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EDTECH IMPLEMENTATION AT ENGLISH TEACHERS COMPETENCIES DEVELOPMENT PROGRAM (PKGBI) 2024 CONDUCTED BY KELAS KREATIF TRAINERS

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ABSTRACT

English Teacher Competencies Development Program (PKGBI), a national initiative aimed at enhancing teacher competence, has adopted several digital tools to improve training delivery and participant engagement. This paper examines the integration of educational technology (Edtech) in the PKGBI 2024 program, facilitated by trainers from the Kelas Kreatif Personal Development Community. Through a case study approach, this paper explores how Edtech solutions were implemented by trainers to enrich the learning experiences of educators joined the program. Key technologies, including Learning Management Systems (LMS), application, platforms, and tools, are evaluated for their effectiveness in meeting training objectives. Findings indicate that Edtech implementation during synchronous and asynchronous sessions covers variations of Edtech namely Pearson English Portal (PEP), Google meet, Google drive, Wordwall, Canva, Quizizz, Wheel of names, Genially, Learning apps, Padlet, Bamboozle, Gslide, Microsoft Power Point, Mentimeter, Bookwidgets, Youtube, Edpuzzle, Nearpod, and Kahoot. Wordwall was found to be the most frequent used by trainers, while Genially is the least used by trainers. In Addition, Canva is the most recommended edtech to use in online setting classroom, specifically PKGBI classroom setting. It was found that Education technology implementation prominently requires practicality followed by interactivity and familiarity resulted in favorability. The paper concludes best practices for edTech implementation in large-scale teacher training programs and its potential to transform professional development in education.

Keywords: Educational technology, Kelas Kreatif, Trainers

INTRODUCTION

Edtech is technology utilized to improve methods of teaching and learning. It includes a variety of tools and resources covering learning management systems, interactive platforms, and educational apps or tools to aid teachers and students. Edtech promotes engagement, collaboration, and personalization between teacher and student in traditional and online classroom settings.

In ancient times, people learn without articles or technology. Storytelling is one of the main methods to teach knowledge. Myth and legend are educational tools to explain the origin of the world, society, and science. People learn by observing and imitating the behavior of others. Oral communication occurs when words are spoken by the mouth, in a face-to-face situation (Ricky W. Grifiin 2006, P .3). Verbal and non-verbal communication involves the process of encoding thoughts into words and actions.

(Kathryn & Howard 2012, P.5) People are not yet familiar with what technology is, what it is like and how, they communicate traditionally. By using their body and mouths to convey all opinions and ideas through spoken words or actions, communication between them is still very natural because it is transferred directly. Even though there is no technology as an intermediary, they can still communicate. Besides that, their togetherness and friendship will also be maintained even with limited access. For example, not being able to communicate with people far away or in terms of education will not be conveyed evenly. Still, the good side is that deliberation between residents will continue to be maintained.

In 5.000-6.000 years ago, people learned through written communication. When people communicate through words, it's called written communication. People express their love, expression, and ideas through words. In the dissemination of science at that time, many were circulated through articles, journals, and scientific papers. Written communication saw a significant advancement with the invention of paper in China during the 2nd century. The rapid spread of intellectual ideas and the mass production of books occurred with the invention of the printing machine by Johannes Gutenberg in Germany in 1450. The development of writing was increasingly rapid. In the 20th century, technological innovations made it easier for humans to communicate, namely text messages and emails. In the early 20th century, around 1920, radio broadcasting began to be used in education as a learning medium. In Indonesia, radio was a learning tool in 1950 and became a crucial medium for distance learning. To explain difficult subjects, teachers would use video, and video technology became popular in the 1980s.

In the 2000s, YouTube became a platform for educational content. The growth of the internet made video a valuable learning medium. Additionally, these educational videos became a solution for distance learning (PJJ) in 2019, as YouTube facilitated access to course materials during remote learning periods amid the global crisis. In the modern era, people can learn through social media platforms such as Instagram, WhatsApp, TikTok, and others without limitations. In the past, science is limited; nowadays, science is shareable. It's shareable because technology has grown rapidly (Dedi Sulaeman, 2024).

