



Needs Analysis for the Development of Digital Materials for Indonesian Language Skills Subject Based on Melayu Culture for PGSD Students, Universitas Riau

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Abstract. This study aims to analyze the needs of PGSD students at Universitas Riau for developing digital materials for Indonesian Language Skills subject based on Melayu Culture with Project Based Learning. The research was conducted at PGSD in May-June 2022. The research sample was 72 students. The development model chosen is the research and development education model developed by Bord and Gall, which consists of three stages: preliminary studies, product development, and product implementation. The researcher was limited to the preliminary study stage in this study. Data collection techniques are used in the form of observation, interviews, and questionnaires (questionnaire) analysis of the development needs of digital teaching materials. The questionnaire was distributed to respondents via a google form. The data obtained were then analyzed using descriptive analysis based on the results of the number of answers given by the respondents. The analysis shows that there are no printed or digital teaching materials for Indonesian Language Skills courses that can be used as a guide in the learning process. On the other hand, teaching materials that need to be developed in the Indonesian Language Skills subject for PGSD students, FKIP Universitas Riau, are digital materials. The digital materials contain material on developing four Indonesian language skills, namely reading, listening, speaking, and writing skills based on Riau Melayu culture with Project Based Learning.

Keywords: Digital Materials · Indonesian Language Skills Subject · Riau Melayu Culture · Elementary Teacher Education · Project Based Learning

1 Introduction

The development of technology and information has been dominated by digital technology. Digital technology is used as a means of interaction by all circles of society, especially students. More than social interaction, digital technologies can increase student retention and learning continuity, provide richer content and are considered more

suitable for use in 21st century learning models [1]. Therefore, Digital technology has the potential and strategic opportunities to play a role and support the success of education and learning in higher education [2]. In addition, digital technology can also be a solution to provide a new learning experience outside the classroom and express a form of understanding that is centered on building meaning according to student construction [2, 3].

The use of digital technology can increase the interactivity and active involvement of students in learning, which is an essential component that must be owned because learning is not only seen as a process of delivering knowledge but requires a complex process to form their knowledge through exploration activities: elaboration and two-way communication [4]. One of the strategic potentials in developing digital technology is that the learning process can be carried out using digital technology-based teaching materials, communication media, software, the internet, and e-mail [5]. Learning in the classroom, especially for students, must have guidelines or guidelines in the form of information, tools, and texts that are used as teaching materials in the learning process that are systematically arranged to display the desired goals and competencies of students. Students' competencies are a component that measures success in classroom learning [6]. The final target is quality output from courses that improve learning outcomes [7].

One of the compulsory subjects of the PGSD Study University of Riau is Indonesian Language Skills (KBI). KBI subject are theoretical and practical courses that equip students to master the nature, techniques, types, and applications of the four Indonesian language skills: listening, speaking, reading, and writing. The purpose of the KBI course is closely related to the goal of learning Indonesian, which is to improve the ability to communicate orally and in writing while still fostering mutual respect for the culture of the Indonesian people. Currently, teaching materials in the form of books or modules have not been used in learning. Instead, lecturers and students still use references from books and journal articles to guide learning. In this situation, it is necessary to develop digital teaching materials (digital materials) for Indonesian Language Skills courses, which are later expected to be able to support learning and improve student achievement. The teaching materials that will be developed are in the form of digital teaching materials (Digital Materials), which are packaged attractively by combining them with Project Based Learning and Riau Melayu culture as content to support the material in the form of projects from these courses. In addition, developing digital materials for the Indonesian Language Skills subject-based Riau Melayu culture through Project Based Learning is later expected to support successful learning, considering the material's content by the curriculum development and student needs. Students are required to have several 21st-century skills, namely the ability to think critically and problems solving, creative communication skills, and the ability to work together/ collaboratively [8–11]. Therefore, the preparation of teaching materials must be able to support students to develop critical thinking and active student involvement, and this can be done through a constructivist learning process with a contextual approach, which is a teaching and learning concept that helps educators connect the content of Indonesian language skills, namely reading, listening, speak and write with Riau Melayu culture, which can be appointed as a project for this course.

