Exploring EFL Pre-Service Teachers' Practices in Learning Material Development

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Article Info	ABSTRACT
	This study explores how English as a Foreign Language (EFL) pre-service teachers develop English learning materials by applying Tomlinson's framework for learning materials criteria at a private university. The research addresses the limited literature on material development practices among pre-service teachers, as previous studies have mostly focused on in-service teachers, while this study focuses on learning materials developed by pre-service teachers. Employing a qualitative case study approach, data were collected through semi-structured interviews with three pre-service teachers and document analysis of three sets of learning materials developed during the Language Material Development course. Thematic analysis was applied to identify materials aligned with Tomlinson's criteria framework, including linked to the curriculum, suitable to learners' needs, balanced skills, learners' prior knowledge, cooperative learning opportunities, targeted to communicative purposes, cultural integration, and succinct instructions. Findings indicate that all analyzed materials met the framework's principles, effectively addressing diverse learning styles, balancing language skills, communicative purposes, and cooperative learning. The study contributes insights for teacher education programs, policymakers, and material developers, emphasizing the criteria of Tomlinson's learning materials framework for developing engaging EFL materials.

1. INTRODUCTION

In English language teaching and learning, materials are essential because they shape what learners are exposed to and how they engage with classroom tasks (Abdala, 2024). As key instructional resources, learning materials can foster meaningful language experiences by supporting the development of reading, writing, speaking, and listening skills across proficiency levels (Tafani (2009b).

Teachers play a central role in mediating classroom input through the materials they select, adapt, supplement, or design to match learners' needs and interest. In this sense, they act as material developers (Tarrayo et al. 2023). Materials development is also associated with teacher learning, as designing materials can prompt teachers to reflect their practice while providing learners with

context-appropriate resources (Ajoke, 2017; Tarrayo & Anudin, 2023).

Research on materials development has grown substantially, yet much of the existing work focuses on in-service teachers and specific contexts, such as digital self-guided platforms in EFL settings (Karademir et al. 2021), ESP materials for university programs (Tomlinson, 2003), vocational materials (Komang et al., 2021), mobile learning applications (Agustina et al., 2022), and materials selection for secondary schools (Abdala, 2024). However, there remains limited empirical evidence on how pre-service teachers develop learning materials**.** To address this gap, the present study explores EFL pre-service teachers' material development practices using Tomlinson's learning material criteria framework, which provides a suitable lens for examining the principles guiding their design decisions. The study is guided by the following research question: How do EFL pre-service teachers develop learning materials? Specifically, it investigates how pre-service teachers at a private university in Jakarta, Indonesia develop English learning materials and what criteria underpin their decisions, with implications for strengthening teacher education and materials-design training.

2. METHOD

This study employed a qualitative approach to explore how EFL pre-service teachers develop English learning materials using Tomlinson's learning material criteria framework. A qualitative approach is appropriate for investigating participants' perspectives and practices in their natural context and for generating in-depth, descriptive accounts (Creswell, 2018). The content analysis were applied to analyze the learning materials developed by pre-service teachers.

2.1 Participants and Data Sources

Participants were selected purposively. Participants were three EFL pre-service teachers enrolled in an English education program within a teacher education faculty. They participated voluntarily. All participants had prior experience developing learning materials through language material development courses taken in semesters 4 and 6. In addition to interviews, the study analyzed three learning-material documents developed by the participants during their coursework.

2.2 Instruments

Data were collected through semi-structured interviews and document analysis. The interview protocol consisted of open-ended questions developed from Tomlinson's learning material criteria framework to elicit participants' rationale and decision-making processes in material development. The interview guide included questions about the intended learner level, grade/phase, topic selection, development steps, clarity of instructions and objectives, curriculum references, use of authentic sources, accommodation of learning styles, skills balance, activation of prior knowledge, and cooperative learning activities.

Document analysis used a criteria-based rubric adapted from Tomlinson's framework, including curriculum alignment, suitability to learners, activation of prior knowledge, communicative purpose, opportunities for cooperative learning, balance of

language skills and sub-skills, cultural content, and clarity of instructions.

2.3 Data Collection Procedure

Semi-structured interviews were conducted with the three pre-service teachers to examine their experiences and reasoning in developing learning materials. The interviews were audio-recorded and transcribed verbatim. The three learning-material documents were collected and analyzed using the document-analysis rubric. Method triangulation (interviews and documents) was used to strengthen trustworthiness. The study used expert review to evaluate the appropriateness of the interview guide, document-analysis criteria, and interpretation of findings.

2.4 Data Analysis

Data were analyzed using thematic analysis. Interview transcripts were coded inductively and deductively, with deductive coding guided by Tomlinson's criteria and inductive coding allowing additional themes to emerge from the data. The learning-material documents were analyzed using the rubric aligned with Tomlinson's framework, and results were compared with interview themes to identify convergences and discrepancies. Themes were refined through iterative review to ensure they accurately represented participants' accounts and the document evidence.

