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The Technology-Enhanced Teaching Reading of English in Junior High School Level: Teachers' Perspectives

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ABSTRACT

Junior high school reading instruction has been used extensively to help meet the objectives of the national curriculum. Teachers and students are encouraged to conduct more advanced technological classrooms by the use of digital technology that has evolved into artificial intelligence. The purpose of this case study was to determine the state of reading instruction at the junior high school level using digital technologies. This study covers the opportunities and challenges for the teachers and students to deal with digital technology and artificial intelligence in the reading class. The data were gathered through observation and interview with the teachers and the students. The results of this study share that (1) it is challenging for the English teacher to use digital technology in the teaching reading, (2) digital technology offers multimodality that help the student to get better understanding on their reading, (3) the integration of artificial intelligence is discussed to get better formula of its implementation, (4) artificial intelligence may support the teacher's teaching preparation, and several other challenges are highlighted in details.

Keywords: digital media; teaching reading; technological enhanced language teaching

INTRODUCTION

To successfully teach the target language, technology is seen as an essential component in English language instruction. When it comes to the media used to help students learn the target language, technology improves instruction. The use of differentiated reading instruction also becomes one of the possible options to do with technology for advanced reading achievement (Haymon & Wilson, 2020). Both the teacher and the students can benefit from the openness and quick access to information that promotes teaching and learning. Using technology, the instructor can create a well-structured lesson plan that considers the motivation and interest of the students as well as their learning requirements. Additionally, the pupils' intrinsic motivation to learn the language might be enhanced.

As technology becomes more prevalent in daily life, students must cultivate the skills necessary to face the future, such as higher order thinking, cross-cultural teamwork, and change adaptation. To promote more dialogic communication, the training focuses on dialogic integration (Teo, 2019). These adhere to constructivist principles, which promote critical discourse, divergent thinking, and cooperative teaching and learning.

The manner that English is taught is altered by technology. In order to maximize goal achievement, it transitions from more in-person instruction to blended learning, which combines both online and offline classes. The roles that students and teachers play are also altered by the usage of technology in ELT. In the past, teachers were expected to serve as a learning hub where pupils could learn anything. Students today need more adaptable teachers who can serve as managers, organizers, media developers, controllers, and learning facilitators. These are the new responsibilities of educators to help students become more self-sufficient learners for lifelong learning. According to Marjan Laal and Peyman Salamati (2012), lifelong learning develops knowledge and abilities throughout one's life, both personally and as a citizen.

Students' perspectives about technology-enhanced learning are inextricably linked to the usage of technology in the classroom. Generally speaking, kids have positive opinions about the usage of technology in the classroom. It does, however, share implementation challenges, such as inadequate technology-based classrooms, a lack of teacher training regarding the devices, a lack of information about the programs and devices applicable to the technologically enhanced class, and a lack of student understanding of how to use the technology (Kazu & Issaku, 2021). Regarding the employment of technology in the classroom, there is a perception that a particular teaching approach should be used. The instructor can use their most successful teaching practice, alter their teaching style during the methods phase, and organize their theoretical perspectives on the method during the post-method era. In the post-method era, educators are looking for different approaches that align with the learning objectives. Teachers using the post approach are free to teach as they see fit (Zeng, 2018). Different approaches chosen as principled eclecticism in post-method through macro methods to make judgments also contribute to the diversity of technology use (Almaktary & Al-Kadi, 2017).

The roles of the teacher are purposefully removed from the emphasis of technology-assisted instruction and learning. In the past, teachers were expected to be in charge of overseeing and managing all aspects of instruction. Depending on the goals of education, teachers can fulfill a variety of tasks through the use of digital technology. They are expected to serve as motivators, organizers, guides, and facilitators of learning (Geng, 2021). Since the students are digital natives, teachers should be prepared with their personalities as learning facilitators. The learning resources are suited to the multimodalities of digital technology, including online forums, discussions, debates, explanations, and other activities that aid students in developing their creativity, productivity, and problem-solving abilities.

Since readers are switching from printed to digital readers, technology plays a significant part in reading instruction. Through its multimodality, technology as reading media enhances students' reading comprehension and complements their reading materials. On the plus side, despite the possibility of an excessive amount of material, readers might obtain comprehensive knowledge that could improve their reading comprehension (Liaw & English, 2017). Students can expand and improve their grasp of the subject they are reading thanks to the vast amount of reading supplemental materials available to them.

