

From Digital Tools to Pedagogical Orchestration: English Teachers' Practices under Indonesia's Independent Curriculum

Susi Susanti¹

¹English Language Education Department, Faculty of Tarbiyah and Teacher Training, Universitas Islam Negeri Antasari Banjarmasin, Indonesia
(susisafiin77@gmail.com)

Hidayah Nor^{2*}

²English Language Education Department, Faculty of Tarbiyah and Teacher Training, Universitas Islam Negeri Antasari Banjarmasin
(hidayahnor@uin-antasari.ac.id)

Saadillah³

³English Language Education Department, Faculty of Tarbiyah and Teacher Training, Universitas Islam Negeri Antasari Banjarmasin
(saadillaelhady302@gmail.com)

*corresponding author

Abstract: *The rapid advancement of digital technology, combined with shifts in curriculum policy following the COVID-19 pandemic, has significantly transformed the learning landscape in Indonesia. In particular, the government's introduction of the Independent Curriculum, which focused on student-centered learning and technology integration, marks a major step toward modernizing education. This research deals with the use of digital learning materials in English classrooms and the difficulties encountered by teachers. This research was conducted at SMP Negeri 6 Banjarmasin and MAN Tanah Bumbu with a case study approach. Data were collected through interviews with English teachers, document analysis, and classroom observations. The results show that teachers are using a variety of digital tools, such as Word Wall, Quizizz, YouTube, and PowerPoint, and AI tools such as Gemini and ChatGPT. These resources allow for more interactive instruction, more testing, and observed opportunities for participation or teachers' perceptions. The study highlighted some of the educational challenges, including poor classroom infrastructure, unequal access to digital devices among students, poor internet connectivity, and poor teacher preparation. In conclusion, while digital media offer promising opportunities to enrich English language teaching within the Independent Curriculum framework, their full potential is still hindered by technical, infrastructural, and pedagogical barriers. This research provides practical insights into the realities of integrating digital learning in schools and offers recommendations to strengthen digital infrastructure and support teacher development.*

Keywords: *Digital Tools; English Language Teaching; Independent Curriculum*

Article History:

Received : 20 April 2026

Accepted : 30 September 2026

Revised : 26 February 2026

Available Online : 30 September 2026



Suggested Citation Format:

Susanti, S., Nor, H., & Saadillah. (2026). From Digital Tools to Pedagogical Orchestration: English Teachers' Practices under Indonesia's Independent Curriculum. *PANYONARA: Journal of English Education*, 8(2), 297–330. <https://doi.org/10.19105/panyonara.v8i2.24378>.

INTRODUCTION

As part of Indonesia's learning recovery efforts after the COVID-19 pandemic, the Ministry of Education, Culture, Research, and Technology has launched the Independent Curriculum through the Ministerial Decree No. 56/M/2022. The curriculum was introduced gradually, beginning with the 2022/2023 academic year, allowing schools to adopt it at their own pace of readiness rather than it being implemented immediately across the country. This policy was implemented during a period of educational recovery when schools were grappling with the effects of learning loss, educational disparities, and socio-emotional challenges of students due to prolonged disruptions in learning. The independent curriculum was introduced as an important aspect of the national learning recovery agenda to allow schools and teachers more flexibility in organising learning activities, to reinforce competency-based instruction, to highlight essential learning outcomes, and to cater to students' varied interests, talents, and learning needs. In addition, the curriculum encourages project-based learning through the *Projek Penguatan Profil Pelajar Pancasila* (P5) to develop critical thinking, creativity, collaboration, independence, and character. Hence, the Independent Curriculum is a strategic educational reform to support the long-term improvement of the quality of education in Indonesia through providing more adaptive, student-centred, and meaningful learning experiences (Kemendikbudristek, 2022; Sufyadi et al., 2021). It was developed as a curriculum framework, and it is more flexible, focuses on basic material, and develops students' uniqueness and abilities.

Teachers are at the core of curriculum design and delivery. This is especially true of the Independent Curriculum which is based on a flexible model of learning, enabled by technology, with the learner at its centre. Thus, teachers are expected to provide meaningful learning experiences through digital technology and learning platforms to engage students in active and collaborative to have innovation and critical thinking skills (Hayati & Herawati, 2022). Teachers are essential to the development and delivery of curricula. The Independent Curriculum is a flexible, technology-enabled, learner-centred model of learning. Therefore, teachers need to be creative in creating meaningful learning experiences with digital technology and learning platforms to facilitate active learning and collaborative learning of students, as well as develop innovation and critical thinking skills (Hayati & Herawati, 2022). Teachers also create and adapt learning resources, digital resources, and assessment practices to support curriculum goals and students' learning needs. Therefore, the competence of digital pedagogical skills is important for the application of the principles of the Independent Curriculum in effective classroom practices

so that learners can utilize various learning media and develop competencies in the digital era.

All tools, technology, and resources used to facilitate the process of information delivery and the process of teaching and learning are called learning media. Learning media is a tool to mediate the instructional messages by the teacher to the students in order to make the learners understand and be involved in the learning process (Azhar Arsyad, 2017). These learning media, in turn, act as pedagogical supports that allow students to acquire knowledge, develop skills, and construct meaningful learning experiences. With the advancement of digital technology, it has become increasingly popular to use a variety of learning media in the field of education, including interactive digital platforms, videos, photos, presentation slides, and audio resources (Hasan et al., 2021). The careful selection and integration of these media can help facilitate effective learning by making learning content more accessible, interesting, and relevant to students' needs.

Digital technologies refer to the use of electronic devices and networked systems to generate, store, process, and communicate digital information. It includes a wide range of internet-based applications, hardware, software and communication technologies that enable knowledge generation and information sharing (Bond et al., 2020). Digital technology has revolutionized education with more interactive, flexible and learner-centered methods of teaching. During the COVID-19 pandemic, educational institutions heavily relied on digital platforms to enable learning which was very clear at that time. Indeed, there is a worldwide movement to return to the classroom, but digital technology remains vital to contemporary education, especially in the Independent Curriculum, which encourages the use of technology to enhance learning. Digital learning media such as videos, interactive presentations, learning management systems, and educational applications can deliver the instructional content in more accessible and dynamic forms to enhance the students' motivation, engagement, and opportunities of active learning.

Digital learning media in English Language Teaching is a tool and platform based on instructional technology to improve language learning by integrating multimedia resources, interactive activities, and online communication in the educational process. Digital learning media are not only channels of delivering information but also tools that enhance learners' communicative competence through authentic language input, immediate feedback and substantial interaction. Instructional videos, interactive presentations, learning management systems, educational applications and collaborative platforms can help students improve their listening, speaking, reading and writing skills in more engaging and contextualised learning environments. Second, digital learning media allow the teacher to implement differentiated learning, monitor the students' academic development, and facilitate collaboration among students by sharing content, discussion forums, and co-editing documents (Hendra et al., 2023). These technologies support the implementation of the Independent Curriculum to encourage student-centered learning, learner

independence, critical thinking, digital literacy, and active participation which are considered important skills for learning English in the digital age.

Recent studies show that digital learning media are gradually changing from traditional presentation tools to interactive and intelligent technologies for active learning. Educational video platforms, gamification and artificial intelligence (AI) were recognised as popular recent digital learning media with the potential to enhance student engagement and offer personalised learning experiences (Setyawati et al., 2024). Prastyo et al. (2024) noted the increasing use of AI-based tools like Co-pilot, Gemini, and Chatbot for lesson preparation, content generation, feedback, and personalised education. These studies focus on the new AI technologies. However, Hafizah (2023) gives a broader view that for the successful implementation of digital learning in the context of the Independent Curriculum, multimedia and immersive technologies such as digital videos, podcasts, AR, VR, educational games, interactive e-modules, and presentation software are also needed. Results showed that the effectiveness of digital learning media is not only technology dependent but also technology integrated meaningfully to promote student-centred learning, increase learner involvement and develop language competencies. In other words, the selection of digital learning media for teaching English must be grounded on pedagogical objectives and students' needs, not on the novelty of technology.

The Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia introduced the Independent Curriculum as part of the learning recovery strategy of the Republic of Indonesia after the COVID-19 pandemic. The curriculum, adopted voluntarily during the 2022-2023 school year, is intended to be flexible and student-centred, giving teachers the freedom to tailor instructional materials and activities to their students and learning environments. It also encourages the use of digital technology and collaborative learning communities to enhance the quality of teaching and to foster the sharing of knowledge between students and teachers. These notions are stipulated in the Ministerial Decree No. 56/M/2022 and its executive directives, where the digital technology constitutes an important element in the process of teaching in a creative and differentiated manner. Based on these policy directions, some characteristics of Independent Curriculum have been stated by Riyan Rizaldi and Fatimah (2022), such as more flexible implementation, more focus on core competencies, and project-based learning as a way to develop Pancasila Student Profile. Features like these underscore the significance of digital learning resources in promoting students' autonomy, individualized instruction, collaborative communication, and authentic language use in the context of English teaching. Therefore, for the successful implementation of the Independent Curriculum in ELT, the ability of the instructors to select and use suitable digital tools to improve the students' English language proficiency is as important as the curriculum flexibility.

