RELATIONSHIP BETWEEN PREDICTION READING STRATEGY AND 5TH GRADE STUDENTS' ACADEMIC ACHIEVEMENT IN ENGLISH IN BOMI COUNTY, LIBERIA

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Abstract

This study investigated the relationship between prediction reading strategy and 5th grade students' academic achievement in English in Bomi County, Liberia. This study adopted the correlational survey research design. The population for the study comprises of comprises 314 public primary school teachers in 71 public primary schools in Senjeh District of Bomi County Northwestern Liberia 2022/2023 academic session. The sample for the study comprises approximately 142 teachers The instrument for data collection is a 15-item structured questionnaire which was titled the Use of Prediction Reading Strategy Questionnaire (UPRSQ). The questionnaire is structured from a pool of literature on a 4-point Likert scale of strongly agree, agree, disagree and strongly disagree with weighted scores of 4,3,2,1. The questionnaire was validated by three experts one from the department of education foundations (Measurement and Evaluation unit), one from the department of early childhood and primary education both from the Faculty of Education Nnamdi Azikiwe University, Awka. One validates was a classroom teacher in the Senjeh District of Bomi County, Liberia. The reliability of the instrument was established using the Cronbach alpha statistics, and yielded a reliability coefficient of 0.85. The achievement scores of the 5th grade pupils in reading comprehension and grammar were collected from the classroom teachers and used in this study. Data was collected through the use of google form and emails. Data collected was analyzed using Pearson product moment correlation coefficient (Pearson r) and linear regression analysis. The findings of the study revealed that a moderate positive relationship exists between the use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension; a low positive relationship exists between the use of prediction reading strategy and 5th grade students' academic achievement in grammar in Senjeh District of Bomi County, Liberia. The hypothesis tested revealed that there is a significant relationship between use

of prediction reading strategy and 5th grade students' achievement in reading comprehension; also, there is a significant relationship between use of prediction reading strategy and 5th grade students' achievement in grammar in Senjeh District of Bomi County, Liberia. Conclusions were made and it was recommended among others that teachers should endeavour to use strategies like prediction reading strategy which was reported to correlate with the subjects taught at the primary school level.

Keywords: *prediction, reading, strategy, students, academic achievement, English language*

Introduction

Background to the Study

Developing countries like Liberia have made tremendous progress in getting children into the classroom and more children worldwide are now in school for formal education. Verma, Doharey and Verma (2023) opined that education is the process of acquiring knowledge, skills, values and attitudes through various forms of learning. Learning is the systematic and institutional process of statutory learning and development, typically through formal institutions such as schools, colleges and universities. Learning can also occur through informal channel such as family community workplace settings among other mediums. Enrolment into school guarantee learning, but seem not to be, as stipulated by the 2018 World Development Report (WDR). This report cut across the different levels of education which among others includes the primary education level.

The primary education is the bedrock on which other levels of education lie. It also provides the vital necessities which are fundamental in developing the primary skills. The Liberian education system follows a 3–9–3–4 structure: three years of Early-Childhood Education (ECE), nine years of basic education (six years lower basic, three years upper basic), then three years of either secondary or TVET, followed by four years of tertiary education. Obidike and Onyekwelu (2019) defined primary education as education given to children aged 6-12 prior to transition into secondary school in Nigeria. Obidike and Onyekwelu (2019) also stated that, this level of education provides the child for physical, motor, health nutritional, intellectual, aesthetic, emotional and social development. The goal of the primary school curriculum is to attain universal literacy, numeracy and socio-economic understanding so as to facilitate the betterment of the life of learners and society. These objectives are translated into action terms that make provision for knowledge, skills and values necessary to permit the individual to: communicate effectively, calculate and numerate with ease; understand the socio-cultural environment and participate in civic life in a meaningful manner among others (Endline Evaluation Report, 2022). Even though the attainment of goals seems to be limited by challenges.

