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### Development of Canva for Education-Based Learning Media Using the Addie Model in the Independent Water Cycle Concept of Independent Curriculum for IV Grade Students of SD Gmist Pniel Biau

**Agus Tay Milanau**

Manado State University  
[agusmilanau86@e-mail.com](mailto:agusmilanau86@e-mail.com)

**Jeanne M. Mangangantung**

Manado State University  
[mangangantungj@gmail.com](mailto:mangangantungj@gmail.com)

**Jeffry S.J. Lengkong**

Manado State University  
[jeffrylengkong@unima.ac.id](mailto:jeffrylengkong@unima.ac.id)

**Richard Daniel Herdy Pangkey**

Manado State University  
[richardpangkey@unima.ac.id](mailto:richardpangkey@unima.ac.id)

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*Advanced canva for education; ADDIE models; Water cycle independent curriculum.*

#### ABSTRACT

The purpose of this research is to: (1) Describe the design of the IPAS (Integrated Science) learning media on the topic of the water cycle for 4th-grade students in the B phase of the Independent Curriculum, based on Canva for Education, to make it suitable for use; (2) Explain the procedure for producing IPAS learning media based on Canva for Education for the water cycle topic, which is valid, practical, and effective, in the B phase of the 4th grade Independent Curriculum; (3) Describe the effectiveness of Canva for Education-based learning media in IPAS (Integrated Science) activities for the water cycle concept in the B phase of the 4th grade. This research belongs to the development research type (Research and Development) using the ADDIE model, which consists of Analysis, Design, Development, Implementation, and Evaluation. Data collection techniques include observation, questionnaires, interviews, and tests. Data analysis techniques involve qualitative and quantitative analysis. The results of the research indicate that: (1) Canva for Education-based IPAS learning media for the water cycle topic is designed using the Canva platform, which offers thousands of templates, elements, text, images, and animated videos, making the developed media suitable for use; (2) The

procedure for developing Canva for Education-based learning media is carried out through the ADDIE model stages; (3) The Canva for Education-based learning media products created have improved the effectiveness of the learning activities. The process of developing learning media is realized in the form of Canva for Education-based products such as videos, PowerPoint presentations, PDF files.

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## **Introduction**

The Independent Curriculum is a curriculum approach that offers variations of learning in a more flexible curriculum, allowing students to have more time to understand concepts and strengthen their competencies. Teachers have the freedom to choose a variety of teaching materials according to the needs and interests of students. There are also projects to increase students' understanding of Pancasila student profiles, using themes determined by the government. This project does not have specific learning achievement targets and is not tied to specific subject content. (Ministry of Education, Culture, 2022).

One of the subjects that underwent changes in the independent curriculum, namely Science and Social Sciences subjects, was integrated into one Natural and Social Sciences (IPAS) subject.

Natural and Social Sciences (IPAS) is a science that examines living and inanimate things in the universe and their interactions, and examines human life as individuals as well as social beings who interact with their environment. In general, science is defined as a combination of various knowledge that is organized logically and systematically by taking into account cause and effect (Ministry of Education and Culture number 008/H/KR/2022, 2022). This knowledge includes natural knowledge and social knowledge.

In the independent curriculum, it is hoped that teachers will be creative in designing learning activities by carrying out cognitive and non-cognitive diagnostics at the beginning of learning activities. So that the teacher designs learning according to the diagnostic results according to the needs of students which is called differentiated learning.

Therefore it shows that the help of all parties is needed to realize the benefits of creative learning. Therefore, it is very important for teachers to be creative in supporting learning activities. (Lasut, Sumampouw, Mangangantung, & Pangkey, 2022)

A creative teacher is a teacher who always tries to improve himself, is thirsty for change, is able to answer every challenge and change that occurs in education, and is able to come up with new solutions to every problem he faces. (Mangangantung, Wentian, & Rorimpandey, 2022)

Then based on interviews with 20 grade IV GMIST Pniel Biau Elementary School students where they did not feel the use of technology in Science Learning. Their android phones are only used to take pictures or record videos and even play games; they are not usually used for learning, therefore the teacher needs to help them learn how to use them.

