Implementing Simulation Games to Enhance Student Behavior

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Abstract

The purpose of this study is to enhance student behavior through implementing simulation games for 30 students at history class at 31 Public Senior High School in East Jakarta in Indonesia. This classroom action research was conducted through applying simulation games related to character building involving character values of discipline, independence, health, sportiveness, nationalism, and self confidence. Results suggest that there is an improvement of student behavior enhancement associated with achievement, motivational, social-emotional, and relational behavior from cycle 1, 2, and 3 arriving at 70 %, 76 %, and 85 %. The findings indicate that implementation of simulation games can enhance student behavior for 30 students at History Course at 31 Public Senior High School in East Jakarta in Indonesia.

Keywords: student behavior, simulation games, character building

1. Introduction

Student religious character is supported by character building in religious school culture (Marini, Safitri, & Muda, 2018; Izfanna, & Hisyam, 2012; Furkan, 2014; Oktarina, Widiyanto, & Soekardi, 2015; Marini, MS, Maksum, Satibi, Yarmi, & Wahyudi, 2019). Student positive character can be improved by character value integration in teaching learning process (Marini, Maksum, Edwita, Satibi, & Kaban, 2019; Marini, Maksum, Satibi, Edwita, Yarmi, & Muda, 2019). Character building is related to student interpersonal skills (Cubukcu, 2012). Character building implementation can improve students' academic scores specifically for building a healthy moral character (Benninga, Berkowitz, Kuehn, & Smith, 2003). Character education program done at school can develop student positive characters (Hartati, Safitri, Nuraini, Rihatno, Marini, & Wahyudi, 2020; Hartati, Safitri, Marini, & Wahyudi, 2020; Edwita, Safitri, Nuraini, Rihatno, Sudrajat, Marini, & Wahyudi, 2020; Ibrahim, Safitri, Umasih., Marini, & Wahyudi, 2020; Nuraini, Safitri, Rihatno, Marini, Putra, & Wahyudi, 2020; Rihatno, Safitri, Nuraini, Marini, Putra, & Wahyudi, 2020; Umasih, Safitri, Nuraini, Rihatno, Maksum, Marini, & Wahyudi, 2020; Marini, Safitri, Nuraini, Rihatno, Satibi, & Wahyudi, 2020). However, these studies haven't paid particular attention to combine character building program and Information and Communication Technology (ICT) related to the simulation games.

2. Literature review

Character building in religious school culture done with providing worship facilities, doing religious ceremonies, and using religious symbols can improve student religious character pointed out by compliance with accomplishing the

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teachings of one's religion, doing religious tolerance toward others, and living in harmony with friends of other religions (Marini, Safitri, & Muda, 2018). Character building was applied in the formal subjects such as akhlaq content, Islamic theology, Qur'an, Hadith, Fiqh, Mahfuzhat, Muthala'ah, and Ushuluddin teaching about character values for the students (Izfanna, & Hisyam, 2012). Character building application can be done in the classroom, school culture, extracurricular activities, and through community involvement (Furkan, 2014; Oktarina, Widiyanto, & Soekardi, 2015; Marini, MS, Maksum, Satibi, Yarmi, & Wahyudi, 2019). The teacher asking the students to pray, to greet with the teacher, and to do reflection are associated with the character value integration at the end of the class (Marini, Maksum, Edwita, Satibi, & Kaban, 2019). Character building is related to student self-esteem in order that the student communication and interaction skill increase (Cubukcu, 2012). Interpersonal communication quality among students can improve student positive character. Application of cooperating learning method in group task, the students motivated by the teacher to be active in class, and the teacher focusing on student affective aspects encourage character building in the classroom (Marini, Maksum, Satibi, Edwita, Yarmi, & Muda, 2019). Character building has positive relationship with student achievement (Benninga, Berkowitz, Kuehn, & Smith, 2003). Implementation of character building conducted in teaching learning process, school culture, extracurricular activities, and through community involvement can develop student character (Hartati, Safitri, Nuraini, Rihatno, Marini, & Wahyudi, 2020; Hartati, Safitri, Marini, & Wahyudi, 2020; Edwita, Safitri, Nuraini, Rihatno, Sudrajat, Marini, & Wahyudi, 2020; Ibrahim, Safitri, Umasih., Marini, & Wahyudi, 2020; Nuraini, Safitri, Rihatno, Marini, Putra, & Wahyudi, 2020; Rihatno, Safitri, Nuraini, Marini, Putra, & Wahyudi, 2020; Umasih, Safitri, Nuraini, Rihatno, Maksum, Marini, & Wahyudi, 2020; Marini, Safitri, Nuraini, Rihatno, Satibi, & Wahyudi, 2020). However, these studies haven't focused on combining character education and Information and Communication Technology (ICT) specifically for simulation games.

