

## Development of Digital-based PAKPAK Traditional Music Teaching Materials

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**ABSTRACT :** This study concludes by using the 4-D model development research, namely: Define, Design, Develop and Disseminate, then digital-based Pakpak traditional music teaching materials can be developed. This can be seen from the assessment of Pakpak traditional music teaching materials by experts with details: (1) Feasibility of teaching material content, at the achievement of 80 good categories; (2) Feasibility of teaching material language, at the achievement of 79 good categories; (3) Feasibility of teaching material presentation, at the achievement of 79.5 good categories. With an average achievement of 79.5 good categories. Assessment of Pakpak traditional music teaching materials conducted by students with details: (1) Feasibility of teaching material content, at the achievement of 79 good categories; (2) Feasibility of teaching material language, at the achievement of 78.5 good categories; (3) Feasibility of teaching material presentation, at the achievement of 78 good categories. With an overall average achievement of 78.5 good categories. From the results obtained, it can be concluded that Pakpak Traditional Music teaching materials are suitable for use by junior high school students in Medan City.

**KEYWORDS :** *Development, Teaching Materials, Traditional Music, Pakpak, Digital*

### I. INTRODUCTION

Cultural Arts subject is one of the subjects in the field of art education at the junior high school level which contains four fields of art, namely: music, dance, art, visual arts, and theater. These four areas of art must be learned by students because they are listed in the books used by teachers and students. Chung-yim Lau; Cheung-on Tam, (2024) performing arts education can increase students' awareness of creative and critical thinking skills, change their behavior and attitudes, increase socio-cultural awareness and benefit their overall development, but stakeholders have different opinions. Interpretation of the meaning and value of performing arts education. There seems to be a gap between arts groups and schools in the understanding of the basic purpose of performing arts education and the role it should play in the school context.

Music learning in secondary schools aims to hone creativity, musicality and aesthetics in music. Music learning is always associated with hearing because music is always audio. Nathan O. Buonviri, (2023), the music curriculum is re-evaluated by paying attention to the quality of sounds that students hear every day as a foundation for increasing aural attention. Perhaps some music classes could be more appropriately conceived as sound exploration classes, thus making school music opportunities accessible to more students and perhaps inspiring lifelong engagement with the aural arts. Music teachers will be more likely to offer a "sound" approach in their classes only if they themselves have many opportunities to explore their aural interface with the world.

To support the learning of Cultural Arts, especially Music, there must be good teaching materials that will be delivered to students. Abdil Munir Pangestu; Isti Hidayah, (2024), Creative thinking involves many aspects, including imagination, association of ideas, mental flexibility, and different views than usual. One of the efforts that can be made is to use innovative teaching materials that combine various activities to develop students' creative thinking skills. The results showed that the average feasibility score of teaching materials was 81.66% with the appropriate category, the average readability score of teaching materials was 90% with the easy-to-understand category, and the average score of student responses to teaching materials was 99% with very good criteria. Thus, from this assessment it can be concluded that the teaching materials developed are feasible to use, easy to understand, and get a good response from students. Teaching materials are not only to increase knowledge, but teaching materials can be packaged to improve student skills, especially in playing music. Lively, Michael T (2017) found various teaching strategies for new and experienced AP music theory teachers and offered a brief overview of textbooks and other teaching materials that can be used when teaching AP music theory courses.

Teaching materials consist of several components that support the quality of learning, including: titles, basic competencies, subject matter, conclusions, and exercises. When doing learning, teaching materials are very useful as tools or equipment that allow educators and students to carry out learning activities. Traditional music is very well packaged into teaching materials because it contains local wisdom. With the development of teaching materials, it can indirectly pass on traditional arts to students to be developed and preserved so as to increase literacy. Ricka, et al (2024) found that teachers' perspectives on local wisdom-based STEM-PjBL digital teaching materials to improve science literacy.

Digital teaching materials are currently needed because they are in accordance with the demands of the times. Digital teaching materials can be used for learning music both theoretical and practical material... Ertas, Sercan; Ipek, Jale, (2022), The results showed that the developed digital teaching materials had a positive impact on student learning, the absence of distraction elements in the materials reduced student distraction, and students showed interest and success in using the materials. The teachers' opinions support the students' opinions and once again demonstrate the effectiveness of digital teaching materials in the education of deaf students. Some applications for music learning can already be used but the obstacles faced by teachers are not yet able to use music learning applications.