This shows the need for innovation for educators in developing technology-based learning media, especially when implementing the independent curriculum as a new curriculum that demands a new paradigm in the learning process. Interesting learning media is easy to reach and has an element of novelty that is currently popular among educators at school, namely Canva. for education. The Canva for Education web-based platform is extraordinary because it features a variety of educational-specific views and can only be utilized by teachers who have a studi.id

account in learning. It also has a very pleasing appearance for students. The researcher uses the learning account in this case to access Canva for teaching because it has unlimited cloud storage and is provided by the Ministry of Education and Culture.

Quoted from([https://www.canva.com/en\\_id/create/](https://www.canva.com/en_id/create/), nd)Canva is a graphic design application used to create social media graphics, presentations, posters, documents and other visual content. The app also provides various sample designs for use Canva was founded in Sydney, Australia by Melanie Perkins, Cliff Obrecht and Cameron Adams on January 1, 2012. In December 2019, Canva launched Canva for education, a free product aimed at education units and educational institutions which aims to facilitate collaboration between students and teachers.

The main advantage is that teachers and all their students can access the platform for free, with no offers or time restrictions. It's also highly compatible with platforms you may already be using, such as Dropbox, Google Grive, and Google Classroom, so signing up doesn't mean compromising a process that's already built and running smoothly anywhere. With easy-to-use design features and easy one-time student access, Canva for education is made for everyone. As a teaching tool, it's also great for encouraging creativity, increasing collaboration, and getting work done.

With the support of various interesting features from various platforms that can be accessed with thelearning.id account on Canva, it is believed that the videos produced will be very interesting and relevant to the needs of students.

In addition, other features besides learning videos that can be made on Canva, namely the feature for creating classes can also be used by research to make it easier to control students who have access to be able to watch learning videos from home without having to save them in their cellphone storage space.

## **Research methods**

This research is included in the ADDIE model Research and Development which consists of analysis, design, development, implementation, and evaluation. This research was conducted on students, namely 3 people in one-on-one trials, 9 people in small group trials, and 20 large groups in phase B class IV SD GMIST Pniel Biau, Siau Timur Selatan District in the Academic Year 2022/2023.

Data collection techniques using observation, questionnaires, interviews and tests. Data analysis techniques in the form of qualitative and quantitative analysis.

The results showed that: (1) Science learning media based on canva for education water cycle material was designed on the Canva website or application with thousands of templates, elements, text, images, animated videos available, so that the media developed is feasible to use and attracts enthusiasm for learning student.

Canva for education based learning media development research design with the ADDIE model:

### **1. Stage Analyze (Analysis)**

The analysis stage is the process stage that defines what students will learn, namely by conducting a needs assessment (needs analysis) regarding current developments and the existence of technological demands, then identifying problems and analyzing tasks (task analysis).

### **2. Stage Design (Design)**

This stage in the ADDIE model is carried out to design the expected learning media and appropriate testing methods. The design or design stage of learning media is designed through teaching modules based on learning activities combined with learning videos, sets of questions for pretest and posttest on water cycle material. The design stage of learning media based on Canva for education consists of 4 steps, namely: 3) Determining Learning Outcomes b) Formulating learning objectives: c) Making learning media based on Canva for education d) Media Production.

### **3. Development Stage (Development)**

The third stage of the ADDIE model is the development stage. learning media based on Canva for education The development stages carried out include:

#### **a. Validation**

Validation. product can be done by presenting several experts, namely material experts and media experts. Product validation in this study was carried out by two experts, namely 2 material experts on expert (content expert judgment) and 2 media experts (media expert judgment).

##### **1) Material Expert**

The material expert chosen was a senior teacher at SD GMIST Pniel Biau who was considered to have mastered the science material to be developed, and the school supervisor. Material in science learning will be reviewed by the validator by providing an assessment in the form of comments or suggestions on the learning aspects and content of the material.

##### **2) Media Expert**

Whereas a media expert is someone who is considered to know the quality of the media being developed (knowing the quality of the media being developed. Two (2) experts in the field of learning media were asked to provide an assessment of Canva for education-based learning media in terms of media/technology. Validation aims to determine the quality the developed media The grid of the media expert assessment questionnaire instrument can be seen in the Appendix.

The results of assessments from material experts and product experts are used for revision guidelines and redeveloping both material and media so that Canva for education-based learning media will be produced that are feasible to test in terms of material and appearance. student.

