

Reframing EFL syllabus design for the 21st century: Exploring teacher readiness in pre-service education

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Abstract

This study explores how pre-service English teachers develop readiness to integrate 21st-century competencies and sustainability principles into English as a Foreign Language syllabus design. Grounded in experiential learning theory and the framework of global competence, the study aims to examine the level of readiness, the relationship between familiarity and confidence, and the factors shaping the transition from conceptual understanding to pedagogical practice. This study employed an explanatory sequential mixed-method design, combining quantitative data from a structured questionnaire with qualitative insights from reflective narratives. The findings reveal that participants demonstrate strong conceptual understanding but uneven confidence and limited practical application. The results indicate that familiarity with key concepts does not necessarily lead to effective implementation without reflective experience and contextual support. The study concludes that teacher readiness is a dynamic process shaped by the interaction between knowledge, belief, and practice rather than a fixed competency. These findings imply the importance of integrating mentorship, reflective inquiry, and contextualized learning experiences into teacher education programs to support the meaningful application of global and sustainability-oriented competencies in language teaching.

Keywords: *EFL syllabus design, experiential learning, pre-service teachers, sustainable development goals, 21st century competencies*

INTRODUCTION

The rapid pace of globalization, coupled with advancements in communication and information technologies, has reshaped the landscape of education worldwide. In English language teaching (ELT), this shift has moved instruction beyond traditional grammar-focused methods toward more holistic and integrated approaches that respond to 21st-century demands. These demands now include a broad range of competencies, such as critical thinking, creativity, collaboration, digital literacy, intercultural competence, environmental awareness, and global citizenship ([Griffin et al., 2012](#); [Voogt & Roblin, 2012](#)). For educators, this shift necessitates a rethinking of how English as a Foreign Language (EFL) syllabi are designed, especially within teacher education programs.

Beyond linguistic competence, contemporary EFL education increasingly emphasizes the integration of sustainability awareness, intercultural understanding, and socially responsive learning practices. International frameworks such as UNESCO Education 2030 and the Sustainable Development Goals (SDGs) position global competence as an essential educational outcome, encouraging learners to critically engage with global issues and cultural diversity ([Rieckmann et al., 2017](#)). In response to these developments, EFL syllabus design is expected to move beyond language-focused objectives toward more contextualized and globally oriented pedagogical approaches.

In Indonesia, these priorities are reflected in the implementation of Kurikulum 2013, which promotes inquiry-based learning, character education, and cross-disciplinary competencies. However, translating these policy expectations into practical instructional design remains challenging, particularly within teacher education contexts where pre-service teachers are still developing the pedagogical capacity to integrate global and sustainability-oriented competencies into EFL learning practices ([Mulyasa, 2021](#)).

Within teacher education, these changes require pre-service teachers to be adequately prepared to translate theoretical frameworks into meaningful pedagogical practices. However, many pre-service English teachers still encounter difficulties in operationalizing 21st-century competencies and sustainability principles in actual syllabus design. Existing studies frequently report that pre-service teachers possess conceptual awareness of 21st-century competencies but experience difficulties translating such understanding into practical pedagogical implementation, particularly in digital pedagogy, global competence, and contextualized syllabus design.

Despite increasing policy alignment, many pre-service teachers still experience difficulties in translating theoretical concepts into practical syllabus design. Previous studies have emphasized the importance of experiential learning, reflective practice, and interdisciplinary approaches in connecting pedagogical theory with authentic classroom contexts ([Mustaqimah et al., 2025](#); [Djam'an, 2025](#)). Other studies have also highlighted the importance of scaffolded guidance, contextual examples, and digital pedagogical support in strengthening instructional confidence and classroom implementation ([Marwa et al., 2025](#) ; [Zaragoza et al., 2023](#)). Nevertheless, these approaches are still not consistently modeled within EFL teacher education programs, leaving many pre-service teachers uncertain about how to operationalize global and sustainability-oriented competencies in actual syllabus design.

