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The Gewanci Application Media based on Smart Apps Creator on the Material of Imitating Animal Movements

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ABSTRAK

Dalam pembelajaran Seni Budaya ranah Seni Tari, guru kelas 1 SD Kanisius Beringin Semarang belum efektif memanfaatkan media yang tersedia; oleh karena itu, diperlukan pengembangan media yang baru. Peneliti bertujuan untuk mengembangkan, mengetahui hasil kelayakan, dan menguji keefektivan media aplikasi Gewanci berbasis Smart Apps Creator *pada materi Menirukan Gerak Hewan. Penelitian semacam ini disebut penelitian pengembangan dengan model ADDIE. Subyek penelitian terdiri dari ahli media dan ahli materi. Tes dilakukan terhadap 23 siswa yang duduk di kelas 1 SD. Penelitian ini menggunakan data kuantitatif untuk mengkaji perkembangan. Data dikumpulkan melalui berbagai metode seperti observasi, wawancara, angket, dan tes. Pengumpulan data dilakukan dengan menggunakan kuesioner Skala Likert. Analisis data meliputi metodologi statistik kuantitatif, kualitatif, dan inferensial. Hasil dari penelitian ini yaitu menghasilkan sebuah media pembelajaran berupa Aplikasi Gewanci. Keterbaruan atau hal yang membedakan dari aplikasi lainnya yaitu terdapat 15 video gerakan menirukan hewan kelinci, disertai gambar dan audio menarik. Aplikasi ini secara khusus dirancang selaras dengan materi ajar. Validasi media dan materi menunjukkan jumlah total skor validasi materi dengan persentase nilai validasi sebesar 93,7%. Hal ini menunjukkan bahwa skor ini sangat layak. Selanjutnya validasi media dinilai sangat layak dengan persentase nilai validasi sebesar 91%. Berdasarkan hasil uji t penggunaan media aplikasi Gewanci memberikan pengaruh yang signifikan. Uji N-gain menunjukkan adanya peningkatan hasil belajar dari pretest hingga posttest. Disimpulkan media aplikasi Gewanci berbasis* Smart Apps Creator *layak dan efektif digunakan dalam pembelajaran seni budaya ranah seni tari.*

ABSTRACT

In learning Cultural Arts in the realm of Dance, grade 1 teachers at SD Kanisius Beringin Semarang have not effectively utilized available learning resources; therefore, new media development is needed. The researcher aims to develop, determine the feasibility results, and test the effectiveness of the Smart Apps Creator-based Gewanci application media on the material of Imitating Animal Movements.This kind of study is referred to as development research using the ADDIE model. The research subjects consisted of media experts and material experts. The test was conducted on twenty three students who were in grade 1 of SD. This research use quantitative data to examine development. Data is collected via many methods such as observation, interviews, questionnaires, and testing. Data collection is conducted using a Likert Scale questionnaire. Data analysis encompasses quantitative, qualitative, and inferential statistical methodologies. The result of this research is to produce a learning media in the form of Gewanci Application which distinguishes itself from other applications, namely there are 15 videos of movement imitating rabbit animals, accompanied by attractive images and audio. This application is specifically designed to be in line with the teaching material. The findings of the media and material validation scores indicate that there are a total number of material validation scores with a percentage validation value of 93.7%. This suggests that these scores are very practical. Furthermore, media validation was considered very realistic, with a validation value percentage of 91%. Based on the t-test results, the use of the Gewanci application media has a significant impact. The N-gain test revealed a moderate improvement in learning outcomes from the pretest to the posttest. The findings suggest that the Gewanci app, developed using Smart Apps Creator, adequately meets the needs of dance education.

1. INTRODUCTION

Over the last several decades, technological progress has been widespread in many aspects of life, including the field of education. Due to the proliferation of new technology, instructors are finding it more difficult to exclude it from their teaching (Astini, 2020; Z. Siregar & Marpaung, 2020; Syamsuar & Reflianto, 2018). The use of technology in education not only changes the way we learn, but also improves the quality of education in facing future challenges. Mastering technology by teachers is not only a necessity, but also the key to developing appropriate learning media (Kanti et al., 2018; Latifah & Utami, 2019; Prawitasari et

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al., 2021). Mastery of technology for teachers is a demand that must be mastered to create effective learning media and help students understand or digest material. Digital learning for primary school students is an effort to use digital technology as an effective, interactive learning tool, which can increase interest and motivation to learn (Amhag et al., 2019; Huseyin et al., 2015; Ida & Maksum, 2021). This method aims to assist students in understanding the material presented by the teacher, reduce the use of useless electronic devices, and access interesting content and heighten the quality of learning. Digital-based learning can increase student learning motivation, as well as strengthen student and teacher creativity (Dewi et al., 2020; Liza & Andriyanti, 2020; Zwart et al., 2020).

