Effectiveness Of Powtoon For Bhinneka Tunggal Ika Elements Based On A Saintific Approach In Class IV

Reinita¹, Dinara Mihalova²
¹,² Program Studi Pendidikan Guru Sekolah Dasar, Fakultas Ilmu Pendidikan Universitas Negeri Padang
Jl. Prof. Dr. Hamka No.1, Air Tawar Bar., Kec. Padang Utara, Kota Padang, Sumatera Barat

Abstrak: This research is motivated by the use of technology-based media which is rarely used, the media used by teachers uses conventional media and abstract media. This study aims to develop Powtoon Video learning media based on a Class IV Scientific Approach. This research is a development research (R&D) using the ADDIE model which consists of 5 stages, namely analysis, design, development, implementation, and evaluation. The results of the effectiveness of the pilot school at SDN 25 Air Tawar Selatan topic A were 60% pre test, 84.7% post test. Topic B pre test 53.52%, post test 85.29%. and the school where the research was conducted at SDN 29 Ulak Karang Utara Topic A pre test 55%, post test 82.5%. Topic B pre test 62.5%, post test 85% and SDN 01 Ulak Karang Selatan Topic A pre test 54.47%, post test 84.41%. Topic B pre test 54.11%, post test 84.11%. the results of the pre test and post test there is an increase in results. It can be concluded that the use of Powtoon Video for Unity in Diversity Elements Based on a Grade IV Scientific Approach is very effective in the learning process.

INTRODUCTION
The era of industrial revolution 4.0 is an era of change from analog to digital which can be seen from technological developments which have an impact on the education system. With the presence of the industrial revolution 4.0, it requires the world of education to be able to use technology in the learning process in order to have abilities or skills. For this reason, learning innovation in the industrial revolution 4.0 era can start from learning in elementary schools. (Rahmatina et al., 2019; Adri, 2023)

The curriculum used in elementary schools is the independent curriculum which was implemented on December 10, 2019 as a refinement of the 2013
curriculum (Rahmadayanti & Hartoyo, 2022). Merdeka Belajar is a new policy program of the Ministry of Education and Culture of the Republic of Indonesia launched by the Minister of Education and Culture of the Republic of Indonesia, the Advanced Indonesia Cabinet (Evi Hasim, 2020; Helmi, 2019). The concept of independent learning leads to being able to contribute well in demanding economic improvements for students so they can learn freely (Marisa, 2021; Gultom, 2021).

The world of adult education is entering the era of the world of media, where learning activities require the lecture method to be reduced and replaced with the use of many media (Irsan et al., 2021). Media is a tool that has been used in the world of education in learning (Luhulima et al., 2017). The benefit of visual media is that it can overcome the limited experience that students have. Allowing direct interaction between students and their environment, visual media can also instill basic, concrete and realistic concepts. (Nurfadhillah et al., 2021)

Animated video applications are an example of successful technology that can be used as an interesting learning medium and can facilitate the delivery of material so that students can more quickly accept the lesson material. (Yusri, 2020; Rusmiaty, 2020; Adri, 2020)

The use of learning media is interrelated with the process of conveying messages from the message source via certain media to the message recipient. Learning media are also able to change abstract material into more concrete ones because at elementary school age students are still thinking at the concrete operational stage. Learning media that can be developed in the learning process is audiovisual media.(Wulandari et al., 2020)

In the article by Y. Ningsih, et al (Anggraini & Ningsih, 2022; Adri, 2021), several problems related to learning media were found, including (1) teachers still use conventional learning media such as cardboard and pictures, (2) the delivery of messages and materials seems less interesting and not varied. namely by lecturing and asking students to understand the material in the student books, (3) teachers have not followed developments in science and technology in developing learning media, (3) teachers have limited abilities in developing IT-based learning media.
After conducting observations and interviews in five schools, researchers found that teachers used the lecture method when explaining material and teachers also used pictures and used simple teaching aids around the school.

Based on observations and interviews conducted by researchers, the researchers want to carry out development research with animated video products in the elements of Bhinneka Tunggal Ika with a scientific approach. Therefore, the title of this research is "Effectiveness of Powtoon Video for Bhinneka Tunggal Ika Elements based on a Scientific Approach in Phase B Class IV in Cluster I North Padang District, Padang City".

METHODS
The type of research used by researchers is the development method or in English Research & Development, research and development methods are research methods used to produce certain products, and test the effectiveness of these products, Sugiyono(in Fitriyani, 2019) Research and development is a research method used to develop and validate products used in education and learning (Hanafi, 2017).

The research subjects were class IV students at SDN 25 ATS and SDN 29 UKU. The researcher took this subject because the school had used the Independent Curriculum in class IV.

The data collection technique in this research using the teaching media effectiveness instrument is in the form of a test. Tests are made to see whether students' learning outcomes are successful or not and to see the effectiveness of the learning media used.

The effectiveness test is obtained from student learning results through research tests that have been carried out, student learning results will then be used as a reference in order to measure student learning completeness. Students are considered complete if their score reaches a maximum of 75 based on the teaching and learning process determined by the school.

RESULT & DISCUSSION

Test results The effectiveness of the Powtoon video learning media can be seen from the learning outcomes of students through the initial and final tests carried out at the trial school SDN
25 ATS and at the research schools SDN 01 UKS and SDN 29 UKU.

