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# Development of Poetry Musicalization Teaching Materials through a Project-Based Learning Model Assisted by Artificial Intelligence Technology

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**ABSTRACT**
This study aims to describe: 1) the validation results per procedure for developing poetry musicalization teaching materials using project-based learning models using artificial intelligence technology for grade X of senior high school; 2) the physical profile of the final product of poetry musicalization teaching materials using project-based learning models using artificial intelligence technology for grade X of senior high school; 3) the non-physical profile of the final product of poetry musicalization teaching materials using project-based learning models using artificial intelligence technology for grade X of senior high school. This study employs a research and development method that combines a qualitative and quantitative approach, conducted at SMA Negeri 1 Bojongpicung, utilizing a modified version of the ADDIE procedure. The research respondents consisted of three Indonesian language teachers and nine students per class, serving as the audience. The research population consisted of 62 grade X students, divided into two parallel courses, and the sample was determined to be 54 students based on a statistical formula. The judger team, comprising each expert in poetry musicalization, a literary learning specialist, and a teaching materials expert, was tasked with validating each development procedure through a questionnaire. Interviews were conducted with three Indonesian language teachers and grade X students. The results of the study: 1) 1) the validation results of the teaching material development procedure are rated as mode 4, which is very good; 2) the physical profile of the final product of the teaching material: a) the title is 'The Beauty of Learning Poetry Musicalization in Grade X of Senior High School; b) the final product of the teaching material is typed using Times New Roman on A4 paper. Font size 11 with automatic spacing for 11 pages; c) the final product of the teaching material contains four initial structures and five core structures; 3) the non-physical profile of the final product of the teaching material: a) the validation mode of the feasibility of the final product according to the review team is 'perfect'; b) the teaching material product is effective for use in learning poetry musicalization for grade X of Senior High School

*Keywords: poetry musicalization, teaching materials, project-based learning, artificial intelligence technology*

# Pengembangan Bahan Ajar Musikalisasi Puisi melalui Model Pembelajaran Berbasis Proyek Berbantuan Teknologi Artificial Intellegence

**ABSTRAK**
Penelitian ini bertujuan untuk mendeskripsikan: 1) hasil valididasi per prosedur pengembangan bahan ajar musikalisasi puisi menggunakan model pembelajaran berbasis proyek berbatuan teknologi *artificial intelligence*; 2) profil fisik produk akhir bahan ajar musikalisasi puisi menggunakan model pembelajaran berbasis proyek berbatuan teknologi *artificial intelligence*; 3) profil nonfisik produk akhir bahan ajar musikalisasi puisi menggunakan model pembelajaran berbasis proyek berbatuan teknologi *artificial intelligence*. Penelitian ini menggunakan metode research and development melalui pendekatan kualitatif-kuantitatif yang berlangsung di SMA Negeri 1 Bojongpicung menggunakan modifikasi prosedur ADDIE. Responden penelitian adalah tiga guru Bahasa Indonesia dan 9 siswa per kelas sebagai audien. Populasi penelitian sejumlah 62 siswa kelas X yang terbagi dari dua kelas paralel dan sampel ditetapkan sebanyak 54 siswa berdasarkan formula statistik. Wawancara dilakukan kepada tiga guru Bahasa Indonesia dan para siswa kelas X. Data prates dan postes dikumpulkan menggunakan instrumen tes unjuk kerja. Data penelitian dianalisis menggunakan statistik inferensial nonparametrik yakni Mann-Whitney untuk menentukan efektivitas produk bahan ajar. Hasil penelitian: 1) hasil validasi prosedur pengembangan bahan ajar bernilai modus 4 yakni sangat baik; 2) profil fisik produk akhir bahan ajar: a) judul 'Indahnya Belajar Musikalisasi Puisi di Kelas X SMA; b) produk akhir bahan ajar diketik menggunakan huruf times new roman pada kertas A4. Huruf bersize 11 pada spasi automatis sepanjang 11 halaman; c) produk akhir bahan ajar berisi 4 struktur awal dan 5 struktur inti; 3) profil nonfisik produk akhir bahan ajar: a) modus validasi kelayakan produk akhir menurut tim penimang adalah 'sangat baik'; b) produk bahan ajar efektif digunakan dalam pembelajaran musikalisasi puisi untuk kelas X SMA.

*Kata kunci: bahan ajar, musikalisasi puisi, pembelajaran berbasis proyek, teknologi artifiacial intelligence*

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## INTRODUCTION

Poetry instruction in 10th-grade high school students uses Indonesian language textbooks for 10th grade. Poetry material is presented manually in written form, both to understand the poem's message and for poetry recitation. This occurs in two types of textbooks: those published by the Ministry of Education and Culture and those published by national private companies. This situation results in the teaching of poetry musicalization, focusing on the knowledge aspect.

