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Teachers' Readiness For English Language Teaching In The Post-Print Culture

Kesiapan Guru untuk Pengajaran Bahasa Inggris di Budaya Pasca-Cetak

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ABSTRACT

The rapid shift in English Language Teaching (ELT) from traditional print-based materials to digital and AI-based environments requires a comprehensive evaluation of teacher readiness. This study investigates ELT teachers' readiness for post-print pedagogy in four constructs: knowledge and skills, affective/beliefs, context, and behavior, and explores the influence of demographic variables. Using a quantitative, descriptive, and comparative design, 228 active English teachers in Indonesia participated via an online questionnaire. The findings reveal a "Digital Paradox" in which teachers have high cognitive and affective readiness, but show a much lower level of behavioral implementation (mean = 51.3), thus being categorized as "Low-Moderate Readiness" in actual practice. Demographic analysis using One-way ANOVA showed no significant differences in readiness by age, location, or school level ($p > 0.05$), indicating that challenges in the post-print era are experienced universally across teaching contexts. However, the Kruskal-Wallis test identified significant differences in teaching experience ($p < 0.05$), with mid-level teachers (8–15 years of experience) showing the highest readiness compared to novice and senior teachers. These results suggest that high theoretical knowledge does not automatically translate into classroom practice due to uneven institutional support and heavy curriculum demands. Therefore, policy interventions must move beyond merely theoretical digital literacy training to provide equitable technological infrastructure and ongoing pedagogical support to bridge the gap between teachers' potential and classroom realities.

Keywords: *ELT teachers, Post-Print Culture, Teacher Readiness, Technology Integration, Artificial Intelligence (AI).*

ABSTRAK

Pergeseran cepat dalam Pengajaran Bahasa Inggris (PJK) dari materi berbasis cetak tradisional ke lingkungan digital dan berbasis AI membutuhkan evaluasi komprehensif terhadap kesiapan guru. Studi ini menyelidiki kesiapan guru PJK untuk pedagogi pasca-cetak dalam empat konstruk: pengetahuan dan keterampilan, afektif/keyakinan, konteks, dan perilaku, serta mengeksplorasi pengaruh variabel demografis. Dengan menggunakan desain kuantitatif, deskriptif, dan komparatif, 228 guru bahasa Inggris aktif di Indonesia berpartisipasi melalui kuesioner daring. Temuan menunjukkan "Paradoks Digital" di mana guru memiliki kesiapan kognitif dan afektif yang tinggi, tetapi menunjukkan tingkat implementasi perilaku yang jauh lebih rendah (rata-rata = 51,3), sehingga dikategorikan sebagai "Kesiapan Rendah-Sedang" dalam praktik aktual. Analisis demografis menggunakan ANOVA satu arah menunjukkan tidak ada perbedaan signifikan dalam kesiapan berdasarkan usia, lokasi, atau tingkat sekolah ($p > 0,05$), menunjukkan bahwa tantangan di era pasca-cetak dialami secara universal di berbagai konteks pengajaran. Namun, uji Kruskal-Wallis mengidentifikasi perbedaan signifikan dalam pengalaman mengajar ($p < 0,05$), dengan guru tingkat menengah (8–15 tahun pengalaman) menunjukkan kesiapan tertinggi dibandingkan dengan guru pemula dan senior. Hasil ini menunjukkan bahwa pengetahuan teoretis yang tinggi tidak secara otomatis diterjemahkan ke dalam praktik kelas karena dukungan kelembagaan yang tidak merata dan tuntutan kurikulum yang berat. Oleh karena itu, intervensi kebijakan harus melampaui pelatihan literasi digital teoretis semata untuk menyediakan infrastruktur teknologi

yang adil dan dukungan pedagogis berkelanjutan untuk menjembatani kesenjangan antara potensi guru dan realitas kelas.
Kata kunci: Guru ELT, Budaya Pasca-Cetak, Kesiapan Guru, Integrasi Teknologi, Kecerdasan Buatan (AI).

