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# Philosophy of Education in the Digital Age: A Systematic Review of ELT Approaches and Ethical Considerations

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## ABSTRACT

The rapid integration of digital technologies into English Language Teaching (ELT) has significantly reshaped pedagogical practices, offering both opportunities and ethical challenges. This study reviews the philosophy of education in the digital age, with a focus on ELT approaches and the ethical concerns arising from their adoption. Three key issues are identified: accessibility and the digital divide, data privacy and security, and reduced human interaction. These challenges underscore the importance of a balanced approach to digital education that upholds equity, security, and social connection. The findings reveal that, while digital tools enhance access to educational resources, they risk excluding students from marginalized communities due to technological disparities. Similarly, the growing use of digital platforms raises concerns about the collection and misuse of sensitive student data, emphasizing the need for robust data protection measures. Additionally, the decline in human interaction within virtual learning environments may affect student motivation, engagement, and emotional well-being. Addressing these ethical challenges is crucial to ensuring that digital ELT adheres to the principles of inclusivity and fairness, fostering a more equitable and secure learning environment for all students. This review provides practical insights for educators, policymakers, and stakeholders in navigating the complexities of digital education.

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## INTRODUCTION

The rapid advancements in technology within the digital era have fundamentally reshaped educational practices across the globe, including English Language Teaching (ELT). As Mazandarani, (2022) mentioned that the cornerstone of

pedagogical frameworks, philosophy of education plays a critical role in shaping teaching methodologies. With the integration of digital tools such as Artificial Intelligence (AI), online learning platforms, and interactive applications, ELT has entered a new phase of innovation and transformation (Vaccino-Salvadore, 2023). These technological advancements have introduced significant pedagogical opportunities, allowing teachers to create more engaging and effective learning experiences for students. However, they have also raised several ethical concerns, including issues of accessibility, data privacy, and the potential erosion of teacher-student relationships.

The influence of educational philosophy on ELT approaches in the digital era is evident in the shift towards learner-centered methodologies (Mogea, 2022); (Mogea, 2023); (Cotton et al., 2024). Theories such as constructivism, which emphasize active learning and the construction of knowledge through interaction, align closely with the features offered by digital tools. For instance, Norvig & Russel, (2020) said that virtual classrooms and collaborative platforms enable students to learn at their own pace, engage in peer discussions, and access a wealth of resources beyond the traditional classroom. Similarly, behaviorist principles underpin the design of many language learning applications, which use repetition and reinforcement to help students acquire vocabulary and grammatical structures (Fathabadi, 2023). However, the rapid deployment of these technologies has not always been accompanied by a thorough examination of their alignment with the core values of educational philosophy.

Foltynek et al., (2023) and Joshua & Mogea, (2019) mentioned that ethical considerations are equally critical in the context of digital ELT. As technology becomes increasingly embedded in educational systems, it is essential to address issues such as the digital divide, which exacerbates inequalities in access to quality education. Students from underprivileged backgrounds may lack the devices or internet connectivity needed to fully benefit from digital learning tools, highlighting the importance of ensuring equitable access (Liando & Tatipang, 2024). Additionally, the use of AI and data-driven technologies raises concerns about the privacy and security of student information. Educators must also navigate the potential for these tools to depersonalize learning, reducing the role of human interaction in language acquisition, which is a vital component of ELT.

The intersection of philosophy, technology, and ELT offers a rich area for exploration, particularly in understanding how foundational educational theories can guide the ethical integration of digital tools. This study seeks to address two key research questions: How does the philosophy of education influence ELT approaches in the digital era? What are the main ethical considerations identified in the application of digital technology in ELT?. The objectives of this study are twofold. First, it aims to examine how educational philosophies such as constructivism, humanism, and behaviorism inform the design and implementation of ELT

approaches in the digital era. Understanding the theoretical underpinnings of these approaches can help educators and policymakers design more effective and philosophically aligned teaching practices, supported by (Sabiri, 2020). Second, the study seeks to explore the ethical implications of incorporating digital tools in ELT, including issues of accessibility, data privacy, and the balance between technology and human interaction. Addressing these objectives, the study will provide valuable insights into the opportunities and challenges of digital ELT and offer guidance for ethical and effective pedagogical practices.

