

Difficulties in Utilizing Digitally-Mediated Authentic English Teaching Materials from The Perspective of Madrasah Teachers

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Abstract: In the 21st century, digital literacy has become a fundamental competency for teachers, particularly in English language teaching. However, many *madrasah* teachers continue to face significant difficulties in utilizing and integrating digital tools and resources into their classroom practices. This study aims to investigate the challenges or difficulties encountered by rural and semi-urban *madrasah* English teachers in utilizing digitally-mediated authentic teaching materials. Using a mixed-methods approach, data were collected from 37 participants through questionnaires and interviews. The findings revealed three main categories of difficulties: technical barriers, competency gaps, and contextual constraints. Technically, while 70% of teachers reported that students have access to digital devices, only 25% had stable internet access, and over 72% lacked essential teaching tools (APE: *Alat Peraga Edukatif*). In terms of competency, only 18.9% felt confident using platforms such as Canva, interactive LiveWorksheets, or Google Forms, and just 5.4% were confident in designing tasks based on local resources. Contextually, 86.4% lacked access to information about seminars or training, and 67.6% noted that professional development activities are rarely available in *madrasahs* (Islamic schools). The study concludes that these challenges require targeted interventions such as digital literacy training adapted to low-resource contexts, collaborative forums for material development, and broader access to professional development platforms such as the National Geographic Learning webinars and many others.

Keywords: Digital Literacy, Professional Development, Teacher Difficulty.

INTRODUCTION

Digital literacy, first introduced by Gilster (1997), is defined as the ability to understand and use information in multiple formats from a wide range of digital sources. It encompasses a complex interplay of technical proficiency, critical thinking, and ethical awareness, enabling individuals to interact with digital content purposefully and responsibly. Closely related is the notion of *digital competence*, which expands this concept by incorporating affective and strategic dimensions—such as motivation, attitudes, and adaptability—alongside knowledge and skills (Schwarz et al., 2024). Together, these constructs underscore that digital literacy is not static but evolves with technological innovation and societal needs. Thus, digital literacy is not merely a technical toolkit but a holistic, evolving framework that underpins lifelong learning, informed citizenship, and equitable participation in the digital era. For educators in particular, it represents both a challenge and an opportunity to reshape teaching practices, foster learner autonomy, and bridge the digital divide

in increasingly diverse and digitally-mediated classrooms.

In today's educational landscape, digital literacy is increasingly viewed as a transformative competency rather than a standalone skill. It involves the capacity to search for, evaluate, and synthesize digital information, as well as the ability to create, share, and communicate through various media and platforms (Falloon, 2020; Kusnadi et al., 2022). More than simply operating devices, digital literacy includes understanding the digital ecosystem—its tools, platforms, norms, and risks—and acting with discernment and responsibility within it (Anurogo et al., 2023; Park, 2013; Purnama et al., 2021; Tinmaz et al., 2023). It empowers individuals to adapt to technological change, manage information overload, and participate confidently in digital environments. As Jin et al. (2020) emphasize, digital literacy is a fundamental requirement for learners and educators to thrive in the 21st century. Furthermore, Lin et al. (2024) argue that digital literacy must include critical evaluation skills, equipping individuals to assess the credibility, bias, and accuracy of online

content—an essential defense against misinformation and digital manipulation.

Given these evolving definitions and expectations, the integration of digital literacy into classroom instruction has become a national and global priority, particularly in the context of English language teaching (ELT). According to UNESCO (2022), digital literacy is no longer a supplemental skill but a foundational competency for both teachers and students in modern education. In Indonesia, this priority is reflected in government-led initiatives such as *Merdeka Belajar* (Independent Learning) and *Sekolah Digital Indonesia* (Indonesian Digital School Initiative), which emphasize the development and delivery of learning materials that are both authentic and digitally enriched (Direktorat Jenderal Pendidikan Tinggi, Riset, dan Teknologi, 2020). In line with 21st-century demands, educators are increasingly expected to possess high levels of digital literacy. This includes the ability to critically select, utilize, and integrate information, media, and technology into classroom practices to improve the quality of instruction. Achieving this, however, requires ongoing professional development through structured activities such as seminars, webinars, workshops, and training sessions.

Furthermore, digital literacy reaches its full potential when paired with creativity and pedagogical skill. Teachers must not only be proficient in using technology but also capable of designing meaningful, contextually relevant teaching materials that actively engage students and enhance learning outcomes.

