Character Building Model in Extracurricular Activities using Simulation Games for Elementary School Students

Sri Nuraini1, Desy Safitri2, Taufik Rihatno3, Arita Marini4, ZE. Ferdi Fauzan Putra5, Apri Wahyudi6

1Universitas Negeri Jakarta, Indonesia. Email: sринuraini@unj.ac.id
2Universitas Negeri Jakarta, Indonesia. Email: desysafitri@unj.ac.id
3Universitas Negeri Jakarta, Indonesia. Email: trihatno@unj.ac.id
4Universitas Negeri Jakarta, Indonesia. Email: aritamarini@unj.ac.id
5Universitas Negeri Jakarta, Indonesia. Email: ferdifauzan@unj.ac.id
6Universitas Negeri Jakarta, Indonesia. Email: apriwahyudistitringsewu@gmail.com

Abstract

This study was conducted in terms of research and development aiming for developing character building model in extracurricular activities using simulation games for elementary school students in Jakarta in Indonesia. The research process consists of development and affirmation of character-building model in extracurricular activities using simulation games. The product of this study is simulation games related to character building in extracurricular activities prepared by GameMaker Studio 2 software. There are some scripts of simulation games associated with character values of discipline, independence, health, sportiveness, nationalism, and self-confidence. The experts evaluated the model and stated that character-building model in extracurricular activities using simulation games developed is highly valid reaching 3.87 from scores ranging 1 to 4. Revision of the model based on expert validation was related to model content improvement and simplification including diminishing the script from ten to six in adjusting with the program capacity. This shows that the developed model is already valid to be used for building elementary school student character in extracurricular activities in Jakarta in Indonesia.

Keywords: Character building; extracurricular activities; simulation games; character values

1. Introduction

According to Indonesia Republic Constitution number 30, national education in Indonesia aims to shape Indonesian positive characters leading to have national existences. The regulation of Indonesia Republic President number 87 stated that elementary school in Indonesia has to establish a goal to strengthen student character building. However, elementary schools in Indonesia generally focus on the cognitive aspect of education, so that student character building reinforcement conducted has not been optimal.

In teaching learning process, character building can be integrated in class (Marini, 2019). There are so many efforts conducted associated with character education and its impacts on student behavior (Berkowitz & Bier, 2004). The teacher competences in carrying out character building have to be improved in order to get the effective character education program conducted (Milson & Mehlig, 2002). Implication of character value integration in teaching learning process can improve the student character (Marini, 2019; Izfanna and Hisyam, 2012). Student religious character was estimated by obedience in performing the teachings of one’s religion, practicing religious tolerance towards others, and living in harmony with friends of other religions (Fahmy, Bachtiar, Rahim and Malik, 2015). Character value integration can be done through teaching learning process, school culture, extracurricular activities, and community involvement (Marini, 2019; Oktarina, Widiyanto, and Soekardi, 2015). Character education applied in religious school culture can develop student...
religious character (Marini, 2018). However, the previous studies are not associated with computer assisted character building, specifically for simulation games.

2. Literature review

Marini (2019) stated that character value integrated in preparation of teaching learning process includes praying, associating teaching material given with improvement of student positive attitude, and examining the neatness of student uniform. Character education in the core of teaching learning process in predicted by guiding the students to cooperate one another in group task, motivating the students to ask questions bravely, and taking priority of building student attitude. In closing activities of teaching learning process, integration of character values is encouraged by praying together, greeting between teacher and students. Teacher creativity is essential in order to have best learning design to develop student positive characters in class. Berkowitz & Bier (2004) found that the effectiveness of character education is relied on its application done by the teacher on the basis of general principles of effective practice. Milson & Mehlig (2002) stated that elementary school teachers were less trained, prepared, comfortable, or competent in delivering character education so that they were not sure about what they could do and should do as character educator. Consequently, the best methods in building student character should be applied to have highly effective program. Character building in teaching learning process can be supported by character value integration in preparation, core, and closing of teaching learning process. (Marini, 2019). This study found that the student prudence influenced the student character. Fahmy, Bachtiar, Rahim and Malik (2015) stated that character education in religious values occurred through attitudes and behaviours related to the tendency to be obedient to the teachings of one’s religion, tolerant of others, and live harmoniously with other religions. Other studies found that enhancement of student positive character was conducted in teaching learning process from the preparation until closing activities, school culture consisting of religious, honest, and working ethos school climate, extracurricular activities through improving student creativity, and community involvement through cooperation with elementary school in arranging student character improvement program (Marini, 2019; Oktarina, Widiyanto, and Soekardi, 2015). Character building of the students through religious school culture by providing worship facilities, religious ceremonies and religious symbols influenced student religious character indicated by obedience in carrying out the teachings of one’s religions, the practice of religious tolerance towards others and living in harmony with other religions (Marini, 2018). However, the previous studies conducted have not connected student character building with computer assisted technology, especially for using simulation games.

