Analysis of the Needs of Game-based Learning Media for Learning Javanese in Elementary Schools

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Abstract
At present there are many students who cannot fulfill the rules in communi-cating in Javanese according to applicable norms. Therefore, this study aimed to identify the needs of game-based learning media that are able to fa-cilitate students learning Javanese both in theory and practice. The research method is quantitative research, with a survey type. The collection instru-ment used was a questionnaire. The sample involved in this research consist-ed of 40 elementary school students. Responses from the questionnaire were then analyzed descriptively with percentages. The results of this research in-dicate that students have fairly good skills in operating smartphones, on their cellphones they also have various games installed that they often play with a duration of about >60 minutes to play a game without feeling bored, some of them then provide suggestions regarding the components that need to be in an educational game, namely pictures of material and questions accompa-nied by discussion. Through this research, it was identified that game-based learning media has the potential and opportunities to be applied to Javanese language learning so that students are skilled and understand the learning ma-terial.
Keywords: *Elementary Schools, Games, Javanese Language, Learning Media*

INTRODUCTION

One of the regional languages with the largest users in Indonesia is Javanese. The dominant Javanese language is used by the wider community in several areas on the island of Java. Broadly speaking, the speech levels used in communicating using Javanese are the ngoko speech level and the krama speech level. Krama is the level of Javanese speech which has the highest politeness meaning. There is an uneasy attitude between communicators and communicants who are not yet known, have higher ranks, priyayi groups, and towards people who are respected or who are older (Tiyas, 2022), (Zubaedi, 2012). Under these conditions, of course, the Javanese Krama language is very important to master. But now there are not a few people from the Javanese tribe who prefer to use Indonesian as a means of communication. Even though the Javanese language in Indonesia has enormous supporters, its development is increasingly shifting and changing, even though the rate of change is still slow (Arafik & Rumidjan, 2016). The less positive attitude towards the Javanese language has hit many young families, especially those from the modern class. Many young families do not understand and are not willing to use Javanese in communicating.

Meanwhile in the world of education in elementary schools, students use Javanese ngoko to communicate with fellow friends, and use Indonesian to communicate with teachers. Javanese ngoko is the lowest level of Javanese speech due to its use to communicate with peers, people who have a high degree to people who have a low degree, or parents to people who are younger (Haryati et al, 2017). Meanwhile, when communicating with older people or teachers, students should use Javanese krama (Arafik & Rumidjan, 2016),(Wardhanika et al., 2022). The need for empowering Javanese language learning needs to be optimized to maintain the nation's cultural diversity (Wardhanika et al., 2022). However, the use of Javanese krama by elementary school children is almost non-existent or arguably rare until now. So that the Javanese Krama language is less popular among elementary school children and has experienced a decrease in the use of Javanese (Haryati et al, 2017). Therefore, it is very important to improve speaking skills, especially Javanese krama, due to the fact that Javanese krama is rarely used for communication.

This is in accordance with observations made by researchers in Pejambon Village, currently many children do not really master Javanese at the speech level of manners. This can be seen from how they communicate with older people. They mostly use the level of ngoko speech. Even though when we talk to people who are respected or with older people, we should use the politeness level. Based on the results of interviews with parents of students, it was found that children rarely or even never speak Javanese krama when they are in the family environment. This is because people who know don't get used to children speaking Javanese krama from an early age. So that it can be carried over into adulthood. Moreover, many parents claim to be more proud of teaching their children Indonesian since childhood. Of course, this makes children unable to speak Javanese properly and correctly, especially the krama language. If this happens continuously, it is not impossible that one day the Javanese krama will really become extinct.

As is known, quality education is education that is able to develop the potential and knowledge possessed by students. One of the efforts that must be achieved is how to create a learning situation that allows the learning experience process to occur in students by mobilizing all learning resources and effective and efficient learning methods (Amelia & Harahap, 2021). In this case, instructional media is an effective supporter to help the learning and teaching process occur. In the learning process, the teacher's role in presenting material for learning can be replaced by the media (Smaldino et al., 2019). It is time for teachers to share roles with the media so that they have more time to carry out other roles, not only as informators. In teaching and learning activities, the media is one of the factors that can support achieving the

learning objectives that have been set (Sudaryono et al., 2018). With regard to the use of media in the learning process which can be seen as a sub-system in the learning process, it is added that currently the existing learning media are generally printed in nature, giving rise to students' disinterest in learning independently.

At this time various learning media are developed innovatively and one of them is game learning media. Learning that uses game-based learning media has advantages, namely that it can help students understand concepts and is able to stimulate student curiosity so that it can increase student learning motivation (Puritat, 2019). It is known that, an educational game is a breakthrough that will bring change (Sutrisni et al., 2018). The use of virtual reality (VR) environments and games and edutainment produces creative outputs that reflect novelties in learning providing entirely new options for human creativity (Anastasiadis et al., 2018),(Zhang et al., 2020).