Hasan et al., (2021) pointed out a three-stage approach to using learning media namely Preparation; teachers prepare to use learning media by developing lesson

plans as usual, reviewing instructional manuals or supplementary materials, and organizing and checking equipment to ensure smooth execution and clear visibility and audibility for students. Implementation/presentation; during teaching, teachers should ensure all media and tools are ready, clearly communicate the learning objectives, explain student responsibilities during the session, and minimize distractions to maintain student focus. Follow-up; these activities consolidate student understanding and assess learning effectiveness. Methods may include discussions, experiments, observations, practice exercises, or tests.

Previous research has suggested that the success of digital learning in English language teaching is not only about the availability of digital tools but also about the pedagogical competence of teachers to embed these tools in meaningful learning activities. For example, Santika et al. (2023) revealed that teachers who strategically used digital resources to teach narrative writing could raise students' engagement, help them grasp the topics, and assess learning through interactive classroom communication. These results are consistent with previous research indicating that digital media can support active engagement and collaborative learning when integrated with instructional goals rather than being merely technological add-ons. Nevertheless, the current literature has mostly been centred on the application of some digital tools or the positive experience in the classroom without much concern to teachers' perceptions, the selection, and integration of the different digital learning media based on the Independent Curriculum framework. This gap is especially pertinent to English Language Teaching, where teachers are expected to balance the language learning objectives and the technology-enhanced pedagogical practices. This study builds on the previous research by exploring English teachers' opinions on the use of digital learning resources in the context of the Independent Curriculum. It provides information about the advantages and challenges of integrating technology into contemporary English language teaching (ELT) classrooms.

Several challenges were faced by teachers who taught English using digital media, according to Salam et al. (2023). The challenges are as follows: lack of fluency with digital media, challenges in preparation of lesson plans, lack of technical abilities, and lack of technological expertise. Although they had used digital media for teaching English before, EFL teachers' lack of technological skill made it difficult to conduct online digital learning activities, such as insufficient time and student discipline. The difficulties were exacerbated by the limited availability and consistency of internet connections, the spread of digital devices, and the availability of training and learning materials. Additionally, Rintaningrum, (2023) explained that despite some benefits of modern technology integration in English language teaching and learning, some challenges or obstacles concerning learning English through technology are stated as follows; type of technology, class size, cost, access, time, lecturer's load, age, ability, availability, number of classes taught, and rapid development of technology. Meanwhile, Setyawati et al., (2024) identified several challenges in the use of

digital media for learning, which include; teacher adaptation to technology, mastery of digital media, human resource (HR) skill in the digital era, technical and financial constraints. Furthermore, Paling et al., (2024) pointed out several challenges in using the internet for learning in the digital age; inequitable access, limited digital literacy, distraction and misuse.

Previous studies have found that teachers' ability to adapt instructional strategies to students' learning needs is essential to the successful implementation of the Independent Curriculum in teaching English. Wilson and Nurkhamidah (2023) found out the variation of students' English proficiency made the teachers design more flexible teaching techniques and modify the learning materials to suit the context. Their study was not specifically about digital learning media. However, the results of their research emphasized the importance of the selection of adequate pedagogical material to the needs of different learner abilities. This is achieved through the Independent Curriculum, where digital learning media can facilitate this adaptive approach by allowing teachers to provide a variety of learning resources, interactive language activities, and immediate feedback based on the learners' levels of English proficiency. Therefore, the present study highlights the pedagogical importance of flexible teaching practices that can be effectively enabled by the meaningful integration of digital learning media in the English language class.

Studies with pedagogically relevant instruction demonstrate the potential of digital learning media for the better acquisition of the English language. For instance, Simanjuntak et al. (2021) documented that YouTube provides authentic audio-visual input which improves learners' listening comprehension, vocabulary and engagement, and subsequently leads to language acquisition. Duolingo can motivate students and practice the language independently through interactive and gamified learning activities (Fauzan & Kasim, 2020). The studies, although different in terms of digital platforms reach a similar conclusion that the educational benefit of digital learning media is not in the technology per se, but in the active involvement, learner autonomy and continuous language practice it brings. However, the two studies mainly focus on the effectiveness of individual digital applications and do not pay attention to how English teachers choose, integrate and perceive various digital learning media in the implementation of the Independent Curriculum. Therefore, further research is required to explore teachers' perceptions towards the pedagogical integration of digital learning media in teaching English language, particularly in the context of curriculum reforms that highlight technology-enhanced, student-centred learning.

Taken together, previous studies imply that digital learning media can be used to enhance English language learning by increasing learner engagement, supporting language-skill development and promoting autonomous learning. However, the existing literature has only focused on the effectiveness of the use of digital platforms such as YouTube, Duolingo, or artificial intelligence applications. It has paid little attention to the pedagogical use of

various digital learning media by English teachers in implementing the Independent Curriculum. Furthermore, there has been little research to investigate the practical issues faced by teachers in choosing, adapting and using digital learning media to meet English language learning objectives within this curriculum framework. This study aims to fill this gap by observing the use of digital learning materials by English teachers in the classroom in the Independent Curriculum. It addresses the types of digital tools used, the pedagogical use of these tools in the teaching of English language and the challenges faced by teachers in the process of implementation. The study contributes to the knowledge of technology integration in ELT by providing empirical evidence of teachers' classroom practices and insights that can inform curriculum implementation, teacher professional development and effective use of digital learning materials in ELT classrooms today.

LITERATURE REVIEW

Digital Learning Media

Digital learning media are technology-based tools and platforms that support the design, delivery, and management of teaching and learning activities. In English language teaching (ELT), these media not only deliver instructional content but also offer opportunities for authentic language exposure, interaction, collaboration, and formative assessment. Previous studies reported that digital learning media can help to improve the skill of English language when implemented in a good pedagogical approach of teaching. For instance, multimedia tools including videos, podcasts, interactive presentations, learning management systems, and collaborative platforms offer learners authentic language input and the chance to practice listening, speaking, reading, and writing in meaningful contexts (Hendra et al., 2023). Additionally, collaborative digital instruments allow teachers to check students' progress, give prompt feedback and design learner-centred activities that boost communication and knowledge building. The effectiveness of these media depends on different contextual factors such as the digital pedagogical competences of teachers, the preparedness of students, the technological infrastructure and the compatibility between digital tools and educational objectives. Hence, digital learning media should not be perceived as technologies that are effective per se but as pedagogical resources, the educational value of which is contingent on how they are used in the context of the English language classroom.

The development of artificial intelligence (AI), virtual reality (VR), augmented reality (AR), and internet-based technologies has caused the very fast development of digital learning media in the last decade (Setyawati et al., 2024). From an ELT perspective, these innovations offer opportunities to develop more interactive, authentic, and learner-centred learning environments. For instance, AI-enabled applications can offer learners personalized feedback on their language use, while VR and AR can enable learners to engage

in immersive communicative activities with rich contextual information, similar to real-life language use. The market is seeing the emergence of affordable smartphones and tablets, and with more learners, there will be more opportunities for digital learning of languages outside the classroom. But the pedagogical value of these technologies will depend on how they are integrated into English teaching in a pedagogically meaningful way. However, the effectiveness of these digital tools depends on the digital pedagogical competence of teachers, the appropriateness of the digital tools for the language learning goals, and the willingness of students to engage in technology-enhanced learning. Therefore, the technological development itself does not guarantee better results in learning English, but its effect depends on the way teachers use the digital media to foster communicative competence and meaningful use of language.

Digital learning media are increasingly viewed as pedagogical tools to promote learner-centred and interactive language learning rather than as mere instructional aids. Digital media provide meaningful exposure to language, collaborative learning and authentic communication in English Language Teaching (ELT) helping students to develop their listening, speaking, reading and writing skills in contextually relevant environments. From a sociocultural perspective, digital learning media also provide opportunities for interaction, scaffolding and collaborative knowledge construction, whereby learners can actively engage themselves with not only language content but also their peers. However, the pedagogical effectiveness of digital learning media is a function not only of the availability of technological resources, but also of the teachers' ability to match digital tools with instructional objectives, and learners' needs and appropriate language-learning strategies. Therefore, understanding teachers' pedagogical decisions about the choice and use of digital learning media is crucial to explaining how technology supports English language learning in the Independent Curriculum.

Learning media help students build strong thinking skills, boost their interest and attention, and advance learning results. They encourage independence, support organized, ongoing thinking, and help develop cognitive and language abilities. Learning media also provide experiences that are hard to achieve with standard methods, making lessons clearer and easier to understand. They let teachers use different teaching strategies, rendering learning more engaging and participatory by involving students. Kemp and Dayton (1985), as cited in Hasan et al. (2021), said that learning media can serve three main functions for individuals, groups, or large audiences.

Independent Curriculum Implementation

The Independent Curriculum was launched by the Ministry of Education, Culture, Research, and Technology of Indonesia as part of the national learning recovery policy following the COVID-19 pandemic. The curriculum was piloted voluntarily in the 2022/2023 school year, thus allowing schools greater flexibility to adapt learning

objectives, teaching approaches, and assessment practices to the learning needs of students and local contexts. The curriculum promotes the use of digital technology and learning communities of educators who collaborate to support innovative teaching that places students at the centre of the learning and prepares the teacher for continual learning as well. These principles have been articulated in the Ministry's policy documents, such as Ministerial Decree No. 56/M/2022 and its subsequent implementation guidelines. The integration of technology is presented as a key aspect of curriculum implementation. The Independent Curriculum is a policy framework for English teachers to integrate digital learning media to promote active learning, learner autonomy, and development of communicative competence.

