

Development of digital teaching material in the South Sumatra traditional games course

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ABSTRACT

The advances in technology and information development are increasingly rapid is a great potential that learners can utilize to improve the quality of learning. It is consistent with the characteristic of students as active users of digital technology. So, lecturers need to make updates to improve the quality of learning. One of them is by providing teaching material according to the needs of students. This study aims to develop digital teaching material for the South Sumatra Traditional Games course at the Study Program of Early Childhood Education Teacher Education, Faculty of Teacher Training and Education, Universitas Sriwijaya. This study used the ADDIE Research and Development (R&D) method with five stages: analysis, design, development, implementation, and evaluation. Data collection techniques were carried out through interviews, questionnaires, and tests. Data analysis techniques using quantitative and qualitative data analysis. The results showed that the evaluation of digital teaching material products that experts had carried out showed that the material aspect scored 87,5% in the Very Good category, the language aspect scored 85% in the Very Good category, and the media aspect scored 92,5% in the Very Good category. Based on this evaluation, it can be concluded that the digital teaching material in the developed South Sumatra Traditional Games courses are valid, feasible, and practical to be used in the learning process. Research can be continued by developing interactive digital teaching material.



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INTRODUCTION

The rapid development of technology and information is a necessity that cannot be denied in education. The influence of this development has a positive impact by being more open and spreading knowledge throughout the world, breaking the boundaries of space and time, and making it easier for students to access information and learning materials according to their needs quickly. The research shows that most students use the internet according to their needs, whether browsing, resourcing, searching, e-mail, or mailing list (Yunelti et al., 2013). It shows that digital technology is believed to increase retention and persistence of learning in students, provide rich content, and is more suitable for application in 21st-century learning models (Mawarni & Muhtadi, 2017). Therefore, digital technology is absolutely necessary to support the learning process, so it is

expected to improve the quality of national education. The use of digital technology changes learning interactions between students and lecturers, as well as digitizing teaching materials that contain various information related to a series of materials.

A lecturer is a professional educator who is one of the essential parts of achieving learning success. One of the obligations of a lecturer contained in the Law of the Republic of Indonesia Number 12 of 2012 concerning Higher Education Article 12 states that "Lecturer is an individual or in groups are required to write teaching material or textbook, which tertiary institutions publish and scientific publications as a source of learning and for developing academic culture and cultivating reading and writing activities for the Academic Community" (UU Republik Indonesia, 2012). Teaching material is anything lecturers can use to support learning activities, making it easier for students to understand learning material to gain knowledge, understanding, skills, values, attitudes, and interests related to achieving specific competencies. Especially at the Higher Education (University) level, students use teaching materials to make them more effective and efficient in understanding learning material. The use of teaching material can also provide treatment to students according to individual characteristics. It can overcome problems related to the lack of self-actualization of students so that students can explore poorly understood materials through teaching material (Rukiyah et al., 2022). So that can be said that teaching materials need to be developed to meet the needs of their users in terms of material renewal, validity, practicality, convenience, attractiveness, communication, to accessibility to motivate students in the learning process.

The development of teaching material is a crucial component of improving the quality of learning. It is necessary to pay attention to several essential principles or standard references as material for improvement in the teaching material. Principles of developing teaching material, namely: (1) the eligibility of material/content is developed based on the principles of completeness, suitability, adequacy, ease, contains character values, and relevance; (2) the presentation is developed based on interesting, creative, and innovative, systematic, and active principles; (3) a language is developed based on the principles of convenience and communicativeness; and (4) the graphic is developed based on interest, creative, and innovative principles, as well as practically (Arsanti, 2018). These four principles also need to be developed by considering the suitability of the times. With the development of technology in this era, teaching material is no longer printed but in digital form (Musdzalifah & Rohayati, 2018). Digital teaching material is a teaching material that uses digital devices, which include personal computers (PCs) in the form of desktop computers, notebook computers (laptops), and tablet computers, as well as utilizing specific application software. Digital teaching material is not much different from printed (conventional) teaching material, namely in terms of the main content, whose main components include material objectives, teaching materials, summaries, exercises, and feedback, in addition to other complements such as preface, table of contents, glossary, index, to the bibliography. The file type most often used for digital teaching material is the portable document format (PDF) which is converted to digital book software, so that the appearance of PDF files becomes more attractive like a book. Therefore, one form of professional educators is being able to utilize technology to be used as a supporting medium in the learning process, namely the development of teaching material based on digital.

