Development of Snakes and Ladder Media Based on Contextual Learning Containing Pancasila Student Profiles in The Pancasila Education Subject to Improve Students' Learning Interest in Elementary Schools

Gerry Adhitya Muntu[1][✉], Yessy Yanita Sari[2], Arum Fatayan[3]

[1]Postgraduate Muhammadiyah Prof. Dr, Hamka Of University, Jakarta

Abstract

Contextual learning connects the learning process with everyday life. However, students' learning interest remains low, as seen from the methods, media, and learning models used by teachers in the classroom. This study aims to develop a snakes and ladders media based on contextual learning, assess its feasibility, and analyze its effectiveness in increasing students' learning interest at SDN Gedong 03 Jakarta. This research uses a development method with the 4D model, involving media and design experts, material experts, and students. The results show that media and design experts gave an overall score of 80% (feasible category with revisions), material experts obtained 93% (feasible category), while student respondents gave 85% (large group) and 83% (small group). The effectiveness of the snakes and ladders media scored 70% (effective category), and students' learning interest reached 82% (very good category). The findings indicate that the contextual learning-based snakes and ladders media with the content of the Pancasila Student Profile can increase students' learning interest and is effective for classroom use, especially in elementary schools.

Keywords: Development, Snakes and Ladders Media, Contextual, Pancasila Student Profile, Learning Interest.

Pengembangan Media Gaull (Game Edukasi Wordwall) Pada Materi Nilai-Nilai Pancasila untuk Siswa Kelas V SD Padmajaya Palembang

Abstrak

Pembelajaran kontekstual mengaitkan proses belajar dengan kehidupan sehari-hari. Namun, minat belajar siswa masih rendah, yang terlihat dari metode, media, dan model pembelajaran yang digunakan oleh guru di kelas. Penelitian ini bertujuan untuk mengembangkan media ular tangga berbasis pembelajaran kontekstual, menilai kelayakan, dan menganalisis efektivitasnya dalam meningkatkan minat belajar siswa di SDN Gedong 03 Jakarta. Penelitian ini menggunakan metode pengembangan dengan model 4D, melibatkan ahli media dan desain, ahli materi, serta siswa. Hasil penelitian menunjukkan bahwa ahli media dan desain memberikan penilaian keseluruhan sebesar 80% (kategori layak dengan perbaikan), ahli materi mendapatkan hasil 93% (kategori layak), sedangkan responden siswa memberikan penilaian 85% (kelompok besar) dan 83% (kelompok kecil). Efektivitas media ular tangga memperoleh hasil 70% (kategori efektif), dan minat belajar siswa mencapai 82% (kategori sangat baik). Hasil penelitian menunjukkan bahwa media ular tangga berbasis pembelajaran kontekstual dengan muatan Profil Pelajar Pancasila dapat meningkatkan minat belajar siswa dan efektif untuk digunakan dalam pembelajaran di kelas, khususnya di sekolah dasar.

Kata kunci: Pengembangan, Media Ular Tangga, Kontekstual, Profil Pelajar Pancasila, Minat Belajar.

✉*Corresponding Author: Gerry Adhitya Muntu*
Affiliation Address: Postgraduate Muhammadiyah Prof. Dr, Hamka of University, Jakarta
E-mail: gerryadhitya16@gmail.com

INTRODUCTION

In order to create competitive human resources who are able to adapt to progress in the third millennium, the education sector needs to undergo various improvements. Learning is a crucial aspect in an individual's life journey, covering the scope of knowledge to teaching and learning activities. Through the learning process, a person can master various disciplines and technologies. The quality of learning must always be improved along with the evolution of the times, especially in this digital era. Learning plays a role as a primary instrument in reshaping human perspectives and values, and has great potential to overcome the sustainability challenges faced by humanity, the learning process is also interpreted as an educational activity that can take place in various places, such as formal educational institutions, universities, and even in the surrounding environment. This can empower students to adopt sustainability as a lifestyle choice. The strategy to achieve the remaining, Sustainable Development Goals (SDGs) with sustainability as the focus of learning is recognized in the United Nations 2030 agenda (Kioupi et al., 2019). Every individual needs education, and all citizens have equal rights to obtain quality education (Yessy et al., 2020), learning is defined as the influence or instruction given by the party responsible for students in educational institutions, educators play their role in the learning process. Thus, the learning process becomes an inseparable element of a person's life journey. In (Fatayan et al., 2022) it is explained that in an era like this, teachers must adjust the learning process activities balanced with the sophistication of existing technology with the aim of becoming a bridge between teachers and students and learning materials can be conveyed properly and in accordance with learning objectives that are more optimal. Learning media is a means for teachers to facilitate the learning process can be conveyed and implemented optimally and improve the quality of the teaching and learning process so that it does not always apply boring learning concepts (Hotimah, 2017).