According to Riyan Rizaldi and Fatimah (2022), the Independent Curriculum encourages flexible learning which is student-centred, project-based, competency-based, and actualization of the Pancasila Student Profile. The characteristics of the curriculum have significant implications for the teaching of English as a foreign language, which demands teaching approaches that foster communication, collaboration, critical thinking and learner autonomy. This case can be an example of implementing the curriculum through digital learning media. In addition to learning in the classroom digital learning media can provide an interactive and authentic learning experience. Learning management systems, educational videos, collaborative writing platforms and artificial intelligence-based applications can support project-based learning. This can also help with collaborative language work and provide opportunities for individualised feedback and independent practice. Moreover, the curriculum flexibility provides teachers with the opportunity to select digital resources based on students' language proficiency and specific learning needs. Therefore, the success of the Independent Curriculum in English classrooms is determined not only by the design of the curriculum but also by the pedagogical competence of teachers in integrating digital learning media for meaningful language learning outcomes.

The Independent Curriculum provides more flexibility, allowing schools to shape learning to their own contexts and their students' needs. The independent curriculum, instead of the annual objectives of the 2013 curriculum, uses a 2–3-year phased learning approach with more flexibility and differentiation in teaching. The new curriculum has also extended lesson planning from a weekly basis to a maximum of one academic year in order to organize and implement learning activities. The greater degree of autonomy motivates teachers to adopt innovative pedagogical approaches and integrate digital technologies that support student-centred learning. The curriculum's focus on flexibility and innovation provides opportunities for teachers to use technology to create engaging, interactive and contextually relevant learning experiences. Therefore, it is important to understand how teachers integrate technology in the Independent Curriculum to evaluate whether the intended flexibility of the curriculum supports meaningful teaching and learning.

Digital Learning Media in Independent Curriculum

Digital learning media is a tool based on technology that is used to present educational content in the form of digital images, videos, interactive presentations, educational applications, and online learning platforms (Sari et al., 2023). In addition, Hafizah (2023) further stated that there are various digital learning media that can be used as a support to the Generation Alpha students in the Society 5.0 Independent Curriculum. These digital tools correspond to the curriculum's emphasis on flexible, student-centred, and technology-integrated learning and allow teachers to select, adapt, and develop digital learning media that improve teaching effectiveness and satisfy students' diverse learning needs in the Society 5.0 era.

Implementation of digital learning media is the utilization of digital tools, applications and platforms in classroom and extracurricular learning activities with an intention. Implementation is not only about access to digital resources but also their systematic and pedagogically meaningful use in order to meet specific learning objectives. This process is the systematic use of pre-designed digital learning media to assist the delivery of instructional material (Syahid et al., 2024). Digital learning media is significant for students' language development in English language teaching (ELT) through authentic language input, interactive communication, collaborative and self-directed learning. Digital platforms can offer learners access to a range of language resources, foster the integration of listening, speaking, reading and writing and provide immediate feedback to support continued learning. Thus, the use of digital learning media not only enhances the effectiveness of teaching and the engagement of learners but also provides students with meaningful opportunities for developing communicative competence in technology-rich learning environments.

Difficulties in Implementing Digital Learning Media

In the past, it was a challenge for the teachers to teach English through digital media (Salam et al., 2023). They struggled to use digital resources. They also struggle to prepare technology-based lesson plans and to gain the technical skills needed to embed digital tools in the classroom. Such barriers could prevent teachers from fully exploiting the pedagogical benefits of digital learning media in effectively supporting students' language learning. The still-existing challenge for EFL teachers who use digital media in English teaching is effectively using technology in the classroom. In addition to lack of technical skills, teachers also face challenges of lack of time to prepare, difficulty in managing student engagement and discipline in technology-enabled learning environments and lack of institutional support. The situation is complicated by a lack of digital devices, limited access to professional development, inadequate teaching resources and unreliable internet connectivity. Together, these factors limit the extent to which teachers can realize the

pedagogical potential of digital learning media. They emphasize the need for continuous technical training as well as improved technological facilities for more effective teaching of English.

Rahma et al., (2023) mentioned that the use of digital learning media in schools in Jambi is still limited because of lack of facilities and lack of government support. Similarly, Rintaningrum (2023) also conducted a study on factors influencing the integration of technology in English language teaching, including types and availability of technology, class size, financial constraints, internet access, time constraints, teachers' workload, age, technological competence, and the fast pace of technological development. The results indicate that the success of technology implementation depends not only on the willingness of teachers to use digital learning media but also on institutional support, technological infrastructure and professional capacity. These studies were conducted in different educational settings but indicate common challenges that may be present in the setting of the present study. Therefore, it is important to study the implementation of digital learning media by English teachers in the current context to find out the opportunities and constraints according to the context and provide evidence to be able to implement technology integration more effectively under the Independent Curriculum.

It was found that the implementation of digital learning media has various difficulties (Setyawati et al., 2024). Technology is advancing rapidly and teachers need to continuously upgrade their digital skills to be effective in using technology in their teaching. Teachers with digital literacy are better able to deliver content and can improve the learning outcomes. But often there is no time to get ready. Obstruct implementation, high costs of technology, possible technical failure and the pressure for creating digital teaching materials. The success of integrating technology depends on the digital competences of teachers, the sufficient support of institutions and the availability of reliable technological resources.

According to Pal et al. (2024), several factors interact to determine the extent to which the internet is used effectively for education in the information age. The digital divide is one of the important challenges such as the difference in internet access, availability of digital devices and the socio-economic status of families which results in unequal educational opportunities for students in urban and rural areas. One of the main problems is the absence of digital skills of teachers and students that hinders them from the effective use of online learning resources. The internet also has problems of distraction and safety for learners. Such as too much time spent on social media, online gaming, cyberbullying, and inappropriate content. The results indicate that successful learning through the Internet requires infrastructure, development in digital literacy and approaches to safe and responsible use of technology in educational contexts.

According to Melati (2024), the success of digital learning is determined by the quality of technological infrastructure and online learning resources. The problem of digital

equipment and reliable internet connectivity is the reason that poor and rural areas do not have access to technology-enabled education. In addition, the quality of online educational resources can differ and thus educators and students must critically evaluate and choose reliable, accurate and pedagogically sound resources. "Technology by itself does not make digital learning successful. It's a reminder of how hard this situation is. The other big thing is the ability for consumers to discover and consume great teaching content.

METHOD

This study used a qualitative case study design to investigate the implementation of digital learning media by English teachers in the Independent Curriculum. The choice of a qualitative case study was appropriate as it allows an in-depth analysis of a contemporary phenomenon in its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident (Yin, 2018). The design allowed a holistic understanding of the teachers' experiences, pedagogical practices and contextual factors influencing the implementation of digital learning media. Data were collected through multiple sources, such as interviews, classroom observations, and document analysis, which allowed for data triangulation and a richer interpretation of the case. The study followed the general procedures of qualitative case study research, including establishing the research questions, designing the study, collecting and analysing data and reporting findings systematically (Yin, 2018).

The research was done in secondary level contexts which were a senior high school, and a junior high school. Such a distinction allows the researchers to study the use of digital learning resources in the context of an independent curriculum on different levels of education. The schools were selected because they have started to implement an independent curriculum in some of their classrooms and, therefore, are appropriate sites for observing the use of digital learning resources in English language teaching. Before the interview and observation in the classroom, the researcher collected the basic data on the types of learning materials used by the English teachers. It has been found that teachers in both institutions have incorporated a variety of digital material in their lesson plans. The researcher ensured data accuracy by conducting the research during the instructional activities. English teachers used multimedia resources such as PowerPoint presentations and YouTube videos; instructional platforms such as Word Wall and Quizizz; and artificial intelligence tools such as Chatbot and Gemini.

The subjects of this study were 2 English teachers, the English teacher of MAN Tanah Bumbu (Teacher A) and the English teacher of SMP Negeri 6 Banjarmasin (Teacher B). The participants were selected using purposive sampling, which is the selection of information-rich cases that can provide a deep understanding of the phenomenon being studied (Yin, 2018; Creswell & Creswell, 2018). The criteria for inclusion were: (1) English teachers who actively taught under the Independent Curriculum, (2) had experience in integrating digital

learning media in English language instruction, (3) were directly involved in classroom teaching during the period of data collection, and (4) voluntarily agreed to participate in the study. Initial contact with both schools confirmed that the selected teachers were indeed qualified by these criteria. The inclusion of two participants was consistent with the qualitative case study design that emphasizes depth of understanding over sample size. The purpose of the study was not statistical generalization, but rather to obtain rich contextualized data concerning teachers' implementation of digital learning media in their respective school contexts. The selection of one teacher from a junior secondary school and one teacher from a senior secondary school also enabled the study to explore the phenomenon in two educational contexts, thereby providing a more comprehensive understanding of the implementation of digital learning media under the Independent Curriculum.

