The Snakes and Ladders Game as Indonesian Cultural Literacy for Students

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Abstract

Knowledge of Indonesian culture among students at SDN Mojo III Surabaya needs to be increased, so that this knowledge is easily accepted, the library uses an approach through traditional games. The game of snakes and ladders inserts images of Indonesian cultural characteristics, this is intended for students to know, understand, and appreciate Indonesian culture. The methods used include the preparation stage, making the game technically, implementing activities, results, and evaluating. The results obtained after implementing the game are proven to be able to increase Indonesian cultural literacy in students, this is evidenced by the ability of each student to easily understand and remember, then be able to convey it smoothly through verbal communication. The benefits are that students become more familiar with and understand the diverse Indonesian culture and provide motor skills and memory about Indonesian culture. The conclusion from this activity is that the game of snakes and ladders can increase the cultural literacy of students at SDN Mojo III Surabaya.

Keywords : Indonesian culture literacy; snakes and ladders; traditional games.

A. Pendahuluan

Libraries have activities to manage, collect, preserve, and provide information from various fields of science to support community research (Fatimah, 2018). The library provides a collection of books and other collections that are neatly and systematically arranged, these collections are stored and processed according to guidelines. Collections in the library are not only processed and stored, but also updated according to scientific developments. Libraries have various types, one of which is the school library. The school library must be managed properly so that it can provide services to library members including teachers, students, employees, and the librarian itself. Librarians must be able to become managers of knowledge, research or search for information both manually and digitally and be able to teach students to obtain information (Rahman, 2021).

One of the tasks of the school library is to help improve the literacy of its students. Early literacy is an early ability such as reading and writing which is usually taught at school and communicated through learning topics (Sutrisno, 2017). Elementary school libraries have a big role to play in increasing literacy in children, because they are sensitive and easily affected by various stimuli from their environment (Febrianta, 2017). To attract students' interest in increasing

literacy, the library must have a strategy to educate students in a more creative and attractive way, such as using games, through games. One of the games that can be used as media literacy is the snakes and ladders game. This is a traditional game that uses dice to determine the steps that must be taken by the pieces or players (Rahmadiani, 2019).

There are six literacy that must be possessed by children, namely reading and writing literacy, numeracy literacy, scientific literacy, digital literacy, cultural literacy and financial literacy. One of them is Indonesian cultural literacy, this literacy is the ability to understand and have an attitude towards Indonesian culture as a national identity (Rahayu, 2021). Cultural literacy of SDN Mojo III Surabaya students is lacking, this can be seen when the librarian plays a folk song, and they don't memorize the lyrics of the song, but when the librarian plays a modern song, they memorize it and sing it fluently. Therefore, libraries and schools need to innovate and be creative so that children have cultural literacy, especially Indonesian culture. According to KBBI (Big Indonesian Dictionary), culture is the result of activities and the creation of the human mind such as beliefs, art, and customs. Indonesian culture is a culture that is supported by some Indonesian citizens, and gives identity to the state and citizens (Pratama, 2020).

Based on these matters. Snakes and ladders game can be an alternative library to improve student literacy. The snakes and ladders game can be a medium for increasing children's literacy, because it has a method of playing while learning (Nurhidayati & Imron, 2021). This game also trains motor skills through learning that requires muscle performance. This game was designed by writers to incorporate elements of Indonesian culture such as questions about Indonesian cultural diversity, challenges to practice regional dances, folk songs and others. This game also includes traditional games that are already in the library. In each box is inserted a picture of the characteristics of Indonesian culture. The aim is for students to know, understand, and appreciate Indonesian culture as a national identity.

B. Metode Penelitian

The method for making this game is an experiment with several stages including the preparation stage, the stage for making the snakes and ladders game, the implementation stage, the results, and the evaluation.