#### **b. Trials**

In the development stage the trial step is very important to be implemented. This trial phase was carried out in class V SD GMIST Pniel Biau. This test was carried out through interviews which emphasized the readability of the text and understanding of the material. The trial was carried out using interview guidelines and questionnaires.

### **3. Implementation Phase (Implementation)**

The implementation phase is a concrete step to implement the results of the product that we are making, everything that has been developed is installed or set up in such a way according to its role or function so that the product can be implemented or applied to actual learning. The number of students to be used in the implementation phase is 20 students/one class.

This implementation phase used an experimental design, namely an experimental design with a control group. The experiment was carried out by comparing the group that was treated with Canva for education-based learning media with a group that did not use Canva for education-based learning media.

Place of research conducted in the room. the time in the research process in each meeting lasted for 2 x 35 minutes per meeting or 4 hours of lessons per week as stated in the independent curriculum structure.

#### **4. Evaluation Stage (Evaluation)**

1. This evaluation stage aims to ensure the quality of the media developed in the learning process, both before and after implementation. The purpose of the evaluation is to determine the effectiveness of Canva for education-based learning media compared to conventional learning media. Actually the evaluation stage can occur at any of the ADDIE stages above. Evaluation at this stage is called formative evaluation, because it aims only for revision needs.

#### **Results and Discussion**

The school that was used as the research object was carried out at GMIST Pniel Biau Elementary School which is located in Biau Village, South East Siau District, Siau Islands Regency Tagulandang Biaro, North Sulawesi Province. GMIST Pniel Biau Elementary School There are 6 study groups, one office room, one library, and one UKS room with land ownership as usufructuary rights because the land used is land belonging to the GMIST Foundation with 90 students and 8 education staff at the school with details of 1 school principal, 6 grade 1 teachers, subject teacher and 1 janitor. All teachers at GMIST Pniel Biau Elementary School are already capable of S1 and there is even one person who has already taken a Masters so it is hoped that it will be easier to deliver digital-based lessons.

By making direct observations and conducting discussions with several grade 4 teachers and research students, they obtained some information, including in learning science class 4 encountered obstacles in conveying material that required understanding and recognition of objects of the universe that could be seen in real terms, students experienced difficulties in terms of information. obtained from the teacher because the learning process is still ongoing conventionally. In addition, the learning media used is less innovative and interactive so that it is only teacher-centered. This causes students to become less interested and interactive in learning activities.

Based on the needs of GMIST Pniel Biau Elementary school, the assessment of the development of learning media based on canva for education is an alternative learning to fulfill this so that it can optimize reasoning skills and increase student activity in developing learning media in the process of learning activities has a very important role because in addition to providing variety learning that can increase student activity in learning can also help students in terms of the material being studied.

The learning media that the researchers developed is learning media based on Canva for education. So far, several media have been tried, but the results still do not meet the expectations that learning media can help, namely learning media based on Canva for education.

#### **Development Procedure**

##### **a. Preliminary studies**

In this development research, a preliminary study was carried out through two things, namely literature study and field study. In addition, this research also carried out a needs analysis

##### **1. Literature review**

The literature study was carried out based on relevant theory and research. It was found that the media had an influence on the formation of student learning activity. From several relevant studies, it was also concluded that there was a link between the use of Canva for

education-based learning media and increasing student activity in learning activities.

## **2. Field study**

Based on the documentation data of the results of the daily IPAS grade IV assessment for the 2022/2023 academic year, it shows that student achievement results are still unsatisfactory. Besides that, based on observations of the learning process, several of these companies still found, including classes, there were several classes that had not used media optimally, even though almost every classroom was provided with an LCD or projector which should have been used in the process of teaching and learning activities. In outline, the implementation in the field still uses lecture.

There is the tendency of students to like ICT learning, which always uses computer media, looks enthusiastic during extracurricular activities because learning is carried out using computers. Teachers do not make maximum use of computers in learning activities. There are still a number of teachers who are capable or rare in operating or technologically literate so that to keep up with current developments, namely the 5.0 era, teachers are still far behind.

## **3. Needs Analysis**

Based on the results of the literature study and field studies, several initial needs analyzes can be formulated for the process of developing this learning media based on the analysis of the primary school curriculum. This type of research has implemented an independent curriculum with the addition of English and Scouting lesson content and especially in art subjects, each student chooses one of the fields. the art he likes according to his talent.

