



Educational Games for Handling Trauma Healing in Post-Corona Virus Pandemic for Grade 2 Elementary Schools: Thematic 2 (Playing in My Neighborhood)

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Abstract: The coronavirus pandemic (2019) has had a significant impact on the world of education, especially in the teaching and learning process. One of the handlings of trauma-healing problems in children after the coronavirus pandemic is through playing while learning. In the second thematic book for grade 2 elementary school children with the theme of playing in my environment, this attracted the attention of researchers to make learning media innovations for children that were interesting and informative. Besides, factual learning media are the focus of researchers to provide new information for children. The purpose of this research is to produce game innovations that hone the cognitive and psychomotor aspects of children as learning media. This game contains educational information about the coronavirus using a persuasive approach. The method used in this research is using the Research and Development Method with the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation). The output in this research is an educational game that can deal with trauma healing for children after the coronavirus pandemic and can be used as a reference for the learning curriculum for grade 2 elementary school children.

Keywords: coronavirus pandemic, learning media, second-grade thematic book, trauma healing children

How to Cite: Yanuarsari, D.H., Mukaromah, M., & Khamadi, K. (2021). Educational Games for Handling Trauma Healing in Post-Corona Virus Pandemic for Elementary Schools: Thematic 2 (Playing in My Neighborhood). *The 3rd International Conference on Elementary Education*, 3(1). 319-326

INTRODUCTION

The Corona pandemic began to occur at the end of 2019 to hit most countries in the world. In the daily Suara.com which was uploaded on March 25, 2020, it was stated that Coronavirus is a virus that can cause illness, ranging from the common cold to severe respiratory illnesses, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). This virus first appeared in the city of Wuhan in China and can transmit from one person to another through direct contact. Various anticipations were made to overcome the spread of this coronavirus. Including Indonesia, which carries out various forms of prevention, one of which is with Work from Home (WFH), isolating residents independently with the Stay-at-Home campaign, including in the field of education by carrying out the process of learning from home. As a result, the corona pandemic, had a big impact on the education sector, one of which was for children at the basic education level.

Reported from Kompas.com on July 28, 2020, that due to the Covid -19 pandemic, requiring schools to be carried out from home makes changes occur and invites questions for children why they cannot come to school anymore. Time to meet peers is lost for a certain period. Most of the children felt disappointed because they missed the opportunity to joke with their peers. The condition of the Covid-19 pandemic and having to stay at home, if it is not handled properly, it will cause disappointment and stress, and even trauma to the child. And in the long run, it can affect children's motivation to learn. Furthermore, according to the staff of the psychology sub-section of the medical rehabilitation installation of Sanglah Hospital in Denpasar, Lily Puspa Palupi, as stated by Merdeka.com on October 5, 2020, that the condition of distance learning in children during the Covid-19 pandemic can cause stress in children.



Based on the helohehat.com website, it is said that stress in children can arise from demands from the surrounding environment such as parents, school, or the social environment. Besides, stress can also arise from within yourself when there is a difference between what you want to achieve and your abilities. Common sources of stress for children include anxiety related to schoolwork, academic rankings, difficulty feeling relaxed due to busy schedules or responsibilities. Still according to helohehat.com, children, including children in the 6-9 years range, generally cannot understand and express what they feel. They do not even realize that what they are experiencing is stress. The characteristics that appear include the emergence of negative behavior, feelings of fear, withdrawal from the social environment, illness for no apparent reason, difficulty sleeping, lack of concentration, and so on. In a study published in the journal *Elementary school Journal* article in 2020, the Covid-19 pandemic triggered quarantine and anxiety which can lead to a serious mental disorder crisis, causing children to experience stress and trauma (Meutia, 2020, p. 60-66).

Therefore, it needs special attention to this condition to maintain the mental health of children, one of which is by carrying out fun learning activities for children that are adjusted to the child's condition. During the Covid-19 Pandemic, the priority was physical and psychological health, so that parents and children still had to be able to undergo the distance learning process, as best as possible did not increase the psychological burden. Based on the considerations described above, it is important to carry out educational activities in the form of a game that is useful for restoring the need to play and interact with playmates, but while recalling knowledge about the virus and the Covid-19 pandemic as part of the life cycle that children have experienced.