Data were gathered through semi-structured interviews, classroom observations and documentation. The researcher selected semi-structured interviews as they would enable the researcher to follow a predetermined interview guide while also enabling the researcher to be flexible and ask follow-up questions and explore participants' responses in more depth (Creswell & Creswell, 2018). The open-ended questions that were in the interview guide were prepared according to the research objectives and explored the experiences of teachers in implementing digital learning media, challenges, and strategies in the Independent Curriculum. Interviews were conducted face-to-face and online and for each teacher conducted twice for about 90 minutes for each session, depending on the availability of participants and practical considerations by using English and Indonesian. All interviews were recorded and transcribed for analysis with the consent of the participants.

The study was based on the observation of regular English lessons in classrooms to investigate teachers' application of digital learning media in real teaching situations. The observations were made on classroom activities, teacher-student interaction and the use of digital learning media during the teaching and learning process. A total of 7 English lessons were observed, with each observation lasting approximately 90 minutes. The observed lessons covered the use of digital learning media by the teacher during the English lessons in the classroom, depending on the teachers' scheduled lessons during the data-collection period. The observations focused specifically on three aspects: (1) the types and functions of digital learning media used by teachers; (2) teacher-student and student-student interactions during the use of digital media; and (3) students' engagement and responses to digitally mediated learning activities. The researchers paid particular attention to how teachers introduced and integrated digital media into learning activities and used it to support the learning objectives of the Independent Curriculum.

The researchers conducted the observations as nonparticipant observers. The researchers remained in the classroom as an observer and did not participate in or intervene in the teaching and learning activities. During each observation, the researchers

used an observation checklist and field notes to document relevant classroom events, teacher actions, student responses, interactions, and the use of digital learning media. The classroom observations were video-recorded with participants' permission, while written field notes were produced during and immediately after each observation.

Documentation was used as a complementary data source to support the findings from the interview and observation. The documentation consisted of photographs of classroom activities, instructional materials, lesson plans, and other relevant teaching documents gathered during the observation and interview process. These materials were used to enhance data triangulation and to increase the credibility of the study.

Data analysis was performed based on the interactive model of Miles et al. (2014) consisting of three phases; data reduction, data display and conclusion drawing/verification. The reason for the choice of this analytical framework is that it is a systematic process of organizing, interpreting and validating of qualitative data from different sources. During data condensation, the researcher read the interview transcripts, classroom observation notes and supporting documents to identify information relevant to the research objectives. The data were coded, categorized and reduced by selecting significant statements, looking for common patterns and sorting into themes related to implementation of digital learning media, challenges faced by the teachers and strategies used by the teachers. Irrelevant and repetitive information was deleted to maintain the focus on the research questions. During the data display phase, the condensed data were organized into thematic matrices and narrative descriptions to facilitate the interpretation and comparison of the two cases. This was done so that the researcher could see similarities, differences and relationships in the themes that arose from the interviews, classroom observations and documentation. Finally, we made conclusions and checked their correctness. In the analysis the researcher continuously interpreted the data by looking for common themes, relationships and patterns across the various sources of data. Preliminary findings were supported by data triangulation. The consistency and credibility of the evidence gained from the interviews, observations and documentation was checked. The data obtained is analysed and verified so that the final conclusion can provide a comprehensive understanding of the implementation of digital learning media for English teachers in the Independent Curriculum.

RESULTS AND DISCUSSION

Results

This part presents the results and discussion of the study. This study addresses two major questions. The research data is evaluated and discussed. Moreover, it explores the difficulties teachers face in using digital learning materials in the context of an independent curriculum and provides an overview of the use of digital learning materials in English

lessons. Conclusions are also drawn from the data collected through documents, interviews, and observation.

Results

The implementation of digital learning media for English classes within an independent curriculum

Observations of English classes showed that English teachers used a variety of digital learning resources to teach the Independent Curriculum. Digital platforms observed include Word wall, Quizizz, YouTube, PowerPoint, Chatbot, and Gemini. These platforms' instructional functions led to three recurrent themes in the thematic analysis of the observation data: (1) digital media as interactive assessment tools, (2) digital media for collaborative knowledge production, and (3) digital media for material delivery and classroom interaction. These themes were identified by clustering teachers' classroom practices across the observed lessons with similar patterns. Depending on the learning activities performed during the lesson, each platform supported different aspects of instruction. Observation results also indicated that Word wall and Quizizz were mainly used for formative assessment and increasing student engagement, while YouTube and PowerPoint were used for presenting learning materials and classroom explanations. Meanwhile, ChatGPT and Gemini were used to assist teachers and students in generating ideas, developing learning content and facilitating collaborative learning activities. Results show that teachers chose different digital platforms based on instructional goals and classroom observed activities. The following sections contain classroom observation data and interview excerpts supporting this interpretation.

Digital Resources as Interactive Evaluation Instruments

The analysis of the classroom observation showed that interactive formative assessment was one of the dominant instructional functions of digital learning media in the implementation of the Independent Curriculum. The theme emerged as teachers were seen to be using Wordwall and Quizizz repeatedly to assess students' understanding and to promote classroom participation. The two platforms were not only used as evaluation tools but also were integrated into the learning process, providing immediate feedback and directing further instruction.

Based on the data of observation, it was found that in the lessons of narrative text, the students did the matching activities to match the pictures with the correct captions by using Wordwall. The activities were shown on the classroom screen, so that individual students could do the tasks and their classmates could see and discuss possible answers.

Observation notes showed that the teacher immediately clarified after each response and directed the students when problems occurred. This pattern suggests that assessment was integrated into the learning process rather than occurring at the end of instruction. The lessons that used Quizizz had a similar pattern. At the beginning of the lesson, the platform was used as a diagnostic assessment to check students' prior knowledge before new material was introduced. Students participated in the activity either alone or in pairs if they didn't have personal devices. According to observation notes, the teacher viewed the students' responses through the platform's real-time dashboard and used the results to judge how much the students had grasped initially.

As one teacher explained in an interview: *"I always begin the lesson with Quizizz to see what the students already know. The results let me know if I need to review the prior material or proceed with the new topic. (Teacher 1)*

The integration of Wordwall and Quizizz demonstrated how digital media could support formative assessment practices in classroom instruction. Both platforms gave real-time feedback and allowed the teacher to see students' understanding during the learning activity, providing information to support instruction in the lessons observed. These results support the Independent Curriculum's focus on ongoing assessment and student-centered learning, where assessment is part of the learning process rather than a measure of final achievement.

Constructing Cooperative Knowledge with Digital Media.

A second theme that came out of the classroom observations was the use of digital media to enable collaborative knowledge production. This theme emerged from repeated observations of students working with YouTube, Gemini, and Chatbot collaboratively to explore narrative texts, to discuss ideas, and to create shared understanding. In all the lessons observed, digital media was used as a resource for collaborative enquiry rather than individual consumption. The observation data showed that the students worked in small groups using Gemini or ChatGPT to analyse the concepts, generic structure, and linguistic features of narrative texts. Students did not give answers generated by AI but rather compared the information generated by the platforms, discussed the relevance of the information to the lesson objectives, and reorganised the information before presenting their findings to the class. Observation notes also indicated that the teacher monitored the group discussion, asked probing questions, and clarified misconceptions when necessary.

A teacher explained in the interview: *"I have students compare the AI answers to what they learned in the textbook. Firstly, they address what information is appropriate to give so that AI becomes a learning resource rather than the answer. (Teacher 2).*

YouTube lessons showed a similar collaborative pattern. The students watched narrative videos like The Ant and the Dove and The Legend of Crying Stone. Then they

worked in groups to identify the generic structure, characters, moral values, and key events of the stories. The observation notes indicate that after group discussions, a class presentation was done where students presented what they understood and answered questions from the teacher and friends

In these activities, the teacher's role was to facilitate discussion, clarify ideas, and encourage students to justify their interpretations with evidence from the videos. In these classroom observations, YouTube, Gemini, and Chatbot were used regularly to support collaborative learning activities in which students discussed information, negotiated interpretations, and generated responses collaboratively. These digital tools became supports for learning that enhanced the group discussion and collective meaning-making, rather than replacing the classroom interaction. These findings are consistent with principles of the Independent Curriculum that encourage collaborative learning, student agency, and active knowledge construction.

Interactive Digital Media for Classroom Interaction and Content Delivery

The third theme that emerged from the analysis of classroom observations was the use of digital media to aid the delivery of materials and classroom interaction. This pattern was typical in lessons where PowerPoint was used to structure parts of the teaching and to facilitate communication between teachers and students during the learning process. Based on observation data, teachers introduced recount texts using PowerPoint to show the definition, communicative purpose, generic structure, and language features through structured visual slides.

The slides were, in fact, not just a medium of presentation but a structure of interaction in the classroom. Teachers would often stop to ask questions, ask students to share personal experiences, and solicit responses before moving on to the next phase of instruction in the lessons observed. Later, students engaged in writing tasks related to their experience and presented or discussed their work with colleagues, and teachers clarified and gave feedback during the discussion.

The interview data supported these observations. One teacher stated: *"PowerPoint helps me to organise the lesson, but I do not use it only for explaining the material. I will stop at some points to ask questions, encourage discussion, and connect the topic to the students' own experiences."* (Teacher 1). Teaching documents, such as lesson plans and presentation slides, also showed that PowerPoint was deliberately used in activities such as questioning, guided discussion, writing practice, and classroom feedback, but not used just for content delivery.