Several previous studies on how edtech leverages English teaching and learning have been conducted by some researchers. In 2022, Fareeha Adil Investigated the impact on learning outcomes using EdTech during COVID-19: Evidence from an RCT in the Punjab province of Pakistan. This research aims to test the effect of EdTech during COVID-19. The researcher found that In the TaRL treatment group, ITT (Intention to Treat) significantly impacted Urdu and English scores. Their Urdu and English language scores increased by 0.56.

From teachers' training perspective, Anne Fleur (2023) on her research analyzed how EdTech can solve education challenges in Sierra Leone by examining policy teacher and community perspectives. The results indicated that the education policy in Sierra Leone is in line with the applied Edtech. Teacher training is necessary as a medium for using the English language. Community engagement is essential to see and ensure they can access technology.

Moreover, teachers must create various competencies to face English language challenges (TEFL) effectively. Teachers must adapt pedagogical methods to students' needs and styles in language acquisition (Richard, 2006) They must understand appropriate teaching strategies to facilitate language acquisition, and pedagogical competence involves the abilities and methods of teaching languages in varied contexts.

On the other hand, teachers must be equipped with good English language skills. Students rely on teachers as their guide. Therefore, teachers must have the ability to use appropriate language not only in vocabulary and pronunciation but also in social context. Teachers need to demonstrate high linguistic proficiency to serve as both linguistic and cultural models for their students (Hymes, 1972).

Educational integration is needed in language learning. To improve the learning experience, teachers must be competent in using educational technology. Effective teachers use technology not as an add-on but as an integral part of their instructional strategies, aligning tools with pedagogical objectives" (Mishra & Koehler, 2006).

Indonesia is one of the countries where Edtech is growing rapidly. Edtech is shaping the future of education. It adjusts learning methods to a rapidly changing world. It can be accessed anytime and anywhere by both students and teachers. In his research, Dedi Sulaeman (2024) analyzed the effectiveness of ICT in improving English language acquisition. The researcher found that the acquisition of language through ICT has a transformative impact and shows significant progress in students' English language acquisition in Indonesia.

Learning Management System (LMS) as educational technology offers more features to enhance learning experience whereas platforms focus on course content. Several popular Edtech Learning Management System (LMS) and platforms used in Indonesia are Ruang Guru, Zenius, Education, Edulogy, Edmodo, Schology, Moodle, and Quipper School. Ruang Guru offers an online tutoring platform with interactive video lessons, live tutoring sessions, and various study materials. Zenius Education is known for its comprehensive content and its focus on conceptual understanding. Quipper, it helps teachers assign materials, track progress, and engage students in a blended learning setup. During the pandemic, Indonesia also supported online and digital learning platforms like the learning online systems such Merdeka belajar. This program aims to utilize technology to create student-centered learning environments. Moreover, there are variant of well-known apps commonly used in education in Indonesia, to name some are, Wordwall, Quizizz, Canva, EdPuzzle, Genially, Kahoot!, Learningapps, Duolingo, Google Classroom, etc.

In 2024, the Ministry of Education, Culture, Research and Technology (Kemdikbudristek) issued regulation (Menteri Pendidikan, Kebudayaan, 2024) No. 12 of 2024 regarding the Curriculum for Early Childhood Education (PAUD), Primary Education, and Secondary Education, stating that English will officially become a mandatory subject in all elementary schools and equivalent institutions starting from the 2027/2028 academic year.

Therefore, to standardize the competency of English teachers across Indonesia, the Ministry has taken the initiative to design a program called the English Teacher Competency Development Program, abbreviated as PKGBI. Currently, the second cohort of the program is being underway. The program is focused on improving the skills, knowledge, and teaching strategies of English teachers throughout Indonesia. This is necessary because teachers need to possess knowledge of language acquisition processes, learning theories, and various teaching methods (Brown, 2000) In addition, teachers must also be able to act as effective facilitators, create communicative learning environments, and utilize the various resources available (Harmer, 2007).

