

Teaching Reading Skills in Digital Classes: A Case Study at an Islamic Secondary School

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Abstract

This study aims to investigate the effectiveness of digital classrooms in English teaching, more specifically in developing students' reading skills of English language instruction at an Islamic secondary high school in Surakarta City. In this study the researcher examines how digital media supports English language learning, especially in the reading domain and its role in developing students' vocabulary knowledge, sentence-level comprehension. The study adopted mixed-methods case study design. Participants included students who attended two digital class sessions and one teacher responsible for instructional delivery. The data were collected from students' performance on multiple-choice comprehension tests based on the topic from English reading material, and from an in depth interview with the teacher. Quantitative data were obtained from one topic with two assessments and were thematically analyzed to contextualize instructional strategies and challenges in digital learning. The integration of quantitative and qualitative findings enabled triangulation and provided an understanding of how digital media supports English language learning. This study contributes to the literature on educational technology, by documenting how English digital classroom programs are implemented in Islamic secondary schools. Practically the research provided insights for teacher training, curriculum development, and afforded the researcher substantive experience across all stages of the research process.

Introduction

Since the COVID-19 pandemic quickened the adoption of digital technologies in English language learning, reshaping teaching and learning practices in secondary schools (Izati et al., 2021). For learners of English as a second language, limited early exposure makes vocabulary knowledge, sentence-level processing, and reading fluency critical for comprehending texts. Although digital media offer interactive, and multimodal resources that can broaden cognitive stimulation through multimedia features, its effectiveness in improving reading skills requires further investigation (Cavanaugh et al., 2016). Digital classrooms introduce a range of tools that may enhance students' learning experiences. However, despite these advantages, many secondary high school students continue to face challenges in reading comprehension, an essential skill for academic success and lifelong learning (Tugo & Tabernilla, 2023). Reading literacy remains a foundational skill, especially in second-language contexts where students must navigate complex texts and unfamiliar vocabulary. The integration of digital classes offers a promising avenue to enhance reading skills. Digital platforms provide interactive, multimodal resources that can adapt to individual learning needs, making English reading instruction more accessible. The reliability and effectivity of digital media in conveying information, especially by offering diverse content formats, instant feedback, and personalized learning paths, digital classes can bridge gaps in comprehension and foster deeper engagement with English texts. As a result from (Brata et al., 2021), digital classrooms are shown to promote learner autonomy and improve learning outcomes. In the digital class, students able to learn a subject material they need in real-time and from anywhere. Previous studies have demonstrated that although digital classrooms provide innovative tools for reading instruction, persistent challenges remain regarding student engagement and the credibility of their responses (Izati et al., 2021)). Despite the transformative potential of digital technology in education, a notable pedagogical gap persists in the effective teaching of reading skills within digital environments. While digital platforms afford access to diverse English texts, adaptive learning pathways, and real-time feedback, student behavior often parallels that observed in traditional classrooms reliant on blackboards.

Based on previous study, there are also some issues with English reading skills. As discussed by (Tugo & Tabernilla, 2023), Grade 7 students demonstrated a lower baseline in English reading comprehension. A condition associated with socio-economic constraints, limited household access to paper and digital materials, lower parental level deficits are especially designed and implemented to support reading instruction. Therefore, this study aims to examine students' English reading instruction at an Islamic secondary high school in Surakarta City. Specifically, it examines the extent to which digital

classes support vocabulary development, and reading fluency, and explores teachers' perceptions of the affordances. By integrating quantitative data on student performance with qualitative data of observation, and teacher insights from interviews. The research aims to provide empirical and conceptual guidance for designing effective digital literacy instruction in secondary English contexts.

Method

Design and Participants

This research utilizes a qualitative case study design integrating quantitative findings to enable and clarify how digital media supports English language learning. According to (Creswell et al., 2007) case studies focus on a problem related to a case (individual, several individuals, program, or activity) selected to provide insight into that problem. The relevance of case studies to real-life situations has two important aspects. First, they help develop insight into reality. Second, case studies contribute central function in the learning process by fostering the skills required to conduct systematic research. In this context, social science offers limited predictive theories with high probability; instead, it provides concrete knowledge that fundamentally depends on context, as stated by (Flyvbjerg, 2006)). In this study, the researcher will apply purposive sampling. Within a qualitative approach, researchers do not use random sampling and large populations; instead, they select participants based on their representation of the study's objectives, as stated (Drs. Anas Salahudin, 2015). The sample will be taken from 23 students in Grade 7 at one of the Islamic secondary high schools in Surakarta City. The materials used include pictures and paragraphs describing place topics. In this study, the researcher tried not to disrupt the class schedule, ensured that classes had received the material from the previous meeting.

