills. These have a strong positive effect on students' cognitive achievement in regular classroom teaching (Olarewaju, 2015). Consequent upon the above, it has been discovered that most of the teachers who teach financial accounting in

secondary schools today, are never close to have studied financial accounting in the university, as such have no qualification in the field of concern (House, 2010). Some even teach the subject under duress either by job placement or due to the instruction of their superior at work and so on. These have constituted the reasons why there have been several setbacks among senior secondary school students in choosing Accounting as a course of study, which is what spurred the researcher in embarking on the study.

According to Eggen and Kauchak (2011) there are three dimensions under which a financial accounting teachers' knowledge of subject matter can be measured; namely content knowledge, pedagogical knowledge of content and general knowledge. The implications of these dimensions are that a teacher cannot teach what he or she does not know. Adediwura and Tayo (2017) further emphasized the existence of high correlation between financial accounting teachers' subject knowledge and what they teach students. In line with these finding, they further accentuated that the ability of a financial accounting teacher to teach effectively depends on the depth of knowledge the teacher possesses. Therefore, a financial accounting teacher whose understanding of the subject content is thorough, uses clearer expressions comparative to those whose backgrounds of subject mastery are weaker (Eggen & Kauchak, 2011). According to Ubulom, Uzoeshi, Amini and Vipene (2019), a test blue print is a guide in the preparation and development, of test items. A good, competent and effective financial accounting teacher is expected to have the knowledge of test blue print to enable him/her to properly cover the various levels of objectives. The use of test blue print has a strong positive relationship with students' rating of their overall school satisfaction, students' self-esteem, and attainment of educational objectives. Financial accounting teachers' competencies enhance a teacher's ability to develop a test blue print as to cover the various taxonomies of educational objectives when constructing and developing a test item (Ubulom, et al., 2019).

Validation of test instrument is the extent to which an instrument measures what it is supposed to measure and performs as it is designed to perform. It is rare, if nearly impossible, that an instrument be 100% valid, so validity is generally measured in degrees. As a process, validation involves collecting and analyzing data to assess the accuracy of an instrument. There are numerous statistical tests and measures to assess the validity of quantitative instruments, which generally involves pilot testing and others. This therefore implies that tests validation is fundamental in assessing the cognitive achievement of students (Asuru, 2015). Thus, financial accounting teachers must monitor the cognitive achievement of their students as every school of accountancy imposes a student-retention policy to maintain the accountancy programme. Usually the school prescribes a minimum grade a student has to reach in accounting subjects and even in taxation and business law. In addition, a student must hurdle a qualification examination that validates his level of mental fitness in financial accounting. (Ademola, 2017). Air-conditioned classrooms and well equipped library are come-ons to the accountancy students. But it was observed that students seldom go to the library and engage in further research in spite of generous spaces of time in their class schedules. They seem to confine themselves to classroom-instruction and the instructional materials in their profession without the initiative of enriching their academic experiences through library work.

### **Statement of Problem**

Educators teaching financial accounting in Rivers State seem to have difficulties in meeting the requirements of the Revised National Curriculum Statement (RNCS), and that some of them experience problems with creation of positive learning environment in the class; knowledge of curriculum and learning programmes; lesson planning, preparations and presentations; assessment of learners as well as the recording of the assessment results. Through years of teaching, financial accounting teachers are expected to acquire expertise in the science and art of teaching accountancy as to ensure proper assessment of students' cognitive achievement in the area of knowledge, comprehension, application, analysis, synthesis and evaluation. Regrettably such expectation is fraught with the variability of accounting subjects taught and the level of proficiency with developments in the field of accounting mitigated (Anobi, 2016).

Lack of interest to learn or lack of the required mental ability to teach and learn the subject, lack of sufficient industrial training, lack of fund from the government to provide quality textbooks, instructional materials and others, have been fundamental problems confronting financial accounting teachers' competency in senior secondary schools in Rivers State, thereby creating a gap. It is on this premise that this evaluation study of financial accounting teachers' competencies in assessing students' cognitive achievement in senior secondary schools in Rivers State was carried out as to fill the gap.

### **Purpose of the Study**

The purpose of this study was to evaluate financial accounting teachers' competencies in assessing students' cognitive achievement in senior secondary schools in Rivers State. Specifically, the study attempted to achieve the following:

- 1 Evaluate the extent to which financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.
- 2 Determine the extent to which financial accounting teachers' use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.
- 3 Ascertain the extent to which financial accounting teachers' knowledge of instrument validation influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

### **Research Questions**

The following research questions guided the study:

- 1 To what extent does financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State?
- 2 To what extent does financial accounting teachers' use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State?
- 3 To what extent does financial accounting teachers' knowledge of instrument validation influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State?

