

Inquiry Reading And ICT Integration For Alleviating Secondary Students' Comprehension Underachievement In Nigeria.

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Abstract: Reading is very important in determining success and worth of school and academic work. One of the skills of reading is comprehension skill. However, the poor performance of Nigerian students in English Language Public Examinations has been located partially in their lack of reading skill. Scholars have raised concerns about the effectiveness of teaching comprehension skills in schools. Recent effort in addressing the problem involves the use of information and communication technology devices with proven comprehension strategies. This paper provides additional information to show evidence for the effectiveness of technology in reading instruction with the use of inquiry strategy. It was suggested that English Language teachers in public secondary schools should be trained with the use of modern ICT tools.

Index Terms: ICT integration, Inquiry reading, Secondary students, Underachievement, comprehension underachievement

1 INTRODUCTION

Reading is an essential language skill needed for success in any academic endeavour, be it at the primary, secondary and tertiary level of education. It is one of the most fundamental components of the primary and secondary school curricular in Nigeria. It has occupied an important position in academic work due to its usefulness in developing total educated person. Consequently, due to its importance and scope of its study, scholars in the past and present time have given it different definitions. According to Ibitoye (2021) ([1], intimated that reading is the process of recognizing written and printed words and understanding their meaning. One of the basic skills of reading is the comprehension skill. An efficient and successful reader is one who comprehension what he or she has read (Adetunji and Olagunju, 2014) [2]. The goal of reading is to comprehend in what has been read. In words of Ahmadi, (2017) [3], stressed that comprehension has been referred to as a process of demonstrating an understanding of a text or a reading material. Reading comprehension on the other hand as a compound term was referred to as "a process of deciphering the author's intention through the strategic use of thinking, questioning, anticipating, evaluating and interpreting skills" (Weller, 2010) [4]. The writers noted that inability to possess and apply the above skills is inimical to proper understanding of the passage read. Senior Secondary School students' low performance in reading comprehension and summary aspects of English Language Examination has been identified to have contributed partly to their low performance in the subject. According to Adetunji and Olagunju (2014) [2], the poor performance of Nigerian students in English language public examinations in Nigeria has been located partially to their lack of competence in reading comprehension. The West African Examination Council (WAEC) Chief Examiners' Reports showed from the statistics of result obtained in 2012 – 2018 that the percentage of credit passes fall below 50% for the period (Obasi, 2018).[5] The persistent below average performance has been linked partly to students' inability to answer comprehension questions correctly and also inability to read and answer summary questions accurately. Studies reveals that comprehension skill is needed either to answering comprehension questions or summarizing a reading passage or text (Okkinga, et al., 2018).[6] The writes noted that it is practically impossible for a reader to summarise a text without prior knowledge of comprehension. Students' comprehension underachievement

may be located partially from their inability to use strategically the comprehension skills listed [6]. Lack of effective use of thinking and questioning skills (higher cognitive skills) may resulted into comprehension deficiency. Poor comprehension can also be caused by other factor such as lack of training and practice in reading comprehension skill (Awolere, 2016). [7] Over the years, language researchers and educators have been so much concerned with the task of improving the effectiveness of teaching reading in the classroom. However, only a few have focused on addressing the problem through effective use of comprehension instruction strategies and also the sue of eclectic approach to teaching reading (Olagunju, 2019) [8]. According to Isiugo-Adanihe (2021)[9], whole literacy in English, especially in a second language environment such as the Nigeria classroom can be promoted through a well-designed reading programme. The review of relevant literature on reading comprehension instruction has revealed that reading is a complex process that requires the use of cognitive, metacognitive and affective/socio strategies. (National Reading Pane, 2000. [10]. Also, the bulk of instruction on reading comprehension in the last three decades is guided by cognitive view of reading and constructivist conceptualization of comprehension (NRPO, 2000) [10]. Within the cognitive tradition, according to Isiugo-Abanihe (2002). [9] language learning ceases to be perceived as habit formation or conditioning process. The teacher-directed model did not suit the present needs of the learners as such gives way to more creative exercise involving much more learner-input. Thus, the use of learner-centred, holistic meaning-oriented reading instruction that facilitates readers' ability to process meaning actively from text, is the focus of this paper. A student-centred constructivist approach to the teaching of reading in school involves the use of inquiry-based reading strategy. Araromi (2002). [11] listed seven reading strategies that can be used to promote reading instruction in schools. One of the strategies is inquiry reading strategy. According to Araromi [11] Inquiry Reading promotes deeper understanding of the text through a longer concentration and practice. Inquiry Reading and Students Comprehension Achievement. Inquiry reading process from the available resources is the most solidly supported to improve comprehension achievement (Olagunju, 2019).[12]. Morreillon (2014) [13] noted that Inquiry process and reading comprehension instruction are strategies that go hand in hand.