Research in Indonesian educational contexts further reveals a persistent divide between theoretical knowledge and classroom realities. Pre-service teachers often demonstrate conceptual familiarity with 21st-century learning principles but struggle to apply them meaningfully in pedagogical practice due to limited contextual support, mentoring, and experiential opportunities ([Purnomo et al., 2020](#)). This condition suggests that conceptual understanding alone does not automatically lead to pedagogical readiness.

In this study, familiarity refers to pre-service teachers' conceptual understanding of 21st-century competencies and sustainability-oriented learning, while confidence refers to their perceived capability to apply these concepts pedagogically in EFL syllabus design. Readiness, therefore, is conceptualized not merely as knowledge possession but also as a

developmental condition emerging from the interaction between conceptual familiarity, pedagogical confidence, experiential learning, and contextual support.

Another limitation of previous studies lies in the fragmented treatment of familiarity, confidence, and readiness. Existing research frequently measures readiness as either self-perceived competence or reflective professional awareness without sufficiently explaining how these dimensions interact and develop in authentic pedagogical contexts. Consequently, the developmental process through which familiarity evolves into pedagogical confidence and enacted readiness in EFL syllabus design remains underexplored, particularly within Indonesian teacher education contexts.

To address these gaps, the present study employs an explanatory sequential mixed-method design integrating Kolb's experiential learning theory (Kolb, 2014) and the OECD global competence framework (OECD, 2019). Rather than conceptualizing readiness as a fixed competency, this study frames readiness as a developmental and mediated process shaped by the interaction between familiarity, confidence, and experiential enactment in EFL syllabus design. Through this perspective, the study contributes to the literature by examining not only the level of readiness among pre-service English teachers but also the developmental processes through which theoretical understanding is transformed into pedagogical enactment within EFL syllabus design. The aims of this study are as follows:

1. To determine the level of readiness among pre-service English teachers across four domains, particularly in cognitive, interpersonal, intrapersonal, and global/SDG.
2. To examine the relationship between familiarity and confidence in applying these competencies.
3. To explore the experiential challenges and mediating factors that shape readiness in the design of the syllabus.

RESEARCH METHOD

Research Design

This study employed an explanatory sequential mixed-method design to examine how pre-service English teachers develop readiness to integrate 21st-century competencies and sustainability principles into EFL syllabus design. The study was grounded in Kolb's experiential learning theory (Kolb, 2014) and the global competence framework (OECD, 2019), which together conceptualize readiness as a developmental and context-dependent process rather than a fixed competency. In this study, familiarity refers to participants' conceptual understanding of 21st-century competencies and sustainability-oriented learning, whereas confidence refers to their perceived capability to apply these concepts pedagogically in EFL syllabus design. Readiness was therefore operationalized as the interaction between conceptual familiarity, pedagogical confidence, experiential learning, and contextual support.

The four domains examined in this study were cognitive, interpersonal, intrapersonal, and global/SDG competence, which were derived by integrating Kolb's experiential learning stages (conceptualization, reflection, and active experimentation) with the OECD dimensions of global competence (knowledge, values, attitudes, and action). The quantitative phase identified readiness patterns and relationships between familiarity and confidence, whereas the qualitative phase explained how these patterns emerged in authentic pedagogical contexts. This integration enabled the study to move beyond descriptive measurement by interpreting the developmental processes underlying teacher readiness in EFL syllabus design.

Research Participants

The participants consisted of 120 pre-service English teachers (82 females and 38 males) aged between 21 and 24 years, enrolled in Curriculum and Syllabus Design courses across three Indonesian teacher education institutions, two public and one private universities. A purposive and stratified sampling strategy was employed to ensure that

participants had relevant academic exposure to curriculum development, 21st-century learning, and digital pedagogy. Participants were required to have completed prior coursework related to language teaching methodology, curriculum design, and technology-enhanced learning. Stratification was applied to maintain proportional representation based on gender and institutional background.

This study was conducted in the context of Indonesian teacher education reform, emphasizing competency-based learning and SDG-oriented educational practices. Ethical approval was granted by the participating institutions, and informed consent was obtained from all participants before data collection.

