

# Canva-Assisted Interactive Learning Multimedia Development on Flat Side Room Building Materials for Grade VIII

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## ABSTRACT

Mathematics learning, which emphasizes exploration and investigation, aims to develop students' ability to understand mathematical concepts through their own invention and apply critical thinking. This study aims to develop a canva-assisted interactive learning multimedia on flat side room building materials in class VIII MTs Nurul Hidayah Lubuk Rumbai that is valid, practical, and has potential effects. This research method uses the ADDIE development model which includes five stages: analysis, desing, depelopment, implementation, and evaluation. The results showed that at the validation stage, interactive learning multimedia was assessed by linguists, media experts, and material experts with the results of validation of 0.78 with the valid category, 0.85 with the very valid category and 0.85 with the very valid category. The practicality test showed very practical results with a score of 90%. The implementation of interactive learning multimedia shows student test results with a classical completeness percentage of 76%, so that interactive learning multimedia is stated to have a good potential effect on student learning outcomes.

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## 1. INTRODUCTION

Education is the main pillar in creating a generation that is competent and able to face the demands of the times (Jaya et al., 2023:2416). Education is also a means for humans to develop their potential and improve quality through learning in order to achieve their desired goals (Kuntoro, 2019:84). Basically, the purpose of education is to develop abilities and shape the character and civilization of the nation. A dignified nation's civilization is oriented towards efforts to educate the nation's life. In other words, education is very important for human needs throughout life, one of which is mathematics education.

Mathematics education is a science from applied and reasoning aspects that is important and must be understood by every student and is widely used in various fields, especially technology (Ferdiyanto,

2020:2). Mathematics education is one of the education that can develop abilities and creativity, which means that there are mathematics lessons (Anggoro, 2017:11). Mathematics learning that emphasizes exploration and investigation aims to develop students' ability to understand mathematical concepts through their own discovery and apply critical thinking (Mulyono & Hidayati, 2020:333). Mathematics learning is one of the learning that is expected to improve problem-solving skills. This is stated in the objectives of mathematics learning according to the Ministry of Education and Culture (2017), namely (1) improving intellectual ability, (2) the ability to solve a problem, (3) high learning outcomes, (4) practicing communication, and (5) developing students' character (Susrianti & Yurida, 2019:2). One of the materials that can be brought to the real world is the flat side space building material which studies about building a space that has flat sides.

Building a flat side space is related to the shape, position, size and nature of a building so that in learning to build a flat side space high visualization is needed. Building a flat side space is used in daily life so that it requires students to understand the concepts of building a flat side space (Citation & Zulhanna, 2020:76). The presentation of building materials for flat side spaces can be made interesting by using the technology that exists at this time.

The rapid development of technology in the current era of globalization can no longer be avoided by its influence on the world of education, thus encouraging many changes in the field of education (Budiman, 2017:31). The development of technology, both computers and the internet, has changed the perspective and way of thinking of a person to be more advanced and practical where information is obtained more young and efficiently (Suripah, 2017:2). So it can affect the mathematics learning process in the classroom.

The current mathematics learning process at MTs Nurul Hidayah Lubuk Rumbai is still using the 2013 curriculum where this curriculum was officially launched by the minister of education and culture (Kemendikbud), namely professor Muh.Nuh in January 2013 where the purpose of this curriculum is designed to replace the 2006 education unit level curriculum (KTSP). Based on the results of observations conducted on October 19, 2024 through interviews with two mathematics teachers, Mrs. Weli Ari Ani, S.Pd and Mrs. Rantika Rahmawati, S.Pd at MTs Nurul Hidayah Lubuk Rumbai, it was found that students' mathematics learning outcomes are currently very low. The average score obtained by students is 31.6 which indicates that their understanding of mathematics material is still very minimal. Only 16.67% of students managed to achieve completeness (about 10 students), while the rest, namely 83.33% of students (about 50 students), did not complete mathematics learning. From the results of these observations, it is also known that mathematics learning in this school is still very dependent on printed books as the only learning medium. Although technology that can help the learning process, such as infocus and laptops are available in schools, this technology has not been used properly in mathematics learning activities. This has the potential to limit variation in the way material is delivered and reduce the effectiveness of learning.