The significance of this research lies in its potential to bridge the gap between educational theory and practice in the context of digital ELT. By synthesizing insights from philosophy of education and examining their application in technology-enhanced teaching, the study will contribute to a deeper understanding of how educators can harness the potential of digital tools while adhering to ethical principles. Furthermore, the research will provide practical recommendations for educators, institutions, and policymakers on how to navigate the complexities of digital ELT, ensuring that technology serves as a tool to enhance, rather than undermine, the educational experience. The integration of digital technology in ELT represents both an opportunity and a challenge. While these tools have the potential to revolutionize language teaching by making it more engaging, accessible, and efficient, they also raise important ethical and philosophical questions. This study aims to shed light on these issues, offering a systematic review of the interplay between educational philosophy, digital ELT approaches, and ethical considerations. By doing so, it seeks to contribute to the development of a more thoughtful and informed approach to language teaching in the digital age.

## RESEARCH METHOD

This study employs a systematic review methodology to examine the intersection of philosophy of education, digital ELT approaches, and ethical considerations. A systematic review is an evidence-based research method that allows for the comprehensive collection, critical evaluation, and synthesis of existing studies (Chigbu et al., 2023). By consolidating findings from multiple sources, the research provides a clear understanding of trends, patterns, and gaps in the literature related to the research questions.

The data for this study consist of 15 peer-reviewed academic papers published between 2020 to 2024. These papers were sourced from reputable databases such as Scopus, Web of Science, and Google Scholar to ensure the credibility and reliability of the findings. Keywords such as "philosophy of education," "digital ELT," "ethical considerations in ELT," and "technology in language teaching" were used to locate relevant studies. The search process yielded a large pool of articles, which were then subjected to a rigorous screening process to identify those most relevant to the research objectives.

The inclusion criteria for selecting papers were as follows:

1. The paper must be published between 2020 to 2024.
2. The paper must be peer-reviewed and published in reputable academic journals or conference proceedings.
3. The paper must focus on the application of educational philosophy in ELT within the context of digital tools and technologies.
4. The paper must address ethical considerations related to the use of technology in ELT.
5. The paper must be written in English to ensure clarity and accessibility of content.

Papers were excluded based on the following criteria:

1. Studies that did not explicitly discuss the intersection of philosophy of education and digital ELT approaches.
2. Papers that solely focused on general educational technology without specific reference to ELT.
3. Articles published in non-peer-reviewed sources or with questionable academic rigor.
4. Papers that were not available in full text or lacked sufficient methodological detail.
5. Studies conducted prior to 2020, as they fall outside the defined publication timeframe.

The selected 15 papers were analyzed using thematic analysis, a qualitative data analysis method that identifies recurring themes and patterns. The analysis process involved several steps. First, the full text of each paper was read thoroughly to ensure a comprehensive understanding of its content. Key concepts, findings, and discussions were highlighted and coded. The initial codes were then grouped into broader themes that aligned with the research objectives, such as "philosophical influences on digital ELT," "ethical challenges in technology integration," and "pedagogical strategies informed by philosophy." These themes were critically evaluated to synthesize findings and draw meaningful conclusions. To ensure the validity and reliability of the analysis, the coding process was conducted independently by two researchers and later compared to resolve discrepancies. The inter-coder agreement ensured that the thematic categories were robust and accurately reflected the data. The synthesis of findings aimed to provide a nuanced understanding of how educational philosophy shapes digital ELT approaches and to highlight the ethical considerations that educators must address.

## FINDINGS AND DISCUSSION

### *Findings*

The data presented in the two tables below provide a comprehensive overview of how educational philosophy influences digital English Language Teaching (ELT) approaches and the ethical considerations associated with implementing technology in ELT. These insights are drawn from 15 peer-reviewed studies published between 2020 to 2024, selected through a systematic review process. The first table focuses on the relationship between different educational philosophies and their corresponding digital ELT approaches. It highlights key findings on how constructivism, behaviorism, humanism, social constructivism, and pragmatism inform various technological tools and teaching strategies. This table demonstrates how these philosophies underpin innovative practices such as collaborative online learning, language learning apps, personalized learning platforms, virtual classrooms, and blended learning models. The findings emphasize the theoretical foundations that guide the development and implementation of digital tools in ELT, providing evidence of their effectiveness in enhancing language learning outcomes.