In its implementation, the Ministry collaborates with several development partners. One of them is Pearson, with its Pearson English Portal (PEP) and My English Lab (MEL) Learning management system. Through its Versant proficiency test, teachers

are standardized based on the CEFR levels ranging from A1, A2, B1, B2, C1, and C2. The program is structured in a Roadmap that lasts four months, including self-study of the e-book, workbook (asynchronous), and face-to-face (synchronous) sessions and activities equivalent to 70 hours of meetings. Those who finish the program accordingly will eventually receive their Credly international certificate that exhibits and recognizes their competencies as certified English teachers fit to teach all levels.

Furthermore, Kemdikbudristek works with several organizations to provide qualified trainers, including CNL Books. CNL Books, in turn, collaborates with the Indonesian English teacher development communities, Kelas Kreatif, to meet the availability of these trainers.

Kelas Kreatif, established in 2008, previously the English Development Project, was initiated by an education figure, Dadan, M.Pd, who has been involved in various educational quality improvement activities, from personal development to national curriculum development. With 7000 or more learning partners, its mission is to create a lifelong learner who continuously reflects on their teaching practices. Subsequently, they are encouraged to research creative, innovative, and interactive learning theories, strategies, and methods to implement these in the classroom. Ultimately, the goal is to create an inspiring learning environment for their students.

Several members of Kelas Kreatif have successfully published their works through the National Book Center as authors of mandatory English textbooks for various levels. Additionally, this personal learning community of practice frequently conducts training sessions related to educational technology that can be utilized in the classroom, thus exposing its members to various educational technologies and honing their skills. With Kelas Kreatif's involvement in the program, it is worthwhile to investigate further the types of educational technology (EdTech) adopted by its members as trainers in the PKGBI program in 2024.

METHOD

This study employs a qualitative case study research design to investigate the educational technology, further called EdTech, implemented by Kelas Kreatif trainers in their PKGBI 2024 classes. As Denzin and Lincon (in Cresswell, 2016) stated that qualitative research is aimed to investigate objects in their original condition to understand and elaborate findings so they make sense or are meaningful. The case study design aims to understand complex dynamics within real-life settings, as Stake (1995). It also captures participants' perspectives in their own words (Merriam: 1998) The target population comprises thirty-seven Kelas Kreatif trainers who have passed the Versant Proficiency test of minimum B2+ CEFR level, totaling thirty-seven participants.

A purposive sampling design is then used to collect data from selected participants using criteria (Creswell, 2013). Trainers from Kelas Kreatif willingly participating in the research and those using edtech are observed. Twenty participants are then studied. Data collection was conducted through a structured online questionnaire administered to the selected cohort of Kelas Kreatif's trainers. The research instrument was designed to study the EdTech implemented in their classes.

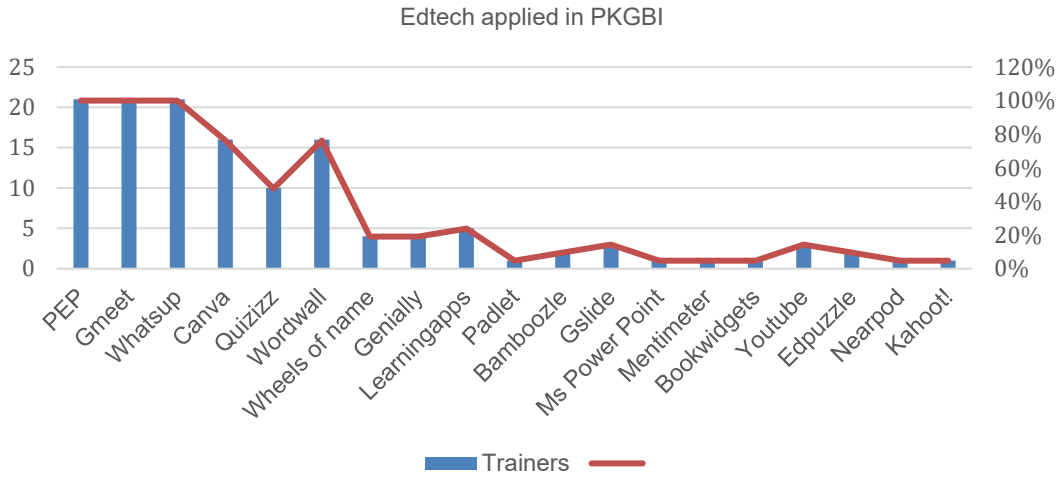
Data was analyzed using content analysis. This analysis is the most appropriate one for small population studies (Schreier, M., 2012), both qualitative and quantitative (Krippendorrff, K.,2004), in which data were transcribed and organized, assigned labels to specific pieces of text (words, sentences, or paragraphs), next grouped into similar