Learning that relies only on printed books makes students read more and interact less with the material, so they find math learning boring and less interesting. Responding to these problems One of the efforts made is to utilize existing technology, such as interactive learning multimedia, to make learning more interesting, fun, and can help students understand mathematics material more easily and

effectively. The use of this technology is expected to overcome existing obstacles and increase students' interest and understanding of mathematics materials. Overall, the results of this observation show that there is a gap between the real conditions in the field and the potential that should be used in the mathematics learning process. This gap, among others, lies in the low learning outcomes of students and the lack of use of technology in learning that can improve the quality of mathematics learning in the school. In addition, Mulyono & Elly (2020) argue that in mathematics classes, teachers are required to actively involve students in building their learning process. Therefore, the use of multimedia is needed as an innovation in today's learning media (Susanti, 2020:60).

Multimedia is a guide between various media in the form of text, images, sounds, animations, videos, interactions, and so on that have been packaged into digital files to convey messages to the public (Indri et al., 2022). Learning that uses multimedia has more appropriate characteristics for the context of the material being taught, because it utilizes various types of media such as text, images, sounds, animations and videos to convey information (Sari et al., 2022:288). According to Munir (2012:113) Interactive is related between two product users, namely humans and computers (software/applications/products). Canva is an application that has been present in the midst of the bustling world of technology. The Canva application is an online design program that provides a variety of design templates that can be used to create learning media (Resmini et al, 2021). Canva is an online design application that provides a variety of graphic designs such as infographics, ppt, resumes, famlets, posters, and so on (Wulandari & Mudinillah, 2022:102). According to Wulandari and Mudinillah (2022:102), Canva is one of the applications that is widely favored among teachers to use in creating learning media. There are various interesting template features that can be used to create interactive learning multimedia and can be developed to design interactive learning multimedia as creative as possible so that the interactive learning multimedia created has a more communicative meaning and visualization that attracts students' attention.

According to Kuntowijoyo (in Ramandanti, 2020:1055), the use of the Islamic context is an attempt to unite the revelation of God that comes from human thought, without ruling out the role of God (secularism) or isolating humans. Basically, the natural sciences, social sciences, and religious sciences have a very close relationship, as stated in the following sentence "science can be studied with the approach of religion and social sciences, which shows that each science has a relationship with each other" (Rahmawati & Bakhtiar, 2019:197). Based on the quote from this sentence, it can be concluded that every field of science can be studied with an approach that includes religious and social aspects (Mulyono & Fauziah, 2024:2). Based on previous research conducted by Sari & Pardimin (2024:5634), Fauziyyah & Juhri (2017:311) and Laia (2023:283) that using interactive learning multimedia has great potential in improving student learning outcomes, the use of appropriate interactive learning multimedia can help students understand the material better and encourage more active involvement in the learning process.

This study aims to develop a canva-assisted interactive learning multimedia on flat side room building materials in class VIII MTs Nurul Hidayah Lubuk Rumbai that is valid, practical, and has potential effects. This research is expected to be a reference source in the implementation of interactive

learning multimedia that has a good potential effect on student learning outcomes, so that learning really becomes more effective and efficient.

## 2. METHODS

The development research method carried out refers to the ADDIE model, which means that it consists of five stages, namely analysis, design, development, implementation and evaluation. The ADDIE development model is one of the models used as a guideline for the development of learning that is effective, dynamic and supports learning itself (Kurnia et al., 2019:283). The researcher chose this development model because although it is very simple, the development process is structured in making teaching materials that can be applied to face-to-face and online classes (Izzah & Auliya, 2023:763). Development procedures or stages are steps taken by development before conducting development research. The research is carried out and will be carried out through the stages of development design using the ADDIE model as follows; Analysis stage, Design stage, Development stage, implementation stage, and evaluation stage. The data collection techniques are through questionnaires and tests, while data analysis techniques are through: validity questionnaires, data analysis of teacher and student practicality questionnaires, and analysis of potential effects.

