Development of Traditional House Culture Learning Media Based on Tradsetig (Traditional House Typhoon Game) for Elementary Students

Henri¹, Nurhaedah², Sayidiman³
¹²³Pendidikan Guru Sekolah Dasar, Universitas Negeri Makassar
¹hnryhenri28@gmail.com, ²nurhaedah7802@unm.ac.id.com, ³sayidiman@gmail.com

Abstract

This research was conducted in class IV of SDN No. 196 Inpres Bontomajannang on the Development of Traditional House Culture Learning Media based on Tradsetig which was motivated by the lack of learning media on traditional house culture based on games. The purpose of this study was to develop a traditional house culture learning media product based on Tradsetig for Elementary School students, and determine the feasibility of the product, to determine the level of practicality of using media products. This study focuses on producing learning media to improve understanding of traditional house culture material. The design of this study is research and development (Research & Development) using the ADDIE model which consists of five stages. The first stage is: (1) Preparation. (2) Planning. (3) Development. (4) Implementation. (5) Evaluation. The conclusion of this study, based on the assessments given by material experts, media experts, teachers and students, this Tradsetig-based learning media is in the very feasible category so that it can be recommended as a learning media on traditional house culture material.

Keywords: Tradsetig learning media; Traditional house culture; Elementary school students

Abstrak

Penelitian ini dilakukan di kelas IV SDN No. 196 Inpres Bontomajannang tentang Pengembangan Media Pembelajaran Budaya Rumah Adat berbasis tradsetig ang dilatar belakangi oleh minimnya media pembelajaran mengenai budaya rumah adat berbasis game. Tujuan dari penelitian ini adalah untuk untuk mengembangkan produk media pembelajaran budaya rumah adat berbasis tradsetig untuk siswa Sekolah Dasar, untuk mengetahui kelayakan produk, dan untuk mengetahui tingkat kepraktisan penggunaan produk media. Penelitian ini berfokus untuk menghasilkan media pembelajaran dalam meningkatkan pemahaman materi budaya rumah adat. Desain penelitian ini adalah penelitian dan pengembangan (Research & development) dengan menggunakan model ADDIE yang terdiri atas lima tahapan. Tahap pertama yaitu: (1)persiapan. (2)Perencanaan. (3)Pengembangan. (4) Penerapan. (5) Evaluasi. Kesimpulan dari penelitian ini, berdasarkan penilaian yang telah diberikan ahli materi, ahli media, guru maupun siswa, media pembelajaran berbasis Tradsetig ini berada pada kategori sangat layak sehingga bisa direkomendasikan sebagai media pembelajaran pada materi budaya rumah adat.

Kata Kunci: **Media pembelajaran Tradsetig; Budaya rumah adat; siswa sekolah Dasar**

1. INTRODUCTION

Human resources are one of the main pillars of a country's development. However, it is unfortunate that the quality of Indonesia's human resources is still far behind. Based on the latest data, Indonesia's Human Development Index (HDI) has dropped from 110th in 2017 to 114th in 2021 out of a total of 191 (United Nations Development Programme, 2022). The results of the UNDP report also place Indonesia in the category

of medium-level human development or stagnant from the category of previous years. This shows that there is still a lot of homework for the world of human development in Indonesia, one of which is in the field of education because the level of knowledge is one of the objects of assessment.

In recent years, Indonesian education has experienced quite significant improvisation such as changes to the curriculum, management of teaching staff, and educational support programs. The improvisations carried out basically have positive progress, but in some respects have not resolved the fundamental problems of Indonesian education which should emphasize the quality of the process more, but the phenomenon of monotonous, rigid, and less interesting learning is still a reality.s of four skills starting from listening skills, speaking skills, reading skills, and writing skills (Ali, 2020). Among these, writing is a crucial aspect that learners must master in Indonesian language instruction. Writing is one of the four core language skills (speaking, listening, writing, and reading) and is classified into two categories: productive skills and receptive skills. Productive skills include writing and speaking, while receptive skills include reading and listening (Asdarina, 2019). According to Krismasari Dewi et al., (2019), writing involves conveying thoughts, desires, and feelings through symbols, signs, or written forms that carry meaning. Sardila (2015) describes writing as a language skill developed through fine motor skills, where the writer's hand movements produce written language units.

