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# Technology Adaptation through Digital Applications in Introducing Traditional Madura Games

*Fikri Nazarullail[1], Dwi Nurhayati Adhani[2]
[1, 2](Universitas Trunojoyo Madura, Jl. Raya Telang PO BOX 2, Kec. Kamal, Kabupaten Bangkalan, Jawa Timur, Indonesia)

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***Abstrak***

Permainan tradisional merupakan warisan leluhur yang patut untuk dilestarikan sebagai bentuk apresiasi terhadap wawasan nusantara. Permainan tradisional memiliki karakteristik yang hampir sama diantara wilayah-wilayah yang ada di Nusantara. Permainan tradisional yang semakin lama semakin menghilang, membuat kita sebagai seorang pendidik memiliki andil untuk terus melestarikannya melalui kegiatan pembelajaran di kelas. Oleh karena itu permainan tradisional harus terus di kembangkan menjadi permainan berbasis aplikasi. Metode penelitian yang dugunakan dalam penelitian ini menggunakan pendekatan penelitian pengembangan dengan 10 tahapan penelitian. Subjek penelitian ini menggunakan Satuan PAUD di pesisir selatan Kabupaten Bangkalan yang menerapkan permainan tradisional dalam pembelajaran. Hasil penelitian menunjukkan bahwa permainan digital yang dikembangkan dikatakan layak dan perlu adanya revisi untuk menyempurnakan aplikasi. Hasil uji coba yang dilaksanakan pada ketiga setting juga menunjukkan kriteria Baik, sehingga aplikasi ini layak untuk digunakan dalam pembelajaran pada anak usia 4-5 Tahun di sekolah maupun di rumah.

***Abstract***

Traditional game is an ancestral heritage that deserves to be preserved as a form of appreciation for the insights of Nusantara. Traditional games have almost the same characteristics among regions in Nusantara. Traditional games are increasingly disappearing, making us as educators have a part to play in preserving them through learning activities in the classroom. Therefore, traditional games must continue to be developed into application-based games. The research method used in this study used a development research approach with ten research stages. The subject of this study included the Kindergarten unit on the south coast of Bangkalan Regency, which applies traditional games in

learning. The study results showed that the digital game developed was feasible and required revision to perfect the application. The results of the trials carried out in the three settings also showed Good criteria, so this application is suitable for use in learning in children aged 4-5 years at school or home.



✉ Corresponding author:
E-mail: fikrinazarullail@gmail.com

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## INTRODUCTION

The post-Covid-19 Pandemic era has made several learning activities in several Education Units still maintain the use of digital devices in learning (Kurniasih, 2019). Digital media can be an alternative in carrying out creative and innovative learning so that it can provide refreshment to the learning process. On the other hand, several educational units continue to use printed learning tools due to the lack of human resources' ability to utilize ICT in learning. Based on the results of research that have been carried out by Isrofah et al. (2022), it was stated that the use of digital devices can help the learning activities in Early Childhood Education, hereinafter abbreviated as PAUD Unit. However, the results of other studies also say that the use of digital devices is considered too difficult to apply in PAUD units and continues to carry out conventional learning so that it can be more accepted by children because learning occurs naturally (Sakti: p.13).

Currently, digital applications are very easy to find to facilitate the learning process, from paid applications to applications that can be downloaded for free on the Google Play Store for Android devices and the Appstore for Apple devices. Easy access to these digital devices gives educators many alternatives for implementing varied learning (Afnil: 2021) in learning. The use of Android-based game applications developed can also involve parental participation in accompanying children to study at home by using digital games to introduce geometric shapes to children. Based on this explanation, the application can help students to keep learning.

Digital devices that have been considered to be addictive and have a negative impact on children are not completely wrong. However, if there is proper assistance and

direction for children, digital devices can help children achieve their growth and development (Isrofah et al., 2022). Based on the results of research conducted by Isrofah et al. (2022), it is also stated that using digital devices really helps children achieve their development. The use of digital devices in this study showed an increase in in Early Childhood development aspects. The impact of using digital devices is indeed weak in improving their motor skills. Using gadgets requires a little effort and persuasion from parents so that children are more active in using applications. On the other hand, according to several sources, using digital devices has many negative impacts. The negative impact of using gadgets is that it can make children anti-social and tend to be passive towards their environment, obesity and decreased vision in children due to exposure to gadget screen radiation (Isrofah et al., 2022).