The components in teaching materials must be interrelated and related to each other in accordance with the learning material. Teaching materials can be interpreted as any form of material that is systematically arranged to enable students to learn by being designed according to the applicable curriculum, Yuberti (2014). Teaching materials are needed as a learning resource so that learning activities can motivate students to actively participate in learning and support the realization of creativity and critical thinking skills. The content and format of teaching materials support learning and components in teaching materials are consistent and use language in accordance with refined spelling.

Teaching materials are a number of information that is arranged systematically, clearly and sequentially to achieve the competencies that must be mastered by students used in learning. Teaching materials are the knowledge, skills, and attitudes of students to achieve established competency standards, Widiastuti (2022). There are eight requirements for good teaching materials: (1) Accurate, in making good teaching materials it is necessary to pay attention to accuracy; (2) Appropriate, good teaching materials have a match between the competencies that must be mastered with the scope of content, depth of discussion, and reader competence; (3) communicative means that the contents of the book are easy for readers to digest, systematic, clear, and do not contain language errors; (4) Complete and systematic, good teaching materials mention the competencies that readers must master; (5) Student-oriented, curriculum education that tends to be constructivist requires teaching materials that can encourage student curiosity; (6) In favor of the ideology of the nation and state, for the purposes of Indonesian education; (7) Correct language rules, teaching materials are written using proper spelling, terms, and sentence structure; (8) Readable, teaching materials with high readability have long sentences and sentence structures according to the reader's understanding, the length of the line is according to the reader's understanding, Akbar (2013).

Teaching materials are suitable for use if they have been validated by material expert validators. The results of research by Muhlis, et al, (2024) show that context-based teaching materials meet the criteria of validity and practicality. The results of the analysis of the science literacy skills of control and experimental class students showed a significant difference in ability ( $p < 0.01$ ). The application of teaching materials shows that context-based teaching materials can improve students' science literacy skills ( $p < 0.01$ ). Furthermore, post hoc analysis showed that students' science literacy skills in interpreting data and evidence scientifically were higher than the other two aspects, namely in evaluating and designing scientific inquiry, and in explaining phenomena scientifically.

The results of observations made by researchers in several secondary schools (junior high school) in Medan City found that the teaching materials used by junior high school Cultural Arts teachers in Medan City are still in manual form, none of which are digital. This makes teachers overwhelmed in teaching because some of the material in the current Cultural Arts book is accompanied by examples that can be seen directly on the internet. Cultural Arts teachers do not want to improve their ability to use computers to access the internet on the grounds that they do not have laptops and are about to retire. This makes junior high school students in Medan city lag behind other schools in North Sumatra. In addition, the traditional music material in the curriculum does not use local wisdom-based material so that students are more familiar with traditional music outside North Sumatra than traditional music that can be packaged from the eight ethnicities of North Sumatra.

Through this research, researchers will develop digital-based Cultural Arts teaching materials tailored to K.D 3.3 "Understanding the techniques and styles of playing simple traditional music individually and in groups", so this research aims to develop digital-based Pakpak traditional music teaching materials.

## II. HEADINGSRESEARCH METHOD

This study uses the development research method (R&D), which is research that is followed up with development and dissemination through a cycle of action, reflection, evaluation, replication and innovation processes. According to Borg & Gall (1983) in Punaji (215) development research is a process used to develop and validate educational products.

This development research uses the 4-D model (four D Model) from Thiagarajan (1974) which consists of: define, the stage to determine and define learning requirements; design, the stage to design learning devices; develop, the stage to produce development products carried out through two steps, namely: expert assessment and trial development; and disseminate, the dissemination process stage is a final stage of development.

This development research uses techniques in data collection, namely (1) validation through validators to be able to provide improvements and suggestions for teaching materials; (2) practicality, to find out the practicality of the teaching materials developed.