At school, always want a learning model that uses interesting media, thereby increasing student activity. Teachers are less than optimal in using computers or laptops as a potential for developing learning media because one of the appropriate computer-based or IT-based learning media is Canva media for education.

Another consideration why canva for education-based learning media is needed in learning is because it is possible for children to prefer learning with computer media in the current era, namely the 5.0 era, children are already familiar with technology, children are more familiar with technology without having to be taught. When children are happy with the learning process, especially with regard to technology, it is also possible that children's interest will increase based on studies on increasing student activity in learning activities.

In this day and age the use of technology and the internet in the world of education is growing rapidly experiencing significant changes. One of the learning methods is using innovative media that are able to promote knowledge and can arouse students' interest in learning. This fact is related to research conducted by Ekici (2015) that the use of ICT support in learning can help streamline student achievement in learning and student understanding.

Thus, if learning using the Canva for Education learning media is not carried out, it is possible that the following things will happen: the use of computers is not maximized in the use of projectors or LCDs provided by classrooms, the utilization is not optimal, students' activeness in learning does not increase because the process of learning activities is still impressed monotonous learning is not child-centered.

### **b. Initial Design**

### 1) Determining Learning Outcomes and Learning Objectives

Canva for education-based learning media that was developed to adapt material from the independent curriculum's IPAS content. The following is the content of the achievement of the talks shown in the following table.

The Learning Outcomes used in the design of Canva for education-based learning media are guided by the independent curriculum, Learning Objectives Flow, and the applicable Teaching Modules where the developed media will be implemented Selection of subject matter that will be the main topic in learning media, namely the Water Cycle Process for Phase B class IV Elementary School. Because the understanding of learning this material is still low, there are still students who have not reached the criteria of completeness of learning objectives, and remember the importance of this material for students' daily lives. "Students are expected to be able to describe the occurrence of the water cycle and its relation to efforts to maintain water availability."

The formulation of the flow of science learning objectives in Phase B SD is shown in the following table

Table 9. Learning outcomes and learning objectives flow

B phase	
Grade 3	4th grade
3.7. students demonstrate the style and motion that occurs in humans.	4.7. students identify the sequence of the water cycle.
3.8. students classify animals around them based on how they move, how to eat, how to breed, their habitat, and how they breathe.	4.8. students describe the influence of the water cycle in everyday life.
3.9. students classify plants around them based on their characteristics (habitat, shape of leaves, roots, seeds, or flowers)	4.9. students present their work on the results of investigations of several ecosystems in the surrounding environment (lakes, rivers, forests).

### 2. Determining Learning Objectives

The learning objectives to be achieved are formulated in several indicators as stated in the flow of learning objectives for the science subjects which are adapted to the attached independent curriculum. The material description is developed according to . the purpose of learning activities. learning with the learning approach used. The developer is guided by using

the inquiry learning cycle, starting from asking questions to seek meaningful understanding, then investigating by searching, analyzing information, discussing the results of the investigation and taking action, by practicing what has been learned and understood. Reflection activities that will occur at each stage of the process, and focus on the topic of water as a source of life, according to the learning objectives in this phase or approaches adapted to conditions.

### **3. Making Evaluation Questions**

In making the evaluation questions the test instruments were prepared based on the water cycle process material. Evaluation questions are in the attachment. Then it was developed into a test instrument and the test instrument is contained in the appendix

The evaluation questions that were made were then held for trials or try outs for instrument trials on 20 students in grade IV at GMIST Pniel Biau Elementary School.

### **4. Media Production**

The media production stage is the activity of connecting all the materials that have been collected in terms of text, images, video and audio according to the material that was previously made to maximize the learning media products that are created and combined into the Canva application.

How to create teaching modules and videos in Canva

1) Choose an example of a slide/video template

Log in to your account, then select the sample free video tutorial that best suits your needs.

We can add and update designs, create videos of the required duration.

2) Customize explainer videos

You can use Canva's free images, graphics and videos, or upload your own items. With the drag-and-drop tool, you can adjust things like the color or crop of the image (to make it more up-close and personal, especially when it comes to learning media).