Learning in PAUD units has different characteristics compared to other formal education units. Early Childhood Education is a place for children to develop from infancy to 7 years (Sujiono, 2012). PAUD units consist of Playgroups, Posyandu (Integrated Service Posts) Parks, Kindergartens/Roudlotul Athfal/Bustanul Athfal, and Similar PAUD Units (Regulation of the Minister of Education and Culture (Permendikbud) No. 137). Several types of educational institutions for early childhood have the same goal: to help children reach optimal developmental ages. Even though each PAUD Unit has the same goal, each institution has unique characteristics and differs from one another between PAUD Units (Permendikbud No. 146). The further development of children makes educators in PAUD must have the right strategy for stimulating children. Therefore, there are many assumptions in the community that studying at PAUD is more about just playing around. However, it is from the playing process that children will learn voluntarily to achieve growth and development within themselves.

Playing is an activity that is usually carried out by children voluntarily, without any instructions from adults. Children will usually play using their imagination and creativity. Most of the children's activities in their development are used to play (Nazatullail, 2019). Based on current observations, the process of children's play proves that there are several types of activities: playing conventionally, with media or educational game tools, and also with digital games. The overgrowing era today allows children's play activities that were previously carried out conventionally to switch to

using digital games. That is why the role of parents in accompanying children is needed so that children's digital activities can be monitored. Therefore, collaboration between parents and children when playing will bring out a sense of attachment so that the emotional connection between the two can be maximized.

The development of learning programs using the help of digital applications is currently being carried out more massively. The development of learning tools in the form of applications is considered to be something that can increase innovation in learning and introduction to local culture. The introduction of games with the characteristics of coastal areas is also important to be introduced to other people in areas with different environmental characteristics and social conditions. Therefore, the findings of Adhani (2020: p. 373) showed that from this coastal area, many games that are unique and do not necessarily belong to regions with different geographical and social characteristics and types. This type of game utilizes objects in the coastal area, one of which is called Othek. This game uses natural materials in the form of shells or used bottle caps which are used as playing tools, namely for players to shoot one shell at another using the index finger and thumb on the floor will be the winner, and other players will pay with one shell as a reward. The results of a survey conducted by researchers in previous studies showed that the potential for coastal tourism in the form of traditional games would gradually disappear due to the rapid development of technology.

Technological developments and innovations in preserving culture have begun to be developed with the intention that local wisdom can always be maintained. One example of innovation the researchers developed in the previous research period aims to preserve the culture of traditional games using digital applications. The developed games have characteristics that are commonly played in various regions in Indonesia (Nazarullail, 2021). The use of technology can also support coastal tourism activities such as introducing what types of games are usually played by coastal children, what kinds of objects come from nature in coastal areas, and the names of famous beaches in the surrounding environment so that children's insights into the archipelago can be honed from an early age.

According to Iswin, traditional games are games that have a regional history or cultural values and human values in traditional games (Iswinarti, 2017). Traditional games had a strong philosophical meaning with regional customs at that time. Even though each region has different types of games, the meaning of playing activities is that they can also help children's development in addition to entertainment and fun. According to Nur, traditional games, which are also the culture of the Indonesian nation, have been proven to foster positive character in children (Nur, H, 2013). Therefore, preserving the culture of games from coastal areas can be done by adapting electronic-based games such as applications that can be played through devices.

Researchers have an interest in gathering information about traditional games originating from the southern coastal region of Bangkalan Regency to be used as an application and can be played by early childhood in the 4-5 years age category. The application that the researcher will design in this development research is a game that can be played virtually and in the form of illustrated animations about traditional games from coastal areas by adapting Indonesian and Madurese languages. The researcher will conduct another analysis by collecting interesting types of coastal games to develop. The hope is that the game application entitled "Na'kana' Paseser" (Coastal Children) can introduce recreational activities using digital play and introduce young children to what types of games are on the coast of Bangkalan Regency.

## LITERATURE REVIEWS

### A. Traditional Games

Iswinarti (2017) explained that traditional game is an inheritance that contains good values and is beneficial for children's development. The traditional game is a game with predetermined playing rules and is played by more than one child. That is why efforts to preserve traditional games can be done into the learning process at school by inserting elements of traditional games through playing activities.