Research Subject

In this research, participants were students enrolled in the Grade seventh English class at an Islamic secondary high school in Surakarta City. The English teacher criteria should be to have experience in English teaching two years experience or more. The teacher teaches a seventh grade secondary high school at one of Islamic secondary schools in Surakarta City. The teacher will use "describing place" as a topic but still within the scope of English Reading material.

Research Instrument

The research instruments are interview, observation, and document. First the researchers will interview with the English teacher of a seventh grade of Islamic secondary school in Surakarta City. Second, the researchers conducted observations and use note-taking. The study used participant observation, with the researcher participating in both digital and conventional English reading classes. In this instruments section, the researchers collected data on English reading instruction on the topic of "describing places," using assessment scores from one conventional class meeting and two digital class meetings.

Data Collection Techniques

The researcher will conduct observations. During data collection, the researcher will use notes to support the process of collecting reading activities in both conventional and digital classrooms. The researcher will not change the existing sessions at the school and will observe the students from a distance behind them. The researcher will also observe classroom conditions during reading activities. Interviews will be conducted the day before the assessment to determine the relevance of all aspects of learning. Researchers will interview the teachers in charge and ask about their experiences with activities in both digital and conventional classrooms. Interviews are conducted to obtain further information and explanations regarding the condition of students in the classroom and the effectiveness of learning. The interviews will be semi-structured with open-ended questions. The questions in the semi-structured interview can be adjusted by the interviewer during the interview process even though the questions have been formatted in advance. The result by the teacher is based on general information from the digital class in that school. Based on interviews regarding new findings, studies often produce unexpected or unpredictable results, as stated by (Fetters & Tajima, 2022).

Data Analysis Techniques

Observation data will be collected and analyzed manually to find descriptive explanations for each piece of data. For numerical data, the researcher will use quantitative data analysis to compute variables and find the average assessment score using IBM SPSS software. (Jain & Sengar, 2024) investigated IBM SPSS, and found that its preference for SPSS over mathematical tools for data analysis further highlights the effectiveness and ease of use of this software. Researchers organized the data into a systematic format described below by topics that mostly originate from literature research and new topics. Document analysis was used as part of the member verification process to maintain validity, enhance the study's credibility. The analysis also integrates teachers' perceptions from the interview results. This teacher is responsible for digital and conventional classes, specifically in English reading classes. This will be conducted during three English reading

assessment meetings on the topic of describing place. The details of the meetings are as follows: one conventional class meeting and two digital classes in offline and online formats. This is to find out the students' opinions on all aspects of learning.

Findings and Discussion

From the interview, the teacher explained his perception of digital classrooms in reading activities. There are two types of digital classrooms: offline and online. Offline digital classrooms took place at the school in on site classrooms. The school provided devices so students could access digital materials during these sessions. In offline digital classrooms, teachers deliver material directly and then provide instructions related to the devices that students will use during the learning process. For example, students access material through videos that have been shared via Google Drive or Google Classroom and as a medium for uploading the results of assignments that have been completed. In addition, teachers also use software such as Quizizz to provide practice questions to students. Online digital classes mean that digital learning is conducted online outside the school environment. Learning in digital classes using this system is carried out in certain situations. Examples include during Covid-19, which required students to study from home, or when the school held a study tour for Year 9, with Years 7 and 8 staying behind because many teachers were accompanying Year 9 on the study tour. Another reason is when the school environment is used for events by local residents or the government. The online digital class learning process is carried out according to the subject hours in the schedule, as usual during face-to-face learning. In addition to academic instruction, students participate in school activities from arrival until dismissal, including the Duha salah, Quran recitation, the Dhuhr and Asr salah. In addition, this learning process involves direct cooperation with parents to monitor students during the learning process. Online Digital class English instruction used platforms such as Zoom, Google Meet, Google Classroom, WhatsApp groups, and Quizizz to deliver practice items of students understanding and formative assessments. To deliver the material, teachers use videos that they have prepared. Students are given assignments through videos, and then they use Google Drive or Google Classroom as a medium to upload the results of the assignments they have completed. The teacher argued that offline digital classes based in school are more effective, noting that teachers find formats ineffective because they cannot observe students and assess their understanding during online distance learning. This is in line with the statement made by the teacher in charge of the class, from whom the researcher obtained data from the online digital class assessment. The third meeting, there were several empty score columns because the students did not complete the assessment, as seen in [Table 1](#).

