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MITIGATING COGNITIVE CHALLENGES FACED BY TEACHERS OF ENGLISH IN TEACHING AND LEARNING READING IN NIGERIAN SECONDARY SCHOOLS

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Abstract

Teachers, especially teachers of English language face considerable challenges when teaching reading at the various school levels. Reading is the act or process of receiving and interpreting information in language via the medium of print. This paper identifies some of the challenges encountered by English teachers while instructing and facilitating the teaching and learning reading among secondary schools generally special focus on Nigeria. It highlights the multifaceted nature of the challenges, encompassing area such as diverse student intellectual abilities, insufficient cognitive engagement, language barriers. This paper review various studies on reading and in Nigerian schools, identify recurrent problems and the gaps relating to cognitive challenges.
It explores potential solutions to mitigate these flaws, emphasizing the pivotal importance of tailored instructional strategies and tooling, collaborative approaches between parents/guardian and managements of school, and the integration of active technological apparatus to the system. The paper recommended that, regular workshops with a cognitive approach should be organized for all teachers of English to enable them handle reading effectively, this training will create a drive-in teacher to ensure that students under their tutelage are fluent readers. More so, in-service training should also be an integral part of continuing teacher education and teachers should be supported in order to increase their level of confidence when teaching reading.

Keywords
Cognitive Theory, Cognitive Challenges, English Teachers, Reading Instruction, Instructional Strategies

1. Introduction

Francis Bacon emphasized the multifaceted benefits of reading, stating that it fosters intellectual depth, discussion encourages readiness, and writing promotes precision. This viewpoint underscores the essential role of reading in shaping a knowledgeable society within the contemporary globalized context, as well as its pivotal role in a child’s cognitive development. Scholars stress the complexity of the reading process, which intricately intertwines cognitive aspects. They advocate for education that focuses on a child’s holistic development, drawing from Benjamin Bloom’s 1956 taxonomy of learning. This approach emphasizes cognitive, affective, and psychomotor domains.

Teachers, central to the educational process, are crucial for enhancing learning and driving school improvement. Yet, many educators may underestimate the intricacies of effective teaching, relying on unfounded judgments, untested instincts, and erroneous assumptions. Effective teaching hinges on the interplay between a teacher’s dispositions, teaching methods, classroom environment, and their impact on student learning. An effective teacher is one who exhibits emotional warmth, innovative teaching techniques, subject mastery, and behavioral competence.

Killen, (2006) opines that, to optimize teaching and learning, teachers must set clear objectives, employ inclusive instructional strategies, and consider their learners’ cognitive abilities. Cognitive strategies, which prioritize the learner’s mental processes, play a pivotal role in designing effective learning systems. Various challenges confront the effective teaching of reading in schools,
including pedagogical approaches, a learning capability, resource inadequacies, and student engagement issues. (Paper, et. al. 2011).

In Nigeria, academic performance of students has been consistently decried to be poor and disappointing as reflected in internal and external examinations conducted (Nwosu, et al. 2021). Ineffective reading has been found as major factor. Various studies conducted in this regard have substantiated different causes of the inefficiency. The strategic position occupied by reading in learning process of a child demands effective teaching by the teacher because its deficiency would eventually affect every other learning task of a learner (Alsofyani, 2019, Loan, 2012). Teachers’ lack of the cognitive abilities of his learners would hinder effective learning most especially reading (Guo, 2018).

Recent studies, such as those conducted by Chew and Cerbin, (2021), highlight nine cognitive challenges that impede student learning. These challenges include mental mindset, metacognition, prior knowledge gaps, ineffective learning strategies, and limitations in attention and working memory. To address these challenges, it is vital to integrate cognitive strategies within the learning framework. Bloom’s Taxonomy of Learning delineates the cognitive domain into six levels of complexity, encompassing knowledge acquisition, understanding, application, analysis, synthesis, and evaluation. Despite the abundance of research on effective teaching and learning, limited attention has been given to the cognitive hurdles faced by English teachers in facilitating effective reading instruction. Nigeria educational institutions at the lower levels are faced by these challenges.

2. Literature Review

Cognitive Theory refers to the understanding that learning is an active mental process of acquiring, remembering, and using knowledge. It emphasizes the role of internal mental processes, such as problem-solving, memory, and language, in understanding the learning process. This theory assumes that individuals are active processors of information, rather than passive recipients. Here, the focus is on how learners perceive, organize, and retrieve information, and how this impacts their ability to learn effectively.