3) Add text and captions

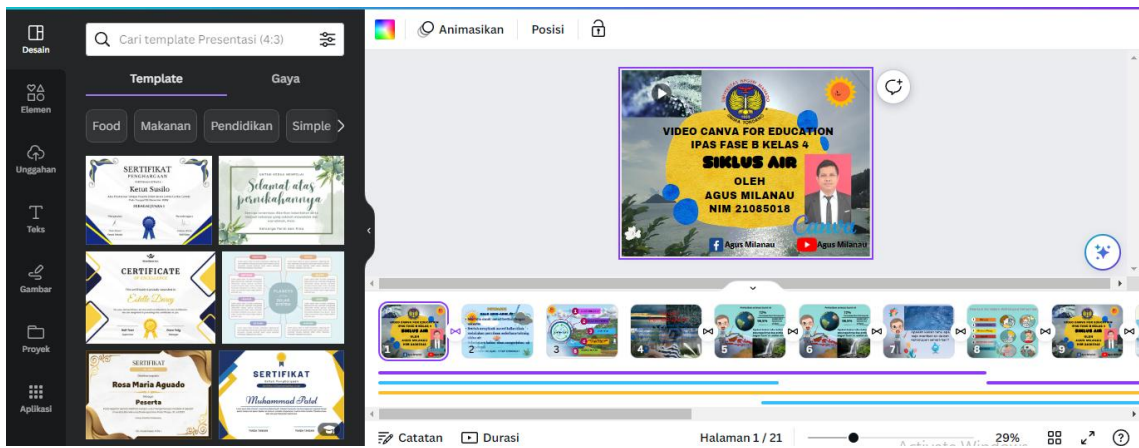
Practical hints or tips help make information easier to remember. Try using only 3-5 words at a time, then let them display on the screen for a few seconds for easy reading.

4) Add music, background sound or animation

Canva's free music library makes it easy to add tracks, or you can add your own recorded soundtrack. In addition, we can animate images or text with one click for professional-looking results. Download videos and share Once satisfied with the video, we can download it with just one click. Instead, give our videos to students.

The production results can be shown in the image below





Video Canva for Education, the product can be accessed in the following link:<https://www.youtube.com/watch?v=MzaM3-aYoN0&t=154s>  
[https://www.canva.com/design/DAFZbJY3ySE/bhi0lM5xrezBLwPOoKXqdw/edit?utm\\_content=DAFZbJY3ySE&utm\\_campaign=designshare&utm\\_medium=link2&utm\\_source=sharebutton](https://www.canva.com/design/DAFZbJY3ySE/bhi0lM5xrezBLwPOoKXqdw/edit?utm_content=DAFZbJY3ySE&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton)

The Canva for Education module, its products can be accessed at the following link:  
[https://www.canva.com/design/DAFR8uiVZIw/TQhSQ4KFnuSJ9-Rj1ZiI9g/edit?utm\\_content=DAFR8uiVZIw&utm\\_campaign=designshare&utm\\_medium=link2&utm\\_source=sharebutton](https://www.canva.com/design/DAFR8uiVZIw/TQhSQ4KFnuSJ9-Rj1ZiI9g/edit?utm_content=DAFR8uiVZIw&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton)

## C. Product Development

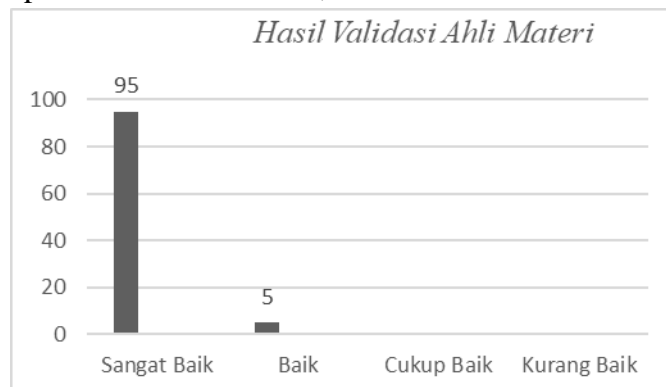
### 1. Validation (expert Judgment)

Canva for education-based learning media validation was carried out by material experts and media experts product validation using assessments in the questionnaire method. Material validation and media validation were arranged based on the grid shown in the appendix.