Based on Permendikbudristek number 16 of 2022 concerning process standards in early childhood education, elementary education levels, and secondary education levels, article 9 paragraph 1 states that learning process standards are carried out in an interactive, inspiring, fun, challenging atmosphere, motivating students to actively participate, and providing sufficient space for initiative, creativity, independence according to the talents, interests, and physical and psychological development of students. Referring to the regulatory basis above, a progressive step is needed from all education stakeholders such as the government, schools, and also teachers so that these ideal conditions can be achieved because ideal process standards will be directly proportional to the quality of the output produced, Junaedi (2019).

The expected learning output is oriented towards the quality of student learning achievement influenced by the basic skills that must be possessed (literacy). Natural and Social Sciences Material or abbreviated as IPAS has material characteristics that tend to be abstract and conceptual, becoming a challenge for educators in facilitating contextual learning. This material will explain a lot about how a scientific process is related to everything that happens in nature, both qualitatively and quantitatively, so that it will have implications for students' literacy skills. IPAS material, especially in Elementary Schools, will study material ranging from animals, plants, the human body, soil or earth, the sky, stars in the sky, and many social contexts such as the environment, society, traditional house culture and so on Karitas (2020).

The results of a preliminary study conducted at UPT SD Negeri 196 Inpres Bontomajannang, Galesong Utara District, Takalar Regency in November 2023, through interviews we conducted with grade IV teachers, it was found that teachers had difficulty in facilitating student learning on conceptual or cultural materials such as the material on Traditional House Culture due to the lack of availability of learning media that can be used in the learning process. This has an impact according to the results of our interviews with students, that they are constrained in understanding the learning material on traditional house culture so that this material tends to be

considered difficult material and also has an impact on cultural literacy skills in the material which is also minimal. In addition, limited space and time with fairly dense material are obstacles that result in suboptimal learning, even in some materials not being conveyed. In fact, the potential owned by the school, namely the availability of adequate supporting facilities, should be a positive indicator, but it has not been utilized optimally, all the material has been conveyed.

Based on the description provided, the researcher is interested in conducting a study titled "Development of Traditional House Culture Learning Media Based On Tradsetig (Traditional House Typhoon Game) For Elementary School Students." Given the background outlined, the research questions for this study are formulated as follows: To develop a traditional house typhoon game-based learning media product for elementary school students, and to determine the feasibility of traditional house culture learning media products based on tradsetig (traditional house typhoon game) for elementary school students!

2. RESEARCH METHOD

The type of research that will be used is research and development (RnD). This research is a type of research that focuses on developing a product that is in accordance with the topic with the hope that it can be a problem solver that is to be solved. The product produced from this research must first go through various stages before the trial process is carried out so that the results obtained are more optimal. The development model used by the researcher is the model developed by Reiser and Molenda, namely the ADDIE model.

ADDIE is an acronym for Analyze, Design, Develop, Implement and Evaluate. The concept of the ADDIE model is applied to build basic performance in learning, namely the concept of develop ping a learning product design. ADDIE is an instructional design cantered on individual learning, has direct and long-term phases, is systematic, and uses a systems approach to human knowledge and learning. Effective ADDIE instructional design focuses on the implementation of authentic tasks, complex knowledge, and original problems. Thus, effective instructional design promotes high fidelity between the learning environment and work settings, (Junaedi, 2019).

This study refers to the Reiser and Molenda model, namely ADDIE, this model has five stages in its development which are structured and simple, namely Analyze, Design, Develop, Implement and Evaluate. The testing process is carried out in 2 stages, namely the alpha test carried out by media experts and material experts, this test is carried out with the aim that the product can be in maximum condition and in accordance with the provisions of the media and material before being tested. After the alpha test is carried out, the next step is the beta test to perfect the media development by analyzing and studying the responses of respondents (students and teachers) and The object of this research is learning media based on Tradsetig (Traditional House Typhoon Game) on the material of cultural diversity of traditional houses for class IV of UPT SD Negeri 196 Inpres Bontomajannang, North Galesong District, Takalar Regency.

