

# STUDENTS' PERCEPTION OF TEACHER'S KNOWLEDGE OF SUBJECT MATTER AND READING COMPREHENSION PERFORMANCE OF SS 3 STUDENTS IN CROSS RIVER STATE, NIGERIA

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## ABSTRACT

The study used the ex post facto design to find out the influence of student's perception of teacher's knowledge of the subject matter on the Senior Secondary Three (SS 3) students' performance in reading comprehension. Questionnaires reading comprehension test were used in eliciting data. The data were subsequently analysed using the one-way analysis of variance (ANOVA). The sample consisted of 1500 SS3 students of the 2007/2008 academic session randomly selected from 30 secondary schools in Cross River State. The findings indicated that there is a significant influence of students' perception of teachers' knowledge of subject matter as perceived by students on reading comprehension performance of SS3 students.

**KEY WORDS:** Students' Perception, Teachers' Knowledge of Subject Matter, Reading Comprehension Performance

## INTRODUCTION

Students' performance in the English language continues to fall below expectations. For instance, between 2000 and 2006 less than 35 percent of the candidates in the West African Senior School Certificate Examination scored 50 percent and above in English language (WAEC, 2007). According to Timothy (2006), although Reading Comprehension is just an aspect of the English Language syllabus, problems with comprehension are likely to affect candidates' performance not only in English Language, but also in other content subjects. Comprehension skills are required for decoding the rubrics and answering examination questions.

Many factors have been observed to contribute to students' poor comprehension. Poor comprehension is attributed to lack of recreational reading (West African Examination Council, 2003, Omojuwa and Timothy, 2006), poor vocabulary (Taiwo, 2001). To some extent, the teacher factor too cannot be ruled out.

The possession of knowledge of subject matter by teachers is crucial in a teaching and learning situation. Knowledge of the subject matter means the information and understanding teachers have about the subject they teach (Perini, 2002). Teachers must possess a body of knowledge they want to impart. That is to say, no knowledge, no teaching.

Nwuba and Nwuba (2005) suggest that to be effective the teacher should have good grasp of the subject matter to be taught. It means that teachers are expected to be knowledgeable in their subject area. For instance, English Language teachers should be well informed about the subject and be acquainted with current practices and principles of teaching reading comprehension.

Knowledge of the subject matter does not stop at just getting information about the subject. It subsumes getting the skill to impart it to the learners. Therefore, knowledge of the subject matter is a holistic package which

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involves getting and utilising available information that will enhance the teaching and learning of the subject. (Bisong, 2005; Uwatt, 2001).

Some empirical studies indicate the influence of teacher's knowledge of subject matter on students' performance. Laczko-kerr and Berliner (2002) compared student achievement in the classroom of certified, under-certified and uncertified teachers certified teachers included individuals from the national "Teach for America" (TFA) programme. All certified teachers in this study graduated from accredited universities and met state requirements for receiving their regular initial teaching certificate. Each under-certified teacher was paired with a certified teacher. All students in these teachers classroom took the mandated state achievement test. The result from this study indicates that the students of certified teachers out-performed students of under certified and uncertified teachers by making about 20% more academic growth.

Similarly, Darling-Hammond (2003) through quantitative analyses of data from a 50-state survey of policies, from 1993-1994 schools and staffing survey and the national assessment of educational progress of education found measures of teachers' preparation and knowledge of subject matter to be the strongest correlates of student achievement in reading and mathematics.

In addition, Eakle and Garber (2004) conducted a research project in public schools, Zaria, Nigeria. Before the intervention, attitude assessments and reading achievement test administered to the classroom teachers and pupils revealed, among other things that the teachers were deficient in knowledge of subject matter and had negative attitudes about teaching comprehension. The intervention involved workshops in which the teachers were taught how to enhance reading and reading comprehension. The post-test showed more than 100% improvement by the teachers and pupils on what they were before the commencement of the

intervention. It was also found that the students' quality of learning increased due to the increased teachers' knowledge of subject matter.

The present study considered the problem of teacher's knowledge of subject matter from the perspective of the students. No matter how knowledgeable the teacher might be, if she is unable to convey that knowledge to the students, it as if she had no knowledge. Knowledge of subject matter should be evident in the classroom and the students should be aware of it.

