An Endeavour to Prevent the Risk of Family Dysfunction through Game of Anti-Family Dysfunction (GANSIA)

Nisriani Uswatunnisa¹[®], Arta Uly Siahaan², Adi Irawan Setiyanto² and Hamdani Arif² ¹Department of Multimedia and Networking, Politeknik Negeri Batam, Batam, Indonesia ²Politeknik Negeri Batam, Batam, Indonesia

Keywords: ADDIE Model, Educational Game, Family Dysfunction, GANSIA

Abstract: Dysfunction in the family is one of the social problems that occurred related to the hampered prosperous family development towards aspects of triumph in national development. An endeavour to prevent the risk of family dysfunction is needed so that these cases can be minimized and not become an enduring social problem. Therefore, the creation of educational learning media is an endeavour to prevent the risk of family dysfunction through an educational board game with talking pen, smart cards, and mini storybooks that can be played by all family members and children which is called Game of Anti-Family Dysfunction (GANSIA). The research model used in this study is the ADDIE model which consists of 5 stages: analysis, design, development, implementation, and implementation. As well as a research method that used in this study are pre-test and post-test. Based on the results of the analysis, it is known that the average result of the pre-test is 31,25% (poor) and the average result of the post-test is 92,5% (excellent). From these results, it is known that the product has an excellent effect in enhancing understanding of 8 family functions as an endeavour to prevent the risk of family dysfunction.

1 INTRODUCTION

One aspect of national development success is the development of a prosperous family. Every parent is obliged to care for, educate, direct, guide the child's life into adulthood, and every family member has the right to receive protection, love, education, and other necessities of life.

The National Population and Family Planning Board of Indonesia state that there are 8 functions of the family to achieve a prosperous Indonesia by carrying out: religion function, socio-cultural function, love and affection function, protection function, reproduction functions, education function, economic function, and environmental development function (BKKBN, 2018). On condition all of these functions are carried out properly, a prosperous family will be established that can help to achieve national development.

Nevertheless, the social problems that occur have hampered the development of a prosperous family towards aspects of triumph in national development, one of the social problems is dysfunction in the

family. There were 516,746 divorce cases in Indonesia which were dominated by constraints and economic factors (Kemenag, 2017). The occurrence of early marriage which is the impact of child rights issues that are not fulfilled in the case of early marriage in Bantaeng also poses a risk to children physically, intellectually, psychologically, and emotionally. And the vulnerability of forms of oppression and violence in the form of sexual or nonsexual in early marriage against women (Kardi, 2018). From the case of early marriage, it can be seen that children have not been fully given the ability to make choices, because a minor is still not mentally and physically mature so that parents or adults are needed who can guide minors so that there is no enduring dysfunction.

Sagulung Sub-District is one of the areas with high divorce cases among other sub-districts in Batam City (Court, 2018). Based on an interview with the Hamlet Head of 06 Sagulung Sub-District, there are social problems such as an early marriage that causes a lack of emotional control between the parent and

Uswatunnisa, N., Uly Siahaan, A., Irawan Setiyanto, A. and Arif, H.

In Proceedings of the 3rd International Conference on Applied Economics and Social Science (ICAESS 2021), pages 325-335 ISBN: 978-989-758-605-7

^a https://orcid.org/0000-0001-5721-5553

An Endeavour to Prevent the Risk of Family Dysfunction through Game of Anti-Family Dysfunction (GANSIA). DOI: 10.5220/0010921100003255

Copyright © 2022 by SCITEPRESS - Science and Technology Publications, Lda. All rights reserved

several divorce cases that have an impact on the children (Mussadad, 2018).

From the data obtained, it can be concluded that there has been a family dysfunction in which the duties and functions of the family do not work properly. An endeavour to prevent the risk of family dysfunction is needed so that these cases can be minimized and not become an enduring social problem as well as hindering the development of a prosperous family to be achieved.

Therefore, this research aims to create a learning media in the form of educational games as an endeavour to prevent the risk of family dysfunction and knowing the effect of it through an educational board game with talking pen, smart cards, and mini storybooks that can be played by all family members and children which is called Game of Anti-Family Dysfunction (GANSIA).

