

EDUCATIONAL GAME DESIGN “NAPAK TILAS PANJI ASMOROBANGUN” IN “WAYANG BEBER” STORY

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Abstract

The process of digitizing historical learning in Indonesia during the emergency times, currently uses dominantly conventional learning media. With regard to conventional learning media, the contribution of the learning media digitalization provides direction for the modernization of historical learning media in the need of solving the lack of exploration, elaboration, critical thinking skills, the flow of historical learning concepts, and the lack of touch to local wisdom. By using the ADDIE Model, the design of the educational game of Panji Asmorobangun in the story of Wayang Beber Pacitan is implemented in Vocational High School (SMK) State of 1 Pacitan gained 87.5% in the validation of media experts and 91.1% in validation of material experts. With regards to expert validation, this media also scored 87.22% in a group trial of 50 students and said it is very feasible to implement under the name of Superpanji media branding. The historical learning media of Panji Asmorobangun figures in wayang beber stories Pacitan Regency supports the game flow process with (High Order Thinking Skills) HOTS through the 5M scientific approach (observing, questioning, associating, experimenting, communicating).

Keywords: Learning Media, Games, Wayang Beber, Panji Asmorobangun

1. Introduction

Currently, Indonesian education is digitizing massively. The process of changing digital-based education culture is not without reason, one of which is the data presented by the 2018 Program for International Student Assessment (PISA), ifn this study, Indonesia in the reading category is ranked 74th in the world, mathematics is ranked 73rd, and science is ranked 71st [2]. In relation to what the Program for International Student Assessment (PISA) explained, Indonesian education is indeed in the incubation period of improving the education sector towards digital [3].

The role of games is never far apart from augmented reality and virtual reality interactive learning media [4], research-based development research (RnD) with a specific focus on games in Indonesia has been implemented in various disciplines [6]. Previous research studies, among others, were conducted by [7] about driving safety board game, [8] on the development of game statistics in arctic and [9] with the implementation of game learning media in children. Departing from education, game-based learning, and learning processes. This cannot be separated in history learning, some problems in conventional history learning such as lack of exploration, elaboration, and confirmation [10], conventional history learning is less in improving critical thinking skills [5], students only understand as readers without the concept of outdoor learning in historical sites (Sulistyo, 2019), and lack of curiosity because there is only one direction as a reader [11]. Conventional history learning is also minimal to the touch of local wisdom [12].

Pacitan Regency is a district in East Java Province, with an area of 1,390 km² supported by a population of 586,100 in 2020, Pacitan Regency cannot be separated from thousands of

cultural heritages within the scope of local wisdom, in the Regional Cultural Minds (PPKD) Regency/City. One of the cultures that is a priority for preservation in the document is Wayang Beber. Wayang Beber is the art of wayang performance by manifesting it in an expanse or in the answer language called "bèbèran" or "ꦧꦺꦧꦺꦫꦤ꧀". This medium sheet

of wayang beber is filled with illustrations of wayang scenes which are then narrated by the dalang during the performance. Wayang beber performances mushroomed and developed rapidly on the island of Answer in the pre-Islamic period which was gradually preserved until Islamic kingdoms such as the Mataram Sultanate. Wayang beber is identical to the story taken close to the Mahabharata and Ramayana. In the process, after the typical religion of the island of Java at that time was identical to Islam, the wayang beber storyline emerged as the main character. The Wayang Beber character is identical to the Panji Asmorobangun story [11] the character story in the wayang Beber is identical to a story that has good values to imitate [12], the value of responsibility, devotion, loyalty, love for the nation, and tenacity in life [13].

In this regard, the wayang beber learning process of the Pacitan community found by the research team is still using conventional methods with word-of-mouth techniques, Islamic boarding schools, and several academic studies of higher education by native Pacitan academicians. The knowledge incubation process about wayang beber carried out by [14] about function and value, [15] wayang beber as the preservation of original art in Indonesia, implementation of wayang beber learning media as a comic medium [16], aesthetic studies [17], and animation [18]. The assessment process and conventional learning methods become obstacles that are so urgent, because wayang beber is difficult to enter into the culture of Pacitan youth as the next generation of cultural preservation. This creates a cultural preservation gap if packaging is done conventionally (without interactive augmented reality, virtual reality, and game-based media) in modern digital media. In the process, wayang beber is synonymous with the study of history learning, the development of education in the field of history that is passed down from generation to generation, and the special preservation process with limited groups or broad groups. In connection with these emergency problems, the design of the educational game traces of Panji Asmorobangun in the wayang beber story of Pacitan Regency is an option to describe the process of disseminating and educating wayang beber and the iconic figure of Panji Asmorobangun.