With the existence of digital teaching materials, it is expected to attract the attention and interest of students so that they are motivated to study and prepare themselves before learning in the classroom because these digital materials will be accessible later anywhere and anytime via the web pgsd.fkip.unri.ac.id. Moreover, students can improve their competence by doing subject projects based on Malay culture [21, 22]. This study aims to analyze the need to develop digital teaching materials that follow the characteristics of students and the existing curriculum. Therefore, students need initial information in developing a teaching material product. In addition, the results of this analysis benefit lecturers in determining what treatment is appropriate in learning practices and improving the ability to understand the material in certain subjects. In this study, the researchers limited it to stage 1, namely needs analysis, because it is an important stage in designing a product whose results can be used as the basis for the product development process that meets the needs in the field.

2 Methods

The development of digital materials is carried out referring to R and D approach. The development model chosen is the educational research and development model developed by Borg and Gall. Borg and Gall (1983) argue: “educational r&d is an industry-based development model in which the research findings are used to design new products and procedures, which then are systematically field-tested, evaluated, and refined until they meet specified criteria. Of effectiveness, quality or similar standards”. Research and development will later produce a product that is feasible, attractive, and more likely to be applied as a learning resource in the classroom, including product development and validation processes [12, 13].

This educational research and development approach is used to create digital learning materials for Indonesian language courses based on Malaysian culture through PjBL for PGSD students. Borg & Gall described several steps in this approach. Research, information gathering, planning, preliminary product form development, preliminary field testing, primary product development, operational development, operational testing, final product review. Dissemination and implementation [12]. The research and development phase proposed by Borg and Gall above consists of 10 phases. However, the development of digital materials for Indonesian language courses based on Malaysian culture for PGSD students at PjBL is divided into three phases.

- Stage 1 - Preliminary investigation (Investigation and Information Gathering).
- Phase 2 - Product Development (Planning, Product Prototype Development, Preliminary Field Test, Product Review, Major Field Test, Product Functional Review, Field Functional Test, Final Product Review).
- Stage 3 - Product introduction (distribution and adoption).

The final result in the form of digital teaching materials for Indonesian language skills courses based on Malay culture through pjabl as a learning resource for courses can be accessed through the PGSD web.

In this study, researchers focused on stage 1, namely the preliminary study. At this stage, the researcher conducts the stage of collecting data or information to determine

the needs in the learning that will take place. Things to consider in determining learning needs include the learning conditions of PGSD students, the potential of PGSD students, and curriculum analysis. The steps taken in this stage are library research and field studies. The primary purpose of this study is to find out which products are suitable to be developed according to the needs of students and the problems found in learning, especially in Indonesian language skills courses.

This research was conducted in May-June 2022. The research population is all students who have taken the Indonesian Language Skills course, totaling 121 students. The sample was randomly selected as many as 72 students of PGSD students, FKIP Universitas Riau. Data collection techniques are used in the form of observation, interviews, and questionnaires (questionnaire) analysis of the development needs of digital teaching materials. The questionnaire was distributed to respondents via a google form. The data obtained were then analyzed using descriptive analysis based on the results of the number of answers given by the respondents.

3 Result and Discussion

3.1 Result

Development research is based on needs in the field; the intended need is a form of a gap between the desired condition and the current actual condition. So that to overcome this gap, it is necessary to improve the quality of learning through needs analysis activities. Needs analysis is carried out with a preliminary study stage by conducting library research and field studies. This is done to determine the importance of the role of teaching materials in supporting the learning process and to find out the types and models of teaching materials needed by students to improve the quality of learning. To produce suitable teaching materials, it is necessary to analyze the needs at the beginning to collect information and analyze student needs. The collection of information on the needs for product development in the form of digital teaching materials for the Indonesian Language Skills course was carried out by conducting discussions and interviews with colleagues, namely the teaching team for the Indonesian Language Skills course, and distributing questionnaires to respondents about the needs in the field. From the interviews and questionnaires, all the needs of lecturers and students were described and analyzed as the first step in developing products in the form of electronic teaching materials for the Indonesian Language Skills course at the PGSD students, FKIP Universitas Riau.