Game of Anti-Family Dysfunction (GANSIA) has a concept of 8 family functions combined with the local culture of Batam City. The board game is implemented from the snake and ladder game along with a talking pen, smart cards, and a mini storybook on the game. The creation of this product is expected to have a positive impact as an effort to prevent the risk of family dysfunction thus family functions are carried out ideally to create quality, happy, and prosperous families that can contribute to achieving an aspect of triumph in national development.

2 RELATED WORKS

In this section, we present the literature reviews and theoretical background related to this research.

2.1 Literature Review

Four different works already carried out the research that has relevance to this research are shown as the following:

- The game of snakes and ladders has a positive impact because there is an increase in knowledge of the subject after the intervention is carried out. This study used pretest and posttest with a questionnaire method and secondary data (Handayani, Lubis, & Aritonang, 2018).
- An audio pen can improve children's reading fluency, comprehension, and vocabulary in a brief time. The involvement and positive responses of the respondents also prove the effectiveness of the audio pen as a tool that

helps in technological development (Krish, 2020)

- A game board, cards, and a box (Gut Check) are very useful and can be used as formal learning media for students (Coil, Ettinger, & Eisen, 2017).
- The story content of the children's storybook in this study has a good point because there is knowledge about local culture in the story (Bakti, Apriliya, & Hidayat, 2018).

2.2 Theoretical Background

Five theoretical backgrounds that correlate with this research are shown as the following:

2.2.1 Family Dysfunction

Dysfunction is "a matter of not functioning normally or having impaired function". As a system, all family members can influence each other if one (or more) family members do not carry out their functions (Wijaya, 2017).

Family dysfunction is where the duties and functions of the family do not work properly. Some examples of family dysfunction such as not getting love or attention, experiencing physical and mental abuse (insinuated and compared to other children).

2.2.2 Snakes and Ladders Game

Snakes and ladders are a game that can be played by two or more people, and in running the game snakes and ladders game requires 3 equipment such as dice, pawns, and a snake and ladder board (Dewi, Kurnia, & Panjaitan, 2017).

By using a board game that is implemented from the snake and ladder game as a learning medium, it can facilitate the delivery of information to prevent family dysfunction.

2.2.3 Talking Pen

An audio pen is a tool that promotes technology to improve learning and skills for a child (Krish, 2020). In this study, a talking pen is used as a component of the game media that emits audio when reading smart cards.

2.2.4 ADDIE Model

ADDIE model is a research model used in this study for the product design of Game of Anti-Family Dysfunction (GANSIA). This model was chosen because it is in line with the designed product. ADDIE model consists of five stages: analysis, design, development, implementation, and evaluation. The ADDIE model has a focus or emphasis on iteration and reflection; therefore, the update is made based on feedback that can be carried out continuously (Fatma, Hayami, Budiman, & Rizki, 2019) as shown in Figure 1.

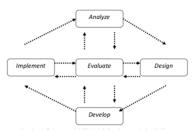


Figure 1: ADDIE Model.

2.2.5 Pre-test and Post-test

The research design that used in this study is "One-Group Pre-test-Post-test Design", where a group is measured and observed before and after the treatment is given. The advantage of this research design is that the author can compare before and after treatment on respondents with the same measuring instrument (Liem & Tan, 2019) as shown in Figure 2.

0	X	0
Pretest	Treatment	Posttes

Figure 2: One Group Pretest-Posttest Design.

In this study, the dependent variable was assessed as one group before (pretest) and after (posttest) the treatment was given. After the treatment was given to the group, the results before and after were compared. The data collection instrument used in this study was in the form of a questionnaire.

The results of the pretest and posttest were converted into frequency percentages, the formula for the percentage frequency conversion (Sulfemi & Mayasari, 2019) is shown in Figure 3 (% is the frequency percentage of each respondent's answer, F is the frequency of answers from respondents and N is the number of respondents).

$$\% = \frac{f}{N} \times 100$$

Figure 3: Frequency Percentage Formula.

After the frequency percentage is obtained, the results of the average pre-test and post-test are described as qualitative data which are interpreted based on the analysis interpretation table (Megasafitri & Sukartiningsih, 2018) as shown in Table 1.

Table 1: Analysis Interpretation Table.