Regrettably, a significant problem persists in several schools where technology remains underutilized. The studies conducted by (Dewi et al., 2019; Riwu et al., 2018; Siregar & Kurniati, 2022). have together shown that a significant number of classrooms do not use digital learning resources, thereby supporting this notion. Another study suggests that the lack of digital learning tools might be attributed to instructors' lack of competence in generating them. (Oktarina et al., 2021; Pramita Dewi et al., 2018; Priantini, 2020). Teachers at SD Kanisius Beringin Semarang, who are responsible for educating first graders, have reported utilizing materials in the classroom that are of uncertain quality or reliability. The teacher of the cultural arts dance lessons provides erroneous learning material, especially in the material of imitating class animal movements. Teachers only rely on pictures of animal movements in books without being supported by audio or video. In addition, the teacher only explains verbally without demonstrating movements, such as the jumping movements performed by rabbits. This condition causes a lack of inspiration for students to really feel and understand the movement in question. Teachers should pay attention to how important direct and interactive experiences are in honing students' movement skills. It is also due to the teacher's lack of ability in teaching dance movements. This makes students less likely to participate in learning and inhibits their ability to express themselves through appropriate body movements.

These problems emphasize the need for innovative digitally-oriented educational materials to assist students in addressing these difficulties. The use of learning media aims to assist students in understanding the subject matter and achieving their learning (Amali et al., 2020; M. D. Batubara et al., 2021; Ilmi et al., 2020). Media used for educational purposes may include a wide range of items, including tangible artifacts as well as software and technological devices. Teachers may more effectively meet students' technological requirements by integrating technology into compelling educational materials (Hidayah & Fathimatuzzahra, 2019; Pertiwi & Dibia, 2018; Sholihin et al., 2020). The importance of using supportive learning media is not only to improve student achievement, but also as motivation in the learning process (Ahdan et al., 2020; Simanjuntak & Budi, 2018). Good media development makes learning interesting and fun (Arsyad, 2014; Ariyanti., & da Ary., 2020). here are three main principles that can guide teachers in choosing learning media, namely effectiveness and efficiency, relevance, and productivity. Therefore, teachers must be observant in choosing the right learning media (Susanto, Amalia Zuliazani., & da Ary., 2019) seeing and understanding the surrounding conditions so that learning objectives can be achieved (Fahmi et al., 2021; Murtiningsih et al., 2022; Prawitasari et al., 2021).

Utilizing the Smart Apps Creator platform, users have the capability to generate novel apps via the utilization of digital technology (Elviana & Julianto, 2022; Suhartati, 2021). Users may create and customize app content without needing to know how to code, owing to its innovative and visually appealing design. Smart applications Creator has many advantages, including its user-friendly interface, minimal memory use, and the ability to create applications without any programming expertise (Desramaza et al., 2023; Fahri, 2022). The output of apps can be generated in various formats such as .apk for Android, .exe for Windows, and HTML format for web apps. Thus, Smart Apps Creator allows users to design apps without any restrictions and time. Through the Smart Apps Creator application, researchers developed a new application called Gewanci. Gewanci stands for Rabbit Animal Movement.

Previous research reveals that the use of digital-based learning media can increase students' learning motivation (Fathoni et al., 2021; Rafmana & Chotimah, 2018). In addition, other findings also show that multimedia, among other interactive learning resources, can specifically improve student learning outcomes significantly (Ayu et al., 2015; Irawan & Suryo, 2017; Prabawa & Restami, 2020; Saifudin et al., 2020). Digital learning can help students grasp the content provided by the teacher. By using digital media, students can access wider and more diverse content, which can make learning more interesting and build interest in learning (F. Y. Kurniawan et al., 2020; H. A. Kurniawan & Soenarto, 2022). However, there has been no study of the Gewanci Application Media based on Smart Apps Creator on the Material of Imitating Animal Movement. Based on this, the purpose of this research is to develop The Gewanci Application Media based on Smart Apps Creator on the Material of Imitating Animal Movement. With the Gewanci application media, it is expected to be a solution to the inaccurate use of learning media by the 1st grade teacher of SD Kanisius Beringin in the realm of dance, especially in the material of imitating animal movements.