The education system faces significant challenges in Liberia, including limited resources, inadequate teacher training on innovative teaching strategies, and low literacy rates among pupils (Ministry of Education, Liberia, 2021). Learning core subjects in schools is an indispensable and critical element in contemporary society. The reading comprehension and grammar itself currently holds an indisputable position and status

amidst the world's major languages (Obiakor and Malu, 2020). Being able to speak, read, write and listen are much needed and advantageous skills. However, the teaching and learning of school subjects seems to be faced with issues bothering around teaching strategies adopted in teaching. However, some report have shown prediction reading strategy to be effective in teaching similar subjects.

Prediction is one of the comprehension processing skills anchoring interactive approach instruction. Learners need prediction skills to understand text passages and improve performance in reading comprehension. The application of prediction skills in reading enables learners to make guesses about the meaning of texts before reading, after which comparing their predictions with the actual contents of such texts (Nguyen, 2016). Nguyen (2016) further stated that prediction reading strategy is the ability of pupils to get meaning from a text by making informed predictions. Prediction reading strategy is used as a way for pupils to connect their existing knowledge to new information from a text to get meaning from what they read. According to Alfisyahrin (2022), prediction strategy is a human attitude that refers to the ability to think and relies on previous experience or knowledge. Efforts to be successful in predicting something can be helped by understanding the clues on the cover of the book, the title of the book, the pictures on the book among others. In addition, Peter cited in Alfisyahrin (2022) believes that prediction is a verbalization expressed in the future form. In the context of this study, prediction is a critical reading strategy that involves using clues from the text, prior knowledge, and logical inference to anticipate what will happen next in a narrative or to predict the content

of an informational text. This strategy engages pupils actively with the text, enhancing comprehension, retention, and engagement.

Prediction is an essential strategy in reading according to Bailey as cited in Alfisyahrin, (2022). Through this strategy, pupils get information from text, diagrams, images, and titles to find out what will happen in the story by predicting or guessing first before reading the text. Prediction reading strategy is a human attitude that refers to the ability to think and relies on previous experience or knowledge. In addition, Bailey as cited in Ayu, Mulyadi, and Firdaus, (2024), predicting allows pupils to use information from text, such as titles, pictures, and diagrams to anticipate what will happen in the story. In this case, pupils must /predict what will happen. Predicting can encourage pupils to express themselves and ask questions actively. Predicting reading strategies makes a huge difference to what is read before it is read and saves time on reader comprehension. This increases vocabulary and can make reading more effective for pupils.

Prediction strategy is characterized by the steps of estimating, verifying predictions, defining observations, listening, comparing, and explaining predictions with observations, revealing pupils' prior knowledge, and allowing them to find alternative solutions to complex problems. (Köse et al, as cited in Ozcan, and Uyanık, 2022). Prediction is an essential strategy in reading (Bailey, 2015). Through this strategy, students get information from text, diagrams, images, and titles to find out what will happen in the story by predicting or guessing first before reading the text.

Prediction strategy is a human attitude that refers to the ability to think and relies on previous experience or knowledge. Efforts to be successful in predicting something can be helped by understanding the clues on the cover of the book, the title of the book, the pictures on the book among others. In addition, Peter cited in Alfisyahrin (2022) believes that prediction is a verbalization expressed in the future form. Especially for texts that are read, predictions are statements about what will happen relative to the text's content, structure, the author's intent, plot, characters, or settings.

The use of prediction reading strategy in teaching enables learners to make guesses about the meaning of texts before reading, during reading, and after reading which they compare their predictions with the actual contents of such texts (Nguyen, 2016). Prediction reading strategies have been applied in most areas of teaching and learning. Prediction reading strategy can be used in reading comprehension passages as encapsulated in interactive approach instruction. Prediction reading strategy assists learners in decoding the meaning of passages by constructing guesses about the contents of texts to be read and comprehended. Banditvilai (2020) opined that reading strategies are among the most powerful factors in improving reading comprehension skills and it has a great impact on the pupils' achievement.