The development of digital teaching material can be categorized as learning media according to needs so that it can positively impact its users. One of the users of digital teaching material in higher education (University) is students. The positive impact of using digital teaching material on students is related to increasing effectiveness and efficiency in the learning process. To increase the efficacy, students can be actively involved in the learning process related to various simulations contained in digital teaching material. Meanwhile, the connection with increased efficiency is that students can learn independently to study learning material more flexibly, whenever and wherever students are. This positive impact also corresponds to student life closely related to technological developments. Today's students are born in the digital era and live by technology, so this generation is called the digital native generation. According to Prensky, digital natives were taken when the world was already in the information and communication technology era, so they will be

very fluent in using information technology (Purwaningtyas, 2022). The characteristics of this generation are always wanting to be fast, able to do two or more jobs at once (*multitasking*), interactive multimedia users, like instant access, collaboration, and always network (*networking*). According to the latest report submitted by Nielsen, around 78% of internet users in Indonesia access the internet using mobile phones (mobile phones), 29% use laptops, 31% use desktop computers, and 2% use tablets (Sumarlin & Malahina, 2019).

Furthermore, based on a survey report with a survey sample of 7,568 respondents in 2021-2022 regarding the 2022 Indonesia Internet Profile, it stated that internet usage behavior based on the age range of 19-34 years was 98.64% (Asosiasi Penyedia Jasa Internet Internet, 2022). Based on these data, it can be concluded that in this age range, students become mobile users who actively access the internet. The relation with learning is the need for the use of technology in the learning process carried out by students because the use of technology cannot be separated from students' daily lives, so the use of digital teaching material in the learning process can be classified into learning media that are following the characteristics of students in the current era.

Students, as users of digital teaching material, can become more motivated. Because students are faced with displays of digital teaching material that are more varied, interactive, and interesting, so they are not dull. Students cannot just read texts, but can also view pictures or videos, listen to sound, and access many sites connected to the internet. Thus, students' insights and knowledge become increasingly broader, deeper, and more complex in understanding material. Apart from speeding up the learning process, other advantages of digital teaching material include cheap financing, easy access, not depending on distance, flexibility, time efficiency, and the use of the latest or updated digital services. Concerning affordable financing, digital teaching materials tend to be more economical. Because it's easier to get for free through the internet, as long as these digital teaching materials are publicly published (*open source*) so that students can access, store (*save*), and collect digital teaching materials through their digital devices, students can use digital teaching material through their digital devices in various conditions and opportunities, both on and off campus. Digital teaching material can be stored without special care, just like traditional teaching materials (*print books*) that require ample space or a special place to store and use them. Because it can be reserved via cloud storage or data storage (hard disk, memory card, and others), it can be accessed from digital devices or any location and is easy to carry anywhere. If digital teaching materials are stored through cloud storage, it requires an internet or online network to be able to access them. However, if digital teaching materials are stored via data storage, then there is no need to need an internet or offline network to access them.

The South Sumatra Traditional Games course is a compulsory subject for undergraduate students (S-1) of the Early Childhood Education Teacher Education Study Program (PG-PAUD) of the Faculty of Teacher Training and Education (FKIP) at Universitas Sriwijaya. The presence of this course is closely related to the existence of Universitas Sriwijaya (abbreviated as UNSRI) as a State University located in South Sumatra Province, Indonesia. South Sumatra is a province in Indonesia located in the southern part of the island of Sumatra, with Palembang as its capital. The general description of the area of South Sumatra and the people's diversity create a plurality in the distinctive cultural features of the Sriwijaya land (as South Sumatra has been called since centuries ago). It became one of the influences in the formation of courses in the PG-PAUD Study Program FKIP at Universitas Sriwijaya, namely the South Sumatra Traditional Games course. Through learning in this course, it is hoped that students will be able to skillfully simulate and design traditional game activities based on the results of analysis of play theory, games, and game tools, as well as the effects of regional cultural studies of South Sumatra in building the character of loving local culture and introducing cultural literacy to early childhood. In addition, based on the results of the preliminary study that the researchers conducted with the lecturers and the teaching team supporting the South Sumatra Traditional Games course, it was explained that there was a lack of literature (such as books, journals, papers, and others) that could be used as a source of reference or reference in discussing traditional games. In the South Sumatra area, thus requiring students go to the field (cities or districts in South Sumatra Province) to obtain information or data related to the material in the course.