**Table 1 Topic A Effectiveness Test Results**

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Initial Test</th>
<th>Final Test</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDN 25 ATS</td>
<td>60%</td>
<td>84.70%</td>
<td>Very Effective</td>
</tr>
<tr>
<td>SDN 01 UKS</td>
<td>54.47%</td>
<td>84.41%</td>
<td>Very Effective</td>
</tr>
<tr>
<td>SDN 29UKU</td>
<td>55%</td>
<td>82.5%</td>
<td>Very Effective</td>
</tr>
</tbody>
</table>

**Table 2 Topic B Effectiveness Test Results**

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Initial Test</th>
<th>Final Test</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDN 25 ATS</td>
<td>53.52%</td>
<td>85.29%</td>
<td>Very Effective</td>
</tr>
<tr>
<td>SDN 01 UKS</td>
<td>54.11%</td>
<td>84.11%</td>
<td>Very Effective</td>
</tr>
<tr>
<td>SDN 29UKU</td>
<td>62.5%</td>
<td>85%</td>
<td>Very Effective</td>
</tr>
</tbody>
</table>

**Discussion**

In a teaching and learning process, a very important element is learning media. One of the main functions of learning media is as a teaching aid which also influences the climate, conditions and learning environment organized and created by the teacher (Sapriyah, 2019). Learning by utilizing video media is considered to be able to reduce obstacles that students often experience in the learning process and increase student understanding (Ridwan et al., 2021).

From the data above, it can be concluded that student learning outcomes increase after using Powtoon Video learning media. Powtoon is an IT-based web application that can be used as a learning medium which includes interesting features such as features for creating presentations or animated videos that can be used easily and interestingly (Anggita, 2020). Therefore, the use of Powtoon video learning media is effective and can be used in the learning process. Using this very easy feature provides benefits, both for students and teaching staff, because it can package teaching materials innovatively (Qurrotaini, 2020).

The expected aim of carrying out this research is to determine the validity of Powtoon audiovisual media on student learning outcomes, determine the practicality of using PowToon audiovisual media on student learning outcomes and determine the effectiveness of student learning outcomes after implementing Powtoon audiovisual media (Anjarsari et al., 2020).

Judging from the research results described above, the process of developing Powtoon Video learning media has been in line with the ADDIE model that has been used in this research. The ADDIE instructional
model is an instructional process that consists of five phases, namely analysis, design, development, implementation and dynamic evaluation (Cahyadi, 2019).

Powtoon videos are in line with the ADDIE model that has been used in this research. The ADDIE model consists of 5 steps, namely, (1) Analysis phase: The Analyze phase is the foundation for all other phases of instructional design. During this phase, the investigator defines the problem, identifies the source of the problem and determines possible solutions. (2) Design phase: The Design phase involves using the outputs from the Analysis phase to plan a strategy for developing the instruction. During this phase, the investigator outlines how to achieve the instructional goals determined during the Analysis phase and expands the instructional foundation. (3) Development phase: The Development phase builds on both the Analyze and Design phases. The purpose of this phase is to generate the lesson plans and lesson materials. During this phase the investigator constructed and developed the package with the help of media software and supporting documentation. (4) Implementation Phase: The Implementation phase refers to the actual delivery of the instruction, whether it's classroom-based, lab-based, or computer-based. The purpose of this phase is the effective and efficient delivery of instruction. This phase must promote the students' understanding of material, support the students' mastery of objectives, and ensure the students' transfer of knowledge from the learning to setting the goals. (5) Evaluation Phase: This phase measures the effectiveness and efficiency of the instruction. Evaluation should actually occur throughout the entire instructional design process within phases, between phases, and after implementation. (Muruganantham, 2015)

According to Teguh, Jampel, & Pudjawan (2015), the ADDIE learning model is a model that has 5 structures that are interconnected and organized in a regular manner so that in application it cannot be created randomly but must be organized, starting with Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model is very simple but its implementation is
systematic. Thus, the modifications made can help in facilitating the development of learning media (Reinita & Saralee, 2022).

The results found in this research are that the Powtoon Video learning media developed meets the effective criteria. This research shows that the use of Powtoon Video learning media has a positive effect on the learning of Pancasila education for fourth grade elementary school.

**CONCLUSION**

Research with the title "Development of Powtoon Video for Bhinneka Tunggal Ika Elements based on a Scientific Approach in Phase B Class IV in Cluster I North Padang District, Padang City" has been developed using the ADDIE development model and achieved effective results at the school where the research was conducted in class IV SDN 01 UKS which consisting of 17 students. In topic A, the initial test obtained a result of 54.47% and the final test obtained a result of 84.41%. Meanwhile, in topic B, the initial test obtained a result of 54.11% and the final test obtained a result of 84.11%. And in class IV at SDN 29 UKU which consists of 8 students. In topic A, the initial test obtained a result of 55% and the final test obtained a result of 82.5%. Meanwhile, in topic B, the initial test obtained a result of 62.5% and the final test obtained a result of 85%.

**ACKNOWLEDGEMENT**

I would like to thank my parents who have provided support and prayers, Mrs. Dra. Reinita, M.Pd as the supervising lecturer who has provided direction and guidance from start to finish, and the Principal and Class IV Teacher of SD 25 ATS, SDN 01 UKS, and SDN 29 UKU which has provided the opportunity to conduct research.

**REFERENCES**