## 3. FINDINGS AND DISCUSSION

### 3.1. Initial Product Development Results

The result of this study is interactive learning multimedia using the Canva application. The development of this interactive learning multimedia uses the ADDIE development research method, which is carried out from the analysis stage, design stage, development stage, implementation stage, and *evaluation* stage) with the aim of producing interactive learning multimedia using the Canva application that is valid, practical and has a potential effect. Next, an explanation of the stages carried out in developing interactive learning multimedia using the Canva application. Here are the steps of the ADDIE development model:

#### Analysis Stage

The analysis stage is the initial stage to conduct development research. This stage is divided into several steps, including: needs analysis; Based on the results of observations and interviews on October 19, 2024, conducted by researchers with grade VIII mathematics teacher MTs Nurul Hidayah Lubuk Rumbai. Namely Mrs. Weli Ariani, S.Pd and Mrs. Rantika Rahmawati, S.Pd were informed that students' learning outcomes were very low, indicating that their understanding of mathematics material was still very minimal. From the results of these observations, it is also known that mathematics learning in this school is still very dependent on printed books as the only source of learning. Although technologies that can help with the learning process, such as infocus and laptops, are available in schools, they have not been put to good use in math learning activities.

Student analysis; Student analysis aims to identify student characteristics in the learning process. Results were obtained where the majority of students showed a tendency to visual and kinesthetic learning styles. Where they are easier to understand the material if it is delivered through media or intermediaries that support concept visualization, such as images, animations or interactive

simulations. Students are also more active and motivated in participating in learning if the material is delivered in an interesting way and involves interaction. When teachers use aids in the teaching and learning process, students are more focused and enthusiastic in receiving material.

**Material analysis;** At the stage of material analysis, the results of the researcher took the material to build a flat side room in class VIII in the even semester where the curriculum used at MTs Nurul Hidayah Lubuk Rumbai is still using the 2013 curriculum (K13). At the analysis stage, an oral formative evaluation was carried out, namely asking about the needs, materials and characteristics of students through interviews with teachers and students at MTs Nurul Hidayah Lubuk Rumbai to collect data.

#### Design stage

At the *design stage*, interactive learning multimedia design was carried out using the Canva application, the preparation of research instruments and questionnaires. The design stage is carried out an oral formative evaluation, namely consultation with the guide to be used as a basis for revising the material that has been consulted. Interactive learning multimedia framework; Flowchart design. The flow of material to be included and developed in interactive learning multimedia is designed using *flowcharts*. Storyboard planning; *Storyboard* aims to make it easier to create interactive learning multimedia that can contain display layouts such as text, images, *videos* or animations. Compiling research instruments and questionnaires; Preparation of research instruments as a tool to collect research data. After the research instrument is prepared, the instrument is consulted with the supervisor so that it can be used to collect research data. The following are the results of the preparation of the instruments used in the collection of research data: 1) Validation sheet by linguists; The linguist validation sheet is prepared with an alternative assessment, namely very good (SB) with a score of 4, good (B) with a score of 3, less (K) with a score of 2 and very poor (SK) with a score of 1. The linguist validation sheet instrument is presented in table 1. Next:

**Table 1.** Linguist Validation Sheet Instrument

| Yes | Aspects                 | Assessment Indicators                  | Instrument Details |
|-----|-------------------------|----------------------------------------|--------------------|
| 1   | Language Qualifications | Businesslike                           | 1,2                |
|     |                         | Communicative                          | 3                  |
|     |                         | Dialogical and interactive             | 4                  |
|     |                         | Compatibility With Student Development | 5,6,7              |
|     |                         | Conformity with the Language Rules     | 8,9,10,11,12       |
| Sum |                         |                                        | 12                 |

Table 1. presents about the linguist validation sheet instrument that This linguist assessment component consists of 12 statements which are divided into 5 assessment indicators. 2) Validation sheet by media experts; The validation sheet of media experts is prepared with an alternative assessment, namely very

good (SB) with a value of 4, good (B) with a value of 3, less (K) with a value of 2 and very poor (SK) with a value of 1. The media expert validation instrument sheet is presented in table 2. as follows:

**Table 2.** Media Expert Validation Sheet Instrument

| No  | Aspects        | Assessment Indicators                                         | Instrument Details |
|-----|----------------|---------------------------------------------------------------|--------------------|
| 1   | Size           | Size with ISO standard                                        | 1                  |
|     |                | Compatibility with content                                    | 1                  |
| 2   | Display        | Attractive <i>cover</i> display                               | 1                  |
|     |                | Color guide on the cover is interesting                       | 1                  |
|     |                | Attractive <i>background</i> display                          | 1                  |
|     |                | Attractiveness of the <i>layout</i>                           | 1                  |
|     |                | Colors and layout elements match and clarify functions        | 1                  |
|     |                | Image compatibility with <i>nisi</i>                          | 1                  |
|     |                | The use of letter variations is not excessive                 | 1                  |
|     |                | The letters used are simple and easy to read                  | 1                  |
| 3   | Use of letters | Use proper punctuation                                        | 1                  |
|     |                | Use of space between lines as appropriate                     | 1                  |
|     |                | Separation between <i>paragraphs</i> is clear and appropriate | 1                  |
|     |                | Layout element placement suitability                          | 1                  |
| 4   | Consistency    | Font consistency and font size                                | 1                  |
|     |                | Accuracy of writing foreign terms and scientific names        | 1                  |
|     |                |                                                               |                    |
| Sum |                |                                                               | 16                 |

Table 2. presents the components of the media expert assessment instrument consisting of 16 statements divided into 4 assessment indicators. 3) Validation sheet by material experts; The validation sheet of the subject matter expert is prepared with an alternative assessment, namely very good (SB) with a score of 4, good (B) with a score of 3, less (K) with a score of 2 and very poor (SK) with a score of 1. The subject matter expert validation instrument sheet is presented in table 3. The following:

**Table 3.** Instrument Material Expert Validation Sheet

| Aspects             | Assessment Indicators          | Instrument Details |
|---------------------|--------------------------------|--------------------|
| Content eligibility | Material compatibility with KD | 1,2,3              |
|                     | Material accuracy              | 4,5,6              |
|                     | Updating of the material       | 7,8,9              |
|                     | Stimulates curiosity           | 10,11              |
| sum                 |                                | 11                 |

Table 3. presents the components of the material expert assessment instrument consisting of 11 statements divided into 4 assessment indicators. 4) Practicality questionnaire (teachers, students and one-to-one tests); Questionnaires filled out by teachers and students were used to determine the practicality of the interactive learning multimedia developed. The teacher's practicality questionnaire consists of 15 statements. Meanwhile, the student practicality questionnaire and *one-to-one* test consisted of 17 statements. 5) Test; In the learning process that has been carried out, at the end of the meeting students conduct tests to get student learning results, by giving questions to all students.

#### Development stage

Creation of interactive learning multimedia using Canva; This interactive learning multimedia is designed by raising the concept of MTs itself with a contextual approach associated with religious values. Interactive learning multimedia includes *covers*, menus, materials, sample questions, quizzes and closing. *Cover*; The *cover* is attractively designed using images and elements related to the concept in interactive learning multimedia and there is a title and a start button to proceed to the next page.

#### Validation of learning media with experts

Validation carried out by experts to improve interactive learning multimedia products developed in terms of language, media, and materials. The names of the interactive learning multimedia validators developed can be seen in table 4. The following:

**Table 4.** Interactive Learning Multimedia Validator Name

| Yes | Validator Name                   | Agency                 | Types of Validators |
|-----|----------------------------------|------------------------|---------------------|
| 1.  | Dr. Dian Ramadan Lazuardi, M.Pd. | Universitas Silampari  | PGRI Language       |
| 2.  | Dr. Leo Charli, M.Pd.            | Universitas Silampari  | PGRI Media          |
| 3.  | Weli Ariani, S.Pd                | Mathematics grade VIII | teacher Material    |

#### Practicality Questionnaire on the One-to-One Test

The one-to-one test stage was carried out with grade VIII students at MTs Nurul Hidayah Lubuk Rumbai as many as 3 students which was held on May 14, 2025. The *one-to-one* test sheet consists of 17 statements. The purpose of the *one-to-one* test is to provide an assessment of the interactive learning multimedia that is developed. The questionnaire used a *likert* scale assessment with items namely 4 (very good), 3 (good), 2 (less) and 1 (not good).