The development of Traditional House Typhoon Game Learning Media in this study refers to the syntax of the Reiser and Molenda model, namely ADDIE, which was adapted by Junaedi (2019) and has five stages, namely Analyze, Design, Develop,

Implement and evaluate with details in the following image:
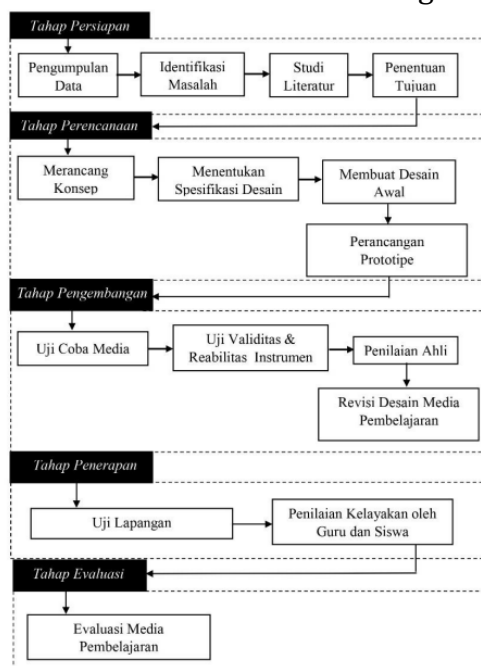
Picture 1. Implement and evaluate with details

The data collection techniques include, according to III (2016) interviews are the process of requesting information by asking appropriate respondents and using interview guides. In this study, the interview process will be conducted with teachers and students to ask for testimonials in the form of weaknesses, strengths, and suggestions aimed at correcting errors that cannot be corrected. The interview grid can be seen in Appendix 1. interview results.

According to Abdullah (2015) Questionnaire is a method of collecting data by distributing a list of questions to respondents, with the hope that they will provide responses to the list of questions. The list of questions can be open, if the answer options are not predetermined, and closed if the answer options have been provided in advance, the instruments can be questionnaires and scales. This questionnaire will be used to collect the results of validation by media experts and material experts as well as teacher and student responses, where the data will be in the form of qualitative data and quantitative data.

Observation means looking attentively. In the context of research, observation is defined as a way of systematically recording behavior by directly observing the behavior of individuals or groups being studied. This observation method is carried out when conducting a preliminary study at the school where the research is conducted.

Observation means looking attentively. In the context of research, observation is defined as a way of systematically recording behavior by directly observing the behavior of individuals or groups being studied. This observation method is carried out when conducting a preliminary study at the school where the research is conducted.

The instrument used in this study was a questionnaire intended to collect data from the media developed which included validation from material experts, media experts, and responses (students and teachers). The questionnaire from this study consisted of a list of statement items distributed to respondents and used to collect

data related to learning media. In addition, the questionnaire was used to determine whether the learning media developed was valid. Several things that need to be considered in determining the criteria or assessment of learning media are: (1) needs, ideals, and values; (2) the accuracy of the effectiveness of the use of learning media; (3) ease of use in obtaining information or using media; (4) achievement of learning objectives that have been formulated. Therefore, the assessment of learning media must refer to the criteria as a measure of the quality of learning media., Kurniawati, (2011).

After obtaining data in the field, the next step is to analyze the data. The data obtained in this study are qualitative and quantitative data. Qualitative data comes from suggestions, responses and input from media expert validation sheets, material experts, teachers and students. while quantitative data is obtained from the results of descriptive data analysis and processing into interval data using a Likert scale. According to Sugiyono (2018:152) the Likert scale is a scale used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena.

Table 1. Likert Scale Statement Format

Attitude Statement	Statement Very feasible/ Strongly Agree/ Very Interesting feasible	Agree/ Interesting	Undecided	Not Feasible/ Disagree/ Not Interesting	Very Unfeasible/ Strongly Disagree/ Very Not Interesting
Positive Statement	5	4	3	2	1

At this analysis stage, there are 2 data obtained, namely validation data (questionnaire) and interactive learning multimedia feasibility data.