1. Introduction

The world of English language teaching is currently undergoing major changes. Where teaching used to be dominated by printed books and stacks of paper, it is now becoming digital and full of AI (K. K. Chan & Tang, 2025). This change is not only about tools, but also about how teachers teach. For this technology to be successfully implemented in the classroom, the key lies in the readiness of teachers (Susilo et al., 2026). Teo (2011) emphasizes that teachers are key players in ensuring that technology is used effectively. In line with this, Mishra & Koehler (2006) emphasize that effective technology integration requires a keen understanding of the relationships among materials, teaching methods, and specific situations or contexts. Therefore, Turrohmah & Suryanto (2023) argue that if teachers are not mentally and skillfully prepared, the digital transformation in schools will not run smoothly.

While global research highlights technology and Artificial Intelligence's potential to boost student motivation and enhance language learning outcomes, there remains a gap in understanding teachers' readiness to transition to a post-print culture, particularly in Indonesia. Evidence suggests that having advanced technological skills does not automatically translate into effective classroom application. This is consistent with Ertmer and Ottenbreit-Leftwich (2010), who note that mere access to technology is not enough without changes in teachers' pedagogical beliefs and instructional methods. Additionally, Tanta et al. (2025) discovered that, although Indonesian teachers often have strong pedagogical expertise, integrating technology into content and holistic practice (TPACK) remains a considerable obstacle.

Most research still focuses on general technical readiness, often neglecting the complex relationships among knowledge, emotions, context, and teacher behavior, especially in AI-rich post-print pedagogy. As Al-Awidi and Aldhaafeeri (2017) point out, moving from traditional materials to digital resources requires teachers to be both technically skilled and pedagogically prepared for effective curriculum changes. This study aims to fill this gap by thoroughly assessing ELT teachers' readiness and exploring how demographic factors, such as years of experience, influence this preparedness. The importance of demographic analysis is supported by Safitri et al. (2022), who show that teachers' readiness to adopt new learning systems is significantly affected by their backgrounds and personal traits. Incorporating Susilo et al. (2026)'s view that readiness is essential for AI integration, this research seeks to provide empirical insights to inform the development of more flexible education policies in the digital era.

Although the need for professional development for teachers has often been voiced, the challenges each teacher faces are not uniform because they vary by background. Factors such as length of teaching experience, diverse school locations, and age maturity provide different insights into their level of readiness. This study aims to examine how prepared these teachers are based on four constructs of readiness (knowledge and skills, affective/beliefs, context, and behavior). In addition, this study aims to determine whether differences in age, location, or teaching length affect teachers' readiness to face this post-print pedagogy. It is hoped that this study will determine the appropriate type of assistance for teachers in the future.

2. Research Methodology

Research Design

This study employed a quantitative descriptive-comparative design. A descriptive research design was used to provide a systematic, accurate description of the current profile of ELT teachers' readiness (Gay et al., 2012). Complementing this, a causal-comparative design was used to explore potential differences in readiness levels across demographic variables, as this

design is appropriate for investigating relationships between independent and dependent variables when the independent variable is not manipulated (Gay et al., 2012).

Participants

The participants in this study included 228 English teachers who are still actively teaching in Indonesia. The sample was taken using convenience sampling, a technique based on the availability and ease of access for researchers (Gay et al., 2012). The main criteria for respondents were teachers who are still actively teaching and have been exposed to digital technology in the classroom. The majority of participants reside in West Java, particularly Garut Regency, while others are spread across Banten and other regions. This demographic diversity includes variations in age, school location, teaching experience, and teaching level, which support comparative analysis of differences in teachers' overall readiness levels.

Data Collection

Data was collected using an online questionnaire distributed via Google Forms. This technique was chosen for its efficiency in reaching respondents spread across a wide area in a short period of time. Researchers distributed the questionnaire link to English teacher communities and school networks in predetermined areas. Before completing the questionnaire, participants were provided with an explanation of the research objectives and assurances of data confidentiality to ensure that research ethics were upheld.

Research Instrument

This research instrument uses a closed questionnaire consisting of 43 questions. This instrument is designed to measure teacher readiness through four main constructs: Knowledge and Skills, Affective/Beliefs, Context, and Behavior. The development of this instrument adapts several theoretical frameworks.