codes into categories or themes, last interpreted the meaning of the categories in relation to the research question.

FINDING AND DISCUSSION

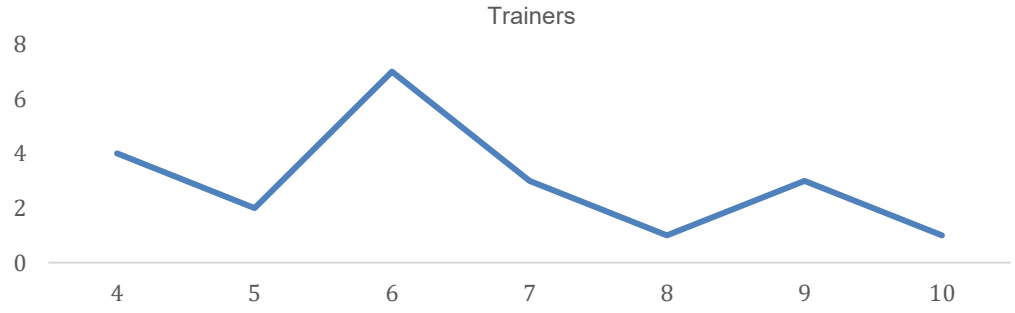
The study was addressed to 21 trainers from the Kelas Kreatif Personal Learning Community. Demographic analysis revealed that the majority of respondents were teachers (thirteen trainers), five lecturers, two school principals, and one other. Fourteen female trainers and seven male trainers taught twenty-three classes: seven A1 levels, eight A2 levels, seven A2+ levels, and one B1 level.

Figure 1. Name of Edtech used by Kelas Kreatif trainers at PKGBI's classrooms



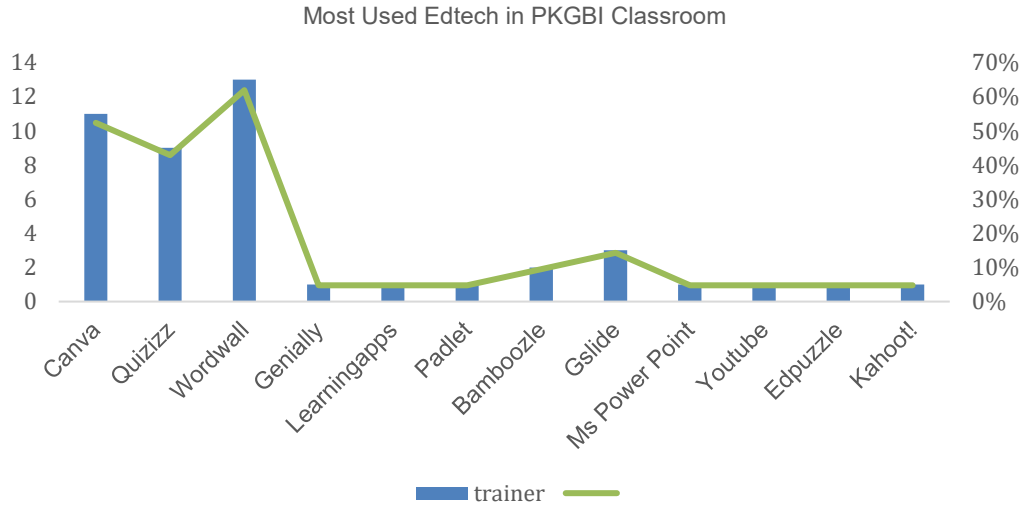
The figure provides a distribution representation of the responses regarding the usage of various Learning Management System (LMS), platforms, and tools. Data shows that there were several edtechs used by Kelas Kreatif trainers in this PKBGI program. Pearson English Portal (PEP), Google Meet (including Google Drive) and Whatsapp (WA) were compulsory LMS, platform and apps used by the trainers. Whereas Canva, Quizizz, Wordwall, Wheels of Names, Genially, Learning Apps, Padlet, Bamboozle, Google Slide, Microsoft Power points, Mentimeter, BookWidgets, YouTube, Edpuzzle, Nearpod, and Kahoot were some of the other platforms and tools trainers applied in their PKGBI classrooms. The next result will only present edtech other than the compulsory one.