Furthermore, the results of the interviews that the researchers conducted with students taking the South Sumatra Traditional Games course stated that in carrying out information or data search activities, students had to provide a significant amount of time, energy, and materials. Students need a long time to get information related to course material. And also feel tired because students need to conduct interviews with the community or make direct observations in certain areas in South Sumatra as well as material that needs to be issued by students to support the implementation of these activities. The observation results show that students need digital teaching material to make it easier to understand the South Sumatra Traditional Games course lecture material.

Based on these facts, the researcher provides a solution by developing a teaching material that contains material in the South Sumatra Traditional Games course, which is packaged attractively according to the characteristics of its users. These students are accustomed to using technology and in accordance with current learning styles based on digital technology. Using learning resources in the form of non-printed or digital teaching materials can improve the creative thinking skills of its users (Nazifah et al., 2021). Therefore, technological advances in the presentation of content or material allow students to develop creative thinking skills by developing digital teaching material in the South Sumatra Traditional Games course. The development of digital teaching material is presented through digital devices consisting of an arrangement of integrated parts so that teaching material is suitable for use by students. These sections include instructions for using digital teaching material, explanations of competencies to be achieved, teaching materials, exercises, to evaluations to measure the level of mastery of competencies that students have mastered after participating in learning activities.

Previous research (Aminuddin et al., 2021) entitled Development of Digital Teaching Materials in Class X Economics Subjects at Public High School 12 Makassar describes that digital teaching materials developed using the ADDIE model show that the results of the validation of material experts are categorized as very valid. The validation of media experts is classified as very accurate so that digital teaching material can be used in the learning process. The results of student responses show that students can use digital teaching materials very practically. This indicates that the digital teaching material developed has practicality in terms of appearance, and language, the typeface used is clear and easy to read, the images in digital teaching materials support learning materials, and the learning concept follows the grade 10 Learning Implementation Plan (*lesson plan*) in the Economics subjects. Furthermore, in analyzing the level of effectiveness using the post-test, the value obtained is in the effective category. Based on these stages, it can be concluded that the development of digital teaching material is considered very good for use in Economics subjects in achieving learning objectives.

Following this description, the formulation of the problem in this study is to develop digital teaching material in the South Sumatra Traditional Games course, which is tested valid and feasible to be used by PG-PAUD FKIP at Universitas Sriwijaya students. The digital teaching material developed is PDF files assisted by digital devices, which contain narratives and images that are presented simultaneously so that the presentation is more varied, not dull, conveying meaning that is easier to understand directly and more precise. This research aims to develop digital teaching materials that are valid by experts and suitable for use in the learning process so that they can potentially increase student understanding and learning outcomes.

METHOD

This research was conducted in the PG-PAUD Study Program FKIP at Universitas Sriwijaya in 2022. Type this research used to research and development (R&D) which is intended to produce a product with scientific value (Faradiba & Budiningsih, 2020), which is then validated and tested to become a viable development product. This study aims to develop digital teaching material for the South Sumatra Traditional Games course used by undergraduate students of the PG-PAUD FKIP at Universitas Sriwijaya. The development model used in this study refers to the ADDIE development model, which consists of the analysis, design, development, implementation, and evaluation stages, as presented in Figure 1.

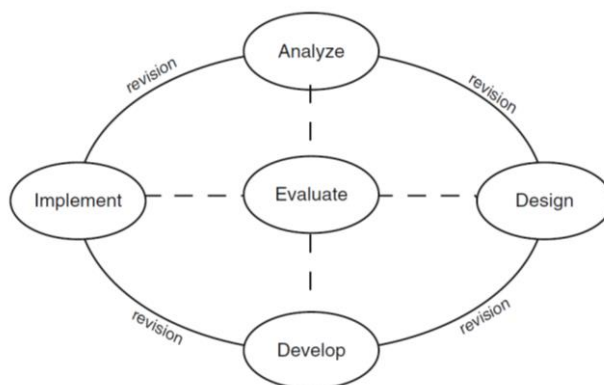


Figure 1. ADDIE Model Procedure (Branch, 2009)

In the analysis stage, the researcher identified the causes of the emergence of gaps that might occur in the learning process in the South Sumatra Traditional Games course. In the design stage, the researcher verifies the expectations to be achieved by the supporting lecturers, team teaching, and students and designs products according to the expectations to be completed. Furthermore, the researcher produces and validates the development product at the development stage. In the implementation phase, the researcher prepares the learning environment and involves students in trying out product development. At the evaluation stage, researchers assess product quality in the learning process, both before and after using product development.