Average Score	Category
0% - 20%	Very Poor
21% - 40%	Poor
41% - 70%	Fair
71% - 80%	Good
81% - 100%	Excellent

The analysis interpretation table category is used to determine the effect of the product on 8 family functions as an effort to prevent the risk of family dysfunction. According to (Riduwan, 2013) in (Megasafitri & Sukartiningsih, 2018) it is stated that the questionnaire criteria can be said to be effective against the use of a product if the average response questionnaire result is >61% from the analysis interpretation table category.

3 RESEARCH MODEL

ADDIE model is a research model used to make Game of Anti-Family Dysfunction (GANSIA) products in the form of educational board games, a talking pen, smart cards, and a mini storybook. The concept of this product refers to 8 family functions (religion function, socio-cultural function, love and affection function, protection function, reproduction function, education function, economic function, and environmental development function) which are combined with the local culture of Batam City.

3.1 Analysis

In this process, the author defines the concepts, materials, and software or hardware that will be used. The software that are used in the implementation of this product are Adobe Illustrator, Adobe Photoshop, Adobe Audition, Blender, Celtx, Arduino IDE / Visual Studio Code. And the hardware requirements used in the implementation of this product are laptops, 3D printing, Arduino modules, RFID cards, speakers, and dubbing devices.

3.2 Design

This stage produces storyboards and scripts as a design for developing game products in the form of

an educational board game in Figure 4, a talking pen and smart cards in Figure 5, and a mini storybook storyboard in Figure 6 in the Game of Anti-Family Dysfunction (GANSIA).

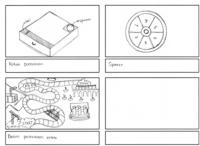


Figure 4: Board Game Storyboard.

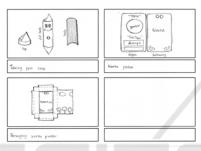


Figure 5: Talking Pen and Smart Cards Storyboard.



Figure 6: Mini Storybook Storyboard.

3.3 Development

This stage determines how each product will be implemented such as the medium that will be used in every product designed.

3.4 Implementation

All the designs that have been made in the previous stages will produce the actual products at this stage.

3.5 Evaluation

The evaluation stage is carried out by supervisors and authors continuously until this product is completed based on the purpose of this product is made. Testing

328

is carried out using pretest and posttest to determine the effect of Game of Anti-Family Dysfunction (GANSIA).

4 RESEARCH METHOD

The research starts from literature study, pretest, product implementation, treatment, posttest, data analysis, and processing, and concludes from the results of data analysis in research as shown in Figure 7.

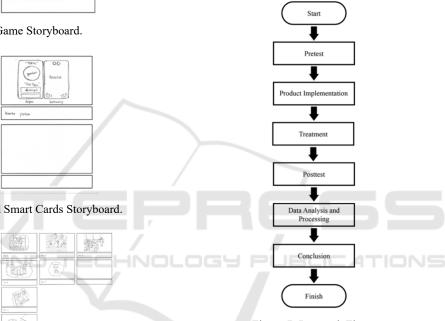


Figure 7: Research Flow.

The pretest and posttest used the same questionnaire and they are aimed at the same respondents so that the results before and after treatment could be compared. This study is to determine the effect of the Game of Anti-Family Dysfunction (GANSIA) based on the data obtained from the results of the analysis according to the category of the analysis interpretation table as an endeavour to prevent the risk of family dysfunction.

Respondents in the pretest and posttest in this study are residents from Hamlet of 06 Sagulung Sub-District of 10 people from 10 families, respondents are active members of the Integrated Service Post (Posyandu) in Hamlet of 06 Sagulung Sub-District. One adult (parent) from each family is the respondent in this study because the game product requires an adult as a mentor in understanding the 8 family functions for other family members or the children in running the game. The concept of this game is designed like the concept of a prosperous family where the mentor is the key in the game that must educate, direct, and guide the family member or the child to understand 8 family functions through the Game of Anti-Family Dysfunction (GANSIA).

In the questionnaire that is tested on respondents, there are 8 questions based on 8 family functions. The 8 questions on the questionnaire that are asked during the pretest and posttest can be seen in Table 2.

Table 2:	Pretest	and	Posttest	C	Duestion	nnaire.
1 aoic 2.	TICLOSE	anu	1 OSHOSI	~	Jucstion	manc.