The second table addresses the ethical dimensions of integrating digital technologies into ELT. It outlines specific ethical concerns such as the digital divide, data privacy, dependency on technology, cultural sensitivity, and accessibility issues. The table also presents recommendations to mitigate these concerns, ensuring that technology use in ELT adheres to ethical standards. For instance, addressing the digital divide requires increased funding for low-income schools, while data privacy concerns necessitate the implementation of robust security measures. Similarly, fostering cultural sensitivity involves creating culturally relevant teaching materials, and enhancing accessibility calls for integrating universal design principles in digital tools. The combined findings provide a holistic understanding of the challenges and opportunities presented by digital transformations in education, underscoring the importance of a balanced approach that aligns technological advancements with educational principles and ethical considerations.

***Table 1: Influence of Philosophy of Education on ELT Approaches in the Digital Era***

| Theme | Frequency of Occurrence (n=15) | Percentage (%) |
|---|---|---|
| Constructivism in digital tools | 8 | 53.3% |
| Behaviorism in language applications | 4 | 26.7% |
| Humanistic approaches in ELT | 3 | 20.0% |

Table 1 provides a breakdown of the influence of various educational philosophies on English Language Teaching (ELT) approaches, particularly in the context of the digital era. It categorizes these influences into three main themes: constructivism in digital tools, behaviorism in language applications, and humanistic approaches in ELT. The table indicates the frequency of occurrence and the percentage for each theme, based on data from a sample of 15 papers. Constructivism in digital tools emerges as the most prominent theme, with 53.3% (8 out of 15) of the respondents highlighting its significance. Behaviorism in language applications follows with 26.7%, and humanistic approaches in ELT are the least frequent, accounting for 20.0%. These findings shed light on the current trend in ELT that increasingly integrates digital technologies, aligning with certain philosophical perspectives, while also suggesting the ongoing relevance of older paradigms, albeit in varying degrees.

The dominance of constructivism in digital tools indicates a significant shift in ELT practices, where learners are encouraged to actively construct knowledge through interaction with digital technologies. According to Piaget's theory of constructivism, learning is most effective when learners engage in hands-on experiences that allow them to build upon their existing knowledge, cited in (Mazandarani, 2022). In the digital age, this philosophy aligns well with the use of interactive tools such as language learning apps, online quizzes, and collaborative platforms like Google Classroom. These tools empower students to take charge of their learning, encouraging autonomous exploration and the application of language in real-world contexts. This shift also aligns with the findings of Cotton et al., (2024), who emphasized that the digital era has catalyzed the widespread use of constructivist approaches, facilitating learner-centered environments where students are seen as active participants in their educational journeys.

Behaviorism, accounting for 26.7% of the responses in the table, continues to influence ELT, especially through language applications designed to reinforce specific behaviors and responses. Behaviorism, rooted in the works of B.F. Skinner, suggests that learning is a result of conditioning through stimuli and responses (in Fathabadi, 2023). In the context of ELT, this approach often manifests in language apps that provide repetitive drills and exercises aimed at reinforcing grammar rules, vocabulary, and pronunciation. This approach's emphasis on reinforcement and repetition is still evident in many popular language-learning applications such as Duolingo and Babbel, in line with (Poole & Mackworth, 2018). For instance, Duolingo uses gamification techniques and rewards to keep learners engaged while ensuring the mastery of discrete language elements. The role of behaviorism in these apps highlights its ongoing relevance in language learning, especially in the context of structured learning environments where measurable outcomes are emphasized. This finding corroborates the research by Goffi, (2023), who noted that behaviorist

principles are still prevalent in many educational technologies, particularly in apps focused on language acquisition.

Humanistic approaches, which prioritize the emotional and social aspects of learning, appear less frequently in the table, accounting for only 20.0% of the occurrences. Humanism, with its roots in the works of Carl Rogers and Abraham Maslow, emphasizes personal growth, self-directed learning, and the development of learners' intrinsic motivations (in Tigard, 2021). In the digital age, humanistic approaches in ELT can be seen in the use of platforms that promote social interaction, creativity, and student autonomy. For example, video-based learning platforms like YouTube and social media groups can serve as spaces for self-expression, collaboration, and the development of intercultural communication skills. However, the relatively lower frequency of humanistic influences in the table suggests that while these approaches are valuable, they may not be as widely integrated into mainstream digital tools, possibly due to the increasing reliance on structured, behaviorist models in language learning apps. The findings resonate with the work of Gao et al., (2022), who argued that while digital tools provide opportunities for social learning and personalized experiences, the dominant focus remains on efficiency and measurable outcomes, which align more closely with behaviorist principles than with humanistic ones.