To achieve the educational goals outlined in the law, it needs to be started as early as possible. According to an education expert, learning is defined as a series of efforts made by individuals to experience a complete change in behavior, as a result of their personal experiences in interacting with their surroundings. The success of teachers in delivering material has the potential to create a fun and interactive learning atmosphere, and has a positive impact on increasing students' enthusiasm for the subject. Interest in learning can be measured through four aspects: desire to learn, focus on learning, motivation to learn, and understanding. Interest in learning plays a crucial role in the educational process; this can affect the way students absorb information during learning activities. Interest is a person's tendency towards something, the stronger the individual's ability, the greater the desire to achieve the desired goal (Slameto, 2010). Included in this is the interest in learning, which must be based on intrinsic ability, a feeling of pleasure that a person has, reinforced by a positive attitude, acting as an affective component that forms attitudes (Renninger et al., 2011).

Interest is a student's interest in a lesson that can be observed through their active involvement during the educational process and their focus on the topic being discussed. Ideally, every student should have learning motivation in every course, especially in studying student characteristics that are in accordance with Pancasila values. Teachers, in their role as mentors, are expected to be able to present a lively, joyful, and creative learning atmosphere, as well as create a conducive environment for students to absorb learning materials (Sobari, 2017). As the center of the learning process, students are expected to be able to internalize the material thoroughly and apply it in life. In addition, it is also expected that students have curiosity and a desire to be involved in learning activities in the school environment. Each stage of learning needs to be accompanied by a high enthusiasm for learning so that all participants can follow it optimally. Thus, the enthusiasm for learning can be seen as students' intrinsic motivation to gain knowledge and achieve learning goals. The characteristics of students who are in accordance with Pancasila values have a crucial

role in improving the quality of human resources in Indonesia (Trismayanti, 2019). Based on available statistics, 90% of teachers still rely on traditional methods without utilizing learning aids, while only 10% integrate media in the teaching process. As a result, student development is hampered and the learning atmosphere becomes less varied. One of the aids that meets the criteria for attractive learning is the snakes and ladders board game. This aid can increase student enthusiasm and develop attitudes and collaboration skills.

Based on existing problems, it can be seen that students lack a strong drive to learn, lack enthusiasm, are not supported by adequate facilities, and teaching methods tend to be static and less interesting. All of this results in students not getting a pleasant learning experience. Learning aids are used in the knowledge transfer process to help students understand and master the material. These aids can be physical objects, technological devices, or a combination of both, which are designed to convey information effectively and facilitate understanding (Dwi, 2023). In the 21st century, snakes and ladders board media are very relevant to support the educational process in the classroom. The aids used also need to be innovative in order to attract students' attention to learn. Teachers have the task of selecting and designing appropriate learning aids, because media is an important instrument in the process of transferring knowledge in the classroom. From the explanation above, we can conclude that a number of breakthroughs in educational media have been created to improve quality and create a joyful learning atmosphere. Although these media have been carefully and attractively designed, some of them still require adequate school infrastructure support. For example, the use of audiovisual materials requires projection devices, which are not always available in every educational institution. Thus, facilities are needed that are not only attractive but also easy to use, and are able to bridge communication between teachers and students.

From the explanation, it can be concluded that a number of breakthroughs in educational media have been created to improve quality and create a joyful learning atmosphere. Although these media have been carefully and attractively designed, some of them still require adequate school infrastructure support. For example, the use of audiovisual materials requires projection devices, which are not always available in every educational institution. Thus, facilities are needed that are not only attractive but also easy to use, and are able to bridge communication between teachers and students. The government and educational institutions have started implementing the Independent Curriculum in 2022, the idea of this curriculum was introduced in mid July 2020 with the intention of simplifying the previous curriculum which was considered complicated and less suited to students' needs. In the country, the idea of a curriculum based on freedom of learning is increasingly in the spotlight. This is reflected in the Decree of the Head of the Education Standards, Curriculum, and Assessment Agency of the Ministry of Education, Culture, Research and Technology No. 022/H/KR/2023 which covers more than 105,000 educational institutions, both state-owned and private, as implementers of the Free Curriculum in the 2023/2024 academic year. Referring to the official website of the Ministry of Education, Culture, Research and Technology (Kemendikbudristek), the Independent Curriculum is a curriculum with various intracurricular learning activities. Learning materials are designed more efficiently so that students have enough time to explore concepts and strengthen their abilities. On the other hand, educators are given the freedom to choose various teaching tools, so that the learning process can be adjusted to the needs and interests of students. The concept of independent learning in the independent curriculum, which is the core of the independent curriculum, is part of the education reform in Indonesia. This idea was introduced by the Ministry of Education, Culture, Research and Technology to strengthen the national education system. The main objective of the Independent Curriculum is to create an open, innovative, and meaningful learning environment for students, so that they can develop holistically and be ready to face challenges as competitive citizens at the national and international levels.