The data were consistent across observations, interviews, and documentation, indicating that the use of digital presentation media was part of an interactive instructional strategy that was aligned with the lesson objectives. The three themes together show different pedagogical functions of digital learning media in the implementation of the Independent Curriculum. Wordwall and Quizizz primarily facilitated formative assessment by allowing teachers to track students' understanding throughout classroom activities.

YouTube, Gemini, and Chatbot were integrated into collaborative learning tasks where students explored information, debated ideas, and built shared understanding. PowerPoint, meanwhile, supported the instructional content organisation and teacher-student interaction by questioning, discussion, and presentation activities. In the lessons observed, digital media was used as a means to an instructional end, not as an end in itself. Classroom observations, interviews with teachers, and instructional documents all indicate that digital learning media were used as pedagogical resources that supported formative assessment, collaborative learning, structured instruction, and classroom interaction. In the observed lessons, teachers played an active facilitative role by facilitating discussions, monitoring students' use of digital resources, and ensuring technology use was aligned with the learning objectives of the Independent Curriculum. The results indicated that the implementation of digital learning media reflected pedagogical practices consistent with the curriculum emphasis on student-centred learning, flexible instruction, and active participation in the classroom.

The challenges faced by English teachers when using digital learning media in the English class within an independent curriculum implementation

The result of the interview indicated that English teachers faced several challenges in the integration of digital learning media in teaching English under the Independent Curriculum. Such challenges can be categorized into three major themes: (1) technology and infrastructure constraints; (2) teacher professional capacity and workload; and (3) classroom management challenges.

Technology and infrastructure constraints

The most frequently mentioned barrier was the lack of technological resources, particularly internet access, inequitable access to digital devices, and poor school infrastructure. The teachers explained that the effective implementation of digital platforms such as Quizizz, Artificial Intelligence (AI), and YouTube depended largely on reliable internet access. But a lot of students used their own mobile data because the school doesn't

offer internet access for classroom learning. Consequently, some students could not fully participate in digital learning activities.

Teacher A said: *"... connectivity needs an internet quota; well, the school also cannot fully provide a free internet quota for students. "So sometimes students automatically pay their own money for a quota to get into the media...."* Similarly, Teacher B stated: *".... I always tell them beforehand that they must provide an internet quota. But most of the time if there is no internet quota, students share the quota with the teacher, and the teacher gives a lot of internet quota. Wi-Fi is available but just for the public...."*

In addition to internet access, teachers said not every student had smartphones that could support digital learning apps. Not all students had smartphones, and some were using devices that were not compatible with applications like Quizizz, GPT or Gemini. Teacher A: *"... not all students have smartphones, then the cell phones themselves sometimes don't support certain media"* Teachers also mentioned a lack of school facilities, especially the absence of permanently installed LCD projectors. The equipment was fragile and prone to damage through frequent movement, and the loss of valuable instructional time as projectors had to be collected from the teachers' office before each lesson. Teacher B (said): *".....Our school can be said good, but the facilities and infrastructure to make it digital, right here, the projector is not permanent in the classroom, right, you have to go to the office to take it and then install it, and it takes more than 5 minutes...."* Teacher A also commented: *"... For instance, the school has not provided an LCD projector for each classroom. "...And if you have a lot of people working with the projector, it wears out or breaks down faster..."*

The evidence, collected from classroom observations, teacher interviews and supporting documentation, converges to show that the technological infrastructure remains a fundamental prerequisite for the implementation of the Independent Curriculum through digital learning media. Teachers across all data sources consistently identified limited internet connectivity, inequitable access to digital devices, and poor classroom facilities as constraining factors to the adoption of digital technologies in classroom instruction. The observation data also showed that these limitations affected students' ability to participate in digital learning activities, particularly in situations where students had to share devices or were challenged by connectivity issues during lessons. The results indicate that sufficient technological infrastructure is an important factor in providing equal opportunities for students to participate and in ensuring the appropriate utilisation of digital learning media in the implementation of the Independent Curriculum.

Teacher professional capacity and workload

Another challenge that emerged from the interview data was the limited opportunity for teachers to participate in professional development related to digital

learning media. Both participants reported this theme equally and explained that they regularly used familiar platforms such as Wordwall and Quizizz, but had limited exposure to other digital learning applications, as formal training opportunities were minimal. Teacher B stated: *"...I only use Wordwall and Quizizz because they are the ones that I know best. I still have a limitation of using other interesting platforms because I have never been to a training about them.* In addition, Teacher A said: *"...I have never done professional development specifically on digital learning. "Most of what I've learned is from self-learning and talking to colleagues.*

Both teachers also identified limited preparation time as a barrier to producing more diverse digital learning materials. Heavy teaching responsibilities cut into the time available to design, revise, and update digital resources to use in the classroom, they said. As a result, digital learning activities were often reused in different lessons. Teacher B characterized this challenge as: *...The teaching schedule is so busy that it is difficult to create digital learning media that varies. For example, I often use the same images in Wordwall activities, because I don't have enough time to update them. "My PowerPoint presentations are the same way. They aren't as varied as I would like because of limited preparation time."*

The two challenges that were uniformly cited by teachers throughout the interview data were: limited access to professional development in digital learning media and insufficient time to create or adapt digital instructional resources. The results suggest that the use of digital media by teachers in the classroom depended not only on teachers' knowledge of the technologies available to them, but also on the accessibility of professional development opportunities and planning time to support instructional planning.

Classroom management challenges

The last challenge identified from the interview and observation data was the management of the classroom in the digital learning activities. Both data sources showed that the management of students' participation was more difficult in classes with relatively large numbers of students. Teachers said that under these conditions, they found it difficult to monitor students' engagement, provide individual assistance, and ensure that all students were actively participating in digital learning activities. "Teacher B said: *"...The problem is the sheer volume of students. Usually, I teach classes of about 30 students, so it is difficult to make sure all students benefit optimally. However, after a few times of using Word wall, I can see students are getting more familiar with the activities and are not as confused as in the beginning."*

This pattern was also observed in classroom observations. During digital learning activities, the teacher walked around the classroom to check students' progress, answer questions, and provide help when necessary. However, observation notes highlighted that

the teacher was not always able to meet with every student individually, as attention had to be split over multiple groups and activities in the time available during lessons. However, the repeated use of digital learning activities appeared to build the students' familiarity with the digital platforms, leading to smoother classroom routines in subsequent lessons. The results of interviews and observations show that classroom management is a practical challenge to implement digital learning media. The results indicate that teachers constantly adjusted their teaching methods to manage large classes while keeping students engaged in digital learning activities.

Discussion

The implementation of digital learning media for English classes within an independent curriculum

Word wall

The results indicate that Word wall was used in the classroom as an interactive formative assessment and not only as a digital game. Classroom observation indicated that teachers integrated matching activities in narrative text lessons, gave immediate feedback, and used students' responses to track their understanding in the learning course. This means that Word Wall's pedagogical value was seen not just in its digital features but also in how teachers used it for ongoing assessment and interaction in the classroom.

This result supports the implementation framework suggested by Hasan et al. (2021), which states that effective integration of digital media is related to careful planning, communication of learning goals, active facilitation during teaching, and follow-up feedback. Classroom observations showed how teachers prepared the required equipment, explained the procedure of the activity prior to its implementation, monitored the students' progress during the lesson, and provided immediate guidance to students when they faced challenges. These pedagogical practices reveal that the success of digital learning media does not depend solely on the technology itself but also on the pedagogical management of classroom activities by the teacher.

The observed classroom practices also support the notion of gamification as proposed by Deterding et al. (2011). The matching-game activities were not only fun but, more so, designed as opportunities for students to actively engage in the identification of elements of narrative texts and respond to formative assessment tasks. Observations in class showed student participation and discussion to be common during these activities. However, the present results do not provide direct evidence of Word wall increasing students' motivation. Rather, results suggest the platform provided interactive learning opportunities that undergirded observable classroom participation.

This interpretation is in line with Santika (2023), who stated that digital learning resources can generate more engaging classrooms if they are integrated into meaningful instructional activities. The results also support the principles of independent curriculum, which emphasize active participation and student-centred learning (Riyan Rizaldi & Fatimah, 2022). The observed lessons by Word wall supported the principles of formative assessment, where opportunities were provided for students to engage in formative assessment, respond to teacher feedback, and participate in classroom interactions. These results are not indicative that the use of Word wall directly contributed to improvements in character development or critical thinking skills. The platform was not a pedagogical tool but rather a platform that enabled teaching practices corresponding to the objectives of the independent curriculum.

Quizizz

The findings showed that Quizizz was mostly used as a formative assessment to help teachers find out students' prior knowledge and adapt instruction accordingly. Rather than using the platform merely as a way to encourage student engagement in the classroom, it was used at the beginning of the lesson to generate information about students' prior knowledge before introducing new material. As can be seen from the interview data, the instant quiz results were useful for the teachers to make a decision whether the previous concepts should be reviewed or the lesson could be continued as planned.

This shows that Quizizz's educational value came not just from its game features but also from its ability to inform instructional decisions. This interpretation is in line with the work of Hasan et al. (2021), which states that the effective implementation of digital learning media requires systematic preparation, clear instructional procedures, active facilitation, and follow-up through feedback and evaluation. Such practices were demonstrated in classroom observations and teacher interviews as teachers prepared the necessary equipment, described the assessment procedures, watched students' responses through the real-time features of the platform, and used the results to guide subsequent classroom activities. These findings suggest that the educational value of Quizizz was more related to the teachers' use of the platform within formative assessment practices than to the technology itself.

