

## DEVELOPMENT OF GENIALLY BASED EDUTAINMENT GAMES AS MEDIA TO IMPROVE STUDENT'S LEARNING MOTIVATION

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## PENGEMBANGAN MEDIA PERMAINAN EDUTAINMENT BERBASIS GENIALLY UNTUK MENINGKATKAN MOTIVASI BELAJAR SISWA

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### ABSTRACT

**Abstract:** The low students' learning motivation influences the suboptimal learning process. The learning activities tend to be monotonous and make the students have a lack of interest in learning. Making creative and innovative media is an effort that can be made to improve students' learning motivation. The research aims to develop genially based edutainment game learning as media that can encourage and cultivate students' learning enthusiasm. The research used the Research & Development (R&D) method and the Borg & Gall development model. The research instruments used were validation questionnaires, trial sheets, and learning motivation questionnaires. The research results indicate that edutainment games based on Genially are valid and suitable for use as a learning media to help teachers in Civic Education learning activities. This is supported by the validation results from three experts of media, materials, and learning, with an average value of 88% in the highly valid category. The average score of learning motivation before applying media was 3.31 in the "sufficient" category, and there was an increase average score of 4.42 in the "very high" category after carrying out learning activities through edutainment game media based on Genially. It shows that edutainment game media based on Genially can also increase students' learning motivation in Civic Education learning subjects.

**Keywords:** edutainment game, genially, students' learning motivation

**Abstrak:** Rendahnya motivasi belajar siswa membuat proses pembelajaran tidak berjalan dengan optimal. Kegiatan pembelajaran yang berlangsung cenderung monoton dan membuat siswa kurang memiliki ketertarikan dalam pembelajaran. Pembuatan media yang kreatif serta inovatif merupakan upaya yang bisa dilakukan dalam meningkatkan motivasi belajar siswa. Tujuan penelitian yaitu untuk mengembangkan media belajar *game edutainment* berbasis *genially* yang dapat mendorong dan menumbuhkan rasa semangat belajar siswa. Penelitian menggunakan metode *Research & Development* (R&D) serta model pengembangan Borg & Gall. Instrumen penelitian yang dipakai yaitu angket validasi, lembar uji coba, dan angket motivasi belajar. Hasil penelitian menyatakan media *game edutainment* berbasis *genially* valid dan layak dipakai sebagai media belajar untuk membantu para guru pada kegiatan pembelajaran PPKN. Hal ini diperkuat dari hasil validasi ketiga pakar yaitu: media, materi, serta pembelajaran dengan nilai rerata sebesar 88% dalam kategori sangat valid. Perolehan nilai rerata motivasi belajar sebelum dengan media yaitu sebesar 3,31 dalam kategori cukup, dan terdapat peningkatan sebesar 4,42 dalam kategori sangat tinggi setelah melakukan kegiatan pembelajaran dengan media *game edutainment* berbasis *genially*. Hal ini menunjukkan bahwa media *game edutainment* berbasis *genially* juga bisa meningkatkan motivasi belajar siswa dalam pelajaran PPKN.

**Kata Kunci:** permainan *edutainment*, *genially*, motivasi belajar siswa

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## INTRODUCTION

The role of education in human life is very important in producing a quality generation, so in education, a professional educator is needed. A professional educator is an educator who is able to carry out the main task of educating and is able to keep up with the increasingly advanced times. Regrettably, one of the prevailing issues in the quality of education in Indonesia presently pertains to the subpar learning process implemented by educators. This is exemplified by a lack of creativity demonstrated by numerous educators during the learning process, Wherein the learning process tends to be dreary, leaving students disinterested during the learning sessions. The change in the 21st century is the rapid development of scientific knowledge in digital technology and the transformation of the learning paradigm through changes in curriculum, media, and technology. The development of increasingly sophisticated technology has a positive impact on the world of education (Aeni, Djuanda, et al., 2022). In the 21st century, Proficiency in digital technology utilization during the learning process is expected from both teachers and students. The integration of technology as a means of learning media in developing students' learning skills is a demand in learning activities in the 21st century (Rahayu et al., 2022). The tool that can be used to convey information is media (Aeni, Nursyafitri, et al., 2022). Learning media is an element that turns a pivotal working in the implementation of the learning process in the classroom (Olisna et al., 2022). The benefits of incorporating media into learning are significant, as it can greatly assist in facilitating the learning process for students (Harsiwi & Arini, 2020).