Cognitive Theory, proposed by theorists such as Jean Piaget and Lev Vygotsky, emphasizes the role of internal mental processes in learning. It posits that learning is an active process where individuals use their existing knowledge and experiences to construct new
understandings. In the context of education, this theory underscores the importance of understanding how students think, process information, and solve problems. It also highlights the significance of factors such as memory, attention, and motivation in the learning process.

One of the central tenets of Cognitive Theory is the idea that learning is influenced by various internal factors, including attention, memory, mental mindset and motivation. This theory underscores the importance of factors such as prior knowledge, cognitive development, and the role of schemas in shaping how individuals perceive and interpret new information.

When it comes to the flaws in teaching reading, several issues have been identified by different scholars and researchers in the recent time that hinder effective literacy instruction. These flaws often stem from a disconnect between theory and practice, as well as a lack of understanding of the complex cognitive processes involved in reading.

2.1. Related Studies in Nigeria

Adeniji and Omale, (2010) research on factors militating against learning of comprehension in Oyo state. It was discovered that environment, teachers and students themselves were factors responsible for poor students’ reading comprehension at the Primary school level. A study on factors negating students’ success in comprehension activities in Nsuka metropolis Junior Secondary Schools was conducted. It concluded that there was dearth of qualified teachers to teach reading comprehension effectively, instructional materials were not adequate, parents and students educational background were poor and a contributive factor, lack of qualified reading text-books added to the problems.

Furthermore, Abu-Ubaida, et. al. (2017) reiterated challenges facing teaching of reading in Nigerian secondary schools as poor background, lack of motivation, over population in classes, lack of motivation in students, poor attendance in classes, lack of teacher and other adults-models, poor libraries, inadequate teaching and learning materials and language laboratories. Earlier study by Adeniji and Omale, (2010) concluded unfavourable learning environment, inadequate teacher’s qualification and poor reading skills as factors hindering comprehension in Oyo state primary schools’ pupils. In Osun State, Oribabor, (2014) embarked on appraisal of reading culture secondary school learning of Oral English and concluded that students’ reading culture was poor due to lack of teachers’ ineffective handling of reading activities.

Investigating factors militating against reading comprehension in Junior Secondary Schools in Nsukka metropolis, Enugu State, Agbo, et. al. (2019) concluded that students performed
poorly in reading comprehension. Factors responsible for the poor performances were identified as inadequate and unqualified teachers with incompetent use of instructional materials, inappropriate poor-qualitied text books with poor educational background of the students. Alice, (2011) in her study on Uyo public secondary schools in Akwa Ibom state discovered that learners were rendered passive in reading teaching and learning process, because majority of the teachers were using traditional methods that are teacher-centered.

In Ondo State, Owolabi (2017) observed secondary school students’ poor reading skills and note-taking as causes of their low performances. Therefore, he investigated effects of Cognitive restructuring and problem-solving strategies on reading and note taking of secondary school students and recorded that they were able to enhance reading habit of the students while noting that poor reading skills formed part of causes of low academic achievement in secondary school students. He listed some indices of poor reading habit in students which include lack of self-control, lack of self-confidence or self-worth, lack of retention and recollection of learning experience, and, lack of ability to take note from lectures and reading materials. It was found that cognitive restructuring was effective strategy to enhance students’ reading and academic performance.

In view of all these assertions, reading problems identified as related to all these researches are consistent which suggestions and recommendations for remedies were made for decades. Nevertheless, inefficient reading, poor reading culture stemmed from reduced interest and motivation, and shifted focus on social media engagement in movies and other related materials, occupy substantial part of the learners’ time (Omoegun, 2012). While Hammed and Ogunrinde, (2010) submitted that newspapers and magazines are educational media resources used mostly for reading by students. Igbokwe, et. al. (2012) on effect of electronic media on the reading capacity of school children revealed that 90% of them spent less than an hour on reading daily. There is need to explore the avenue of cognitive approach to ameliorating the precarious problems confronting teaching and learning reading in Nigerian Secondary school students.

Sheed and Olaotan, (2022) identified inadequate research on effects of educational media resources utilization and cognitive styles on reading habit. Hence, cognitive styles and educational media resources utilization as predictor of reading habit of private secondary schools’ students in Oyo State was researched. The result indicated that level of reading habit and use of cognitive styles, dependent and independent among the students in private secondary schools was low. It
established prevalent use of internet, computer, films, video players and smart-phones among the students.