The results also support the theory of gamification (Deterding et al., 2011; Singhal et al., 2019) that encourages the use of game elements to promote active participation in learning activities. The classroom observations showed the students were doing the quiz tasks either individually or collaboratively, and the teachers monitored and gave instant feedback to the students. However, the present study did not reveal Quizizz's direct effect on the students' reading comprehension or motivation. Rather, the results suggest that the

platform has the potential to provide opportunities for active participation and immediate feedback in the observed classroom context.

This interpretation also supports Santika (2023), who noted that digital learning tools can foster an engaging classroom environment when they are meaningfully integrated into instructional practice. The use of Quizizz, as viewed from the independent curriculum, is a manifestation of the curriculum's emphasis on formative assessment and the determination of students' learning needs. The teachers reported that the diagnostic information from the quizzes helped them understand students' prior knowledge before introducing new learning materials. This platform also supports teachers in making instructional decisions that respond to students' current understanding as part of a learner-centred approach to the curriculum. (Rizaldi & Fatimah, 2022).

AI (Artificial Intelligence)

The highlight of the study is the integration of Gemini and ChatGPT, which shows how generative artificial intelligence (GenAI) was implemented in English language instruction as a learning resource and not as a substitute for students' work. The classroom observations revealed that the students worked in small groups to use the AI-generated information to identify the generic structure and language features of narrative texts. In addition, the observation notes indicate that students discussed the AI-generated responses, compared them with classroom material, rearranged the content, and presented the results to their classmates rather than directly submitting the AI output.

A teacher's explanation reinforced this pattern: *"I have students compare the AI responses to the textbook and discuss what information is appropriate to present. The answers shouldn't be copied and pasted, because the point is to learn the material, not just use AI. (Teacher 2).* The results indicate that the educational value of Gemini and ChatGPT was largely a function of the teacher's instructional design. Instead of letting AI replace the students' learning processes, teachers developed activities that involved discussion, comparison, and presentation of information produced by the platforms.

In the lessons observed, teachers used AI as a springboard for collaborative inquiry, monitoring group discussions and clarifying misconceptions, and encouraging students to support their responses with evidence from the learning materials. This interpretation is in line with Huang et al. (2019), who state that artificial intelligence can increase students' access to information and support digital learning when integrated into appropriate pedagogical activities. In the same vein, the observed instructional practices are congruent with Hasan's (2021) framework for implementing digital learning, which consists of careful preparation, explicit instructions for tasks, ongoing teacher facilitation, and follow-up with classroom discussion. The findings are also in line with A. Rahman and Nor (2024), who

define ChatGPT as a learning support that can stimulate students' questioning and exploration of textual information. However, this study goes beyond these views by showing that the educational contribution of AI depends on how teachers design learning activities that encourage students to collaboratively evaluate, reorganize, and discuss AI-generated information, rather than relying on the technology alone.

The findings also show that the Independent Curriculum has a student-centered orientation (Rizaldi & Fatimah, 2022). Students were provided the opportunity to explore learning resources independently, while they worked collaboratively to construct and present their understanding of narrative texts. However, there is no direct evidence in this study that AI alone improved students' critical thinking or learning autonomy. Instead, the results suggest that the teacher's facilitation of the use of Gemini and ChatGPT in the classroom created a context for collaborative exploration, independent information seeking, and engagement, all of which align with the educational values promoted by the Independent Curriculum.

YouTube

The results indicate that YouTube was more than the source of the audio-visual material for the presentation of the narrative texts. The platform was incorporated into a series of learning activities in the observed lessons, such as interpreting video material, participating in collaborative discussions, analysing the generic structure and moral values of narrative texts, and presenting conclusions to the class. These findings indicated that the instructional worth of YouTube was not only in the availability of video materials but also in the ways teachers conceptualized follow-up activities to enhance the students' active engagement with the content.

The main contribution of the present study is that the educational use of YouTube was not limited to improving listening or viewing comprehension, which was the main focus of many previous studies. The videos of the observed classrooms were a shared resource for group discussion, analysis, oral presentations, and teacher reflection. The learning journey involved questioning, discussion, and presentation activities that involved students in constructing and communicating their understanding of the narrative texts in addition to viewing the video. This suggests that teachers' pedagogical effectiveness with YouTube was more about the instructional design teachers created than the technology itself.

This understanding echoes the framework of Hasan (2021), which emphasizes the value of effective preparation, defined learning outcomes, active facilitation, and planned follow-up activities for effective digital learning. The lessons observed showed these stages in teachers' preparation of digital resources, explanation of learning tasks, facilitation of classroom discussions, and guidance during students' presentations. The collaborative

activities observed, such as Teacher A's classroom activities, are in line with the principles of the dictogloss approach as described by Nasution (2019), but the implementation was adapted to the classroom context by highlighting group discussion and collaborative text analysis instead of individual text reconstruction. This observation shows how established models of teaching can be adapted flexibly to specific learning goals when embedded in digital media.

The results also extend the work of Almurashi (2016), who noted that YouTube can be an authentic source for language learning through audio-visual input. Although this view emphasizes the role of multimedia content, the current study demonstrates that meaningful learning was achieved due to the interaction between digital resources and teacher facilitation. The teacher would pause the video to ask guiding questions, have students justify their interpretations, and facilitate collaborative presentations. These practices show how the educational value of YouTube was mediated not only by the authenticity of the videos but also by teachers' pedagogical decisions to convert multimedia content into opportunities for collaborative learning and classroom interaction.

These findings indicate that YouTube can facilitate student-centred learning when incorporated into inquiry-oriented activities and not solely as a presentation medium within the independent curriculum. This study, therefore, contributes to the expanding discourse on digital learning by demonstrating the pedagogical benefits of YouTube in the use of collaborative learning approaches and intentional teacher facilitation, particularly in English language contexts implementing the Independent Curriculum.

In addition, the use of YouTube in the classroom aligns with both the first and second characteristics of the independent curriculum (Riyan Rizaldi & Fatimah, 2022). Firstly, video content that presents moral values, followed by group discussions, promotes character development in line with the Pancasila student profile through reflective and value-based learning. Secondly, by guiding students to focus on story structure and key narrative elements, the teacher emphasized essential material without overloading them with information. This approach not only supports students' comprehension of core content but also highlights how multimedia and contextual learning can enhance engagement.

PowerPoint

The results indicate that PowerPoint was not just a presentation medium in the implementation of the Independent Curriculum. It wasn't a vehicle for instructional content but a structured framework that facilitated classroom interaction, guided discussion, and student engagement throughout the lesson. This means that the educational value of PowerPoint was determined by the pedagogical choices of teachers, especially their ability to connect visual presentations with questioning, discussion, and student presentations.

An important result of the current research is that PowerPoint enabled teacher-student communication, not teacher-centred instruction. The classroom observations indicated that the teachers often interrupted their lecture to ask students to share their personal experience, answer the question, and present a recount text to the class. Thus, the presentation slides provided visual scaffolding, organizing learning and providing opportunities for interaction and feedback. The results indicate that even the most commonly used digital presentation software can support student-centred learning when integrated into interactive instructional practices.

This interpretation is consistent with the framework of Hasan (2021), where effective digital learning is not the use of technology but systematic preparation, active facilitation, and structured follow-up activities. Similarly, the results were consistent with Podgórska (2023), who argues that PowerPoint is more beneficial when creatively used to encourage students' engagement rather than just a tool for information delivery. However, this study extends this view by showing that the effectiveness of PowerPoint is more related to teachers' instructional strategies (e.g., questioning, classroom discussion, student presentations, formative feedback) than to its visual features. These practices transformed presentation slides from a passive information delivery tool to a pedagogical resource that promoted communication and active engagement.

The results suggest that, in the context of the independent curriculum, digital presentation media can support student-centred instruction if teachers intentionally embed them in interactive learning activities. This is not to imply that PowerPoint itself enhances learning, but rather that its educational value is realized through intentional pedagogical design that encourages classroom interaction, student engagement, and meaningful engagement with instructional content.

In relation to the independent curriculum, PowerPoint supports the third characteristic, flexibility in curriculum implementation (Riyan Rizaldi & Fatimah, 2022). The teacher adapted the material to suit classroom conditions and involved students in retelling personal experiences, allowing for differentiated instruction. Although more teacher-centred, PowerPoint was used as a tool to support active learning and student participation. This flexibility in strategy and pacing is aligned with the curriculum's emphasis on contextual and adaptable lesson design.

The challenges faced by English teachers when using digital learning media in the English class within an independent curriculum implementation

This study identifies the challenges that English teachers faced when using digital learning media in English class based on the implementation of the independent curriculum. Based on the interviews conducted, some of the main obstacles have been revealed by the

participants, namely two English teachers. The results of interviews between researchers and teachers as participants are described to provide in-depth understanding.

Limited Access or Internet Connectivity Among Students

The findings revealed that stable internet connectivity remains a challenge in implementing digital learning media. Both teachers acknowledged that students often relied on personal mobile data, which can be financially burdensome. Furthermore, the school did not provide free Wi-Fi specifically for student use. This finding is consistent with previous studies Salam et al., (2023) that reported internet connectivity as a primary obstacle in digital learning, particularly in schools with limited technological infrastructure.