The population in this study were fourth (IV) semester students who took the South Sumatra Traditional Games course in 2021/2022, then a research sample of 20 (twenty) undergraduate PG-PAUD FKIP Universitas Sriwijaya students was selected. The data collection technique used in this research is in the form of observations related to learning activities that occur in the South Sumatra Traditional Games course as initial information data regarding facts that occur in the field, interviews with lecturers and teaching teams, and students regarding the development of required teaching material, validation questionnaires for experts (*expert review*) consisting of material experts, linguists, and media experts, as well as a response questionnaire on the use of digital teaching material by students. The data analysis technique used in this study is a quantitative descriptive analysis technique. The type of data taken is in the form of qualitative data, which is quantified using descriptive judgments (Permitasari et al., 2022). The goal is to analyze data by describing the data collected as it is without any engineering.

RESULTS AND DISCUSSION

Results

In the preliminary study stage or the analysis stage (*analyze*), researchers conducted a literature study regarding the role of teaching material in supporting the learning process in tertiary institutions. The researcher also obtained and analyzed preliminary information regarding the lack of literature on the South Sumatra Traditional Games course at the PG-PAUD FKIP Study Program, Universitas Sriwijaya. The researchers discussed with the supporting lecturers and the teaching team for the South Sumatra Traditional Games course and learned that students had difficulty getting material related to the course. This was triggered due to the lack of books discussing Traditional Games of South Sumatra, so students need to observe and interview the community in certain areas to obtain information or data relating to the material in the course. These activities make it difficult for students because they have to spend a lot of energy, time, and material.

Furthermore, the researcher interviewed several students who took the South Sumatra Traditional Game course to find out the needs of students regarding the problems that occur in the learning process in that course. The results of the interviews showed that students needed books (teaching material) related to the Traditional Games of South Sumatra course. The availability of

teaching material can be one of the supports for successfully implementing the learning process (Taufiqy et al., 2016). Therefore, the provision of teaching material needs to be applied in the learning process to facilitate, streamline, and make students more efficient in understanding teaching materials in these courses.

At this design stage (*design*), the researcher verifies the expectations to be achieved by the supporting lecturers, teaching team, and students and makes product designs following the expectations to be achieved. Based on the conclusions at the analysis stage, it was explained that students needed teaching material in the Traditional Games of South Sumatra course. Furthermore, the researchers conducted discussions to find out the needs of students in-depth regarding teaching material. It was found that the development of digital teaching material in the South Sumatra Traditional Games course had not been carried out. The suggestions that students give to improve the quality of the learning process are the development of digital teaching materials to make it easier for students to study these teaching materials. This follows the character of today's students who are used to interacting with technology.

Furthermore, suggestions from supporting lecturers and teaching teams regarding developing digital teaching material are that teaching materials must be linked to early childhood concepts. This is consistent with the principle of relevance in the development of teaching material, namely having a relationship with the achievement of learning objectives (Sanjaya & Inawati, 2019). The learning achievements of the course (CPMK) are that after participating in learning in the South Sumatra Traditional Games course, students are expected to be able to skillfully simulate and design traditional game activities based on the results of an analysis of play theory, games, and game tools, as well as the effects of cultural studies of the South Sumatra region in building the character of loving local culture and introducing cultural literacy in early childhood. Based on suggestions from supporting lecturers, teaching teams, and students, the researchers designed digital teaching material for the South Sumatra Traditional Games course related to the concept of early childhood.

In the development stage (*development*), researchers produce the product as digital teaching material for the Traditional Games of South Sumatra course. The material in digital teaching material is developed based on the course syllabus that has been prepared. Researchers create digital teaching material by presenting 7 (seven) components, namely: (1) Materials descriptions that adapt to the course syllabus; (2) Learning Objectives that contain targets that are expected to be achieved by students; (3) Teaching Materials that contain material information that is discussed in depth and accompanied by theories related to early childhood concepts; (4) The summary contains the results of summarizing the teaching materials; (5) Exercise to measure students' ability to master learning material through several questions; (6) Feedback that functions to assist students in assessing their abilities after using digital teaching material; and (7) Bibliography to make it easier for students to find additional information.