In many situations, Indonesian language teachers teaching in 10th-grade high school neglect this literary learning. From a pedagogical competency perspective, teachers must be able to develop and/or utilise additional teaching materials to enrich existing ones (Kastolani, 2018).

Based on the above conditions, efforts to develop teaching materials for poetry musicalization for 10th-grade high school students are crucial. With these teaching materials, teachers can overcome the limitations of primary textbooks in teaching poetry musicalization.

Project-based learning is a challenging type of learning for 10th-grade high school students because it requires them to produce concrete work based on the knowledge they have acquired.

In addition to the learning model, the development of poetry musicalization teaching materials for 10th-grade high school students also utilises artificial intelligence technology. The choice of this electronic media motivates students to participate in teaching and learning activities.

Based on the description above, the research to develop teaching materials uses a title that accommodates both the learning model and the learning media. The title is "Development of Poetry Musicalization Teaching Materials through a Project-Based Learning Model Based on Artificial Intelligence Technology for 10th-grade High School Students.

This article contains three research questions, which are presented as follows:

1) What are the validation results of the development procedure for poetry musicalization teaching materials using a project-based learning model, using artificial intelligence technology for 10th-grade high school students?
2) What is the physical profile of the final product of poetry musicalization teaching materials using a project-based learning model, using artificial intelligence technology for 10th-grade high school students?
3) What is the non-physical profile of the final product of poetry musicalization teaching materials using a project-based learning model, using artificial intelligence technology for 10th-grade high school students?

IIn line with the research questions, three research objectives are presented. First, to describe the validation results of the development procedure for poetry musicalization teaching materials using a project-based learning model with artificial intelligence technology for 10th-grade high school students. Second, to describe the physical profile of the final product of poetry musicalization teaching materials using a project-based learning model with artificial intelligence technology for 10th-grade high school students. Third, to describe the non-physical profile of the final product of poetry musicalization teaching materials using a project-based learning model with artificial intelligence technology for 10th-grade high school students.

This research has several benefits. First, for Indonesian language teachers who wish to teach poetry musicalization, this teaching material can be a suitable choice among many similar resources. Second, for school principals, this article is also helpful because it can serve as a guide for principals' supervision of Indonesian language teachers, both in terms of teaching materials and learning media. Third, for the Indonesian Language Teachers' Association, this article is also beneficial. The materials, strategies, and learning media in this teaching material can be used as discussion material in official Indonesian language teacher forum meetings. Fourth, for students of the Indonesian Language and Literature Education

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Master's Program, this article also has significant benefits. In addition to being useful as a reference for writing scientific articles, the results of this research are also helpful as discussion material in both lectures and seminars.

Poetry musicalization has several elements—first, the element of tone. In poetry musicalization, tone is a crucial element because poetry must be recited with musical accompaniment. Second, the element of rhythm. Rhythm in poetry is used to convey the poem's meaning through musicalization. The poem's theme determines the rhythm and tempo. For example, a passionate poem theme is much more suited to a fast and energetic musical rhythm and tempo. Third, the element of pronunciation. Pronunciation relates to the correct vowel in each word, meaning each letter in the word must be pronounced according to its point of articulation. Fourth, the element of harmony. Harmony means that all elements of the poem's musicalization must be harmoniously connected, harmoniously harmonising between the musical instrument and the poem being translated (Damono, 2014).

Besides its elements, poetry musicalization also has various forms. First, there is total musicalization of poetry. This form of musicalization means that the entire content of the poem is transformed and translated into musical instrument form. In other words, there is no poetry reading, or perhaps only the mention of the title. Second, there is an accompaniment to the musicalization of poetry. This means the poem is performed accompanied by a musical instrument, such as a guitar, piano, violin, or other. This type of musicalization still employs the traditional poetry reading, with the only difference being the addition of musical accompaniment. Third, there is the musicalization of song poetry. This means that the entire content of the poem is transformed into song form, so the lyrics are derived from the poem and sung in conjunction with the musical accompaniment. Fourth, there is mixed poetry musicalization. This means the poem is performed by reading it, accompanied by music and singing. This type of musicalization is a combination of both musicalization and accompaniment.

Relevant articles can be found in online journals. Some relevant articles include:

1) Gea, A. L. A., Telaumbanua, E. C, Zendrato, A., & Bawamenewi, A. (2023). Pengembangan Media Pembelajaran Musikalisasi Puisi untuk Meningkatkan Kemampuan Belajar Siswa Kelas IX. Journal on Education, 6(1), 3015-3021.
2) Nurhidayah, N., Daeng, K., & Syamsudduha, S. (2024). Pengembangan Materi Ajar Elektronik Pembelajaran Puisi Siswa Kelas X SMA. Jurnal Onoma: Pendidikan, Bahasa, dan Sastra, 10(2), 1559–1568.
3) Sitepu, A. L., Nazara, S. H., Alexandra, V., Gabriella, C., Simanjuntak, I. J., & Purba, Y. R. (2025). Musikalisasi Puisi: Seni Menggabungkan Sastra dan Melodi sebagai Media Kreativitas Pembelajaran. JAHE: Jurnal Akuntansi Hukum dan Edukasi. Vol. 2 No. 1 Mei 2025, 47-53

## METHOD

This study employed a research and development (R&D) method through a modified ADDIE procedure, which involved the following steps: analysis, design, development, implementation of the initial product, evaluation and revision of the initial product, implementation of the revised product, evaluation and revision of the revised product, and production of the final product.