According to Piaget in Slavin (2009), the characteristics of elementary school students tend to think concrete operations, and at the age of children is a period of interaction with play (Slavin, 2009). Based

on Permendikbud Number 32 of 2018 stipulates that the minimum service standard (SPM) for basic education is for students aged 7 (seven) to 15 (fifteen) years, which aims to create an atmosphere of learning and the process of learning activities so that students actively develop their potential himself, including having the power of self-control, personality, intelligence and skills that are needed by him. So, in the development of the education curriculum, it is adjusted to the level of education that is being taken. One of the curricula related to basic education for SD/MI children requires considering the dynamics of global development and the increase in the potential, intelligence, and interests of students.

Learning in elementary school students, a teacher, educators must be able to carry out learning activities that are close to concrete reality and play-oriented, the learning media serves as a substitute for conveying information if they cannot confront something real. Therefore, teachers as facilitators of children in learning must be able to choose the stages that are by the development of teaching materials. One of them is the stages of developing learning media using the ADDIE method. According to Barokati and Annas (2013), the ADDIE model is a model that guides the development of effective, dynamic, and supportive learning. One of them is the game of snakes and ladders (*Permainan Ular Tangga*) which is developed with children's approaches and needs in basic education. The game of snakes and ladders can also assist in the development of various thematic learning practices, especially at the second-grade elementary school (SD) level related to the theme "playing in the environment around children". The game of snakes and ladders is a type of game that is played by two or more children by rolling dice, which consists of several boxes in which there are pictures of snakes and ladders placed randomly. If in playing, the participant gets a ladder, it means going up by the direction of the ladder, and if he gets a snake then in the game the participant must go down according to



the snake's path. Participants are declared to win if they arrive at the finish box first.

The purpose of this research is to produce a prototype game of snakes and ladders as a form of the campaign in handling stress and even trauma in children after the Coronavirus pandemic which is adapted to a

This study uses a descriptive-percentage research method. Sukmadinata (2006) states that descriptive research is research that aims to describe the phenomena that exist around them, both natural and man-made. Phenomena can be in the form of activities, forms, characteristics, changes, relationships, similarities, and differences between one phenomenon and another. This research refers to the design process which refers to the phenomenon of the need

new concept. The new concept provided contains information regarding the handling of the Coronavirus, while still paying attention to their basic needs to play, interact and hone children's psychomotor abilities so that messages related to stress management will be conveyed, especially for children.

METHOD

for instructional media needed for children today and is arranged descriptively. Validity can be achieved by looking at the significance of the study through the percentage method. The percentage method is carried out by identifying the average value of the validator, namely learning media experts, children, and educators as companion learning materials. Data were calculated using a Likert scale with a range of points 1 to 4.

Table 1. Assessment Identification, Likert Scale

Number	Alternative answers	score
1	Very Good	4
2	Good	3
3	Not Good	2
4	Not very Good	1

Next, the value validation result [10] is calculated using the following method:

$$\%score = \frac{\sum \text{acquisition score}}{\sum \text{maximum score}} \times 100\% \quad (1)$$

The result of the acquisition of the next score is measured using score interpretation using a Likert scale, which is as follows:

Table 2. Interpretation of Score Scale

Number	Percentage	interpretation
1	0%-25%	Not very Good
2	26%-50%	Not Good
3	51%-75%	Good
4	76%-100%	Very Good

The success of the research can be seen from the significance of the questionnaire scores with a range of 51% -100% on the criteria of "Good" and "Very Good".

Referring to the results of data search, namely by conducting interviews with a child psychologist from Elizabeth Hospital Semarang, namely Probowatie Tjondronegoro. Extracting data related to

trauma healing in children after the post-pandemic coronavirus, the results show that learning media for children that can stimulate the brain and suppress stress is by using game media. The results of the development of learning media in the form of teaching aids in the form of a game of snakes and ladders with material content related to information about the coronavirus that occurred at the end of 2019. This modified

snake and ladder game can be used by grade 2 elementary school students to be used to reduce stress and also trauma healing in children and provide an approach to fine motor movements related to understanding and information about the coronavirus.

The learning media in the form of the snake and ladder game has the following advantages:

- a. This learning media is in the form of teaching aids in the form of a snake game which is designed to be a digital printing work that can be carried and stretched in the field or schoolyard.
- b. This snake and ladder learning media can be used for students to learn

independently while playing so that the material to be delivered feels more relaxed and less stressful

- c. The concept of education in learning media is designed to be as attractive as possible so that students do not feel bored.
- d. This learning media is not only able to train children's motor skills but also to train the cognitive aspects of children.
- e. The graphics presented are made as attractive as possible with bright colors that can stimulate children's sensitivity, added with informative contents
- f. Content is presented informatively with a rational approach so that it is easily understood by students.