2. METHODS

This study focuses on development research utilizing the ADDIE technique. The paradigm consists of five processes: Analyze, Design, Develop, Implement, and Evaluate (Batubara & Batubara, 2020). The ADDIE development paradigm starts with the Analyze stage. In the first stage, researchers went to the field to find out the problems that occurred at SD Kanisius Beringin Semarang. The problems obtained from interviews with the 1st grade teacher of SD Kanisius Beringin Semarang were used as the basis for researchers to find ideas for solutions. The second stage is Design. The second stage is the search for solutions from the needs analysis. The third stage is Development. At this stage, it is the realization of Design or designing preparations that have been made. The end of this stage is a media product that will be tested to determine its feasibility and effectiveness. The research also prepared material validation questionnaires, media validation, and teaching modules as an assessment for media development. After the revision stage is over and the material and media professionals have evaluated it, this phase is put into action. First-grade students at SD Kanisius Beringin Semarang use media applications created using the Smart Apps Creator program. In addition, the pupils were given a pre- and post-test by the administrators. The fifth step involves evaluating or appraising the situation. This is the ultimate phase after the media evaluation conducted with the first-grade students of SD Kanisius Beringin Semarang. The manufactured product is then implemented and its impacts are analyzed. When the pretest and posttest results are considered together, they will indicate if any changes are needed. The media is prepared for testing provided that no further adjustments are required. The primary objective of the evaluation step is to determine the viability of using media production with Smart Apps Creator.Validation for this research was conducted by a learning media specialist and a material expert at SD Kanisius Beringin Semarang.

The research included a cohort of twenty-three first graders from SD Kanisius Beringin Semarang. The development research used students' pre- and post-test scores, numerical data from material and media experts' validation, and other quantitative data. Data was collected using a range of methods including observation, interviews, questionnaires, and evaluations. In order to identify field-specific problems, we performed interviews and observations. To get expert comments and evaluations on the produced media, we used questionnaires. Prior to and subsequent to students' use of the media, assessments were administered to gauge their learning outcomes. The data was gathered by the use of a Likert Scale questionnaire, with the instrument grids shown in Table 1.

Table 1. Learning Media Expert Instrument Grid

No.	Aspects	Indicator
1	Software Engineering	Use and suitability of display Navigation and accessibility
2	Pemrograman	Language use and motivation for learning

Table 2. Learning Material Expert Instrument Lattice

No.	Aspects	Indicator
1	Learning Objectives	a. Appropriateness of Learning Objectives b. Clarity of Learning Objectives
2	Learning Materials	a. Accuracy of Learning Materials b. Clarity of Learning Materials c. Learning Flow
3	Learning Methods	a. Appropriateness of Method Selection
4	Sumber Pembelajaran	a. Benefits

The values used on the Likert scale are from 1-4 with the following categories *"not feasible"*, *"less feasible"*, *"feasible"*, and *"very feasible"*. The feasibility of learning media is assessed based on the average score provided by professionals in the fields of materials and media, which must be at least 3 or 50%. The learning material must meet the minimum condition in order to be considered "feasible". Data analysis methods include both quantitative and qualitative techniques, along with inferential statistics. Qualitative descriptive analysis was used to comprehend the opinions of specialists about the Gewanci Application Media developed utilizing Smart Apps Creator. To elevate the standard of educational media, suggestions and opinions from experts in the subject area and media field were used as a reference point. The data for quantitative descriptive analysis was derived from expert assessments of the created media. We used inferential statistics, including the Normality Test, Paired Sample T-test, and N-Gain Test, to assess the

influence of The Gewanci Application Media, developed using Smart Apps Creator, on students' learning outcomes.

3. RESULT AND DISCUSSION

Results

Based on the problems found in the field, a solution is needed to overcome the inaccuracy in the use of learning media. That is by creating innovative learning media. Researchers used the Smart Apps Creator application to develop a new application called Gewanci, which contains interesting images, videos and audio to increase student interest and learning outcomes. Gewanci stands for Rabbit Animal Movement. The Gewanci application developed by researchers has several menu features, including the profile of the application creator, instructions for using the application, learning objectives, videos imitating rabbit animal movements, and learning resources. In the video menu, there are 15 movements that must be imitated by students during the learning process. The development of the Gewanci application can be explained through the following stages.