The descriptors given to material and media experts and teacher responses consist of 13 questions. So the minimum score is 15 and the maximum score is 75, where the interpretation of the score is as follows:

Minimum score   : 1 x 15
(assessed descriptors) = 15 Maximum score   : 5 x 15 (assessed descriptors) = 75 Criteria category 5

Range of values   : $\frac{75-15}{5} = 12$

Table 2. Categories of Material and Media Expert Validation Questionnaire

Value Scale	Score	Validation Level
5	67 – 79	Very Appropriate/very agree/very interesting
4	54 – 66	Worthy / agree / interesting
3	41 – 53	Doubtful
2	28 – 40	Appropriate / disagree / not interesting
1	15 -27	Very Unsuitable / Strongly Disagree / Very Unattractive

Next, to calculate the entire questionnaire, the questionnaire sheets are first checked one by one, then each choice is examined and added up to find the percentage, using the formula with the following description:

PS : Percentage of answers
F : Total trial scores
N : Maximum score

$$PS = \frac{F}{N} \times 100\%$$

Table 3. Product Qualification Assessment Scale

Validation Level Value Scale	Validation Level
81%-100%	Very Appropriate/very agree/very interesting
61%-80%	Worthy / agree / interesting
41%-60%	Doubtful
21%-40%	Not Appropriate / disagree / not interesting
0%-20%	Very Unsuitable / Strongly Disagree / Very Unattractive

The resulting index number shows a score of 15-100, with a 5-column value scale which will later be calculated, and it can be seen in which category the assessment results obtained using the Likert scale are in (ferdinanda, 2014:232)

3. FINDINGS AND DISCUSSION
Findings

The scope of the development of this Learning Media is limited to the material on traditional house culture theme 7 (the beauty of diversity in my country) for grade IV elementary school. This is based on the results of a preliminary study conducted in February 2024 from interviews and observations, when researchers found a lack of availability of good educational game-based learning media for material that tends to be abstract and broad such as traditional house culture material so that teachers have not been able to convey the material well because the teacher's time to explain it is quite short so that the material must be accelerated. Therefore, Tradsetig-based learning media on traditional house culture material is the scope of the development of this learning media.

The material on traditional house culture in Elementary School, if referring to the applicable curriculum, will only be studied by elementary school students in grade IV, theme 7, subtheme 2. The basic competencies, indicators, and learning objectives are as follows:

Table 4 Basic competencies, indicators and objectives of science learning

BASIC COMPETENCIES (BC)	INDICATOR
3.2 Identifying social, economic, cultural, ethnic and religious diversity in local provinces as the identity of the Indonesian nation.	1. Explaining the meaning of traditional houses. 2. Mention the names of traditional regional houses in Indonesia
4.2 Presenting the results of identification regarding social, economic, cultural, ethnic and religious diversity in the local province as the identity of the Indonesian nation.	1. Explaining the forms of traditional regional houses in Indonesia. 2. Explaining the uniqueness of regional traditional houses in Indonesia.

Table 5. objectives of science learning

LEARNING OBJECTIVES
1. After hearing the teacher's explanation, students are able to explain the meaning of traditional houses.
2. After hearing the teacher's explanation, students are able to mention the names of traditional regional houses in Indonesia.
3. After hearing the teacher's explanation, students are able to explain the forms of traditional regional houses in Indonesia.
4. After hearing the teacher's explanation, students are able to explain the uniqueness of regional traditional houses in Indonesia.

The characteristics of students that were successfully identified during the preliminary study include:

Table 6. Data on Number, Age Range, and Gender of Students

Gender	Amount	Age Vulnerability
Man	21	9-11 years old
Woman	13	

Students tend to be active in learning and really like game-based learning, educational games, especially new things. Meanwhile, the obstacles faced by students include: 1) students have difficulty understanding broad and complex material in a short time, 2) there are differences in learning speed between students.

Table 7. Tabulation of Validation Results and Responses

No	Validators & Responders	Mark	Category
1	Media Expert	73,33%	Worthy
2	Materials Expert	81,33%	Very Worth It
3	Teacher	84,00%	Very Worth It
4	Student	84,00%	Very Worth It

Stages of collecting sources Researchers collect supporting components for the process of developing Tradsetig-based learning media on traditional house culture material. The details are as follows:

1) Collection of teaching materials, teaching materials used in teacher thematic books and student thematic books in elementary schools, Independent Curriculum, Science Subject, grade 4 SD.

2) *Software,* the development of traditional-based learning media was developed using the Canva application to create designs and provide an overview of the culture of traditional houses in Indonesia.

3) Media materials, image sources and elements, are not entirely self-made but some are also taken from external parties such as Google for traditional house images, Canva for writing elements and plots. However, especially for some interesting plots and games, they are the developer's own ideas and creations.