3. FINDINGS AND DISCUSSION
3.1 Findings

All English learning materials for Phases A, D, and E (phases in *Merdeka* Curriculum) developed by the pre-service teachers met Tomlinson's principles. The materials were aligned with the curriculum, accommodated students' learning styles, and activated learners' prior knowledge and experiences. They also provided opportunities for cooperative learning and served a clear communicative purpose.

Table 1. Learning Materials Developed by Pre-Service Teachers

No.	Criteria	Phase		
		A	D	E
1	Learning materials are linked to the curriculum	√	√	√
2	Learning materials cater the students' learning styles (visual, audio, and kinesthetic)	√	√	√
3	Learning materials exploit the learner's prior knowledge and experience.	√	√	√
4	Learning materials offer opportunities for cooperative learning.	√	√	√
5	Learning materials provide the students with opportunities to use the target language to achieve communicative purpose.	√	√	√
6	Learning materials provide balance skills (listening, speaking, reading, writing, vocabulary, and grammar).	√	√	√
7	Learning materials show students' country culture and other country cultures.	√	√	√
8	Learning materials have succinct instructions.	√	√	√

In addition, the materials integrated a balanced range of language skills and components, including listening, speaking, reading, writing, vocabulary, and grammar. Cultural content was represented through examples from students' local culture as well as cultures from other countries. Finally, the materials included clear instructions (See Table 1).

3.1.1 Learning materials are linked to the curriculum

Learning materials for Phase A were aligned with the *Merdeka* Curriculum. The learning objectives were formulated by referring to the curriculum's learning outcomes and emphasized students' ability to understand, recognize, and respond to the target content.

Learning materials for Phase D were also aligned with the *Merdeka* Curriculum. The learning objectives focused on identifying, selecting, and producing various English texts, consistent with the stated curriculum outcomes.

Similarly, learning materials for Phase E were integrated into the *Merdeka* Curriculum. The learning objectives targeted higher-level outcomes, encouraging students to identify, evaluate, apply, and produce various text types (Figure 1).

Learning objectives:
1. Students can comprehend the biography text they have just read.
2. Students can write biography text about their favourite celebrity systematically.
3. Students can select information they want to know after listening an interview with a celebrity.
4. Students can apply their speaking skill to do an interview.
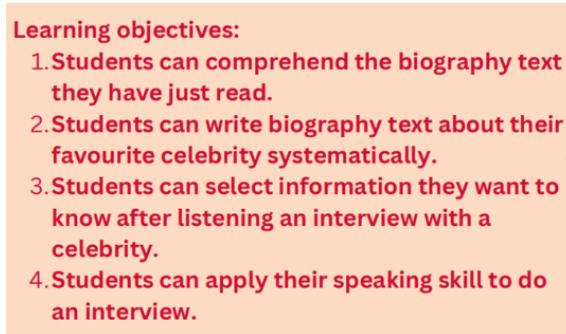
Figure 1. Example of Phase E Learning Objective

3.1.2 Learning materials cater to the student's learning styles (visual, audio, and kinesthetic

Learning materials for Phase A accommodated multiple learning styles through varied task types. Visual support was provided through colorful illustrations (e.g., pictures of school tools) and other image-based activities. For auditory learners, the materials included a listening section in which students listened to audio input to complete activities. For kinesthetic learners, the materials incorporated role-play activities that required students to learn through movement and interaction.

Similarly, learning materials for Phase D incorporated activities targeting visual, auditory, and kinesthetic learning preferences (Figure 2). Visual learning was supported through tasks such as observing and interpreting a jazz concert poster and other visualization-based activities. Auditory learning was facilitated through listening tasks that required students to respond to questions and complete a listening checklist based on audio input. Kinesthetic engagement was promoted through role-play as an interactive classroom activity.
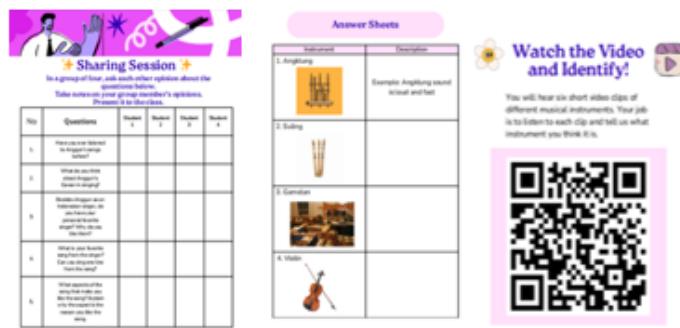
*Figure 2. Example of Learning Materials Cater
to the Student's Learning Styles*

Learning materials for Phase E also addressed diverse learning styles by integrating visual, auditory, and kinesthetic components. Visual activities included interpreting visual texts (e.g., a concert poster) and other tasks involving visualization. Auditory components were presented through listening-based activities, including answering comprehension questions and completing a listening checklist after listening to audio. Kinesthetic learning was supported through role-play tasks, enabling students to practice language through interaction.

