

STUDENT OPINIONS REGARDING EDUCATIONAL GAME-BASED LEARNING MEDIA INNOVATION FOR CHARACTER EDUCATION

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Abstract

This research has the aim of identifying the need for innovation in the development of fun learning media in game format. Due to the swift currents of globalization, education needs to innovate in various aspects in order to create graduates who have the competence as well as the character of love for the homeland. The method used in this research is descriptive quantitative, it takes 47 students of elementary school as a research subject, the data is collected by survey method which uses a questionnaire item as a data collection tool. The data from the distribution of the questionnaires were then processed using the percentage technique. The results showed that in terms of the implementation of learning, so far students feel bored when participating in learning activities in class (83%), meanwhile the use of media used by teachers also tends not to keep up with the times, such as student handbooks (68.1 %) still dominates in learning. Students think that innovation is needed in the form of learning media with an educational game format (76.6%). It is hoped that the results of this study can be the basis for the development of learning media that are in accordance with the needs and characteristics of students.

Keywords: needs analysis, innovation, instructional Media, character building, globalization

1. Introduction

The view of National Education can be said as a sector that has a noble goal, namely to educate the lives of its people (Syamsuar & Reflianto, 2018), accompanied by a vision that is the realization of an education system that is able to compete in global competition (LUBIS, 2020; Yildiz, 2019). and can respond to the challenges of an era that dynamically continues to progress (Putra, 2019; Syamsuar & Reflianto, 2018). In addition, education is also considered an indicator of the nation's progress (Syarif & Mawardi, 2021), this is because through education it will produce human resources with character and competence.

Unfortunately, until now the national education system still focuses on competence in the cognitive aspect regardless of the affective, psychomotor and nationalist character of graduates (Amirin, 2013). In fact, in this era of information disclosure and the swift flow of globalization, apart from the need for intelligent human resources, it also needs to be accompanied by morals and character to maintain a love for the homeland and its cultural heritage (Sajadi, 2019; Atika et al., 2019). If intellectual intelligence is not accompanied by character building, it is possible that these students will be able to harm others (Ramdani, 2018). Therefore, it is very important to instill character and moral education in students from an early age (Amirin, 2013; Hamriana, 2021).

Basically, character education should bring students to cognitive value recognition, affective value appreciation, and finally to real value practice (Arfandi & Shaleh, 2016). Character education is character education that touches the cognitive, affective, and psychomotor domains (Ronald Tambunan, 2021). So far, character education instilled by parents in the family environment, as well as teachers in schools, places more emphasis on aspects of knowledge than aspects of attitudes and applications. In addition to teaching, teachers have an obligation to assist students in shaping their own character and morals, through giving good moral examples to students both when teaching in the classroom and when meeting outside the classroom (Hasnadi, 2019).

Basically, character education is supposed to lead learners to cognitive recognition of values, affective passion for values, and finally to the real practice of values. Character education is an ethics education that touches the cognitive, affective, and psychomotor realms. So far, character education instilled by parents in the family environment, as well as teachers in schools, has emphasized more on the aspect of knowledge than the aspect of attitudes and applications. In addition to teaching, teachers have an obligation to assist students in

shaping their character and morals, through giving ethical examples both to students both when teaching in the classroom and when meeting outside the classroom (Hasnadi, 2019; Zubaedi, 2012).

Indonesia is rich in local culture, one of which is Wayang. Wayang can be one of the many alternatives to make it an instrument in character building for students, by examining the stories and characters in the story of a wayang. As a noble cultural heritage, it seems that wayang continues to exist from generation to generation and is a part of the life of the Indonesian people, especially Java (Nurgiyantoro, 2011; Handayani, 2014). The various values contained in it are the values of art, beauty, philosophy, behavior, religious perception, outlook on life and ideals, contained in the world of wayang (Saraswati et al., 2019). It is undeniable that based on the results of this analysis, wayang can be an integral part of learning activities to convey education of noble character for children (Nikmah, 2020). Therefore, character education based on the local wisdom of the Indonesian people is very important.

It is known together that the learning process requires a pleasant interaction by integrating the principle of edutainment so that students are interested in the learning process. Furthermore, learning as an interaction process between teachers, students, and teaching materials requires media that will mediate the flow of information on the content of the material to be studied (Sugiyati, 2016; Budiarto et al., 2020). One form of fun, games in learning is to use media that are currently familiar among students (Budiarto et al., 2021).

