

DEVELOPMENT OF DIGITAL STORYBOOKS TO INSTILL EMPATHETIC CHARACTERS IN EARLY CHILDHOOD IN RA AL-KARIIM, CIREBON DISTRICT

Sri Heti*

* IAIN Syekh Nurjati Cirebon
sriheti18@gmail.com

Jazariyah **

** IAIN Syekh Nurjati Cirebon
jazariyah@syeknurjati.ac.id

Ayu Vinlandari Wahyudi***

***IAIN Syekh Nurjati Cirebon
ayuvw.vw@gmail.com

Abstract

This research is motivated by the lack of media that supports the learning process, especially to instill empathetic character. The lack of understanding of empathy in children gives rise to bullying. This research aims to instill the character of empathy in young children using digital storybook media in the OB RA Al-Kariim group, Cirebon Regency. The type of research used is development or R&D type research with the Borg and Gall model which has 10 stages of development. However, researchers limit the product development stages to only 8 stages. The subjects of this research consisted of 9 children from group OB. Data was obtained through observations, interviews, filling out questionnaires, and documentation. Next, the data that has been obtained is then analyzed using qualitative analysis and quantitative analysis. Media expert validation results obtained an average score of 94% and material expert validation results obtained an average score of 88% in the "Very Eligible" category. The results of the feasibility response from class OB teachers obtained a score of 86% and the response results from the accompanying teachers obtained a score of 84% in the "Very Eligible" category.

Keywords: *empathy; social emotional; media; caring.*

INTRODUCTION

Humans grow and live in a social environment; this social involvement can have an influence on everyone. This is in line with Busyaeri & Muharom's opinion that there is a relationship of mutual influence in social interactions and reciprocal relationships that influence the behavior of each community. However, as time goes by, it is very unfortunate that there is a fact that children are starting to experience a decrease in curiosity and concern for the social environment, this can be seen from the many cases of bullying that occur among young children (Busyaeri & Muharom, 2016).

Based on data from KPAI (Indonesian Child Protection Commission), in 2021 there were 53 cases of child victims of bullying in the school environment and 168 cases of bullying in cyberspace. Meanwhile, in 2022, bullying cases in schools will increase by 81 cases. Perren said that bullying has been around since kindergarten. In his research, of the total kindergarten children, 37% of children were actively involved in bullying cases, either as victims or perpetrators, or even both. Of the 16 to 18 kindergarten groups, there is at least one child who is the victim or perpetrator of bullying several times a week (Ufairah, 2018).

Many things have been done to combat bullying, both written and real, such as creating anti-bullying posters, anti-bullying movements, and anti-bullying seminars. An example of this effort is implementing character education through habituation by instilling good values. Nastiti also believes that the formation of character takes quite a long time, so that with this character education, apart from maximizing children's skills and capacities, it is also hoped that in the future it can produce a generation with good character or personality (Nastiti, 2022).

Character education is an effort to foster beauty, and schools must explicitly show beauty such as respect and responsibility (Purwanto & Maimunah, 2022). Character education is more important than moral education because it not only teaches children what is right and what is wrong, but also helps them understand the values of good character and makes them act according to these values to become much better individuals (Priska, 2020). Agreeing with this, Djohar stated that an important part of moral or character education is touching the area of the heart so that a sense of empathy can emerge. Without touching this area, any form of moral education of children will fail (Muhtadi, 2014).

Rogers stated that empathy is the ability to interpret another person's condition or state of mind correctly, and without losing sight of the real situation (Sutanti, 2017). In fact, high empathy can help individuals become happier people in their lives by building good, friendly and comfortable relationships with other people. Jannati stated that it is very important to apply empathy in the era of society 5.0, because by doing so, a person can foster a sense of mutual help, make the interlocutor feel appreciated, lighten the burden on the interlocutor, build positive social relationships with other people, provide appropriate responses in accordance with other people's states, and understanding and controlling their emotions (Jannati & Hamandia, 2021). The existence of empathy in children as part of emotional knowledge allows children to direct and control their emotional experiences, so they are able to interpret and respond to other people's emotional expressions (Arik, 2024).