Reading comprehension is defined as a type of reading that aims to understand the contents of the reading (MS and Rachmadtullah. 2018). Reading comprehension is also the ability to read very complex word, understand, and interpret the contents of the reading. Comprehension is considered the essence of reading as it accounts for the process that

supports the effective extraction of meaning from a written passage (Alghonaim, 2020). According to MS and Rachmadtullah (2018), reading comprehension is described as a reading activity carried out to understand the contents of the reading, both explicitly and implicitly from the reading material. Operationally, reading comprehension is the act of assimilating a text passage read during the teaching and learning process. In reading comprehension, the learner is not only required to understand the contents of the reading, but he/she must also be able to analyze or evaluate and relate to what has been read to the experiences and previous knowledge they had. Helarde (2021) posited that reading comprehension has certain goals which include gaining success to full understanding of logical arguments, story sequences or text patterns, symbolic patterns, emotional additional tones, and also linguistic means used to achieve goals. Nonetheless, the attainment of these goals seems to be limited due to the strategy employed during the teaching and learning process in teaching pupils reading comprehension in English. Grammer is also a topic in English which is taught among pupils at primary level of education. The present study also examines its relationship with the prediction reading strategy.

Nonetheless, this issue of low academic achievement is clearly seen in grammar classes. Grammar is often traditionally taught and practiced in isolation from communication skills (Sarah, Al-Harbi and Alshumaimeri, 2016). Thus, grammar learners reported that although they learn a lot of grammar, it is difficult to use grammar correctly (Al-Hamlan and Baniabdelrahman, 2015). A number of studies have been conducted and the research of Akbash, Sahin, and Yaykiran (2016) indicate that there is a correlation

between reading comprehension results and the factors of reading comprehension and reading comprehension contribute positively to the results of factors affecting reading comprehension. Other findings by Manihuruk (2020) show that there is a positive moderate correlation between factors affecting reading comprehension and reading comprehension. According to Gultiano (2022), pupils often experience poor reading comprehension due to their failure to read strategically and to spontaneously monitor their understanding while reading. Educators have become dissatisfied with reading comprehension results, studies need to turn their attention to broader views of reading and devote themselves to current issues in reading comprehension to make some innovations and new directions on how to improve reading comprehension **(**Paris, as cited in Gultiano, 2022). In the same vein, Sumirat, Padilah, and Haryudin (2019), conducted a study to examine the use of predictions strategy in improving pupils' reading comprehension. Sumirat, Padilah, and Haryudin reported that predictions strategy has significant impact on students' reading comprehension. It is essential for the teacher to improve the quality of English teaching learning process, especially in writing activities. The results of the research show that peer editing was believed to be successful in improving the students' writing skill and overall academic achievement.

Pupil's academic achievement can be defined as the learning outcome of pupils which includes the knowledge, skills, and ideas gained and retained through their course of study within and outside the classroom situation (Odagboyi, 2015). Cheng, Wang, and Liu (2019) stated that academic achievement is one of the explicit indicators of pupil achievement in

school. The teacher could use a pupils' achievement on the other hand as an indicator in assessing his/her teaching method (Samba and Ogah, 2020). Operationally, academic achievement represents learning outcomes and indicates the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university (Okolocha and Okeke, 2018). Academic achievement is commonly measured using examination or continuous assessment. However, despite the various teaching methods employed by primary school teachers, pupils still perform poorly in reading comprehension, grammar and arithmetic. This is a backdrop which informs the present study to examine the relationship between use of prediction reading strategy and 5th grade students' academic achievement in Bomi County, Liberia.

Purpose of the Study

The main purpose of this study is to determine the relationship between use of prediction reading strategy and 5th grade students' academic achievement in English in Bomi, county, Liberia. Specifically, this study determined:

1. the relationship between use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension in Bomi, county, Liberia.
2. the relationship between use of prediction reading strategy and 5th grade students' academic achievement in grammar in Bomi, county, Liberia.

Research Questions

The following research questions guided the study

1. What is the relationship between use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension in Bomi, county, Liberia?
2. What is the relationship between use of prediction reading strategy and 5th grade students' academic achievement in grammar in Bomi, county, Liberia?

Research Hypotheses

The following null hypotheses was tested at 0.05 alpha level of significance

1. There is no significant relationship between use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension in Bomi, county, Liberia.
2. There is no significant relationship between use of prediction reading strategy and 5th grade students' academic achievement in grammar in Bomi, county, Liberia.