The preparation of the material topics in this digital teaching material is in accordance with the course syllabus for the South Sumatra Traditional Games and is linked to the concept of early childhood, consisting of 7 (seven) materials, namely: (1) Basic Concepts of Play and Games, consisting of the following topics: a) The Definition of Play and Games, b) Play and Game Characteristics, c) Stages of Play Development, and d) Urgency of Play for Early Childhood; (2) Play Theory, consisting of the following topics: 1) Classical Play Theory, and 2) Contemporary Play Theory; (3) Educational Game Tools (APE) for Early Childhood, consisting of the following topics: a) APE Definition, b) APE Urgency, c) Types of APE, d) Characteristics of APE, and e) Principles of Selection APE; (4) Traditional and Modern Games, consisting of the following topics: a) Definition, b) Characteristics, and c) Weaknesses and Strengths of Traditional and Modern Games; (5) Regional Culture of South Sumatra, consisting of the following topics: a) Geographical Location, b) Traditional Houses, c) Regional Dances, d) Traditional Clothing, and e) Typical Food; (6) Regional Traditional Games of South Sumatra, consisting of 20 (twenty) types of traditional games of the South Sumatra region; and (7) Introduction to Literacy through Traditional Games, consisting of the following topics: a) Read and Write Literacy, b) Numerical Literacy, c) Scientific

Literacy, d) Digital Literacy, e) Financial Literacy, and f) Cultural and Citizenship Literacy, can be seen in Figures 2 to 5.



Figure 2. Front Cover



Figure 3. Back Cover



Figure 4. Preface



Figure 5. Contents

Furthermore, this digital teaching material was tested for validity by 2 (two) experts, a material expert and linguist and a media expert with expertise in ICT-based learning media and teaching materials (*Information and Communication Technology*). Table 1 show the validation testing by experts, including material experts, linguists, and media experts. The validation aims to assess the feasibility of the digital teaching material being developed and provide suggestions for improvements to improve digital teaching material.

Table 1. Recapitulation of validity test instruments

| No. | Aspects | Indicators |
|-----|----------|---|
| 1. | Material | a. Content Eligibility b. Presentation Eligibility |
| 2. | Language | a. Language Component |
| 3. | Media | a. Graphic Eligibility b. Display Eligibility |

Source: Modification of National Professional Certification Agency (BNSP) Assessment Standards

Based on the data as presented in Table 1, it is known that there are 3 (three) aspects of the validity test, namely: (1) Material aspects which consist of content eligibility indicators (completeness of material, breadth of material, depth of material, suitability of material with scientific developments, as well as the latest), and indicators of presentation eligibility (systematic consistency of presentation of material, practice questions, feedback, summaries, and student involvement); (2) Language aspect consisting of indicators of language components (effectiveness of sentences, readability of messages, conformity with students' level of understanding, accuracy with writing conventions, and consistency in the use of terms and symbols); and (3) Media aspect which consists of graphic eligibility indicators (appropriateness of teaching material sizes with International Organization for Standardization/ISO standards and suitability of sizes with materials), and display eligibility indicators (appearance consistency, color harmony, illustration suitability, layout consistency, element completeness, typography, ease of understanding, and ease of using digital teaching material).

Table 2. Recapitulation of Validity Test Results

| No. | Aspect | Score (%) | Category |
|-----|----------|-----------|-----------|
| 1. | Material | 87,5% | Very Good |
| 2. | Language | 85% | Very Good |
| 3. | Media | 92,5% | Very Good |

Source: Data Processing Results

Based on the data presented in [Table 2](#), it is shown that the material aspect obtained a final score of 87.5% in the Very Good category, the language aspect received a score of 85% in the Very Good category, and the media aspect obtained a score of 92.5% in the Very Good category. So the conclusion from this score is that the digital teaching materials developed are valid for testing and can be used in learning.

Digital teaching material products that have been validated by experts and declared valid for testing, then a revision and refinement process is carried out following suggestions for improvement from experts, both in terms of material, language, and media. The product revisions that have been carried out consist of (1) Digital teaching material is reasonable, only a little needs to be added about the latest early childhood scientific studies; (2) Consistency in the use of words, please readjust it; and (3) Try to use self-documented pictures and photos.