Despite *madrasah* teachers being aware of the importance of digital literacy skills for 21st-century educators, our preliminary observations revealed that several teachers experienced difficulties in utilizing digital media effectively in their English language classrooms. For instance, one teacher expressed uncertainty when asked to create a multiple-choice test using Google Forms, or asking them to make a simple video-based vocabulary exercise using Canva, citing a lack of familiarity with video editing tools. Another *madrasah* teacher struggled to design a PowerPoint presentation that incorporated interactive elements such as embedded audio or quizzes, indicating limited confidence in applying even basic digital features. These examples suggest that although digital tools are increasingly available, many teachers still face challenges in mastering the

necessary skills to integrate them meaningfully into their teaching practices—particularly in designing engaging and context-relevant English language learning activities. One *madrasah* teacher said that the internet connectivity at her school was too slow primarily because her school was situated at the foothills of a mountain, making it difficult to access digital resources, participate in webinars, or integrate online tools effectively into her English lessons.

A numerous studies also reported multifaceted challenges faced by *madrasah* teachers—especially in rural and semi-urban *madrasahs*—in utilizing digitally-mediated learning materials into classroom instruction. Tempur (2024) notes that digital transformation efforts in rural schools are often constrained by inadequate infrastructure and limited access to digital tools, which results in a digital divide between urban and rural education contexts. Similarly, Gusmana (2025) emphasizes that without reliable infrastructure and ongoing support, teachers in *Madrasah Ibtidaiyah* (Islamic elementary school) struggle to develop and implement quality instruction using digital resources. Sudarsih (2025) echoes these findings, identifying time constraints and low digital confidence as common obstacles preventing effective use of media in learning. These barriers are further compounded by geographic and technological limitations, as evidenced by Sazali's (2025) study of a remote *madrasah*, where poor internet access severely hindered the adoption of digital platforms. Collectively, these studies point to a systemic challenge: while digital literacy is increasingly recognized as essential, teachers in under-resourced regions face structural, technical, and pedagogical barriers that hinder meaningful integration of digital media in their instructional practices.

In line with the background aforementioned, the current study aims to analyze the difficulties faced by English language teachers at *madrasahs* in Lombok in utilizing authentic English teaching materials that incorporate elements of digital literacy. This study intends to fill that gap by exploring the difficulties encountered by English teachers at *madrasahs* in urban and semi-urban areas in Lombok by proposing three research questions: (1) How do *madrasah* teachers perceive difficulties in utilizing digitally-mediated authentic English teaching materials?; (2) What is your biggest difficulties in utilizing digitally-

mediated authentic English teaching materials at school?, and (3) What kind of support or training would help you overcome these difficulties?

METHODS

Research Design

This study employed a mixed-methods approach, combining both qualitative and quantitative data collection techniques (Creswell & Clark, 2011) to explore the difficulties experienced by teachers in designing digitally-mediated authentic English teaching materials. The quantitative data were obtained through questionnaires, while the qualitative components included a semi-structured interviews. This mixed design enabled a holistic understanding of both observable trends and contextual insights related to teachers' experiences.

Research Time and Place

This study was conducted in August 2024. The data collection took place at Ponpes Raudlatusslibyan NW Belencong, a private *madrasah* or Islamic school situated in Belencong village, Gunung Sari sub-district, West Lombok regency, West Nusa Tenggara province, Indonesia. Gunung Sari was selected as the research site intentionally or purposively due to the fact that it is situated close to the urban City of Mataram which is the capital of NTB province, having rural and semi-urban villages, and having diverse landscapes—coastal, agricultural, and hilly areas—many of which are reported for internet blank spots (Purnama, 2025). This site was considered ideal for data collection due to its representative challenges in digital connectivity.

Population, Sample, and Sampling Technique

The population of this study consisted all English language teachers working in private *madrasah aliyahs* (Islamic high schools/MA) in Gunung Sari sub-district, West Lombok regency. West Lombok has a total of 89 private *madrasahs*, of which 14 private *madrasahs* are located in Gunung Sari—representing approximately 16% of all private *madrasahs* in the regency. As of May 2025, Gunung Sari has the second-highest number of private *madrasahs* among all sub-districts in the West Lombok (Daftar-Sekolah.net, 2025). Each private Islamic high school employs approximately 2-3 English

teachers who teach Grades 10-12. Based on this estimate, the total population of English teachers in private *madrasah aliyahs* in Gunung Sari was approximated to be 42 (14 schools x 3 teachers).

This study adopted the purposive sampling technique in which the participating teachers were selected based on specific criteria that include: (a) currently teaching at rural or semi-urban private *madrasahs* in Gunung Sari; (b) having demonstrated difficulties in utilizing digital media for instructional material development, as identified through preliminary observations and discussions with several school principals and teachers; (c) showing an interest in adopting digital innovations; and (d) possessing basic skills in operating digital media. Purposive sampling was used to ensure that participants possessed relevant characteristics aligned with the study's objectives (Creswell, 2012).