Methods

This study adopted the correlation survey research design. According to Nworgu (2015), a correlational design is a research design that seeks to establish relationship between two or more variables as well as indicates the direction and magnitude of the relationship between the variables. It was conducted among 5th grade teachers in Senjeh District in Bomi, county, Liberia. The population for the study comprises of comprises 314

public primary school teachers in 71 public primary schools in Senjeh District of Bomi County Northwestern Liberia 2022/2023 academic session (Source: Liberia Education Statistics Annual School Census 2019-20 Final Report.pdf). The sample for the study comprises approximately 142 teachers. In the first stage simple random sampling technique of toss of coin was used to select 2 teachers from the existing 71 public primary schools. The second stage employed the use of simple random sampling technique of balloting to select Ten 5th grade teachers from each of the sampled public primary schools in Senjeh District of Bomi County. This amounts to 176 teachers selected in all.

The instrument for data collection is a 15-item structured questionnaire which was titled the Use of Prediction Reading Strategy Questionnaire (UPRSQ). The questionnaire is structured from a pool of literature on a 4-point Likert scale of strongly agree, agree, disagree and strongly disagree with weighted scores of 4,3,2,1. The questionnaire was validated by three experts one from the department of education foundations (Measurement and Evaluation option), one from the department of early childhood and primary education both from the faculty of education Nnamdi Azikiwe University, Awka. One validate was a classroom teacher in the Senjeh District of Bomi County, Liberia. The reliability of the instrument was established using the Cronbach alpha statistics, and yielded a reliability coefficient of 0.85. The achievement scores of the 5th grade pupils in in English which contained reading comprehension and grammar scores was collected from the classroom teachers and used in this study. Data was collected through the use of google form and emails. The class room teachers served as research assistants as they assisted in assigning

codes to the achievement scores of the pupils. Data collected was analyzed using Pearson product moment correlation coefficient (Pearson r) and linear regression analysis. Specifically, Pearson r was used to answer the research questions, while linear regression analyses was used to test the null hypotheses raised. In testing the hypothesis, where the p-value is greater than or equal to the significant value 0.05, the null hypothesis is not rejected, otherwise, where the p-value is lesser than or equal to the significant value, the null hypothesis is rejected. Data analysis was computed using the Statistical Package for Social Science Version 27.

Results

Data for this study was analyzed and presented as follows;

Research Question 1: What is the relationship between use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension in Bomi, county, Liberia?

Table 1: Pearson r summary on the relationship between use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension (n=142).

Sources of variation	N	Prediction reading strategy r	Reading comprehension r	Remark
Prediction reading strategy	142	1.00	0.64	Moderate positive relationship
Reading comprehension	142	0.64	1.00	

In table 1 it was observed that a moderate positive relationship of 0.643 exists between use of prediction reading strategy and 5th grade students' academic achievement in reading

comprehension in Senjeh District of Bomi County, Liberia. This implies a corresponding increase in the use prediction reading strategy scores and the academic achievement scores of students in reading comprehension.

Research Question 2: What is the relationship between use of prediction reading strategy and 5th grade students' academic achievement in grammar in Bomi, county, Liberia?

Table 2: Pearson r on the relationship between use of prediction reading strategy and 5th grade students' academic achievement in grammar (n=142)

Sources of variation	N	Prediction reading strategy r	Grammar r	Remark
Prediction reading strategy	142	1.00	0.31	Low positive relationship
Grammar	142	0.31	1.00	

In table 2 it was observed that a low positive relationship of 0.31 exists between use of prediction reading strategy and 5th grade students' academic achievement in grammar in Senjeh District of Bomi County, Liberia. This implies that the scores in the use of prediction reading strategy and academic achievement scores of students decrease correspondingly.

Hypothesis 1: There is no significant relationship between use of prediction reading strategy and 5th grade students' achievement in reading comprehension in Bomi, county, Liberia.

Table 4: Linear regression summary on the significant relationship between use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension (n=176).