Based on observation findings at RA Al-Kariim on Friday, November 26, 2022. In one incident, a female student in class 0B had darker skin than the other children and was then made fun of by her friends. The response from other children who witnessed this incident was indifferent, and some of them even mocked him. Apart from that, an incident that is often encountered is when in a group of children there is one child who

is not dominant, then that child will become the object of ridicule from his friends and the response from other individuals or groups of children is that if they don't stay silent then they will also make the child the wrong one. not dominant as an object of ridicule too, both at the same time and at other times. As with findings in the field, the author realizes that children experience a crisis of empathy for themselves and their friends. This is in line with the opinion of Daniel Goleman who says that empathy will begin to disappear when children are approximately two and a half years old, when children begin to realize that other people's pain is not the same as personal pain, and they begin to be good at looking for diversions (Muhtadi, 2014). Reflecting on cases which are also supported by expert opinions, of course instilling empathy from an early age is a must. This helps them grow into good, moral, polite, reliable and trustworthy people in society (Muhtadi, 2014).

Efforts to instill empathy made by teachers at RA Al-Kariim themselves only use the method of lectures or advice, storytelling and example conveyed orally without supporting media. However, in fact researchers found that this method was less effective because not all children could understand what the teacher was saying. This is also supported by Mrs. Warnisi's statement in an interview that previously she had not used supporting media other than LKA in the form of pictures about good and bad behavior, because schools were not adequate so that supporting media such as printed picture story books did not yet exist, let alone digital-based ones. As Hasan said, learning media is media that can be used in the learning process and contains instructional messages or information (Hasan, 2021). Learning media is very important to help students acquire new knowledge, abilities and skills.

Based on the description of the problem above, the researcher wants to conduct research related to how to foster a sense of empathy in early childhood which is based on the increasing number of bullying among children through digital-based storybooks. In connection with this, the author is motivated to conduct research and development with the title "Development of a Digital Storybook to Instill Empathetic Characters in AUD in Ra Al-Kariim".

METHODS

The research method used is Research and Development (R&D) is a research method that creates new products or improves existing products. The products made consist of hardware and software. Educational products can be in the form of modules, books and other learning programs (Syavira, 2021). This research focuses on research design and development of the Borg & Gall model which consists of: (1) Potential and problems, (2) Data collection, (3) Product design, (4) Design validation, (5) Design revision, (6) Product trials, (7) Product revisions, (8) Usage trials, (9) Product revisions, (10) Mass production. Researchers limited the development stages to 8 out of 10 stages. This is because the target of the product is limited, namely, only to be tested at 1 institution and also due to time constraints. As explained by Borg and Gall, when carrying out a small scale project with a limited number of test subjects with a design created by

the researcher, and if the manufacturing process does not have sufficient resources then one effort that can be made is to limit the research to only a few steps and R&D cycle (Ridwan, 2023). The population of this study were group 0B students at RA Al-Kariim, Cirebon Regency. The number of trial samples was 9 students. Data collection techniques use interviews, questionnaires, observation and documentation. This research uses quantitative data analysis techniques and qualitative data analysis. The data obtained from the questionnaire validity and feasibility tests were then analyzed using a Likert scale based on questionnaire response score rules.

RESULTS AND DISCUSSION

1. Initial information collection

The initial information collection process is carried out to find information and problems faced by both institutions, teachers and students in the learning process. In collecting this initial information, researchers carried out observations and interviews with students and teachers. The results of observations obtained by researchers in class 0B, researchers found several behaviors or attitudes of the children there which showed that they were unable to understand what empathy was for their friends, those around them, and for themselves. Of the many attitudes or behaviors of children that show their lack of knowledge about empathy, one of them is that in one incident, a girl had darker skin than other children, and was then made fun of by her friends.

The response from other children who witnessed this incident was indifferent, and some of them even mocked him. Based on the findings that the researcher obtained from this observation, the researcher realized that there were still many class 0B children at RA Al-Kariim who still did not understand what empathy was or showed concern for their surroundings. Apart from that, researchers also found a lack of learning media in the school. Most of the media available there is only media to stimulate motor or cognitive skills in children, while the media to stimulate religious, moral and social emotional aspects such as empathy in children is very limited, only through storytelling, advice or example methods.