***Table 2: Ethical Considerations in Digital ELT***

| Ethical Concern | Frequency of Occurrence (n=15) | Percentage (%) |
|---|---|---|
| Accessibility and digital divide | 6 | 40.0% |
| Data privacy and security | 5 | 33.3% |
| Reduced human interaction | 4 | 26.7% |

Table 2 presents the ethical considerations observed in the context of Digital English Language Teaching (ELT), focusing on three key areas: accessibility and the digital divide, data privacy and security, and reduced human interaction. These concerns have been examined based on their frequency of occurrence, providing insight into the most pressing ethical issues faced by educators and students in the increasingly digital learning environment.

The first ethical concern identified in the table is accessibility and digital divide, which was reported by 40% of the respondents. This concern highlights the challenges posed by unequal access to digital resources, such as the internet, devices, and digital literacy skills. Students in remote or economically disadvantaged areas often struggle to access the necessary technology for online learning, exacerbating existing inequalities. The digital divide can lead to significant educational disparities,

as students without access to the internet or digital devices are at risk of falling behind. A study by Chan, (2023) emphasized that digital education should be inclusive and accessible to all students, regardless of their socio-economic background. Furthermore, Tatipang et al., (2024) pointed out that while technology promises to democratize education, it also has the potential to deepen the divide between those who have access to resources and those who do not. To address this, educators and policymakers must work toward bridging the gap by ensuring equitable access to digital tools and resources, especially in marginalized communities.

The second ethical concern is data privacy and security, which was mentioned by 33.3% of the respondents. As digital platforms increasingly collect personal information, concerns over the privacy and security of students' data have become prominent. Educational technologies often require students to input sensitive personal information, such as names, addresses, and academic performance. This data, if not properly protected, can be vulnerable to breaches, leading to potential misuse or exploitation. In their study, Sabiri, (2020) discussed the importance of safeguarding student data and ensuring that educational platforms comply with data protection regulations, such as the General Data Protection Regulation (GDPR) in the European Union. Moreover, Soe, (2024) highlighted that the collection of personal data by educational platforms may lead to surveillance concerns, as companies may use this data for purposes beyond education, such as targeted advertising or data mining. To mitigate these risks, it is crucial for educational institutions to establish clear data privacy policies, prioritize security measures, and raise awareness about responsible data use.

Lastly, reduced human interaction is another ethical concern, reported by 26.7% of respondents. This issue arises from the shift towards digital learning environments where face-to-face interactions between teachers and students are limited. While digital platforms provide flexibility and convenience, they can reduce the opportunities for students to engage in social learning, form relationships with peers, and receive personalized attention from educators. Garrison, Anderson, and Archer (2010) explored the concept of "community of inquiry" in online learning, emphasizing that the lack of social presence can negatively impact the quality of learning experiences. Furthermore, Ismail, (2024) found that students in fully online courses tend to feel more isolated compared to those in traditional classrooms, leading to potential declines in motivation and engagement. To counteract this, it is essential to design digital ELT courses that foster interaction, collaboration, and peer support, ensuring that students do not miss out on the social aspects of learning.

Table 2 underscores the need for ethical considerations in digital ELT, with particular focus on accessibility, data privacy, and reduced human interaction. As digital technologies continue to shape the educational landscape, it is essential for

educators, policymakers, and technology providers to address these concerns. Ensuring equitable access, safeguarding student data, and promoting meaningful interaction will be key to creating an ethical and effective digital learning environment. As Özkan & Aşık, (2023) argue, addressing these ethical challenges is not only necessary for the success of digital education but also for maintaining the integrity and fairness of the learning process in the digital age.

***Discussion***

The findings presented above outline the major ethical concerns in the context of Digital English Language Teaching (ELT), highlighting the frequency and impact of these issues. The data identifies three primary ethical concerns: accessibility and the digital divide, data privacy and security, and reduced human interaction. Each of these concerns carries significant implications for the future of digital education, raising questions about fairness, equity, and the overall effectiveness of digital ELT. In this discussion, we will explore these ethical concerns in depth, examining their causes, consequences, and potential solutions. we will also highlight the broader context in which these issues arise and consider how they might shape the future of ELT in the digital age.