3.1.3 Learning materials to exploit the learner's prior knowledge and experience

The phase A learning materials were designed to activate learners' prior knowledge and experiences, primarily through a brainstorming activity (Figure 3). This activity encouraged students to recall what they already knew, which supported their understanding of the lesson content. For example, students were asked to brainstorm items that should be carried in a school bag.
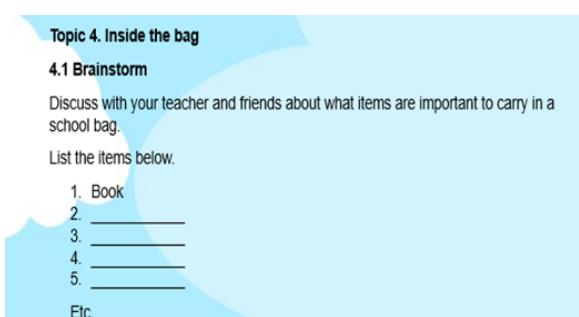

*Figure 3. Example of Learning Materials to Exploit the
Learner's Prior Knowledge*

The Phase D learning materials also activated prior knowledge by drawing on students' experiences with music, including references to both Western and Indonesian musical contexts. Likewise, the Phase E materials elicited learners' prior experiences of attending or watching concerts to help them connect personal experiences with the target topic.

Based on interview and document analysis data, all pre-service teachers

typically activated prior knowledge at the beginning of lessons, most commonly through brainstorming. However, the integration of prior knowledge was stronger in Phases D and E, whereas Phase A showed only partial integration.

3.1.4 Learning materials offer opportunities for cooperative learning

Learning materials for Phases A, D, and E were developed to promote cooperative learning by incorporating collaborative, group-based activities. In Phase A, students worked with peers to describe and interview others, creating opportunities for interaction and teamwork. In Phase D, the materials included group discussions in which students practiced asking for and giving opinions, followed by group presentations in front of the class. In Phase E (Figure 4), cooperative learning was supported through role-play assignments that required students to work as a team to complete tasks and perform dialogues collaboratively.

Figure 4. Learning Materials Offer Opportunities for Cooperative Learning

3.1.5 Learning materials provide the students with opportunities to use the target language to achieve communicative purposes

Learning materials for Phases A, D, and E (Figure 5) were created to encourage the use of the target language for communicative purposes through interaction-focused tasks. In Phase A, students answered questions orally and practiced short conversations in pairs, enabling them to use English to exchange information. In Phase D, students worked in groups to practice asking for and giving opinions, responded to questions, and presented their ideas in front of the class, which required meaningful communication in English. In Phase E, students completed role-play tasks and participated in a brainstorming discussion with peers, supporting collaborative planning and spoken interaction in the target language.


Figure 5. Learning Materials for Communicative Purposes

3.1.6 Learning materials provide balance skills (listening, speaking, reading, writing, vocabulary, grammar)

Learning materials for Phases A, D, and E (Figure 6) were constructed to provide a balanced language skills and sub-skills consisting of listening,

speaking, reading, writing, vocabulary, and grammar. Across the three phases, the materials incorporated a range of tasks aligned with Tomlinson's principles to support integrated language development.
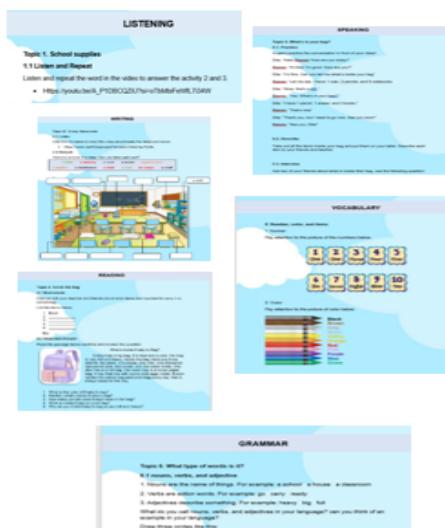

Figure 6. Learning Materials Provide Balance Skills

In particular, activities were structured to help learners build comprehension and production abilities through receptive (listening/reading) and productive (speaking/writing) practice, while also reinforcing vocabulary and grammar. Overall, each phase included multiple activities targeting different skills to strengthen learners' language competence.

3.1.7 Learning materials show students' country culture and other countries' culture

Learning materials for Phases A, D, and E (See Figure 5) were designed to incorporate cultural content, including students' local culture and, in some cases, cultures from other countries. In Phase A, the materials introduced cultural awareness by exposing students to schools in different countries through guided questions and class discussions, allowing them to compare familiar and unfamiliar contexts.