First, the needs analysis. The results of the needs analysis, namely interviews with grade 1 teachers at SD Kanisius Beringin Semarang, found that teachers were less innovative in using learning media. When teaching the content of Cultural Arts with the domain of dance material imitating animal movements, the teacher only relies on books containing pictures of animals. Then, in explaining the motion of an animal, such as rabbits, it is only explained verbally, without demonstrating it, the teacher finds it difficult to teach practice. Stemming from this problem, the right learning media was developed on the material of imitating animal movements in grade 1 SD Kanisius Beringin. The media that researchers developed in the form of Gewanci application media which stands for Rabbit Animal Movement. This application was developed from another application called Smart Apps Creator. It is hoped that the Gewanci application media can make learning effective, efficient, and learning objectives can be achieved.

Second, design. At this stage, as a remedy for the identified issues in the needs analysis, namely the creation of appropriate learning media. However, before the media is made, proper preparation, design, or design is needed to make it easier to develop and make the media. The steps taken at the design stage are: (1) Determine the learning media to be made. (2) Prepare the material to be used. (3) Determine indicators and learning objectives for material boundaries. (4) Making a storyboard as a flow of learning media which is then consulted with a supervisor. (5) Prepare images, videos, and sounds as supporters of the media to be developed.

Now, advance. The application media product has now achieved its ultimate shape, owing to the successful implementation of the concept. The media was validated by experts who had knowledge in both the topic area and the medium of communication. They provided comments and suggestions to enhance its quality. The media is now prepared for evaluation on first graders at SD Kanisius Beringin Semarang after its assessment and approval by experts. Figure 1 illustrates the results of the Gewanci Application Media production, which was developed using Smart Apps Creator.

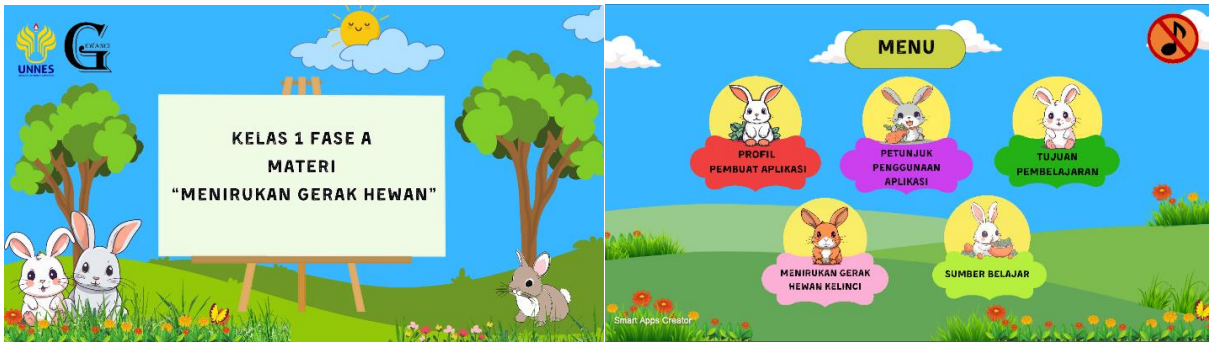

Figure 1. Results of Gewanci Application Media Based on Smart Apps Creator on the Material of Imitating Animal Movements

The Gewanci Application media developed using Smart Apps Creator was then tested for validity by material and media experts. The feasibility of the learning media is determined by the average score given by the experts, which requires a minimum score of 3 or at least 50% to be considered "feasible" for use in learning. A recapitulation of the validation results for learning materials and media is shown in Table 3.

Table 3. Recapitulation of Material & Media Validation Score Results

No.	Validasi	Jumlah Skor Total	Skor Maksimum	Rata-rata	Nilai Validasi
1	Materi	75	80	3,7	93,7%
2	Media	102	112	3,6	91%

Based on Table 3, the recapitulation of the results of the material and media validation scores shows the total number of material validation scores of 75 with an average of 3.7 and a validation value percentage of 93.7% so that it is declared very feasible. While the total number of media validation scores is 102 with an average of 3.6 and a percentage of validation value of 91% also declared very feasible. So it can be concluded that the Gewanci Application Media based on Smart Apps Creator developed gets very feasible validity by experts.