Close examination of the situation as reflected in the various studies cited on Nigerian secondary schools, the problems challenging effective teaching and learning of reading are consistent. Factors related to background, teachers, environment, students, materials, methodology and reading materials were mentioned and reiterated. Thus, suggesting that a more cursory look at managing the diverse areas strategically for remedies is needed. Hence, the option of cognitive approach to mitigating challenges of teaching and learning reading is hereby proposed.

3. Instructional Approaches

3.1. Mental Mindset: A Learning Process

Mental Mindset, an essential component of the learning process, encompasses students’ attitudes, beliefs, and expectations concerning a particular subject, including their confidence in achieving success, their approach to various topics, and their response to teaching methodologies and evaluation methods employed by instructors (Chew, 2014; Farrington, 2013). Notably, this disposition significantly impacts student engagement and academic performance across diverse subject matters, teaching methodologies, and assessments (Cahill et al., 2018), as emphasized in previous research (Farrington, 2013; Farrington et al., 2012).

Regarding instructional approaches for enhancing reading functionality, the act of teaching reading involves the strategic facilitation of student engagement with textual materials, aiming to foster ease of understanding, motivation, and the ability to extract information effectively (Van der Boom, 2017). This process, especially crucial in early education, presents a formidable challenge for educators committed to cultivating inclusive learning environments, fostering a sense of belonging, and nurturing the academic growth of diverse student populations (Pei, 2018). To this end, the incorporation of metacognitive strategies in teaching reading, involving educators modeling cognitive processes and encouraging student participation in active comprehension, has gained prominence (Gannaio, 2017; Simpson and Moreno-Perez, 2020).

Within the United States educational landscape, efforts by school districts, state education departments, and colleges of education emphasize the importance of providing effective instructional practices and tools to enhance students’ reading proficiency, starting from pre-primary levels and progressing through the early grades (Bloomquist, 2017). This initiative has yielded
significant benefits for both individual student development and the nation’s overall literacy rates, as evidenced by recent reports highlighting the Philippines’ notable progress in literacy among Southeast Asian countries (Fuerte, 2019). Moreover, local efforts, such as those observed in Zamboanga del Norte, have demonstrated the impact of collaborative endeavors between governmental and non-governmental entities in promoting educational infrastructure development and fostering a culture of reading among students (Maluyo, 2014).

In Nigeria as earlier mentioned, challenges persist in the secondary education context, where the mastery of reading, among other skills, remains pivotal. Despite the integration of various textual genres and teaching methodologies, students often encounter difficulties comprehending complex texts due to issues related to their language proficiency, learning habits, and the pedagogical approaches employed by educators (Abdul Halim, 2014). Addressing these challenges necessitates a multifaceted approach that considers both the cognitive strategies employed by students, such as practice-based learning, and the implementation of effective instructional techniques that encourage active participation and deeper comprehension in the learning process.

3.2. Cognitive Reading Strategies

Effective instruction in cognitive reading strategies (CRSs) can significantly enhance students’ comprehension abilities and transform them into adept, strategic readers. Encouraging students to engage in interactive techniques such as prediction, questioning, summarization, inference-making, visualization, and answering queries, among others, fosters a deeper grasp of textual content. Through the active application of these strategies, readers are able to process information more proficiently, thereby obtaining, retaining, and subsequently utilizing the acquired knowledge from their reading experiences.

Notably, the employment of CRSs, as supported by Soto et. al. (2019), aids in the construction of a comprehensive mental representation of the text, thereby facilitating the reader’s interpretation and understanding of the material. Similarly, the scholarly work of Suyitno, (2017) emphasizes that the efficacy of cognitive strategies lies in the reader’s selective application of these techniques during the reading process, emphasizing the importance of vocabulary comprehension, concept linkage, idea organization, authorial intent recognition, context assessment, and critical judgment formation.
Various scholarly contributions, such as the research conducted by Marzuki, et. al. (2018), highlight the efficacy of cognitive strategies in enhancing reading comprehension, evident in the significant improvement of students’ performance when employing predictive titles and key word analysis. This, coupled with McNamara’s (2009) assertion, underscores the crucial role of reading strategies in overcoming comprehension obstacles and developing robust reading capabilities. Furthermore, an overview of international studies, including those by Cassata (2016), Joseph et al. (2016), and Yuan et al. (2020), confirms that the adoption of CRSs as pedagogical aids greatly bolsters the development of comprehensive reading skills, thereby fostering an interactive and enriching engagement with textual content.