No.	Questions			
1	What is the function of the family that explains			
	families and family members encourage and			
	develop family life as a place to build spiritual			
	values and cultural values of the nation so that			
	they become people who believe and have a			
	devotion to The Almighty?			
	a. Environmental development function			
	b. Religion function			
	c. Economic function			
2	What is the function of the family that explains it			
	provides opportunities for families to develop the			
	nation's cultural wealth?			
	a. Religion function			
	b. Reproduction function			
	c. Socio-cultural function			
3	What is the function of the family that explains it			
	provides a solid foundation for children with			
	children, husband and wife, the parent with			
	children so they become a place for a life full of			
	love to grow?			
	a. Love and affection function			
	b. Education function			
	c. Environmental development function			
4	What is the function of the family that explains			
	the family is a place to foster a sense of security			
	and warmth to every other family member?			
	a. Economic function			
	b. Protection function			
	c. Religion function			
5	What is the function of the family that explains			
	the mechanism for continuing the planned			
	offspring, to encourage the creation of human			
	welfare who is faithful and pious?			
	a. Reproduction function			
	b. Environmental development function			
<u> </u>	c. Socio-cultural function			
6	What is the function of the family that explains			
	the family is in charge of educating offspring to			
	be broad-minded and able to make adjustments to			
	the environment?			
	a. Education function			
	b. Religion function			
	c. Reproduction function			

7	What is the function of the family that explains				
	the family is a supporting element of family				
	independence and resilience?				
	a. Protection function				
	b. Love and affection function				
	c. Economic function				
8	What is the function of the family that explains				
	educating each family member to be able to place				
	themselves in a harmonious, tuneful, and				
	balanced manner according to the carrying				
	potential of the environment?				
	a. Socio-cultural function				
	b. Environmental development function				
	c. Protection function				

The next step is to analyze and process the data obtained from the results of the pretest and posttest, then the average results of the pretest and posttest obtained are described as qualitative data to conclude from the results of the analysis based on the data generated.

5 RESULTS

In this section, we present the results for the products and the analysis of Game of Anti-Family Dysfunction (GANSIA).

5.1 Product Results

Game of Anti-Family Dysfunction (GANSIA) consists of an educational board game, a talking pen along with smart cards, and a mini storybook which is shown as the following:

5.1.2 Educational Board Game

At the analysis stage, the initial stage is to create concepts and materials presented in the educational box game. The software used in the design of this product are Adobe Illustrator CC 2018 and Blender.

For the design stage, the educational board game is designed in three-dimensional form to be developed into a wooden board game media as shown in Figure 8.

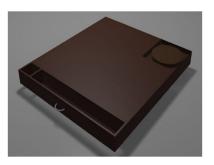


Figure 8: Educational Board Game 3D Model.

At the development stage, the surface of the wooden board is designed with a concept that elevates the local culture of Batam City such as the Barelang Bridge, *Kampung Kota Tua*, Muka Kuning Industrial Area, and *Kenduri Melayu* combined with the concept of the snake and ladder game as shown in Figure 9.



Figure 9: Board Game Surface Layout.

This wooden board design is also equipped with a spinner as a medium that determines the movement of players as shown in Figure 10 and pawns in the form of *gong-gong* wearing *tanjak melayu* as the characters of the players in the educational box game as shown in Figure 11.



Figure 10: Spinner Layout.

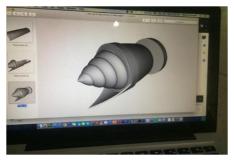


Figure 11: Game Pawn Model.

At the implementation stage, an educational board game is implemented in the form of wooden board media as shown in Figure 12.



Figure 12: Wooden Board Game.

The surface of the educational box game that has been designed in the previous stage is printed in the form of a sticker to be glued to the surface of the wooden board as shown in Figure 13.



Figure 13: Educational Board Game Surface.

Pawns that are designed with a three-dimensional model are printed using 3D printing to become a media object for the game in the educational board game as shown in Figure 14.



Figure 14: Game Pawns.

The evaluation stage is done by how well the product can be used and following the purpose for which the product is made. The results of the educational board game can be seen in Figure 15.



Figure 15: Educational Board Game.

5.1.3 Talking Pen and Smart Cards

At the analysis stage, the initial steps taken are preparing concepts, smart card materials, and audio narration. The equipment needed for hardware design (talking pen) and supporting devices (smart cards) are Arduino modules, SD cards, RFID cards, speakers, 3D printing, and filaments.