This study employed a descriptive qualitative-quantitative approach. This study described the qualitative data in the form of the teaching materials development procedure. The implementation procedure for the revised product included quantitative data, including pre-test and post-test data for poetry musicalization. This data was needed to demonstrate the effectiveness of the revised teaching materials in teaching poetry musicalization to 10th-grade high school students.

This research took place at SMA Negeri 1 Bojongpicung. The school is located on Jati Road, Jati Village, Bojongpicung District, Cianjur

Regency, West Java Province. The school has six parallel tenth-grade classes.

This research was conducted in the even semester of the 2024/2025 academic year. At the outset of the research, preparatory activities were conducted. First, the assessment team was determined, consisting of those responsible for material aspects, those responsible for methodology aspects, and those responsible for learning aspects. Second, various questionnaires were developed for the assessment team: a poetry musicalization indicator questionnaire, an initial design questionnaire, and a questionnaire. Third, the high school where the product development trial would be conducted and the potential observers. Fourth, the schedule for the trial of the teaching material product was determined.

Fieldwork is a learning activity within the framework of the trial of the teaching material product. These activities represent the fourth and sixth procedures of the ADDIE modification procedure, which consists of eight procedures (Razak, 2019). All procedures were validated by the assessment team using a progressive system, except for the fourth and sixth procedures.

First, the basis analysis procedure. This procedure covers the following topics: learning fundamentals, learning media, time allocation for learning, student potential, teacher potential, poetry groups to be taught, learning models, the involvement of AI technology, test indicators, test specifications, and poetry musicalization tests for 10th-grade high school students.

Second, the product design procedure. This procedure outlines the product design based on the baseline analysis

Third, the development procedure. This procedure outlines the process and results of developing the initial product, which consists of six A4-sized pages. The evaluation team also validated this initial product.

Fourth, the initial product trial procedure. This procedure includes poetry musicalization learning activities in grade 10. This initial product trial is based on a lesson plan aligned with the learning model and media

Fifth, the initial product evaluation and revision procedure. This procedure includes an evaluation of the initial product teaching materials, whether sourced from teachers, students, or the researcher herself. The purpose of the evaluation is to identify aspects of the initial product teaching materials that require revision. Finally, the teaching materials, which are initial products, are revised based on the evaluation results. The output of this initial product evaluation and revision activity is the creation of teaching materials with a revised status.

Sixth, the revised product trial procedure. This procedure includes poetry musicalization learning activities in other grade 10 classes, involving an observer. An initial poetry musicalization test precedes the learning activity.

Seventh, the revised product evaluation and revision procedure. This procedure involves an assessment of both the initial and revised teaching materials, which were sourced from teachers, students, and the researcher herself. The purpose of the evaluation is to identify aspects of the teaching materials that students perceive as uncommunicative and therefore require improvement. Finally, the revised teaching materials were revised based on the evaluation results. The output of this activity was a final product entitled.

The Beauty of Learning Poetry Musicalization in Grade 10 of Senior High School.

The respondents for this study were three Indonesian language teachers in grade 10 of SMA Negeri 1 Bojongpicung. The research data sourced from them were their responses to the teaching materials, obtained through interviews. Furthermore, the teacher respondents also acted as observers. Data on teacher and student learning activities were obtained through observation guidelines.

A group of tenth-grade students from SMA Negeri 1 Bojongpicung also served as respondents. This means that in addition to serving as sample members, they were also designated as research respondents, those who asked questions verbally or demonstrated unique learning activities related

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to the teaching materials. Their number was relatively limited: nine students.

The research population consisted of tenth-grade students who took the poetry musicalization pre-test, participated in the musicalization lesson using the developed teaching materials, and completed the post-test. The 60 students were divided into two parallel classes for the product development trial, with equal numbers in each. The first class served as the control group, while the second class served as the treatment group.

The research sample consisted of 54 students. This number was determined based on Slavin's formula (Krejcie & Morgan, 1970; Razak, 2017; Santoso, 2023; Amin et al., 2023; Subhaktiyasa, 2024), which is as follows: n = N/(1 + N(e^2). Where n is the sample size. N is the population size. One is a constant value. E is the error rate, which in this study was set at 0.05. The sample size for each group consisted of 27 students (28 were included in this study).