Fourth, implementation. At this stage, implementation is carried out by conducting media trials that have been revised and have been assessed for feasibility by validators. The Gewanci application can be installed via laptop or cellphone. To ensure learning effectiveness. Before displaying the Gewanci application media, students are given instructions to perform rabbit movements according to the commands given, including rabbit jumping to the right and left, rabbit jumping back and forth, rabbit jumping in place, rabbit waking up, rabbit looking for food, rabbit eating, rabbit spinning beautifully, rabbit settling, rabbit mocking, rabbit calling friends, rabbit chatting, rabbit digging the ground, rabbit lurking, rabbit taking carrots, and stylish rabbit. Students were asked to practice the movements according to their imagination and creativity. The total movements that each student can do will be used as a pretest score before using the Gewanci application media. After recapitulating the pretest score, then the Gewanci application media is displayed. On the "Imitate Animal Movements" menu, students are directed to imitate 15 rabbit animal movements contained in the Gewanci application. The type of motion used is the same as the motion performed in the pretest assessment, namely the motion of the rabbit jumping to the right and left, the rabbit jumping back and forth, the rabbit jumping in place, the rabbit waking up, the rabbit looking for food, the rabbit eating, the rabbit spinning beautifully, the rabbit settling, the rabbit mocking, the rabbit calling friends, the rabbit chatting, the rabbit digging the ground, the rabbit lurking, the rabbit taking carrots, and the rabbit styling. The total movements successfully performed by each student were assessed as posttest scores. A recapitulation of the results of the pretest and posttest scores of class 1 SD Kanisius Beringin Semarang is presented in Table 4.

Table 4. Recapitulation of Pretest and Posttest Scores of class 1 SD Kanisius Beringin Semarang

No.	Test	Lowest Score	Highest Score	Average	Number of Students Completed
1	Pretest	20	80	48.6	5
2	Posttest	20	100	67.8	11

Based on Table 4, the summary of pretest and posttest scores shows that before using the Gewanci application media, the lowest score obtained by students was 20, while the highest score was 80, with an average of 48.6. The number of students who met the criteria for learning completeness was 5 students. After using the Gewanci application media, the lowest score obtained by students remained 20, but the highest score increased to 100, with an average of 67.8. The number of students who achieved learning completeness was 11 people. Thus, there was an increase of 6 students who achieved learning completeness after using the Gewanci application media.

The normality test is the first step before conducting the T test to ensure that the data is normally distributed. Researchers conducted a normality test using SPSS 27 software with the Kolmogorov-Smirnov formula. The decision-making criteria for this test is based on a probability technique, with a significance level of $\alpha = 0.05$. In order to meet the assumption of normality, the significance value must exceed 0.05. However, if the significance value is less than 0.05, the presumption of normality will not hold. The results of the normality test are shown in Table 5.

Table 5. Normality Test Results

No.	Tes	Statistic	Df	Sig.
1	Pretest	0.173	23	0.073
2	Posttest	0.173	23	0.074

Prior to the application of media therapy, the significance value is 0.073, as determined by the normality test using the Kolmogorov-Smirnov algorithm. This was accomplished in the pretest phase. The

significance value decreases to 0.074 with the application of media treatment. Since none of the values are considerably below 0.05, we may infer that their distributions are normal. The process of testing hypotheses using the Paired Sample T-test involves verifying that the normality conditions have been met. We use a significance probability technique, with a significance threshold of α = 0.05, to make decisions in the T-test. The cornerstone of decision making lies in the examination of the probability number based on the following factors. A significance score higher than 0.05 suggests that the null hypothesis (H_0) is accepted. The null hypothesis H_1 is rejected when the significance score is below 0.05. With a significance level of 0.05, the research done using SPSS 27 found a significant result with a p-value of 0.000. By accepting H_1 as the alternative hypothesis and rejecting H_0 as the null, we are able to make a conclusive decision. Put simply, the results of both the pre- and post-tests indicate that the Gewanci application media has a significant influence. The N-Gain calculation was also used to determine the extent of improvement in the students' learning outcomes, and the findings are shown in Table 6.

Table 6. N-Gain Test Results

No.	Test	Average	N-Gain	Sig.
1	Pretest	48.69	0.46	Medium
2	Posttest	67.83		

From Table 6 N-Gain Test Results, it was found that the average score on the pretest reached 48.69, while for the posttest it reached 67.83. There is a difference between the average posttest and pretest scores of 19.14. Evaluation of the increase in student learning interest, as measured by a gain value of 0.46, indicates that the increase in learning outcomes from pretest to posttest can be classified as moderate.