After carrying out initial revisions, a beta test was carried out on the Tradsetig-based learning media on teachers and students. The beta test was carried out on the class IV homeroom teacher and 8 students representing 3 intellectual levels, namely low intellectual, medium intellectual, and high intellectual, which were obtained based on the homeroom teacher's recommendation. This beta test was carried out at SDN No. 196 Bontomajannang Presidential Instruction, North Galesong subdistrict.

At this stage, students are also divided into 2 teams, each consisting of 4 people. Each team is looking forward to the opportunity to play this TRADSETIG-based traditional house culture game. After the game is finished, 2 players with the highest point level or the first to reach the finish line will be the winner.

The results of the percentage of response data by teachers are described below:
$$PS = F/N \text{ x } 100\%$$
$$PS = 63/75 \text{ x } 100\%$$
$$PS = 84{,}00 \text{ }\%$$

The teacher response results obtained were 84% so they were in the very appropriate category based on the instrument validity category table. As for the comments from the teacher's response, the quizzes were given more and varied to make them more interesting.

The results of the percentage of validation data by students are described below:
$$PS = F/N \text{ x } 100\%$$
$$PS = 63/75 \text{ x } 100\%$$
$$PS = 84{,}00 \text{ }\%$$

The student response results obtained were 84.00 so they were in the very appropriate category based on the instrument validity category table. As for comments from students, elements still need to be added to make it more interesting and there are more quizzes.

The percentage results of validation data by material experts are described below:
$$PS = F/N \text{ x}100\%$$
$$PS = 61/75 \text{ x } 100\%$$
$$PS = 81{,}33\%$$

The material expert validation results obtained were 81.33% so they were in the Very Appropriate category based on the instrument validity category table. The

comments from experts are that the material presented is appropriate and suitable for use. The material just needs to be sharpened further.

The percentage results of validation data by Media experts are described below:

$$PS = F/N \text{ x100\%}$$
$$PS = 55/75 \text{ x } 100\%$$
$$PS = 73{,}33\%$$

The media validation results obtained were 73.33% so they were in the Appropriate category based on the instrument validity category table. The comments from media experts are that trade-based learning media is suitable for use but must undergo revision according to the notes provided by the validator.

Discussion

The development of the *Tradsetig* learning media was based on the needs identified from a preliminary study conducted in February 2024. Interviews and observations revealed a lack of educational game-based learning media relevant to the material on traditional house culture—material that tends to be abstract, broad, and less engaging for elementary students. This aligns with expert perspectives that interactive and enjoyable learning media can enhance student comprehension and motivation (Suryani et al., 2023; Nugraha et al., 2024).

Traditional house culture is only taught in the Grade IV elementary school curriculum under Theme 7, Subtheme 2. With basic competencies emphasizing the identification and presentation of Indonesia's cultural diversity, the learning process requires a contextual and visual approach. Therefore, *Tradsetig*, as an interactive educational game-based media, is considered appropriate as it delivers the material through a more meaningful learning experience.

The study also revealed student characteristics showing that they are highly active and enthusiastic about educational games and new things. However, they face challenges such as: 1) difficulty understanding broad and complex material in a short time, and 2) varying learning speeds among students. This supports the importance of using adaptive and collaborative media in learning (Utami & Sari, 2022).

Validation results from experts showed very positive responses: 1) The subject matter expert scored the media at 81.33% (very appropriate), emphasizing the suitability of content and the need for further refinement. 2) The media expert gave a score of 73.33% (appropriate), with technical improvement notes. 3) Teachers and students both responded with 84% (very appropriate), suggesting more quizzes and engaging elements to enhance appeal.

Students, grouped based on intellectual levels, showed high enthusiasm when using the media. This strengthens the effectiveness of gamification models in learning, which stimulate students' intrinsic motivation (Hamari et al., 2016; Wulandari et al., 2023). The beta test conducted with students of varying intellectual levels demonstrated that the media accommodates diverse learning needs. This supports the *Universal Design for Learning (UDL)* principle, which emphasizes flexibility in presenting materials to meet the needs of all students (Meyer et al., 2014). Therefore, the development of *Tradsetig* has contributed positively to the effectiveness of teaching the theme of Indonesia's cultural diversity in elementary schools, particularly through the use of game-based learning approaches.