A new paradigm in reading instruction is offered by the availability of several learning resources and potential texts through high technology multimodality. Artificial intelligence must be incorporated into reading instruction in order to complement students' learning styles, which call for current and diverse teaching resources. There is a significant gap in the use of technology in reading instruction, nevertheless, when it comes to how the media is implemented and how the learning is organized. This study confirms the possible teaching and learning processes using technological enhancement. The consideration of technological, pedagogical, and content knowledge in teaching reading for junior high school students.

METHODOLOGY

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To deal with the teachers' perspectives on their teaching of English with the implementation of digital technology, especially artificial intelligence, there is a need to gather information on their practices and aspects influencing their technological class. This study was a case study aimed at finding the current condition of teaching reading with the help of digital technology at the junior high school level. The main purpose of this study is to seek in-depth understanding on the topic addressed (Creswell & Poth, 2018). This study covers the opportunities and challenges for the teachers and students to deal with digital technology and artificial intelligence in the reading class. The participants of this study were typically selected based on the goals of this study through purposive sampling. The aspects considered for the participants are their technological use during the English class and their teaching administration that merge with the practice. Ten English teachers from public junior high schools in Magelang regency were selected to join the study. Two of the respondents are master degree teachers while others are bachelor degree graduates. The data were gathered through observation and interview with the teachers and the students. The process of data analysis includes data collection, data reduction, coding data, data analysis, and data presentation. The analysis of the data was conducted through descriptive qualitative technique.

RESULT AND DISCUSSION

Data gathering, data reduction, data coding, data analysis, and data presentation are all steps in this study's process. Data collection is the first step, during which the researcher observed and spoke with the teachers. This also includes the teaching administration that deals with English instruction. The teaching and learning process as well as the instructional materials utilized to support the learning objectives comprise the data collected during this procedure. The majority of the data are qualitative in nature and are examined using the qualitative analysis method.

Following the procedures for data qualitative analysis, the data were qualitatively examined after they had been thoroughly gathered. Data minimization was the initial stage. The study's objectives and the instrument it employed were taken into account when decreasing the amount of data. The data reduction was carried out to facilitate the researcher's analysis of the data and should address the research questions. Researchers use data reduction to modify, condense, and present data in a more readable manner (Mezmir, 2020).

Focus coding was the coding technique employed, and the study found the most important or common codes using this strategy. This approach made it possible for the researchers to comprehend how the study's categories and subcategories relate to one another. Creating codes that encourage further in-depth analysis of the data is known as "coding" the data (Miles et al., 2014). The difficulties in managing the reading class, the variety of digital technology utilized in the class, the incorporation of artificial intelligence in the reading class, and the opinions of the teacher regarding the use of AI in the reading class were all taken into account when coding the data.

To answer the study questions, the data was analyzed in accordance with the coding procedure. The analysis adheres to the qualitative data analysis process, which aims to crystallize the findings and enhance comprehension of the subject matter. The codes may transform the data into categories (Rivas, 2012). The analysis was conducted by taking into account the pedagogical and technological components of teaching reading.

This study takes into account four main factors. First, there are differing opinions among teachers regarding the use of digital technology, particularly artificial intelligence, in reading instruction. According to the findings, the majority of junior high school English teachers are still hesitant to use artificial intelligence in the classroom. Many of them encounter difficulties when attempting to use artificial intelligence to assist the class. According to the

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professors, they are still learning a lot about artificial intelligence, and it is a novel concept for them to handle. Teachers are facilitated with lack of teaching materials and the implementation of artificial intelligence (Lindner & Romeike, 2019). Teachers often feel too tired to learn on their own and help pupils with the right artificial intelligence because of the vast array of applications and platforms available from AI.

Additionally, the teaching administration is supported when artificial intelligence is used during the preparatory stage of language acquisition. Teachers have access to more advanced administrative functions, like monitoring students' progress and conducting more individualized instruction based on their diverse learning requirements and styles. The learning monitoring for the students can be done in more real time by the teacher (Luo, 2021)so the students can select their own learning path in reading through free artificial intelligence. Free artificial intelligence learning resources encourage the use of more efficient language practice, vocabulary development for more thorough learning, and more independent study outside of the classroom.