Without free Wi-Fi access or sufficient internet quota, students face additional financial burdens, which in turn affects their ability to participate fully in digital learning activities. Without reliable internet, students' opportunities to access digital learning platforms such as Quizizz, YouTube, and AI-based tools are significantly restricted. This is in line with the view Lukma & Nurjanah (2023) that in order to utilize the Quizizz platform effectively, it is imperative to ensure the stability of the internet network. Additionally, Cahyana (2020) mentioned that the problem occurred while implementing YouTube video in classroom which obtained by teacher and students is the lack of internet connection and the other facilities.

Besides that, this challenge relates directly to the first characteristic of the independent curriculum, which is the use of project-based learning to foster a Pancasila student profile (Riyan Rizaldi & Fatimah, 2022). This pedagogical approach requires teachers and students to engage in activities such as digital collaboration. But the limited access to the internet by secondary school students restricted their ability to participate fully in the digital learning activities. The data collected through interviews and classroom observations showed that students had limited access to digital resources due to connectivity problems and in some cases, students had to share devices or face interruptions during the learning activities. The results indicate that the lack of adequate technological infrastructure may hinder students' continuous participation in collaborative and student-centred learning activities that are emphasized in the Independent Curriculum.

Inequitable Access to Digital Devices

In addition to internet access, unequal ownership of compatible digital devices was reported as a serious obstacle. Some students either lacked smartphones or owned devices that were incompatible with certain educational applications. This reflects the "digital divide" discussed by Paling et al., (2024) and Akbar et al., (2023), where socioeconomic

disparities limit students' access to technology. Teachers face difficulties in delivering inclusive digital learning experiences, as the variety of student-owned devices affects the ability to use interactive platforms effectively.

The digital divide not only hinders participation but also impacts students' learning outcomes and engagement in technology-integrated classrooms (Dijk, 2020). This finding supports Rabani et al., (2023) study, which highlights that one of the primary challenges in implementing technology in Indonesian education is inadequate infrastructure. While digital technologies were present in many secondary schools, poor internet connectivity and lack of access to basic devices like computers and mobile phones meant that these were often not used effectively in classroom learning. The present study found, through interview and classroom observation data, that these constraints affected students' participation in digital learning activities and impacted teachers' delivery of technology-supported instruction in the Independent Curriculum.

Additionally, the integration of interactive digital media such as Quizizz, YouTube, and AI tools within project-based contextual learning aligns with the first characteristic of the independent curriculum (Riyan Rizaldi & Fatimah, 2022). However, not all students have access to adequate digital devices, leading to disparities in accessing learning resources. This digital divide poses a risk of digital exclusion, which contradicts the inclusive principles upheld by the independent curriculum. Moreover, such inequality can hinder effective collaboration among students in Project-Based Learning (PjBL), as this approach relies heavily on the active participation of all learners.

Professional Development Chance that Focusses on Digital Learning Media

Another important finding of this study is that the teachers' level of participation in professional development related to digital learning media is low. The interview data indicated that the two teachers mostly acquired their digital competencies by self-study and through informal conversations with colleagues. Hence, the digital tools of classroom instruction were largely limited to the existing applications that teachers were familiar with, such as Quizizz and Word wall. The findings indicate that teachers' adoption of digital learning media was not only a function of the availability of technology, but also of opportunities to develop the pedagogical knowledge necessary to integrate a wider range of digital tools into classroom practice.

The limited opportunity for teachers' professional development and the insufficient time for preparation point to an important condition for the implementation of digital learning within the Independent Curriculum. The curriculum affords teachers greater flexibility to develop student-centred learning, but the effective use of digital technologies requires ongoing professional learning and sufficient time for instructional planning.

Without these supports teachers may return to familiar digital tools and reuse existing learning resources, which may limit the possibilities for varying classroom activities.

This finding is in line with Setyawati et al. (2024) and Rahmawati and Suharyati (2022), who pointed out that continuous professional development is needed to enhance the digital competence of teachers and facilitate effective technology integration. However, the present study complements these perspectives by showing how bounded professional development influenced teachers' daily teaching practices. Instead of prohibiting teachers to use digital media, the absence of organised training seemed to promote the continued use of known digital platforms and reduce the opportunity to extend instructional strategies.

These findings also have implications for the implementation of the Independent Curriculum. The curriculum gives teachers a lot of freedom to design learning activities to meet the needs of their students, but the findings suggest that this flexibility is highly correlated with teachers' willingness and ability to integrate digital technologies in a meaningful way. In this regard, the research suggests that continuous professional development is a key enabling condition to help teachers to grow their digital pedagogical practices and to make good use of the flexibility provided by the Independent Curriculum, a view also pointed out by Riyan Rizaldi and Fatimah (2022).

Inadequate Facilities to Support Digital Learning

The results indicate that the presence of digital devices alone is not enough to use digital learning media effectively. Classroom observations revealed that the school had projectors and other digital resources, but they were not permanently installed; instead, they were set up before each lesson. Digital learning is successful when technological resources are available and usable in the normal practices of the classroom.

This conclusion is in line with the findings of Rahma et al. (2023) and Salam et al. (2023), which state that managing infrastructure is an important aspect of the successful implementation of technology in educational institutions. The current study supports this conclusion, as it found that the issues were not just about equipment availability but also about daily management and accessibility. The observed classrooms did need additional time to prepare and set up the digital equipment before instruction. This illustrates the organizational and logistical constraints that can limit the use of digital learning, even when technology resources are available.

The findings also have implications for the delivery of the Independent Curriculum. The curriculum promotes a flexible, learner-centred, technology-rich learning environment. However, the present study shows that achieving these pedagogical purposes depends on

the institutional conditions that facilitate and promote the easy and efficient access of teachers to digital resources for the classroom. Therefore, the success of the independent curriculum is achieved if the availability of digital infrastructure and the management, maintenance, and accessibility of technological resources are sustainable to support teachers' pedagogical practices.

Large Class Size and Number of Classes Taught

The teacher also said that the large number of students in each class presented a challenge in maximizing the use of digital media. There were about thirty students in a class, and the teacher faced difficulties in tracking students' learning progress, providing immediate feedback, and keeping all the students engaged in digital learning activities. The problems were more obvious in interactive activities such as online quizzes, group activities, and digital presentations, where students needed continuous help and technical support.

The results generally show that the obstacles of the implementation of digital learning media are not only technological. The convergence of evidence from interviews and classroom observations shows that teachers experienced a number of interrelated constraints in terms of technological infrastructure, inequitable student access to digital resources, insufficient professional development opportunities, heavy teaching workload, and classroom management. The findings suggest that, even though teachers showed a high commitment to integrate digital learning media into their teaching practices, the successful implementation of the Independent Curriculum depends on teachers' pedagogical readiness and institutional support such as adequate infrastructure, continuous professional development, manageable workloads, and sufficient teaching resources.

The result is in line with Rintaningrum (2023), who stated that the large number of students in the class may decrease the effectiveness of technology integration in language learning. Similarly, Aini and Syahputra (2023) found that teachers in large classes had more difficulties in classroom management, student engagement, and individualized instruction. With more students to teach, teachers have to divide their attention among a higher number of learners, making it difficult to monitor students' use of digital media, identify learning difficulties, and provide feedback in a timely manner. In this sense, digital media could be a tool for presentation, but not for active language practice or meaningful interaction.

But the teacher also said that students were more involved when the use of digital media was consistent in the lessons. With repeated use, the students became familiar with the digital platforms, required less technical support from the teacher, and made the classroom activities more efficient. The result suggests that even though a large class size

restricts the use of digital media at the beginning, regular and sustained use of digital media over time builds students' digital literacy and participation in learning.

This challenge is also closely related to one of the characteristics of the independent curriculum, namely, learning essential content with more opportunities for students to explore, collaborate, and have a deeper conceptual understanding (Riyan Rizaldi & Fatimah, 2022). For teachers to reach these goals with digital media, they need to cater to interaction, monitor student learning, and provide continuous formative assessment. But with increasing class sizes, it's challenging enough to meet these pedagogical demands, let alone to do so while also managing classroom discipline, troubleshooting technical difficulties, and addressing a broad range of learning needs. Hence, digital media has pedagogical advantages, but its capacity to encourage student-centred English learning may not be utilized to its utmost.

Tight Teaching Schedule and Limited Time Preparation

The last challenge identified was tight teaching schedules where teachers had limited time to develop varied digital learning content. Results indicated that teachers' busy teaching duties hindered their constant creation, revision, and update of digital learning materials. Students were thus often subjected to repetitive learning activities. For example, the teacher used the same images on platforms such as Word wall because there was no time to search or design new visual resources. Likewise, PowerPoint presentations were rarely updated with new interactive elements, leading to less dynamic classroom teaching.

This situation is in line with Setyawati et al. (2024) declaring that a limited time to prepare and heavy teaching loads are the main obstacles for the successful integration of digital learning tools. Salam et al. (2023) similarly highlighted that besides the use of digital media in the classrooms, sufficient time should be given for planning, developing, and evaluating the digital learning resources for their effective use. Teachers do not have time to prepare and tend to rely on pre-existing materials rather than coming up with innovative digital activities that trigger the active involvement of the students. Hence, digital media is used more as a tool to deliver content and not as a means to make English learning interactive.

