DEVELOPMENT OF DIGITAL-BASED COMICS ON NATIONAL INSIGHT MATERIAL IN CLASS V OF STATE PRIMARY SCHOOL 105410 RAMPAH PEKAN

Muti Indah Sari¹, Irfan Dahnial²
Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia¹,²
Email: mutiindahsari@gmail.com¹, irfandahnial@umsu.ac.id²

Abstract
Education is one aspect that is influenced by developments in technology, information and communication. For example, a shift in learning paradigms to accommodate advances in science and technology to increase efficiency and optimize learning. The development of the educational era indirectly requires teachers to be able to utilize technology, information and communication as media and teaching materials for learning activities. The aim of developing digital-based comic learning media is that it is considered to be able to help students understand learning material because the advantage of digital-based comic media is that it is able to present images that can arouse students' interest in learning. This type of development research uses the 4D model which was initiated by Thiagarajan (1974). This 4D development model has four stages, namely define, design, develop and disseminate, but in development research it only reaches the develop stage. The product that has been developed by this researcher has been validated by material experts getting 81.66% percentage with the criteria "very feasible", media expert validation gets 93.33% percentage with the criteria "very feasible", and language validation gets 100% percentage with the criteria "very worthy.” Based on the results of expert validation, the product that has been developed in the form of digital-based comics is suitable for students to use during the learning process.

Keywords: comic, digital, national vision

Introduction
Information technology is experiencing rapid development in the 21st century. This indicates that the era of globalization has entered. In the era of globalization there is an understanding regarding the possibility of the disappearance of conditions where goods and services experience free movement between countries with various aspects which not only have a good effect but also have a bad effect on the nation's future. These consequences can be seen from a lifestyle that resembles western people. The influence of two food cultures, clothing culture (fashion), and lifestyle (fun), and so on. The influence of the Indonesian nation's successors on foreign culture, as well as poor understanding, threatens externally and must be taken into account, which results in the loss of nationalist feelings and will have real effects to divide the nation (Hanipah et al., 2022). In fact, we can see the wide and varied geographic and sociocultural conditions in Indonesia. Whether this diversity is agreed upon or not, it can trigger many problems such as: separatism, poverty, environmental destruction, corruption, violence, nepotism, as well as the destruction of empathy in respecting other people's rights and collusion, which are manifestations of these diverse cultures. Meanwhile, Samuel Huntingan is in (Izzati, 2019) through his book entitled The Clash of Civilization, he predicted that a clash would
occur. These include social, economic, political, racial, cultural and religious aspects. The many cases that have occurred in Indonesia are caused by several factors, such as conflict cases in the regions: Poso, Ambon, as well as the Madurese conflict in Dampit with the Dayak ethnic group, as well as other cases that are not published.

A total of 237,641,326 people according to the 2010 population census, are considered to require efforts to increase the national spirit as part of the nationalist feeling, thereby being able to foster a spirit of unity and unity. Kalin (2011) states that unity and unity contain an unlimited and expansive context, not only in the socio-political aspect. In the Indonesian context, cultivating national insight is needed by every Indonesian citizen, especially for kindergarten, elementary, middle school, high school and university students. This aims to avoid tribal, group and class fanaticism, as well as primordialism. Therefore, from childhood, students are guided regarding national insight which aims to build students' character. Barida (2017) explains that national insight forms national consciousness or nationalism which reflects nationalist thoughts. Every nation should have national goals and ideals in life, from a national perspective the Indonesian people can feel love for the country of Indonesia. Budimansyah (2010) explained that to provide guarantees for the continuity of national and state life, education in national insight and a sense of love for the country is needed for students.

Schools are the most strategic educational institutions in shaping students' character, introducing national values and learning about cultivating a high sense of love for the country in order to always love the country. Education is also expected to maximize all the advantages possessed by students. National insight is very important to instill in students so that the implementation of this national insight must truly reflect the noble values of students who obey existing regulations, to create a personal life with a national perspective that is attached to their personal life in their daily lives (Salman Al Farisi et al., 2023). Instilling national insight in schools starts from understanding the use of appropriate media and methods for students so that the learning activities conveyed can be understood by students. Using appropriate media can make it easier for teachers and students in learning activities.