Data on teacher and student learning activities were collected using an observation guideline instrument. This instrument was declared valid because it was compiled using objective and systematic procedures

Data on Indonesian language teacher and student responses to the teaching materials were also collected using a non-test instrument, namely an interview guide. This instrument was declared valid because it was compiled using objective and systematic procedures.

Data on Indonesian language teachers' and students' responses to the teaching materials were also collected using non-test instruments. The instrument in question was an interview guide. This instrument was deemed valid because it was developed using objective and systematic procedures. Most teaching materials development procedures used questionnaires. The questionnaires were closed-ended and contained four rating scales. This rating scale is a simplification of the 1-10 Likert scale (Budiaji, 2013; Azwar, 2012).

The validation data from the assessment team for most teaching materials development procedures were analysed using descriptive statistics. The appropriate statistical measure for this type of data is the mode, which is the score that occurs most frequently among 1, 2, 3, and 4.

Pre-test and post-test data were collected using a test instrument. According to Azwar (2014), a test is considered valid if it is developed objectively and follows procedural steps. These steps are explained below.

First, determine the type of test. This article uses a project-based performance test. "Second, determine the testing system. This article uses a take-home examination system.

Third, determine the number of poems used as the basis for musicalization. This article selects one of three poems from 'Hujan Bulan Juni' (Damono, 1994).

Fourth, determine the type of musical instrument used in the musicalization of the poetry. The article uses a guitar as the musical instrument.

Fifth, develop the poetry musicalization test specifications. The poetry musicalization test specifications involve most of the procedures above.

Sixth, write the poetry musicalization test items for 10th-grade students at Bojongpicung State Senior High School.

The raw pre-test and post-test data were obtained by scoring the responses. Each scoring indicator ranges from 0 to 10. Thus, the total score is 40. If each indicator achieves only 50 per cent, the resulting score is 20.

The pre-test and post-test poetry musicalization data were also analysed using nonparametric inferential statistics. The appropriate statistical measures for the research data were the Mann-Whitney test.

The Mann-Whitney test was used to determine the effectiveness of the teaching materials. The Mann-Whitney test was used instead of the independent sample t-test, which was discarded due to the non-normal distribution of the data.

The use of the project learning model through AI media in poetry musicalization learning in class X of SMA Negeri 1 Bojongpicung is declared

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effective, as indicated by the significant Z value. > 0.05. If not, the poetry musicalization learning model is declared ineffective.

## RESULT

### 1. Validation Results of the Weighing Team

### 1. 1 Validation Results of the Needs Assessment Procedure

The validation mode for the needs assessment procedure components was "really good" All indicators in the needs assessment procedure received a rating of 4, or very good, from all validators. Complete data is provided in the table below.

Table 1
Results of the Needs Assessment Procedure Validation by the Assessment Team

| No. | Indicators | Validator | Rating Scale 1-4 (1=really bad; 2=bad; 3= good; 4= really good) | | | |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| 1 | title of teaching material on musicalization of poetry | Validator-1 | | √ | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | | √ |
| 2 | teacher's potential to use teaching materials in learning | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | | √ |
| 3 | students' potential to use teaching materials in learning | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | | √ |
| | | Mode | | | | √ |
| 4 | conformity with learning objectives in the curriculum | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | | √ |
| 5 | poetry musicalization skill indicators | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | √ | √ | |
| | | Mode | | | | √ |
| 6 | poetry musicalization skills test specifications | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | √ | √ | |
| | | Mode | | | | √ |
| | Total | | | | | √ |

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### 1.2 Design Procedure Validation Results

The validation mode for the design procedure components was "good." Of the five components in the design procedure for developing poetry musicalization teaching materials, three components received a mode score of 3, or "good." One component, the fourth component, received a mode score of 4, or "very good." Complete data is included in the table below.

Table 2
Design Procedure Validation Results by the Advisory Team

| No. | Indicators | Validator | Rating Scale 1-4 (1=really bad; 2=bad; 3= good; 4= really good) | | | |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| 1 | title components of teaching materials for musicalization of poetry | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | | √ |
| | | Mode | | | | √ |
| 2 | components of the table of contents of teaching materials | Validator-1 | | √ | √ | |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | √ | |
| 3 | components of the foreword of teaching materials | Validator-1 | | | √ | |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | √ | |
| 4 | components of teaching material content | Validator-1 | | √ | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | | √ |
| 5 | artificial intelligence components | Validator-1 | | | √ | |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | √ | |
| | Total | | | | √ | |

### 1.3 Development Procedure Validation Results

The validation mode for the components of the initial product development procedure for poetry musicalization teaching materials, using a project-based learning model assisted by artificial intelligence technology in grade 10 at SMA Negeri 1 Bojongpicung, was "good." Of the five components in the development procedure, four had a mode value of 3, or "good." However, validator 1 gave a value of 3 for the second indicator, or "good." Validator 1 also gave the same value for the fourth indicator. For the fifth indicator, all validator teams scored it with a value of 3, or "good." One component, the first component, received a mode value of 4, or "very good." Complete data is included in the table below.