In the implementation phase (*implement*), researchers applied digital teaching material to undergraduate students in the PG-PAUD FKIP Universitas Sriwijaya Study Program who took the South Sumatra Traditional Games course. First, the researcher prepares a learning environment that follows the policy in the conditions that are currently happening, namely the application of the hybrid learning method (a learning method that combines online learning dan offline learning). At this stage, the researcher conducted one-to-one trials on 6 (six) students with high, medium, and low ability category criteria. Researchers provide learning using digital teaching materials that have been developed. At the end of the lesson, students were asked to fill out a response questionnaire regarding using digital teaching material.

The results of the questionnaire that students filled in at the one-to-one trial stage obtained responses from students of 94.6% in the Very Eligible category. Next, the researcher conducted a small-scale or small-group trial of 15 (fifteen) students with high, medium, and low ability category criteria. Researchers provide learning using digital teaching materials that have been developed. At the end of the lesson, students were asked to fill out a response questionnaire regarding using digital teaching material. The results of the questionnaire that students fill in at the small-scale trial stage or small group obtained responses from students of 91.3% in the Very Eligible category. The results of this trial show that in the aspects of attractiveness, convenience, and usefulness of using digital teaching material that has been developed, they are declared suitable for use by students in the learning process in the South Sumatra Traditional Games course.

In the last stage, namely the evaluation stage (*evaluate*), the researcher assessed the quality of the product in the learning process, both before and after using digital teaching material. Researchers used questionnaires and tests (pre-test and post-test) in large-scale trials or field tests on 20 (twenty) students to measure the practicality and potential effects of using digital teaching material developed to increase student learning outcomes in the South Sumatra Traditional Games course. The average pre-test score was 66.1, and the post-test average was 92.7. The results of large-scale trials or field tests show an increase in student learning outcomes of 26.6 and an N-Gain of 0.78 in the High category. Based on the results of large-scale trials or field tests shows that the use of digital teaching material that has been developed is stated to be practical and has a potential effect on the ability of student learning outcomes in the South Sumatra Traditional Games course at the PG-PAUD FKIP Universitas Sriwijaya Study Program.

Discussion

Teaching material is one of the materials that contain a description of material about knowledge and experience as well as theory and practice, which is specifically discussed and used by students and learners to make it easier to understand several materials or certain subjects that are in line with the curriculum in the learning process. It is further explained that textbooks and instructional materials are crucial in teaching and learning. These assist teachers in achieving a lesson's objectives ([Frimpong, 2021](#)). This shows that the existence of teaching material is essential to improving the quality of education. Teaching materials make it easier for students to obtain knowledge and information related to teaching material in a systematic and programmed manner. Through teaching material, students can develop competence according to the teaching material

and can motivate mastering teaching material, either with specific methods or media. Teaching material can also make it easier for lecturers to convey material programmatically according to the demands of the curriculum. The expected learning outcomes can be explained systematically in teaching material so that lecturers are assisted in determining the media, methods, and assessment tools according to plan.

The rapid advancement of information technology in education has changed conventional teaching material into digital teaching material. Digital teaching material is a teaching material that utilizes digital devices and is supported by specific application software. The development of this technology influences the behavior of students who tend to use technology in everyday life. Generally, the age range of 20-25 years is students who use computers for 35.3 hours per week to do assignments using software, do office work, and communicate through social networks (Juraida, 2016). This is an opportunity and a challenge for lecturers to carry out the learning process following the behavior of students accustomed to using technology. One is the development of digital teaching material as a form of technological advancement in world education.

The results of the preliminary study that the researchers conducted with lecturers, teaching teams, and students of the PG-PAUD FKIP Universitas Sriwijaya Study Program found that in the learning process in the South Sumatra Traditional Games course, it was stated that the lack of availability of literature as a source or reference for materials related to those courses. While participating in learning in these courses, students need to go to the field (community environment in certain areas) to gain knowledge and understanding related to learning material. These activities reduce the effectiveness and efficiency of the learning process, resulting in decreased student learning outcomes. Because these activities require a lot of energy, time, and materials, making it difficult for students, lecturers, and team teaching.

Based on the problems above, this study aims to develop digital teaching material for the South Sumatra Traditional Games course for undergraduate (S-1) students of the PG-PAUD FKIP Study Program at Universitas Sriwijaya. The development of digital teaching material is prepared based on the course syllabus and adapted to the characteristics of its users, namely students as prospective Early Childhood/Kindergarten educators. Digital teaching materials are developed by utilizing technology, and this needs to be done to meet the needs of students who are digital natives (FH et al., 2021). A digital native is a term attached to generation Z (the generation that grew up in an all-digital and sophisticated world). The presence of this digital teaching material has a potential effect on improving the learning outcomes of undergraduate (S-1) students in the PG-PAUD FKIP Universitas Sriwijaya Study Program in the South Sumatra Traditional Games course.