Given these criteria and the relatively small population size (fewer than 100), the study adopted a whole population sampling i.e. 42 teachers. Despite limited funding, all eligible English teachers selected were invited to attend in the data collection phase, which was conducted as part of a community service program. All participants would receive reimbursement or compensation for their involvement in the present study.

Data Collection Procedures

To obtain comprehensive data, two main techniques were employed that included questionnaire and interview adopting guide to mixed method research (Creswell & Clark, 2011). Data collection was carried out through the following techniques.

1. Questionnaire Distribution

A structured questionnaire was distributed to obtain quantitative data on teachers' perceptions regarding technological access, digital competency, and contextual constraints.

2. Interview

Semi-structured interviews were conducted with a subset of participants to explore their experiences, difficulties, and expectations in using digitally-mediated authentic teaching materials.

Research Instruments

Two primary instruments were utilized to collect and validate data that included questionnaire and interview.

1. Questionnaire

The questionnaire was developed based on literature related to digital literacy and language instruction. It consisted of 20 items, all phrased as positive statements to avoid confusion and reduce response bias among participant with 5-option Likert scale items. A pilot version of the questionnaire was tested for clarity and reliability with a small group of similar participants before distribution. All Likert-scale items use the following scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. The items are divided into three sections that inquire about technical barriers (infrastructure, access, connectivity) in Section A, competency gaps (digital literacy, pedagogical design) in Section B, and contextual constraints (time, support, collaboration) in Section C.

2. Interview Guide

An interview guide was prepared to ensure consistency across sessions while allowing for exploratory two follow-up questions. The guide covered themes such as difficulties experienced during the utilization of digital media, perceived usefulness of the digital media, and reflections on institutional or infrastructural support. The two follow-up questions are: what is your biggest difficulties in utilizing digitally-mediated authentic English teaching materials at school? And What kind of support or training would help you overcome these difficulties?

Data Analysis Technique

Data were analyzed using both quantitative and qualitative methods. Quantitative data from the questionnaire were processed using descriptive statistics (frequencies, percentages, and mean scores) using Microsoft Excel to identify common trends in participant responses. The distribution of difficulties encountered by participants in utilizing digitally-mediated authentic English teaching materials used the formula frequency of responses divided by total respondents ($n = 37$). Meanwhile, qualitative data from interview transcripts were analyzed using thematic analysis (Braun & Clarke, 2006), where codes

were inductively developed and grouped into themes that reflected recurrent ideas. Triangulation was applied by comparing data across instruments to enhance the credibility and validity of the findings.

FINDINGS AND DISCUSSION

Findings

RQ1. How do *madrasah* teachers perceive difficulties in integrating or utilizing digitally-mediated authentic English teaching materials?

The difficulties can be grouped into three broad categories: (1) technical barriers such as infrastructure, access, and connectivity, (2) competency gaps such as digital skills, pedagogical design, and task creation, and (3) contextual constraints such as time, location (rural/urban divide), and lack of teaching community support.

1. Section A: Technical Barriers

Limitations related to technical barriers such as infrastructure, digital device access, internet connectivity, and the visibility of elements in participants' teaching environments, shown in Figure 1, reveal several critical challenges that directly impact the integration of digitally-mediated authentic teaching materials. Positive perception of student access to devices is shown in Item 1 that a combined 70% (38% SA and 32% A) of teachers agreed that their students have access to digital devices such as smartphones, tablets, or computers. This is a notable strength, suggesting that in many rural or semi-urban settings, student readiness for digital learning is improving, possibly due to increased smartphone ownership—even if shared or limited in functionality.

Significant problem with poor internet connectivity, however, is revealed (Item 2) that only 25% agreed that internet access at their school is stable and reliable, while 33% disagreed and 35% strongly disagreed—a total of 68% reporting poor connectivity. This slow and unstable internet connectivity, often exacerbated by blank spots (Purnama, 2025) is the most critical infrastructure barrier, affecting everything from material development to participation in webinars and digital classroom activities. Even with devices available, poor internet significantly limits digital innovation.