In a study to improve reading comprehension of students, using a classroom action research CARD, Researchers noted that there is improvement in students literal comprehension and interpretative comprehension using an inquiry method. (Gilakjani & Ahmadi, 2011).[14] Al-Jadili (2018). [15] result, showed that using inquiry learning strategy has high impact on developing reading comprehension and self-regulation among ninth-grades in Gaza. In related research evidence, Olagunju (2019). [8] investigated the effectiveness of Inquiry-based strategies on literacy skills of senior secondary school students. The result of the quasi-experimental study indicated that there is a statistical difference between the mean score of students using inquiry strategies and the control groups on reading comprehension and composition writing. In the previous studies, Burhanuddin (2012). [16] emphasized that teaching reading through inquiry method is a good way to improving the students' reading comprehension. Al-Jadili (2018), [15] observed a remarkable effect of inquiry learning strategy on developing reading comprehension and self-regulation among students.

Theoretical Framework:

Sentence and Waite (2021) [17] cited Lee Vygotsky (1978), Social Constructivist Theory (SCT) provided the framework for the use of inquiry reading and ICT integration in promoting students' comprehension achievement. Vygotsky, is a pro-constructivist theorist whose work focuses more on social interaction as a primary source of cognition and behaviour. It is Vygotsky that bring the concept of social learning into constructivism when the notion of zone of Proxima Development (ZPD) was given global acceptance. The available literature on inquiry practices in recent time, (Byker, et al., 2017). [18] explained specific practices, like technology integration, collaboration learning that educators use to support inquiry related tasks.

Inquiry Reading in an ICT-rich Environment

Today's world is interacted with the ICT integrated in many ways. To support inquiry pedagogy, researchers have advocated integration of review process with ICT methodology in education (Govender & Kayode, 2020).[19] ICTs have unique way in enhancing inquiry approaches. Kayode (2019), [20], found that technology-enriched environment had a significant effect on students academic performance. Higher-order thinking skills. Apart from the above, the 21st century learning and literacy skill has made the use of information technology an essential part of people's day to day activities (Kayode, 2019). [20] Previous studies informed that most of the schools around the world use Information Technology and communication (ICT) integrated technologies in teaching and learning process. Examples include mobile phone technologies, websites, online learning, tablet usage etc. (Kayode & Maleshoane, 2021; Guma, Faruque & Khushi, 2013). [21, 22] Subsequently, to support student's comprehension achievement, higher-order thinking and communication activities, the emphasis in this paper is on integrating inquiry reading into information technology model (Assaly, Ibtihal, and Abdelnaser Jabarin, 2021).[23] explained that reading comprehension shapes students' ability to understand what is read and provides the skills necessary to participate in the 21st century workforce. Literacy development in 21st century merges higher order thinking skill with information and communication (digital literacy) . Also, in

order to meet the learners, need for 21st century learning and application of knowledge and skills, instructional media tools (such as video and tapes) can be used to aid students' acquisition of right skill. Alabi and Afumadu (2021),[24] explained that to ensure an effective teaching learning process, instructional tools should serve as support for knowledge acquisition. They noted that technology for instruction are not limited to charts and other printed materials, but have advanced and have cut across software programmes, video disks, compact disks, video and video tapes, lesson plan and data bases. Information technological tools are viewed as the new trend of instructional materials. They are designed for use by pupils and teachers as learning resources and tools. They can be designed as support tools for effective scaffolding of comprehension instruction. Examples include advance organizers, charts, video, question matrix and other tools that can aid metacognitive skills.