Instruments

A 22-item self-report questionnaire was developed to assess pre-service teachers’ readiness for integrating twenty-first-century competencies into the EFL syllabus design. The instrument consisted of four domains: cognitive, interpersonal, intrapersonal, and global/SDG competence, rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). In addition to close-ended items, the questionnaire included open-ended questions designed to explore participants’ experiences, perceived confidence, implementation challenges, and contextual factors related to applying 21st-century competencies in EFL syllabus design.

The instrument was adapted from existing teacher readiness frameworks ([Darling-Hammond et al., 2020](#); [Voogt & Roblin, 2012](#)) and contextualized for Indonesian EFL teacher education. Three experts in curriculum studies, linguistics, and English language teaching reviewed the instrument to evaluate construct validity, clarity, and contextual relevance.

Table 1

Structure of the Readiness Questionnaire

Domain	Total Items	Example Item	Source Construct
Cognitive	6	“I can design tasks that promote problem-solving and critical thinking.”	Kolb’s experiential learning and cognitive engagement
Interpersonal	5	“I can organize collaborative learning activities effectively.”	twenty-first-century collaboration and communication
Intrapersonal	4	“I can use digital tools to enhance learner autonomy.”	Self-regulated & digital learning competence
Global/SDG	5	“I can integrate SDG-related issues into EFL materials.”	Global citizenship and sustainability literacy

Pilot testing with 30 non-participating students confirmed the clarity and reliability of the instrument. Cronbach’s alpha for the total scale reached $\alpha = .89$, indicating high internal consistency. The Kaiser-Meyer-Olkin measure of sampling adequacy ($KMO = .812$) and Bartlett’s Test of Sphericity ($\chi^2 = 614.5, p < .001$) confirmed the data’s suitability for factor analysis. Exploratory Factor Analysis (EFA) using Varimax rotation extracted four factors corresponding to the theoretical domains and explained 72.4% of the total variance. Factor loadings ranged between .71 and .82, supporting the validity of the multidimensional readiness construct.

Data Analysis

The quantitative data were analyzed using SPSS version 25. Descriptive statistics (mean, standard deviation) established the general readiness level and variation across domains. Pearson's correlation examined the relationship between familiarity and confidence, while Exploratory Factor Analysis (EFA) verified the latent structure of readiness. Statistical significance was set at $p < .05$.

Qualitative data were analyzed through thematic coding in three stages: open coding, axial grouping, and thematic interpretation. Codes such as limited exemplars, digital constraints, and mentoring needs were clustered into themes capturing cognitive, interpersonal, intrapersonal, and global/SDG. Intercoder reliability reached 87% across two independent reviewers. Integration followed [Fetters et al. \(2013\)](#) framework, aligning quantitative outcomes with qualitative interpretations through a joint display matrix. This integration enabled the identification of convergence and divergence across data strands, producing the interpretive synthesis reported in the results section.

The integration of quantitative and qualitative findings followed the explanatory sequential logic proposed by [Fetters et al. \(2013\)](#), in which qualitative data were used to explain, contextualize, and interpret quantitative patterns related to readiness, familiarity, and confidence. This process enabled the study to identify not only statistical relationships but also the experiential and contextual factors shaping the transformation of conceptual understanding into pedagogical enactment.

FINDINGS AND DISCUSSION

Findings

This section presents the research findings aligned with the research objectives, followed by an integrated discussion that interprets the results in relation to relevant theories and previous studies.

Research Findings

The quantitative data from 120 pre-service English teachers demonstrated strong psychometric properties. The overall reliability of the 22-item readiness questionnaire was high (Cronbach's $\alpha = .89$). All four domains—cognitive, interpersonal, intrapersonal, and global/SDG—exceeded the acceptable reliability threshold ($\alpha > .80$). Sampling adequacy was confirmed by a Kaiser-Meyer-Olkin value of .812 and a significant Bartlett's Test of Sphericity ($\chi^2 = 614.5$, $p < .001$), indicating suitability for factor analysis.