The right media can have a good impact on the quality of learning. The results of observations at SD Negeri 105410 Rampah Pekan in class V found that there were still teachers who carried out teaching and learning activities in traditional ways, causing students to feel bored. Media development efforts are needed in the hope of making it easier for students and educators in the teaching and learning process. Digital comic media offers several advantages and benefits as a learning tool, including the ability to attract student interest, the attractiveness of the material and the ease with which students can understand concepts that have an abstract nature (Julizawati, 2023). Digital comics have advantages that can be used as a learning tool, including being able to attract students' interest, the attractiveness of the material, and making it easier for students to learn and understand abstract concepts. Besides that digital comics can presenting the teaching material in a more interesting way with a narrative that includes the entire storyline of the National Insight material. In digital comics, students can learn on their own without direct guidance from the teacher because the learning material is arranged visually accompanied by illustrations (Julizawati, 2023).

From the above background, it is important to develop digital-based comics on national insight material in class V of SD Negeri 105410 Rampah Pekan. According to the background outlined by researchers, the problems that can be identified are (1) There are still teachers who apply a conventional learning process, (2) There is still learning that
tends to be boring, (3) There is still no development of digital-based comics. Then the formulation of the problem in this research is (1) How to make digital-based comics on national insight material in class V of SD Negeri 105410 Rampah Pekan?, (2) What is the feasibility of digital-based comic media on national insight material in class V of SD Negeri 105410 Rampah? Week?. Next, the research aims are (1) to find out how to develop digital-based comics on national insight material at SD Negeri 105410 Rampah Pekan, (2) To find out the feasibility of digital-based comics on national insight material at SD Negeri 105410 Rampah Pekan. Furthermore, after conducting this research, there is hope that it can contribute benefits such as (1) Theoretically, contributing a role in the development of learning media, making references for the activities of writers developing digital-based comic products and producing learning media in the form of digital-based comics, (2) Practically, Digital comics can be a learning medium and make it easier for teachers to present material to students and provide teachers with an understanding regarding the urgency of using media in learning activities so as to create efficient and effective learning.

**Research methods**

This type of research is research and development or Research and Development (R&D). Development and research (development and research) are research procedures that give birth to a product, as well as testing the effectiveness of the resulting product (Sugiyono, 2018: 507). The model applied, namely the development of the 4D model, is a model for developing various types of teaching materials with general characteristics, which can be used to enrich the types of learning media. According to (Arkadiantika et al., 2020) Thiagarajan's (1974) 4D model development was composed of 4 main procedures adapted to 3D. The 3D development model includes define, design, and development.

In the development stages, the researcher explains several characteristics of the parts in each development stage, explains by analyzing the function of the components in each product development stage and explains the correlation in the system. In this research, the researcher carried out the development stage because the researcher did not have a goal of knowing the effectiveness of product development. The procedure is described as follows.
Figure 1. 3D Design Adopsi Thiagrajan (1974)

The data collection method in this research utilizes a questionnaire sheet, namely a data collection method by providing a number of questions or written statements for respondents to answer. The questionnaire in this research uses a Likert scale. This Likert scale questionnaire provides 5 alternative answers that indicate Favourable (support) and Non Favourable (not support) for each option in the form of a score:

<table>
<thead>
<tr>
<th>Score</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Very good</td>
</tr>
<tr>
<td>4</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>Currently</td>
</tr>
<tr>
<td>2</td>
<td>Bad</td>
</tr>
<tr>
<td>1</td>
<td>Very bad</td>
</tr>
</tbody>
</table>

The formula for calculating the percentage of validation sheets for digital-based comic teaching media is as follows:

\[ P = \frac{F}{N} \times 100 \]

(Source: Wakhyudin, Rermatasari, 2017)

Information:
\[ P \] = Validity percentage  
\[ F \] = Total score obtained  
\[ N \] = Maximum score
Table 2. Product Feasibility Test Classification Criteria

<table>
<thead>
<tr>
<th>No</th>
<th>Validity Criteria</th>
<th>Validity Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81.00% - 100.00%</td>
<td>Very decent, can be used without revision</td>
</tr>
<tr>
<td>2</td>
<td>61.00% - 80.00%</td>
<td>Decent, usable with minor revisions</td>
</tr>
<tr>
<td>3</td>
<td>41.00% - 60.00%</td>
<td>Not feasible, can be used with many revisions</td>
</tr>
<tr>
<td>4</td>
<td>21.00% - 40.00%</td>
<td>Not suitable, not yet usable, still requires revision</td>
</tr>
<tr>
<td>5</td>
<td>00.00% - 20.00%</td>
<td>Totally inappropriate, should not be used</td>
</tr>
</tbody>
</table>

(Source: Wakhyudin, Permatasari, 2017)

Based on this table, it can be seen that the expert validity test obtained a minimum percentage score of 61.00% - 80.00, thus the teaching and learning media has been declared feasible and can be implemented with minor revisions. If the validity test shows 41.00% - 60.00%, the product is categorized as less suitable and requires many revisions.