Figure 2. Number of Edtech used by Kelas Kreatif trainers at PKGBI's classrooms



The data also indicates that four trainers apply four educational technology tools, followed by two trainers applying five tools, seven trainers applying six tools, three trainers applying seven tools, one trainer applying eight tools, three trainers applying nine tools, and one trainer applying ten tools. All respondents employ a combination of tools rather than relying exclusively on a single platform.

Figure 3. Most-used Edtech by Kelas Kreatif trainers at PKGBI's classrooms



Aside from the compulsory LMS (PEP, GMeet and WA), the data illustrates the distribution of Wordwall as the most frequently used platform by trainers. Thirteen (62%) respondents most adopted it in their classroom. Canva is the next most used edtech. It is frequently used by eleven respondents (52%). The next top three is Quizizz, frequently used by nine respondents (43%). Three respondents (14%) used Google Slide, two respondents (10%) used Bamboozle, also one respondent (5%) for each Genially, LearningApps, Padlet, Ms. Power points, Youtube, Edpuzzle and Kahoot!.

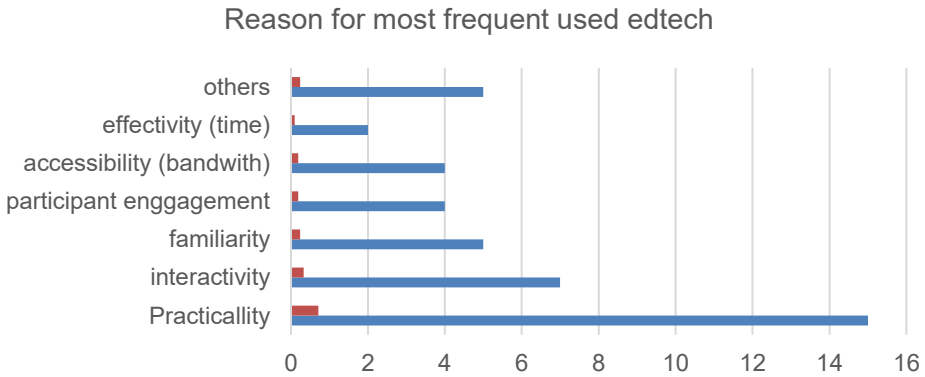
Table 1. Reason why the trainers choose the most frequently used Edtech in PKGBI classrooms

Trainers no	Reason for frequently use the edtech
1	Because it is more interactive and can create higher participant involvement.
2	Canva makes presentations more attractive while wordwall is easy to use and doesn't take a long time
3	Because I am very used to using Genially, it has various and interactive features
4	Easy to use and doesn't really require a strong internet network.
5	it's familiar
6	"Quizizz Presentation allows me to interact with participants directly and the results can be recorded in the application. Quizizz is also relatively easy to use.
	Genially is one of the presentation media that I paired with Quizizz because the Genially link can be directly linked in Quizzizz."
7	Convenient and easy to use these tools, or mandatory in the case of Pearson LMS and Google Meet/Drive

8	Easy to use
9	Because it is practical and makes it easier for me to share screens and make participants participate actively
10	Easy to use and personalize
11	The most familiar and can be accessed premium with a learning teacher account. id
12	It is familiar and has many quiz variations and gamification features
13	Easy and low bandwidth
14	More familiar and easy to use
15	To review lessons
16	There isn't any yet
17	Easy to use
18	Practical, effective and user friendly, safe to the network too
19	Provides various forms of presentations/games that make it easier for us to create presentations and games
20	It's easier and more fun
21	Easy to access, easy to use or operate during PKGbI activities, enjoyable for participants.