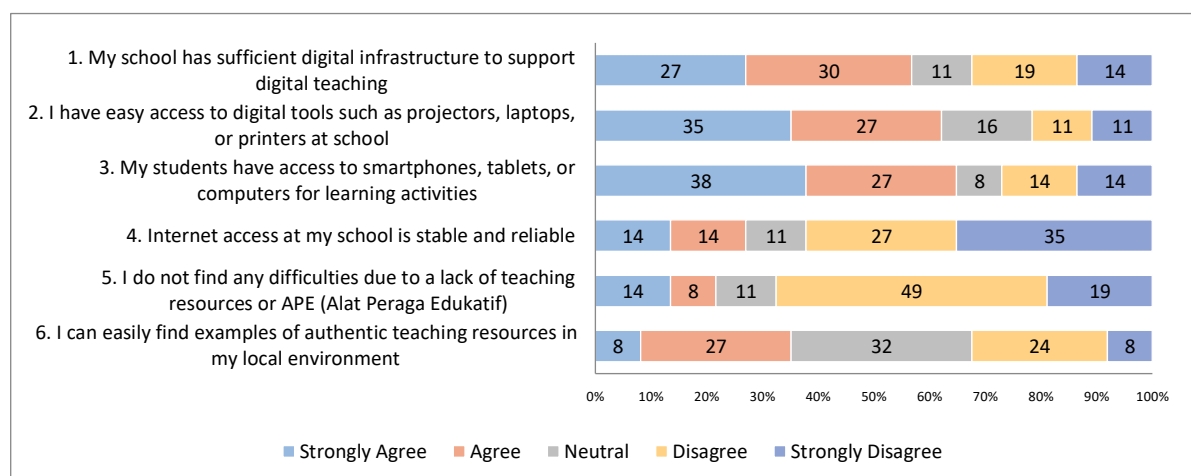


Figure 1. Percentage of perceived utilizing digitally-mediated authentic English teaching materials among madrasah teachers.

In several areas in West Lombok, especially those situated in more remote or hilly terrains, internet access is not only limited in speed but also highly unreliable, frequently disconnecting during usage or failing to connect at all. This inconsistency disrupts teachers' ability to access online teaching materials, participate in webinars, use cloud-based tools, or assign interactive digital tasks to students. Lack of teaching resources or Alat Peraga Edukatif (APE) as shown in Item 5 is agreed by teachers with only 11% (8% SA + 3% A), while 72% disagreed and 35% strongly disagreed. This indicates that over 100% cumulative dissatisfaction is reported here (due to multi-response rounding). This suggests that schools still suffer from basic teaching tool shortages, such as printers, smart TVs, or visual aids—limiting teachers' ability to deliver high-quality instruction, let alone digital instruction.

2. Section B: Competency Gaps

Teachers' self-reported confidence and ability in using digital tools, designing engaging tasks, and integrating digital resources into English language instruction, as shown in Figure 2, highlight significant training needs and skill gaps among rural and semi-urban English teachers, particularly in creating original and interactive content using digital platforms. Very low confidence in using digital tools (Item 7) that only 18.9% of participants agreed they feel confident using tools like Canva, LiveWorksheets, or Google Forms, while a combined 72.9% either disagreed (35.1%) or strongly disagreed (37.8%). This clearly indicates a critical lack of digital tool mastery,

which is essential for creating visually engaging and interactive digitally-mediated teaching materials. The complete absence of "Strongly Agree" responses reflects deep-rooted digital skill gaps.

Item 8 reveals difficulty designing tasks based on local resources that only 5.4% of respondents expressed agreement (SA + A) that they can independently design engaging learning tasks based on local resources. In contrast, 64.8% disagreed or strongly disagreed, with 29.7% remaining neutral. This suggests that while teachers may understand the idea of local-based or authentic learning materials, they lack the confidence and capacity to translate it into creative, autonomous task design. In terms of promoting creativity through digital tasks teachers are struggling that only 13.5% of them agreed they do not find it difficult to create tasks that promote creativity (Item 9), while 48.6% disagreed or strongly disagreed, and 37.8% remained neutral. This high level of neutrality may indicate uncertainty or inexperience. Overall, the data suggest that many teachers find it challenging to design student-centered tasks, especially for passive learners—an issue compounded when using unfamiliar digital tools. Similar concerns of uncertainty (Item 10) about integrating digital media effectively: just 18.9% of participants agreed they understand how to effectively integrate digital media into English lessons, while a combined 64.8% disagreed or strongly disagreed. This gap in practical application reflects a lack of training in digital pedagogy, not just in tool usage, but in how to strategically use media to support learning outcomes.