The data from expert validation is then used to determine the feasibility of the product produced, using the formula:

$$Validity = \frac{Score\ obtained}{Maximum\ score} \times 100$$

## III. FINDING

### 3.1 Pakpak Traditional Music Teaching Materials

Cultural Arts teaching materials on Music materials must be adjusted to the curriculum listed in the syllabus and lesson plans so that learning can be carried out properly. Therefore, teachers must be able to develop these teaching materials according to the needs and level of student understanding. The teaching materials that are developed must be arranged systematically and continuously so that students can learn them sequentially.

The developed teaching materials must contain:

- Learning objectives, containing the end result of the material that has been delivered when learning which shows the competencies that must be mastered by students.
- Description of material, contains material descriptions that are adjusted to the Learning Implementation Plan (RPP) and syllabus.
- Summary, contains conclusions from the description of the material that has been presented.
- Exercises, contains exercise questions that are adjusted to the material in the teaching material.

The teaching materials developed in this study are adjusted to K.D 3.3, namely "Understanding the techniques and styles of playing simple traditional music individually and in groups", The traditional music developed in teaching materials is traditional music in North Sumatra, namely Pakpak traditional music. This teaching material was developed as a companion book to support the Cultural Arts book used previously.

Pakpak traditional music teaching materials developed digitally in the form of a book creator which can be seen at the link:

<https://read.bookcreator.com/ZHJZSYVzesdVSTUIcCYqC5ftX5r2/k9aU9g2mOI6A7kjlrlzvlw>

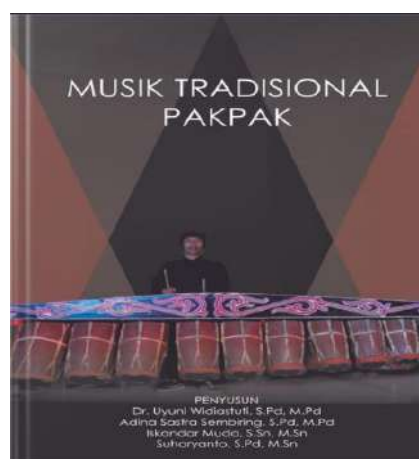


Fig 1. Cover of Pakpak Traditional Music Teaching Materials

Pakpak traditional music teaching materials consist of:

- Material Identity which contains:
  - Basic Competencies (KD)
  - Competency Achievement Indicators (IPK)
  - Learning objectives.

- b. Material, which contains:
  - (1) Types of traditional Pakpak musical instruments
  - (2) Traditional Pakpak songs
  - (3) Functions of Pakpak Traditional Music
  - (4) Types of Pakpak Traditional Music ensembles
  - (5) Sisibah drum ensemble
  - (6) Sisibah Drum Playing Technique
- c. Conclusion
- d. Exercise

### 3.2 Development of Teaching Materials for Pakpak Traditional Music

The development of Pakpak Traditional Music teaching materials was carried out with four stages in accordance with the 4-D model, namely: Define, Design, Develop and Disseminate.

#### a. Define

The first stage is done by defining the learning requirements which consist of five steps, namely:

- (1) Conducting initial diagnosis to students to improve the efficiency and effectiveness of learning Pakpak traditional music.
- (2) Looking at student characteristics by looking at students' initial abilities before Pakpak traditional music material is given.
- (3) Analyzing the tasks that exist in Pakpak traditional music material so that students achieve minimum competence.
- (4) Analyze the concept of Pakpak traditional music material and develop syntax in learning Pakpak traditional music.
- (5) Formulate learning objectives and expected student behavior after learning Pakpak traditional music.

#### b. Design

The second stage carried out to design learning devices is carried out through four steps, namely:

- (1) Criterion-test construction, to determine the initial competence of students before giving Pakpak traditional music material and as an evaluation after giving Pakpak traditional music material.
- (2) Media selection, to match the material with the media to be used based on the characteristics of the material, learning objectives, student characteristics.
- (3) Format selection, teachers review the format of teaching materials to choose a form of presentation that is adapted to learning media such as the use of audio and audio visual.
- (4) Making an initial design, to simulate the presentation of material with the designed learning syntax with peer assessment (between students).

#### c. Develop

The third stage carried out to develop Pakpak traditional music teaching materials was carried out through two steps, namely:

##### (1) Expert appraisal

This step was carried out by experts to provide some suggestions for improving Pakpak traditional music teaching materials as well as improving the design of the development of Pakpak traditional music teaching materials.