Akhmar, A.M., & Syarifudin (2007) explained that local wisdom is a system of values or behavior in living the life of local people in interacting with the environment where they live wisely. Local wisdom is usually taught from generation to generation. It is passed down from generation to generation through language,

literature, arts, ceremonies, customs, and so on (Ministry of Education and Culture (Kemdikbud, 2016)). Based on this statement, local wisdom has traditional values thick with norms and culture originating from places in Indonesia.

The diversity of types of local wisdom can be manifested in a variety of concrete and non-concrete forms. According to Koentjaraningrat (1990: p.5), local wisdom can manifest into:

1. ideas, values, norms, regulations
2. behavior patterns, activity complexes, and
3. artifacts, culture, materials, and cultural objects.

Based on this statement, the diversity of local wisdom consists of several types, including patterns of thinking, patterns of behavior, and rules that limit them as well as works of art in the form of fine arts and other arts.

According to Lavega (2014), regarding the classification of traditional games, they are divided into several categories, namely:

1. Psychomotor games, namely games that require movement to play but do not show any communication in these movements
2. Collaborative games, namely games that require cooperation between one player and another
3. Games that have opponents:
   a. One against all, for example, one player has to catch another player
   b. One-on-one, that is, there is a one-on-one fight. These can be classified into:
      1) Symmetrical resistance, for example, kicking the ball to each other, throwing and catching shuttlecocks
      2) Asymmetrical resistance, for example, poco, thumbs up
   c. All against all, the resistance between all players, for example, fighting over the ball, sack race
   d. Co-op game
      1) Team versus team, namely the match between two possibilities
      2) One against all-all against one, i.e., in chain circle players
      3) All against all, this game consists of several teams, each of which has partners and is the opposite

4) The game is ambivalent, all players can be friends or become enemies with unclear criteria.

Based on the results of research conducted by the researchers in 2020 with the title "Study of cultural analysis of traditional Madura games in terms of early childhood education units in Bangkalan", it was found that there were many traditional games played by children with various types of characteristics. Among these characteristics, several games originated from coastal areas and the natural environment as a source of play. The research used a qualitative approach with a case study type of research with a single case study model. The results of the research carried out by researchers in the previous research period stated that there were three types of games: creativity, dexterity, and natural materials.

## B. Learning Media

Learning media is anything that can be used to convey messages through various channels (Hamid, M, 2020). In other words, the media is a tool for conveying messages to other people using intermediary media so that the information to be conveyed is easily understood by other people, while what is called media in learning is a means to channel learning messages and information to students. Learning media is designed by adjusting the learning needs and material delivered to students.

The following are the benefits of media in learning:

1. Assisting the learning process that takes place between educators and students: educators more easily convey the material with the tools used;
2. Increasing the interest and motivation of students in the learning process: using interactive media will increase the activity of students;
3. Overcoming the limitations of space, time, energy, and sensory power. Some of the material presented in learning is sometimes too complex, so using learning media is a solution to overcome these limitations. For example, online learning media allows students to search for any information on the website without being limited by space and time (Hamid, M, 2020).

Learning media can also be adapted to the material to be delivered to students. The selection of learning media needs to pay attention to the efficiency of its use so that learning activities can run effectively. Anderson (in Rohani, 2019) explained the instructional media group as follows:

1. Audios
2. Print
3. Audio – Print
4. Silent Visual Project
5. Visual Design Project with Audio
6. Motion Visuals
7. Motion Visuals with Audio
8. Things

Some of these media groups have their respective functions when applied in learning activities in and outside the classroom. Learning media for early childhood has different characteristics. Early childhood has unique characteristics: like a blank sheet of paper that can be written on anything according to the wishes of the educator. Children also have high imagination, so the learning media used by educators must adapt to their characteristics. As quoted in his book (Kustiawan, 2016) explained, several media are suitable for children's characteristics such as pictures or sketches, cartoons, games, etc.

## C. Digital Games

Games generally develop through two main media, digital and analog. Digital games are divided into several classifications, namely video games (games that use a computer as the main playing medium), console games (games that use a game cassette player assisted in the form of a controller or joystick connected to a television or screen), and tablet games (games which use tablet media in its operation) (Pinastika, 2014). The classification of toys and games is broadly divided into two main domains: analog games and digital games.