***Accessibility and the Digital Divide: A Barrier to Equal Education Opportunities***

The issue of accessibility and the digital divide in education has become a critical concern, particularly as the shift toward digital learning intensifies. The findings in Table 1 & 2 reveal that 40% of participants identified this as the primary ethical issue in Digital English Language Teaching (ELT), which highlights the widespread impact of this challenge on the educational landscape. As digital platforms and online learning environments increasingly become integral to modern education, the divide between those with access to digital resources and those without is growing, posing significant barriers to equal educational opportunities (Al-Khresheh, 2024). This divide not only affects students' ability to access learning materials but also influences their ability to thrive in a digital educational setting, ultimately hindering their academic progress and future success.

The accessibility and digital divide concern goes beyond merely having access to technology. It encompasses a wide range of issues related to the availability of essential digital infrastructure. Students in remote, rural, or economically disadvantaged areas often lack reliable internet connections, modern computers or smartphones, and sufficient bandwidth to fully participate in online learning (Alda et al., 2020). The absence of these essential tools creates a significant barrier, making it nearly impossible for these students to keep up with their peers in more resource-rich environments. As a result, they may fall behind in their studies, unable to access

crucial course content, participate in online discussions, or engage in collaborative activities that are common in digital learning environments.

This issue is particularly prominent in regions where poverty or geographical isolation limits access to technological resources. For instance, in rural areas, many students lack the infrastructure for reliable internet access, leaving them at a distinct disadvantage compared to their urban counterparts. According to Mohamad Fikray et al., (2022), the promise of digital education to democratize learning can easily be undermined if significant groups of students are excluded from participating due to technological and infrastructural limitations. This divide often exacerbates existing inequalities, reinforcing the disparities between privileged and disadvantaged groups. As such, addressing accessibility in digital ELT is not only a matter of providing the tools needed for learning but also ensuring that all students, regardless of their socio-economic background, have equal opportunities to engage with and benefit from the educational experiences offered.

Moreover, the digital divide is not just about the hardware such as devices and internet access but also about digital literacy. In many cases, students in underprivileged areas may have access to the necessary technology but lack the skills to use it effectively (Tigard, 2021). This issue is particularly prominent in regions where digital literacy has not been prioritized within the educational curriculum. While students may have access to computers or smartphones, they may struggle to navigate learning platforms, use educational apps, or even communicate effectively online. This lack of digital fluency creates a barrier to meaningful engagement with digital content, leading to frustration and disengagement from the learning process.

Teng, (2024) points out that even in the presence of technological access, students who lack the necessary digital skills will struggle to take full advantage of online learning opportunities. This gap in digital literacy further perpetuates the educational divide, as students who are unfamiliar with or unable to effectively use digital tools may feel disconnected from the learning process. Donald & Andrew, (2023) also highlight the issue of digital competency, noting that digital literacy extends beyond the basic ability to use devices. It involves critical thinking, problem-solving, and the ability to assess the credibility and usefulness of online resources. As such, simply providing access to technology without accompanying digital literacy training is unlikely to address the underlying inequalities in digital education.

To combat this issue, educational systems must place a strong emphasis on integrating digital literacy into the curriculum. Ensuring that all students regardless of their background have the necessary skills to navigate and utilize digital platforms is essential for bridging the digital divide. Early integration of digital literacy can empower students to use technology more effectively and equitably, equipping them with the skills they need not only for academic success but also for their future careers in an increasingly digital world (Swiecki et al., 2022). Furthermore, digital literacy

programs should be inclusive and accessible to all students, with a focus on those who may have limited exposure to technology outside the classroom. These initiatives should teach not only how to use technology but also how to critically engage with and assess the information available online.

Addressing the accessibility and digital divide also requires broader infrastructural changes. Policymakers and educational institutions must prioritize the expansion of affordable and reliable internet access, particularly in underserved areas. This may involve collaborating with internet service providers, local governments, and non-profit organizations to extend broadband infrastructure into rural or economically disadvantaged regions. For example, community-based initiatives that provide free or subsidized internet access could play a key role in ensuring that all students have the opportunity to participate in online learning, in line with (Vaccino-Salvadore, 2023). Additionally, educational institutions should consider providing devices such as laptops or tablets to students who cannot afford them, ensuring that every learner has the tools they need to engage with digital education effectively.

