Technology integration in English learning materials development: do students meet challenges?

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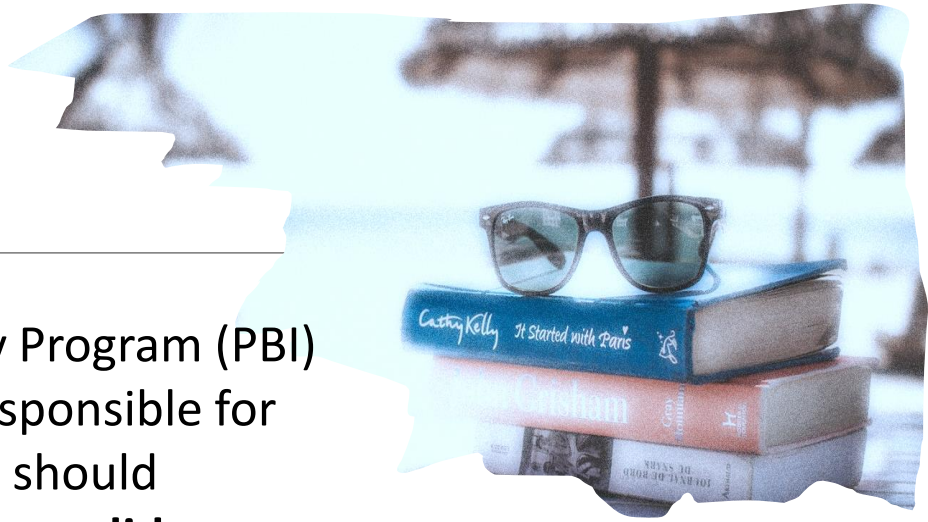
Background of the Study



- The English Language Education Study Program (PBI) is an educational institution that is responsible for delivering quality education so that it should produce **professional English teacher candidates**.
- The efforts to achieve the goals are holding **courses** which support each candidate to have **high skills teaching English** for learners.
- A **mandatory subject** is **learning materials development**.

Background of the Study

- Pre-service EFL teachers gain experience in creating instructional materials, which helps them to develop **logical, systematic, and creative thinking skills.**
- Then, **technology integration** in learning materials development is required to boost **learners' participation**.
- It does not only stimulate **students' autonomy** in learning activities, but also improves their **learning results**.

Objective of the Study

This study focuses on **identifying challenges** to the technological integration in the development of English learning materials faced by EFL pre-service teachers.

The notion of English learning materials development

- **Materials development refers** to any activity carried out by authors, educators, or students to offer language input sources, to utilize those sources in ways that optimize the possibility of intake, and to inspire intentional output; in other words, the provision of language knowledge and/or experiences in ways that support language acquisition (Tomlinson)
- Materials should **help learners to feel at ease**. In this case, technology integration in learning materials development is needed.

Practice of English learning materials integrated with technology

- The ASSURE model places technology's role in the fourth stage, which is technology use. The goal of incorporating technology into language instruction is to enhance students' reading, writing, speaking, and listening abilities .
- ASSURE (**A**nalyze learners, **S**tate objectives, **S**elect method, **U**tilize media and materials, **R**equire learner participation, Evaluate and revise)
- Artificial intelligence (AI) technology has been adopted by practitioners recently to enhance learners’ language skills.

Challenges of English learning materials development integrated with technology

- A number of factors, including students, teachers, educational systems and policy makers, and the environment, contribute to the obstacles encountered when integrating the development of teaching materials and technology.
- Low ability in operating technology, lack of supporting media and tools, interpersonal conflict among stakeholders, lack of motivation, and learners' inadequate background knowledge are several main obstacles to integrating technology into the development of materials

The research method

- This study employed quantitative survey.
- Questionnaire was adapted to find data of the research.
- The questionnaire was categorized into three aspects as student's insufficiency of knowledge, insufficiency of infrastructure/institution, and insufficiency of new technology development knowledge.
- The questionnaires were constructed in Google form (https://forms.gle/phVui9LRgdWdZdRX8), distributed online and accessible.
- The survey consisted Likert-type scale items that addressed students' Technology Integration Challenges (a Likert scale from 1 - Strongly Disagree to 4 - Strongly Agree)

Result

There are three categories : insufficiency of infrastructure, of new technology knowledge, and of student's knowledge

The ratio of over all categories : the highest mean falls to the insufficiency of infrastructure.

Limited information technology **facilities and infrastructure** in the form of laptops and PC computers provided by institutions for student academic activities" with mean score 3,17 and standard deviation 0,803

Lack in using **new technology** because it requires a lot of time and money with mean score 2,51 and standard deviation 0,675

The insufficiency **students' knowledge** category is lack of time to look for sources or materials from technology-based devices with mean score 2,92 and standard deviation 0,679.