N	Cal. r	df	Cal. t	Pvalue	Remark
142	0.64	140	3.40	0.00	Significant

Table 4 indicates that at 0.05 level of significance and 140df, the calculated t 3.40 with a Pvalue 0.00 which is less than 0.05. Based on this result, the null hypothesis is rejected. This goes to show that there is a significant relationship between use of prediction reading strategy and 5th grade students' achievement in reading comprehension in Senjeh District of Bomi County, Liberia.

Hypothesis 2: There is no significant relationship between use of prediction reading strategy and 5th grade students' achievement in grammar in Bomi, county, Liberia.

Table 5: Linear regression summary on the significant relationship between use of prediction reading strategy and 5th grade students' achievement in grammar (n=176).

N	Cal. r	Df	Cal. t	Pvalue	Remark
142	0.31	140	4.61	0.00	Significant

Table 5 reveals that at 0.05 level of significance and 176df, the calculated t 4.61 with Pvalue 0.00 which is less than 0.05, the null hypothesis is rejected. This implies that there is a significant relationship between use of prediction reading strategy and 5th grade students' achievement in grammar in Senjeh District of Bomi, county, Liberia.

Discussion of Findings

The findings of the study revealed that a moderate positive relationship exists between use of prediction reading strategy and 5th grade students' achievement in reading comprehension in Senjeh District of Bomi County, Liberia. This implies a corresponding increase in the use of prediction reading strategy scores and the achievement scores of students in reading comprehension. Correspondingly, the null hypothesis reveals that there is a significant relationship between use of prediction reading strategy and 5th grade

students' achievement in reading comprehension in Senjeh District of Bomi County, Liberia. This conforms with the findings of Akbash, Sahin, and Yaykiran (2016), which indicated that there is a correlation between reading comprehension results and the factors of reading comprehension and reading comprehension contribute positively to the results of factors affecting reading comprehension.

The study also reported that a low positive relationship exists between use of prediction reading strategy and 5th grade students' achievement in grammar in Senjeh District of Bomi County, Liberia. This implies that the scores in the use of prediction reading strategy and achievement scores of students decrease correspondingly. The hypothesis found that there is a significant relationship between use of prediction reading strategy and 5th grade students' achievement in grammar in Senjeh District of Bomi, county, Liberia. This aligns with the findings of Manihuruk (2020), which showed that there is a positive moderate correlation between factors affecting reading comprehension and grammar.

Conclusion

Based on the findings of this study, it was concluded that a moderate positive relationship exists between use of prediction reading strategy and 5th grade students' academic achievement in reading comprehension, and a significant relationship between use of prediction reading strategy and 5th grade students' achievement in reading comprehension in Senjeh District of Bomi County, Liberia. On the contrary, a low positive relationship

exists between use of prediction reading strategy and 5th grade students' achievement in grammar, and a significant relationship between use of prediction reading strategy and 5th grade students' achievement in grammar in Senjeh District of Bomi, county, Liberia.

Recommendations

Based on the findings of this study, it was recommended that;

1. Teachers should endeavour to use strategies like prediction reading strategy which was found to correlate with the subjects taught at the primary school level.
2. There is need to sensitize teachers on textbook usage, while supplementing with improvised materials; guide learners through titles; as well as update teacher training curriculum by integrating inter alia, emerging instructional methods embracing Information and Communication Technology and entrenching innovation in resource mobilization and use.
3. English teachers could apply and explore more deeply the prediction strategy in improving pupils' reading and grammar skills.

References

Akbash, S. Sahin, M. and Yaykiran, Z. (2016). The effect of reading comprehension on the performance in science and mathematics. *Journal of Education and Practice.*

Alfisyahrin, R. (2022). *The implementation of prediction strategy in improving students' reading comprehension in English recount text.* https://repository.ar-raniry.ac.id/id/eprint/25651/1/Rika%20Alfisyahrin,%20180203007,%20FTK,%20PBI,%20082225035684.pd

Alghonaim, A. S. (2020). Impact of related activities on reading comprehension of EFL students. *English Language Teaching, 13,*(4); 15-27. ISSN 1916-4742 E-ISSN 1916-4750.