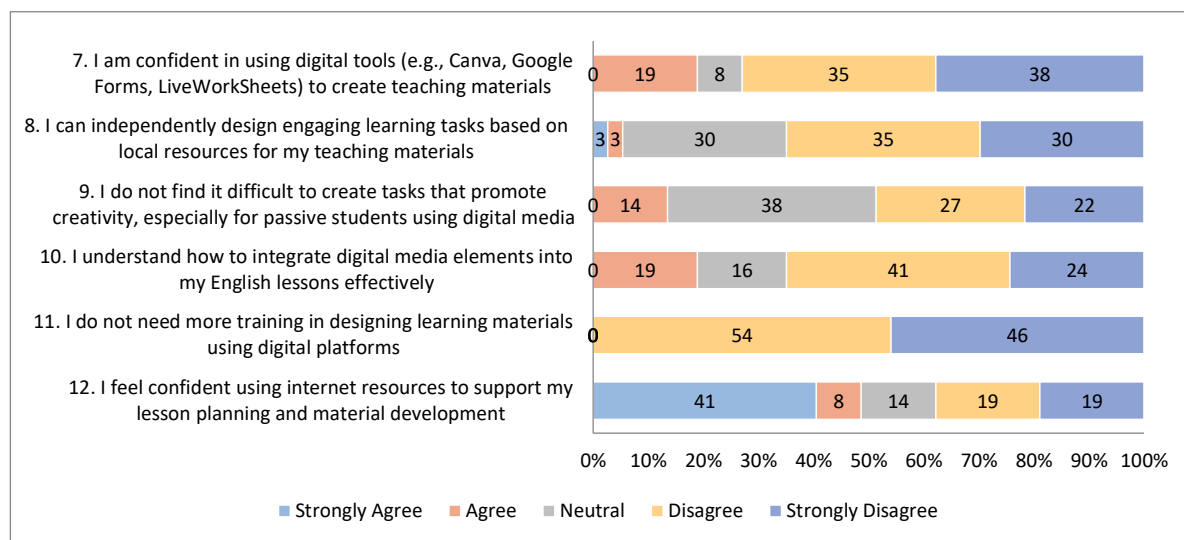


Figure 2. Percentage of perceived competency gap in utilizing digitally-mediated authentic English teaching materials among madrasah teachers.

The strongest consensus) across this section (Item 11) shows that teachers overwhelming need for professional development such as trainings, offline seminars, or webinars. As much as 100% of respondents either disagreed (54.1%) or strongly disagreed (45.9%) with the statement that they do not need more training. This is a clear and urgent indicator that rural and semi-urban English teachers recognize their own limitations and are seeking support in digital material design and lesson development. Interestingly, some confidence in using internet resources (Item 12) shows that 48.6% of participants agreed or strongly agreed that they feel confident using internet resources to support lesson planning. However, the remaining 51.4% either disagreed or remained neutral, indicating that even basic online research or resource usage is not yet fully comfortable for many teachers. This issue is due to limited and slow internet access in a number of areal such as hilly regions and blak spots.

3. Section C: Contextual Constraints

Contextual challenges that influence teachers' ability to create and implement digitally-mediated authentic English learning materials, as shown in Figure 3, include time management, collaboration, institutional support, and access to professional development. Figure 3 shows that time constraints are a major barrier for *madrasah* teachers. Many of them

reported that they lack adequate time in their teaching schedules to develop original digital materials. This constraint often forces them to rely on pre-existing resources (Item 14), not because of lack of interest, but due to workload and limited instructional planning hours. A majority of teachers expressed that they would feel more confident designing digital materials if working collaboratively with peers (Item 15). This highlights a need for more structured, school-supported collaborative platforms, such as MGMP forums, which were also acknowledged as helpful in developing better materials (Item 16).

Lack of peer and institutional support are perceived by many respondents that they disagreed with the idea that they already have sufficient professional support from colleagues (Item 17), indicating feelings of professional isolation. While some school leaders are supportive (Item 18), the level of institutional encouragement for digital innovation appears inconsistent. A clear consensus in regards to lack of access to professional development (Items 19 and 20). Teachers in private Islamic schools (*madrasahs*) still face limited access to seminar/webinar information from school principles or board of the MGMP. These constraints represent systemic barriers that hinder teacher growth and digital capacity-building.