Effective learning can be achieved if the students' mood is in a pleasant condition, Subsequently, this will motivate them to engage in the learning process proactively. The improvement of learning motivation needs to be enhanced as an effort in school learning (Hamdu & Agustina, 2019). Learning

motivation is a process of giving encouragement or spirit to someone so that they have the willingness to learn better. Learning enthusiasm needs to be possessed by students, especially those at the elementary school level. The presence of learning motivation can encourage them to learn better and achieve learning objectives to the fullest. According to (Aeni, 2014) is very important for a teacher to provide motivation to students in fostering their enthusiasm and self-confidence. One way to enhance students' motivation to learn is by creating an enjoyable learning experience. Teachers can do this by applying edutainment-based learning media.

Edutainment media is considered as a tool in improving the quality of learning and teaching (Mansour et al., dalam Pratama et al., 2020) Edutainment-based learning is a combination of words derived from education and entertainment. The word education means education, while the word entertainment means entertainment. When translated into Language, edutainment means education that takes place in an enjoyable manner. Based on this statement, we can understand that edutainment is a process of teaching and learning that combines education with entertainment in order The aim is to ensure that the learning process is both effective and enjoyable. The elements of education in edutainment learning media are the learning material, while the elements of entertainment are games (Hastuti et al., 2017) Games are activities carried out by children with the aim of obtaining pleasure for the process of forming a child's personality and contributing to achieving the physical, intellectual, social, moral, and emotional growth of the child (Al Arifin, 2018). Games are an activity that can make children learn with feelings of happiness and joy and are important for the growth and development of children

Genially is a platform designed to facilitate educators in implementing creative and innovative learning processes by creating attractive learning media as teaching materials.

On the Genially website, you can create interactive content such as posters, infographics, presentations, quizzes, resumes, and more. The existence of Genially web platform will certainly make the learning process enjoyable, where the features and templates offered by Genially are very attractive and varied, making the teaching and learning process not monotonous and not boring. Genially-based game edutainments are a learning media in the form of games created through the Genially web platform with an attractive game interface. Game edutainments contain learning content designed like typical games, so that children will feel happy during the learning process. With the presence of game edutainments, The aspiration is for children to exhibit greater levels of activity and enthusiasm towards learning.

Based on previous research that discusses learning media in the form of games, conducted by (Anggraini & Kristin, 2022) entitled "Development of Social Studies Learning Media Based on Monopoly Game to Improve Motivation and Learning Outcomes of 4th Grade Elementary School Students", it has been proven that the game media used can increase learning motivation from before the use of media, which was 42.3%, to 87.97% with the criteria of very high learning motivation, and children's learning outcomes also improved when the Monopoly game was implemented in social studies learning. Subsequently, the following research was conducted by (Pratiwi & Hardini, 2022) The study entitled "Development of Snake and Ladder-based Learning Media to Improve Learning Motivation of Fourth Grade Elementary School Students in Science Subjects" states that There was a surge in motivation to learn, as shown by outcoming of student motivation to learn. before the use of

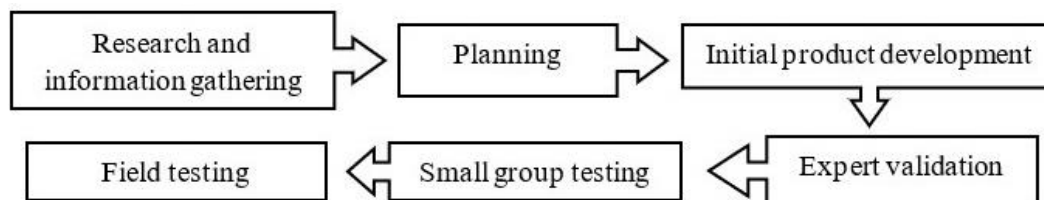
media, which was 70.20% with the criteria of "Good", becoming 84.86% with the category of "Very Good".