Conclusion:

ICT has come to stay with us, and has been an integral part of teaching and learning process. The evolution to "ICT for Education and Integration of ICTs Throughout the Curriculum," blending their use with other tools and resources to assist student learning has been on increase to improve teaching and learning in educational sector (Agung, 2020; Govender & Kayode, 2020). [25, 19].sFewer studies have presented a framework for integrating ICT technology and inquiry-based learning pedagogies in the classroom and have also shown the effectiveness of the innovation in teaching reading comprehension. Considering the positive results from previous studies, the need to brace up for the challenges of the new digital age and the need to improve teaching quality in English language classroom, should be geared towards promoting effective ICT pedagogy in the classroom.

Recommendations:

On the basis of the evidence in support of ICT integration in reading comprehension pedagogy, the following recommendations were made:

- Government should ensure that schools are equipped with ICT facilities to complement efforts of some old student's association and cooperates bodies
- Stakeholders and heal of schools should ensure that secondary school students and teachers have access to ICT gadgets in school to complement those that are available for the students to use at home
- School management system should ensure that teachers' attend seminars and workshops in relation to the use of inquiry reading strategy and ICT integration
- School principals should liaise with other stakeholders to make sure that school libraries are stocked with supplementary e-book, content area materials, and digital resources that promote reading culture in schools.

References

- [1] Ibitoye, W.A. Creative reading. In Aleburu, V.I. (Ed.) Basic Studies in Language and Communication Skills IV. Lagos. Nathy: Publishers. pp . 7 – 15. 2011.
- [2] Adetunji, A.A & Olagunju, T.O . A study of the effect of home, school and personal variables on students' reading comprehension achievement. Journal of Education and