1. Analog Game

   An analog game is a game that has a physical representation processed continuously to achieve a game goal.

2. Digital Games

Digital games are the result of technological simulations that are constructed through a game. Therefore, digital games can only be operated within the context and role of technology.

## METHODS

The research model used by researchers was research and development. This research used development research with the model from Borg and Gall, namely because this research produces a product. Then, the product's feasibility was tested if it would be used as a learning media for early childhood. Borg and Gall's research also has a clear, detailed, and systematic form, which can be understood and facilitate development research (Sugiyono, 2014). The data sources in this study were Educators in PAUD Units with characteristics of the south and north coasts of Bangkalan Regency, namely RA At Tahririyah, RA Al Azhar, and Kindergarten Dharma Wanita Unity of Tanjung Bumi.

The stages of this research began with analyzing the potential problems; collecting data; compiling the product design; carrying out design validation. Based on information from the validator, the next step was to revise the design. Media revised and ready were tested on the product. The results of trials carried out then were revised the product again if there are bugs in the application; then the application was tested for use; and made final revisions; After the product was deemed ready for general use, the application was disseminated through dissemination or via the institution's website so that it can be downloaded by educators at schools.

Data in a development study were analyzed qualitatively and quantitatively way with the following elaboration: 1) Qualitative data analysis, qualitative data analysis to process data at the stage of validation results with experts in the form of responses, suggestions and criticism. This analysis was used to process children's response data to the media being developed; 2) Quantitative Data Analysis, quantitative data analysis by looking at the questionnaire that has been collected will calculate the percentage of each statement item in the questionnaire. According to Komang I Sudarman in Wanda Ramansyah's book, to calculate the percentage of each statement item in the questionnaire you can use the following formula (Rahmansyah, W., 2018).

$$\textbf{Answer Percentage} = \frac{F}{N} \times 100\%$$

Description:

F = Frequency of subjects choosing alternative answers

N = The total number of questionnaire items

The results of the above calculations will be analyzed for the validity level of the media that has been developed. The analysis refers to the following criteria:

Table 1. Conversion of Achievement Level and Media Qualification

| Achievement Level | Qualification | Description |
|---|---|---|
| 90% - 100% | Very high | Very feasible, no revision needed |
| 75% - 89% | high | feasible, no revision needed |
| 65% - 74% | Quite high | Less feasible, revision needed |
| 55% - 64% | Less high | Not feasible, revision needed |
| 0% - 54% | Very Less high | Very not feasible, revision needed |

Source: Modification from Ramansyah (2018)

## RESULT AND DISCUSSION

An application-based traditional game developed by a researcher named Na'Kana' Paseser is from the Madurese language, which means Na'Kana = Children, Paseser = Coastal, or if it is made into words, Children of the Coast. This game has a philosophy, namely a game originating from the coastal area of Madura Island, with myriad interesting traditional games to be published to the general public. This game was created by researchers with to introduce the names of beaches in Madura, and also introduce the coastal games of Madura Island to a broad audience.

The following is the process of making an application made by the researchers by discussing with the developer the concept of running the application. The process of making this game was divided into several stages:

1. Creating a game display design made using Adobe Illustrator CC 2020.

2. Making animated videos using Wondershare Filmora.
3. Creating the game development with Unity as the Game Engine and Visual Studio 2017 as the code editor.

Pinastika (2014) explained that digital games are divided into several classes: video games (games that use a computer as the main playing medium), console games (games that use a game cassette player assisted in the form of a controller or joystick connected to a television or screen), and tablet games (games that use tablet media in their operation). This application is included in the type of game that uses gadgets or tablets, making it easier and more practical to use.

The process of making this application was preceded by creating characters and the storyline of the game, making it easier for developers to create traditional game-based applications. The characters that the researchers included in this application are Sakera mini and Marlena mini. These two characters are very synonymous with folklore in the Madura region. The following is an overview of the applications that have been developed by researchers. The following is an overview of applications that have been developed and applied in the introduction of traditional games to children aged 4-5 years in PAUD units in coastal areas.