For the design stage, the circuit of hardware and supporting devices are assembled according to product requirements as shown in Figure 16.



Figure 16: Talking Pen Circuit.

The smart card as a miscellaneous device is designed according to the concept and material. The front, back, and packaging of smart cards are designed with concepts and materials developed from 8 family functions and combined with the local culture of Batam City. The front card design can be seen in Figure 17, the back in Figure 18, and the packaging in 19.



Figure 17: Smart Cards Front Design.



Figure 18: Smart Cards Front Design.



Figure 19: Smart Cards Packaging.

Talking pen case design is also carried out in a three-dimensional form. The talking pen is in the form of an endemic animal character *gong-gong* as shown in Figure 20.

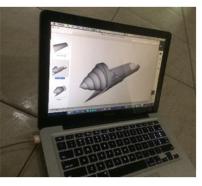


Figure 20: Smart Cards Packaging.

At the development stage, an audio recording process is carried out as the sound output from the talking pen. At this stage, the contents of the RFID card data file are changed to define the name of the audio file in the program and inserted into the SD card on the talking pen. The next step is to make a talking pen program and a smart card as a whole to be inserted into the SD card.

At the implementation stage, the design of the surface, back, and packaging of the smart card is printed in the form of a sticker attached to the RFID card. And the three-dimensional design of the talking pen case is printed using 3D printing made from filament as shown in Figure 21.



Figure 21: Talking Pen Case Printed.

After the case is printed, the whole circuit is inserted into the case of the talking pen.

The evaluation stage is done by how well the product can be used and by the purpose for which the product is made.

5.1.4 Mini Storybook

The analysis stage is to create concepts, materials, and storylines that are presented in the mini storybook. At this stage, the size of the storybook that will be designed in the mini storybook is also determined to be used as print media. The software used in the design of this product is Adobe Illustrator.

For the design stage, the design is made according to the concept, script, and storyboard that has been traced as shown in Figure 22.



Figure 22: Mini Storybook Tracing Process.

At the development stage, the coloring stage is carried out which can be seen in Figure 23 and the application of the story is in Figure 24.



Figure 23: Mini Storybook Coloring Process.



Figure 24: The Process of Applying the Script.

At the implementation stage, the mini storybook is implemented in the form of print media which is also combined with 8 family functions and the local culture of Batam City which can be seen in Figure 25.



Figure 25: Mini Storybook Display Results.

At the evaluation stage, testing is carried out to find out how well the product made can be applied and it is following the purpose of the product. The result of the mini storybook can be seen in Figure 26.



Figure 26: Mini Storybook.

The product constructed in the Game of Anti-Family Dysfunction (GANSIA) is an educational board game, smart cards, a talking pen, and a mini storybook. It was designed to highlight the local culture of Batam City with the hope that the public will not only know the function of the family but also be more familiar with the local culture. Smart Cards are made from RFID Cards with family function materials that are packaged using language that is easily understood by children and parents. The Talking Pen can read smart cards that emit audio containing commands that the players must execute. Talking pen is made to make it easier for players who can't read yet and make the game more interesting. The talking pen is also designed in the form of Gong Gong as an endemic animal from the Riau Islands. The mini storybook is called "My Family", it is about the function of the family, and it is one of the products in the Game of Anti-Family Dysfunction (GANSIA). The results of the GANSIA product can be seen in Figure 27.



Figure 27: GANSIA Product Results.

The GANSIA board game has obtained Intellectual Property Rights which have been issued by the Directorate General of Intellectual Property (DJKI) in 2019 with application number EC00201975094 and registration number 000158081.

5.2 Analysis Results

The analysis is carried out in Hamlet of 06 Sagulung Sub-District by 10 female respondents. Based on the age of the respondents, respondents who are in the age of 20-30 years are 1 respondent, respondents who are in the age of 30-40 years are 5 respondents, and respondents who are aged 40-50 years are 4 respondents.

Based on the respondent's occupation, the respondents who have a job as housewives are 10 respondents. The number of correct and incorrect answers from the pretest and posttest tests carried out on the respondents can be seen in Table 3.