Results and Discussion

Development of Digital Comic Learning Media

The development of learning media in this research is digital-based comics. Digital-based comics are comics published digitally; includes a writing style that informs the visual meaning, images that are single or consist of parts; has a frame, there is a balanced reading flow; and there are symbols such as word balloons; the visuals (Juneli et al., 2022). Digital-based comics are one of the teaching media that is continuously experiencing developments in the technological era in making learning activities easier. The development of digital-based comics in this research was designed using the Canva application and includes material on national insight in class V PKN subjects at SD Negeri 105410 Rampah Pekan. Figure 2 shows the procedure for making digital-based comics

Figure 2. Digital-Based Comic Learning Media Development Process

Several stages of preparing digital-based comic teaching media are as follows: 1) identifying ideas for digital-based comic products to be prepared, 2) finding references regarding the material to be used in the product, 3) creating a story script, 4) designing the design to be used, 5) develop digital comics based on designs and stories that have been designed, 6) apply the finished product to research subjects in teaching and learning activities.

Based on the discussion in research methods, the development of this teaching media applies the 4D method by Thiagarajan (1974) which was modified to 3D. Stages of developing digital-based comics using the Thiagarajan (1974) method, namely.

1. Definition Stage (Define)

The definition stage functions in identifying and determining the requirements needed for teaching and learning activities and collecting all information related to product development and embedding it in digital-based comic media. This stage has 5 main procedures: specifying instructional objectives, task analysis, concept analysis, front end analysis, and learner analysis. The front end analysis stage (stage of analyzing needs) for digital-based comics is analyzing uses understand the basic needs of teaching and learning activities. Stage learner
2. Design Stage (Design)
This stage aims to design a structured and systematic form of learning media to meet the desired outcomes for students. These stages consist of:

a. Preparation of benchmark reference tests (Constructing criterion-referenced tests) In preparing products, researchers have their own methods for creating the teaching media they want to prepare. The preparation of this learning media cannot be separated from the relationship with the learning objectives. From the results of observations carried out by researchers on learning media, the structure is as follows:
   1) Create existing teaching and learning materials and then develop them into content concepts for preparing learning media
   2) Create material using language that is easy for students to understand

b. Format selection
The format is chosen based on instructions from the material to be presented. The purpose of choosing the format in digital-based comic learning media is comic content design, comic design, which consists of writing, layout and image design.

c. Initial design
Designing interesting and unique comic designs is the beginning of designing digital-based comic learning media in the form of printed comic learning books. The following is the procedure in the process of compiling comics:
   1) Determine the story concept
   2) Prepare the Canva application to design comics

3) Then click sign in – sign in with Google on the Canva application
4) Determine the text, colors and template that will be used
5) Create the characters in the comic

6) To add or create tools or objects, select the elements menu, then type what is needed

7) After completing the design, digital-based comic learning media can be downloaded according to the file type required
3. Develop

This stage carried out validity tests of research instruments as well as expert validation regarding the development of digital-based comics. The validation procedure is as follows.

a. Instrument Validation

An instrument whose validity has been tested is a good instrument. In this research, the instrument was tested using a validity test. The instrument validity test is carried out by experts (expert judgment). The expert who tested the validity of this instrument was Dr. Faisal Dongoran, M.Si.

b. Expert Validation

The suitability of the digital-based comics being compiled can be seen from the results of expert appraisal. From expert validation using a questionnaire, data is obtained. Validation was carried out on three lecturers, namely Mr. Rian Taufika, S.Pd., M.Pd as material expert, Assoc.Prof.Dr.Muhammad Arifin M.Pd as media expert, and Mr. Amin Basri S.Pd,I.,M.Pd as a linguist.

1) Material expert validation

The validator for this research material expert is Mr. Rian Taufika, S.Pd., M.Pd as a lecturer in Citizenship Education. This validation aims to see the material expert's assessment of the digital-based comic media created. Validation of digital-based comics was carried out on Thursday, 4 January 2024. Based on the results of the validation that has been carried out, there are no suggestions so no revisions need to be made, because the material content/content is appropriate and interesting.