### **Methodology**

The study was an ex post facto design. The sample consisted of 1500 SS3 students of the 2007/2008 academic session randomly selected from 30 secondary schools in the state. The independent variable was teachers' knowledge of subject matter while reading comprehension was the dependent variable. Questionnaires and a test of reading comprehension were used in eliciting data. The One-Way ANOVA and Tukey test were used to test the null hypothesis – There is a significant influence of teachers' knowledge of subject matter as perceived by students on reading comprehension performance of SS3 students.

### **Findings**

The result showed that those students who perceived their teachers' knowledge of subject matter as low had a mean score of 6.52 while those who perceived their teachers' knowledge of subject matter as moderate and high had mean scores of 12.98 and 21.18 respectively. The calculated F ratio of 5863.16 is greater than the critical value of 3.00 at a confidence level of 0.05. Consequently, the null hypothesis which states that there is no significant influence of SS3 students' perception of teachers' knowledge of subject matter on their reading comprehension was rejected and the alternative hypothesis retained. The result is presented in Tables 1.

**TABLE 1:** One-way analysis of variance (ANOVA) of the influence of teachers' knowledge of subject matter on reading comprehension performance of SS3 students.

Knowledge of subject matter		n	X	SD	
Low		360	6.52	1.49	
Moderate		243	12.98	3.04	
High		881	21.18	2.21	
Source of variation	SS	df	MS	F	F-Critical
Between group	58035.53	2	29017.76	5863.16*	3.00
Within group	7328.73	1481	4.95		
Total	65364.26	1483			

\*Significant at 0.05 level of significance

SS = Sum of squares.

df = Degree of freedom.

MS = Mean square.

F = Symbol for ANOVA test

Further analysis using Tukey test was employed to determine the group with major variance. The result of the Tukey test is presented in Table 2. A comparison of high and low groups showed a q-value of 105.39 that is greater than the q critical of 3.314. This showed that the mean of the students who perceived their teachers' knowledge of subject matter as high (21.18) was significantly higher than the mean of those students who perceived their teachers' knowledge of subject matter as low (6.52). Comparison of high and moderate groups showed a q of 50.87 which is greater than the critical q of 3.318. This showed that the mean of the students who perceived their teachers' knowledge of subject matter as high (21.18) was significantly higher than the mean of those students who perceived their teachers'

knowledge of subject matter as moderate (12.98). Comparison of moderate and low groups showed a q of 35.11 which is greater than the critical q of 3.318. This showed that the mean of the students who perceived their teachers' knowledge of subject matter as moderate (12.98) was significantly higher than the mean of those students who perceived their teachers' knowledge of subject as low (6.52). The Tukey test showed that the major source of variation was the group of those students who perceived their knowledge of subject as high. It can therefore be said that those students who perceived their teachers' knowledge of subject as high tended to perform better in reading comprehension than those students who perceived their teachers' knowledge of subject as moderate and low.

**TABLE 2:** Pairwise comparison of means in students' perception of teachers' knowledge of subject matter using Tukey test

Pair	Mean difference	SE	q	q critical	Conclusion
High vs Low	14.65	0.139	105.39	3.314	Significant
High vs. moderate	8.19	0.161	50.87	3.314	Significant
Moderate Vs Low	6.46	0.184	35.11	3.314	Significant

SE = Standard error

q = Symbol for Tukey test.

### DISCUSSIONS

The outcome of the analysis of this hypothesis showed that teachers' knowledge of subject matter has a significant influence on the reading comprehension performance of SS3 students' in Cross River State. In other words, those who perceived their teachers' knowledge of subject matter as high performed better than those whose perceptions of their teachers' knowledge of subject matter are moderate and low. The results show that students in each category performed significantly different. The implication of this research finding is that the level of knowledge of subject matter a teacher possesses influences the students' reading comprehension performance.

This is consistent with the findings of Uwatt, (2001), Perini, (2002), Brabham, (2002), Nwuba and Nwuba, (2005). These studies found out that teachers' knowledge of subject matter is central to improving students' reading comprehension performance scores. Knowledge of subject matter is important because teachers who are knowledgeable exude confidence, approach the subject matter with mastery, dexterity and finesse. Such teachers inspire and motivate students to learn. Students know teachers who know their onions. There is little doubt that, all things being equal, students who have knowledgeable teachers would perform well.