2. Method

This study uses the ADDIE Model pengembangan development procedure (Rosset, 1987) in [19]. Selection of the ADDIE model provides opportunities for a constructive development flow. The stages of this learning media development development model have the following flow chart:

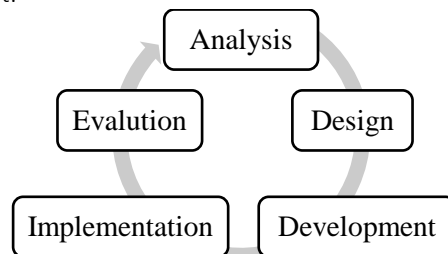


Figure 1. ADDIE Model research flow (Sugiono, 2019)

The data collection method used interviews, observation, and structured analysis of qualitative sources. Data analysis used quantitative data analysis.

3. Finding and Discussion

3.1 Material Identification and Software Workflow

The analysis stage in the follow-up to the follow-up problems of this development research, the research team conducted direct interviews, here are some important findings from the interview with Soekarno, 2021, with the following important findings:

Table 1. Conclusion of interview data reduction of the interviewees

Conclusion 1	Panji Asmorobangun is synonymous with slanted and observant eyes in seeing all phenomena or environmental problems around him, smiling lips give a 'legowo' mood, and Panji Asmoro Bangun is also synonymous with a sharp nose.
Conclusion 2	The visualization of Panji in wayang beber is described as having an ideal body and in the body of the puppet, the banner has a body category that is full and sturdy.
Conclusion 3	Panji Asmorobangun comes from the kingdom of Kahuripan, a son of a brave king from one of the kingdoms in Java
Conclusion 4	It is said that Inu Kertapati disguised himself under the name Panji Angronakung. Panji Inu Kertapati or Panji Asmorobangun went to find Candrakirana, his lover who had long left the kingdom.
Conclusion 5	After arriving in the kingdom of Ngurawan, Panji served the king in earnest and became the favorite servant of the king of Nguraman for many years. During his service, Panji fell in love with Chandrakirana, the son of Demang Wengker
Conclusion 6	It is said that King Daha then made a magic contest between the knights. Who is the most superior / powerful, he is the winner and will be compared with Candrakirana or Dewi Sekartaji

Based on the results of observations and interviews, it can be separated into two level conclusions, conclusions one to three are an analysis of the characteristics of the Panji Asmorobangun character, while conclusions four to six are conclusions related to the process of Panji Asmorobangun involvement in the wayang beber story, Pacitan district. The following is the workflow of the Superpanji game, the Superpanji game is taken from the journey of Panji Asmorobangun in the wayang beber story of Pacitan Regency taken from the conclusions of the informants:

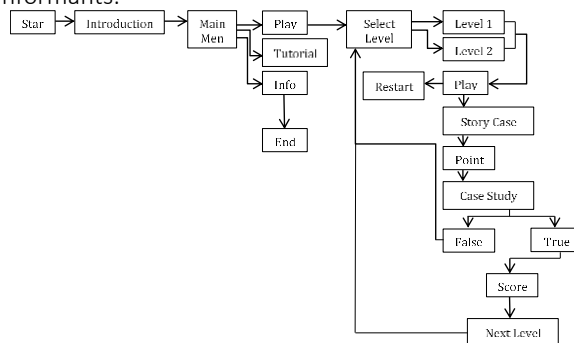


Figure 2. Workflow

3.2 User Interface

The development of asset design in this superpanji game requires a special study and analysis related to the adaptation of real-world objects into virtual displays. Filtration of the

data in the analysis stage is continued into visual assets to support the form of assets, following the Superpanji game user interface:

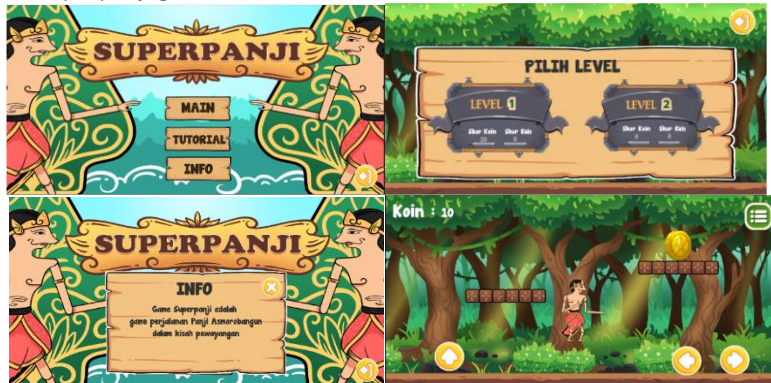


Figure 3. Superpanji game user interface

In developing the design of the educational game traces of Panji Asmorobangun in the wayang beber story of Pacitan Regency, the research team got 87.5% in media expert validation, and 91.1% in material expert validation. In this regard, the software trials in a large group obtained results of 87.22% which were declared very good (development was feasible to be implemented).

4. Conclusions and Suggestions

The design of the educational game traces of Panji Asmorobangun in the wayang beber story of Pacitan Regency contributes to the digitization of learning media and provides a direction for changing conventional history learning into modern learning through digitizing learning media in solving problems of lack of exploration, elaboration, critical thinking skills, flow of learning concepts, and lack of touch on local wisdom.

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