- a) Preparation Stage :
 - 1. Manage licensing with the librarian of the SDN Mojo III Surabaya library.
 - 2. Discuss with the Librarian
 - 3. Identify the need for tools and materials
 - 4. Buy tools and materials to make snakes and ladders game.
 - 5. Determine the contents of the theme of the snakes and ladders game
 - 6. Design a game of snakes and ladders on paper.
 - 7. Print the design that has been made
 - 8. Determine which group of students will be the target of the snakes and ladders game
 - 9. Division of tasks between Librarians
- b) Stage of Making the Snakes and Ladders Game
 - 1. Create a Design in Corel Draw X7
 - 2. Making the Dice

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- 3. Make quizzes and challenges
- c) Implementation Stage

Playing snakes and ladders game at SDN Mojo III Surabaya. Students play the game according to the rules, which is played by 5 students, then take turns throwing the dice and moving forward according to the number they get.

d) Results

At this stage the authors describe the results of the implementation of the snakes and ladders game that has been tested.

e) Evaluation Stage

The authors evaluate the results of implementing the snakes and ladders game by monitoring students' understanding until they are able to explain fluently about Indonesian cultures according to the questions provided.

C. Pembahasan

This section describes the steps involved in making snakes and ladders game.

1. Preparation

To carry out this stage it takes 2 weeks, and will be carried out in March 2022, here are the details:

1) In the first week

- a) March 14, 2022 : Making permits with the librarian
- b) 15 16 March 2022 : Conduct discussions with the Librarian regarding the game of snakes and ladders.
- c) March 17, 2022 : identify several tools and materials needed to make a snake and ladder game
- d) March 18, 2022 : Looking for and buying equipment and materials for making snakes and ladders game

2) In the second week

- a) March 21, 2022 : Determine the contents of the snakes and ladders game theme
- b) March 22, 2022: design a snake and ladder game on the media that will be used to place the game.
- c) 23-24 March 2022: conduct a survey and determine where to print banners
- d) March 25, 2022 : Determine which group of students will be the target of the snakes and ladders game

After the preparatory stage is complete, the authors then prepare the tools and materials needed to make the snakes and ladders game, including :

Tools :

- **1) Laptops** are relatively small hardware devices that can be carried easily, and there is a Corel Draw X7 application, which functions to search for pictures and quizzes.
- **2) Mouse** is a hardware device that accepts input from cursor movements, keystrokes, and scrolling which can be used to select text, icons, files, and folders.
- **3) Printer** is a printing machine that display printed data, such as text or images/graphics on paper according to the required size. The printer is

used to print quiz questions and challenges which are then cut and collected together.

- **4) Glue**, which serves to glue various materials, the type of glue used must dry faster, be stronger, and have a long-lasting bond. Glue is used to make dice.
- **5) Markers** are writing instruments that use liquid ink and produce thick strokes. Markers are used to mark circles on flannel for making dice.
- **6)** The ruler is a measuring device and a tool for drawing straight lines. A ruler is used to measure flannel when making dice.
- **7)** A sewing needle is a rod-shaped sewing tool with a hole for thread at the end. Sewing needles are used to sew fabric dice.

Material and Software :

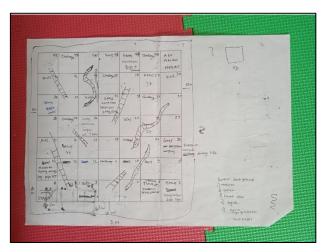
- **1) Google Chrome** is a browser application used to surf the internet. The author uses google chrome to find questions for quizzes and pictures to paste on snakes and ladders game.
- **2) Corel Draw X7** is a graphic design computer application that is widely known and used for designing. Corel Draw X7 is used to create snakes and ladders game designs.
- **3) Microsoft Word** is word processing software and is used to write and submit quiz questions and challenges which are then printed on paper.
- **4) Banners** are long cloth materials that display certain information. Banners are used by writers for print media for snakes and ladders game. The choice of banner material is used so that it can be directly stepped on by students.
- **5) Flannel** is a cloth made from wool fibers and is used to make number dots on dice
- 6) Sewing thread is used to sew dies from one fabric to another.