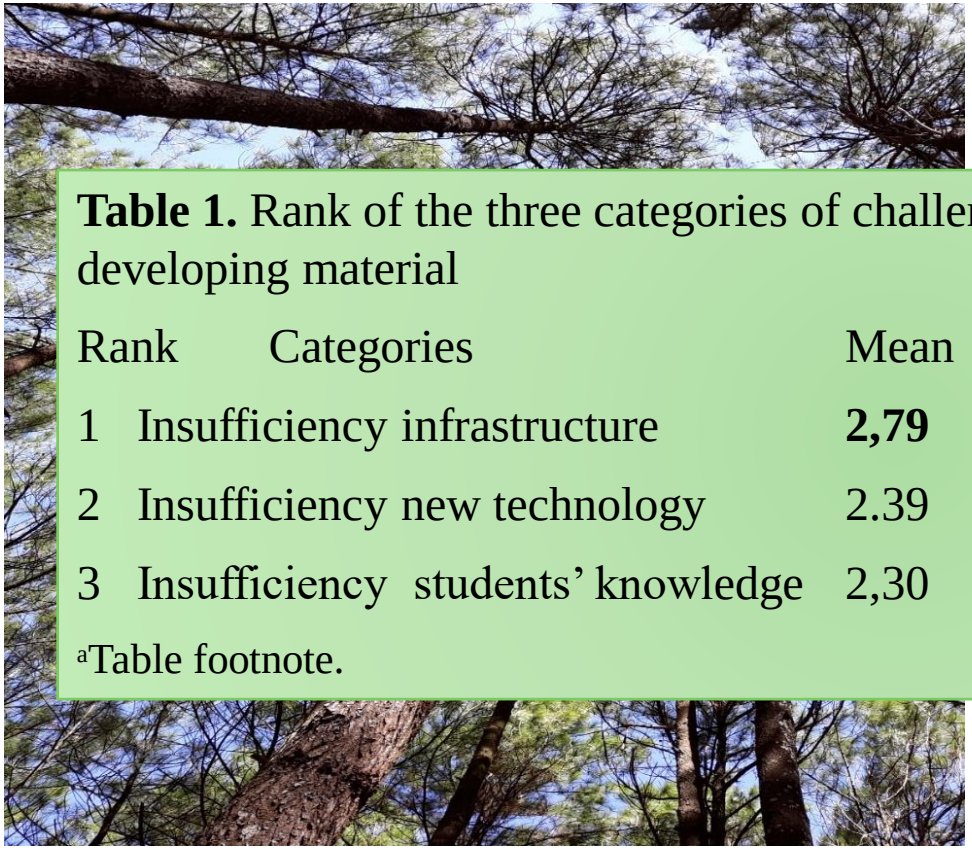
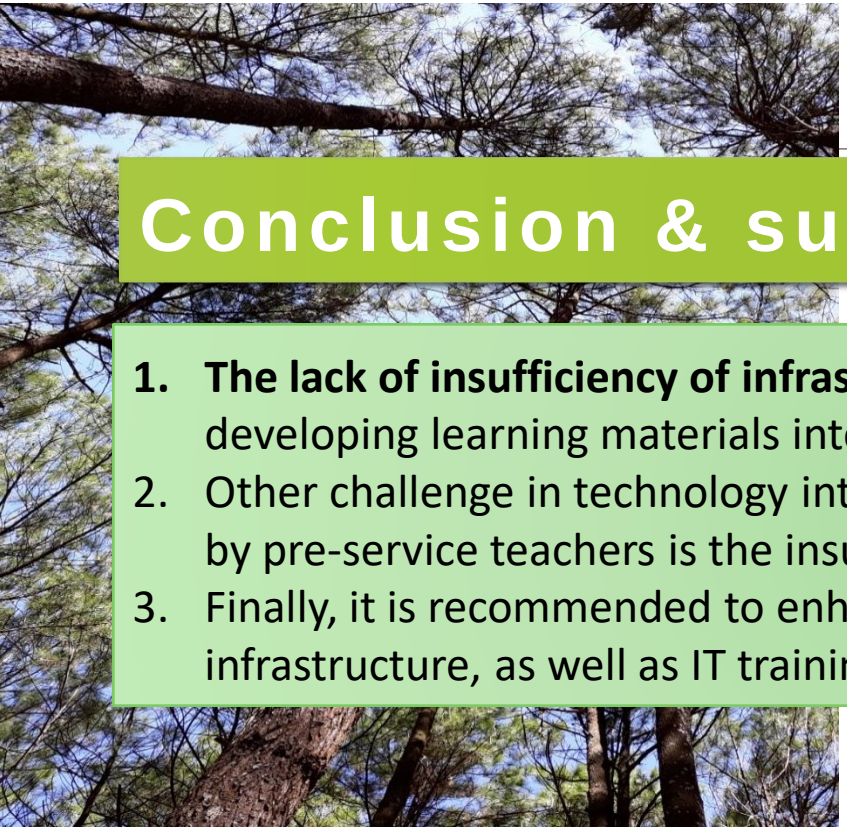


Table 1. Rank of the three categories of challenge in integrating technolgy in developing material

Rank	Categories	Mean	Standard Deviation
1	Insufficiency infrastructure	**2,79**	**0,341**
2	Insufficiency new technology	2.39	0,101
3	Insufficiency students' knowledge	2,30	0,165

[a]Table footnote.



Conclusion & suggestion

1. **The lack of insufficiency of infrastructure is the main challenge** for students in developing learning materials integrated with technology.
2. Other challenge in technology integration of learning materials development met by pre-service teachers is the insufficiency of new technology.
3. Finally, it is recommended to enhance resource allocation, and internet infrastructure, as well as IT training and support.

Learning outcome

Terima kasih