### **Hypotheses**

The following null hypotheses were formulated and tested at 0.05 alpha level.

1. There is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.
2. There is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers' use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.
3. There is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers' knowledge of instrument validation influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

### **Methodology**

The study adopted evaluation research design. The particular model of evaluation used in this study was the CIPP model as developed by Daniel Stufflebeam in 1971. However, the study applied only the Process component of the model in the present evaluation of financial accounting teachers' competencies as it is related to the variable under investigation. The population of this study consisted of 66,164 senior secondary school students in Rivers State. A sample size of 398 students was fixed using the Tsaro-Yamen formula. Thereafter, the simple random sampling technique was adopted in selecting the sample size. In this study, a self-structured rating scale of 50-items was used for data collection titled: "Financial Accounting Teachers' Competencies in Assessing Students' Cognitive Achievement Rating Scale". The instrument was face and content validated by an Accounting Education Lecturer in Rivers State University and two other Measurement and Evaluation experts in Rivers State University and Ignatius Ajuru University of Education. To establish reliability, the instrument was trial tested using the test re-test method. A reliability coefficient index of 0.79 was obtained using Pearson's Product Moment Correlation which indicated that the instrument was reliable and as such acceptable. Descriptive statistics of mean and standard deviation were used to answer the research questions, while the hypotheses were tested at 0.05 alpha level using the inferential statistic of Analysis of Variance.

### **Results**

**Research Question 1:** To what extent does financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State?

**Table 1: Descriptive statistic on the extent financial accounting teachers' knowledge of subject matter influences the assessment of students' cognitive achievement in senior secondary schools in Rivers State.**

S/No.	Items	Rivers East [n <sub>1</sub> = 70]		Rivers South East [n <sub>2</sub> = 211]		Rivers West [n <sub>3</sub> = 114]		Rmk	
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD		
1	The knowledge of fundamental concepts of book-keeping help teachers in assessing students' cognitive achievement.	3.62	0.82	3.54	0.97	3.66	0.84	3.61	VHE
2	The knowledge of bank statement and cash book help teachers in assessing students' cognitive achievement.	3.15	0.64	3.17	0.68	3.28	0.57	3.20	HE
3	The knowledge of ledger account as instructional materials help teachers in assessing students' cognitive achievement.	3.19	0.85	3.31	0.59	3.28	0.70	3.26	HE
4	Teachers' knowledge of supplementary double entry system during teaching help them in assessing the cognitive of students.	3.21	0.51	3.18	0.86	3.25	0.63	3.21	HE
5	Teachers' knowledge of taxation procedures provides for proper assessment of students' cognitive achievement.	3.59	0.81	3.63	0.78	3.51	0.49	3.58	VHE
6	The knowledge of trial balance effectively help teachers in assessing cognitive achievement of students in the course.	3.53	1.02	3.59	0.87	3.56	1.24	3.56	VHE
7	The knowledge of published financial statement and balance sheet help teachers in assessing the level cognitive achievement by students.	2.95	1.08	3.01	1.17	3.04	0.94	3.00	HE
8	The knowledge of cost volume profit analysis help teachers improve the cognitive of students.	3.04	1.21	3.22	1.14	3.10	1.03	3.12	HE
9	The knowledge of depreciation is important in assessing proper cognitive achievement of students.	3.31	1.15	3.15	0.75	3.28	1.09	3.25	HE
10	The knowledge of application of overhead cost, material cost and job costing is fundamental for	3.60	0.99	3.72	1.26	3.63	1.04	3.65	VHE



teachers in assessing cognitive achievement of students.

<b>Grand Score/Remark</b>	<b>3.32</b>	<b>0.91</b>	<b>3.35</b>	<b>0.91</b>	<b>3.36</b>	<b>0.86</b>	<b>3.34</b>	<b>HE</b>
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**Source:** Survey Data, 2022.

The information in Table 1 above presents that students of Rivers East have a grand mean of 3.32 and standard deviation of 0.91, Rivers South-East have a grand mean of 3.35 and standard deviation of 0.91, and Rivers West have a grand mean of 3.36 and standard deviation of 0.86 on their rating of the extent financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State. The students of the three Senatorial Districts of Rivers State have total mean that lies between 2.50 –3.80, implying that, subject knowledge has high extent influence on the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

**Research Question 2:** To what extent does financial accounting teachers' use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State?