https://pembahas.dialeks.id/index.php/jp
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Volume 4, Nomor 4, Juli 2025
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Table 3
Results of the Development Procedure Validation by the Assessment Team

| No. | Indicators | Validator | Rating Scale 1-4 (1=really bad; 2=bad; 3= good; 4= really good) | | | |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| 1 | title components of teaching materials for musicalization of poetry | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | | √ |
| | | Mode | | | | √ |
| 2 | development of components of the table of contents of teaching materials | Validator-1 | | √ | √ | |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | √ | |
| 3 | development of components of the foreword of teaching materials | Validator-1 | | | √ | |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | √ | |
| 4 | development of components of teaching material content | Validator-1 | | √ | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | | √ |
| 5 | development of artificial intelligence components | Validator-1 | | | √ | |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | |
| | | Mode | | | √ | |
| | Total | | | | √ | |

### 1.4 Results of Validation of Evaluation Procedure and Initial Product Revision

The validation mode of the evaluation procedure component and revision of the initial product of poetry musicalization teaching materials, utilising a project model learning assisted by artificial intelligence technology, is rated as 'perfect'. First, the validation component of the evaluation aspect of the trial of the initial poetry musicalization teaching materials using a project model learning approach assisted by artificial intelligence technology is found to be valued at mode 4, namely 'perfect'. Second, the validation component of the revision aspect of the initial poetry musicalization teaching materials using a project model learning assisted by artificial intelligence technology in class X of SMA Negeri 1 Bojongpicung is found to be valued at mode 4, namely 'perfect'. The complete data is contained in the table below.

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e-ISSN : 2809-6355

Table 4
Results of the Validation of the Evaluation Procedure and Initial Product Revision by the Weighing Team

| No. | Indicators | Validator | Rating Scale 1-4 (1=really bad; 2=bad; 3= good; 4= really good) | | | |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| 1 | description of evaluation aspects in the initial product trial of teaching materials | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | | √ |
| | | Mode | | | | √ |
| 2 | description of the initial product revision aspects of teaching materials based on trial learning | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | | √ |
| | | Mode | | | | √ |
| | Total | | | | | √ |

**1.5 Results of Validation of Evaluation Procedures and Final Product Revisions**

The validation mode of the evaluation procedure component and the revision of the poetry musicalization teaching material, utilizing the project model learning assisted by artificial intelligence technology, is rated as 'really good'. First, the validation component of the evaluation aspect of the trial of the revised poetry musicalization teaching material using the project model learning assisted by artificial intelligence technology is found to be valued at mode 4, namely 'perfect'. Second, the validation component of the revision aspect of the poetry musicalization teaching material using the project model learning assisted by artificial intelligence technology in class X of SMA Negeri 1 Bojongpicung is found to be valued at mode 4, namely 'perfect'. The complete data is contained in the table below.

Table 5
Results of the Validation of the Evaluation Procedure and Revised Product Revisions by the Weighing Team

| No. | Indicators | Validator | Rating Scale 1-4 (1=really bad; 2=bad; 3= good; 4= really good) | | | |
|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| 1 | description of evaluation aspects in the initial product trial of teaching materials | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | √ | √ |
| | | Mode | | | | √ |
| 2 | description of the initial product revision aspects of teaching materials based on trial learning | Validator-1 | | | | √ |
| | | Validator-2 | | | | √ |
| | | Validator-3 | | | | √ |
| | | Mode | | | √ | √ |
| | Total | | | | | √ |

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**2. Physical Profile of the Final Product**

**2.1 Title of the Final Product**

The final product of the poetry musicalization teaching material developed using the artificial intelligence-based project learning model for grade X high school uses the title attribute. The title in question is 'Indahnya Musikalisasi Puisi melalui Model Pembelajaran Proyek'.

**2.2 Final Product Graphic Aspects**

Teaching materials are typed using Times New Roman letters on A4 paper. 11 size letters with automatic spacing for 11 pages.

The tutorial page uses two columns. Each teaching presentation is equipped with a video screenshot of the musicalization of the poem.

**2.3 Final Product Structure**

The final product of the teaching materials involves nine structures. The structure of the final product materials is:

1) title
2) instructions for use
3) foreword
4) table of contents
5) teaching point-1: tone
6) teaching point-2: rhythm
7) teaching point-3: pronunciation
8) teaching point-4: harmony
9) project work

**3. Non-Physical Profile of the Final Product**

**3.1 Final Product Feasibility**

First, according to the assessment team's assessment, the final teaching material meets the content feasibility requirements. The content feasibility of the final product is rated "very good." Two of the three assessors gave it a score of 4 (very good), while one assessor gave it a score of 3 (good).