2) Media expert validation

The media expert validator in this research is Assoc.Prof.Dr. Muhammad Arifin M.Pd who is a lecturer who is an expert in the field of digital media-based learning. The purpose of this validation is to see the media expert's assessment of the digital-based comics being developed. Validation was carried out on Thursday, 4 January 2024. There are suggestions from media experts for digital-based comics.
3) Linguist validation  
The language expert validator in this research is Mr. Amin Basri S.Pd.I., M.Pd who is a lecturer with expertise in the field of languages. The purpose of this validation is to determine the assessment of media experts on the development of digital-based comics. Validation was carried out on Friday, 5 January 2024. Based on the results of the validation that has been carried out, there are no suggestions therefore there is no need for revision because the language used is good and can be understood by students.

Eligibility Test/Expert Validation  

Material Expert Validation  
Content considerations are the focus of material expert validity. Material expert validation assessment, namely assessing the validity of digital-based comics based on material components by lecturers. The feasibility test of the material was carried out by the Citizenship Education lecturer, namely Mr. Rian Taufika, S.Pd., M.Pd. Validation
Development of Digital-Based Comics on National Insight Material in Class V of SD Negeri 105410 Rampah Pekan

was carried out on Thursday, January 4 2024. The assessment results are in the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Assessment Indicators</th>
<th>Total Items</th>
<th>Score obtained</th>
<th>Desired score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Material Firmness</td>
<td>3</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Content accuracy</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Delivery Method</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Accuracy of Digital-Based Comics with learning materials</td>
<td>3</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Suitability of digital-based comics with learning objectives</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>49</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

In the content consideration section by the material expert validator which is composed of 5 indicators, the 1st indicator has 3 descriptions of the accuracy of the material, getting a score of 13 out of 15 desired scores, next, the second indicator has 2 descriptions of the accuracy of the content, getting a score of 8 out of 10 desired score, then the 3rd indicator contains 3 descriptions of delivery techniques, obtained a score of 12 out of 15 desired scores, the 4th indicator has 3 descriptions of the accuracy of digital-based comics for learning material, obtained a score of 12 out of 25 desired scores, and Finally, the 5th indicator has 1 description of the suitability of digital-based comics with learning objectives, getting a score of 4 out of 5 desired scores.

The results of the research above show that the average score obtained is 45 out of 60 desired scores. Thus, the percentage of validator assessments for digital-based comic media based on material:

\[
P = \frac{E}{N} \times 100
\]

\[
P = \frac{49}{60} \times 100
\]

\[
P = 81.66
\]

From the results of the calculations carried out above, a result of 81.6% was obtained by validating material experts in the entire digital-based comic teaching media. As for the validation results from material experts, there are digital-based comic teaching media as follows:

<table>
<thead>
<tr>
<th>Validator</th>
<th>Validation Criteria</th>
<th>Percentage</th>
<th>Validation Level</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rian Taufika, S.Pd., M.Pd</td>
<td>81,66%-100,00%</td>
<td>81,66%</td>
<td>Very decent, can be used without revision</td>
<td>49</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that when compared with the media validation criteria in table 2, the results of the validator by Mr. Rian Taufika S.Pd., M.Pd
obtained a total score of 49 percentage 81.66% including in the validation group 81.00% - 100.00% validity level is very valid, can be applied without revision.

Media Expert Validation

Media expert validation focuses on 3 aspects, namely product criteria, visual design and technical quality. This feasibility test was carried out by Assoc.Prof.Dr.Muhammad Arifin M.Pd. validation was carried out on Thursday, 4 January 2024. The assessment results can be seen in the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Assessment Indicators</th>
<th>Total Items</th>
<th>Obtained score</th>
<th>Desired score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>State of the media</td>
<td>2</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Media quality</td>
<td>2</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Image attractiveness</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Visual cover design</td>
<td>3</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Visual principles of illustration of story content</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Principles of illustration of characters in stories</td>
<td>2</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Good media requirements</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>70</strong></td>
<td><strong>75</strong></td>
</tr>
</tbody>
</table>

In the aspect of product criteria by media design expert validators, the validation results are composed of 3 descriptions, namely the first indicator has 2 descriptions of the physical condition, getting a score of 9 out of 10, the desired score, the second indicator has 2 descriptions of the quality of the media, getting a score of 9 out of 10 desired score, in the third indicator there are 2 descriptions about the attractiveness of the media, obtained a score of 10 out of 10 desired scores, in the visual design aspect it is composed of 3 descriptions, namely the fourth indicator regarding the visual design of the cover, obtained a score of 15 out of 15 desired scores, in the indicator The 5th consists of 2 descriptions of visual principles for illustrating story content, getting a score of 8 out of 10 desired scores, in the 6th indicator there are 2 descriptions of several principles of illustrating several actors in the story, getting a score of 9 out of 10 desired scores, as well as aspects There is 1 description of technical quality, namely the seventh indicator regarding good media requirements, with a score of 10 out of 10 desired scores.