**Table 2: Descriptive statistic on the extent financial accounting teachers' use of test blue print influences the assessment of students' cognitive achievement in senior secondary schools in Rivers State.**

S/No.	Items	Rivers East [n <sub>1</sub> = 70]		Rivers South East [n <sub>2</sub> = 211]		Rivers West [n <sub>3</sub> = 114]		$\bar{x}$	Rmk
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD		
11	The use of text blue print help teachers in assessing students' cognitive achievement.	3.09	0.77	3.14	1.27	2.96	1.04	3.06	HE
12	The use of text blue print enhances teachers' identification of students' measured achievement domains.	2.55	0.85	2.97	1.18	2.80	1.07	2.77	HE
13	The use of text blue print by teachers ensures a fair assessment of students' cognitive achievement.	3.10	1.20	2.71	1.23	2.60	0.69	2.80	HE
14	The use of text blue print allows accounting teachers to assess test scores students.	3.41	1.31	3.45	0.91	3.50	0.84	3.45	VHE
15	The use of text blue print gives accounting teachers the proof they need to ensure that students' cognitive achievement is basic.	3.53	1.27	3.60	1.15	3.62	1.03	3.58	VHE
16	Teachers' use of text blue print help in assessing effectiveness in a test as to improve cognitive achievement of students.	3.17	1.12	3.09	0.87	3.02	1.06	3.09	HE
17	Teachers' use of text blue print ensures that question type, and the level of the questions are all taken	2.75	1.23	2.81	1.07	2.64	1.29	2.73	HE

	into account when developing an assessment to modify students' cognitive achievement.								
18	The use of text blue print appropriately reflect key course goals and objectives about students' cognitive achievement.	3.00	1.01	2.92	1.05	2.80	1.05	2.91	HE
19	The use of text blue print defines the parameters of an assessment by teachers before creation process of students' cognitive domain.	3.22	1.04	3.05	0.93	3.13	1.07	3.13	HE
20	The use of text blue print help teachers align objectives, instruction and assessment of students' cognitive achievement.	3.66	0.98	3.43	1.04	3.40	1.09	3.50	VHE
<b>Grand Score/Remark</b>		<b>3.15</b>	<b>1.08</b>	<b>3.12</b>	<b>1.07</b>	<b>3.05</b>	<b>1.02</b>	<b>3.11</b>	<b>HE</b>

**Source:** Survey Data, 2022.

The information in Table 2 above presents that students of Rivers East have a grand mean of 3.15 and standard deviation of 1.08, Rivers South-East have a grand mean of 3.12 and standard deviation of 1.07, and Rivers West have a grand mean of 3.05 and standard deviation of 1.02 on their rating of the extent use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State. The students of the three Senatorial Districts of Rivers State have total mean that lie between 2.50 –3.80, implying that use of test blue print has high extent influence on the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

**Research Question 3:** To what extent does financial accounting teachers' knowledge of instrument validation influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State?

**Table 4.3: Descriptive statistic on the extent financial accounting teachers' knowledge of instrument validation influences the assessment of students' cognitive achievement in senior secondary schools in Rivers State.**

S/No.	Items	Rivers East [n <sub>1</sub> = 70]		Rivers South East [n <sub>2</sub> = 211]		Rivers West [n <sub>3</sub> = 114]		$\bar{x}$	Rmk
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD		
21	The knowledge of instrument validation enhances adequate and effective assessment of students' cognitive achievement.	2.68	0.76	2.86	0.99	3.11	0.81	2.88	HE
22	The knowledge proper validation of instrument before administration help in assessing students' cognitive achievement.	3.03	0.88	3.17	0.71	3.06	0.94	3.09	HE
23	The knowledge of instrument	3.49	1.05	3.55	0.96	3.40	1.03	3.48	VHE