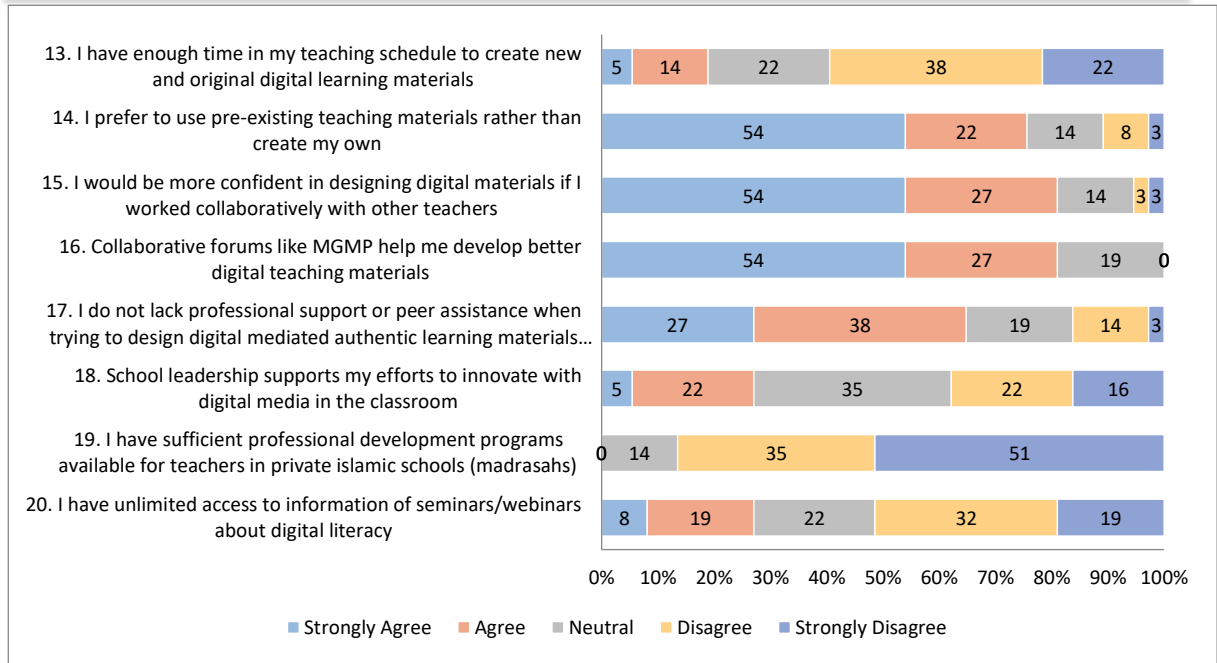


Figure 3. Percentage of perceived contextual constraints in utilizing digitally-mediated authentic English teaching materials among madrasah teachers.

The analysis of Sections A, B, and C reveals a consistent pattern of barriers hindering the integration of digitally-mediated authentic English learning material in rural and semi-urban schools. Section A (Technical Barriers), with a cumulative average of 55.7% disagreement, highlights pressing issues such as poor internet connectivity, lack of digital infrastructure, and limited access to authentic materials and educational tools. Section B (Competency Gaps) records the highest concern, with an average of 64.9% disagreement, reflecting teachers' limited confidence in using digital tools, designing creative tasks, and integrating digital media—further emphasized by 100% of teachers stating they still need more training. Section C (Contextual Constraints) follows closely, with an average of 62.5% disagreement, showing that time limitations, lack of collaboration, insufficient institutional support, and poor access to professional development opportunities remain major challenges. Together, these three areas form a multi-layered obstacle that restricts rural English teachers' ability to innovate with digital and contextualized learning approaches.

RQ2. What is your biggest difficulties in integrating digital meditaed authentic English teaching materials at school?

In the process of integrating digitally-mediated authentic English teaching materials, participants encountered a range of difficulties.

The difficulties, as outlined in table below, reflect both technical and pedagogical issues that arise during the development and integration of digital-based instructional resources in diverse educational contexts.

Based on the data presented in the Table 1, the biggest difficulties in integrating digital meditaed authentic English teaching materials for *madrasah* teachers at school are: *First*, limited access to information on professional development seminars/webinars (86.4%) being the most frequently reported difficulty, highlighting a significant information gap for rural and semi-urban English teachers. Many are unaware of ongoing professional development opportunities due to poor communication channels, lack of school coordination, or digital barriers. This isolation severely limits their chances to upgrade skills, adopt new teaching strategies, or engage with current pedagogical innovations.

Second, time constraints and limited skills in creating digital materials; preference for using pre-existing materials (67.6%). A large portion of teachers reported that limited time and confidence hinder their ability to design original digital teaching content. Many rely on existing materials because creating resources from scratch requires both technical competence and creative planning, which are difficult to achieve under tight teaching schedules. *Third*, lack of professional development programs for teachers in private Islamic schools (67.6%) reflects

systemic inequality, where teachers in madrasahs often lack access to formal training programs. Unlike their public school counterparts, they receive fewer invitations to government or institutional PD programs, leaving them without crucial opportunities to build professional capacity or integrate digital innovations.

