

Mining the Gold: Development of a Board Game to Increase Social Awareness of Junior High School Students' Social-Emotional Learning

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Abstract. This study aims to develop a computer game with the role-playing game genre to increase students' social awareness in social-emotional learning. Technological developments will affect students' non-cognitive needs, especially at the junior secondary level. One of the non-cognitive needs needed is social-emotional learning, which is related to how students can survive and appropriately deal with life. However, in reality, there are still many students who still need to learn about social-emotional learning. Five aspects of social-emotional learning need to be studied. One aspect that students need to understand is social awareness. By having social awareness, students can control themselves regarding various things that happen to them. The researcher developed a board game called "Mining the Gold" to improve this ability. This game aims to train students to control themselves when collecting points to win with various events. This study uses the Research and Development (RnD) method. This research results in producing a product as a board game. Researchers hope that from this board game, students in junior high school can develop their social awareness skills and form social-emotional learning.

Keywords: Board Game, Social Awareness, Social Emotional Learning, Junior High School

1 Introduction

The era of Industrial Revolution 4.0 is still an era that demands continuous development and adaptation. Industrial Revolution 4.0 brought major changes to the world of work and influenced various aspects of life [1]. This era is marked by various technological developments that were created to make work easier. The presence of robots, artificial intelligence, machine learning, and so on is a sign of the development of the Industrial Revolution 4.0 [2]. In the era of Industrial Revolution 4.0, human life is always connected to technology and information [3]. The development of the Industrial Revolution era 4.0 requires someone to have various kinds of competencies.

One of the competencies that you need to have is social-emotional learning abilities. Social-emotional ability is one of the abilities that need to be developed in the current era of disruption [4]. Collaborative for Academic, Social, and Emotional Learning [5] revealed that the social-emotional aspects of learning include self-management, self-awareness, relationship

skills, and responsible decision-making. These indicators can become a basis for someone to overcome various problems.

One important indicator of social-emotional learning is social awareness. Social awareness is essential in carrying out one's adaptation function and social interaction [6]. Social awareness is built from cognitive and emotive empathy [7]. Social awareness can be developed since someone is still in school.

Instilling social awareness when someone goes to school, especially at the junior high school level, is important. The development of social awareness can be developed by junior high school students. During adolescence, social skills are also needed in the educational process because education is a socialization process, and school is one of the places for social interaction [8],[9]. In the educational context, social awareness is an indicator of students' social-emotional learning and is an aspect of development that is as important as cognitive development [10]. Junior high school students need social awareness as capital to survive in the future era, especially in their social lives.

Social awareness can be developed through various methods and media, one of which is through board games. Board games have rules and ways of playing to achieve a certain goal. In general, board games are low-tech and easier to use, and so can be seen as a more suitable activity for older populations which are usually not "digital natives." [11]. Board games are not just free-flow but contain a particular context that is usually "structured" and "rule-governed" [12],[13]. Thus, board games are interesting and can be designed to develop students' social awareness.

This research aims to produce a board game product to develop junior high school students' social awareness.

2 Method

The method used in this research is Research and Development (RnD). RnD is a research method that aims to produce a product. Research and development (R&D) is used to create and accredit educational products [14]. This method has several phases: Research and information collecting, Planning, Developing a preliminary form of product, Preliminary field testing, Main product revision, Main field testing, Operational product revision, Operational field testing, Final product revision, Dissemination, and implementation [15]. This research limits the RnD stage to the material development and media design stage. In the future, this research will enter the effectiveness and further testing stage.

3 Result and Discussion

3.1 Social Awareness of Junior High School Students

At the junior high school level, social awareness is important because social awareness has various indicators that become the basis for students in solving problems. Construction of social awareness is built from three main dimensions, namely (a) tacit awareness (awareness of one's own or other people's point of view), focal awareness (awareness of the object of observation, either oneself or others), and content awareness (awareness of the form of awareness observation of either appearance or experience) [16]. The various indicators

instilled in students will become students' strengths in solving social problems that will occur in the future.

3.2 Boardgame Social Awareness

In developing the social awareness board game, researchers here emphasize how to provide meaning to the game. The material that will be included in the development of board game media is based on previous discussions related to social awareness. The following is the material that will be arranged in board game media.

Table 1. Social Awareness Board Game Material

Three main dimensions	Task
tacit awareness	awareness of one's own or other people's point of view
focal awareness	awareness of the object of observation, either oneself or others
content awareness	awareness of the form of awareness observation of either appearance or experience

The researchers designed the material prepared and included it in board game media. Starting from how to play, models to the goals of the game.

3.3 Development of Board Game “Mining the Gold”

The board game model developed by researchers called "Mining the Gold" consists of several components. The components of this board game consist of two items, namely the game board and cards. The following is an explanation of the components of the board game "Mining the Gold".



Figure 1. Game Board

This game board contains places to place cards to "dig for gold." Students have to collect a higher number of gold count by digging in this place



Figure 2. Game Cards and Stop Cards

This game card contains numbers related to the amount of gold to be collected and a stop card indicating the game's end.

The board game "Mining the Gold" has several stages in playing the game.

- a. The game is played for 2-4 people
- b. The goal of the game is to collect the highest possible number of numbers in your hand
- c. In this game, students will play with teams/individuals.
- d. At the start of their turn, each individual holds two cards in their hand
- e. The game consists of 2 phases: Draw Phase and Dig Phase
- f. In the draw phase, each player draws/takes a card and then must exchange it with the one in hand and place one card on the board
- g. Carry out the draw phase until the cards run out and have been drawn
- h. Before the next phase, the teacher inserts a STOP card into the pile of cards where it works. When someone gets a stop card, students are not allowed to dig again
- i. Entering the next phase, namely digging, students draw from the pile that was previously placed, and exchange it with the card in their hand.
- j. Students can also dig by randomly exchanging the cards they have with the cards their opponents have
- k. each player can only switch cards with another player once with a difference of 1 dig after the opponent uses the switch opportunity
- l. Dig continues until one of the players gets a stop card
- m. The game ends, the winning player is the one who collects more gold than his friends

The board game "Mining the Gold" has points that need to be conveyed by teachers to strengthen students' social awareness. The following are the points that teachers need to convey to students.

- a. The point of this game is that every card drawn is an unexpected event
- b. Until the stop card is obtained, it states that every event becomes unpredictable until everything is finished
- c. Each card drawn can mean something positive or negative

- d. The student's attitude in taking the card is the point, how to deal with various positive or negative things
- e. Apart from that, students' views regarding the events they experience will certainly be different from each other, each person has their views and is different from themselves in dealing with or viewing an event.

4 Conclusion

Social awareness is important to instill in someone, especially since they are in junior high school. This is because having strong social awareness from the start will make it easier for someone in the future to adapt to the environment and solve various social problems, especially in the era of the Industrial Revolution 4.0. Thus, one way to instill social awareness is using board game media. Through board game media, students have the potential to be more interested in a game that is more related to student life. Researchers developed this board game media to provide an introduction and understanding and increase students' social awareness. Experts will further test this development for media validation and reliability to develop students' social awareness. In the future, this media will be registered for intellectual property rights (IPR) and can further be distributed to teachers to provide broad benefits.

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