Table 1. Formative Assessment.

Description:

M1 : Meet 1
DM 2 : Digital Meet 2
DM 3 : Digital Meet 3

No	NAME	M1	DM2	DM3	AVERAGE
1.	AHN	80	95	96	90.33
2.	FAP	80	96	0	58.67
3.	HTP	88	75	90	84.33
4.	MAD	100	85	94	93.00

5.	MAAH	90	95	94	93.00
6.	MRA	88	75	93	85.33
7.	RWK	88	90	94	90.67
8.	SBR	90	75	96	87.00
9.	MSS	86	75	92	84.33
10.	AKR	83	80	92	85.00
11.	AQP	75	86	95	85.33
12.	AGA	90	100	96	95.33
13.	CAP	88	100	95	94.33
14.	MA	90	75	95	86.67
15.	NSK	88	100	94	94.00
16.	NSLA	80	98	93	90.33
17.	NSC	88	75	94	85.67
18.	NSH	90	100	95	95.00
19.	NCR	95	100	0	65.00
20.	NPA	90	90	94	91.33
21.	RAPP	90	100	0	63.33
22.	ZAN	88	85	0	57.67

According to Tugo & Tabernilla, (2023) teachers and parents must work together to help students overcome problems in reading comprehension. This means that parents as the ones responsible for their children, must be aware of and able to monitor their children's growth and development, especially in terms of literacy skills at secondary school level.

(Wayan Arsana et al., 2022) described a training program for teachers at Islamic High School, in Sidoarjo, on how to use Quizizz. The research design consisted of training and workshops, with instruments in the form of presentations and guidance sessions, as well as descriptive data analysis based on the training results. It highlighted the creativity of teachers in using the platform. As stated by (Kirani & Nuroh, 2025), integration of digital media in the learning process makes teachers more creative in designing or preparing themes or topics using digital media.

The researchers found that this condition was also in line with what was conveyed by English teachers as respondents to the question, "Does the digital platform commonly used in school-based digital classrooms have a positive impact on teachers and students? In fact, Quizizz has many useful tools to support the delivery and assessment of material, and teachers are able to make more varied learning experiences, making this learning media more attractive to students than conventional learning media." She also admitted that she often received a lot of positive feedback from her students when conducting digital classes at school using the Quizizz platform. As an example, the application of Quizizz here is during formative assessment. From observations of digital classes in schools, the researcher found that many students were enthusiastic. As discussed by (Nurjanah et al., 2025), the adoption of digital tools has the potential to generate a more interactive, engaging, and flexible learning environment. This could be seen when, after the assessment using Quizizz, many students came to the front of the class to see the highest scores displayed on the LCD projector. The leaderboard feature allowed students and teachers to view the highest scores in real time. According to (Kaur Swaran Singh et al., 2020) mobile applications provide several features that support students' learning. These include instant messaging, audio recorder, storage, the employ of videos and photos by default, and the ability to attach and edit icons. This visibility made it easier for teachers to record scores and from the students' perspective, this motivated them to strive for the highest ranks among their peers, thereby encouraging them to study the material diligently. This can be seen in [Table 1](#), column DM 2.

According to (Elisa Ayu Ningsih & Nurmalia Sari, 2021) their research highlights that both students and teachers view technology integration as beneficial, but a lack of confidence among educators remains a significant barrier to effective implementation. This is also reflected in the responses of teachers who participated in the study when asked, "What difficulties did you encounter when using this digital platform? At first, it was difficult and complicated to use the various tools available to make learning media, but with effort and perseverance, it is now easy to use this platform," said an English teacher who participated in the study. From observations of digital classes in schools, the researcher found that many students were enthusiastic. (Nurjanah et al., 2025), according to their discussion "the adoption of digital tools has the potential to design a more interactive, engaging, and flexible learning environment." Frequency analysis was conducted using IBM SPSS by comparing the first meeting in the conventional class with the second meeting in the digital class at the school. The comparison of scores show that 12 of 22 students (54.5%) scored higher in the digital-based meeting (Meet 2). Nine students (40.9%) scored higher in the conventional meeting (Meet 1), and one student (4.5%) had the same score in both meetings, as seen in [Table 2](#). These findings indicate a tendency for higher scores in the digital session, but need to be supplemented with descriptive analysis and paired tests to assess the significance and magnitude of the effect. As discussed by (Manalu, 2019), these values align with students' tendency to prefer and show greater interest in digital texts rather than paper texts.