- Practice. pp. 38 – 45. 2014.
- [3] Ahmadi M.R. The impact of motivation on reading comprehension. *International Journal of Research in English Education*, 2(1), 1-7. 2017.
- [4] Weller, S. (2010). Comparing lecturer and student accounts of reading in the humanities. *Arts and Humanities in Higher Education*, 9(1), 87-106. 2010.
- [5] Obasi, C., & Ugo, C. Predicting Growth Rate of Students' Achievement in Mathematics Using Mathematical Growth Model. *Online Submission*, 2(2), 44-51. 2018.
- [6] Okkinga, M., van Steensel, R., van Gelderen, A. J., & Slegers, P. J. Effects of reciprocal teaching on reading comprehension of low-achieving adolescents. The importance of specific teacher skills. *Journal of research in reading*, 41(1), 20-41. 2018.
- [7] Awolere O.O. Differentiated and Scaffolding instructional strategies as determinants of senior secondary school students' learning outcomes in English comprehension in Oyo State. A Ph.D Post-field seminar paper presented at the Department of Teacher Education, University of Ibadan. 2016.
- [8] Olagunju, T.O. Enhancing literacy skills of senior secondary school students through inquiry-based strategies. *The Moulder*, 8(3), 255 – 270. 2019.
- [9] Isiugo-Abanihe, M. A qualitative evaluation of reading instruction in primary schools in Abia State. In Adebayo Lawal, Ifeoma. Isiugo-Abanihe and I.N. Ohia (eds.) *Perspectives on Applied Linguistics in Language and Literature*. Lagos. Sterling-Horden Publishers (Nig.) Ltds. pp. 417-429. 2021
- [10] National Reading Panel (US), National Institute of Child Health, Human Development (US), National Reading Excellence Initiative, National Institute for Literacy (US), United States. Public Health Service, and United States Department of Health. Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups. National Institute of Child Health and Human Development, National Institutes of Health, 2000.
- [11] Araromi M. Issues in planning reading improvement in secondary schools. In Adebayo Lawal, Ifeoma Isiugo-Abanihe and I.N. Ohia (eds). *Perspectives on Applied Linguistics in Language and Literature*. Lagos: Sterling-Horden Publishers (Nig.) Ltds. Pp. 240 – 247. 2002.
- [12] Olagunju T. O. Enhancing literacy skills of senior secondary school students through inquiry-based strategies. *The Moulder*, 8(3), 255-270. 2019.
- [13] Morreillon, J. Inquiry learning comprehension instruction: process that go hand-in-hand (knowledge quest inquiry). *School library monthly*. 43(2), pp. 1-4. 2014.
- [14] Gilakjani, A. P., & Ahmadi, M R. A study of factors affecting EFL learners' English listening comprehension and the strategies for improvement. (2011).
- [15] Al-Jadili, R.S. The impact of inquiry learning strategy on developing reading comprehension and self-regulation among ninth grades in Gaza. A thesis in Faculty of Education, The Islamic University of Gaza. 2018.
- [16] Burhanuddin W. Using inquiry method to improve the students' reading comprehension (A classroom Action Research). *Exposure Journal*, 1(1), pp. 126-146. English Education Department, University of Muhammadiyah Makassar. 2012.
- [17] Sentance, S., & Waite, J. Teachers' Perspectives on Talk in the Programming Classroom: Language as a Mediator. In *Proceedings of the 17th ACM Conference on International Computing Education Research* pp. 266-280. (2021, August).
- [18] Byker E. J., Coffey, H., Harden, S., Good, A., Heafner, T.L., Brow, K. E., and Holzberg, D. Hoping to teacher someday? Inquire within: Examining inquiry-based learning with first-semester undergraduates. *Journal of Inquiry and Action in Education*. 8(2), pp. 54 – 78. 2017
- [19] Govender, D.W and Kayode, A.E. Examining Availability and Frequency use of Computer-Based Technology Resources among Students in Nigerian Universities. *PONTE, Academic Journal*. Apr.2020, Vol.76, Issue 4. doi.org/10.21506/j.ponte.2020.4.26. 2020.
- [20] Kayode, A.E. Examining Computer-based Technology skill and academic performance of students in Nigerian Universities. PhD Thesis, Department of Computer Science Education, University of KwaZulu-Natal, South Africa. Upload on university-website: (https://researchspace.Ukzn.ac.za+kayode Aderinsola). 2019.
- [21] Kayode, AE & Rapeane-Mathonsi, M. (2021). An examination of naming systems amongst the Yoruba of the Southwestern Nigeria. A lead paper presented at Names Society of Southern African Congress, Conference theme: Current trends in names and naming organized by Durban University of Technology, South Africa. 3 – 5 November, 2021.
- [22] Guma, Ali, A. Haolader Faruque, and Muhammad Khushi. "The role of ICT to make teaching-learning effective in higher institutions of learning in Uganda." (2013).
- [23] Assaly, Ibtihal, and Abdelnaser Jabarin. "Arab Israeli EFL teachers' perceptions and practices vis-à-vis teaching higher-order thinking skills: A complicated relationship." *Language Teaching Research* (2021): 13621688211032426.
- [24] Alabi O. & Afumadu C. Effect of employing digital language laboratories (DLL) in English instruction on students' performance: An instructional strategy in technology of education. *African Journal of Educational Research*. Department of Arts and Social Sciences Education, Early Childhood and Educational Foundations and Science and Technology Education, University of Ibadan. Vol. 24, pp. 17 – 24. 2021
- [25] Agung, W.R. Improving Character based reading by applying inquiry method of the eleventh year students of SMA NEGERI 1 Jatinon Klaten in Academic year of 2019/2020 (Doctoral dissertation, universitas Widya Dharma Klaten). (2020).