The challenge is even more critical in the implementation of an independent curriculum. The teachers are expected to design learning experiences that are flexible and student-centred; emphasize essential competencies, meaningful exploration, and collaboration; and include formative assessment (Riyan Rizaldi and Fatimah, 2022). These teaching strategies require teachers to constantly adapt their teaching materials to the needs and learning contexts of their students. This suggests that English language classrooms should incorporate various digital activities to facilitate language practice,

communication, collaboration, and instant feedback. However, heavy teaching loads restrict teachers' opportunities to design or modify such materials, which hampers the full implementation of the curriculum's pedagogical principles. This means that teachers often resort to using repetitive digital content that is easier to prepare but offers fewer opportunities for meaningful interaction and differentiated learning. This finding shows that the success of implementing the Independent Curriculum needs teachers' digital competence and institutional support, especially enough preparation time for teachers to create engaging and pedagogically sound digital learning resources.

CONCLUSION

The result of this study shows that the English teachers of MAN Tanah Bumbu and SMP Negeri 6 Banjarmasin have integrated some digital learning media such as Word wall, Quizizz, YouTube, Power point and AI-based tools such as ChatGPT and Gemini to support the English language teaching in the implementation of the Independent Curriculum. Nevertheless, the effectiveness of digital media integration is still mediated by a number of contextual challenges such as limited internet connectivity, unequal access to digital devices, inadequate professional development opportunities, inadequate school facilities, large class sizes and limited preparation time due to heavy teaching workloads.

This study contributes to the existing research of digital learning by providing empirical evidence of the implementation of digital media by English teachers in the context of the Independent Curriculum in Indonesian secondary schools. The results show that the integration of technology is not only a matter of teachers' willingness and digital competence, but also of appropriate institutional support, such as reliable infrastructure, continuous professional development and sufficient time for instructional planning. This finding can be a reference for schools and education policymakers in formulating a strategy to strengthen the implementation of digital learning in line with the goals of the Independent Curriculum.

Future research should examine digital media implementation across a wider range of schools and educational contexts using larger samples or mixed-method approaches. Future studies could also examine the impact of particular digital platforms or artificial intelligence tools on students' English language achievement, engagement, and digital literacy to yield more comprehensive evidence for technology-enhanced language learning.

DECLARATION OF AI AND AI-ASSISTED TECHNOLOGIES

In developing this work, the authors utilized ChatGPT to support information retrieval, along with DeepL (V.24.4.3) to enhance linguistic accuracy and readability. The

authors have carefully reviewed, revised, and refined the content as necessary and take full responsibility for the final manuscript.

REFERENCES

- A Rahman, M. H., & Nor, H. (2024). Unveiling the Role of Artificial Intelligence on Reading Processes. *PRIMACY Journal of English Education and Literacy*, 3(1), 18–27. <https://doi.org/10.33592/primacy.v3i1.4877>
- Aini, R. M., & Syahputra, M. (2023). Unveiling The Dynamics : Exploring Challenges In English Language Teaching Across Varied Classroom Sizes in Aceh , Indonesia. *International Conference on Education, Science Technology And Health (ICONESTH 2023)*, 1011–1027.
- Akbar, J., Ariani, M., Zulhawati, & Haryani. (2023). *Penerapan Media pembelajaran Era Digital* (Efitra (ed.); 1st ed.). PT. Sonpedia Publishing Indonesia. <http://repositorio.unan.edu.ni/2986/1/5624.pdf><http://fiskal.kemenkeu.go.id/ejournal%0Ahttp://dx.doi.org/10.1016/j.cirp.2016.06.001%0Ahttp://dx.doi.org/10.1016/j.powtec.2016.12.055%0Ahttps://doi.org/10.1016/j.ijfatigue.2019.02.006%0Ahttps://doi.org/10.1>
- Almurashi, W. . (2016). The Effective Use of Youtube Videos for Teaching English Language in Classrooms As Supplementary Material at Taibah University in Alula. *International Journal of English Language and Linguistics Research*, 4(3), 32–47.
- Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. *International journal of educational technology in higher education*, 17(1), 1-30.<https://doi.org/10.1186/s41239-019-0176-8>
- Cahyana, A. A. C. (2020). The Use of Youtube Video in Teaching English for Foreign Language At Vocational High School. *Jurnal Pendidikan Bahasa Inggris Indonesia*, 8(2), 1–11. <https://doi.org/10.23887/jpbi.v8i2.3399>
- Creswell, J. W. (2007). Choosing Among Five Approaches. In *Sage publications* (Issue June). <https://www.researchgate.net/profile/Rulinawaty>
- Deterding, S., Khaled, R., Nacke, L., & Dixon, D. (2011). *Gamification : Toward a definition*. 7(12), 1–5.
- Dijk, J. Van. (2020). The Digital Divide. *JASIST WILEY*, 1–3. <https://doi.org/10.1002/asi.24355>
- Firmadani, F. (2020). Media Pembelajaran Berbasis Teknologi Sebagai Inovasi Pembelajaran Era Revolusi Industri 4.0. *Prosiding Konferensi Pendidikan Nasional*, 2(1), 93–97. http://ejurnal.mercubuana-yogya.ac.id/index.php/Prosiding_KoPeN/article/view/1084/660
- Hasan, M., Milawati, Darodjat, Khairani, H., & Tahrim, T. (2021). Media Pembelajaran. In *Tahta Media Group*.
- Hayati, C. I., & Herawati. (2022). Islamic Religious Education Curriculum (PAI) Innovation in the Framework of Installing Local Wisdom Values. *Journal of Education Science (JES)*, 8(2), 337–348.
- Huang, M. H., Rust, R., & Maksimovic, V. (2019). The Feeling Economy: Managing in the Next

- Generation of Artificial Intelligence (AI). *California Management Review*, 61(4), 43–65. <https://doi.org/10.1177/0008125619863436>
- Lukma, H., & Nurjanah. (2023). *MEDIA PEMBELAJARAN DIGITAL* (Andriyanto (ed.); 1st ed.). Underline.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: a methods sourcebook* (Third). SAGE Publications.
- Nasution, A. K. R. (2019). YouTube as a Media in English Language Teaching (ELT) Context: Teaching Procedure Text. *Utamax: Journal of Ultimate Research and Trends in Education*, 1(1), 29–33. <https://doi.org/10.31849/utamax.v1i1.2788>
- Podgórska, R. (2023). Teaching English with PowerPoint. *Zeszyty Glottodydaktyczne Jagiellońskiego Centrum Językowego*, 12, 93–97. <https://doi.org/10.4467/27204812zg.23.007.18709>
- Rabani, S., Khairat, A., Guilin, X., & Jiao, D. (2023). The Role Of Technology In Indonesian Education At Present. *Journal of Computer Science Advancements*, 1(2), 85–91. <https://doi.org/10.55849/jsca.v1i1.403>
- Rahma, F. A., Harjono, H. S., & Sulisty, U. (2023). Problematika Pemanfaatan Media Pembelajaran Berbasis Digital. *Jurnal Basicedu*, 7(1), 603–611. <https://doi.org/10.31004/basicedu.v7i1.4653>
- Rahmawati, Y., & Suharyati, H. (2022). Peningkatan Literasi Digital Dalam Pembuatan Bahan Ajar Multimedia. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 8(2), 977. <https://doi.org/10.37905/aksara.8.2.977-984.2022>
- Rintaningrum, R. (2023). Technology integration in English language teaching and learning: Benefits and challenges. *Cogent Education*, 10(1). <https://doi.org/10.1080/2331186X.2022.2164690>
- Riyan Rizaldi, D., & Fatimah, Z. (2022). Merdeka Curriculum: Characteristics and Potential in Education Recovery after the COVID-19 Pandemic. *International Journal of Curriculum and Instruction*, 15(1), 260–271.
- Salam, U., Wahdini, Surmiyati, Rezeki, Y. S., Riyanti, D., & Suthathothon, P. (2023). Teachers' Challenges and Strategies in Using Digital Media in Teaching English. *Journal of English Language Teaching Innovations and Materials (Jeltim)*, 5(1), 49–68.
- Santika, R., Charisma, D., & Sugesti, I. (2023). The Implementation Of Digital Resources As Supporting Learning Media In Teaching Narrative Writing Text. *Jurnal Indonesia Sosial Teknologi*, 4(9), 1261–1271. <https://doi.org/10.59141/jist.v4i9.711>
- Setyawati, A., Novita, L., Syamia, E. N., Maryani, L., & Wahab, A. (2024). Media Pembelajaran Berbasis Digital. In Murjainah, D. Rahmiati, & Kasmawati (Eds.), *PT Arr rad Pratama* (1st ed.). <http://journal.mahesacenter.org/index.php/ppd/article/view/195>
- Singhal, S., Hough, J., & Cripps, D. (2019). Twelve tips for incorporating gamification into medical education. *MedEdPublish*, 8, 216. <https://doi.org/10.15694/mep.2019.000216.1>
- Yona, S. (2014). Penyusunan Studi Kasus. *Jurnal Keperawatan Indonesia*, 10(2), 76–80. <https://doi.org/10.7454/jki.v10i2.177>