Table 2

Reliability and Sampling Adequacy

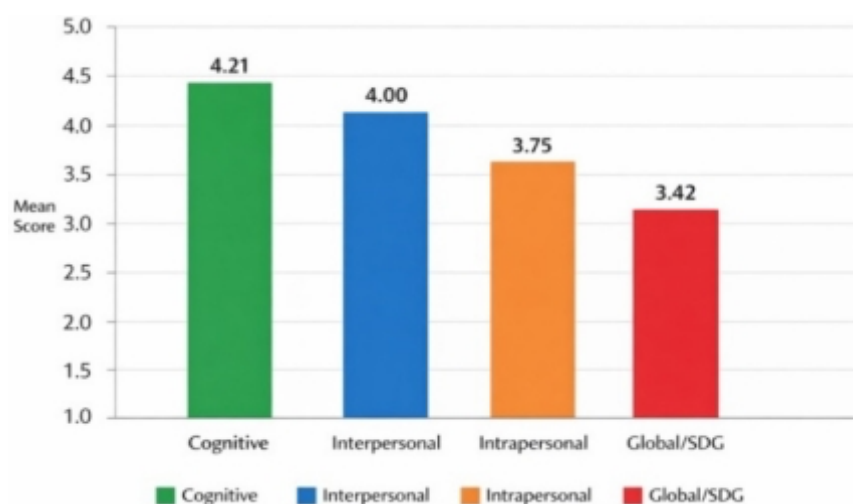
Domain	Total Items	Cronbach's α	KMO	Bartlett's Sig.
Cognitive	6	.86	.782	.000
Interpersonal	5	.84	.793	.000
Intrapersonal	4	.81	.775	.000
Global/SDG	5	.83	.812	.000
Overall	22	.89	.812	.000

The descriptive statistics revealed uneven readiness across the four competency domains (Table 3). Cognitive readiness recorded the highest mean score ($M = 4.21$, $SD = 0.44$), followed by interpersonal readiness ($M = 4.00$, $SD = 0.50$). Intrapersonal readiness was moderate ($M = 3.75$, $SD = 0.60$), while global/SDG readiness was the lowest ($M = 3.42$, $SD = 0.63$), indicating a disparity in the development of different competency domains.

Table 3*Descriptive Statistics of twenty-first-century Competencies (n = 120)*

Domain	Mean	SD	Interpretation
Cognitive	4.21	0.44	High
Interpersonal	4.00	0.50	High
Intrapersonal	3.75	0.60	Moderate
Global/SDG	3.42	0.63	Moderate
Overall Mean	3.85	0.54	Moderate - High

Overall readiness was rated at a moderate-high level ($M = 3.85$, $SD = 0.54$). While the majority of participants rated themselves highly in cognitive and interpersonal competencies, fewer than half expressed similar confidence in integrating global and sustainability-related elements into syllabus design. Figure 1 below visualizes this pattern.

Figure 1*Mean Score Distribution of twenty-first-century Competencies*

The figure clearly shows that the Cognitive and Interpersonal competencies are dominant, forming the “core strengths,” while Global/SDG competence represents the weakest link in the overall readiness profile. This gap of 0.79 points between the highest and lowest domains highlights a significant pedagogical disparity.

To examine the relationship between familiarity with twenty-first-century competencies and confidence in applying them in syllabus design, a Pearson correlation analysis was conducted. The results indicated a strong positive relationship ($r = .67$, $p < .01$), suggesting that increased conceptual understanding is associated with higher perceived readiness. However, this relationship does not necessarily guarantee effective implementation in practice.

Table 4*Correlation between Familiarity and Confidence*

Variables	r	Sig. (2-tailed)	Interpretation
Familiarity – Confidence	.67	.001	Significant, strong correlation

This relationship accounted for approximately 45% of shared variance ($r^2 = .45$), suggesting a substantial association between conceptual understanding and perceived pedagogical capability.

The relationship between familiarity, confidence, and readiness became evident throughout the findings. Participants who demonstrated higher conceptual familiarity generally expressed stronger pedagogical confidence; however, confidence alone did not necessarily guarantee enacted readiness in syllabus design practices. This indicates that readiness develops through continuous interaction between conceptual understanding, reflective experience, and contextual pedagogical support.

Building on this result, an exploratory factor analysis using Varimax rotation was conducted to examine the underlying structure of readiness. The analysis identified four distinct factors corresponding to the theoretical domains.