Incorporating games into the learning process has a favorable impact on students, including introducing technology and its features, teaching children to follow instructions and rules in games, providing exercises to improve thinking skills and problem solving, and as a fun and entertaining learning tool (Widyatmojo & Muhtadi, 2017). One advantage of game-based learning is that it stimulates both physical and mental activity in students, thereby enhancing their motivation (Mahfi et al., 2020). Therefore, the existence of game edutainment is anticipated that the utilization of media would assist teachers in rendering the classroom learning process more pleasurable., which can motivate students to learn.

The objective of this study is to create an edutainment game using Genially as a platform, with the aim of nurturing and stimulating students' interest in learning. Additionally, it seeks to investigate the growth in students' motivation to learn while utilizing the Genially-based edutainment game among third-grade elementary school students.

## **METHOD**

The methodology employed in this investigation is Research and Development (R&D). The research procedure relates to Borg & Gall's development model, which has been modified by Sugiyono and consists of 10 stages. The stages used in this research are only six steps, those are research and information gathering, planning, initial product development, expert validation, small group testing, and field testing. Figure 1 shows the Borg & Gall research procedure with the modified six stages, which are:



**Figure 1. Research Procedure Borg & Gall**

The appropriate approach for Research and Development (R&D) research, which uses steps such as preliminary studies, development, and field testing, is a mixed-method approach that combines qualitative and quantitative approaches. (Aeni, 2016).

The research was conducted at SD Negeri 1 Gegesik Wetan, located in Cirebon Regency, West Java Province. This research was carried out on January 28, 2023. The participants in the study were 16 third grade elementary school students. The data collection technique used was a questionnaire using the Likert Scale which consists of 5 levels: "Very Good" (5), "Good" (4), "Moderate" (3), "Poor" (2), and "Very Poor" (1). The Likert scale questionnaire was used in the validation by media experts, subject matter experts, and instructional experts, as well as in small-group testing and field testing.

The quantitative data was analyzed using the formula below as a data analysis technique to determine its validity level.

1. The formula for processing data question

$$P = \frac{x}{xi} \times 100 \%$$

Information :

P = Percentage

x = Score of the answer to one question

$x_i$  = Maximum score of the answer to one question

2. The formula for processing data for all questions.

$$P = \frac{\sum x}{\sum xi} \times 100 \%$$

Information:

P = Percentage

$\sum x$  = Total score of all answers

$\sum x_i$  = Total maximum score of all answers

Then the conclusion regarding the feasibility of the media is interpreted into the following criteria:

**Table 1. Eligibility Criteria**

Percentage	Information
76% - 100%	Very Valid
56% - 75%	Quite Valid
40% - 55%	Less Valid
< 40%	Invalid

(Sriwahyuni & Mardono, 2016)

## RESULTS AND DISCUSSION

Development of Genially-based Game edutainment Media

### a. Research and Information Collection

At this stage, collecting various information related to the product to be developed is carried out. Game Edutainment media was developed because in class III at SDN 1 Gegesik Wetan, an interview was



conducted with the homeroom teacher, where the teacher had yet to develop digital-based learning media that attracted students' interest in learning, especially on PPKN material. The learning media that the teacher uses when learning is only sourced from books. Meanwhile, teachers must be able to carry out digital-based learning in this digital era. In line with the opinion (Putri, E. E., Faizin, M., & Ma'rifah, 2022) that in this digital era, education is both science- and technology-based. Technological developments in this learning have changed conventional learning into digital-based learning.