4. CONCLUSION

After developing TRADSETIG-based learning media, it went through a fairly long process referring to the ADDIE development model. There are 5 stages that need to be gone through, including: (1) preparation: determine the scope, identify learning characteristics, set constraints, produce a planning document, produce a style manual, determine and collect resources, conduct initial brainstorming, determine the look and feel. (2) Planning: developing initial content ideas, conducting task and concept analysis, creating preliminary program descriptions, preparing prototypes, creating storyboards, and preparing manuscripts. (3) Development: preparing text, preparing elements and icons, collecting pieces. prepare supporting materials, carry out alpha tests, carry out revisions, (4) Implementation: carry out beta tests, carry out final revisions, (5) Evaluation: Evaluate the input results and validate them. The TRADSETIG-based learning media developed in this research allows students to learn independently when studying and makes time use more efficient, because the learning process can be carried out inside and outside the classroom. Media is a tool that can be used as a channel for messages to achieve teaching goals. The use of media in teaching can arouse new desires and interests for students, generate motivation and stimulation for learning activities, and even have psychological influences on students (Karo-Karo & Rohani, 2018; Syamsiani, 2022). Learning media is a way to convey messages through various channels, stimulate students' thoughts, feelings and interests so as to create a learning process to add new information to students

REFERENCES

Abdullah, M. (2021). *Metodologi Penelitian Kuantitatif*. In Aswaja Pressindo (1 Ed.). Aswaja Pressindo.

Hamari, J., Koivisto, J., & Sarsa, H. (2016). Does gamification work? — A literature review of empirical studies on gamification. *Computers in Human Behavior, 57*, 178–185. https://doi.org/10.1016/j.chb.2015.10.011

Junaedi, I. (2019). Proses Pembelajaran Yang Efektif. *Journal Of Information System, Applied, Management, Accounting And Research, 3*(2), 19–25.

Kurniawati, R., & Maulidya, L. (2022). Pengembangan Media Pembelajaran Turbaya (Miniatur Budaya) Rumah Adat Tematik Tema 7 Indahnya Keragaman Di Kelas IV Di Sekolah Dasar. *Jurnal Muassis Pendidikan Dasar, 1*(1), 69–76.

Meyer, A., Rose, D. H., & Gordon, D. (2014). *Universal Design for Learning: Theory and Practice*. CAST Professional Publishing.

Nugraha, H., Ramadhani, D., & Fitria, A. (2024). *Game-Based Learning Media Development for Thematic Learning in Elementary Schools: A Development Study*. Jakarta: Pustaka Edu Nusantara.

Safitri, A. (2018). *Penelitian dan Pengembangan Model ADDIE pada Peserta Didik Kelas X SMA Negeri 11 Jakarta* (Doctoral dissertation, Universitas Negeri Jakarta).

Sugiyanto, S. S. (2011). *Game Edukasi Ragam Budaya Sebagai Media Pembelajaran Budaya Tentang Pakaian dan Rumah Adat di Indonesia*.

Suryani, L., Putri, R. M., & Pramudita, T. (2023). The development of interactive learning media to enhance student understanding of local culture. *Indonesian Journal of Elementary Education, 8*(1), 45–54. https://doi.org/10.23887/jpdi.v8i1.52190

Suryani, N. (2016). Pengembangan Media Pembelajaran Sejarah Berbasis IT. *Jurnal Sejarah dan Budaya, 10*(2), 186–196.

Tarigan, D., & Siagian, S. (2015). Pengembangan Media Pembelajaran Interaktif Pada Pembelajaran Ekonomi. *Jurnal Teknologi Informasi & Komunikasi Dalam Pendidikan, 2*(2), 187–200.

Utami, W., & Sari, D. P. (2022). The effect of interactive learning media on elementary students' learning outcomes in cultural diversity material. *Journal of Educational Science, 10*(2), 85–93.

Wati, A. (2021). Pengembangan Media Permainan Ular Tangga Untuk Meningkatkan Hasil Belajar Siswa Sekolah Dasar. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar, 2*(1), 68–73.

Wulandari, R., Saptari, S., & Hidayat, T. (2023). Development of local culture-based educational games to enhance students' cultural literacy in elementary schools. *Journal of Educational Technology, 25*(2), 112–123.

Yunanto, D. (2021). Game Edukasi Puzzle Rumah Adat Tradisional Indonesia Berbasis Android. *Jurnal Informatika dan Rekayasa Perangkat Lunak, 2*(3), 414–420.