3. Method

This research goal is to develop character building model in extracurricular activities using simulation games for elementary school students. This study used Research and Development involving needs analysis to collect some information related to character building model in extracurricular activities using simulation games for elementary school students, designing and developing, and expert validation of character building model in extracurricular activities using simulation games for elementary school students. Data was collected through evaluation instrument for character building model in extracurricular activities using simulation games for elementary school students. Data analysis used descriptive quantitative technique.

4. Results and Discussion

Needs analysis result at 145 public elementary schools in Jakarta, the capital city of Indonesia indicated that character building effectiveness implemented in extracurricular activities related to
praying together before and after extracurricular activities, displaying awards for outstanding students in competitions related to extracurricular activities, including the score of extracurricular activities in report cards, having an agenda to involve students in Saturday and Sunday camp, being present on time, following extracurricular activities in an orderly manner, students playing an active role, creating a pleasant atmosphere, having habit of cooperation, involving students in competitions related to extracurricular activities that they are interested in, incorporating character values, providing infrastructure support in carrying out extracurricular activities reached 73.80 % (seen in Table 1)

Table I. Frequency distribution of management score of extracurricular activities on the basis or character building

<table>
<thead>
<tr>
<th>No</th>
<th>Score of observation</th>
<th>Frequency (fi)</th>
<th>Relative frequency (%)</th>
<th>Cumulative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>1</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>1</td>
<td>0.7</td>
<td>1.4</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>7</td>
<td>4.8</td>
<td>6.2</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>29</td>
<td>20.0</td>
<td>26.2</td>
</tr>
<tr>
<td>5</td>
<td>13</td>
<td>107</td>
<td>73.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

On the basis of this survey result, this research designed and developed character building model in extracurricular activities using simulation games for elementary school students. Theoretical model of character building in extracurricular activities using simulation games for elementary school students can be seen in Figure 1.

![Figure 1. Theoretical model of character building in extracurricular activities using simulation games](chart)

It can be seen in Figure 1 that there are six character values contained in simulation games consisting of discipline, independence, healthy, sportivity, nationalism, and self confidence. Discipline character value was described by student attitude in line marching training to maintain the cohesiveness of the steps. Character value of independence was encouraged by student attitude developed through Saturday Sunday camp activities. Character value of healthy was attained through the saying that in a strong body there will be a healthy soul as well. Student sportivity was improved by the meaning of sportsmanship and the benefits of teamwork in sport activities so that the students not playing cheat being knight in sports. Character value of nationalism was developed by student attitude instilled by doing extracurricular activities of regional dances. Character value of self confidence was enhanced by students established in order to be sure of their ability to learn dance.

This simulation games created using software known as GameMaker Studio 2 can be downloaded at URL: http://www.yoyogames.com/studio/download. This product has a main page as previously designed by making seven pages with a view seen in Figure 2. It can be seen in Figure 2, main page of simulation games has light green background with many objects in it. These games are started from the purple player located on the lower left continued to the dark green wall objects surrounding the four sides of the display. After this, it can be continued by a red barrier object shaped like grass, followed by a number object starting from 1 to 7 being the ‘door’ to the next page where the seven rooms having each question used by this simulation games users.

![Figure 2. Main page of simulation games of character building in extracurricular activities](image)

The next page shown in Figure 3 presents a question about character building in extracurricular activities having to be answered. This page will appear when the player is moved closer to the number 1 in ‘room0’ or the main page of this simulation games. This page has a purple background and applies wall objects placed on the top and bottom as well as gray question boxes with pink fonts so that the contrast of the background is visible. In returning to the previous page, the player must be moved with the up/ down/ left/ right arrow on the keyboard approaching the number 1.
In this simulation games, challenges are designed by having clear, fixed, and relevant goals for players to stimulate the interests of the people involved. Audio and visual effects in this simulation games can improve student sensory curiosity. Control is taken to determine decisions affecting the results and having a good effect on the player. Fantasy appearing is not only interesting to the emotional needs of players, but also provide an analogy leading to improve student learning.

Based on the expert validation, it can be stated that character-building model in extracurricular activities using simulation games developed is highly valid arriving at 3.87 from maximum score 4. Revision of the model on the basis of expert validation was associated with model content improvement and simplification including diminishing the script from ten to six in suiting with the program capacity. This shows that the developed model is already valid to be used for building elementary school student character in extracurricular activities in Jakarta in Indonesia.

**Conclusion**

It can be concluded that character building model in extracurricular activities using simulation games is already valid to be implemented for elementary school students in Jakarta in Indonesia. Finally, it is expected that this product can encourage the student interest to get involved so that their positive character will be improving.

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