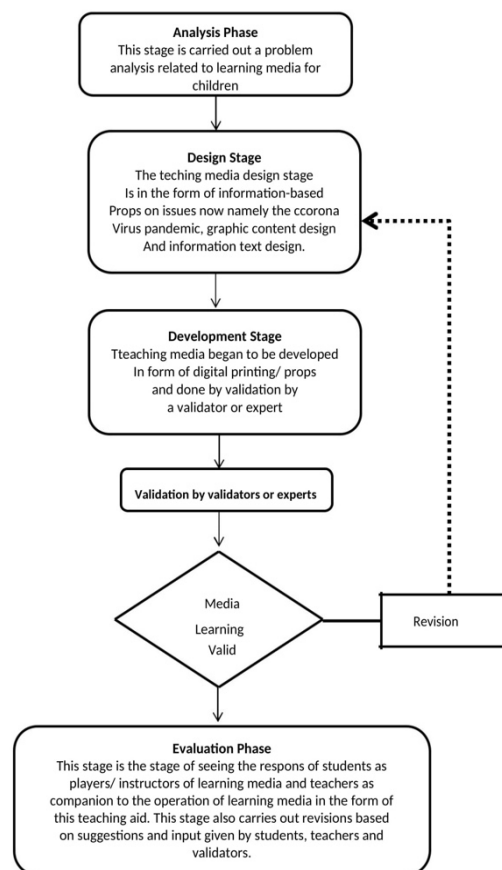


Figure 1. The flow of the ADDIE model development process in learning media

The development of teaching aids in this learning media uses the ADDIE method. According to Gay, quoting from Wasis (2004), the ADDE method is an attempt to develop an effective product in the form of learning materials, learning media, learning strategies that can be used in schools, not theoretically tested. According to Reyzal

Ibrahim (2011), this development model is a model with a learning design that refers to an effective and efficient system approach and an interactive process. The results of the evaluation at each phase can lead to the development of learning into the next phase. The result of one phase can be the initial product for the next phase. This ADDIE



model consists of five phases or main stages, namely 1) Analyze, 2) Design, 3) Development, 4) Implementation, 5) Evaluate. The analysis of the ADDIE model stages in designing learning media is as follows:

Analyze stage

This stage is the stage of recording every learning need that is used to identify problems. This stage aims to describe the problems experienced by students during the learning process. The forms of activities carried out at this stage are, 1) analyzing the problem; includes student learning outcomes, student responses related to the delivery of material taught by the teacher, the need for learning media concepts, innovative media concepts related to knowledge of current issues, 2) analysis of learning resources including the availability of teaching materials, compatibility with learning outcomes and ease of use, 3) analysis of student needs, the validity of which was carried out by interviewing several students to determine the context and content of students' needs on teaching media.

Design Stages

After formulating the problems and needs of students, the next stage is to carry out the design stage of the teaching media. The initial stage of designing is a rough design of the learning concept. Concept design is done manually which is then developed into digital content in the form of a learning model framework that refers to student needs. At this stage, the researcher found the concept of learning media, namely the concept of the snake and ladder game that was able to achieve the concept of deepening cognitive and motor skills of children. Information content in learning media will deliver material that is by the learning curriculum for grade 2 Elementary School on the thematic "Playing with the Surrounding Environment". The contents of information related to the coronavirus pandemic that occurred at the end of 2019. The concept of information and content had been previously discussed by experts, namely by child

psychologists as resource persons from Elizabeth Hospital regarding the handling of post-pandemic corona trauma healing, namely Tjondronegoro. In this stage, the researcher also made a response validation sheet for teaching media in the form of a questionnaire in the form of a pre-test of the use of learning media for students and also conducted a post-test. which will be used for the validator at the final stage after the learning media begins to be applied.

Development Stages

This stage is the development stage of a design based on needs analysis. The learning media is designed digitally through the Paintool SAI software for snake and ladder game content and developed in Adobe Photoshop software for the background. The export format for the learning media will be created version.jpeg which is then processed into digital printing.