Table 5*Factor Loadings after Varimax Rotation*

Item	Cognitive	Interpersonal	Intrapersonal	Global/SDG
1. Critical Thinking	.812	-	-	-
2. Creative Tasks	.798	-	-	-
7. Collaboration	-	.781	-	-
8. Communication	-	.774	-	-
12. Digital Tool Use	-	-	.733	-
16. SDG Integration	-	-	-	.804
18. Global Awareness	-	-	-	.792

These factors explained 72.4% of the total variance. Cognitive items loaded strongly on the first factor (loadings .79–.82), followed by interpersonal (.77–.78), intrapersonal (.73–.75), and global/SDG items (.79–.80). The factor structure confirms the multidimensional nature of readiness for the design of the twenty-first-century EFL syllabus.

Integrated Findings

To provide a deeper understanding of the quantitative results, qualitative data were integrated to explain how teacher readiness is experienced and interpreted by participants. The integration of quantitative and qualitative findings revealed that statistical readiness patterns were closely associated with participants' lived pedagogical experiences. While quantitative data identified differences across readiness domains, qualitative reflections explained the contextual and experiential factors contributing to these differences, particularly regarding digital pedagogy and global/SDG integration.

Table 6*Integrated Quantitative and Qualitative Findings*

Quantitative Result (Mean \pm SD)	Qualitative Excerpts	Theme (Reflection)	Integrated Interpretation
Cognitive (4.21 \pm 0.44)	<p>"I can design critical thinking tasks easily." G2</p> <p>"I feel most familiar with critical thinking and collaboration. I often analyze information critically in assignments and work in teams for projects." G6</p>		High familiarity + high confidence = established competence.
Interpersonal (4.00 \pm 0.50)	<p>"Group activities help, but large classes make it hard." G8</p> <p>"In class, we often do group projects, which improve our ability to collaborate with peers." G4</p>		Good awareness, limited by classroom logistics.
Intrapersonal (3.75 \pm 0.60)	<p>"I know tools such as Padlet and Canva, but rarely use them." G5, G3</p>		Digital literacy awareness > practical fluency.
Global/SDG (3.42 \pm 0.63)	<p>"I don't know how to link grammar with global issues." G1</p> <p>"I can accept and understand different perspectives from people but I may have an issue to connect it with real world especially when we have different cultural background" G4</p>		Conceptual awareness exists, but lacks procedural know-how.

The integrated analysis of quantitative scores and qualitative reflections reveals a clear hierarchical pattern of teacher readiness across four dimensions, indicating differentiated levels of competence among pre-service EFL teachers. The cognitive dimension demonstrates the highest level of readiness ($M = 4.21$, $SD = 0.44$), suggesting that participants possess strong conceptual understanding and confidence in designing higher-order thinking tasks. Qualitative responses further reinforce this finding, as participants frequently expressed familiarity with critical thinking frameworks and instructional strategies aligned with twenty-first-century learning paradigms. This convergence between numerical data and reflective statements indicates that cognitive readiness has evolved into an established pedagogical competence rather than remaining at the level of theoretical awareness. Moreover, the interpersonal dimension ($M = 4.00$, $SD = 0.50$) reflects relatively strong awareness of collaborative and student-centered approaches; however, qualitative evidence highlights contextual challenges that constrain practical implementation. Participants acknowledged the value of group-based learning activities but emphasized logistical barriers such as large class sizes and classroom management complexities. This suggests that while pre-service teachers understand the importance of collaborative learning principles, their readiness remains partially conditional upon institutional and

environmental factors, indicating a gap between pedagogical ideals and classroom realities.

In contrast, the intrapersonal dimension ($M = 3.75, SD = 0.60$) reveals a moderate level of readiness characterized by awareness without consistent application. Many participants reported familiarity with digital tools such as Padlet and Canva, yet admitted limited integration into actual teaching practices. This discrepancy suggests that digital literacy among pre-service teachers is predominantly declarative rather than procedural, highlighting the need for more practice-oriented training that bridges knowledge acquisition with sustained pedagogical implementation.