	validation is fundamental in reporting validation as to assess the cognitive of students.								
24	The knowledge of instrument validation is made adequate in assessing cognitive achievement.	3.41	0.92	3.58	1.23	3.61	0.95	3.53	VHE
25	The knowledge of instrument validation establishes proper validation of test items which improves students' cognitive.	3.02	1.21	2.84	0.90	2.57	1.23	2.81	HE
26	The knowledge of instrument validation assist teachers to be proficient in their test construction as to assess students' cognitive achievement.	2.73	0.94	3.03	1.17	2.86	1.01	2.87	HE
27	The knowledge of instrument validation provides for instrument coverage and basic assessment of students' cognitive domain.	2.88	0.98	2.91	1.03	3.13	0.85	2.97	HE
28	The knowledge of instrument validation ensures accurate interpretation and effective assessment of cognitive achievement of students.	3.51	1.16	3.50	1.15	3.62	1.18	3.54	VHE
29	The knowledge of instrument validation help accounting teachers assess students' cognitive achievement.	2.64	0.95	2.55	0.93	2.78	1.05	2.66	HE
30	The knowledge of instrument validation help in measuring theoretical or psychological traits or constructs in assessing the cognitive of students.	2.77	1.10	2.80	1.16	2.81	1.20	2.79	VHE
<b>Grand Score/Remark</b>		<b>3.02</b>	<b>1.00</b>	<b>3.08</b>	<b>1.02</b>	<b>3.10</b>	<b>1.03</b>	<b>3.07</b>	<b>HE</b>

**Source:** Survey Data, 2022.

The information in Table 3 above presents that students of Rivers East have a grand mean of 3.02 and standard deviation of 1.00, Rivers South-East have a grand mean of 3.08 and standard deviation of 1.02, and Rivers West have a grand mean of 3.10 and standard deviation of 1.03 on their rating of the extent financial accounting teachers' knowledge of instrument validation influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State. The students of the three Senatorial Districts of Rivers State have total mean that lie between 2.50 –3.80, implying that knowledge of instrument validation has high extent influence on the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

### Test of Hypotheses

**Hypothesis 1:** There is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

**Table 4: Summary of One-way Analysis of Variance (ANOVA) on the influence of financial accounting teachers' knowledge of subject matter on the assessment of students' cognitive achievement in senior secondary schools in Rivers State**

Sources of Variation	Sum of Squares	Df	Mean Square	F	Sig	Decision
Between Groups	1.391	2	.193	15.610	.015	$H_0$
Within Groups	49.107	393	.294			
Total	50.498	395				Accepted

$N = 395$ ;  $F(2, 0.193) = 15.610$ ;  $p = 0.015 < 0.05$

Table 4 above presents the sum of squares of 1.361, with 2 degrees of freedom, and a mean square of 0.193 for between groups. Within groups has the sum of squares of 49.107, degrees of freedom of 393, and a mean square of 0.294, while the total has 50.498 sum of squares and 395 degrees of freedom. The computed F is 15.610 which is statistically significant at .05. Thus the null hypothesis that "there is no significant difference among the mean rating of students in the three senatorial districts on the extent to which financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State" is hereby accepted:  $F(2, 0.193) = 15.610$ ,  $p < .05$ . In other words, students in the three senatorial districts consented that financial accounting teachers' knowledge of subject matter improves the assessment of students' cognitive achievement in senior secondary schools in Rivers State to a High Extent.

**Test of Hypothesis 2:** There is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers' use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

**Table 5: Summary of One-way Analysis of Variance (ANOVA) on the influence of financial accounting teachers' use of test blue print on the assessment of students' cognitive achievement in senior secondary schools in Rivers State**

Sources of Variation	Sum of Squares	Df	Mean Square	F	Sig	Decision
Between Groups	.952	2	.315	18.104	.016	$H_0$
Within Groups	37.678	393	.898			
Total	38.63	395				Accepted

$N = 395$ ;  $F(2, 0.315) = 18.104$ ;  $p = 0.016 < 0.05$

Table 5 presents the sum of squares of 0.952, with 2 degrees of freedom, and a mean square of 0.315 for between groups. Within groups has the sum of squares of 37.678, degrees of

freedom of 393, and a mean square of 0.898, while the total has 38.63 sum of squares and 395 degrees of freedom. The computed F is 18.104 which is statistically significant at .05. Thus the null hypothesis that “there is significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers’ use of test blue print influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State.” is accepted:  $F(2, 0.315) = 18.104, p < .05$ . In other words, students in the three senatorial districts asserted that financial accounting teachers’ use of test blue print enhances the assessment of students’ cognitive achievement in senior secondary schools in Rivers State to a High Extent.

**Test of Hypothesis 3:** There is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers’ knowledge of instrument validation influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State.