Based on the research results above, it can be seen that the average score obtained is 70 out of 75 desired scores. Thus, the percentage of digital-based comic media validators' assessment of the media design is as follows:

\[ P = \frac{70}{75} \times 100 \]

\[ P = 93.33 \]

According to the calculation results above, the overall validation of media design experts in digital-based comics reached 93.33%. The validation results of media design experts on digital-based comic media are shown in the table below.
Table 8. Media Design Expert Validation results

<table>
<thead>
<tr>
<th>Validator</th>
<th>Validation Criteria</th>
<th>Percentage</th>
<th>Validation Level</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assoc.Prof.Dr. Muhammad Arifin M.Pd.</td>
<td>81.00%-100.00%</td>
<td>93.33%</td>
<td>Very decent, can be used without revision</td>
<td>70</td>
</tr>
</tbody>
</table>

Based on the table above, it can be seen that when compared with the media validity criteria in Table 2, the results of validator Assoc.Prof.Dr. Muhammad Arifin M.Pd. obtained a total score of 70 percentage 93.33% belonging to the validation group 81.00% - 100.00% validation level is very valid, can be applied without revision.

**Linguist Validation**

Linguist validation focuses on 1 aspect, namely linguistics. This feasibility test was carried out by Mr. Amin Basri S.Pd.I., M.Pd. Validation was carried out on Friday, 5 January 2024. The assessment results can be seen in the table below.

Table 9. Linguist Expert Validation Results

<table>
<thead>
<tr>
<th>No</th>
<th>Assessment Indicators</th>
<th>Total Items</th>
<th>Score obtained</th>
<th>Desired score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sentence effectiveness</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>Suitability of terms</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Language accuracy</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Simplicity of language</td>
<td>3</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Suitability to students' intellectual development</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>10</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

In the linguistic aspect, the language expert validator, which is composed of 5 indicators, shows that the 1st indicator found 2 descriptions of the effectiveness of sentences, obtained a score of 10 out of 10 desired scores, then the second indicator contained 2 descriptions of the appropriateness of term placement, obtained a score of 10 out of 10 scores. desired, then in the third indicator there are 2 descriptions about the suitability of the language used, getting a score of 10 out of 10 desired scores, and in the fourth indicator there are 3 descriptions about simplicity of language, getting a score of 15 out of 15 desired scores, and the 5th indicator There are 2 descriptions regarding accuracy with students' intellectual development, getting a score of 5 out of 5 desired scores.

According to the research results above, it can be seen that the average score obtained is 50 out of 50 desired scores. For this reason, the percentage of validator assessments for digital-based comic media from language is as follows:

\[ P = \frac{\text{\text{score obtained}}}{\text{\text{desired score}}} \times 100 \]

\[ P = \frac{50}{50} \times 100 \]

\[ P = 100 \]
From the results of the calculations carried out above, the total validation of media design experts in digital-based comics reached 100%. The results of the linguist validation on digital-based comic media can be seen in the table below:

<table>
<thead>
<tr>
<th>Validator</th>
<th>Validation Criteria</th>
<th>Percentage</th>
<th>Validation Levels</th>
<th>Total Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amin Basri S.Pd.I., M.Pd</td>
<td>81,00% - 100,00%</td>
<td>100%</td>
<td>Very decent, can be used without revision</td>
<td>50</td>
</tr>
</tbody>
</table>

The table above shows that when compared with the media validity criteria in table 2, the results of Amin Basri S.Pd.I., M.Pd. obtained a total score of 50 with a percentage of 100% belonging to the validation group 81.00% - 100.00% which is declared very valid, can be applied without revision.

The data that has been collected based on the results of the learning media validation is then calculated and processed with the aim of drawing conclusions from the percentage data for each criterion. In obtaining percentage data, researchers applied the formula by Wakhyudin, Permatasari (2017), the Likert scale rating is the average validation score for each validator divided by the maximum score obtained which is then multiplied by 100%. There is data on the percentage of validation levels for digital-based comic learning media.