The lowest readiness level emerges in the global/SDG dimension ($M = 3.42, SD = 0.63$), indicating significant challenges in integrating global perspectives and sustainability issues into EFL syllabus design. Qualitative reflections reveal uncertainty regarding how linguistic components, such as grammar instruction, can be meaningfully connected with global themes. This finding suggests that while conceptual awareness of global education exists, pre-service teachers lack concrete pedagogical frameworks or models for operationalizing these concepts within language teaching contexts.

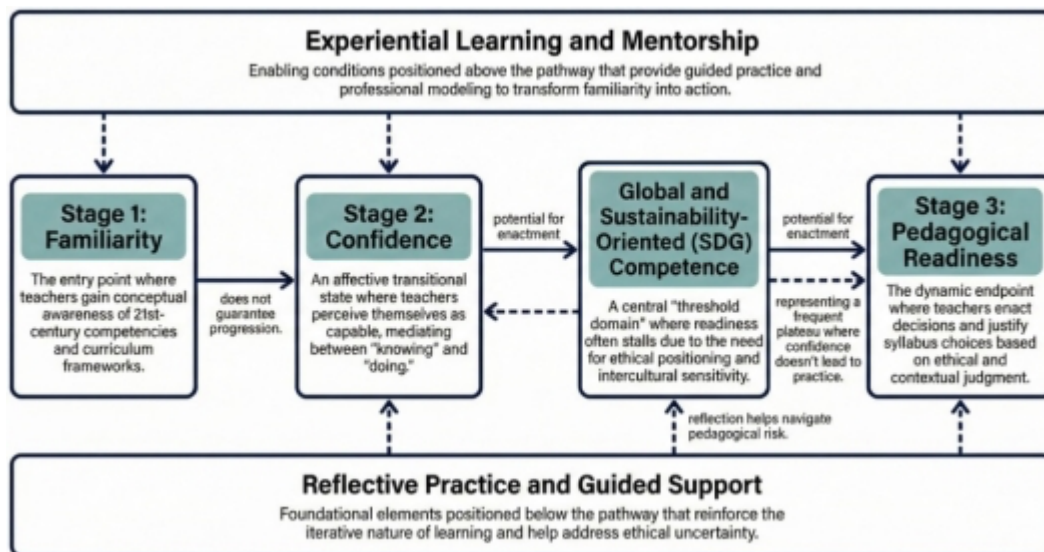
Overall, the hierarchy of readiness between cognitive, interpersonal, intrapersonal, and Global/SDG demonstrates that Indonesian pre-service teacher preparation has advanced significantly in terms of modern pedagogical competencies, especially in collaborative learning and critical thinking. Nonetheless, preparedness for integrating digital practices and internationally responsive education is still lacking, highlighting important areas for curricular reform and focused professional development.

Rather than merely reflecting statistical variation, the hierarchical readiness pattern identified in this study suggests a developmental imbalance in pre-service teacher preparation. The dominance of cognitive readiness indicates that teacher education programs may place stronger emphasis on conceptual acquisition than on situated pedagogical enactment. In contrast, the lower global/SDG readiness reflects the continuing difficulty of transforming abstract global competence frameworks into practical syllabus design strategies within EFL contexts.

Conceptual Model of Teacher Readiness

The integrated quantitative and qualitative findings support a dynamic model of teacher readiness, as illustrated in Figure 2.

Figure 2
Conceptual Model of Readiness Pathway



The model demonstrates how theoretical knowledge is translated into pedagogical readiness through the mediating role of confidence, while experiential learning and mentoring act as key moderating factors. Without structured mentorship and authentic practice, readiness tends to remain at the level of conceptual understanding rather than being fully realized in pedagogical action. This model offers a conceptual contribution by framing readiness as a developmental and context-dependent process rather than a fixed competency.

The proposed readiness pathway model suggests that conceptual familiarity serves as an initial foundation rather than a direct indicator of pedagogical competence. The transition from familiarity to enacted readiness is mediated by experiential learning opportunities, reflective practice, mentoring, and contextual support. Without these mediating factors, readiness may remain at the level of theoretical awareness rather than evolving into practical pedagogical implementation.