3. Method

This classroom action research included three cycles. Each cycle consisted of the steps of planning, acting, observing, and reflecting in the spiral model as proposed by Kemmis and McTaggart to enhance student behavior. In the step of planning, lesson plan was created to implement simulation games with GameMaker Studio 2 software for 30 students at history class at 31 Public Senior High School in East Jakarta in Indonesia. In the step of acting, application of simulation games related to integration of character values including discipline, independence, healthy, sportivity, nationalism, and self confidence was done. In the step of observing, enhancement of student behavior related to achievement, motivational, social-emotional, and relational behavior due to the effect of simulation games application was recorded. In the step of reflection, evaluation was made related to the student behavior increase due to implementation of simulation games. This research was continued to the next cycle if the target of student behavior enhancement established 80 % not reached. The cycle done in this research can be seen in Figure 1.

4. Results and Discussion

In the step of planning, lesson plan is created related to simulation games with GameMaker Studio 2 software for 30 students at history class at 31 Public Senior High School in East Jakarta in Indonesia. There are six-character values contained in

simulation games consisting of discipline, independence, healthy, sportivity, nationalism, and self confidence. Discipline character value described in simulation games by student attitude in obeying the rules established. Description of independence in simulation games was stimulated by Saturday Sunday camp activities. Healthy character value described in simulation games was supported through the saying that in a strong body there will be a healthy soul as well. Description of student sportivity in simulation games was encouraged by the meaning of sportsmanship and the benefits of teamwork in sport activities so that the students not playing cheat being knight in sports. Nationalism described in simulation games was developed by student attitude instilled by doing extracurricular activities of regional dances. Description of self confidence in simulation games was stimulated by students established in order to be sure of their ability to learn dance.
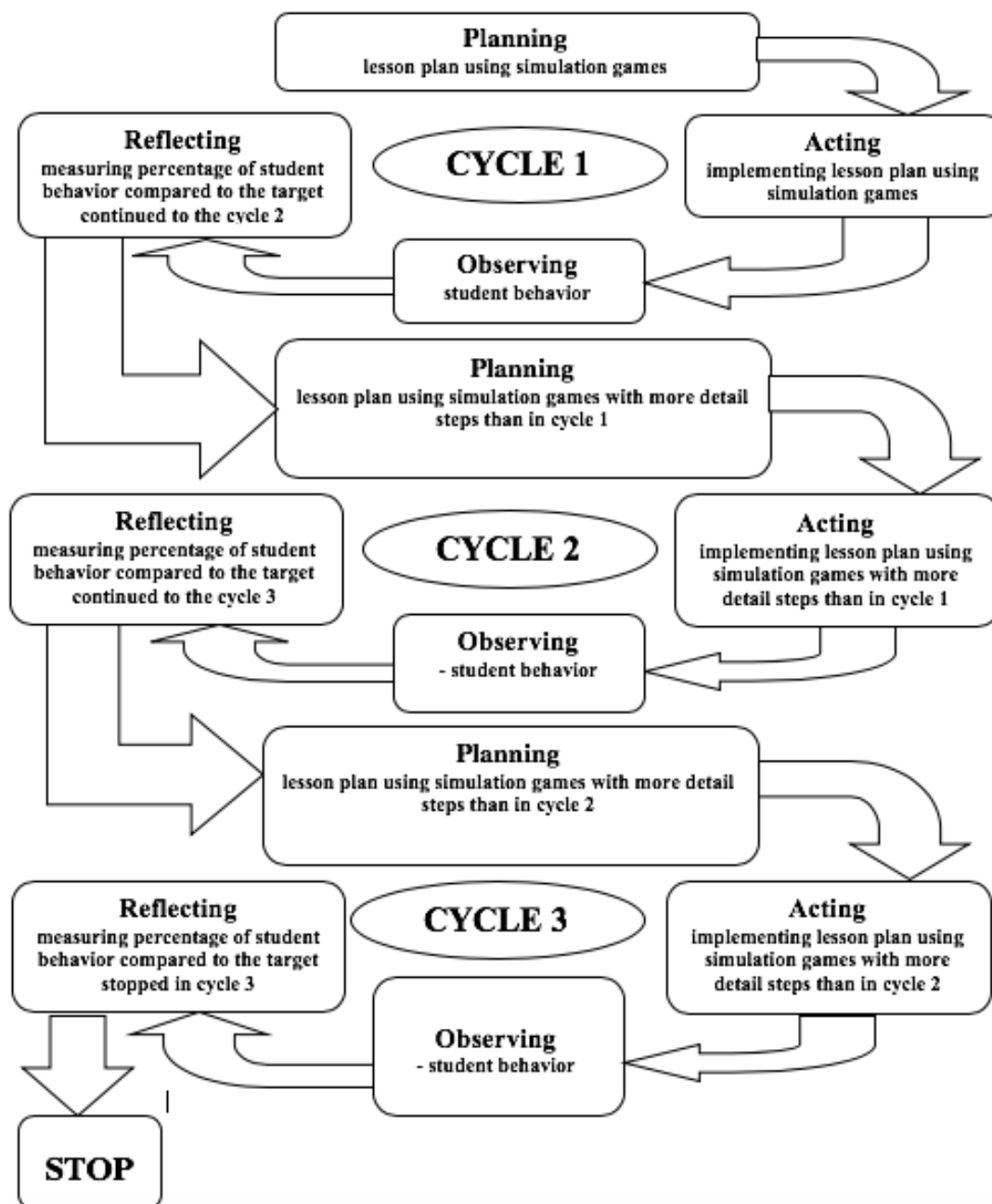
Figure 1. Research cyles