The effectiveness of educational design in specific conditions further emphasizes the urgency of modifying the design and tactics of implementing a more comprehensive curriculum. This step was taken to support national educational aspirations and as an element of efforts to restore the learning process after the pandemic. The Independent Curriculum, previously known as the prototype curriculum, was designed as a more flexible learning framework, emphasizing essential content and the formation of student character and capabilities. This educational design is also a breakthrough to help teaching staff and management of educational institutions in transforming teaching and learning activities to be more contextual, substantial, and enjoyable. It is hoped that students can more easily absorb the material presented in the classroom (Sitoningrum, 2023). The fundamental principles of the Independent Curriculum include the flexibility of educational institutions, strengthening character formation, project-based learning, increasing modern era skills, and empowering educators.

In the Independent Curriculum, there is a concept of the Pancasila Student Profile which aims to form personality and competencies that are integrated into students' daily lives through the atmosphere of educational institutions, intracurricular activities, and Pancasila student profile strengthening projects as cocurricular and extracurricular activities. The Pancasila Student Profile has six main dimensions: (1) Faithful and ethical, (2) International perspective, (3) Mutual cooperation, (4) Independent, (5) Critical thinking, and (6) Creative. One strategy to realize the characteristics of Pancasila students is implemented through strengthening initiatives that integrate learning between scientific fields. Students are invited to observe and formulate solutions to problems in their immediate environment, in order to improve various capabilities in the characteristics of Pancasila students. Education regarding the characteristics of Pancasila students is integrated into all learning subjects in educational institutions, especially those related to Pancasila Education. In this case, students are equipped with an understanding of the essence of Pancasila, a sense of togetherness, independence, critical analysis of the foundations of the state and laws and regulations, and the creativity contained in these values. All of these aspects are taught in an integrated manner with the dimensions of the characteristics of Pancasila students. The transformation resulting from the knowledge acquisition process is lasting, so that the information obtained is not easily forgotten, through the learning process, individuals experience metamorphosis towards a more optimal condition than before. The transformation of the name PPKN to Pancasila Education has been regulated in Government Regulation No. 4/2022, which revises PP No. 57/2021 concerning National Education Standards. Article 40 paragraph 4 of this regulation emphasizes that the curriculum content must include religious teaching, Pancasila studies, citizenship, and Indonesian, which are implemented as compulsory subjects in the form of religious education, Pancasila studies, and Indonesian. In the context of the independent curriculum, Pancasila learning is directed to form students who have faith, devotion to God Almighty, noble character, national and international perspectives, independence, critical thinking, and creativity. The implementation of Pancasila education in the school environment is carried out through civic learning based on the principles of Pancasila, the 1945 Constitution, the spirit of unity in diversity, and dedication to the unity of the Indonesian state.

Based on the discussion above, the snake and ladder board activity is a simple but attractive game that can be played by children together. Therefore, this game has the potential to be modified into a learning media that integrates Pancasila education materials and student characteristics in the Pancasila student profile. Based on thoughts and literature reviews, researchers aim to develop an innovative learning media that can attract students' interest in learning, namely the snake and ladder media by adapting and implementing contextual-based learning methods that contain Pancasila student profiles in

interesting and innovative Pancasila education subjects for learning activities in the classroom and increasing interest in learning.

METHODS

In the study, the researcher used Research and Development (R&D). The research and development model used in this study is 4D and was developed by Sivasailam Thiagarajan, Dorothy S. Semmel, and Semmel. The 4D development model has 4 stages of development, then adapted into three stages, namely: 1) Define Stage, 2) Design Stage, 3) Develop Stage, 4) Dissimination Stage (Sugiyono, 2015). According to Thiagarajan, the steps of the 4D model consist of four research stages, namely:

Figure 1. Research Steps According to Thiagarajan

Referring to (Sugiyono, 2015), data collection was carried out by presenting a series of written questions to respondents to be answered. Survey instruments were used in the study to evaluate the quality of the learning aids developed, with the aim of obtaining input from media experts, material experts, and respondents in order to improve the media. Data analysis techniques used included direct observation of students, distribution of validity questionnaires to material and media experts, and surveys of students. The assessment of the quality of learning media in the form of a snake ladder game based on a contextual approach was presented in a descriptive presentation format and percentage results that had been distributed to respondents, namely grade IV students of SDN Gedong 03 Jakarta. The validation process of this aid and the topics discussed were carried out by media and material expert validators, which were then analyzed using descriptive percentage techniques, then analyzed using descriptive percentage techniques with the formula (Sudjino, 2006):

$$P = \frac{f}{n} \text{ X } 100\%$$

Keterangan :
f= Frekuensi yang sedang dicari persentasenya
N= *Number of Cases* (Jumlah frekuensi/banyaknya induvidu)
P= Angka Persentase

N Gain Test, a method often used by education experts to measure the effectiveness of learning, in this method allows the evaluation process to be more enjoyable and measurable (Utami, 2024).

$$N \text{ } Gain = \frac{Skor \text{ } Posttest - \text{ } Skor \text{ } Pretest}{Skor \text{ } Ideal - Skor \text{ } Pretest}$$

Table 2. Interpretation Categories of N-Gain Effectiveness

Percentage (%)	Interpretation
< 40	Not Effective
40- 55	Less Effective
56 - 75	Fairly Effective
> 76	Effective

(Source: Hake, 1999)

Table 3. Distribution of Gain Scores

Percentage (%)	Category
g < 0,7	Tinggi
0,3 < g < 0,7	Sedang
g < 0,7	Rendah

(Source: Syahfitri, 2008)

FINDINGS AND DISCUSSION

Improving the snakes and ladders teaching media by utilizing the 4D model which consists of a series of stages as follows:

1. The Define stage is part of the needs analysis that involves assessing the applicable curriculum and the materials used. In the analysis stage, problems are seen in the learning process in schools related to the use of learning media. Current classroom learning tends to use media that is less interesting, resulting in students being inactive and having difficulty understanding the material. The use of lecture methods and theme books as learning support is still dominant.

2. The Design stage involves designing learning components and instruments. In this stage, the snakes and ladders game is planned to be very interesting. This game can be used as a learning medium that can attract students' attention through an attractive appearance and simple playing rules. The design of the snakes and ladders game is very attractive with a combination of several colors in each column, popular animated character images, and snakes and ladders images that are comfortable to look at.

Figure 2. Development of Snakes and Ladders Media in Pancasila Education Learning in Elementary Schools

3. The Development stage is the stage of making a product based on a previously created design. The steps for making media include determining the size, material, and shape of the media display. This media will be developed according to the design that has been determined, and then validated by material experts and media experts. This validation is carried out to ensure that the learning media is appropriate both in terms of appearance and content. Validation is carried out by two experts, namely media and material experts.

Table 4. Snakes and Ladders Media Validation Results

Validation	Aspect	Percentage	Criteria
Materials Expert	Content	100%	Very Worthy
	Language		
Media and Language Expert	Physical	80%	Worth
	Pictures	60%	
	Color	80%	
	Writing	80%	
	Supporting Media	60%	

4. The Disseminate stage is the stage of developing and testing innovative and creative products that have been produced from the development stage. The goal is to introduce this product to users, both individually, in groups, and in learning systems. In this disseminate stage, the testing is given to students by testing the snakes and ladders media in large groups of 29 students and small groups of 5-6 students. (Adhitya et al., 2023)

After developing the snake and ladder media using the 4D model, the next step is to validate and experiment with the products that have been produced to experts. In the initial stage, the assessment begins with consultation with experts and the distribution of questionnaires and providing media to media and material experts. The results of the respondents that have been given to the experts are shown in the expert validation table below:

Table 5. Expert Validation

Validation	Aspect	Percentage	Overall	Criteria
Materials Expert	Content	100%	100%	Very
	Language			Worthy
Media and Language	Physical	80%	80%	Worth
Expert	Pictures	60%		
	Color	80%		
	Writing	80%		
	Supporting Media	60%		

The results of the feasibility test above from media experts have a percentage result of 100% and material experts have a percentage result of 80% with a very feasible category. After conducting an assessment of the experts, it is continued with individual, small and large group assessments. Individual assessments are carried out to evaluate the media that has been developed with 29 with good, sufficient, and less reading interest criteria. Furthermore, a small assessment is carried out by a small group consisting of 5-6 students as respondents. Finally, a large assessment is carried out by a large group or field test with 29 respondents from students to test the feasibility and effectiveness of the media that has been developed. The following are the results of individual, small and large group assessments listed in the following trial questionnaire distribution table:

Tabel 6. Overall Results of Small and Big Scale Trials

No	Respondents	Percentage	Overall Percentage	Category
		Overall Results of Small Scale Trials		
1	Group 1	87%	83%	Worth
2	Group 2	84%		
3	Group 3	84%		
4	Group 4	69%		
5	Group 5	89%		
		Overall Results of Big Scale Trials		
	Overall	85%	85%	Worth

It can be concluded that the results of the trial from the individual scale of small and large groups are declared feasible to be used in Pancasila Education learning for grade IV of elementary school. The results of the overall evaluation, which were carried out through the distribution of questionnaires to small groups, showed a success percentage of 83%. With an assessment of the category "feasible". Meanwhile, the large group trial produced a

percentage of 85% with an assessment of the category "feasible". To test the snake and ladder media based on contextual learning containing the profile of Pancasila students in increasing students' interest in learning Pancasila education subjects, the researcher will apply the N-Gain formula. This test will involve 29 students from class IV SDN Gedong 03 Pagi Jakarta. The researcher started by giving a pre-test to measure the initial understanding of the students before they used the snakes and ladders media. Next, the students will follow a series of learning using the snakes and ladders media during the meeting. After the learning is complete, the researcher will give a post-test that is identical to the pre-test to measure the increase in their understanding.

Effectiveness of N-Gain Test

Tabel 7. Assessed Aspects and Results of N-Gain Effectiveness

No.	Assessed Aspects	Results
1	Average N-Gain	0.70 (Effective Category)
2	Effectiveness of Media/Method	70% (Effective)

From the test results, the average N-Gain obtained was 0.70. This shows that the increase in student understanding is in the "Moderate Gain" category. This category shows that the snake and ladder media based on contextual learning with effective interpretation in increasing students' interest in learning Pancasila education containing Pancasila student profiles. Based on data analysis, 70% of students experienced a significant increase in learning interest after using the snakes and ladders media, this means that the media or method tested is effective in increasing the learning interest of grade IV students in the Pancasila education subject containing the Pancasila student profile. Thus, the results of this study indicate that the use of snakes and ladders media based on contextual learning has a significant positive impact on increasing the learning interest of grade IV students in the Pancasila education subject containing the Pancasila student profile at SDN Gedong 03 Pagi Jakarta.

Student Learning Interests

In collecting data on students' learning interests, researchers conducted an observation and distributed questionnaires to fourth grade students at SDN Gedong 03 Jakarta. The data taken by researchers related to learning interests obtained a percentage of 82% with a very good category, that the snakes and ladders learning media can increase learning interest in the learning process in the classroom on Pancasila education subjects containing Pancasila student profiles. In collecting data on students' learning interests, researchers conducted an observation and distributed questionnaires to fourth grade students at SDN Gedong 03 Pagi Jakarta. In distributing the questionnaire, researchers divided it into two aspects, namely student attraction and learning activities. This objective was taken by researchers to determine the development of learning media in the learning process in the classroom. The results of the two aspects obtained different results, the aspect of student attraction got a percentage of 79% with a good category, in the aspect of learning activities got a percentage of 85% with a very good category, that the snake and ladder media can increase attraction and learning activities in the classroom.

CONCLUSION

The development of snakes and ladders media based on contextual learning in the Pancasila education subject contains the profile of Pancasila students using the 4D model, namely Define or definition consisting of initial-final analysis, student analysis, concept analysis, task analysis, and formulation of learning objectives. After that there is the Design

stage of media selection, format selection and initial media design. After that there is the Develop or development stage at this stage there are several steps, namely the manufacture of snakes and ladders products, validation by media experts and trials on students Then in the final stage of this research model is Disseminate at this stage is the use of media on a larger scale, one way is to distribute or use it in real learning activities in other schools that can be used by other educators as well. This snakes and ladders learning media was tested at SDN Gedong 03 Pagi Jakarta on grade IV students, the final product results in the form of snakes and ladders media containing materials and images as supporting illustrations. The results of this study indicate that media and design experts get an overall result of 80% with a category of feasible with improvements, material experts get an overall result of 100% with a category of very feasible. The results of student respondents get results of 85% in large groups and 83% in small groups and the results of effectiveness get a percentage of 70% with an effective category and student learning interest respondents get results of 82% that students of SDN Gedong 03 Jakarta have a good interest in learning by using snake and ladder media based on contextual learning containing the profile of Pancasila students in the subject of Pancasila education.

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