Second, according to the assessment team's assessment, the final teaching material meets the presentation feasibility requirements. The presentation feasibility of the final product is rated "very good." Two of the three assessors gave it a score of 4 (very good), while one assessor gave it a score of 3 (good).

Third, according to the assessment team's assessment, the final teaching material meets the language feasibility requirements. The language feasibility of the final product is rated "very good." All assessors gave it a score of 4 (very good).

Fourth, according to the assessment team's assessment, the final teaching material meets the graphic feasibility requirements. The graphic feasibility of the final product is rated "not good." Two of the three weighers gave a score of 3 (not good) while one weigher gave a score of 3 (good).

**3.2 The Effectiveness of Teaching Materials to Improve Poetry Musicalization**

Below are presented descriptive statistics of post-test data on poetry musicalization of grade X MA Negeri 1 Bojongpicung per sample group. The presentation uses the following table.

Table 6
Post-test Data of Grade X Students of SMA Negeri 1 Bojongpicung Poetry Musicalization per Sample Group

| Control Group | | Experiment Group | |
|---|---|---|---|
| 33 | 28 | 39 | 33 |
| 33 | 28 | 39 | 33 |
| 33 | 28 | 39 | 31 |
| 33 | 28 | 39 | 31 |
| 33 | 24 | 35 | 31 |
| 30 | 24 | 35 | 31 |
| 30 | 24 | 35 | 31 |
| 30 | 24 | 35 | 31 |
| 30 | 24 | 35 | 31 |
| 30 | 21 | 33 | 30 |
| 30 | 21 | 33 | 30 |
| 28 | 20 | 33 | 30 |
| 28 | 20 | 33 | 30 |
| 28 | 20 | 33 | 30 |

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First, the lowest score for the control group was 20, while the highest score was 33. Second, the lowest score for the treatment group was 30, while the highest score was 39. This is the comparison of the lowest and highest scores for the poetry musicalization data between the control group and the experimental group of 10th-grade students at SMA Negeri 1 Bojongpincung.

he normality test for the poetry musicalization data curve per sample group, using the Shapiro-Wilk technique, obtained a significant result. <0.05. The sig. The Value for the control group was 0.012, while for the treatment group, it was 0.001 (Figure 1). Thus, Ho is rejected, meaning that the remaining poetry musicalization data for 10th-grade students at SMA Negeri 1 Bojongpincung are not generally distributed within each sample group.

**Tests of Normality**

| | Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| Group | Statistic | df | Sig. | Statistic | df | Sig. |
| Control | 0,212 | 28 | 0,002 | 0,900 | 28 | 0,012 |
| Experiment | 0,203 | 28 | 0,005 | 0,847 | 28 | 0,001 |

a. Lilliefors Significance Correction

Figure 1
Screenshot of Results of the Normality Test for Poetry Musicality Data Curves

Tests for the homogeneity of variance of the poetry musicalization population for 10th-grade students at SMA Negeri 1 Bojongpincung are no longer necessary. Even if the homogeneity of variance test results were homogeneous, the use of parametric inferential statistical procedures would still be unacceptable due to the non-normal distribution of the data. Therefore, the next step was to determine the effectiveness of the final product's teaching materials using the artificial intelligence-based project learning model, as assessed by the Mann-Whitney test.

The Z-score of the Mann-Whitney test is -4.965. This value has a significance level of 0.000 (Figure 2). Therefore, Ho is rejected. This means that the poetry musicalization teaching materials developed for 10th-grade students at SMA Negeri 1 Bojongpincung, utilising an artificial intelligence-based project learning model, are effective in improving students' poetry musicalization skills.

**Test Statistics[a]**

| | post-test |
|---|---|
| Mann-Whitney U | 92,500 |
| Wilcoxon W | 498,500 |
| Z | -4,965 |
| Asymp. Sig. (2-tailed) | 0,000 |

a. Grouping Variable: postest

Figure 2
Screenshot of the Mann-Whitney Test Calculation Results for Poetry Musicality Data

## DISCUSSION

Poetry musicalization teaching materials developed using a project-based learning model, assisted by artificial intelligence technology, have proven effective in improving 10th-grade high school students' poetry musicalization skills. This is thought to be due to several factors.

First, the project-based learning model motivates students to actively participate in presenting poetry musicalizations using the guitar. Activities involving musical instruments indeed stimulate learning enthusiasm and alleviate boredom. This statement aligns with the content of the article.(Ferawati, 2015; Roffiq et al., 2017; Putri & Ramadhan, 2022; Suprihatin, 2015; Oktiani, 2017).

Second, the learning media factor. Poetry musicalization teaching materials are essentially learning media. Through this medium, students can easily understand the learning material. This statement aligns with the content of the article. (Kusno et al., 2022; Leonady et al., 2025; Aryani, & Achmad 2024).