Figure 1. Pictures of the Na'Kana' Paseser application

After carrying out the application preparation, the next stage is to validate the expert so that the game being developed can be feasible according to the expertise

possessed by the validator. In trials on expert validators, this material was carried out on experts in the early childhood learning. This material expert validator comes from Universitas Negeri Malang with a home base in the Department of Non-formal Education. However, he has previous experience, as the coordinator of the Early Childhood Education Teacher Education Study Program in Higher Education. Umu Da'watul Choiro, S.Pd., M.Pd was the material expert validator. The following results from the material expert trial with an average score estimate.

Table. 2 Material Expert Validation

| Indicator | 1 | 2 | 3 | 4 | 5 | Total |
|---|---|---|---|---|---|---|
| **Scale** | 3.6 | 4.25 | 3.75 | 4 | 4 | 3.92 |
| **Percentage** | 72 | 85 | 75 | 80 | 80 | 78.4 |

Based on the results of these calculations, it can be seen that the material accuracy indicator had an average of 72% in the Good category. The material content indicator was averaged of 85% in the Very Good category. The material evaluation indicator had an average score of 75%. The material clarity indicator had an average of 80% in the Very Good category, and the language indicator had an average of 80% in the Very Good category. Based on the results of the total average calculation, a score of 78.4% was obtained in the Very Good category. Based on these criteria, the media is said to be feasible and needs revision (Ramansyah, 2018). The validator provides several notes:

1. To bring up cognitive abilities through counting
2. To have an educational value
3. To be played by both boys and girls

The validation of media experts carried out by researchers aims so that the application and display developed can have aesthetic value, and attractiveness, and also become a learning medium in introducing traditional Madurese games. The learning media expert validator comes from Universitas Negeri Malang with a field of Expertise in Fine Arts and Interactive Learning Media. The validator is named Abdul Rahman Prasetyo, S.Pd., M.Pd. The following results are from calculating learning media experts' scores and validation percentages.

Table 3 Media Expert Validation

| Indicator | 1 | 2 | Total |
|---|---|---|---|
| **Scala** | 4.4 | 4.11 | 4.255 |
| **Percentage** | 88 | 82.22 | 85.11 |

Based on the results of quantitative data calculations, the results percentage of data with indicators of software engineering development had 88% in the Very Good category. For the visual appearance aspect indicator, it obtained a percentage of 82.22%. The results of the total average percentage of material expert validation had 85.11% in the Very Good category. Based on these criteria, the media is said to be feasible and needs revision (Ramansyah, 2018). There are several suggestions given by the validator to the researchers to improve the media that has been compiled including:

1. Using a coastal color theme
2. Using Indonesian that is easy for children to understand

The next stage in developing this application is to test the game directly on learning activities in the PAUD Unit. There are three stages of trials that have been carried out in different school settings but have the same regional characteristics, namely in the coastal environment. The following are the results of trials that have been carried out with the small, medium, and large class categories.

Table 4 Average Trial Results

| | P1 | P2 | P3 | P4 | P5 | Rata-Rata |
|---|---|---|---|---|---|---|
| Small Scale Trials | 67.86 | 50 | 92.86 | 85.71 | 82.14 | 75.71 |
| Medium Scale Trial | 69.05 | 53.57 | 67.86 | 61.9 | 64.28 | 63.33 |
| Large Scale Trials | 68.2 | 46.87 | 80 | 78.75 | 80.62 | 70.87 |

Based on the average results of trials carried out in three different PAUD Units, it was in a Good category. These criteria were generated from experiments using the application carried out in schools with different characteristics, but the area was in a coastal environment. The average value obtained produced data in a good category because the use of Android devices is still uneven, and necessary to introduce similar games regularly.

## CONCLUSION

Based on the results of the development research that the researchers have carried out, it can be concluded as follows:

1. Traditional game applications based on Android applications have been designed and implemented in PAUD Units by utilizing Adobe Illustrator CC 2020, Wondershare Filmora, Unity applications as Game Engine, and Visual Studio 2017 as code editors.
2. An application-based traditional game entitled "Na'Kana' Paseser" has been successfully developed
3. The validation results for material experts obtained the feasible category, and the need for improvement and validation by media experts obtained the feasible category to be developed with revisions in several parts as a form of improving the application.
4. The results of trials carried out by researchers in small, medium, and large class settings obtained different categories. In the small class tryout, a score of 3.03 was obtained with a percentage of 75.71% with a Very Good predicate, while in the middle class, it was 2.53 with a percentage of 63.33% with a Good predicate. In addition, in the large class, the score was 2.84 with a percentage of 70.88% with a Good predicate.