Based on the interviews with the teaching team for the Indonesian Language Skills course, information was obtained that the preparation of printed and digital teaching materials had never been done. This is because preparing printed or digital teaching materials requires a longer preparation time and special abilities to design these digital teaching materials. In the PGSD students, FKIP Universitas Riau, learning still uses external references such as books, articles, and other materials that are not necessarily by the content of the Indonesian Language Skills course. Lecturers are still fixated on the lesson plans and lesson plans made. Regardless of the content referred to in the course. In addition, the learning that has been carried out has implemented Project Based Learning. However, the student projects have not implemented the four Indonesian

language skills: reading, listening, speaking, and writing. Projects made by students have not been maximally carried out. Although the Free Learning Curriculum 2020 demands Riau Melayu culture -based learning, the course content or Graduate Learning Outcomes implemented have not shown any Riau Melayu culture content.

Next, the distribution of questionnaires to students through google forms was also carried out to find out the needs of students regarding digital teaching materials. As for the distribution of the questionnaires that have been carried out, responses are obtained with the following results:

- a. The learning process that has been carried out so far is using the group discussion method by presenting the material that has been given (94.2%), students summarizing the lecture material and collecting it before the lecture begins (89.3%), and students have not been able to participate in lectures (42, 2%) actively.
- b. Learning resources that are often used in lectures can be seen in Table 1.
- c. Understanding of Indonesian language skills can be seen in the following Table 2. The student explained that the obstacle to understanding the four Indonesian language skills was because the contents of the four Indonesian language skills were not systematically arranged, so students could not practice the four Indonesian language skills well. In addition, only a few Indonesian language skills are practiced in lectures.
- d. The development of digital teaching materials for the Indonesian Language Skills Course has not been carried out. However, students agree that the digital teaching

Table 1. Learning resources used in lectures

No	Learning resources	Presentasi
1	Presentation slides	91,6%
2	Reference book	48,7%
3	Article	85,7%
4	Social media	63,1%
5	Etc	42,5%

Table 2. Understanding of Indonesian language skills

No	Materials	Percentage
1	The essence of Indonesian language skills	87,8%
2	Reading Skills	76,2%
3	Listening Skills	56,4%
4	Speaking Skills	43,7%
5	Writing skills	78,9%

materials developed are based on Malay culture (93.4%) and project-based learning (91.6%). The suggestions that students give in the process of developing digital teaching materials are the development of digital teaching materials that will be carried out that can be accessed anywhere (online/offline), using social media as a form of disseminating the results of projects that have been made, the existence of Riau Melayu culture materials in course content, doing projects related to Riau Melayu culture, and making projects of the four Indonesian language skills with Riau Melayu culture.

3.2 Discussion

Based on the analysis of the need for digital teaching materials, it shows that the preparation of teaching materials for Indonesian language skills, both printed and digital, has never been done. This is because preparing printed or digital teaching materials requires a longer preparation time and special abilities to design these digital teaching materials. In learning, digital teaching materials are needed to support the learning process. Students are more likely to be interested in digital teaching materials that can support learning and be accessed anywhere. In addition to being easily accessible anytime and anywhere, innovatively developed teaching materials can encourage effective and independent learning [14, 15] and help students acquire the skills needed in learning [16]. Suitable teaching materials can also support a mixed learning process or blended learning [17], where teaching materials will be more accessible and learned by students.

In this needs analysis, information was also obtained that students hope that the existence of teaching materials in digital form allows students to study each topic of learning materials individually according to their abilities and competencies [18]. Digital teaching materials for Indonesian Language Skills courses will later be able to include Riau Melayu culture material in course content, create projects related to Riau Melayu culture, and make projects of the four Indonesian language skills with Riau Melayu culture. Project-based learning in the Indonesian Language Skills course will be a new experience for students, especially in developing four Indonesian language skills: reading, listening, speaking, and writing. With help of these digital teaching materials, it can add to the student learning experience [19]. Suitable teaching materials, of course, contain theories that students will learn, summaries, and are equipped with various learning activities that students can do. The development of learning needs should pay attention to the characteristics of students from various aspects, such as the development of their potential, intellectual intelligence, and psychology [20].

4 Conclusion

Based on the data from the surveys and discussions conducted, it can be said that there is no printed or digital Indonesian language course material that can be used as a guide for the learning process. Therefore, the material developed for the Indonesian language course for PGSD students, FKIP Universitas Riau, is a digital textbook. The digital textbook contains material on developing four Indonesian language skills, namely reading, listening, speaking, and writing skills based on Riau Melayu culture with Project Based Learning.

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