Beyond infrastructural improvements, governments and educational institutions should also consider policies that address the specific challenges faced by marginalized groups. This includes offering targeted support to students in remote or rural areas, students with disabilities, and students from low-income families, all of whom are disproportionately affected by the digital divide. Special initiatives designed to provide additional resources, such as subsidized devices or digital literacy workshops, can help level the playing field and ensure that every student has a fair chance to succeed in the digital classroom.

The ethical implications of the digital divide are far-reaching. If left unaddressed, this divide will continue to exacerbate existing inequalities, leaving marginalized students further behind in their educational journeys. This, in turn, will limit their opportunities for future employment and success. To ensure that digital education remains a force for good, it is essential that educational systems actively work to bridge the divide by providing equitable access to the technology and skills needed for success. As Al-khresheh, (2024) suggests, there is an urgent need to prioritize inclusivity and ensure that digital education does not become a tool that reinforces social and economic disparities but rather one that empowers all students to reach their full potential.

The accessibility and digital divide represent significant ethical challenges in the context of Digital ELT. This divide affects not only students' ability to access educational content but also their capacity to engage meaningfully with the learning process. Addressing these concerns requires a multi-faceted approach that includes improving technological infrastructure, promoting digital literacy, and implementing policies that ensure equal access to resources. By taking proactive steps to close the

digital divide, we can ensure that digital learning platforms serve as tools for educational equity, enabling all students to succeed, regardless of their socio-economic background or geographical location.

***Data Privacy and Security: Safeguarding Students in the Digital World***

Data privacy and security are crucial ethical concerns in the digital realm, particularly within the context of Digital English Language Teaching (ELT). With the rise of online learning platforms, the collection, storage, and protection of students' personal data have become critical issues. Many digital education platforms require students to provide sensitive personal information such as names, contact details, and academic records.

In the context of digital ELT, students trust their educational institutions to protect their privacy. However, if personal data is not properly managed, it can be vulnerable to unauthorized access, potentially leading to privacy violations. This breach of trust undermines the ethical foundation of digital education and raises concerns about the vulnerability of students in the online environment. Data privacy issues can lead to a range of negative outcomes, from identity theft to the manipulation of personal data for commercial purposes (Nguyen et al., 2023). When students feel that their personal information is not secure, it can erode their trust in the educational system and deter them from engaging fully in the learning process.

The increasing commercialization of education technology further exacerbates the problem. As Şahin, (2023) & Mogea, (2023) pointed out, many educational platforms are owned and operated by private companies that prioritize profitability over student welfare. This introduces a significant ethical dilemma, as student data may be harvested and used for purposes other than education. For example, data may be exploited for targeted advertising, profiling, or data mining, which may not align with the educational objectives for which the data was originally collected. The use of students' personal information for commercial gain raises concerns about exploitation and the potential violation of student autonomy. Furthermore, educational institutions increasingly rely on third-party providers to offer digital tools, which makes it more difficult to ensure that student data is handled responsibly. When data is stored by external entities, there is an added layer of complexity in ensuring the security and ethical use of that data.

The ethical implications of data privacy in digital ELT extend beyond the immediate risks of data breaches. The misuse of data can lead to a range of harmful consequences. Identity theft is perhaps the most obvious concern, but there are also more subtle issues, such as discrimination based on personal or academic data (Holmes & Tuomi, 2022). Inaccurate data may affect students' future educational or career opportunities, leading to long-term consequences. Moreover, when students' personal information is collected and used without their knowledge or consent, it

undermines their autonomy and control over their own data. This erosion of autonomy can have a lasting impact on students' confidence in educational institutions and their willingness to engage in digital learning environments.

To mitigate these risks, it is essential for educational institutions to adopt comprehensive data privacy policies. Institutions should ensure that students' personal information is stored securely, using encrypted databases and secure communication channels. Additionally, they must be transparent with students about how their data will be used and obtain informed consent before collecting any personal information. By providing clear, accessible information on data privacy, institutions empower students to make informed decisions about their participation in digital education. Educators should also be trained on best practices for managing student data, ensuring that they are aware of the ethical implications of handling personal information.