Discussion

The usage of Gewanci application media has a significant impact on students' learning, as shown by the pre- and post-test results. The primary reason for this is because the content developed for the Gewanci application using Smart Apps Creator has the capacity to improve students' learning outcomes. The application is designed to be easily usable and useful, since it enables users to generate interactive teaching content. Interactive content include images, videos, and music, which enhance students' learning efficacy. (Abdulah et al., 2021; Amirudin & Setuju, 2018; Siahaan et al., 2021). Previous research also supports that interactive media helps student learning and improves learning outcomes (D. Kurniawan & Saragih, 2016; Wibawa, 2017). In addition, digital-based learning media that can be accessed through smartphone devices allows students to learn anytime and anywhere (Fartina et al., 2019; Saputra et al., 2020).

Secondly, Gewanci application media, which is based on Smart Apps Creator, increases student engagement in learning. Smart Apps Creator offers an editing feature that allows users to input image or video files which can then be processed into an application development (Aeni et al., 2023; Fahri, 2022; Suhartati, 2021). The choice of animals used in the Gewanci application is rabbits because they see the characteristics of rabbits who like to jump and are very suitable as a reference for researchers to make movements. This media application is enriched with text, images, sound, and video (multimedia), so that learning becomes more interesting and motivates students to learn (Illahi et al., 2018; Qistina et al., 2019; Wulandari et al., 2017). The Gewanci application contains several menu features, including the application maker's profile menu, application instructions, learning objectives, videos of imitating rabbit animal movements, and learning resources. In the menu imitating rabbit animal movements there are 15 movements that students will have to imitate during the learning process. The movements created are easy, namely examples such as jumping, walking, and turning because they adjust that this material is for grade 1 elementary school students and do not cause difficulties. These movements help students to be actively involved in learning. Previous studies indicate that active learning can boost students' motivation and enthusiasm to engage in educational activities. (Hartarto, 2015; Ningrum, 2016; Santosa & Christupar, 2021).

Third, Gewanci application Media developed through Smart Apps Creator can increase student learning motivation. Learning media that feature interesting concepts and designs help teachers in meeting technological demands (Hidayah & Fathimatuzzahra, 2019; Pertiwi & Dibia, 2018; Sholihin et al., 2020). The use of supportive learning tools aims to enhance learning outcomes and boost student motivation during the educational process. (Ahdan et al., 2020; Simanjuntak & Budi, 2018). Prior research (Ardina et al., 2019; Maronta et al., 2023). has shown that customized teaching materials enhance student learning. According to (Ikhtiarini et al., 2021; Masturah et al., 2018). students are more motivated to study when they see learning as a straightforward task. The Gewanci Application Media, developed using Smart Apps Creator,

facilitates students in comprehending the material and achieving learning objectives effectively. (Elviana & Julianto, 2022; Mariani et al., 2021; Suhartati, 2021) together discovered that using Smart Apps Creator proved to be the most straightforward method for consumers to generate novel digital apps. Moreover, several studies have shown that integrating digital media into the classroom may augment students' enthusiasm and motivation for studying (Carolina, 2023; Endris & Suhartini, 2022; Handayani, 2021). Benefit of the Gewanci Application Media based on Smart Apps Creator lies in its ability to improve students' understanding of learning materials by providing access to a variety of diverse menus. In short, the use of the Gewanci Application Media based on Smart Apps Creator can improve student learning outcomes. However, it should be noted that the limitation of this study is that it only contains Animal Imitation Materials intended for grade 1 elementary school students, focusing on the content of imitating rabbit animal movements. Therefore, the implications of this research indicate that the development of The Gewanci Application Media based on Smart Apps Creator can be a tool to improve student understanding in the learning process.

4. CONCLUSION

This Gewanci application is equipped with several features including an attractive image, video and audio menu. One of the main features is the video menu imitating 15 rabbit animal movements, which will be imitated by students during learning. The Gewanci App Media, developed using Smart Apps Creator, received a commendable level of validity from experts based on research data of 93.7% and 91%. The t-test results showed a statistically significant increase of 0.000 in pre and post test scores following the use of the Gewanci application. In addition, the N-gain test of 0.46 indicated an increase in learning outcomes from pretest to posttest. Overall, the findings indicate that the Gewanci App Media, developed using Smart Apps Creator, is feasible and effective to use for teaching dance in the cultural arts syllabus of first grade students at SD Kanisius Beringin Semarang.

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