#### Implementation stage

Implementation is a field test that aims to see student learning outcomes before and after using interactive learning multimedia on the building material of flat side rooms in class VIII MTs Nurul Hidayah Lubuk Rumbai which totals 25 students. At the implementation stage, the researcher is tasked as a facilitator in the learning process. At this stage, 3 meetings were held. Which was held on May 21, June 02 and June 04, 2025 with learning process activities using interactive learning multimedia where students were asked one by one to try to use interactive learning multimedia. After the learning process

lasted for the last 2 meetings, the researcher carried out a test on June 4, 2025 which aimed to find out the potential effects of the interactive learning multimedia developed.

#### Evaluation stage

At the evaluation stage, formative evaluation and summative evaluation are carried out. In formative evaluation, each stage is carried out by the researcher with the help of a supervisor, evaluation in the form of input in each stage of development using the ADDIE development method. The results of the validation test of experts, namely language experts, media experts, material experts and one to one tests, practical tests of teachers and students including formative evaluations. At the field test stage, a summative evaluation is carried out.

#### Presentation of Trial Data

The data collection of trial data on learning multimedia was carried out by validation tests by linguists, media experts, material experts, and practicality tests by users by teachers, students (small groups) and one to one tests as well as field tests by students (field tests).

#### Results of data analysis of validation test

Validity is an important condition in determining the validity of the quality of mathematics learning media (Yudela et al., 2020). According to Nabila et al. (2021), a product can be said to be valid if all validators have stated that it is appropriate and good to be applied, such as material that is in accordance with competencies and indicators, language validation in accordance with good Indonesian grammar, and media indicators in accordance with student characteristics. The following description of the validation test assessment:

#### Linguist

The results of the validation analysis of linguists on interactive learning multimedia by Mrs. Dr. Dian Ramadan Lazuardi, M.Pd. are presented in the following table 5:

**Table 5.** Results of Linguist Validation Analysis

| Analysis Results            |       |
|-----------------------------|-------|
| $\sum S$                    | 28    |
| $V = \frac{\sum S}{n(c-1)}$ | 0,78  |
| category                    | Valid |

From table 5. presented above, it can be concluded that the results of linguists' validation of interactive learning multimedia on flat side room building materials were declared valid categories with a score of 0.78.

#### Material Expert

The results of the validation analysis of media experts on interactive learning multimedia by Mrs. Weli Ariani, S.Pd. are presented in table 6. The following:

**Table 6.** Results of Material Expert Validation Analysis

| Analysis Results |    |
|------------------|----|
| $\sum S$         | 28 |



|                             |                     |
|-----------------------------|---------------------|
| $V = \frac{\sum s}{n(c-1)}$ | 0,85                |
| <b>category</b>             | <b>Highly Valid</b> |

From table 6. presented above, it can be concluded that the results of the validation of material experts on interactive learning multimedia on the building material of flat side rooms were declared very valid with a score of 0.85.

Media members

The results of the analysis of media expert validation on interactive learning multimedia by Dr. Leo Charli, M.Pd. are presented in table 8. The following:

**Table 7.** Results of Media Expert Validation Analysis

| <b>Analysis Results</b>     |                     |
|-----------------------------|---------------------|
| $\sum s$                    | 41                  |
| $V = \frac{\sum s}{n(c-1)}$ | 0,85                |
| <b>category</b>             | <b>Highly Valid</b> |

From table 7. presented above, it can be concluded that the results of the validation of media experts on interactive learning multimedia on flat side room building materials were declared very valid with a score of 0.85.