Furthermore, the organizing stage, namely carrying out division of tasl 201 being responsible so that the making of the game can run smoothly, this stage involves Human Resources who have their respective roles, including:

- **1) Authors:** Designing snakes and ladders, making dice, accompanying students to play snakes and ladders
- **2)** Librarian: participates in determining the theme of the snakes and ladders game, makes dice, and accompanies the students when playing.

After the division of tasks is complete, then designing the shape of the snakes and ladders game, the first design is drawn on paper which is then scribbled on to determine the content and elements that will later be included in the snakes and ladders game. After that, the size that will be used for this snake and ladder game is 3m x 3m with each column measuring 40cmx40cm so that a total of 49 columns. as well as the bonus column. Then the contents of the snakes and ladders game are generated, namely determining the location of the quiz column, the challenge column, the games column, and the bonus column. Besides that, it also determines the location of the snake and ladder

Figure 1 Design of a game called Snakes and Ladders



2. Making the Snakes and Ladders Game

The game of snakes and ladders was made for 2 weeks. This stage is a continuation of the second week. The following is the timeline starting from making designs, dice, to quizzes or challenges, including:

1) In the third week

- a) March 28, 2022 : Installing the Corel Draw X7 application
- b) 29 31 March, 1 April 2022 : Create a snake and ladder design using Corel Draw X7

2) In the fourth week

- a) 4 5 April 2022 : Printing banners
- b) 6 7 April 2022 : Look for materials to make dice then make dice
- c) 8 and 11 April 2022 : Collect questions for the quiz
- d) 12 13 April 2022 : Collecting questions for the Challenge

a. Designing on Corel Draw X7

Corel Draw X7 is a computer application in the form of a vector graphics editor, and functions as image processing and is usually used in the fields of publication, printing, and other fields that require a visualization process. The stages of designing a snake and ladder game are as follows:

- 1) The first step is to open the Corel Draw X7 application then create a table of 49 boxes with a size of 3m x 3m with each box measuring 40cm.
- 2) The second step is to determine the color used in the game of snakes and ladders. After doing a search. Then find colors that suit elementary school children, namely rainbow colors.
- 3) The third step is to write numbers in each column.
- 4) The fourth step is to write in the snake and ladder design column. The posts are quizzes, challenges, games and their contents, as well as bonuses.

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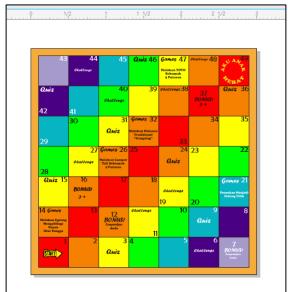


Figure 2 Addition of Writing in a Box

5) The fifth step is to identify the snake, ladder and start symbols. Before being inserted into Corel Draw X7, the symbol is "remove background" to remove the background of the image object so that it can be used. Then new symbols can be entered into Corel Draw X7. The next step is to find images with the theme of Indonesian culture. The authors include images of traditional musical instruments, traditional games, traditional houses, traditional Indonesian dances, traditional transportation, and Surabayan icons.

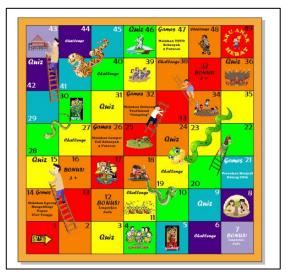


Figure 3 The Results of Snakes and Ladders game

6) The sixth stage is printing the finished design. Figure 4 is a printout of the snakes and ladders game.