Table 2. Frequency, Statistics Analysis,.

Statistics			Winner			
Winner			Frequency		Percent	Cumulative
N	Valid	22			Valid Percent	Percent
	Missing	0				
Mean		1.50				
Median		2.00				
Mode		2				
Std. Deviation		.598				
Minimum		0				
Maximum		2				

Valid	0	1	4.5	4.5	4.5
	1	9	40.9	40.9	45.5
	2	12	54.5	54.5	100.0
	Total	22	100.0	100.0	

In interviews with English teachers, researchers also found that the strategies used in the learning model employed by teachers during digital classes at school. When asked about this, teachers stated that "During digital classes, we as teachers only act as facilitators. We use the Student Centered Learning model. Before this learning takes place, students are given basic knowledge related to the topic that will be discussed in this digital class, and then we only provide basic instructions on what to do in this session. Then, based on these instructions, students will continue on their own but with the guidance of teachers who act only as facilitators." In this case, the student-centered approach focuses on students and has a philosophy that recognizes that each student has unique potential, interests, and learning styles, as discussed by (Darmayanti, 2023). This results align with those reported was found by researchers in the previous discussion, where students became very enthusiastic in responding to learning. This shows that the student-centered approach is indeed successful in encouraging students' interest in learning without neglecting interactive learning tools to support this aspect.

During classroom observations, researchers found differences in student attitudes during digital classes. Compared to conventional classes, students were more enthusiastic about understanding reading texts on the topic of describing places. There, students were seen to frequently ask the teacher about vocabulary they did not know, and this was certainly good for improving their understanding of new vocabulary. (Zhang et al., 2024) investigated the effect of effort expectancy in digital reading behavior of secondary high school students and found that effort expectancy directly and positively influenced secondary high school students' intention to read digitally and indirectly positive influenced their behavior through the mediation of intention. (Risa Arisca, n.d.) Based on her investigation, she stated that learning with digital texts effectively support reading-skill development. In addition to providing various features, digital texts also provide many resources and can make students' reading activities more practical.

Researchers found that in conventional classrooms, students tended to be inactive in exploring topics related to describing places in English reading instruction and were often prompted by teachers during the learning process. In its application in conventional classroom meetings, it was confirmed that teachers used a student-centered learning (SCL) approach. According to (Olana & Amante, 2017), the SCL approach aims to give students greater responsibility and enable them to think, process, analyze, synthesize, critique, apply, and solve problems. Students' responses showed a passive classroom environment, unlike seen in digital classrooms in previous discussion. For example, when correcting assessment questions, the teacher waited for answers from the students. The teacher repeated the question twice: "Can you describe the color of that building?" Because no one student was given an answer the teacher called many of the students by name but it took more time then finally one of them answered the question. This was different from the implementation of digital classrooms in schools. When correcting assessment questions, students are very active in participating in answering questions before the teacher mentions and shows the answers to the questions through the digital platform. (Tulung et al., 2020), reveals that a student-centered approach encourages students to be more active, engaging in activities such as speaking, calculating, conducting experiments, writing, and making videos and web-based materials, but also in thinking and shaping their own learning processes.

Conclusion

Based on the results of the study, students learned English reading using two classroom models, namely conventional classrooms and digital classrooms. From the findings obtained during the study, students at an Islamic secondary high school in Surakarta learned using a student-centered learning approach. They enjoyed attending lessons from start to finish in digital classrooms, but in conventional classrooms they tended to be passive in the English reading learning process. At school, apart from studying, they still perform their prayers and read the Quran diligently and disciplined. During the learning process, students who learn using a student-centered learning approach show interest, attention, and are active in the learning process, but only in digital classes at school.

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