Discussion

This study aimed to reframe EFL syllabus design for the 21st century by examining pre-service teacher readiness through an integrated mixed-methods approach. The results show that cognitive, interpersonal, intrapersonal, and global/SDG competence form a hierarchical readiness pattern. This pattern has significant theoretical and practical implications for understanding how teacher preparedness evolves in modern teacher education. The pattern implies that preparedness functions as a multi-layered developmental concept influenced by exposure to instructional rhetoric, contextual mediation, and experiential opportunities rather than as discrete competencies.

The findings support the argument that teacher readiness should not be viewed as a static competency or isolated skill set. Instead, readiness appears to function as a mediated developmental condition shaped by the interaction among conceptual familiarity, pedagogical confidence, experiential learning, and contextual support. This perspective extends previous readiness research by emphasizing the process through which theoretical understanding is transformed into pedagogical enactment.

These findings align with broader developments in teacher education shaped by globalization and advances in communication and information technologies. In ELT, this shift has moved instruction beyond traditional grammar-focused approaches toward more integrated and competency-based models ([Darling-Hammond et al., 2020](#); [Voogt & Roblin, 2012](#)). This transformation necessitates reconsidering how EFL curricula are designed, particularly within teacher education programs. Previous studies also emphasize that pre-service EFL teachers must possess not only linguistic expertise but also the capacity to foster these competencies in technologically mediated learning environments ([Aisyiyah, 2022](#); [Daflizar et al., 2022](#)).

Twenty-first-century competencies not only support language proficiency development but also prepare learners to engage critically with global and societal challenges within EFL contexts. In contrast, this research indicates inconsistencies in how these competencies are understood and implemented by pre-service teachers. For instance, a study conducted in Latin American contexts found that EFL instructors lacked a common understanding of twenty-first-century skills with many prioritized technology and 4C (critical thinking, communication, collaboration, and creativity), yet struggling with unified frameworks and successful tactics like project-based learning ([Siddiq et al., 2016](#)). The necessity of focused teacher training to close conceptual gaps is highlighted by the fact that this ambiguity frequently results in disjointed classroom practices.

The relatively strong interpersonal readiness reinforces findings that collaborative learning and communicative pedagogy have become widely accepted in EFL education ([Richards, 2021](#)). Yet qualitative evidence also reveals contextual barriers such as large class sizes and classroom management challenges that constrain implementation. This condition reflects what may be described as “conditional readiness,” in which pre-service teachers

conceptually support collaborative pedagogy but remain hesitant to apply it consistently due to perceived environmental limitations.

A similar pattern appears in the integration of sustainability-oriented learning within EFL contexts. Previous studies highlight the effectiveness of interdisciplinary curriculum design, project-based learning, and authentic environmental texts in promoting eco-literacy and global awareness ([Yu et al., 2024](#)). However, ongoing issues like a lack of funding, a mismatch between language and sustainability goals, and insufficient teacher preparation frequently lead to surface-level integration rather than transformative pedagogy ([Rahmayanti et al., 2020](#); [Sulaiman et al., 2025](#)). These findings suggest that successful SDG integration requires not only conceptual awareness but also structured pedagogical support and contextualized instructional modeling.

In Indonesia, the 2013 curriculum (Kurikulum 2013) and its subsequent revisions emphasize character education, inquiry-based learning, and cross-disciplinary skills. Nonetheless, there has been unequal classroom implementation, especially in areas with limited resources. Therefore, it is a challenge for teacher education institutions to produce graduates who can integrate global and sustainability ideals into their teaching methods in addition to being proficient in language instruction ([Mulyasa, 2021](#)).

Previous studies on Indonesian pre-service EFL teachers reveal relatively strong readiness in critical thinking and collaborative learning but continuing limitations in digital literacy and SDG integration ([Padmadewi et al., 2020](#); [Park & Son, 2020](#)). Other studies further indicate that technological readiness is strongly influenced by self-efficacy, institutional support, and opportunities for authentic pedagogical practice ([Aisyiyah, 2022](#); [Daflizar et al., 2022](#)). These findings reinforce the argument that readiness develops not only through conceptual exposure but also through contextual and experiential mediation.