Respondents

Responses were measured using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). This Likert scale was used to assign points to each individual response so that the level of readiness could be calculated numerically (Gay et al., 2012). This instrument was also validated through an expert-judgment process by lecturers to ensure that each statement item was consistent with the indicators to be measured. A summary of the indicators and the distribution of statement items is presented in Table 1 below:

Table 1. Summary of indicators and distribution of statement items

Constructs	Sub-Constructs	Item Code	Example Statement	Theoretical Basis
Knowledge & Skills	TPACK-Digital, AI-Literacy, Assessment Literacy.	I1-I16	I can select online learning resources that are appropriate for students' needs.	(Mishra & Koehler, 2006; Rowsell & Walsh, 2011)
Affective/Beliefs	Perceived Usefulness (PU), Perceived Ease of Use (PeoU), Self-Efficacy	I17-I27	Digital technology can be easily adapted to my class.	(Bandura, 1997; Davis, 1989; Venkatesh et al., 2003)
Context	Institutional Support & Constraints/Barriers	I28-I37	Internet connection or device availability is often a constraint.	(Ertmer, 1999, 2005; Tondeur et al., 2008)
Behavior	Intention to Use & Reported Adoption	I38-I43	I use AI to help with explanations or examples in class.	(Hamilton et al., 2016; Puentedura, 2006)

Data Analysis

The collected data were analyzed quantitatively through two stages. First, descriptive statistics were used to calculate the mean and percentage to map teachers' readiness levels across constructs. Second, a comparative analysis was conducted to assess differences in readiness levels across demographic groups. Based on the views of Gay et al. (2012), researchers used One-way ANOVA for variables that met parametric assumptions (normality and homogeneity). However, for variables that violated parametric assumptions, the non-parametric Kruskal-Wallis test was used as an equivalent alternative.

3. Findings And Discussions

Findings

The results of the data analysis show that, overall, ELT teachers' readiness to engage with post-print pedagogy falls into the Moderate-High Readiness category. However, upon further examination, there are quite striking variations in scores among the four constructs measured. The Knowledge and Skills construct received the highest average score of 80.9, placing it in the "Moderate-High Readiness" category. This indicates that teachers have sufficient digital literacy and technical understanding. On the other hand, the Affective/Beliefs and Context constructs show a level of readiness in the "Moderate Readiness" category, where teachers are positive but constrained by supporting factors in the school environment. Meanwhile, the Behavior construct received the lowest average score of 51.3 and falls into the "Low-Moderate Readiness" category. This shows that actual classroom implementation remains a major obstacle for teachers.

This study also examined differences in teacher readiness across four demographic variables: age, school location, teaching level, and length of teaching experience. There were various findings from this difference test. First, for the variables of age, school location, and teaching level, the results of the One-way ANOVA test showed a significance value greater than 0.05 ($p > 0.05$). These findings indicate that there are no significant differences among ELT teachers, despite differences in age, geographical location of teaching, and teaching level at school.

However, different results were found for the variable of teaching experience. Using the Kruskal-Wallis nonparametric test, a significant difference in teacher readiness was found by length of service ($p < 0.05$). Based on mean rank, teachers with 8-15 years of teaching experience had the highest readiness scores compared to novice teachers with 0-7 years of teaching experience. These findings confirm that length of service is a major demographic factor influencing teachers' readiness to adopt a post-print pedagogical culture.

DISCUSSIONS

1) Discussion of General Readiness of ELT Teachers

Research indicates that ELT teachers are generally prepared for post-print pedagogy, with their readiness categorized as 'Moderate-High Readiness.' Their average score suggests they have sufficient knowledge and skills, and they recognize the advantages of digital tools, showing confidence in their classroom application. Nonetheless, external support from the school remains inadequate. Additionally, their behavioral scores reveal that teachers' implementation of digital technology still faces some challenges.

This finding aligns with Safitri et al. (2022), who state that although teachers have basic knowledge and skills in technology, their implementation is often suboptimal due to inadequate school facilities and poor internet connectivity.