#### a) Material Expert

Product validation on material aspects is carried out by people who are considered competent in IPAS material. Product validation by material experts was carried out from 9-11 January 2023 using an instrument in the form of a questionnaire attached to the material assessment using the following rating scale 1= not good 2= not good 3= good and 4= very good. The results of product evaluation by material experts obtained an average rating score of 95.3% with very good criteria with suggestions for the suitability of the order in which the material was presented and the effectiveness of the language used.

Chart of Material Expert Validation Results, can be shown in the following diagram

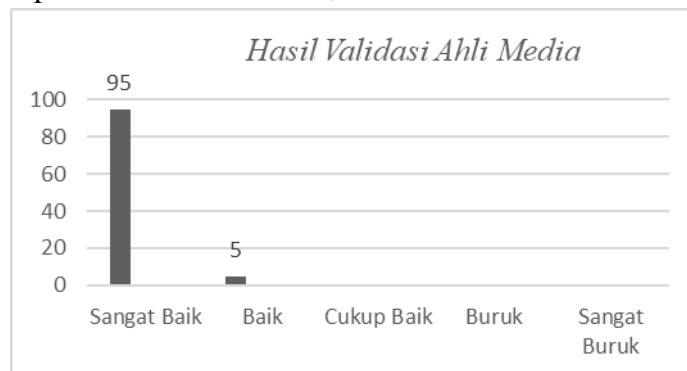


Based on the average score of the material expert validator's assessment results, that is, the material is included in the very good criteria. The lowest rating is for the suitability of the order of presentation and the adequacy of examples of exercises and evaluation for more details can be seen in the following attachment, although the material can be said to be very good and feasible, the developer still revises it, especially in the order of presentation of the material and the order of language, according to the suggestions from the validator and the form table changes before and have been validated by material experts for more details regarding previous revisions.

### b) Media Expert

Media experts who are considered competent in validator learning media are taken from lecturers of the Manado State University postgraduate study program whose expertise is in the field of educational technology. Product validation by the media was carried out from 9 to 11 January 2023. Product evaluation used the following rating scale 1= not good 2= not good 3= good and 4= very good.

Chart of Material Expert Validation Results, can be shown in the following diagram



Based on the data or score from the validator's assessment results, namely 95%, the material is included in the very good criteria.

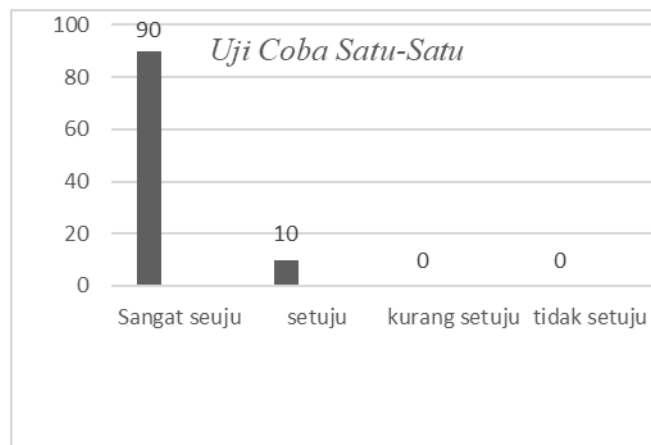
## 2) Product Trials

### a) One-to-One Trial

After the Canva for Education-based learning media product is in accordance with input from material experts and media experts, the product is ready to be tried out. The first trial is a one-to-one trial which was conducted at GMIST Pniel Biau Elementary School, Siau Timur Selatan District, Regency Siau Archipelago Tagulandang Biaro Province of North Sulawesi. The first trial was carried out on January 24, 2023. The trial was conducted to test the readability of learning media products for three students with high, medium and low academic ability.

The results of this test obtained a total score of 118 from 3 students with an average of 96.7% of student responses that dominated the choice of value 4 regarding readability. The chart of the results of the one-to-one trial is shown in the following diagram.

chart . One-on-One Trial Results



This average indicates that Canva for Education-based learning media is in the "very good" category. Students think that Canva for Education-based learning media is easy and interesting and very enthusiastic in learning. Some suggestions for improvement and test subjects include background color and writing. . The full results of the current pilot assessment can be seen in the attachment.