Educational games are one way to help students learn in a fun way. As stated Andrea & Nurhuda (Andrea & Nurhuda, 2020) states that educational games are a type of learning media that are used to provide teaching through unique and interesting media. Educational games that are used as learning media can motivate students to think about solving the challenges in the game (Greipl et al., 2020). Therefore, educational games are designed with a structure that allows students to carry out investigative activities so that they are motivated by high curiosity (Gao et al., 2020).

This research then becomes important because learning Javanese requires an innovation to be able to improve the learning climate to be more dynamic, moreover the subjects are elementary school students with characteristics that of course get bored easily in following learning material. By learning the innovative Javanese language, it is expected to be able to: 1) Maintain and Preserve the Javanese Language, 2) Deliver More Interesting Material, 3) Improve Javanese Language Skills. The development of a learning media is certainly not spared from the initial analysis activities before the media is created or what is known as needs analysis. Analyzing needs is one of the most important activities before designing an instructional media. Therefore, referring to various factual findings from the field and the benefits of various game-based media according to relevant research analysis, this study aims to identify the needs of game-based media such as game characteristics, smartphone ownership and students' ability to operate smartphones in order to facilitate learning Javanese. for elementary school students.

METHODS

This research is included in the quantitative research with survey type (Abdullah, 2015). The sample involved in this research was 40 students grades IV-VI of elementary school in Pejambon Village who were randomly selected (Maisarah, 2019), This research was conducted in May 2023. The data collection technique uses a non-test with the instrument namely the needs analysis questionnaire, the needs analysis questionnaire used in this survey research was adopted from several needs analysis research by (Qodr et al., 2021),(Nakpong & Chanchalor, 2019), with the aspects explored are information regarding; 1) students' ability to use smartphones, 2) time or duration of game playing, 3) game installation on HP, and 4) components that must exist in educational game which has been adapted to the needs and characteristics of this study. Furthermore, the responses from the questionnaire were then analyzed using data analysis techniques which in this research used percentage analysis techniques (Roemintoyo & Budiarto, 2021), which are then interpreted into a description to provide an overview of students' needs regarding educational games for learning Javanese.

RESULTS AND DISCUSSIONS

In this section the questionnaire that has been distributed to students is then analyzed by percentage to determine students' needs for the characteristics of game-based learning media for learning Javanese. The results of student responses from filling out the questionnaire are illustrated in the following graphs. The first response is about the ability of students to operate smartphones. The results of student responses to this question were fairly good, because most of them were used to using smartphones even though we did not investigate their ownership. But what can be ascertained is that most of the students already have the ability to operate these technological devices. The answers to student responses regarding this question are summarized in figure 1.
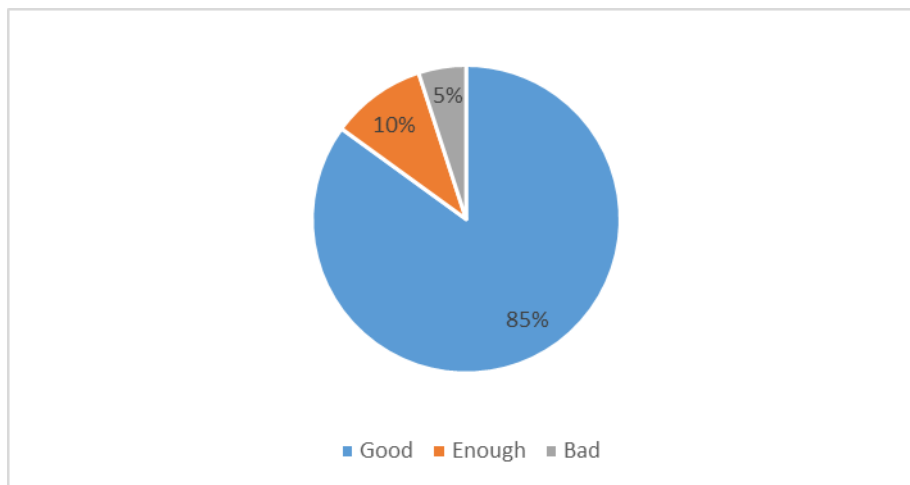