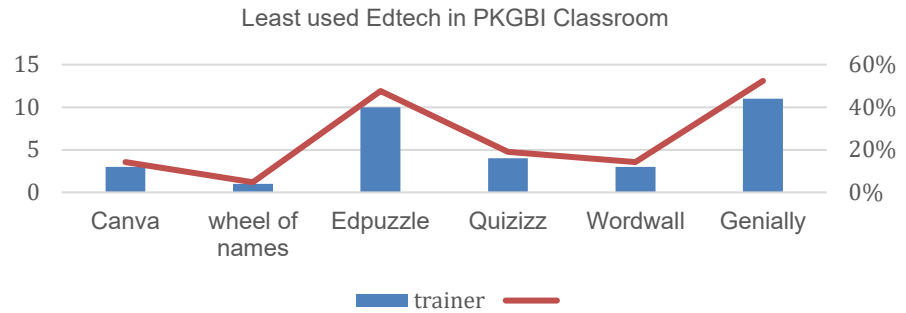
As seen in the table, several trainers repeatedly stated certain words as their reasons for choosing a particular edtech. By indexing the data into codes of practicality (derived from the statement "easy to use or practical), interactivity (derived from the statements "it is more interactive" or "provides various forms of games"), familiarity (stated "it is familiar" and some similar reasons), participant engagement (stated "enjoyable for participant" and its similarity), accessibility ("low bandwidth" or "safe to network" reasons), effectivity ("effective" reason), and other reasons ("able to synchronized", "can be recorded" and their similarity reasons).

Figure 4. Reason for most frequent edtech used by Kelas Kreatif trainers at PKGBI's classrooms



Some results found that trainers choose particular edtech for some reasons. Fifteen participants (71%) emphasized practicality, seven participants (33%) preferred interactivity features, five participants (24%) preferred familiarity, four participants (19%) emphasized participant engagement also accessibility, two participants (10%) emphasized tools' effectivity, and the other five participants (24%) stated other reasons, namely synchronization, convenience, and personalization reason.

Figure 5. Least used Edtech by Kelas Kreatif trainers at PKGBI's classrooms



On the other hand, as shown in the following figure, the result of a question asking which edtech is most unlikely to be used by trainers in their PKGBI classroom setting shows that Genially and Edpuzzle as the answers. Genially is stated as the least utilized edtech in their daily PKGBI setting by eleven trainers (52%), second least is Edpuzzle, where ten trainers (48%) preferred to less utilized it, and under five trainers still underutilized Quizizz (19%), Canva (14%), Wordwall (14%), and Wheel of Names (5%).