Local research, as illustrated by Ospina (2019), emphasizes the diverse array of learning strategies available to readers, particularly when confronted with unfamiliar vocabulary, emphasizing the importance of effective strategy usage. Battigelli (2015) and Pérez (2015) advocate for explicit instruction on employing CRSs, highlighting their crucial role in simplifying reading comprehension and providing readers with a diverse toolkit for navigating complex textual landscapes.

3.3. Visualization Strategy: A Cognitive Sample

This approach involves creating mental images to aid in understanding complex concepts and information. By employing this strategy, individuals can enhance their comprehension and retention of various subjects.

Effective visualization during the reading process is crucial for understanding and retaining the main ideas of a text. Scholars have emphasized that this cognitive strategy involves engaging all five senses and evoking emotions to construct mental images, aiding interpretation and memory retention. Through the creation of mental displays, readers can better comprehend and recall textual information, leading to an enhanced reading experience. This technique not only facilitates the connection between the reader’s background knowledge and the narrative but also fosters a positive attitude towards reading, promoting active and imaginative thinking.

Furthermore, the absence of physical and psychological preparation for reading can impede students’ ability to grasp the author’s message, ultimately affecting their comprehension. O’Malley and Chamot, (1990) have highlighted a range of cognitive strategies relevant to the learning process, including repetition, translation, grouping, note-taking, deduction, elaboration, and inference, all of which operate directly on incoming information to enhance learning. These
strategies, when accurately employed during reading activities, such as linking new words to existing vocabulary or summarizing key points, facilitate better text comprehension.

Additionally, Suyitno, (2017) has analyzed the use of cognitive strategies in reading, emphasizing their contribution to students’ achievement. The research findings underscore the significance of leveraging language resources and strategic potential to improve reading efficiency. Ghafournia’s work further highlights the pivotal role of learning strategies in enhancing students’ ability to comprehend textual material. This collective body of research emphasizes the importance of employing cognitive strategies, particularly visualization, to facilitate effective reading comprehension and overall academic achievement.

In the context of reading comprehension, learners are encouraged to harness their language proficiency and employ various strategic approaches to optimize their understanding of textual content. Ghafournia’s research underscores the importance of leveraging one’s linguistic abilities to enhance reading efficiency. Learning strategies, as highlighted by the various scholars, play a critical role in fostering a deeper understanding of text, thereby contributing to the overall academic growth and success of students.

Moreover, an integral aspect of this process involves not only the cognitive strategies associated with textual interpretation, but also the affective and metacognitive dimensions of learning. The engagement of emotions and the cultivation of metacognitive awareness enable students to become more conscious of their own cognitive processes, thereby facilitating a more comprehensive and profound engagement with the text. This holistic approach to reading comprehension emphasizes the integration of cognitive and affective elements, thus promoting a more thorough and enduring understanding of the material.

As such, educators and learners alike should prioritize the development and implementation of effective cognitive strategies, encompassing visualization techniques, as well as the cultivation of emotional and metacognitive awareness. By fostering a comprehensive approach to reading comprehension that encompasses these multifaceted dimensions, educational institutions can facilitate the cultivation of critical thinking skills and promote a lifelong love for learning and knowledge acquisition.

4. Findings and Discussion
From the various studies examined, a number of challenges were identified which are captured below:

- Lack of emphasis on critical thinking skills: Simply teaching students how to read without fostering critical thinking skills can limit their ability to analyze, evaluate, and interpret texts critically. Encouraging students to question, evaluate evidence, and form independent judgments can significantly enhance their overall reading comprehension and analytical abilities.

- Inadequate integration of technology: In the digital age, integrating technology into reading instruction can offer numerous benefits, including interactive learning experiences, access to a vast array of reading materials, and adaptive learning platforms that cater to individual student needs. However, the failure to integrate technology effectively into the reading curriculum can limit the opportunities for students to engage with reading in innovative and meaningful ways.

- Insufficient support for struggling readers: Some educational systems may lack comprehensive support systems for students who face significant reading difficulties or learning disabilities. The absence of tailored interventions and resources for struggling readers can perpetuate the cycle of poor reading skills and hinder their overall academic progress.

- Inadequate assessment and feedback mechanisms: Insufficient or ineffective assessment and feedback mechanisms can hinder teachers’ ability to identify individual student needs and provide targeted support. Integrating comprehensive assessment tools and providing timely, constructive feedback can facilitate a more personalized and effective approach to reading instruction.