**Table 6: Summary of One-way Analysis of Variance (ANOVA) on the influence of financial accounting teachers’ knowledge of instrument validation on the assessment of students’ cognitive achievement in senior secondary schools in Rivers State**

Sources of Variation	Sum of Squares	Df	Mean Square	F	Sig	Decision
Between Groups	1.483	2	.391	125.501	.013	$H_0$
Within Groups	27.488	393	.184			
Total	28.971	395				Accepted

$N = 395; F(2, 0.391) = 125.501; p = 0.013 < 0.05$

Table 6 presents the sum of squares of 1.483, with 2 degrees of freedom, and a mean square of 0.391 for between groups. Within groups has the sum of squares of 27.488, degrees of freedom of 393, and a mean square of 0.184, while the total has 28.971 sum of squares and 395 degrees of freedom. The computed F is 125.501 which is statistically significant at .05. Thus the null hypothesis that “there is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers’ knowledge of instrument validation influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State” is accepted:  $F(2, 0.391) = 125.501, p < .05$ . In other words, students in the three senatorial districts opined that financial accounting teachers’ teachers’ knowledge of instrument validation enhances the assessment of students’ cognitive achievement in senior secondary schools in Rivers State to a High Extent.

### Discussion of Findings

The study evaluated financial accounting teachers’ competencies in assessing students’ cognitive achievement in senior secondary schools in Rivers State. The research question one (1), revealed the extent financial accounting teachers’ knowledge of subject matter influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State. It was found that students of Rivers East have a grand mean of 3.32 and standard deviation of 0.91, Rivers South-East have a grand mean of 3.35 and standard

deviation of 0.91, and Rivers West have a grand mean of 3.36 and standard deviation of 0.86 on their rating of the extent financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State. The students of the three Senatorial Districts of Rivers State have total means that lies between 2.50 –3.80, implying that, knowledge of subject matter has high extent influence on the assessment of students' cognitive achievement in senior secondary schools in Rivers State. The test of hypothesis one (1), presented the sum of squares of 1.361, with 2 degrees of freedom, and a mean square of 0.193 for between groups. Within groups has the sum of squares of 49.107, degrees of freedom of 393, and a mean square of 0.294, while the total has 50.498 sum of squares and 395 degrees of freedom. The computed F is 15.610 which is statistically significant at .05. Thus the null hypothesis that "there is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers' knowledge of subject matter influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State" is hereby accepted:  $F(2, 0.193) = 15.610, p < .05$ . In other words, students in the three senatorial districts consented that financial accounting teachers' subject knowledge improves the assessment of students' cognitive achievement in senior secondary schools in Rivers State to a High Extent. In line with this findings, Eggen and Kauchak (2011) asserted that teachers show better knowledge of certain operations than the teachers themselves. All these call for drastic or even radical change to function effectively in the learning environment. Aside from being constantly in touch with new developments in the field, the financial accounting teacher has to adjust to new ideas and innovative teaching approaches to be able to discuss current discoveries taking place around the world of finance and others. According to Eggen and Kauchak (2011) there are three dimensions under which a financial accounting teachers' knowledge of subject matter can be measured; namely content knowledge, pedagogical knowledge of content and general knowledge. The implications of these dimensions are that a teacher cannot teach what he or she does not know. Adediwura and Tayo (2017) further emphasized the existence of high correlation between financial accounting teachers' subject knowledge and what they teach students. In line with these finding, he further accentuated that the ability of a financial accounting teacher to teach effectively depends on the depth of knowledge the teacher possesses. Therefore, a financial accounting teacher whose understanding of the subject content is thorough, uses clearer expressions comparative to those whose backgrounds of subject mastery are weaker.

The research question two (2) revealed the extent financial accounting teachers' use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State. It was found that students of Rivers East have a grand mean of 3.15 and standard deviation of 1.08, Rivers South-East have a grand mean of 3.12 and standard deviation of 1.07, and Rivers West have a grand mean of 3.05 and standard deviation of 1.02 on their rating of the extent use of test blue print influence the assessment of students' cognitive achievement in senior secondary schools in Rivers State. The students of the three Senatorial Districts of Rivers State have total means that lie between 2.50 –3.80, implying that use of test blue print has high extent influence on the assessment of students' cognitive achievement in senior secondary schools in Rivers State. The test of hypothesis two (2), presented the sum of squares of 0.952, with 2 degrees of freedom, and a mean square of 0.315 for between groups. Within groups has the sum of squares of 37.678,