Questions	Pretest		Posttest	
	Correct	Incorrect	Correct	Incorrect
Q1	7	3	9	1
Q2	3	7	10	0
Q3	6	4	9	1
Q4	3	7	8	2
Q5	2	8	10	0
Q6	3	7	10	0
Q7	1	9	8	2
Q8	0	10	10	0

The results of the correct answers from the pretest and posttest were processed into percentage form, quantitative data obtained from the pretest test results were processed into percentage form which can be seen in Table 4.

Table 4: Percentage of Pretest Results.

No.	Target Outcome	%	
1	Respondents are able to understand the function of religion	70%	
2	Respondents are able to understand the function of socio-cultural	30%	
3	Respondents are able to understand the function of love and affection	60%	
4	Respondents are able to understand the function of protection	30%	
5	Respondents are able to understand the function of reproduction	20%	
6	Respondents are able to understand the function of education	30%	
7	Respondents are able to understand the function of economic	10%	
8	Respondents are able to understand the function of environmental development	0%	
	The average result of the pretest		

Based on the results of the pretest, it can be seen that the average of the respondents' answers who can answer the questions correctly during the pretest is 31.25% of the respondents.

Quantitative data obtained from the posttest test results were processed into percentage form. The percentage results from the posttest test can be seen in Table 5.

Table 5: Percentage of Posttest Results.

No.	Target Outcome	%
1	Respondents are able to understand the function of religion	90%
2	Respondents are able to understand the function of socio-cultural	100%

3	Respondents are able to understand the function of love and affection	90%
4	Respondents are able to understand the function of protection	80%
5	Respondents are able to understand the function of reproduction	100%
6	Respondents are able to understand the function of education	100%
7	Respondents are able to understand the function of economic	80%
8	Respondents are able to understand the function of environmental development	100%
	The average result of the posttest	92.5%

Based on the results of the posttest, the average number of respondents who can answer the questions correctly during the posttest is 92.5% of the respondents.

From the results of the pretest and posttest, it can be seen that the percentage of respondents who can answer questions about understanding the 8 family functions correctly increased from 31.25% to 92.5%. In the first question related to religion function, there was an increase from 70% to 90%. In the second question related to social-cultural function, there was an increase from 30% to 100%. In the third question related to love and affection function, there was an increase from 60% to 90%. In the fourth question related to the protection function, there was an increase from 30% to 80%. In the fifth question related to reproduction function, there was an increase from 20% to 100%. In the sixth question related to education function, there was an increase from 30% to 100%. In the seventh question related to economic function, there was an increase from 10% to 80%. In the eighth question related to the environmental development function, there was an increase from 0% to 100%. The results of the pretest and posttest can be seen in Figure 28.

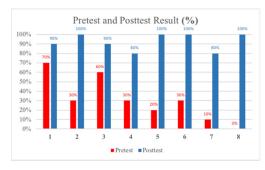


Figure 28: Pretest and Posttest Result in Percentage.

The average pretest result of the target outcome before being given treatment was 31.25%, this figure can be categorized that the pretest result is included in the "Poor" category. The average posttest result of the target outcome after being given treatment is 92.5%, this figure can be categorized that the posttest result is included in the "Excellent" category. From these results, it is known that the posttest results obtained are >61% which states that the GANSIA product has an effect on increasing understanding of 8 family functions.

Based on the results of the pretest and posttest in this study, it can be seen that the product has an excellent effect on increasing understanding of the 8 family functions as an effort to prevent the risk of family dysfunction in Hamlet of 06 Sagulung Sub-District.

6 CONCLUSION & DISCUSSION

Based on the research that has been done, it can be concluded this research produces Game of Anti-Family Dysfunction (GANSIA) in the form of an educational board game, a talking pen, smart cards, and a mini storybook that made by using the ADDIE model (analysis, design, development, implementation, and evaluation).

From the results of the analysis, it is known that the average of the pretest result is 31.25%, this figure is included in the "Poor" category. And the average posttest result is 92.5%, this figure is included in the "Excellent" category. Based on the results of the pretest and posttest referring to the analysis interpretation table, it is known that Game of Anti-Family Dysfunction (GANSIA) product has a very good effect in increasing understanding of the 8 family functions as an effort to prevent the risk of family dysfunction in Hamlet of 06 Sagulung Sub-District.