Implementation Stage

This stage is the stage when the previous stage has been declared valid by three validators. This stage was carried out by simple trials on 15 grade 2 elementary school students. Previously, questionnaires were distributed related to the context of knowledge communication transfer before testing on learning media. Next, after the trial, a questionnaire will be distributed to see the results of the transfer of knowledge communication. The purpose of conducting pre-test and post-test trials on this learning media is to determine the level of usefulness and ergonomics before and after being tested on students. If it meets this category well, the learning media is suitable for use. But if it does not meet the criteria, revisions or revisions will be made according to the suggestions and input gave by the respondent.

The pre-test as an initial stage is carried out to see the development and comparison between before making new learning media innovations and after. This pre-test emphasizes the assessment of the previous media which can be seen in the table results as follows:



Table 3. The Results of The Pre-Test Questionnaire on Old Learning Media

No	Aspects measured	Percentage of Outcomes	Interpretation
1	Visual learning media	60%	Good
2	Presentation technique	46,6%	Not Good
3	Learning media content	53,3%	Good
4	Language	80%	Very Good
5	Resolve Trauma Healing for Post-Corona Virus Pandemic	0%	Belum ada media
Average all aspects		59,97%	Good

Evaluation Stages

This stage is the final stage where improvements or revisions will be made after receiving suggestions and input from the three validators, namely students as users, teachers as companions, and resource persons as experts or learning media experts. The next steps are the distribution of post-test questionnaires to see the significance of the results of the learning media in the form of this snake and ladder game. The results of the questionnaire distribution trial were aimed at students to find out the learning outcomes after using this media. The results of the assessment of the use of instructional media involved 15. grade 2

elementary school students in the city of Semarang. Students are given learning media in the form of teaching aids in the form of a game of snakes and ladders in which information media has been designed that contain educational content related to current issues, namely the coronavirus pandemic. The assessment instrument focuses on 5 aspects of assessment, namely 1) visual learning media, 2) Presentation Techniques, 3) Learning Media Content, 4) Language, 5) Overcoming trauma for post-corona virus pandemic. So that the following chart results are obtained:

Table 4. The results of the learning media trial for students

No	Aspects measured	Percentage of Outcomes	Interpretation
1	Visual learning media	86,6%	Very Good
2	Presentation technique	93,9%	Very Good
3	Learning media content	80%	Very Good
4	Language	86,6%	Very Good
5	Resolve Trauma Healing for Post-Corona Virus Pandemic	86,6%	Very Good
Average all aspects		86,74%	Very Good

To find out the significance of the next results, checking and assessment of this learning media is carried out on educators, namely teachers by matching the needs of learning outcomes in children with

measurement aspects, namely 1) completeness of the material, 2) presentation techniques, 3) language and 4) learning outcomes.



Table 5. The Results of The Instructional Media Trial by The Teacher

No	Aspects measured	Percentage of Outcomes	Interpretation
1	Completeness of the material	83%	Very Good
2	Presentation technique	85%	Very Good
3	Language	75%	Good
4	Learning achievements	85%	Very Good
Average all aspects		83,25%	Very Good

The validity of the final significance is also carried out on learning media resource persons to assess the feasibility of this learning media for students which includes

assessments on, 1) Conformity of content with the curriculum, 2) Technical design and learning concepts, 3) Content of learning media and 4) Language.

Table 5. The Results of Learning Media Trials by Instructional Media Sources

No	Aspects measured	Percentage of Outcomes	Interpretation
1	Compliance with curriculum	86%	Very Good
2	Technical design and learning concepts	88%	Very Good
3	Learning Media Content	85%	Very Good
4	Language	85%	Very Good
Average all aspects		86%	Very Good

CONCLUSION

Referring to the results of the analysis that has been carried out, it can be concluded that the ADDIE model is suitable to be applied in the development of learning media for grade 2 elementary schools related to the thematic curriculum of 'Playing in the Neighborhood' with the form of props in the form of a game of snakes and ladders with an informative concept. The concept of the teaching material provided adapts to current issues, namely the corona pandemic that occurred at the end of 2019. This refers to previous research conducted by Febrianti, et al. (2019) which has successfully developed teaching materials using the ADDIE model. The suggestion for the development of this research is that the ADDIE model can be used as a research method in developing learning media and can be a reference for further research development. Learning media in the form of the snake and ladder game can

also be used as a reference or developed in other games in future research.

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