Results of the overall assessment of validity questionnaire

Based on the data from the analysis of the research of the multimedia validation test of interactive learning on the building materials of flat side rooms which were carried out through taking assessments using questionnaires that had been calculated. The recapitulation data of the results of the overall assessment of the validity questionnaire can be seen in table 8. next:

**Table 8.** Results of the Overall Assessment of the Validation Questionnaire

| <b>Valuation</b> | <b>n</b> | <b><math>\sum s</math></b> | <b>c</b> | <b><math>V = \frac{\sum s}{n(c-1)}</math></b> | <b>Category</b> |
|------------------|----------|----------------------------|----------|-----------------------------------------------|-----------------|
| Linguist         | 12       | 28                         | 4        | 0,78                                          | Valid           |
| Media Member     | 16       | 41                         | 4        | 0,85                                          | Highly Valid    |
| Material Expert  | 11       | 28                         | 4        | 0,85                                          | Highly Valid    |

Based on table 8. presented above that the results of the analysis of the validation test of interactive learning multimedia on the building material of flat side rooms obtained results from linguists with a valid category with a score of 0.78, media experts with a very valid category with a score of 0.85 and material experts with a very valid category with a score of 0.85. It can be concluded that interactive learning multimedia on flat side space building materials can be used in the learning process.

### Results of data analysis of practicality test

#### Uji one to one

The analysis of the results of the one-to-one test on interactive learning multimedia by three individual learners who have heterogeneous ability levels is presented in table 10. The following:

**Table 9.** Results of a one-to-one test

| Analysis Results                                            |                |
|-------------------------------------------------------------|----------------|
| Total score                                                 | 193            |
| Number of question items × for many students maximum score× | 204            |
| $p = \frac{\sum x}{x} 100\%$                                | 95%            |
| Category                                                    | Very Practical |

From table 9. presented above, it can be concluded that the analysis of the one to one test on interactive learning multimedia on flat side room building materials with 3 students who were selected heterogeneously was declared very practical with a score of 95%.

#### Student practicality

The student practicality questionnaire in the small group trial on interactive learning multimedia was held on May 17, 2025 consisting of 6 grade VIII students who were selected heterogeneously. Data on the analysis of the results of a small group trial questionnaire on Canva-assisted interactive learning multimedia on flat side room building materials can be seen in table 10. The following:

**Table 10.** Results of Student Practicality Analysis

| Analysis Results                                            |                |
|-------------------------------------------------------------|----------------|
| Total score                                                 | 356            |
| Number of question items × for many students maximum score× | 408            |
| $p = \frac{\sum x}{x} 100\%$                                | 87%            |
| Category                                                    | Very practical |

From table 10. presented above, it can be concluded that the analysis of students' practicality of interactive learning multimedia on the building material of flat side rooms which was carried out on June 17, 2025 was declared very practical with a score of 87%.

#### Teacher practicality

Teacher practicality in interactive learning multimedia was carried out on May 17, 2025 at MTs Nurul Hidayah Lubuk Rumbai by a mathematics teacher, Mrs. Weli Ariani, S.Pd. The results of the data analysis of the teacher's practicality questionnaire on interactive learning multimedia can be seen in table 11. below:

**Table 11.** Results of Teacher Practicality Analysis

| Analysis Results                        |                |
|-----------------------------------------|----------------|
| Total score                             | 54             |
| The maximum number of question points × | 60             |
| $p = \frac{\sum x}{x} 100\%$            | 90%            |
| Category                                | Very Practical |

From table 11. presented above, it can be concluded that the results of the teacher's practical analysis of interactive learning multimedia on the building material of flat side rooms carried out on June 17, 2025 were declared very practical with a score of 90%.