2. Digital Storybook Design

The next stage or step is the design of the product that will be developed. The steps taken by researchers are as follows:

a. Creating a Story Narrative

The first step the researcher took was to create a narrative story. After going through the initial information gathering process, the researcher carried out an analysis regarding the content of the story of the product that will later be developed. The narrative of this digital storybook media was developed by referring to incidents or occurrences that researchers discovered during observations. The content of the digital storybook is based on a fable type story where the characters are a group of guinea pigs against the background of a garden entitled Snowy, Shadow, & Choco. The narrative of this story tells of 3 main characters, namely, a white mermut named Snowy who has a weakness in his legs

so he cannot walk well. Apart from that, there is Shadow the black marmot and his friends who really like to make fun of or mock Snowy. Finally, there is Choco, a kind brown marmot, who will later become a mediator between Snowy and Shadow.

b. Creating a Digital Storybook Outline

This process was carried out to determine the flow of development of digital storybook media created by researchers. This creation also aims to make it easier for researchers to develop digital storybook media.

c. Designing Images and Supporting Attributes

In the design process, researchers used the Ibispaint X application to create garden illustrations as a setting in the story and use AI features to create characters or actors in the story.



d. Assembling and Creating Digital Storybook Media

In assembling or combining illustration results with other attributes, researchers used the Canva application. The following series of story books were created:



e. Inserting Audio

Inserting audio or background sound is the last step that researchers take in creating a digital storybook. After the process of uniting or assembling all parts of the storybook, continue by changing the display from PDF format to Flipbook using the Heyzine application. Through the Heyzine application, researchers added supporting features such as including background sound with the song

"Best Friend" created by Kak Dodi, whose reference the researchers took from the Educa Studio YouTube Channel.

3. Validation of digital storybook products

After developing it in fleepbook form, a broad test was carried out by media experts and material experts with the following results:

Table 1. Percentage results of media experts and material experts for stage 1

Validator	Total score	Percentage	Information
Media expert	33	66%	Worthy
Material expert	36	72%	Worthy

Based on the validator test results by media experts 66% and material experts 72%, these results indicate that the media developed is feasible. However, each validator still provides notes for the product design being developed so that improvements need to be made.

Table 2. Notes on improvements by material experts and media experts

Media expert notes	Material expert notes
<ol style="list-style-type: none"> 1. Match the story with the illustrations 2. Book identity/copyright 3. Add a short synopsis at the end of the page 4. Color contrast and harmonization in the illustrations are made even smoother 	<ol style="list-style-type: none"> 1. Grammar or editorial on page 2 changed 2. The images and the story content are more adjusted 3. The expressions of each character are clarified 4. Dialogue layout tidied up 5. Place the moral at the end

After validation results from material experts and media experts have been obtained, improvements are then made based on suggestions given by media experts and material experts. The repaired product results are then validated again by the validator with the following results:

Table 3. Results of the percentage of media experts and material experts for stage 2

Validator	Total score	Percentage	Information
Media expert	47	94%	Very Worth It
Material expert	44	88%	Very Worth It

The validator test results by media experts were 94% and material experts were 88%. The results showed that the product category was in the Very Feasible category and was allowed by the validator to be tested.

6. Product improvements

Improvements to the product are carried out after validation in the first stage and improvements according to the validator's suggestions.

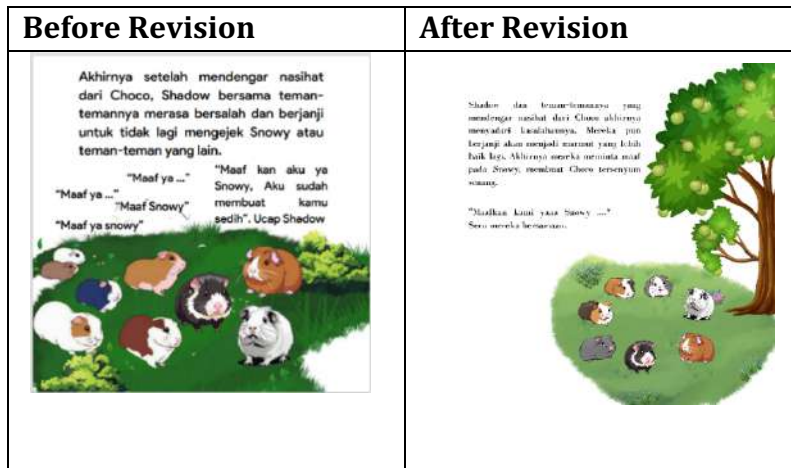
On the cover page, the revised design is a color contrast in the grass and leaves and then the characters have clearer expressions so that children can distinguish the characters through expressions.



On the opening page there is the addition of a black guinea pig character, a change in the contrast of the color of the grass, and a change in font type as well as shorter sentences. This change is in accordance with the direction and advice of media experts who suggested changing the color contrast of the grass so that the focus of children or readers can be focused on the guinea pig character. Other suggestions from material experts include changing fonts and shortening sentences with the aim of making the page not look full of writing.