The development of digital teaching material in the South Sumatra Traditional Games course for undergraduate (S-1) PG-PAUD FKIP Study Program, Universitas Sriwijaya, uses the Research and Development method. One design for the development of digital teaching material that is often used is the ADDIE model (Cahyadi, 2019) through 5 (five) stages, namely: the analysis stage (*analyze*), the design stage (*design*), the development stage (*development*), the implementation stage (*implement*), and the evaluation stage (*evaluate*). The ADDIE model can guarantee the quality of digital teaching material. Because the systems approach to the ADDIE model divides the product development planning process into several steps, sequenced in a logical sequence, then using the output of each step as input for the next step.

The results showed that the development of digital teaching material in the South Sumatra Traditional Games course was based on validity tests from experts, namely from the material aspect, language aspect, and media aspect, it obtained the Very Good category from the indicators of content eligibility, presentation eligibility, a language component, graphic eligibility, and display eligibility. Based on the analysis results obtained from experts, several suggestions are used as reference material for improving the digital teaching material being developed (Sari et al., 2022). Furthermore, the digital teaching material produced was field tested through 3 (three) stages, namely the one-to-one trial stage, which was carried out on 6 (six) students, small group trials, which were carried out on 15 (fifteen) students, and field tests conducted on 20 (twenty) students. Researchers used student response questionnaires regarding digital teaching material in one-to-one and small-group trials. The conclusion from the results of the response questionnaire that students have filled in is that it is in the Very Eligible category.

Meanwhile, at the field test trial stage, the researcher used the pre-test and post-test to use the developed digital teaching material. The field test trials showed an increase in student learning outcomes of 26.6 and an N-Gain of 0.78 in the High category. Students responded positively in the practical category to learning using the developed digital teaching material. This practicality shows the convenience of students in using digital teaching materials produced following the tools, materials, and media used in learning that are readily available and easy to use (Suniasih, 2019). Based on the results of validity tests and field trials, it was shown that the use of digital teaching material in the South Sumatra Traditional Games course was stated to be valid, eligible, and practical and had a potential effect on the learning outcomes of undergraduate students in the PG-PAUD Study Program, FKIP, Universitas Sriwijaya.

Researchers realize that the development of digital teaching material is not perfect, so it has limitations, namely, this research only develops teaching material in digital form. This digital teaching material has not been developed interactively, so it is necessary to carry out further development to create interactive digital teaching material by combining two or more media to assist users in visualizing material clearly through pictures, videos, and animations designed attractively and can interact with its users (Khamidah et al., 2019). Thus, it is hoped that it will have implications for users of teaching material to be more effective (more accessible) and efficient (faster) in understanding the materials presented.

CONCLUSION

Digital teaching material for the Traditional Games of South Sumatra course was developed based on the results of preliminary studies conducted by researchers and adapted to the needs of students as their users. The development of this digital teaching material has been validated by experts (*expert review*) on the material aspect, which scored 87.5% in the Very Good category, the language aspect, which scored 85% in the Very Good category, and the media aspect which scored 92.5 % in the Very Good category. This concludes that the digital teaching material that has been developed is valid to be used in the learning process. In the one-to-one, small group, and field test trials, positive responses were obtained from undergraduate (S-1) PG-PAUD FKIP Universitas Sriwijaya Study Program students regarding the use of digital teaching material in the South Sumatra Traditional Games course. The results of the one-to-one trial were 94.6% in the Very Eligible category, while the small group trial results were 91.3% in the Very Eligible category. Furthermore, in the field test trials, digital teaching material improved student learning outcomes, as indicated by an increase in pre-test and post-test scores of 26.6 and N-Gain of 0.78 in the High category. So it can be concluded that the digital teaching material developed has been tested as valid, eligible, and practical to be used in the learning process in the South Sumatra Traditional Games course at the PG-PAUD FKIP Study Program, Universitas Sriwijaya. The recommendation for further development is needed to create interactive digital teaching material that combines two or more media (text, images, graphics, audio, and video) which are controlled by following directions from an order. For further research, this teaching material can be developed in an interactive digital manner so that users can understand more clearly and in detail.

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