Various research results have shown that the learning process needs a stimulus that is able to attract students' attention, such as a picture stimulus and a word stimulus or visual and verbal concluding that verbal stimuli produce better learning outcomes for the task of remembering, recognizing, remembering, and connecting facts and concepts (Perdana et al., 2021; Ige, 2019; Capuno et al., 2019). Through learning media, later it can increase student motivation in participating in a series of learning activities with full appreciation (Roemintoyo et al., 2022; Lin et al., 2016).

Packaging information into game-based learning media that is a favorite of children at the elementary education level (Cheng et al., 2013). This is because game media has the advantage that it can help students learn well because students will tend to feel happy and it has been proven to reduce students' anxiety levels (Wahyuningtyas et al., 2017). In addition, game media can also be used as a supporting tool to complement conventional and modern teaching methods so that students get an optimal learning experience, so that they can acquire skills, adapt, problem solving, interactive, creativity, good teamwork, and communication (Hwang et al., 2014; Greipl et al., 2020; Widyatmojo & Muhtadi, 2017).

Puzzle is a game of arranging pictures in which before starting, the pictures are scrambled (Yunanto & Chandrawati, 2017). Puzzle is a child-friendly game and has high educational value, considering the difficulty level of this game tends to be adjusted to the development of students (Andrea & Nurhuda, 2020). Thus, puzzles can be an option to be used as learning media in the classroom.

Based on the various empirical and theoretical facts above, a bold innovation is needed to then be able to apply puzzle games as learning media to shape student characters that contain material or values for wayang characters (Yunanto & Chandrawati, 2017; Triyanto & Rejekiningsih, 2021; Kadek Suartama et al., 2020). In addition, children's motor skills will also develop and can be trained through puzzle games. Puzzle game-based learning is almost certainly seen to facilitate the process of achieving student competence, especially those who are undergoing basic education (Gil-Flores et al., 2017; Abdul Jabbar & Felicia, 2015). Through this strategy students easily understand besides being fun because it is in the form of a game. Thus, this study will identify opportunities for using ICT-based learning media in the format of puzzle games as an effort to instill character in elementary school students.

2. Method

The type of research used is descriptive quantitative research (Sugiyono, 2018). This research was adopted based on the research objective, namely to be able to obtain descriptive data derived from a needs analysis questionnaire. The population of this study was elementary school students at Singosaren Elementary School Bantul, with a total sample of 47 students.

The method used is a survey with a non-test data collection technique accompanied by a data collection instrument, namely a questionnaire (Widoyoko, 2012). Meanwhile, the data analysis technique used is descriptive by converting the results of the questionnaire into percentages to make it easier to present data and identify innovation opportunities for developing learning media for character education (Ivanovich, 2014). The data needed in this study are (1) the conditions of the implementation of learning; (2) the use of learning media, and (3) students' views on media development in the form of puzzle games for classroom learning.

3. Results and Discussion

In this needs analysis research, it is carried out using the data collection method through the distribution of questionnaires to students. The scope of its implementation includes analysis of the learning process, analysis of the use of learning media, and students' views on learning media innovations based on puzzle games.

Questionnaires have been distributed to research subjects, a total of 47 students. The results of the questionnaire that has gone through the analysis process on aspects of the process or learning conditions can be seen in the following table.

Table 1. The results of the questionnaire on learning conditions

No.	Conditions felt by students	Total students	%
1.	Boring	39	83%
2.	Pleasant	2	4,3%
3.	Ordinary	6	12,8%

Based on the table, it was identified that a number of students felt that learning activities in class tended to be boring, almost 83% of students gave this response, ironically only 4.3% of students stated that learning activities in class were fun, this of course does not apply to all subjects considering that This research is also limited to a certain learning time. This is because learning activities in the classroom, especially during a pandemic like this, tend to be more boring, considering that there are no outdoor activities (very limited), interactions between friends also tend to be limited, thus making students feel more that learning activities in class today tend to be towards boring. Students only focus on studying or reading the material and then completing the assignment.

Next are the results of the analysis of the questionnaire which contains questions about the use of learning media during classroom activities, the following are the results of the analysis.