But given the lack of proficiency in artificial intelligence, educators require additional training to bridge this gap. To support the requirement for continuous training to actively encourage instructors to use artificial intelligence into their teaching practices, more professional development should be carried out. The workshops may take the kind of in-depth instruction on how to apply AI to a particular field or course of study. The workshops' instruction helps teachers practice effectively and reduces errors or mistakes during implementation. More chances for teachers to advance their technical proficiency are therefore required in order to supplement their pedagogical and subject-matter expertise.

Additionally, it is thought that the usage of artificial intelligence may affect how students and teachers interact. Students are more independent because artificial intelligence allows for more autonomous learning while also meeting their needs. Instead of engaging in meaningful conversations, they might merely engage in phatic speech. The kids' acquisition of the language depends on meaningful communication. It appears that independent learning is well-structured to provide children more purpose and aid in their language development.

The ethical issues are the most difficult part of putting artificial intelligence into practice. The development of students' critical thinking skills is essential and calls for more practice than relying on artificial intelligence to solve students' problems directly. To assess the data produced by artificial intelligence, either the instructor or the pupils should hone their critical thinking skills. The mastery of critical thinking skills support the students to gather more reliable information and distinguish the hoax (Rusandi et al., 2023). This is because artificial intelligence uses the internet to retrieve information that ordinary people with less expertise in the topic might share.

Second, using artificial intelligence in digital learning materials provides multimodality to help students comprehend what they are reading more fully. In the context of teaching English, multimodality refers to the utilization of multiple forms of representation and communication, including texts, audio, images, and videos. Through visual learning, students are given personalized learning materials through the use of images and movies. They expand on the information that the texts are unable to provide. Multimodalities offer auditory, visual, kinesthetic and linguistic modes of learning (Lee et al., 2023). Students can also benefit from more interactive learning resources when multimodal modalities are used. More interactive exercises with numerous modes can be created by the teachers. This also includes using a variety of applications to help students with speaking exercises and to give them visual feedback in the form of scores and graphs.

Additionally, kids might learn more contextually when multimodalities are available during reading instruction. It is widely accepted that using multimodality to depict language in context through real-world images and videos is possible. Artificial intelligence facilitates the

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students to have virtual-learning environments (Lee, 2024). Based on the kids' interests and cultural background, this might help illustrate vocabulary and other topics to provide them with more accurate information. Students receive more pertinent instruction when there are more contextual learning resources and activities available.

In order to meet a variety of needs, artificial intelligence is being used to distribute translations, transcriptions, and alternative forms in relation to autonomous learning. Foreign language learners typically translate their reading comprehension process first into the target language. Students' reading comprehension can be improved by offering translation and other options. To identify the challenging words in the text, students do not need to use their dictionary again.

Additionally, the multimodality that artificial intelligence provides might improve students' learning engagement. In order to keep students interested in their studies, artificial intelligence gives them the chance to mix activities like storytelling through podcasts, films, and more interactive tests. Students are free to engage in any activities and modalities that help them reach their learning goals. interactive tests. Students' learning achievement is positively impacted by the utilization of interactive quizzes (Purba, 2020). It has been demonstrated that using interactive quizzes encourages students to study more creatively and to compete in an engaging way (Zainuddin et al., 2020). The development of multimodal semiotic awareness is the first step toward multimodality in digital reading. The ability to fully understand not only written and spoken language but other semiotic modalities, such as interactivity, is known as multimodal semiotic awareness (Lim, 2020).

The final discovery focuses on the method used to incorporate artificial intelligence into reading instruction. It is common knowledge that using artificial intelligence to teach reading calls for a formula in order to achieve the objectives of media implementation. Teachers find it difficult to organize the learning that artificial intelligence facilitates. According to Nugrahawati (2024), teachers can profit from artificial intelligence by offering more individualized learning styles, preferences, instructional content, and activities. In order to collect more reading experiences, artificial intelligence provides more dynamic and captivating reading activities. Thus, reading instruction gives teachers additional data and insightful knowledge about the behaviors, comprehension, and learning objectives of their students. Teachers may create more dynamic lessons and open up new learning opportunities by utilizing data-driven insights and accessibility.