Al-Hamlan, S., and Baniabdelrahman, A (2015). A needs analysis approach to EFL syllabus development for second grade students in secondary education in Saudi Arabia: A descriptive analytical approach to students' needs. *American International Journal of Contemporary Research, 5*(1) 118-145

Al-Harbi, S.S. and Alshumaimeri, Y. A. (2016). The flipped classroom impact in grammar class on EFL Saudi secondary school students' performances and attitudes. *English Language Teaching, 9,* (10); 60-80. ISSN 1916-4742 E-ISSN 1916-4750

Ayu, N, Mulyadi, M and Firdaus, M. (2024). The influence of previewing predicting strategy and reading motivation toward seventh-grade students' reading comprehension at Junior High School 10 of Palembang. PPSDP *International Journal of Education, 3* (1) 2024, 188-194 E-ISSN 2829-5196, P-ISSN 2830-3229 188.

Banditvilai, C (2020). The effectiveness of reading strategies on reading comprehension. *International Journal of Social Science and Humanity* DOI:10.18178/ijssh. 2020.V10.1012.

Cheng, C. H., Wang, Y. C. and Liu, W. X., (2019). Exploring the related factors in students' academic achievement for the sustainable education of rural areas. *Sustainability 11*(21):5974 DOI: 10.3390/su11215974. October 2019.

Gultiano, S.O (2022). Reading comprehension in the English subject among grade 4 students in Carmen Elementary School, 8(6) 2022 IJARIIE-ISSN (O)-2395-4396

Helardez, C. M. (2015). Reading comprehension level and vocabulary skills of grade ii pupils and their academic performance in English of St. Paul University Philippines

Liberia Education Statistics Report 2019-20. https://educateherlib.com/wp-content/uploads/2022/09/Annual-School-Census-2019-20-Report.pdf

Manihuruk, D.H (2020). The correlation between EFL students' vocabulary knowledge and reading comprehension: A case study at the English education department of universitas Kristen Indonesia. *Journal of English Teaching*

MS, Z., and Rachmadtullah, R. (2018). *Constructivism approach in learning to write narrative at elementary school.* 1st International Conference on Innovation in Education (ICoIE 2018), 287–290. https://doi.org/10.2991/icoie-18.2019.64.

Nguyen, H. T. T. (2016). How does an interactive approach to literary texts work in an English as a foreign language context? Learners' perspectives in close-up.

Innovation in Language Learning and Teaching, 10(3), 171-189. https://doi.org/10.1080/17501229.2014.932361

Nworgu, B. (2015). *Educational research: Basic issues and methodology (6th ed.)*. Ibadan, Nigeria: Wisdom Publishers.

Obiakor, M.I. and Malu, D. (2020). Problem of teaching and learning of English language as a second language in secondary schools in Ankpa Local Government Area of Kogi State.

Obidike, N.D. and Onyekwelu. L.U. (2019). Effects of gender on teaching methods on academic achievement of primary three pupils in basic science in Aguata local government area. *IAA Journal of Social Sciences (IAA-JSS) 5*(1):72-80, 2019

Odagboyi, I. A. (2015). Effect' of gender on academic competence of primary education department students of college of education Akwanga Nasarawa State Nigeria. *Advances in Social Sciences Research Journal, 2*(10)) 199B203

Okolocha, C. C. and Okeke, V. N. (2018). Effect of peer tutoring on academic achievement of low achievers in keyboarding in secondary schools in Anambra State *International Journal of Scientific and Research Publications 8*(8) DOI:10.29322/IJSRP.8.8. 2018.p8088. August 2018

Samba, R. M. O. and Ogah, J. O. (2020). Effects of assertive questioning and prior knowledge of behavioral objectives teaching strategies on achievement of students with different abilities in biology. *International Journal of Innovation and Research in Educational Sciences, 7*(2), 107-124.

Sumirat, R. 1, Padilah, C.F.R. and Haryudin, A. (2019). The use of predictions strategy in improving students' reading comprehension *PROJECT (Professional Journal of English Education*, *2*(4):521 DOI:10.22460/project.v2i4.p521-525 License CC BY-SA 4.0 July 2019.