Figure 4 The Banner of Snakes and Ladders Game



The following is an explanation of each function of the snakes and ladders game boxes:

- 1. Box number 1 is the starting point for the game of snakes and ladders
- 2. Box number 2 contains the stairs to box number 15
- 3. Box number 3 contains a quiz. The quiz contains questions about Indonesian culture such as songs, food, dance, traditional houses, and others.
- 4. Box number 4 contains animated images of traditional Javanese gamelan musical instruments.
- 5. Box number 5 contains the gandrung traditional dance
- 6. Box number 6 contains a challenge
- 7. Box number 7 contains the bonus of throwing the dice back
- 8. Box number 8 contains a picture of the traditional game, namely congkak
- 9. Box number 9 contains a quiz

- 10. Box number 10 is a snake box descending from box number 18
- 11. Box number 11 contains a challenge and a picture of the traditional saman dance
- 12. Box number 12 contains a bonus roll of the dice again
- 13. Box number 13 is an empty box
- 14. Box number 14 contains games, namely playing stilts made of coconut shells around a board of snakes and ladders
- 15. Box number 15 contains a quiz
- 16. Box number 16 contains a 3 step forward bonus
- 17. Box number 17 contains images of Balinese culture, namely the Kecak dance and Balinese temples
- 18. Box number 18 contains traditional Indonesian transportation, namely rickshaws and snakes descending
- 19. Box number 19 contains a challenge
- 20. Box number 20 contains a ladder going up to box number 22
- 21. Box number 21 contains games, namely acting as a little puppeteer
- 22. Box number 22 contains a ladder going up from box number 20
- 23. Box number 23 is an empty box
- 24. Box number 24 contains a quiz
- 25. Box number 25 contains the traditional game of gobak sodor
- 26. Box number 26 contains a game where you play 5 rounds of jumping rope
- 27. Box number 27 contains a challenge
- 28. Box number 28 is a snake box descending from box number 30
- 29. Box number 29 contains a ladder going up to box number 43
- 30. Box number 30 contains the traditional dance of peacocks and snakes descending
- 31. Box number 31 contains a quiz
- 32. Box number 32 contains games, namely playing slim games
- 33. Box number 33 contains a ladder going up from box number 25
- 34. Box number 34 contains pictures of the traditional games of Rangku Ayu and the stairs going up
- 35. Box number 35 contains a descending snake
- 36. Box number 36 contains the Gadang traditional house
- 37. Box number 37 contains a 3 step forward bonus
- 38. Box number 38 contains a challenge
- 39. Box number 39 contains a picture of the traditional lumping horse dance
- 40. Box number 40 contains a challenge
- 41. Box number 41 is a snake box descending from box number 45
- 42. Box number 42 contains a quiz
- 43. Box number 43 contains a picture of a house on stilts and a staircase ascending from Box number 29.
- 44. Box number 44 contains a challenge.
- 45. Box number 45 contains a descending snake.
- 46. Box number 46 contains a quiz and a picture of Surabaya's iconic Suro and Boyo statues.
- 47. Box number 47 contains games which is playing "Yoyo" for 5 rounds.
- 48. Box number 48 contains a challenge and a picture of the traditional musical instrument "Angklung".
- 49. Box number 49 is the last Box that indicates the game has ended.

b. The process of making a Dice

The dice in this game are in the shape of a cube. On each side, there are circles numbering from 1 to 6. The authors use a large 30cm x 30cm dice which aims to be easy for students to play and see. The dice materials are made from used carpet and flannel cloth owned by the library. The dice are made by sewing method. The process of making it:

- 1) Prepare scissors, sewing thread, sewing needle, ruler and marker.
- 2) Measure the carpet fabric as needed, which is 30cm x 30cm then cut it. After that, sew the cloth to one another that has been cut into dice.
- After that, cut a round flannel with a number of dice contents from 1 to 6.
- 4) The next step is to fill the finished dice with dacron and waste paper. After that, attach the flannel that has been cut into circles to each side of the dice. Then the dice is finished and



Figure 5 The Dice of the game

c. Creating quizzes and a challenge

The quiz questions used are general knowledge about cultural diversity in Indonesia, such as food, traditional games, traditional houses, folk songs, regional cuisine, and tribes in Indonesia. While challenges are physical activities carried out by students to be demonstrated by students, such as dancing, singing, telling about one of the books they have read. The quiz questions and challenges are printed on paper and then cut and layered with paper and laminated so they don't tear and last a long time.