Third, the reading skill factor. Learning media contain descriptive text about the learning material. Students communicate effectively with

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Volume 4, Nomor 4, Juli 2025
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the relevant learning materials, indicating they possess adequate reading skills. This aligns with statements by Harjasujana & Damaianti (2013) and Razak (2018). Furthermore, scientific articles reviewing reading skills include those by Yanti & Harti (2022) and Yuniarti et al. (2024).

The development of poetry musicalization teaching materials is fundamentally focused on strengthening integrated learning. This means that when students participate in music arts lessons, teachers can utilize musicalization materials in music activities. Conversely, when Indonesian language teachers teach poetry musicalization, they can utilize students' musical activities during art lessons.

Implementing integrated learning is crucial. Integrated learning reinforces the material from the integrated subjects. This aligns with the content of the article.(Zaenatun et al., 2021; Hidayati et al., 2025; Armadi & Astuti, 2018).

## CONCLUSION

First, the validation results of the five teaching material development procedures are rated as mode 4, which is very good. Second, the physical profile of the final product of the poetry musicalization teaching material using a project model based on artificial intelligence technology: a) the title is 'Indahnya Musikalisasi Puisi melalui Model Pembelajaran Proyek'; b) the final product of the teaching material is typed using Times New Roman on A4 paper. Font size 11 with automatic spacing totalling 11 pages; c) the final product of the poetry musicalization teaching material contains four initial structures and five core structures. Third, the non-physical profile of the final product of the poetry musicalization teaching material: a) the validation mode of the feasibility of the final product according to the weighing team is 'perfect'; b) the teaching material product is effective for use in learning poetry musicalization for grade X SMA. Those are the three main conclusions in this study.

## REFERENCES

Amin, N. F., Garancang, S., & Abunawas, K. (2023). Konsep Umum Populasi dan Sampel dalam Penelitian. *Pilar: Jurnal Kajian Islam Kontemporer. Volume 14 , No. 1, Juni 2023, 15-31.*

Armadi, A., & Astuti, Y. P. (2018). Pembelajaran Terpadu Tipe Webbed Berbasis Budaya Lokal untuk Meningkatkan Hasil Belajar Siswa Kelas IV Sekolah Dasar. *Premiere Educandum: Jurnal Pendidikan Dasar Dan Pembelajaran, 8(2), 185-195*

Aryani, & Achmad, A. M. (2024). Pembelajaran Keterampilan Membaca Teks Eksposisi Berbasis Artikel Ilmiah Jurnal Online Menggunakan Pendekatan Keterampilan Proses. Jurnal Pembelajaran Bahasa Dan Sastra, 3(6), 731–744. https://doi.org/10.55909/jpbs.v3i6.642

Azwar, S. (2012). *Penyusunan Skala Psikologi, Edisi 2*. Yogyakarta: Pustaka Pelajar.

Azwar, S. (2013). Validitas dan Reliabilitas Tes. Yogyakarta: Pustaka Pelajar.

Budiadji, W. (2013). Skala Pengukuran dan Jumlah Responden Skala Likert. Jurnal Ilmu Pertanian dan Ilmu Perikanan. Volume 2, No. 2, 2013, 127-133.

Damono, S. D. (1994). *Hujan Bulan Juni: Sepilihan Sajak*. Jakarta: Grasindo.

Ferawati, A. S. (2015). Pengaruh Pemberian Terapi Musik Terhadap Penurunan Kecemasan dan Tingkat Stress Mahasiswa Semester VII Ilmu Keperawatan dalam Menghadapi Skripsi di Sekolah Tinggi Ilmu Kesehatan Insan Cendekia Husada Bojonegoro, JUMAKIA 1(1): 1-9

Gea, A. L. A., Telaumbanua, E. C, Zendrato, A., & Bawamenewi, A. (2023). Pengembangan Media Pembelajaran Musikalisasi Puisi untuk Meningkatkan Kemampuan Belajar Siswa Kelas IX. Journal on Education, 6(1), 3015-3021. https://doi.org/10.31004/joe.v6i1.3348

https://pembahas.dialeks.id/index.php/jp
p-ISSN : 2809-5367
e-ISSN : 2809-6355

Harjasujana, A. S. & Damaianti, V. S. (2013). *Membaca dalam Teori dan Praktik*. Bandung: Mutiara.

Hidayati, M., Alifah, M., Febrianita, M., Romadhona, M. R.., Juwita, M. M., Haq, M. N. A., Sujatmiko, B. & Wiyono, W. (2025). Penerapan Model PjBL dipadu Drill and Practice Guna Meningkatkan Keaktifan dan Ketuntasan Belajar. Jurnal Ilmiah Profesi Pendidikan, 10(2), 1679–1685. https://doi.org/10.29303/jipp.v10i2.3402

Kastolani, N. M. (2018). Pengembangan Media Pembelajaran Operasi Hitung Bilangan Bulat Berbasis Aplikasi Android untuk Siswa Kelas VII SMP Negeri 2 Sengkang. Universitas Negeri Makassar.

Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. Educational and Psychological Measurement, 30, 607-610.

Kusno, A., Arifin, M. B., & Mulawarman, W. G. (2022). Identifikasi Konteks Ekstralingual Virtual Bahasa Media Sosial sebagai Penunjang Analisis Bahasa sebagai Alat Bukti Hukum. Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya, 5(1s), 261-282. https://doi.org/10.30872/diglosia.v5i1s.401

Leonady, W., Gunawan, I., Sutanto, T. S., & Gunawan, S. B. (2025). Transformasi Alat Musik Celempung ke dalam Format KONTAKT Library sebagai Media Kreativitas Musik Digital. Musikolastika: Jurnal Pertunjukan dan Pendidikan Musik, 7(1), 85-104. https://doi.org/10.24036/musikolastika.v7i1.218

Nurhidayah, N., Daeng, K., & Syamsudduha, S. (2024). Pengembangan Materi Ajar Elektronik Pembelajaran Puisi Siswa Kelas X SMA. Jurnal Onoma: Pendidikan, Bahasa, dan Sastra, 10(2), 1559–1568. https://doi.org/10.30605/onoma.v10i2.3371

Oktiani, I. (2017). Kreativitas Guru dalam Meningkatkan Motivasi Belajar Peserta Didik. Jurnal Kependidikan, 5(2), 216–232. https://doi.org/10.24090/jk.v5i2.1939

Putri, L. M., & Ramadhan, S. (2022). Pengaruh Model Pembelajaran Example Non Example dan Motivasi Belajar Siswa terhadap Keterampilan Menulis Teks Prosedur. Diglosia: Jurnal Kajian Bahasa, Sastra, dan Pengajarannya, 5(1), 13-30. https://doi.org/10.30872/diglosia.v5i1.316

Razak, A. (2018). *Membaca Pemahaman: Teori dan Aplikasi Pengajaran*. Pekanbaru: Ababil Press.

Razak, A. (2017). *Menggapai Mixed Methods Bidang Pembelajaran Bahasa Indonesia*. Edisi-1. Pekanbaru: Yayasan Pendidikan Raja Zulkarnain.

Roffiq, A., Qiram, I., & Rubino, G. (2017). Media Musik dan Lagu pada Proses Pembelajaran. JPDI: Jurnal Pendidikan Dasar Indonesia, 2(2), 35-40.

Santoso, A. (2023). Rumus Slovin: Panacea Masalah Ukuran Sampel? *SUKSMA: Jurnal Psikologi Universitas Sanata Dharma. Volume 4, Nomor 2, 24-43.*

Sitepu, A. L., Nazara, S. H., Alexandra, V., Gabriella, C., Simanjuntak, I. J., & Purba, Y. R. (2025). Musikalisasi Puisi: Seni Menggabungkan Sastra dan Melodi Sebagai Media Kreativitas Pembelajaran. JAHE: Jurnal Akuntansi Hukum dan Edukasi. Vol. 2 No. 1 Mei 2025, 47-53

Subhaktiyasa, P. G. (2024). Menentukan Populasi dan Sampel: Pendekatan Metodologi Penelitian Kuantitatif dan Kualitatif. Jurnal Ilmiah Profesi Pendidikan, 9(4), 2721–2731. https://doi.org/10.29303/jipp.v9i4.2657

Jurnal Pembelajaran Bahasa dan Sastra
Volume 4, Nomor 4, Juli 2025
DOI: https://doi.org/10.55909/jpbs.v4i4.811

Suprihatin, S. (2015). Upaya Meningkatkan Motivasi Belajar Siswa. Jurnal Pendidikan Ekonomi UM Metro, 3(1), 73–82. https://doi.org/10.31316/g.couns.v3i1.89

Yanti, R., & Harti, S. (2022). Hubungan antara Keterampilan Membaca Teks Laporan Hasil Observasi dan Keterampilan Membaca Teks Prosedur. Jurnal Pembelajaran Bahasa dan Sastra, 1(5), 661–668. https://doi.org/10.55909/jpbs.v1i5.149

Yuniarti, L., Putria, Z., & Gusriani, A. (2024). Hubungan antara Keterampilan Membaca Artikel Jurnal Online dan Keterampilan Menulis Reduksi Temuan Artikel Jurnal Online. Jurnal Pembelajaran Bahasa dan Sastra, 3(4), 537–544. https://doi.org/10.55909/jpbs.v3i4.215

Zaenatun, A., Setiani, A. A., Farrah, R., Widyastuty, R., & Aeni, A. N. (2021). Pengaruh Pembelajaran Terpadu terhadap Hasil Belajar Siswa di Sekolah Dasar. Jurnal Inovasi Pendidikan dan Pembelajaran Sekolah Dasar. Volume 5, Nomor 2, Desember 2021, 183-194