However, since data on teachers' knowledge of subject matter were based on students' perception, it is possible that students who usually perform well in comprehension would perceive their teachers in more positive light than would those who usually perform

poorly. Therefore, rather than students' performance in reading comprehension being a consequence of students' perception of teachers' knowledge of subject matter, it might well be the other way round.

Besides, it is also possible that the finding may be due to factors other than teachers' knowledge of subject matter. For instance the interplay of the students' innate intelligence may have contributed to the research finding.

Be it as it may, for teachers to be effective they must be well informed about the subject. This is echoed by Baumgart (1977) who iterates that exhibition of knowledge of subject matter is one of prerequisites for effective teaching and learning. As the saying goes, people cannot give what they do not have. So also teachers cannot teach what they do not know.

### CONCLUSION

The study investigated the influence of teacher knowledge of subject matter students' performance in reading comprehension of SS3 students in Cross River State. Based on the findings it is concluded that teachers' knowledge of subject matter facilitates students' reading comprehension performance. Teachers must be knowledgeable in their subject area to be able to influence the students meaningfully.

### RECOMMENDATIONS

1. Teachers, particularly teachers of English language, need to improve on their knowledge of the subject matter. There is need to update their knowledge from time to time so as to be rich and current

in relevant information. This can be achieved through enrolling for professional development.

2. Educational administrators should make provision for teachers to participate in conferences, seminars, workshops, in-service trainings, etc. These will go a long way to deepen their knowledge of subject matter and offer them the opportunity of exposure to current ways of making teaching presentation more fascinating to the students.
3. There should be a periodic assessment of teachers' knowledge of subject matter by the relevant authorities (for example, the Teacher Registration Council). This will force teachers to deliberately seek and acquire relevant current knowledge and skills in their areas of specialisation.

## REFERENCES

- Bisong, J. O., 2005. The professionalism of teacher: Pedagogic competence. *Nigerian Journal of Professional Teachers*, 1(1), 49- 59.
- Brabham, E. G. and Villiame, S. K., 2002. Question and answer. Levelled text: The good news and the bad news. *The Reading Teacher*, 55 (N5), 438-442.
- Darling-Harmond, L., 2003. Keeping good teachers: Why it matters, what readers can do. *Educational Leadership*. 60 ( 8), 6-13.
- Day, R. and Bamford, J., 2002. Top ten principles for teaching extensive reading. *Reading in a Foreign Language*, 14(2), 1-6.
- Eakle, E. and Garber, A., 2004. Literacy in Nigeria: A case study. *Journal of Adolescent and Adult Literacy*, 47 (5), 390 – 401.
- Nwuba, C. C and Nwuba, K. C., 2005. An investigation into the problems militating against teaching in the polytechnics. A case for Kaduna Polytechnic, Kaduna. *Nigerian Journal of Professional Teachers*. 1(1), 33-41.
- Omojuwa, J and Timothy, A., 2006. Television viewing frequency and reading comprehension performance of Secondary School Students in Cross River State, Nigeria” *Education for Today*, Vol 6, No. 2, 2006, 19 – 21
- Perini, R. L., 2002. Teaching ideas, the pearl in the shell: Author's notes in multicultural children's literature. *The Reading Teacher*, 55 (5), 428-435.
- Taiwo, R., 2001. Lexico-semantic relations errors in senior secondary school students' writing. *Nordic Journal of African Studies*, 10, 31 - 76.
- Timothy, A. E., 2006. Television viewing, recreational reading and reading comprehension and vocabulary acquisition of SS3 students in Cross River State. Unpublished Ph.D thesis, Faculty of Education , University of Calabar.
- Uwatt. L. E., 2001. Classroom communication . In S. C Uche & O. I Enuokoha (Eds.), *Professional skills for effective teaching*. Lagos, Rehoboth Favours.
- West African Examination Council., 2003. Chief Examiners' Report. May/June. Lagos: The West African Examination Council.
- West African Examination Council., 2007. WASSCE 1997-2006 English Language Statistics. Lagos: The West African Examination Council