3. Implementation of Snakes and Ladders Game

After making a product (a game of snakes and ladders), the next step is implementing the product for SDN Mojo III Surabaya students. The implementation of the snakes and ladders game was carried out for 5 weeks. Every week the authors conduct one experiment with 23 students, on:

- 1) Week 5 : April 18, 2022.
- 2) Week 6 : April 25, 2022
- 3) Week 7 : May 9, 2022
- 4) Week 8 : May 17, 2022
- 5) Week 9 : May 23, 2022 and May 30, 2022

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Each student plays with the rules that have been given, then it is played by 4 groups, each of which has 5 to 6 students alternately throwing the dice and moving forward according to the numbers obtained. If students stop at one of the boxes, and there is a quiz, they will get a question that must be answered. However, if they get a challenge, then they have to do the challenge according to the information provided. In practice, there were some students who got questions but were unable to answer, on the other hand, there were those who were able to answer fluently. Children who could not answer would be punished by looking for answers to questions through the information available in the library. this is an effort for children to improve their literacy. When students get a challenge, in fact, there are students who cannot demonstrate traditional dances or sing folk songs and will be punished like in a quiz. Nonetheless, the majority of students find it easier to practice and find it fun and easier to memorize traditional games such as yo-yo, coconut shell enggrang, and others. The implementation of this game was carried out 5 times until there were no students who answered incorrectly and practiced challenges regarding Indonesian cultures.



Figure 6 The Implementation of Snakes and Ladders Game

4. Results

After doing several experiments, the result is that students have enthusiasm for this game. They assume that if the message is easy to understand. The students responded well. They are also disciplined to follow the rules. In the first experiment, several students were instructed to sing traditional songs, such as 'Apuse', the song 'Cublek-Cublek Suweng'. They were also instructed to play a traditional game called "yoyo", demonstrate puppet art performances, and also play the "engrang" game. Students who get a singing challenge with the title 'Apuse' do not memorize it and still need help from the Librarian to complete the challenge. Then other students who were challenged to demonstrate wayang also needed help from their friends because they felt embarrassed to demonstrate it themselves. In the second trial of the snakes and ladders game, the author still needed to explain the game to the students, but in this trial some students had understood the flow of the snakes and ladders game and the instructions on the game board. In the third experiment, some students succeeded in singing a song entitled 'Apuse' fluently. Then in the wayang demonstration, there were still students who were shy but dared to demonstrate even in a low voice.

In the fourth trial, the author had not explained to the students about the snakes and ladders game because all students could follow easily and responsively. This experiment resulted in most students when challenged to sing the folk song 'Apuse' had fluently and memorized from beginning to end. Then in the puppet game, some students have bravely introduced themselves using puppets as a medium even though they are still in a low voice.

On the fifth or final trial, students were able to play directly without the author In the fourth experiment, most of the students were challenged to sing a traditional song entitled 'Apuse' more fluently and without repeating it. Then in the wayang game, some students dared to introduce themselves confidently and used the wayang tools to introduce themselves. In the last experiment, students were able to play directly without directions from the librarian. In this fifth experiment, it was proven that students' cultural literacy had increased. Especially when they got the challenge of demonstrating wayang, more than 5 students successfully completed the challenge and were able to introduce themselves more smoothly and more confidently.

From the 5 experiments that have been carried out, it can be interpreted that in order to obtain maximum results in increasing literacy in children, an approach that is appropriate to the child's character is needed. The game of snakes and ladders as a medium for cultural literacy has proven to be able to increase students' knowledge of Indonesian culture.