degrees of freedom of 393, and a mean square of 0.898, while the total has 38.63 sum of squares and 395 degrees of freedom. The computed  $F$  is 18.104 which is statistically significant at .05. Thus the null hypothesis that “there is significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers’ use of test blue print influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State.” is accepted:  $F(2, 0.315) = 18.104$ ,  $p < .05$ . In other words, students in the three senatorial districts asserted that financial accounting teachers’ use of test blue print enhances the assessment of students’ cognitive achievement in senior secondary schools in Rivers State to a High Extent. This finding is supported by the view of Ubulom, Uzoeshi, Amini and Vipene (2019) that a test blue print is fundamental in the construction, preparation and development of test items. A good, competent and effective financial accounting teacher is expected to have the knowledge of test blue print to enable him/her to properly cover the various levels of objectives. The use of test blue prints has a strong positive relationship with students’ ratings of their overall school satisfaction, students’ self-esteem, and attainment of educational objectives. Financial accounting teachers’ competencies enhance a teacher’s ability to develop a test blue print as to cover the various taxonomies of educational objectives when constructing and developing a test item. Consequent upon the above, it has been discovered that most of the teachers who teach financial accounting in secondary schools today, are never close to have studied financial accounting in the university, as such have no qualification in the field of concern (House, 2010). Some even teach the subject under duress either by job placement or due to the instruction of their superior at work and so on. This have constituted the reasons why there have been several setbacks in the construct under investigation.

The research question three (3) established the extent financial accounting teachers’ knowledge of instrument validation influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State. The information in table 4.3 presented that students of Rivers East have a grand mean of 3.02 and standard deviation of 1.00, Rivers South-East have a grand mean of 3.08 and standard deviation of 1.02, and Rivers West have a grand mean of 3.10 and standard deviation of 1.03 on their rating of the extent financial accounting teachers’ knowledge of instrument validation influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State. The students of the three Senatorial Districts of Rivers State have total means that lie between 2.50 –3.80, implying that knowledge of instrument validation has high extent influence on the assessment of students’ cognitive achievement in senior secondary schools in Rivers State. The test of hypothesis three, presented the sum of squares of 1.483, with 2 degrees of freedom, and a mean square of 0.391 for between groups. Within groups has the sum of squares of 27.488, degrees of freedom of 393, and a mean square of 0.184, while the total has 28.971 sum of squares and 395 degrees of freedom. The computed  $F$  is 125.501 which is statistically significant at .05. Thus the null hypothesis that “there is no significant difference in the mean ratings of students in the three senatorial districts on the extent to which financial accounting teachers’ knowledge of instrument validation influence the assessment of students’ cognitive achievement in senior secondary schools in Rivers State” is accepted:  $F(2, 0.391) = 125.501$ ,  $p < .05$ . In other words, students in the three senatorial districts opined that financial accounting teachers’ knowledge of instrument validation enhances the assessment of students’ cognitive achievement in senior secondary

schools in Rivers State to a High Extent. In line with the above, Asuru (2015) established that validation of test instrument is the extent to which an instrument measures what it is supposed to measure and performs as it is designed to perform. It is rare, if nearly impossible, that an instrument be 100% valid, so validity is generally measured in degrees. As a process, validation involves collecting and analyzing data to assess the accuracy of an instrument. There are numerous statistical tests and measures to assess the validity of quantitative instruments, which generally involves pilot testing and others. This therefore implies that instrument validation is fundamental in assessing the cognitive achievement of students.

### **Conclusion**

It was concluded that the methods of teaching financial accounting appears to be unattractive and not encouraging to learners. In such a situation, it appears as though financial accounting teachers' competencies could hardly meet the standards in assessing students' cognitive achievement. Thus, accounting teachers must monitor the cognitive achievement of their students as every school of accountancy imposes a student-retention policy to maintain the accountancy program. Usually the school prescribes a minimum grade a student has to reach in accounting subjects and even in taxation and business law. Conclusively, the result of this study indicated that, financial accounting teachers' knowledge of subject matter, use of test blue print and knowledge of instrument validation enhance the assessment of students' cognitive achievement in senior secondary schools in Rivers State.

### **Recommendations**

Based on the findings of the study, the following recommendations are made;

1. Secondary schools offering financial accounting should ensure that their teachers have sound knowledge of financial accounting. This will assist the programme implementers to work efficiently towards achieving the objectives by producing graduates who will be able to acquire the necessary attitudes, knowledge, skills and competencies in financial accounting.
2. Financial accounting teachers should ensure the use of test blue print in the preparation and development of their test items to enable them cover the various contents in their scheme of work.
3. Financial accounting teachers should acquire the right skills, and knowledge of instrument validation to ensure their test items are properly valid before administration to the students.

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