In Phase D, the materials primarily drew on local Indonesian culture, such as Gamelan music and Indonesian artists, to activate students' existing cultural knowledge. However, this phase did not include explicit references to cultures from other countries.

By contrast, Phase E presented a more balanced integration of local and foreign cultures, combining examples from Indonesian culture with references to Western popular culture. This balance enabled students to engage with their own cultural background while also developing awareness of global cultural contexts.

3.1.8 Learning materials have succinct instructions

Learning materials for Phases A, D, and E (See figure 6) were developed by EFL pre-service teachers and included a range of activities and lesson components aligned with Tomlinson's learning material criteria. Across all phases, the materials provided clear and concise instructions, which helped students understand the sequence of tasks and reduced potential confusion during classroom implementation. Interview data also indicated that the pre-service teachers intentionally formulated instructions to be brief and easy to follow.

3.2 Discussion

The findings indicate that the learning materials developed by EFL pre-service teachers across Phases A, D, and E largely reflected Tomlinson's (2003) materials development principles. Overall, the materials

demonstrated clear alignment with the Merdeka Curriculum learning outcomes, integrated multiple language skills, and incorporated communicative tasks and cooperative learning. This suggests that pre-service teachers are able to operationalize a principles-based framework when designing materials for different proficiency phases within a national curriculum context.

These results resonate with prior materials-development studies that emphasize the importance of aligning content with learner needs and instructional goals. For instance, research on digital and context-specific materials development highlights the role of needs-informed content and structured design in supporting language learning (Karademir et al., 2021; Rohimajaya et al., 2021). In the present study, communicative activities such as role-play, group discussion, and presentations were consistently embedded across phases, supporting the view that effective materials should include meaningful, real-life communication tasks (Komang et al., 2021). In addition, the presence of visual, auditory, and kinesthetic task variations across phases indicates an awareness of learner diversity, consistent with research arguing that materials should accommodate different learning preferences (Çenberci, 2022).

The findings also align with studies that highlight the value of instructional design features such as cultural contextualization, collaboration, and communicative purpose in EFL materials (Utami et al., 2022).Similarly, the integration of higher-order tasks in some activities reflects trends in EFL materials development that promote critical thinking and deeper engagement (Agustina et al., 2022). In contrast to Abdala (2024), who reported that many evaluated textbooks lacked authenticity, communicative purpose, and balanced skills, the materials in this study demonstrated stronger inclusion of authentic or contextually meaningful content, clearer communicative goals, and more balanced skills. This contrast may suggest that teacher-developed materials when guided by principled criteria can address gaps often found in commercially available textbooks, although this claim should be interpreted cautiously due to the small dataset.

Despite these strengths, the study identified two areas for improvement. First, the activation of learners' prior knowledge was less consistently implemented in Phase A, indicating that lower-level materials may require more explicit scaffolding strategies to connect students' everyday experiences with lesson content. Second, cultural representation was uneven: Phase D tended to foreground local cultural content with limited inclusion of broader multicultural or international perspectives. These limitations highlight the need for more deliberate planning of pre-task schema activation and more balanced cultural integration across phases.

Pedagogically, the study contributes to language teacher education by showing that Tomlinson's framework can serve as a practical guide for pre-service teachers in developing curriculum-aligned, communicative, and skills-integrated materials. Teacher education programs may therefore strengthen materials-development training by explicitly teaching Tomlinson's principles, engaging students in iterative design

cycles (draft–feedback–revision), and emphasizing evidence-based decisions related to learner needs, authenticity, and cultural inclusivity. Such preparation can enhance pre-service teachers' pedagogical knowledge and better equip them to design materials that support meaningful EFL learning in diverse classroom settings.

4. CONCLUSION

This study concludes that EFL pre-service teachers were able to align their English learning materials with the national curriculum and apply key principles from Tomlinson's (2003) learning material criteria. Across Phases A, D, and E, the materials incorporated multiple learning styles, cooperative learning, and communicative tasks, although the depth of implementation varied across phases. Based on the document analysis, the materials met criteria related to curriculum alignment, learner suitability, activation of prior knowledge, communicative purpose, cooperative learning, balanced coverage of language skills (listening, speaking, reading, writing, vocabulary, and grammar), cultural content, and clear, concise instructions.

Further study is recommended in several directions. First, future research should involve a larger and more diverse sample of pre-service teachers and institutions to improve transferability. Second, researchers should examine classroom implementation and student outcomes (e.g., engagement, skill gains, task performance) to determine how materials quality translates into learning impact. Third, adding multiple data sources such as reflective journals, lesson plans, mentor feedback, and stimulated-recall interviews would strengthen triangulation and explain why certain criteria were implemented more strongly in some phases (e.g., prior-knowledge activation and multicultural representation).

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