Furthermore, compliance with data protection regulations, such as the General Data Protection Regulation (GDPR) in Europe, is essential for ensuring that student data is handled in an ethical and legal manner. As Gökmen, (2023) emphasizes, educational institutions must take proactive steps to adhere to these regulations, which provide a legal framework for safeguarding personal data. These regulations not only protect students but also ensure that educational institutions remain accountable for their actions. As the reliance on digital platforms in education continues to grow, it is crucial that educators, administrators, and policymakers collaborate to establish and uphold ethical standards for data privacy and security. By doing so, they can help create a digital learning environment where students can feel confident that their personal information is being handled with care and respect.

***Reduced Human Interaction: The Social Implications of Digital Education***

The ethical concern of reduced human interaction in digital education presents a unique set of challenges for both the learning process and students' emotional well-being. While digital platforms provide greater flexibility and convenience, especially for students with geographic or time constraints, they also remove many of the social dynamics that are central to traditional classroom learning. In face-to-face settings, students are able to engage in spontaneous conversations, collaborate on tasks, and develop personal relationships with peers and teachers (Donald & Andrew, 2023). These interactions not only enhance academic learning but also provide essential emotional support. In contrast, the virtual classroom environment can feel isolating and detached, which can negatively impact students' sense of connection to the learning material, their peers, and even their instructors.

Human interaction plays a key role in creating a sense of community within educational settings. According to Martínez-Soto & Prendes-Espinosa, (2023), a "community of inquiry" is essential for fostering meaningful learning experiences,

particularly in language acquisition. The dynamic exchange between students and instructors, as well as among peers, helps build trust, motivation, and engagement. In face-to-face classrooms, students can pick up on non-verbal cues, express their thoughts freely, and have immediate feedback from their teachers. This interaction strengthens their confidence and facilitates deeper understanding. However, online environments often lack these same opportunities for real-time, social connection, making it difficult for students to feel fully engaged or supported.

The absence of immediate social interactions in digital ELT environments can also affect how students process and retain information. In traditional settings, discussions, debates, and group activities allow students to practice their language skills in a more organic, social context (Lengkoan & Rombepajung, 2022). These interactions are particularly important in language education, where communicative competence is developed not just through studying grammar or vocabulary but through social engagement. In contrast, students learning in isolation may miss out on these informal learning experiences, potentially hindering their overall language development.

Moreover, reduced human interaction in digital ELT environments complicates the provision of personalized feedback and support. In face-to-face classes, instructors can observe students' body language, listen to their tone of voice, and quickly identify areas where additional support is needed (Lengkoan et al., 2024). In online environments, particularly those that rely on asynchronous learning, students may not receive immediate feedback on their progress, leaving them uncertain about their performance. The lack of instant feedback can demotivate students and create feelings of frustration or confusion. As González-Calatayud et al., (2021) found, students in fully online courses often report feeling disconnected and less motivated due to the absence of social bonds and personalized interactions. This detachment can lead to disengagement, making it more difficult for students to stay focused on their academic goals.

To address the issue of reduced human interaction, digital ELT courses must be designed to prioritize social presence and foster a sense of community. One effective solution is to incorporate collaborative tools such as discussion forums, group projects, and video conferencing. These tools allow students to interact with one another and their instructors in real-time, enabling the formation of relationships and collaboration that are key to the learning process (Foltynek et al., 2023). These interactions can help students feel more connected, not just to the material, but to each other and their teachers. Additionally, using collaborative learning methods provides opportunities for students to practice language skills in a social context, similar to what would occur in a traditional classroom.

Furthermore, instructors in digital ELT settings should make a concerted effort to offer personalized feedback and emotional support to students. Regular check-ins,

individual assessments, and prompt responses to student inquiries can help address the emotional and academic needs of learners. Instructors can also use digital platforms to create spaces for students to share their experiences and concerns, allowing them to feel more heard and supported in their educational journey. By providing a supportive and engaging online environment, educators can counteract the isolating effects of digital learning and help students build the confidence and motivation needed to succeed.

While digital ELT offers many advantages, it also comes with the significant ethical concern of reduced human interaction. The lack of face-to-face social engagement can impact both students' academic performance and their emotional well-being. By fostering a sense of community, incorporating collaborative tools, and offering personalized support, educators can create a more connected and engaging digital learning environment that helps mitigate the negative effects of reduced interaction. In this way, the social aspects of learning, which are crucial for students' academic success and mental health, can be preserved even in digital spaces.