- Failure to adapt to individual learning styles: Each student has unique learning preferences and styles that impact their ability to engage with reading material effectively. Neglecting to accommodate individual learning styles can limit students’ comprehension and hinder their overall academic progress, as some students may struggle to connect with the material using conventional teaching methods.

- Inadequate training on evidence-based practices: Some English language teachers may lack comprehensive training on evidence-based literacy practices, including effective
reading instruction strategies and techniques grounded in cognitive theory. This gap in training can result in a less nuanced understanding of how to foster strong reading skills among students.

- Limited understanding of diverse learning needs: Teachers may face challenges in catering to the diverse learning needs of students, especially those with different cognitive abilities and learning styles. Insufficient awareness of how cognitive theory applies to various learning styles can lead to a one-size-fits-all approach that may not effectively engage all students.

- Overreliance on traditional teaching methods: A rigid adherence to traditional teaching methods that do not account for the evolving needs of students in the modern world can hinder the effectiveness of reading instruction. It is essential to integrate innovative and research-based approaches that align with the changing educational landscape and cater to the diverse learning styles and preferences of students.

- Inadequate professional development for educators: Continuous professional development is crucial for educators to stay updated with the latest research, methodologies, and best practices in literacy instruction. The absence of robust professional development opportunities can hinder teachers’ ability to adapt to changing educational landscapes and implement effective reading strategies in the classroom.

- Neglect of metacognitive strategies: Teaching students how to monitor their own reading processes and apply metacognitive strategies can significantly enhance their reading comprehension and overall learning outcomes. Disregarding the importance of metacognitive skills can limit students’ ability to regulate their learning and hinder their development as independent and proficient readers.

- Lack of emphasis on differentiated instruction: Addressing the diverse learning needs of students through differentiated instruction is crucial for effective reading instruction. However, some teachers may face difficulties in implementing differentiated instructional strategies that accommodate varying reading levels and learning preferences, hindering students’ cognitive development and overall literacy skills.

- Neglect of the role of parental involvement and community engagement: The role of parents and caregivers in promoting literacy development should not be overlooked. Lack of parental involvement in supporting and encouraging reading at home can limit the
reinforcement of reading skills learned in school and hinder the overall progress of students in their literacy journey. The involvement of parents and the community is crucial for fostering a supportive learning environment and promoting students’ cognitive development. However, teachers may face challenges in engaging parents and the community in supporting students’ literacy development, potentially limiting students’ cognitive growth and overall academic success.

- Neglect of holistic language development: Reading is interconnected with other language skills such as writing, speaking, and listening. Neglecting the holistic development of these language skills can limit students’ ability to express themselves effectively, both orally and in writing, and can hinder their overall language proficiency.

By addressing these cognitive challenges through thoughtful pedagogical approaches and comprehensive support systems, educators can create a dynamic and inclusive learning environment that nurtures students’ cognitive development in reading, critical thinking skills, and engender overall academic achievement. Implementing these strategies not only enhances students’ cognitive abilities but also prepares them to become lifelong learners equipped with the necessary skills to thrive in an ever-evolving and complex world.

5. Conclusions and Recommendations

Based on the findings of the study, the following conclusion were drawn. Reading as a skill permeates all the areas of curriculum. It is an inherent part of language learning as well. Teachers are the prime source for students to cultivate the reading habit. They can execute this laborious task only when they have the required competence to teach effectively. This present study has discussed the perceived cognitive challenges faced ranging from diverse student intellectual abilities, insufficient cognitive engagement, language barriers.

Addressing these flaws requires a comprehensive and collaborative effort that involves educators, policymakers, parents, and the wider community. By prioritizing evidence-based practices, fostering a love for reading, promoting inclusivity, and adapting teaching methodologies to meet the evolving needs of students, stakeholders can work towards creating an educational environment that fosters a strong foundation in literacy and equips students with the skills they need to thrive in an increasingly complex and interconnected world.
To further address these flaws, it is crucial for educational institutions to prioritize comprehensive professional development programs that equip English language teachers with the necessary knowledge and skills to integrate cognitive theory into their reading instruction practices effectively. Additionally, incorporating technology, fostering a supportive classroom environment, and promoting a deeper understanding of diverse learning needs can significantly enhance the application of cognitive theory in teaching reading. Continual research and up-to-date training materials can help educators stay informed about the latest developments and best practices in literacy instruction, enabling them to create more engaging and effective learning experiences for their students.

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