The results of the overall assessment of the practicality questionnaire

Based on the data from the analysis of the assessment of the practical test of interactive multimedia learning assisted by Canva on the building material of flat side rooms which was carried out through taking assessments using the practicality questionnaire of teachers, students (small groups) and the one to one test that had been calculated. The recapitulation data of the results of the overall assessment of the practicality questionnaire can be seen in table 12 below:

**Table 12.** Results of the Overall Assessment of the Practicality Questionnaire

| Valuation      | Number of questions<br>× maximum score<br>number of students× | Total<br>respondent<br>scores | $p = \frac{\sum x}{x} 100\%$ | Category              |
|----------------|---------------------------------------------------------------|-------------------------------|------------------------------|-----------------------|
| Teacher        | 60                                                            | 54                            | 90%                          | Very Practical        |
| Student        | 408                                                           | 356                           | 87%                          | Very Practical        |
| Uji one to one | 204                                                           | 193                           | 85%                          | Very Practical        |
| <b>Total</b>   | <b>672</b>                                                    | <b>603</b>                    | <b>90%</b>                   | <b>Very Practical</b> |

From table 12. The one presented above explains the results of the overall assessment of the practicality questionnaire for interactive learning multimedia on flat side room building materials with a score of 90% with a very practical category.

Field test results

The field test in this study was conducted with 25 students of grade VIII MTs Nurul Hidayah Lubuk Rumbai with the aim of finding out the potential effect of interactive learning multimedia on student learning outcomes.

Based on the results of students' work in answering questions given by researchers. This answer shows their understanding after using interactive learning multimedia and reflects their way of thinking in solving the given problems. The following is the data on the overall learning outcomes of students in table 14. below:

**Table 13.** Field Test Analysis Results

| Value range | Number of students | Percentage  | Kategori   |
|-------------|--------------------|-------------|------------|
| 91-100      | 6                  | 24%         | Tuntas     |
| 81-90       | 8                  | 32%         | Conclusion |
| 70-80       | 5                  | 20%         | Conclusion |
| < 70        | 6                  | 24%         | Incomplete |
| <b>Sum</b>  | <b>25</b>          | <b>100%</b> |            |

Based on the results of table 13. It was concluded that the field test analysis carried out in class VIII MTs Nurul Hidayah Lubuk Rumbai which amounted to 25 students related to interactive learning multimedia assisted by Canva on the flat side room building material developed got results of as many as 19 students who completed and 6 students who did not complete. It has been explained in table 3. that student learning outcomes can be declared to have a potential effect if the minimum completeness  $\geq 70\%$ . So if it is accumulated from students who complete the score of 76%, it is categorized as good. It can be concluded that the development of interactive learning multimedia assisted by Canva on flat side room building materials is in the good category and can be used in learning.

### 3. 2. Data Analysis Results

Based on the results of the research produced by an interactive learning multimedia product on the building material of a flat-sided room that is valid, parapractical and can see student learning results. The results of data analysis from this study are a description of the results of the analysis carried out on the validity, practicality and student learning outcomes test using the interactive learning multimedia that was developed. The results of the validation test data analysis are presented as follows:

#### Linguist ratings

The validation trial of linguists on the interactive learning multimedia developed was assessed by Mrs. Dr. Dian Ramadan Lazuardi, M.Pd. based on the results of the questionnaire that had been filled out and analyzed that the interactive learning multimedia developed was included in the valid category with a value of 0.78.

#### Subject matter expert assessment

The validation trial of material experts on the interactive learning multimedia developed was assessed by Mrs. Weli Ariani, S.Pd. based on the results of the questionnaire that had been filled out and analyzed that the interactive learning multimedia developed was included in the category of very valid with a value of 0.85.

#### Media member ratings

The validation trial of media experts on the interactive learning multimedia developed was assessed by Dr. Leo Charli, M.Pd. based on the results of the questionnaire that had been filled out and analyzed that the interactive learning multimedia developed was in the category of very valid with a value of 0.85.

According to Khairani & Ain (2021), the media can be declared valid if the lowest level of validity that has been achieved is valid. Based on the overall results, it can be concluded that interactive learning multimedia on flat side space building materials can be used in the learning process.

The results of the analysis of the practicality test data are presented as follows:

#### One-to-one test assessment

A one-to-one test of the interactive learning multimedia developed was given to three students individually who had heterogeneous abilities. Based on the questionnaire that has been filled out and analyzed, the interactive learning multimedia developed is in the category of very practical with a value of 95%.