Figure 1. Students' Ability to Use Smartphones

The next question is about students' habits when accessing games and the length of time they use their cell phones to play. The response results show that most students have installed the game on the cellphone they are using, even though the cellphone belongs to their parents or siblings, so when they use it they immediately look for the game to play with their friends. After that, students responded to the next question, namely regarding the duration of time to play the game. Most of them answered that they played games with a fairly long duration, namely > 60 minutes. This of course makes parents quite wary of the presence of games that have nothing to do with subject matter but can be accessed continuously by students. In terms of students also feel happy with the game which is graphically of good quality, interactive and dynamic so that it makes them feel at home playing for a fairly long duration of time. Student responses to these questions are illustrated in graph 2 below.
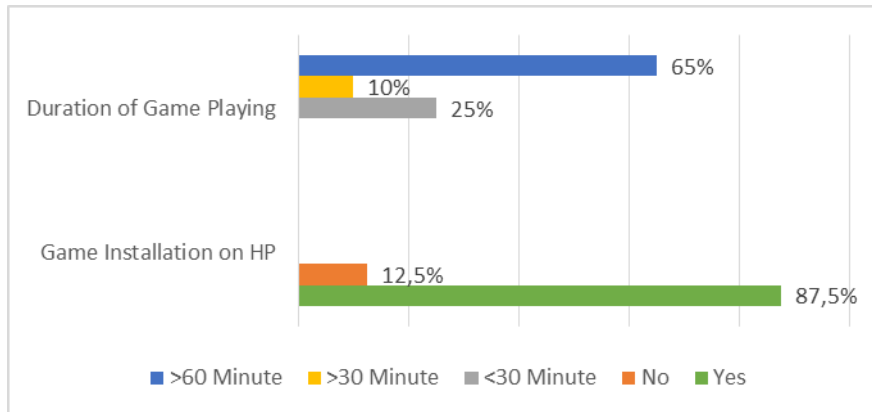
Figure 2. Duration of Game Playing and Game Installation on HP

The next question is about the components that according to students need to be in a game for learning. From this question, of course it was identified that students felt that even though it was said to be a game, but because for learning they stated if there was a need for introductory material as a component of the game, then followed by a discussion of the types of games being developed both in the form of questions and solving cases, and there were method or instructions for use. The following is a summary of the response analysis of questions related to components in educational games.
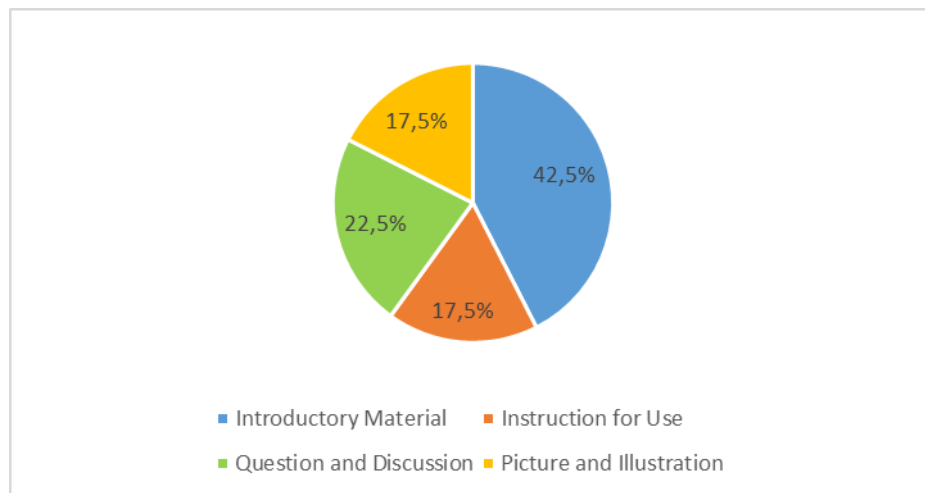
Figure 3. Components in Educational Games

Referring to the results of this needs analysis research, it can be identified that basically students are used to using smartphones and playing games on these smartphones. The presence of technology in the form of smartphones should be able to provide opportunities to be utilized in learning activities considering that students are already familiar with cellphones (Picerno et al., 2019). In its development, learning media is needed at various levels, both elementary, secondary, and tertiary levels. This certainly can be an effort that can be made by teachers to improve Javanese Krama language skills, as several previous studies have successfully shown that Android-based games or games help children learn about Javanese Krama vocabulary (Wardhanika et al., 2022),(Agustini et al., 2020). This is of course because in the game there are components that can reduce boredom when the learning process takes place

(Anastasiadis et al., 2018),(Shute & Ke, 2012). So that students become more focused in understanding the material and practicing with friends in their class.

The existence of educational games makes learning more varied and fun. Children can work on quizzes while enjoying games on smartphones which tend to be more practical to use, besides that the colorful screen display can also arouse children's interest in playing while learning so that it can motivate children to learn and make it easier for children to understand the material being given (Irmansyah et al., 2020).

The results of this needs analysis are of course expected to be a first step to presenting an innovation in learning Javanese in elementary schools, through educational games that attract students' attention. The presence of educational games as media is certainly considered relevant to students' needs in learning and understanding Javanese language skills which tend to be accessible anywhere and because they are in a game format, students are not more easily bored when accessing material.

CONCLUSION

The results of the needs analysis in this research concluded that Android-based game media has great opportunities and potential to be implemented because most students already have the ability to operate smartphones well, are used to accessing games for hours without getting bored, and provide input regarding the components that must be present. in educational games. Besides that, various relevant researches show that the use of games for learning has a positive impact on improving academic achievement, attitudes and student character. Through this research, it is hoped that it can become the basis for further research in order to be able to develop Android-based game media to facilitate elementary school students learning Javanese. In addition, suggestions for teachers also try to develop a learning innovation in the format of developing learning media with smartphones, as well as creating other digital teaching materials that can be oper-ated by students via the smartphones they have, or those owned by their parents.

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