### Small Group Trial

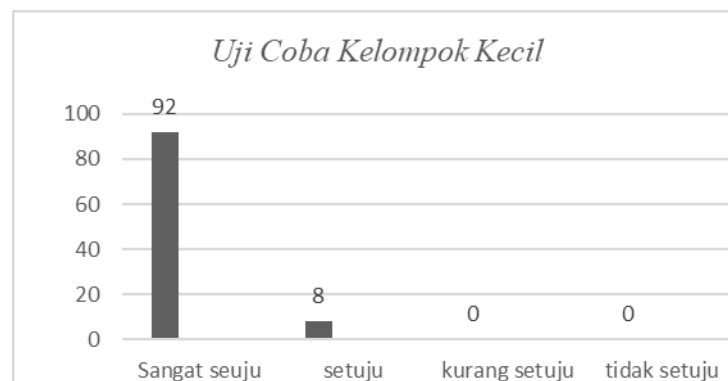


Chart 4. Small Group Trial Results

The small group trial is a continuation of the one-on-one trial with the number of test subjects or respondents as many as 9 students. students with low academic level.

The results of this test obtained a score of 353 and 9 students with an average of 98.1%,

the responses were dominated by a choice of 4 values, the proportion of responses to learning media based on Canva for Education.

The chart of small group test results is shown in the following diagram.

This average indicates that learning media based on Canva for Education is in the "very good" category. Students think that Canva for

Education-based learning media is very suitable, very easy and very interesting and very enthusiastic in learning because students understand more.

The next step after the small group trial is the large group trial. The large group tryout has the number of subjects in one class or in this case as many as 20 students. The large group tryout is different from the one-on-one tryout and the small group class tryout. some of the revisions came from small groups.

The results of this test obtained a score of 790 with an average of 98.8% on the Canva for Education-based learning media.

The large group test result chart is shown in the following diagram.

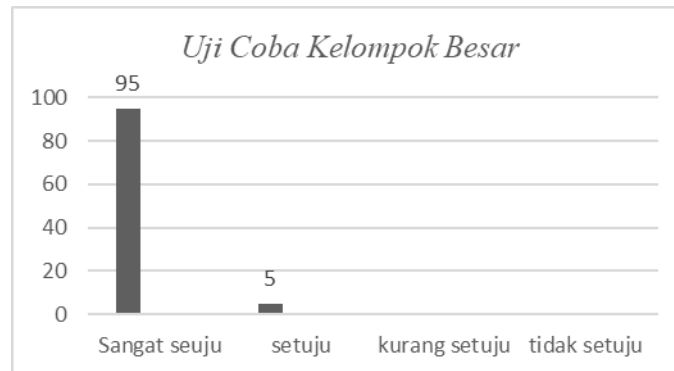


Chart 4. Results of the Large Group Trial

This average shows that canva for education-based learning media is in the "very good" category according to the opinion that canva for education-based learning is very suitable, very easy and very interesting and very enthusiastic in learning because students become more understanding after seeing the Hajj trial results very good, the next step is the implementation of the product from the group trial service, which can be seen in the attachment.

#### **b) Product Implementation and Evaluation**

After the product is tested, the product is ready to be used or implemented. The implementation of canva for education-based learning media products was carried out by class IV of SD GMIST Pniel Biau with a total sample of 20 students.

Implementation is carried out from January 30 to January 31, 2023.

#### **C. Discussion**

Research and development performed to produce a particular product improve existing products, and evaluate its effectiveness. The end result is a requirements analysis, which is used to evaluate the effectiveness of a product before it is made available to the public.

To collect empirical data that can be used as a basis for creating products, design and development is a systematic study of how to design a product, develop/produce a design, and assess product performance. concepts and methods that apply to learning and non-learning.

Product validation and development is served by development research. If a researcher is validating, it indicates that the product already exists and the researcher is simply re-evaluating the product's efficacy. In its broadest sense, product development can consist of producing new goods that have never been produced before, or improving current products in ways that make them more useful, efficient, and effective.

Development design Analysis, Design, Development, Implementation, and Evaluation is a development strategy that tries to direct the creation of training program infrastructure and tools that are efficient, dynamic, and also encourage the effectiveness of the training itself. The ADDIE model is a learning model that is general and suitable for research. Development is a process that is seen as sequential but also interactive when used in development.

Canva for education-based learning media developed by researchers using an application or can be accessed via the web without an application using the internet network. To further

maximize the results of learning media products based on Canva for Education, the features in the Canva application are used as supports.