Table 2. The results of the questionnaire on the use of instructional media

No.	Type of Instructional Media Used	Total students	%
1.	Student Handbook	32	68,1%
2.	Worksheet	2	4,3%
3.	Electronic Module	0	0
4.	Audio Visual	13	27,7%

Looking at the results of the analysis of the distributed questionnaires, it appears that congratulations, the use of learning media is still dominated by student handbooks (68.1%), followed by audio-visual-based media (YouTube). media of this type. Seeing these results, it certainly cannot be denied that it will have an impact on the achievement of learning outcomes, both in terms of cognitive, affective and psychomotor. In addition, learning in schools that puts aside character will certainly also receive a negative impact if the implementation of learning still tends to be conventional and does not pay attention to sharing the components that make up the learning process.

Therefore, it is necessary to innovate learning media that can eliminate students' boredom when learning and be able to integrate ICT for optimizing the use of learning resources. The results of the next questionnaire will provide results regarding students' views on learning media innovations made in the format of a puzzle game. The following is a student's view of the learning media innovation.

Table 3. Students' views on instructional media innovation

No.	Student Opinion	Total students	%
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1.	Interested	31	66%
2.	Ordinary	16	34%
3.	Not Interested	0	0

Table 4. Types of instructional media innovations

No.	Media Type	Total students	%
1.	Game	36	76,6%
2.	Electronic Module	3	6,4%
3.	Video	5	10,6%
4.	Interactive Quiz	0	0
5.	Audio	3	6,4%

Referring to the two tables, it is known that most students are interested in innovation in the use of learning media (66%), this certainly provides an opportunity to be able to make them not bored anymore when participating in the learning process in class. In addition, students also expressed their wishes regarding the type of learning media innovation they want. The type of media in the game format dominates the students' desires, as can be seen from the percentage in the table which shows the figure of 76.6%. Followed by the type of video media (10.6%), then there are electronic and audio modules which are 6.4% each.

It is well known that learning media is indeed an intermediary that has an important role in conveying information and subject matter. Learning media has the benefit of providing a stimulus to students' thoughts, feelings, attention and interest in learning (Daryanto, 2013; Aripin & Suryaningsih, 2019). Therefore, in its development and utilization, it is necessary to pay attention to the needs of learning subjects (Budiarto et al., 2020).

In addition, actually the learning process contains two elements that are considered to have a very important role in the success of learning activities, namely teaching methods and teaching media (Mutluer & Altun, 2021). These two aspects are interrelated. The choice of one of the two elements will affect each other. So that in the development of learning media innovation, of course it must be based on teaching objectives, types of tasks and responses that students are expected to master after teaching takes place, place, and learning context.

The results of this study indicate high student interest in the presence of learning media innovations. One of them is the type of learning media with a game format. Recently, game-based learning has been specifically designed to help students understand the material and achieve predetermined learning competencies (Tsai et al., 2016; Partovi & Razavi, 2019; Irmansyah et al., 2020). Where a game is designed for education, students will acquire knowledge through playing the game, helping them absorb and understand concepts. Given that so far, teachers only deliver material with the help of material books. Of course the choice of using the media is not optimal enough for the achievement of learning objectives and the formation of student character. Through innovative learning media, puzzle games that are integrated with subjects and noble cultural values will later be able to assist students in learning and assist in the formation of strong characters (Irmansyah et al., 2020; Arfiariska & Hariyati, 2021; Fransiska, 2021; Ronald Tambunan, 2021).

Through this needs analysis research, it is hoped that it can accommodate the characteristics of students, students' needs for subject matter, and the suitability of the media with students. Do not forget that, the results of this research are also very important for the development of further products, namely the innovation of learning media based on puzzle games. Thus, students will be able to feel the benefits according to what they need when using puzzle game products.

4. Conclusion

Character education plays an important role in the era of globalization, this of course must receive important attention for all academics and policy makers that there should not be a decline in morals and character as a result of us ignoring it. Knowledge and skills are indeed important to be achieved by students

when participating in a series of learning activities. However, solid character education will determine the nation's morale in the future.

Learning media innovation is considered to have an important role in achieving learning objectives, but still must accommodate the wishes and characteristics of its users. The results of this study indicate the need for innovation in the development of learning media, so that students are more active and not bored when following a series of learning processes. Puzzle game media that contains noble cultural values such as characters in wayang certainly have a great opportunity to be utilized. In addition to the learning objectives achieved, students will also have and know the moral values, cultural values contained therein. So they are expected to have a strong character and not be eroded by the swift currents of globalization.

Other researchers can use the results of this needs analysis for the development of a learning media innovation product based on local cultural values, as an effort to enrich the stimulus for the formation of student character, besides they also have the knowledge and skills as determined in the study plan.

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6. References

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