Apart from infrastructure challenges, the scores indicate that teachers' practices in integrating technology into the classroom are generally unprepared. Howard and Mozejko (2015) note that, despite teachers feeling confident, technology is often used only to transfer old methods to

digital media, without evolving their teaching strategies to achieve greater depth. Without practical application in the classroom, technology mastery remains untapped potential (Harrison, 2017).

These findings indicate a gap between knowledge and practice in implementing post-print pedagogy. This aligns with Davis's (1989) view that the adoption of innovation is influenced not only by understanding its benefits but also by perceptions of the effort required to implement it. Therefore, even though teachers understand the value and potential of post-print pedagogy, complex practical challenges and limited support can hinder the transition from understanding to optimal classroom implementation (Ertmer & Ottenbreit-Leftwich, 2010).

2) Discussion of ELT Teachers' Readiness Based on Constructs

a. Knowledge and Skills

The research results indicate that the knowledge and skills construct of ELT teachers falls into the Moderate-High Readiness category, with the highest average score among the constructs. When analyzed using the Technological Pedagogical Content Knowledge (TPACK) framework by Mishra & Koehler (2006), a high score in this construct suggests that teachers already have a solid foundation in Pedagogical Content Knowledge. These findings align with the argument by Basilotta-Gomez-Pablos et al. (2022) that digital literacy has become an essential competency for educators to select and utilize digital tools that meet students' needs.

The high scores on knowledge and skills indicate that ELT teachers have developed the necessary skills to incorporate technology into their teaching (Garavaglia et al., 2013). However, as explained by Mishra & Koehler (2006), teacher readiness is not limited to mastery of technology, content, and pedagogy alone, but also includes the ability to integrate all three into context-specific teaching strategies. These scores indicate that teachers already have a strong foundation, but still require guidance to implement this knowledge in the classroom.

b. Affective/Beliefs

Research findings indicate that the affective/beliefs construct of ELT teachers falls within the Moderate-High Readiness category, suggesting a positive attitude and confidence among teachers regarding the implementation of post-print pedagogy. This aligns with the findings of Williyan et al. (2025), who state that most educators now accept the presence of technology, including AI, as a partner in developing learning content. As Sutrisno and Surono (2024) note, teachers' readiness is strongly influenced by affective factors, including attitudes, self-confidence, and willingness to adapt. This positive attitude stems from perceptions of usefulness, in which teachers believe that using technology will improve their teaching effectiveness and performance, known as perceived usefulness (Davis, 1989). When teachers have a positive outlook, they tend to see technology as a tool that facilitates their work rather than as a burden (Clipa et al., 2023).

However, the scores that have not yet reached the maximum number also reflect a variety of attitudes among teachers. As concluded by Williyan et al. (2025), although teachers feel supported, they still have concerns that excessive technology use could reduce students' independence and critical thinking. Therefore, this construct still requires strengthening through a deeper understanding of digital ethics.

c. Context

The results of the research on the context construct show the category of Moderate Readiness. This indicates that environmental factors at school are sufficient to support teachers' readiness for post-print pedagogy. This is in line with Teo's (2011) explanation that environmental factors greatly influence teachers' decisions to use technology. Venkatesh et al. (2000) argue that this environmental support operates through a process of internalization, whereby teachers absorb the school environment's influence and support

into their own perceptions. Thus, teachers tend to see post-print pedagogy as relevant to their work.

However, when linked to the majority of respondents in rural areas, these findings reinforce Tania's (2025) argument that inadequate infrastructure and limited internet access remain obstacles in Indonesia. The Moderate Readiness condition explains why teachers feel inhibited from taking full steps, because teachers' mental readiness is often hampered by uneven facilities in the field. In fact, the success of institutions in providing support to teachers can help improve work performance so that the implementation of post-print pedagogy is maximized Venkatesh et al. (2000).

d. Behavior

The results of the study show that the behavior construct has the lowest average score and is in the Low-Moderate Readiness category. This indicates that there are major obstacles in translating knowledge into real action in the classroom. This low score is in line with the views of (Cope & Kalantzis (2009) which states that ELT teachers are often stuck in old teaching habits without engaging in deep reflection, thus limiting innovation in the classroom. Although teachers have a positive attitude, they still find it difficult to break away from the deeply rooted traditions of print culture. This is in line with the challenges identified by Hafner et al. (2020) where interview results indicate that teachers find it difficult due to the large amount of information that must be processed simultaneously, with limited time for review.