Table 1. The Biggest Difficulties Encountered by Participants in Integrating Digitally-mediated Authentic English Teaching Materials (n = 37)

No	Types of Difficulties	Perc.
1	Limited access to information of professional development trainings/seminars/webinars/community service	86.4%
2	Time constraints and limited skills in creating digital materials; preference for using pre-existing materials	67.6%
3	Lack of professional development programs available for teachers in private islamic schools (<i>madrasahs</i>)	67.6%
4	Poor or unreliable internet access (slow and pricy internet package for rural and semi-urban <i>madrasah</i> teachers)	62.2%
5	Difficulty in selecting varied and challenging tasks that stimulate student creativity, especially for passive learners	59.5%
6	Difficulty in designing instructional media due to limited educational tools (<i>Alat Peraga Edukatif</i>) available at school	56.8%
7	Inadequate mastery of information technology, making it difficult to develop digital teaching media	54.1%
8	Limited digital media literacy among both teachers and students	51.4%
9	Teaching materials are difficult to obtain in remote areas	48.6%

Fourth, poor or unreliable internet connectivity (62.2%) remains a core barrier, especially in rural and semi-urban areas where signal strength is weak and data costs are high. This not only affects access to digital materials and online platforms but also limits participation in online training, collaborative forums, and the use of web-based teaching tools. *Fifth*, difficulty in selecting varied and challenging tasks that stimulate student creativity (59.5%) in which many teachers struggle with task design that fosters student engagement and creativity, particularly for passive learners. Developing meaningful activities based on Linguistic Landscape content requires time, pedagogical

knowledge, and innovation—all of which are difficult to balance in under-resourced teaching environments.

Sixth, difficulty in designing instructional media due to limited educational tools (*Alat Peraga Edukatif*) at school (56.8%). A lack of teaching aids such as projectors, printers, and digital boards makes it hard for teachers to produce or use multimedia content. Without access to basic instructional infrastructure, efforts to create or deliver digital learning materials are significantly constrained.

Seventh, inadequate mastery of information technology (54.1%) in which over half of the participants indicated that limited IT skills hindered their ability to design or operate digital teaching media. Many are unfamiliar with platforms like Canva, video editors, or presentation tools, which are essential for modern classroom delivery and material development. *Eighth*, limited digital media literacy among teachers and students (51.4%) in which both educators and learners face challenges in navigating digital platforms. Teachers often lack strategies for guiding students in using online tools effectively, while students may lack the digital habits, access, or training to engage in tech-based learning activities independently.

Ninth, teaching materials are difficult to obtain in remote areas (48.6%) or less developed regions, teachers have difficulty sourcing authentic and relevant authentic teaching materials or resources. This hinders their ability to contextualize lessons and integrate local environmental texts into English language instruction.

RQ3. What kind of support or training would help you overcome these challenges?

Based on the data from 37 participants, the most helpful support would be contextualized digital literacy training and collaborative material development programs. Teachers highlighted the need for training in creating teaching media despite limited APE (*Alat Peraga Edukatif*), as many schools lack basic infrastructure. They also require assistance in locating or developing digitally-mediated learning materials, especially in remote areas where such materials are scarce (Item 4). Several participants expressed a preference for working together through professional communities like MGMP (Item 7), indicating that collaborative training workshops—rather

than isolated, individual tasks—are more effective. Additionally, the lack of IT skills and time constraints (Items 7–9) point to the need for simple, step-by-step digital media tutorials using accessible tools and devices, especially those that can work offline or with limited connectivity.

Since both teachers and students face challenges with internet access and digital literacy (Items 6, 9, 10), support should also include: low-bandwidth digital tools training, offline resource development, and task design strategies that foster creativity among passive learners (Item 5). In short, the support most needed includes: digital media creation training tailored for low-resource settings, task design workshops using authentic teaching material relevant to rural contexts, collaborative spaces (MGMP) for material co-creation, and basic IT skills training for both teachers and students. This combination would empower teachers to overcome infrastructure gaps, enhance student engagement, and build sustainable teaching practices adapted to rural challenges.

Discussion

The current study's findings resonate strongly with prior research on the difficulties of integration of digitally-mediated English learning materials in rural and semi-urban *madrasah* contexts. Similar to Tempur's (2025) observation, this study reveals persistent barriers such as limited infrastructure, high internet costs, inadequate digital skills, and insufficient access to contextualized digital content—all of which mirror the systemic issues reported in our participant schools. Gusmana (2025) also emphasizes that digital transformation in *madrasah* settings is not merely a technical matter but involves structural and pedagogical support, aligning with this study's findings on the urgent need for professional development and institutional backing. Sudarsih (2025) highlights teachers' struggle with time and confidence in using digital media—an issue confirmed in this research, where only 18.9% of participants felt confident using basic tools like Canva or Google Forms.