This paradigm is useful because it is methodical, with each step always referring to the previous one. has been improved, making the product made more efficient. The ADDIE development model has five key phases, which are as follows: 1) Analysis: The analysis phase tries to explain the reasons for the discrepancy between the science learning conditions that occur in the target customers of the product to be made and the actual conditions, 2) Design is the stage of making media that anticipates learning and appropriate testing procedures: 3) Development is the process of changing designs that have been made into functional items. The most crucial step before using the product is to do a trial first: 4) Implementation at the core implementation stage, teachers and students who use a predetermined learning system must be prepared to determine the value and usefulness of the learning media developed. 5) Evaluation, namely the stage of evaluating the effectiveness of the media made to support the process and learning outcomes, both before and after implementation.

The Independent Curriculum is a curriculum that offers learning variations within the curriculum itself, in which learning content is optimized so that students have sufficient time to understand concepts and strengthen their competencies. Teachers have the freedom to choose various learning resources so that learning can be adapted to the learning needs and interests of students. There are also projects that aim to strengthen the achievement of Pancasila student profiles, which are developed based on certain themes set by the government. This project does not have specific learning achievement goals, so it is not tied to subject content.

In the Merdeka curriculum, Phase B of Natural and Social Sciences (Natural and Social Sciences) learning includes class III and class IV. One of the changes in the Merdeka curriculum is the flexibility in the curriculum structure. In addition, there have been changes in the arrangement of core competencies and basic competencies.

The water cycle is the continuous circulation of water on Earth, moving from Earth to the atmosphere and back to Earth. The water cycle involves the processes of evaporation, precipitation and condensation. The following are the processes of the water cycle: a. Evaporation Water from seas, rivers and lakes evaporates because of the sun's heat. Plants also emit moisture into the air. This process is called evaporation. b. Precipitation Water vapor rises and collects in the atmosphere. Gradually, the air can no longer hold water vapor (it is saturated). This process is called precipitation. c. Condensation If the temperature drops, the water vapor will turn into water droplets. These water droplets form clouds. This process is called condensation.

Material expert validation and media expert validation of Canva for education based learning media that has been made. The results of the material validation show that the material listed in the media is very appropriate to the learning material, while the media expert validation shows that the Canva for Education-based learning media developed using an application or via the Canva page are also very feasible to use.

In addition to validation, product trials were also carried out three times (one to one trials, small group trials, and large group trials). Learning Activities.

Canva for education-based learning media products have been verified by material experts and media experts who are competent in their fields and have been declared suitable for use as a result of product trials, both one-to-one trials, small-scale trials, and group trials great has also

been done. Overall and the results of the trial that canva for education-based learning media products are feasible to use after implementing learning-based media products can actually increase student enthusiasm for learning based on the instruments filled out by students

This is proven by the research developed by previous researchers in line with the results of research on the development of canva for education-based learning media conducted by researchers and previous research on canva for education-based learning media which are equally appropriate to use. It is proven that the results of this development research are that canva for education-based learning media is appropriate for use in science learning for fourth grade students of GMIST Pniel Biau Elementary School in Siau Timur Selatan District, Siau Islands Regency Tagulandang Biaro

### **Conclusion**

1. Science learning media based on canva for education water cycle material is designed on the Canva website or application, which provides thousands of templates, elements, text, images, animated videos, etc. so that the media developed is suitable for use and attracts students' enthusiasm for learning. The test results in the initial conditions before using the Canva for Education media showed students who had not yet achieved the Learning Objective Completeness Criteria (KKTP). Students who scored 70 and above had an average score of only 42.25. After learning using the Canva for Education media, all students showed that they achieved KKTP. with an average value of 98.80.

2. The procedure for developing learning media based on Canva for education was obtained by using the ADDIE model consisting of analysis, design, development, implementation, and evaluation.

3. Canva for education-based learning media products developed with the Canva application can be run directly on the Canva application or via the Canva page and can also be downloaded and uploaded on social media (youtube, facebook, whatsapp, etc.) or can be stored in file form on a CD or flash. So that it can be played during the learning process. The slides in the learning media include learning objectives, materials, images, animations and videos. Canva for education-based learning media products that have been made can increase the effectiveness of learning activities.

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