![Expert Validation](image-url)

**Figure 8. Diagram of Validation Results by Media Design, Language and Material**

It can be seen that based on the percentage diagram of validation results above, the interpretation of the validity of digital-based comic learning media is shown in the following table:

<table>
<thead>
<tr>
<th>Validation aspect</th>
<th>Interpretation</th>
<th>Percentage of validation results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Very Worth It</td>
<td>81.66%</td>
</tr>
<tr>
<td>Media design</td>
<td>Very Worth It</td>
<td>93.33%</td>
</tr>
<tr>
<td>Language</td>
<td>Very Worth It</td>
<td>100%</td>
</tr>
</tbody>
</table>
**Discussion**

Media is part of the learning material or physical vehicle that contains learning material in the student environment which is able to provide stimulation to students in learning (Arsyad A, 2011). The role of learning media in learning activities can be an inseparable thing from learning activities. Learning media are all things that can be used to convey a message from the sender to the recipient, with the aim of stimulating students' thoughts, attention, feelings and desires in learning (Tafonao, 2018). An urgent matter in the use of media is the relationship with the level of technological progress in education.

Comics are defined in the form of cards that contain characters and implement certain stories in a sequence that is strongly related to the images and are designed to be conveyed to readers, especially students. Initially, comics were created for entertainment purposes only, not for learning activities.

As is known, comics have various broad meanings and names based on their location. Images in comics are images that relate to each other and make up the story. In general, comics mean stories with pictures or abbreviated as cergam. According to McCloud (in Nurgiyantoro) comics are images and symbols that are close to a sequence in order to convey information and get an aesthetic response from the reader.

The aim of this research is to create teaching media products in the form of teaching materials in national insight material with a very suitable category for developing teaching and learning media. This learning media was designed through the Canva application. This section contains an explanation regarding the development of research results on learning media. The development of teaching materials is in the form of digital-based comic teaching and learning media. These learning materials are made according to the needs of educators and students at SD Negeri 105410 Rampah Pekan.

The teaching and learning materials used are digital-based comic learning media, where this comic is part of a comic which contains illustrated, colorful stories and contains PKN lesson material. Digital-based comic media in comic presentations contain sequential story structures by connecting PKN subject matter with comics with the aim of making it easier for teachers and students in learning activities. Because comics are a combination of sequential, illustrated and colorful story structures, readers are interested in reading due to their uniqueness. For this reason, the use of comic media on a digital basis can attract students' interest in reading and learning.

National Insight is the material used in developing learning materials in the development of digital-based comic learning media. The selection of national insight material was carried out considering that national insight plays an important role in everyday life so that students learn how to preserve a high sense of patriotism to always love their country, and behave based on the experience of Pancasila values as the basis of the State and a guide to life for all Indonesian people. The teacher's delivery of material, especially national insight, simply uses a textbook as a study guide. Overall explanation of the material, minimal use of visual media such as pictures or photos that explain national insight.

The development model applied in this research is Thiagarajan's 4D. adjusted to 3D. The 3D development model includes define, design and development. In the define stage there are 5 main procedures consisting of learner analysis, front and analysis, task analysis, specifying instructional objectives, and concept analysis. At the design stage there are 4 procedures including media selection, constructing criterion-coordinated test, initial design, and format selection. Next, in the development stage, there are 3 stages including: expert validation (language, media and materials), feasibility and revision. It is
at this stage that researchers can conclude whether digital-based comic media is suitable or not suitable for use.

The product developed by this researcher has been tested by material expert validation, achieving a percentage of 81.66%, declared "very feasible", media expert validation, achieving a percentage of 93.33%, declared "very feasible", and language validation, achieving a percentage of 100%, declared "very feasible". Based on the results of expert validation, product development in the form of digital-based comics is suitable for students to use in learning activities.

**Conclusion**

According to the results of research and development of digital-based comic media, the following conclusions can be drawn: digital-based comic media with national insight material for class V students at SD Negeri 105410 Rampah Pekan has been tested for its feasibility based on the assessment of media design experts, language experts and material experts. In terms of material, it achieved a percentage of 81.66% and this score is included in the very appropriate category, therefore digital-based comic media can be implemented as a learning process. Furthermore, in terms of media design, the percentage was 93.33% and this value was declared very feasible. And in terms of language, getting a percentage of 100% is in the very worthy category.

**BIBLIOGRAPHY**


Development of Digital-Based Comics on National Insight Material in Class V of SD Negeri 105410 Rampah Pekan


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