The finding that the behavior construct is the lowest validates the digital paradox, in which digital literacy does not automatically correlate with actual practice. In line with the argument of Chan et al. (2025), high technological knowledge will remain an unused capacity if it is not accompanied by the ability to evaluate and apply tools effectively. These low scores also validate the concerns of Williyan et al. (2025) that, without guidance, teachers will be stuck in the 'comfort zone' of traditional pedagogy, despite a positive attitude towards technology.

3) Discussion of ELT Teachers' Readiness Based on Demographic Variables

The results of the comparative analysis in this study provide an overview of ELT teachers' profiles. Based on the One-way ANOVA test, the variables of age, school location, and teaching level did not show any significant differences ($p > 0.05$). The finding that age does not affect teacher readiness is in line with what is discussed by Reza Rahimi & Mosalli (2024)who argue that, in this day and age, digital skills are no longer a matter of age but a professional requirement for all teachers. This shows that even mature teachers are starting to catch up with technology in order to meet the same professional demands as younger teachers.

The similarity in results for the school location variable also shows that, despite differences in field facilities, teachers' enthusiasm for adapting to the post-print era remains at a similar level. This supports the view of R. Chan et al. (2025) that digital literacy has become a shared responsibility within the education ecosystem. However, when linked to low Context construct scores, these findings indicate that the lack of institutional support is felt equally by all teachers. The absence of significant differences shows that all teachers, regardless of school location, are struggling with minimal school support. This condition validates the concerns of Casilao (2025) that real barriers to technology integration often do not stem from the teachers' intentions alone, but rather from a school environment that is not yet ready to support practical classroom implementation.

On the other hand, a very clear difference emerged in the variable of length of teaching experience, which was tested using Kruskal-Wallis ($p < 0.05$), where teachers with 8-15 years of service were the group with the highest level of readiness. This finding contradicts the study by Casilao (2025) which states that the length of service has no effect. Reza Rahimi & Mosalli (2024) explain the importance of professional independence, an advantage of the middle-length-of-service group. At this stage, teachers with 8-15 years of teaching experience usually

have the right level of teaching maturity. This is different from new teachers (0-7 years) who, according to Casilao (2025), are still in the survival phase, meaning that teachers are still adapting to classroom management and have not yet focused on post-print innovation. Meanwhile, teachers who have been teaching for more than 15 years often face challenges with technological change, or are accustomed to the old print-culture tradition. As mentioned by Reza Rahimi & Mosalli (2024), digital mastery requires continuous skill updates, but very senior teachers may feel that their methods are already effective enough, so their motivation to switch to post-print pedagogy is lower than that of the intermediate group (8-15 years). It can be concluded that the mid-career stage (8-15 years) is the optimal period where mature teaching experience meets a high level of adaptability.

4. Conclusion

This study concludes that ELT teachers in Indonesia have high cognitive and affective readiness to face post-print pedagogy, but still face major obstacles in implementing it. This digital paradox phenomenon shows that teachers' high understanding of technology and Artificial Intelligence (AI) is still limited to the conceptual level due to limited contextual support. This study also reveals that readiness for post-print pedagogy has become a universal challenge felt equally by all teachers regardless of age, school location, or teaching level. However, teaching experience has proven to be a significant differentiator, with teachers with 8-15 years of experience being the most prepared group because they have an ideal balance between pedagogical maturity and technological adaptation compared to novice and senior teachers.

Implications & Recommendations: Practically speaking, these findings indicate that policies aimed at improving teacher quality should not only focus on theoretical digital literacy training but also ensure equitable access to technological facilities and provide direct practical guidance to bridge the untapped potential of teachers across all regions. This study reinforces the readiness model that places contextual factors (environment) as the main determinant in the cultural transition from print to digital teaching. Further research is recommended to explore specific strategies teachers use to overcome facility limitations through case studies or in-depth interviews.

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