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4. Head and teachers at RA Al Jaly, Blega Subdistrict, Bangkalan Regency

5. Head and teachers at RA Bakti Telang, Kamal Subdistrict, Bangkalan Regency
6. Android-based digital application developer.

## REFERENCES


Afnil, R N. Mulyana, E H. Rahman, T. 2021. Pengembangan Media Pembelajaran Berbasis Android untuk Memfasilitasi Pengenalan Bentuk Geometri pada Anak Usia Dini. Jurnal PAUD Agapedia, Vol:5 No: 1. Hal: 29

Akhmar, A.M, & Syarifudin. 2007. *Mengungkap kearifan lingkungan Sulawesi Selatan*. Masagena Press: Makassar

Hamid, M dkk. 2020. *Media Pembelajaran*. Medan: Yayasan Kita Menulis

Isrofah, Sitisaharia, Hamida. 2022. *Pembelajaran Berbasis Media Digital pada Anak Usia Dini di Era Revolusi Industri*. JIIP-Jurnal Ilmiah Ilmu Pendidikan. Vol: 5 No 6. Hal 1753

Iswinarti. 2017. *Permainan Tradisional: Prosedur dan Analisis Manfaat Psikologi.* Malang: UMM press.

Kemdikbud RI. 2016. *Analisis Kearifan Lokal Ditinjau Dari Keragaman Budaya Tahun 2016*. Pusat Data dan Statistik Pendidikan dan Kebudayaan (PDSPK) Kementerian Pendidikan dan Kebudayaan Republik Indonesia

Koentjaraningrat. 1990. *Pengantar Ilmu Antropologi*. Jakarta: Rineka Cipta

Kurniasih, E. 2019. *Media Digital Pada Anak Usia Dini*. Jurnal Kreatif: Jurnal Kependidikan Dasar. Vol:9 No: 2. Hal: 90.

Kustiawan, U. 2016. *Pengembangan Media pembelajaran Anak Usia Dini*. Malang: Gunung Samudera

Lavega, P., Alonso, J. I., Etxebeste, J., Lagardera, F., & March, J. 2014. *Relationship between traditional games and the intensity of emotions experienced by participants*. Research Quarterly for Exercise and Sport, 85(4), 457-467.

Nazarullail, F & Adhani, D.N. 2021. *Pengembangan Permainan Tradisional Madura Berbasis Aplikasi "Kaule Se Mennang" Untuk Anak Usia 5-6 Tahun Di Bangkalan.* Laporan Penelitian Mandiri 2021 (Tidak Diterbitkan)

Nazarullail, F. 2017. *Pemberdayaan Masyarakat Melalui Program Ekowisata "Lepen Adventure".* Jurnal Pendidikan: Teori, Penelitian, dan PengembanganVol. 2 No. 8.

Nur, H. 2013. *Membangun Karakter Anak melalui Permainan Anak Tradisional.* Jurnal pendidikan Karakter Vol 3, No 1.

Permendikbud 146 Tahun 2014 Tentang Kurikulum 2013 Pendidikan Anak Usia Dini

Permendikbud No. 137 Tahun 2014. Tentang Standar Nasional Pendidikan Anak Usia Dini

Pinasthika, L.T. 2014. *Permainan Jenga (Digital dan Analog) Pada Anak Usia Prasekolah*. Jurnal Sosioteknologi. Vol 13 No 3

Ramansyah, W. 2018, *Model-Model Pengembangan Media Pembelajaran*. Bangkalan: UTM Press.

Rohani. 2019. *Media Pembelajaran. Diktat*. Fakultas Ilmu Tarbiyah dan Keguruan: Universitas Islam Negeri Sumatera Utara

Sakti, S.A & Hidayat L. 2021. Transformasi Pembelajaran PAUD di Era Pandemi Covid-19 (Study Kasus pada Masyarakat Miskin Pedesaan). Jurnal Riset Golden Age PAUD UHO. Vol: 4 No: 1. Hal: 13

Sugiyono. 2014. Metode Penelitian Kualitatif, Kuantitatif, dan R&D. Bandung: Alfabeta

Sujiono, Y.N. 2012. Konsep Dasar Pendidikan Anak Usia Dini. Jakarta: PT. Indeks