In the step of acting, simulation games related to character building containing character values of discipline, independence, healthy, sportivity, nationalism, and self confidence was done. In the step of observing, enhancement of student behavior was related to achievement, motivational, social-emotional, and relational behavior due to the effect of simulation games application was recorded. Achievement behavior was supported by the students working slowly, creating something beautiful, and finishing the task completely. The student motivational behavior was stimulated by the students interested in listening to the teacher, actively participate in group discussion, and showing good work ethic. The student social-emotional behavior was indicated by the students obeying the rules in class, being able to cooperate in group task, and listening to other opinions in group discussion. The relational behavior was pointed out by the students communicating nicely with others, assisting others who are struggling, and respect the feelings of others.

In the step of reflection, evaluation was measured associated with the success of student behavior caused by implementation of simulation games. In cycle 1, 2, and 3, the student behavior related to the student achievement behavior involving activities of the students working slowly, creating something beautiful, and finishing the task completely arrived at 69 %, 75 %, and 85 %. The student motivational behavior consisting of activities done by the students interested in listening to the teacher, actively participate in group discussion, and showing good work ethic reached 65 %, 70 %, 84 %. The student social-emotional behavior describing activities of the students obeying the rules in class, being able to cooperate in group task, and listening to other opinions in group discussion attained 74 %, 80 %, 87 %. The student relational behavior dealing with the students communicating nicely with others, assisting others who are struggling, and respect the feelings of others attained 70 %, 78 %, and 82 %. The student behavior entirely in cycle 1, 2, and 3 reached 70 %, 76 %, and 85 %. Based on the existing data, the results revealed that the percentage of student behavior in cycle 3 has been more than the target, so this research was stopped in cycle 3.

5. Conclusion

In the conclusion, it is highlighted that implementation of simulation games involving character values of discipline, independence, healthy, sportivity, nationalism, and self confidence can improve the student behavior related to achievement, motivational, social-emotional, and relational behavior for 30 students at history class at 31 Public Senior High School in East Jakarta in Indonesia.

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