Moreover, the difficulties reported by Sunarto and Al Ghifari (2021), including poor infrastructure, parental support gaps, and geographic isolation, remain highly relevant post-pandemic, especially in regions like West Lombok. These findings underscore the enduring nature of such challenges, even after

the emergency phase of remote learning has passed. Similarly, Sazali (2025) notes that poor connectivity in remote areas disrupts the use of digital resources in religious education, which parallels our participants' experiences with unstable internet access in mountainous zones.

Finally, Ruslan et al. (2025) stress the importance of structured digital media training for improving teacher competence—a point that this study also identifies as critical, given the unanimous call among participants for more digital media workshops. Altogether, the alignment between this study's findings and previous literature confirms that the barriers to digitally-mediated English teaching in *madrasah* contexts are complex, systemic, and require multi-layered interventions—ranging from infrastructure development to localized teacher training and collaborative support systems.

The current study's findings do not simply indicate a lack of available training—it reveals a more systemic communication and accessibility issue. Many teachers, especially those in private Islamic schools (*madrasahs*) in rural or semi-urban areas, are unaware of available PD opportunities because: (1) information is not well-disseminated through formal school channels, (2) there are no centralized information platforms they can easily access, (3) teachers rely on peer networks (e.g. MGMP), which may not be consistent across regions, and (4) Digital announcements are often missed due to internet limitations or lack of digital fluency.

These difficulties should be regarded as a serious issue for *madrasah* teachers for the reason that professional development is essential for improving teaching quality, especially for new or undertrained teachers (Napitupulu & Napitupulu, 2020), keeping up with innovations like digital literacy integration (Carlson & Gadio, 2002; Gruszczynska et al., 2013; Kerkhoff & Makubuya, 2022), and building teacher confidence and motivation (Hennessy et al., 2015; Hennessy et al, 2022). If teachers lack access to PD information, they are unlikely to even begin these improvements—regardless of how motivated they are. This leads to inequality of opportunity and pay between urban and rural teachers (Song, 2023), poor performance and stagnation in teaching innovation (Shi & Sercombe, 2020), frustration between teachers (Hunt-Barron, 2015), increased reliance on outdated or generic teaching methods (Ramila & Benmhamed, 2024), inequality in learning

outcomes that will disadvantage students to get quality education as well as can hinder their academic achievement and may also lead to adverse psychological consequences (Song, 2023), teaching fatigue/boredom that will impact teachers and learning fatigue/boredom that will impact students as well.

CONCLUSION

The present study concludes that challenges outlined above reflect broader systemic issues in integrating digital literacy for English language instruction. These challenges are not solely technical in nature but also stem from a lack of professional development, unequal access to resources, and varying levels of institutional support. Addressing these issues requires a multifaceted approach that include strengthening digital literacy training for teachers to enhance teachers' competencies in digital media design, internet-based research, and task creation. Such programs must be context-sensitive and tailored to the realities of teachers working in remote or resource-limited areas, (2) encouraging collaboration through teacher forums like MGMP can provide valuable support structures. By working together, teachers can exchange ideas, co-develop materials, and learn from one another's experiences in integrating digital resources effectively, (3) improving infrastructure and accessibility, especially in rural and underserved regions. This includes the provision of digital devices, stable internet connectivity, and school-based digital learning hubs, (4) developing contextualized teaching resources in which teachers should be encouraged and supported to develop or adapt digitally-mediated learning materials that reflect their local linguistic and cultural environments. These localized resources are not only more accessible but also more meaningful for students, thus enhancing engagement and learning outcomes.

The findings suggest that the *madrasah* teachers' difficulties in integrating digitally-mediated authentic English learning materials be systematically addressed through a combination of policy support, targeted capacity-building initiatives, community service programs, and the promotion of collaborative, context-responsive teaching practices. Local and national education authorities should prioritize improving digital infrastructure, especially in rural and semi-rural areas, while also providing equitable access to

professional development opportunities for teachers. In addition, fostering peer collaboration through structured forums like MGMP and encouraging the integration of locally relevant materials such as Linguistic Landscape resources can empower educators to create more engaging and inclusive learning environments. Ultimately, applying a short self-assessment instrument for measuring digital competences (Schwarz et al., 2024) can be adopted or adapted as part of ongoing professional development and teacher evaluation efforts that can serve as a practical diagnostic tool to help educators identify their strengths and areas for improvement in digital literacy in pedagogical contexts.

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