### b. Planning





This stage is carried out as the basis for selecting the subject of Civics Education on Rights and Obligations in School. The selection of this subject is based on field observations by the researcher, where there are still students who do not know their rights and obligations in school. This is because in the Civics Education lesson, the students' learning motivation is still low. The learning and teaching activities carried out did not inspire the students' enthusiasm for learning. During the learning process, the teacher did not use creative and innovative learning media, resulting in a monotonous learning atmosphere. In addition to determining the material, at this stage, the curriculum-based

subject matter is also studied. In accordance with the competency standards and basic skills in the book theme 4, sub-theme 2, about obligations and rights in school, several questions have been created and adapted by the researcher.

### c. Creation of Initial Products

This stage explains about the development of a genially-based game edutainment media. This game media includes materials and practice questions about obligations and rights in school. The flow used is "Exploration", which means that students must learn and understand the material about obligations and rights in school first, and then attempt to answer the practice questions available in the game. At this stage, the researcher created a genially-based game edutainment consisting of two games: Jumanly game and a special game for material discussion. In this game, students will practice searching for information themselves about obligations and rights in school. After that, they will present the information they have obtained in front of their classmates. The second game is the dragon game, in which students will be given 5 practice questions at each level. The form of the questions in this dragon game varies, starting from true or false questions to completing words. The following is the appearance of the developed game media:

**Table 2. Material Game Media Display**

Section Name	Picture	Section Name	Picture
Cover		Play Menu	
Game Information		Material Form	










KD, Indicators, and Learning Objectives



Certificate



**Table 3. Display of Exercise Game Media**

Section Name	Picture	Section Name	Picture
Cover		Level 3	
Game Information		Level 4	
Menu Level		Final Level	
Level 1		Certificate	
Level 2			

#### d. Expert Validation

This stage is carried out to validate the initial product, which is an game edutainment media for PPKN lessons in grade 3 elementary school. Validation data for the game

edutainment media was utilized out by three experts, including media, material, and learning experts, with the results that is able to be seen in Table 4.

**Table 4. Final Results of Feasibility Test**

Validation	Number of Scores	%	Criteria
Media	47	94%	Very Valid
Material	42	84%	Very Valid
Learning	44	88%	Very Valid
Averages %		89%	Very Valid

The feasibility test calculated using the second formula showed that the validation results for media obtained a score of 94% highly valid category. Then the validation results for material obtained a score of 84% highly valid category. Furthermore, the validation results for learning obtained a score of 88% highly valid criteria. By the validation results of the three experts, the average score obtained was 89% in the highly valid criteria. Based on the classification of values in the range of 76% - 100%, it means that this media

meets the highly valid qualification. The genially-based game edutainment media for PPKN lesson is valid and worthy of being tested according to the opinions and recommendations of the experts.

#### e. Small Group Trial

Four students from different schools participated in this small group trial. The outcome of this experiment is illustrated in the table presented below:

**Table 5. Results of Small Group Trial Questionnaire**

Aspect	Total Value	%	Criteria
Media Design	69	86%	Very Valid
Visual Communication	177	89%	Very Valid
Learning	105	88%	Very Valid
Average %		87%	Very Valid

Table 5 shows that the media engineering aspect scored 86% in the highly valid category, while the visual communication aspect scored 89% in the highly valid category, and the learning aspect also obtained a score of 88% in the highly valid category. According to this small-scale trial, the genially-based game edutainment media obtained a "Highly Valid" rating with an average score of 87% from the three aspects. Therefore, the testing phase of the educational game edutainment media can proceed.