Since artificial intelligence allows teachers to articulate structural and procedural mechanisms concerning human learning, its application alters teaching methodologies to meet objectives. Problem solving, planning, knowledge representation, and text comprehension are all aspects of human learning that computers can perform (Brown et al., 1978). Therefore, the teaching tactics should help the students learn the material by using content-independent strategies.

The results of the study demonstrate that inventive, instructive, critical, and critical teaching tactics are necessary to encourage the adoption of artificial intelligence. According to Jimenez et al. (2023), the instructional tactics must foster students' critical thinking, communication, teamwork, and self-regulated learning. Critical thinking abilities are necessary to address potential issues with machine learning algorithms that may develop biases. It is appropriate to critique these biases since they perpetuate prejudices and stereotypes. Students with critical thinking abilities are able to assess their artificial intelligence-based learning activities critically. It also covers reasoning abilities that may be demonstrated by looking at how students behave and interact (Zhai et al., 2021).

Students can choose the best learning organization depending on their response when more individualized learning is implemented in the reading class. The teacher is able to score the pupils' work because artificial intelligence provides them with immediate feedback based

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on their input. Conversely, adaptive learning offers automated correction systems that are tailored to the demands, characteristics, and educational objectives of the pupils (Zhai et al., 2021). By using proximal instructional materials, adaptive intelligence improves automatic learning.

The final discovery relates to artificial intelligence and how it might help teachers prepare for teaching reading. An innovative approach to working with students, beginning with preparation, is provided by artificial intelligence. More effective assessment tools can be obtained by personalizing the learning process, including the planning (Patrik et al., 2024). Using needs and challenges, artificial intelligence creates more individualized instructional plans. This could result in the creation of educational materials like worksheets and activities. For the finest preparation of their lessons, this can undoubtedly free up the teachers' time to work on other subjects.

Examining the lesson plan and a sample work scheme is the first step in the artificial intelligence lesson planning process. Teachers must examine the opportunities and challenges of implementing artificial intelligence as a teaching revolution (Kehoe, 2023). Notwithstanding the difficulties the instructor may encounter when implementing To produce more applicable and suitable instructional decisions, teachers' knowledge and expertise should be added to the information gleaned via artificial intelligence.

In terms of the students' vocabulary proficiency, the reading instruction in technologically augmented classes varies. Vocabulary instruction cannot be separated from the use of text-to-self and technologically augmented training (Yanga et al., 2018). Through their existing vocabulary expertise, the kids pick up new words and relate them to their own experiences. For learning to be more meaningful, vocabulary training should be taken into account when teaching reading.

The artificial intelligence specification that is employed may support various reading instruction methods. For instance, using ChatGPT can help with the pre-reading phase of the procedure. The students come up with ideas for the texts' topics during the pre-reading phase. This aids in the development of reading comprehension and reading common ground among the students. The students' reading stage may then be aided by the usage of Quillbolt and Paraphraser.io (Rahman & Nor, 2024). Through its thesaurus, pupils can access texts and learn how to comprehend them. Last but not least, during the post-reading phase, students can utilize ChatGPT to expand and enhance their comprehension of the potential future reading.

The internet and computer technology are two more important factors that the instructor should take into account while integrating artificial intelligence in the classroom. According to the study's observations and interviews, a large number of junior high school teachers forbid their students from bringing or using cell phones, and the availability of computers appears to be incomplete. Computer labs are frequently used for computer-related courses or even as test-taking facilities. Seldom do the pupils use computers and internet access to help them learn English. As a result of their everyday actions for amusement, kids are familiar with the internet and all of its facets. The sufficient technological facilities during the teaching of reading requires funding for supplementary support.

CONCLUSION AND RECOMMENDATION

Through a case study on the usage of technology-enhanced reading classes from the viewpoints of the teachers, this study identifies the current state of ELT. Among the findings are the teacher's opinions regarding the employment of technology in the reading class, the multimodality provided by digital texts, the incorporation of artificial intelligence into the reading instruction, and the artificial intelligence-based reading lesson plan. It is necessary to

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take into account the usage of artificial intelligence as technology-enhanced reading learning materials because it presents both potential and obstacles. To strengthen the conclusions, more research on the use of AI in reading instruction across grade levels and contexts should be examined.

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