The conclusion is in line with the emerging recent research (Bakti et al., 2018; Coil et al., 2017; Handayani et al., 2018; Krish, 2020), it contributes to the existence of learning media in the form of educational games through a board game, talking pen, smart cards, and mini storybook. This study also shows that the scope of research in the use of Game of Anti-Family Dysfunction (GANSIA) products needs to be expanded therefore that family welfare education as a form of effort to prevent the risk of family dysfunction can be increased and community groups can be formed as a forum for family welfare education assistance. In addition, to develop the product of GANSIA, the talking pen from Game of Anti-Family Dysfunction (GANSIA) product is one of the media to prevent the risk of family dysfunction, it should be developed with a flatter shape in the future to make it easier to grip and increase the ease of use of the product.

ACKNOWLEDGEMENTS

This research was partially supported by Ministry of Research, Technology and Higher Education of Indonesia through *Program Kreativitas Mahasiswa*.

REFERENCES

- BKKBN. (2018). Kuatkan 8 Fungsi Keluarga Untuk Kesejahteraan Indonesia. Retrieved from BKKBN: https://www.bkkbn.go.id/detailpost/kuatkan-8-fungsikeluarga-untuk-kesejahteraan-indonesia
- Court, R. (2018). Sistem Informasi Penelusuran Perkara. Retrieved from Pengadilan Agama Kelas 1A Batam: https://sipp.pa-batam.go.id
- Mussadad. (2018, November 12). Data Penduduk RW 06 Kecamatan Sagulung. (N. Megawati, Interviewer)
- Handayani, I., Lubis, Z., & Aritonang, E. (2018). Pengaruh Penyuluhan Dengan Media Permainan Ular Tangga Terhadap Pengetahuan Tentang Buah dan Sayur Pada Siswa MTS-S Almanar Kecamatan Hamparan Perak. *Jumantik*, 115-123.
- Krish, P. (2020). The Use of the Audio Pen in Enhancing Reading Skills among Preschool Children . International Journal of Information and Education Technology.
- Coil, D., Ettinger, C., & Eisen, J. (2017). Gut Check: The Evolution of an Educational Board Game. *PLOS Biology*.
- Bakti, T., Apriliya, S., & Hidayat, S. (2018). Buku Cerita Anak berbasis Kearifan Lokal Kelom Geulis Tasikmalaya untuk Siswa Sekolah Dasar. PEDADIDAKTIKA.
- Kemenag. (2017). Balitbangdiklat Kemenag. Retrieved from Kemenag: https://balitbangdiklat.kemenag.go.id/assets/uploads/2 017/02/CERAI_GUGAT.pdf
- Fatma, Y., Hayami, R., Budiman, A., & Rizki, Y. (2019). Rancang Bangun Virtual Tour Reality Sebagai Media Promosi Pariwisata di Propinsi Riau. JURNAL FASILKOM.
- Wijaya, J. (2017). Penerimaan Penonton Terhadap Disfungsi Keluarga dalam Film Siti. Jurnal E-Komunikasi.
- Dewi, T., Kurnia, D., & Panjaitan, R. (2017). Penggunaan Media Permainan Ular Tangga Pada Pembelajaran Pips Untuk Meningkatkan Hasil Belajar Siswa Pada Materi Pembagian Wilayah Waktu di Indonesia. *Jurnal Pena Ilmiah*.
- Liem, W., & Tan, H. (2019). Mengukur Tingkat Pemahaman Pelatihan PowerPoint Menggunakan Quasi-Experiment One-Group Pretest-Posttest. JSM STMIK Mikroskil.

- Sulfemi, W., & Mayasari, N. (2019). The Use of Audio Visual Media in Value Clarification Technique to Improve Student Learning Outcomes in Social Studies. *Jurnal Pendidikan*.
- Megasafitri, R., & Sukartiningsih, W. (2018). Pengembangan Media Interaktif Berbasis Adobe Flash Dalam Pembelajaran Menulis Eksosisi Pada Siswa Kelas V. JPGSD.
- Riduwan. (2013). Dasar-dasar Statistika. Bandung: Alfabeta.
- Kardi, D. (2018, April 17). Kontroversi Pernikahan Dini dan Polemik Batas Usia Perkawinan. Retrieved from CNN Indonesia: www.cnnindonesia.com

335