#### Assessment of student practicality

The test of students' practicality of interactive learning multimedia on the developed flat-sided room building materials was given to 6 students who had heterogeneous abilities, based on the results of the questionnaire that had been filled out and analyzed that interactive learning multimedia on the developed flat-sided building materials included the very practical category with a score of 87%.

#### Teacher practicality assessment

The teacher's practicality test of interactive learning multimedia on the flat side space building material developed has been assessed by the mathematics teacher, Mrs. Weli Ariani, S.Pd. based on the results of the questionnaire that has been filled out and analyzed that interactive learning multimedia on the flat side space building material developed is in the very practical category with a score of 90%.

#### Recap of the overall assessment of the practicality test

Based on the assessment of the practicality test by teachers, students and the one-to-one test of interactive learning multimedia on the flat side room building material developed is included in the very practical category with a score of 90%. It can be concluded that interactive learning multimedia on flat side space building materials can be stated to be very practical to be used in the learning process.

#### Field test results

The field test in this study was carried out with 30 students of grade VIII MTs Nurul Hidayah Lubuk Rumbai aimed to find out the potential effect of interactive learning multimedia assisted by Canva on flat side space building materials. Based on the field test by grade VIII students of MTs Nurul Hidayah Lubuk Rumbai on interactive learning multimedia on flat side room building materials that were developed are included in the good category with a score of 76% with the number of students who were declared complete as many as 19 students and those who were declared incomplete 6 students, it can be concluded that interactive learning multimedia on flat side room building materials can be declared good to be used in the learning process.

#### Final Product Revision

Based on the results of the research conducted by testing interactive learning multimedia on flat side room building materials to measure the learning outcomes of grade VIII students of MTs Nurul Hidayah Lubuk Rumbai that was developed. Reviewed from several aspects, namely from validation tests (linguists, material experts, media experts, and one-to-one students) as well as practical tests of teachers and students, criticism and suggestions that can be revised to the product for the better are obtained. In line with Khairiani & Ain (2021) at the revision stage, input and suggestions from experts aim to find out the shortcomings and errors in the products that have been developed in order to improve the product so that it is better and can be used in the learning process.

Based on the implementation of learning activities using interactive learning multimedia assisted by Canva on the building material of flat side rooms in grade VIII, several things were found, namely students showed some increased interest and enthusiasm in participating in learning. The positive response from students makes the learning process in the classroom more communicative and the understanding of the material faster and deeper. After the product has gone through various stages and further revised by the researcher, the final product produced in this development research is an interactive learning multimedia on flat side room building materials to measure the learning outcomes of grade VIII students at MTs Nurul Hidayah Lubuk Rumbai that is valid, practical and has a potential effect.

Interactive learning multimedia has the advantages of (1) a more innovative and interactive learning system, (2) educators will always be guided to be creative and innovative in finding learning breakthroughs, (3) able to combine text, images, audio, music, animations, images, videos and a unit that supports each other to achieve learning goals, (4) increase the motivation of students during the teaching and learning process so that the desired learning goals are obtained, (5) being able to visualize material that has been difficult to explain just by explaining or conventional teaching aids and (6) training students to be more independent in gaining knowledge (Munir, 2012:113). Interactive learning multimedia will provide enormous benefits for teachers and students if it is chosen, developed and used appropriately and well. Interactive learning multimedia will be effective if paired with interesting applications, such as the Canva application.

#### 4. CONCLUSION

Based on the results of the development of interactive learning multimedia on the building material of the flat side room for class VIII MTs Nurul Hidayah Lubuk Rumbai can be drawn the following conclusions; Interactive learning multimedia on flat side space building materials that has been developed received scores from linguists with a valid category with a score of 0.78, media experts with a very valid category with a score of 0.85 and material experts with a very valid category with a score of 0.85.

The practicality of interactive learning multimedia on the flat side space building materials developed was obtained by 90% with the category of very practical. The large group test (field test) conducted in class VIII MTs Nurul Hidayah Lubuk Rumbai which amounted to 25 students on interactive learning multimedia on flat side room building materials had a potential effect on student learning outcomes of 76% in the good category.

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