#### f. Field Test

The participants for this stage were 16 third-grade students from SDN 1 Gegesik Wetan. In this stage, the students were first taught about "Rights and Obligations in School" by accessing the first game edutainment media, Jumanlly. After that, the students played the second game to do exercises. There were three aspects assessed in this field trial, namely media engineering, visual communication, and learning aspects. The outcomes acquired during this stage are presented in the subsequent table:

**Table 6. Result of Field Test Questionnaire**

Aspect	Total Value	%	Criteria
Media Design	295	92%	Very Valid
Visual Communication	737	92%	Very Valid
Learning	439	91%	Very Valid
Average %		92%	Very Valid

The table above indicates that the aspect of media engineering obtained a 92% score in the highly valid criteria, and also the aspect of visual communication obtained a 92% score in the highly valid criteria. Furthermore, for the last aspect which is the aspect of learning, it obtained a 91% score in the highly valid criteria. The genially-based media game edutainment tested in this trial obtained an average percentage score of 92% for all three aspects, which fell within the range of 76% to 100%. This means that the genially-based media game edutainment is highly valid in terms of qualification.

In the process of learning, students require encouragement or motivation so that the learning activities can run smoothly. The learning outcomes of students are significantly influenced by the motivation to learn (Andriani & Rasto, 2019). According to (Mudanta et al., 2020) motivation that exists within oneself has a significant influence on process of development and learning outcomes of students. Therefore, as a motivator, teachers must have the ability to motivate students to cultivate a sense of enthusiasm for learning. Table 7 and Table 8 are the results of data on student motivation before and after learning activities with media.

**Table 7. Data on Student Motivation for Learning**

Indicator	Before	After
Diligent in completing tasks	3,22	4,53
Persistent in facing difficulties	3,28	4,25
Having an interest in subjects	3,27	4,48
Prefers to work independently	3,69	4,53
Easily gets bored with routine work	2,97	4,59
Able to defend their opinions	3,69	4,56
Reluctant to let go of something believed in	3,13	3,88
Enjoys seeking and solving problem-solving activities.	3,25	4,54
Total Average Score	65,94	88,81
Average Score	3,31	4,42

As we can see, there is a difference in student response regarding motivation to learn before and after implementing the learning activities. The motivation to learn increased after the implementation of learning activities with genially-based media game edutainment. A learning resource is deemed capable of elevating motivation to learn if the mean score

for each criterion increases post-implementation in comparison to pre-implementation. The assessment results, which are still in the form of scores, are converted into values according to the following conversion guidelines:



**Table 8. Guidelines for Converting Research Scores into Five Categories**

Skor	Formula	Classification
5	$X > 4,01$	Very High
4	$3,34 < X \leq 4,01$	High
3	$2,26 < X \leq 3,34$	Enough
2	$1,99 < X \leq 2,26$	Low
1	$X \leq 1,99$	Very Low

Table 8 shows that there is a difference in student response regarding motivation to learn before and after learning activities with media. The motivation to learn among students increased after the learning activities with genially-based media game edutainment, compared to before the learning activities with media. This is also evidenced by the average score obtained before using the media, which was 3.31, increasing to 4.42. Furthermore, Table 8 on the guidelines for converting the average score of assessment results shows that the motivation to learn among students before and after the learning activities with media has increased from being in the "Fairly Sufficient" category to "Very High". can be concluded that the creation of genially-based media game edutainment for learning purposes can increase student motivation to learn.

In line with previous research, (Febyanita & Wardhani, 2020) study titled "Development of Water Cycle Puzzle Media to Increase Student Learning Motivation" states that the research conducted showed the increase on student motivation through using media in their learning, where the score increased from 36% before the learning activities with media to 71% after the learning activities with media.

## CONCLUSIONS

## RECOMMENDATIONS

The game edutainment media product based on Genially for the subject of Civics Education in 3rd grade of elementary school has been created according to the procedure of learning media development, which includes research and information gathering, planning, initial product creation, expert validation,

small group testing, and field testing. According to the outcome of feasibility tests utilized by three experts in media, materials, and learning, Having achieved an average percentage score of 88% highly valid criteria, it has been deemed appropriate for employment in classroom PPKN learning activities. The students' learning motivation has increased from the average score before learning with the media, which was 3.31 in the "Fair" category, to 4.42 in the "Very High" category after learning activities with the media. Thus, the creation of genially-based game edutainment media can be utilized by educators as a learning media in the classroom and contribute to the improvement of students' learning motivation.

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