***Drop-point: Ethical Challenges and the Future of Digital ELT***

The issue of accessibility and the digital divide is perhaps one of the most pressing ethical challenges. As digital learning becomes more entrenched in the educational system, the gap between those who have access to the necessary technology and those who do not continues to grow. This divide is not just about physical access to devices or high-speed internet, but also about the digital literacy skills that are required to navigate these technologies effectively. In an increasingly digital world, students without the means or skills to engage in digital education risk being left behind. Educational institutions must address this divide by ensuring that all students, regardless of their socio-economic background, have access to the necessary resources to succeed in digital learning environments. This might involve investing in affordable devices, providing internet subsidies, and offering digital literacy training to both students and educators.

Equally important is the issue of data privacy and security. The growing reliance on digital platforms for education raises significant concerns about how student data is collected, stored, and used. The findings indicate that data privacy is a key ethical issue in digital ELT, as many educational platforms collect personal information from students. The concern here is not just about protecting this data from breaches or unauthorized access but also about the ethical use of this information. Are educational institutions and technology companies using student data responsibly? Are students aware of how their data is being used? These are critical questions that must be answered in order to maintain trust in digital education systems. Educational institutions must ensure that they are fully compliant with data protection regulations and implement stringent security measures to protect student

data. Transparency about how student data is used, and obtaining informed consent, will also help in fostering a relationship of trust between students and educators.

Another major ethical challenge is the issue of reduced human interaction. While digital learning platforms offer flexibility and convenience, they also risk isolating students from the social and emotional benefits that come from face-to-face interaction in traditional classrooms. Social learning is essential for language development, and it helps students build relationships with peers and instructors. The lack of human interaction in digital environments can lead to feelings of isolation, disengagement, and a lack of motivation. To address this challenge, educators should prioritize creating interactive and collaborative learning experiences within digital platforms. Virtual classrooms, video discussions, and peer collaboration activities can foster a sense of community and belonging, even in online environments. The social and emotional aspects of learning should not be overlooked, as they are integral to students' academic success and well-being.

The future of Digital ELT hinges on how well these ethical challenges are addressed. To ensure that digital education remains equitable and effective, educational institutions must take a proactive approach to these concerns. Bridging the digital divide, ensuring the privacy and security of student data, and promoting meaningful interaction between students and instructors are fundamental steps in creating a fair and secure digital learning environment. However, without careful attention to these issues, digital education could become another mechanism of exclusion, deepening the divide between the haves and have-nots. Therefore, the ethical challenges in digital ELT must be at the forefront of discussions about the future of education, ensuring that it is truly inclusive and accessible to all.

## CONCLUSION

This research highlights the significant ethical challenges that arise in the context of Digital English Language Teaching (ELT). The findings underscore three primary concerns: accessibility and the digital divide, data privacy and security, and reduced human interaction. Each of these challenges poses distinct yet interconnected risks to the equitable and effective implementation of digital ELT. The study reveals that these ethical issues are not merely technical but have deep social implications that can impact students' learning experiences and outcomes. To ensure that digital ELT lives up to its potential, it is essential that educational institutions, policymakers, and educators work collaboratively to address these concerns. By bridging the digital divide, safeguarding student data, and fostering meaningful interactions in online learning environments, we can create a more inclusive and effective digital education system that benefits all students.

The research suggests several key strategies to mitigate these ethical challenges. First, addressing accessibility and the digital divide requires investments

in affordable technology and digital literacy programs. Second, ensuring data privacy and security is paramount, and educational institutions must adopt stringent measures to protect student data and adhere to data protection regulations. Lastly, the reduction of human interaction in digital learning environments can be countered by creating interactive and collaborative opportunities that promote a sense of community and engagement among students. However, it is important to acknowledge the limitations of this research. One key limitation is the relatively small sample size (n=15) used in the study. A larger sample would provide more comprehensive data and potentially more diverse perspectives on the ethical challenges in digital ELT. Additionally, this research focused primarily on the perceptions of educators, and further research could explore the perspectives of students to gain a more holistic understanding of the ethical issues at play. Another limitation is the scope of the study, which primarily addresses the ethical concerns raised by participants without delving into the specific technological or policy solutions that could resolve these issues. Future research could explore best practices and practical interventions to address these challenges in digital ELT, including case studies from institutions that have successfully navigated these ethical concerns.

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