Many pre-service teachers still struggle to apply theoretical frameworks to actual syllabus design, despite policy congruence. In programs like Kampus Mengajar, where student teachers interact directly with real-world teaching contexts, ([Mustaqimah et al., 2025](#)) emphasize the importance of experiential learning. Although their scope is still constrained, such projects aid in bridging the gap between theory and practice. Similarly, although pre-service training programs rarely model such techniques, [Djam'an \(2025\)](#) stated that interdisciplinary and project-based approaches can successfully embed sustainability teaching.

The global/SDG dimension's lowest readiness highlights a serious disconnect between the design of EFL curricula and the objectives for sustainability and global citizenship. Although international frameworks like the OECD's global competence model and UNESCO's Education for Sustainable Development have placed a strong emphasis on policy, participants expressed hesitancy about incorporating global issues into language learning exercises. This supports earlier research showing that a lack of real-world examples causes sustainability education to frequently remain abstract in teacher preparation programs ([Bourn, 2020](#); [Djam'an, 2025](#)).

Additionally, students' critical thinking, empathy, and involvement are encouraged by including SDG content, which also improves their language proficiency and global citizenship values ([Azizah et al., 2025](#)). Crucially, the challenge of connecting grammar instruction with global issues draws attention to a more profound theoretical problem: pre-service teachers can view language instruction and global education as distinct fields rather than as complementary pedagogical approaches. This study supports the need for interdisciplinary syllabus models that present language acquisition as a means of critically engaging with contemporary concerns rather than as an isolated language objective.

[Purnomo et al. \(2020\)](#) found that many educators perceive educational research as disconnected from classroom realities due to limited access and concerns regarding practical applicability. These findings mirror those of the current study, in which pre-service English teachers expressed a need for more context-specific examples, mentoring, and structured opportunities to design syllabi that incorporate global and twenty-first-century

themes. In EFL environments, assessments of twenty-first-century abilities reveal curriculum-related, student-centered, and external obstacles that make evaluation and integration more difficult, like strict standards and resource constraints.

This study emphasizes how crucial it is to provide aspiring teachers with both theoretical understanding and useful resources in order to satisfy the changing needs of contemporary classrooms. Longitudinal methods should be used in future studies to investigate how pre-service teachers' preparedness changes when they enter the workforce, especially with regard to integrating global competency. Furthermore, evidence-based methods for bolstering the weaker domains mentioned here may be found in experimental interventions investigating scaffolded globalized syllabus design.

Despite these contributions, the study is limited by its reliance on self-reported data and cross-sectional design, which may not fully capture the longitudinal development of teacher readiness across authentic teaching experiences.

CONCLUSIONS

This study examined the readiness of pre-service English teachers to integrate twenty-first-century competencies and sustainability principles into EFL syllabus design. The findings indicate that readiness develops unevenly across domains, with stronger performance in cognitive and interpersonal competencies but more limited readiness in intrapersonal and global or sustainability-related dimensions. The study also identified a strong relationship between familiarity and confidence, suggesting that conceptual understanding contributes to perceived readiness, although it does not necessarily ensure effective pedagogical implementation.

The findings further demonstrate that teacher readiness should not be understood as a fixed competency or isolated skill set. Rather, readiness emerges as a developmental and mediated process shaped by the interaction between conceptual familiarity, pedagogical confidence, experiential learning, and contextual support. This study therefore contributes to EFL teacher readiness literature by highlighting how theoretical understanding is transformed into pedagogical enactment through reflective and experiential processes.

Overall, the study highlights the importance of moving beyond knowledge-based teacher preparation by integrating experiential learning, reflective practice, mentorship, and contextualized pedagogical support into EFL teacher education programs. These findings also suggest the need for stronger instructional modeling and scaffolded opportunities for integrating digital, global, and sustainability-oriented competencies into syllabus design practices. Future research may further explore how readiness evolves longitudinally across different teaching contexts and investigate intervention-based approaches to strengthen underdeveloped readiness domains.

Nevertheless, the study is limited by its reliance on self-reported data and cross-sectional measurement, which may not fully capture the evolving nature of teacher readiness across authentic teaching experiences.

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