##### (2) Developmental testing

This step is a trial of Pakpak traditional music teaching materials that have been developed and tested on students. The trial of teaching materials was carried out by looking for data on responses, reactions and comments from users (students) and the results obtained were carried out to improve Pakpak traditional music teaching materials. The trial was then carried out again until it obtained effective results.

The development of Pakpak traditional music teaching materials is carried out by testing the feasibility of teaching material content, the feasibility of Pakpak traditional music teaching materials, and the feasibility of presenting Pakpak traditional music teaching materials to experts who have been appointed by researchers to validate the design of teaching materials and students as users of teaching materials. The effectiveness of Pakpak traditional music teaching materials is carried out by providing work on questions tailored to learning materials. For more details can be seen in the following table:

Table 1. Expert Assessment of Pakpak Traditional Music Teaching Materials

No.	Assessment Aspect	Expert		Average Score	Value
		Material	Media		
1	Feasibility of teaching material content	80	80	80	Good
2	Language feasibility of teaching materials	78	80	79	Good
3	Feasibility of presentation of teaching materials	80	77	79,5	Good
Average				79,5	Good

The results of the expert's assessment of Pakpak traditional music teaching materials consisting of 3 main aspects of the assessment, namely: (1) The feasibility of the content of teaching materials is at an average achievement of 80 with a good category; (2) The feasibility of the language of teaching materials, is at an average achievement of 79 with a good category; (3) The feasibility of the presentation of teaching materials is at an average achievement of 79.5 with a good category. With an overall average of 79.5 with a good category. The results of the expert assessment show that the Pakpak traditional music teaching materials developed are good for use.

Table 2. Student Assessment of Pakpak Traditional Music Teaching Materials

No.	Assessment Aspect	Expert		Average Score	Value
		Material	Media		
1	Feasibility of teaching material content	78	80	79	Good
2	Language feasibility of teaching materials	80	77	78,5	Good
3	Feasibility of presentation of teaching materials	79	77	78	Good
Average				78,5	Good

The results of students' assessment of Pakpak traditional music teaching materials consisting of 3 main aspects of assessment, namely: (1) The feasibility of the content of teaching materials is at an average achievement of 79 with a good category; (2) The feasibility of the language of teaching materials, is at an average achievement of 78.5 with a good category; (3) The feasibility of the presentation of teaching materials is at an average achievement of 78 with a good category. With an overall average of 78.5 with a good category. The assessment results from students show that the Pakpak traditional music teaching materials developed are good for use.

d. Disseminate

The dissemination stage is carried out by distributing Pakpak Traditional Music teaching materials (soft and hard copies) that have been developed digitally to Cultural Arts teachers who are members of the MGMP (Musyawarah Guru Mata Pelajaran Seni Budaya) SMP Medan City to be used in their respective schools. This dissemination stage was also carried out in collaboration with the Medan City Education Office.

#### IV. CONCLUSION

This study concluded that by using the 4-D model development research, namely: Define, Design, Develop and Disseminate, then Digital-based Pakpak Traditional Music teaching materials can be developed. This can be seen from the assessment of Pakpak traditional music teaching materials conducted by experts with details: (1) The feasibility of the content of teaching materials is at an average achievement of 80 with a good category; (2) The feasibility of the language of teaching materials, is at an average achievement of 79 with a good category; (3) The feasibility of the presentation of teaching materials is at an average achievement of 79.5 with a good category. With an overall average of 79.5 with a good category. Assessment of Pakpak traditional music teaching materials conducted by students with details: (1) The feasibility of the content of teaching materials is at an average achievement of 79 with a good category; (2) The feasibility of the language of teaching materials, is at an average achievement of 78.5 with a good category; (3) The feasibility of the presentation of teaching materials is at an average achievement of 78 with a good category. With an overall average of 78.5 achievements in the good category. From the results obtained from expert and student assessments, it can be concluded that Pakpak Traditional Music teaching materials are suitable for use in junior high school students in Medan City. It does not rule out the possibility that the teaching materials for Pakpak traditional music that have been developed are also feasible for other junior high school students outside Medan City.

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