Table 2. Reason why the trainers not choosing those Edtech in PKGBI classrooms

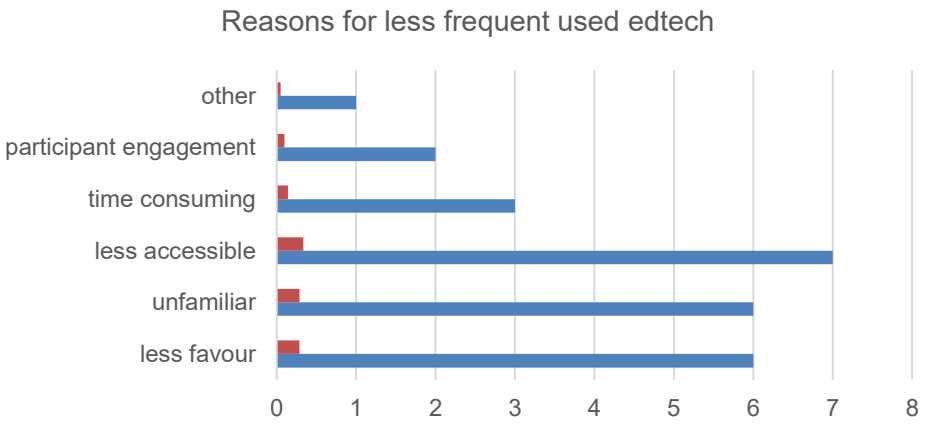
Trainers no	Reason for less frequently use the edtech
1	Currently represented by the use of Quizizz
2	Because the need to randomize names or questions is always present at every meeting
3	I prefer other applications
4	Because of the nature of the competition/test, I don't want any participant to feel that they have the least value and therefore become unmotivated to take part in taking the quiz.
5	never used it
6	Wordwall is a gamification media from material prepared per synchronous meeting. But not every time I use it.
7	Only for variations in types of activities.
8	Difficulty connecting when using other applications
9	Because I usually use it in my classes with students, not with PKGBI participants. I think, in a synchronous session, it would be better to take material from something closest to the participants.
10	I've never used it, but maybe I'll try it at future meetings.
11	Not familiar yet
12	Not yet proficient in using it
13	There is no desire to just try. It's comfortable.
14	Limited knowledge and access
15	Its use has not been explored
16	Because the internet connection in the area is not good. Then the existing ebook is sufficient while time is limited.
17	Heavy
18	It takes a long time to prepare, and there are often problems when the network is not good
19	Haven't had time yet but will use it later

20	In my opinion, the bandwidth used is too large, making it possible for many errors to occur in the learning process
21	It's too heavy to use in meetings and sometimes it's not compatible with participants' internet connections, so it's slower. And editing takes longer

As it was conducted on the most-used edtech in the classroom, the action was also done on the least-used edtech. Trainers' answers were categorized into codes. The codes include favourability ("I prefer other applications", "there's no desire to just try" and their similar reasons), familiarity ("not familiar yet", "never used it", "limited knowledge" or "its use has not been explored reason), accessibility ("problem when the network is not good", "it's to heavy" or "not compatible" reasons), effectivity ("it takes a long time to prepare" or "editing takes longer" reason), participant engagement ("Because of the nature of the competition/test, I don't want any participant to feel that they have the least value and therefore become unmotivated to take part in taking the quiz" and its similar reason), and others.

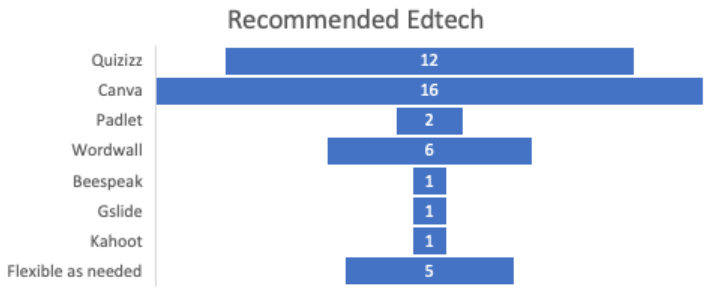
The following figure shows the result of the classification. The data showed that seven trainers (33%) preferred not to use the edtech because of accessibility, six trainers (29%) due to familiarity and favourability, three trainers (14%) less preferred them because of effectivity, two trainers (10%) because of participant engagement, and one trainer (5%) for other reason.

Figure 6. Reason for least frequent edtech used by Kelas Kreatif trainers at PKGBI's classrooms



Finally trainers are ask based on their previous experience on both using and not using certain edtech in their PKGBI classroom setting. Which edtech then these trainers suggest as best to be implement on another online setting classroom, and the result is pictured in the following figure.

Figure 7. Reason for least frequent edtech used by Kelas Kreatif trainers at PKGBI's classrooms



The data shows that Canva is the most recommended Edtech in an online classroom setting. sixteen participants recommend it. Quizizz is the second option, with twelve trainers giving recommendations on it. Next is Wordwall, with six recommendations. Padlet has two recommendations, Beespeak, Google Slide, and Kahoot! with one recommendation. The other five trainers did not recommend specific tools, arguing that there's no one tool fits all conditions.