5. Evaluation

According to W.J.S Poerwodarminto (in Chasanah, 2012), Comprehension is defined as the ability to understand something after studying and remembering it. In measuring understanding of something, it is necessary to experiment on an object which is expected to produce a level of understanding of the situation. Comprehension can also be interpreted as measuring certain uses productively, the Comprehension in question is where someone can connect a principle for remembered and applied when facing certain situations (Chasanah, 2012). Children build their own cognitive world, thus adapting their minds to include new ideas, because the additional information obtained can increase understanding (Mu'min, 2013). Based on this theory, the interpretation is that the game of snakes and ladders which was carried out at SDN Mojo III/222 Surabaya proved effective as an approach to increasing Indonesian cultural literacy. Students who previously did not know became aware then remembered and were able to practice it. This activity can also be a means of learning while playing so students don't get bored when visiting the library. As well as being an important point for librarians to know the needs of students when in the library other than reading books.

D. Kesimpulan

Based on the experiment of playing the snake and ladder game at the SDN Mojo III/222 Surabaya Library, it can be concluded that the game has proven effective in increasing cultural literacy in students. After playing this game the students' ability to understand and explain has increased. This means that building the development of cultural literacy is one of the tasks of the school library that

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must be carried out as an effort to increase student literacy. At elementary school age, having a high interest in games with this behavior the school library can take advantage of it by making game-based literacy media, one of which is the snakes and ladders game. This game is widely known by children because of its interesting content and easy-to-understand playing rules. In order to make it more attractive, it should be made in a large shape so that the child can become a pawn for himself. The results obtained after implementing the Snakes and Ladders Game product are that this game is very useful for SDN Mojo III students as a means of learning while playing. The lesson that can be taken is that students become more familiar with and understand the diverse Indonesian culture and provide motor skills and memory. Besides that, it also generates the perception that the library is not only a place to get information sources, but also as literacy education through recreation. The solution given by the author for this experiment is that the competition librarian holds this activity of playing snakes and ladders regularly at least once a week in the library and takes turns in each class.

References

- Chasanah. (2012). Penerapan Metode Demonstrasi Dalam Pembelajaran Shalat Untuk Meningkatkan Pemahaman Pada Anak Usia Dini Di Ra. Al Muna Semarang. *Institut Agama Islam Negeri Walisongo*, 1(69), 5–24.
- Fatimah. (2018). Perpustakaan, Manfaat, Kelebihan dan Kekurangan. Jurnal Imam Bonjol : Kajian Ilmu Informasi Dan Perpustakaan, 2(1), 30–35.
- Febrianta, Y. (2017). Model Pembelajaran Motorik Yang Menyenangkan. Jurnal Pendidikan Ke-SD-An, 3(3), 184–188. https://media.neliti.com/media/publications/259046-modelpembelajaran-motorik-yang-menyenan-0505c726.pdf
- Mu'min, S. A. (2013). *Teori Perkembangan Kognitif Jean Piaget*. 6(1), 89–99.
- Nurhidayati, S., & Imron, I. (2021). Peningkatan Kemampuan Literasi Anak Usia Dini Melalui Konsep Ular Tangga Asmaul Husna. *Proceeding Umsurabaya*, 350–356.
- Pratama, C. D. (2020). *Kebudayaan Nasional: Definisi dan Bentuknya*. Kompas.Com. https://www.kompas.com/skola/read/2020/12/15/175356169/kebuday aan-nasional-definisi-dan-bentuknya?page=all
- Rahayu, E. W. (2021). Pemanfaatan Game Edukasi Untuk Meningkatkan Kemampuan Literasi Siswa di MI YAPPI Balong Girisubo. *Jurnal Program Studi Pendidikan Matematika*, 8(3), 457–464.
- Rahmadiani, S. (2019). Penerapan Permaian Ular Tangga Sebagai Media Pembelajaran Untuk Meningkatkan Motivasi Belajar Mata Pelajaran Pendidikan Agama Islam Di SMP Negeri 13 Palembang.
- Rahman, T. (2021). Peran Perpustakaan Dalam Meningkatkan Literasi Baca Tulis Di Kalangan Civitas Akademika Perguruan Tinggi.
- Sutrisno, M. D. (2017). Penggunaan Media Permainan Sebagai Upaya Membangun Literasi Dini. *Journal Article*, 1–10.