Albeit some LMSs, platforms, apps, or tools were not originally intended for educational purposes, they are now being used purposively for education. There are some distinct differences between LMSs, platforms, apps, and tools. Bates (2015) explained how tools are important in creating variation in learning experience, which facilitates the specific needs of certain settings. Whereas platforms are not merely a single-function application, but rather as a whole environment that can incorporate LMS or tools (Siemens, 2011)

Implementing educational technology in an Indonesian setting, which has a vast territory and large population, needs to consider distribution problems. In terms of human resources, technology, and infrastructure. Stepping into a teacher competencies training program, although this diversification suggests a flexible approach to educational technology, where tools are integrated based on specific pedagogical needs, a one fit all situations technology is necessary to consider before addressing one.

The Pearson English Portal (PEP), as a PKGBI program, primarily as an educational tech used in the ten weeks of online class, is a comprehensive digital platform designed to enhance the teaching and learning in blended English classes. It combines its 250 years of education expertise into a single, user-friendly LMS. PEP has some key features such as teaching blended English resources, digital resources, guided lesson plans, students' performance reports, lesson flow and presentation modes, homework management, and feedback system.

Google Meet is used in every synchronous session to cover the gap during the five days a week, asynchronous self-paced class. In addition, Google Drive is also used as the main storage for the trainer-graded speaking and writing tasks. For daily asynchronous courses, teachers and students engaged through WhatsApp to stay in touch. Other than those obligatory resources, trainers have their own preferred edtech tools to use.

The data analysis shows that sixteen edtech tools were being used in the setting, namely Canva, Quizizz, Wordwall, Wheels of Names, Genially, Learning Apps, Padlet, Bamboozle, Google slide, Microsoft Power points, Mentimeter, BookWidgets, YouTube, Edpuzzle, Nearpod, and Kahoot. From the already mentioned edtechs, Wordwall (62%),

Canva (52%), and Quizizz (43%) appeared to be the three most frequent used edtechs in the PKGBI setting. The reason for this decision is due to its predominance in practicality. As Shirley et. Al (2011) put forward in their research that practicality consists of three constructs of congruence, instrumentality, and cost/benefits. Practicality in this study refers to the trainers' compatibility in using the technology. Statements like "easy to use" and "practical" are the most frequent words stated by trainers. In addition, the technology provides various presentation and gamification features that help trainers to present their material interactively that suits the training needs. Thirdly, most trainers are quite familiar with the tool.

The overwhelming preference for Wordwall signifies that interactive, game-based learning technology may be highly effective in the instructional environments these respondents represent. The substantial use of Canva and Quizizz points to the importance of tools that facilitate content creation and assessment.

The least used edtechs in this setting are Genially (52%) and Edpuzzle (48%). The reason for this to happen is mainly because of accessibility problems. Both high bandwidth use and poor internet connection are the main problems since some training participants come from remote areas with poor infrastructure. This aligns with Rahman and Sandra's (2024) findings when researching educational technology implementation among pre-service EFL teachers in Bukit Tinggi, which conclude that accessibility is one of the main problems faced when teaching in the Indonesian context.

CONCLUSION

This study concludes a significant finding in educational technology implemented in PKGBI classroom settings conducted by Kelas Kreatif trainers. With the advancement of LMSs, platforms, tools and application, how certain technology is use, trainers knowledge and supporting facilities on the other hand play a pivotal role in implementing one. Kelas Kreatif trainers various background knowledge on technology has easy certain edtech implementation. However there are still factors they cannot controlled such bandwidth and internet connection. The findings is most beneficial for educational technology developer on how they can develop a simple, interactive, low bandwidth LMS, platforms, tools or application. Also for edtech training organizer in which they need to make sure that both trainers and participants are well aware of how all the edtech used and usage. Future study suggested from the findings is on effort to cope with problems found in this study.

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