On the contents page there are changes to the characters or figures, namely by adding expressions that are adapted to the narrative, then also the layout or placement of the narrative or dialogue is shortened, and the placement is made clearer so that readers are not confused. Lastly, change the color contrast of the background on all pages.



7. Digital Storybook Product Trial

After going through several stages, the finished product is revised and declared suitable for field testing in learning process activities. In the trial stage, it was carried out directly by the researcher on 2 teachers, which was then applied by the teacher to 9 class 0B students at RA Al-Kariim, Cirebon Regency on January 29 to February 5 2024. During the research, the researcher applied the media 3 times in one week. The first application of the product involves first introducing the media that has been developed by researchers to group 0B teachers, regarding how to access the media via links, how to use the icons on the storybook screen so that teachers can easily use the media. Then the researcher distributed questionnaires with a 5 point scale, each containing 10 statements for teachers to assess the feasibility of the product being developed with the following results:

Table 4. Class Teacher Percentage Results

Validator	Total score	Percentage	Information
Teacher 1	44	86%	Very Worth It
Teacher 2	42	84%	Very Worth It

The second and third application of the product is carried out by the teacher to the students. The application of the digital story book with the title Snowy, Shadow, & Choco is carried out after the core learning activities before break time. Access digital storybooks via a projector screen so that children can view and read together, assisted by a teacher who narrates the contents of the storybook. In this activity, the researcher's role is as an observer, that is, the researcher analyzes how the children respond when the teacher tells the contents of the storybook. During storytelling and reading activities using digital storybooks, the children were very enthusiastic about listening and answering when the teacher occasionally asked questions regarding the contents of the digital storybook Snowy, Shadow, & Choco.

During the product application process, researchers act as observers to analyze and observe children's behavior and habits. There are changes or not between before using media and after using media, whether changes towards increasing or decreasing children's empathic abilities. To find out if there is a change or not

regarding the child's empathy abilities, researchers used a validated grid containing 5 indicators with 10 criteria as the assessment standard.



Image of an Enthusiastic Child Reading the Story Book Snowy, Shadow, & Choco

According to Mukhtar Latif, media selection should meet quality requirements such as function, purpose, benefits, appropriate to the child's world, attractive, colorful, and related to children's play activities.(Khadijah, 2015). In line with this, digital storybook media is created by paying attention to several things, including adapting the themes in the curriculum, story content based on children's daily lives, and characterizations taken from animal forms so that they can attract children's interest.

Gonen believes that the reason picture story books are used as a learning medium is because stories delivered in words and pictures can enrich concepts in providing various information (Rizkiyah & Ningrum, 2022). Likewise, the digital storybooks developed by researchers are made using words and sentences appropriate to the child's age, meaning that the words and sentences are arranged in such a way that they are easily understood by children, both in terms of meaning and pronunciation. Next, the words and sentences that have been arranged are then illustrated through pictures so that the meaning of the story content can be illustrated.

Digital storybooks created by researchers can increase the cultivation of empathy in children, including children being able to comfort friends who are sad, children being interested in offering help to their friends, and children being interested in appreciating their friends with an average score before using the media of 27.25% and after using the media. increased to 53.61%. In line with this research, Iis stated that through storytelling, children can increase their empathetic abilities, including children wanting to play with friends, children wanting to help friends, and children wanting to share with friends. After previously in cycle 1 it was 42.8%, it increased in cycle 2 to 85.71% (Iis, 2012). The difference between this research and the previous one is that the digital storybook created by the researcher has not been able to increase children's willingness to play with their friends, this is because children at RA Al-Kariim tend to be friends with friends who are already familiar.

In addition, the digital storybook media created by researchers obtained an average score of 94% from media experts and an average score of 88% from material

experts without notes after several revisions. However, during the trial, the researcher received notes from the teachers in group 0B RA Al-Kariim regarding variations in the characters in the story, because having diverse characters can attract more children's interest. Meanwhile, previous research conducted by Lucia Dewi Kartika Sari and Krisma Widi Wardani regarding the development of digital picture storybooks to increase students' responsible character obtained a score of 93.7% from media experts and 91% from material experts with a note of paying attention to the use of capital letters (Sari & Wardani, 2021).

The overall results of the feasibility assessment of digital storybook media developed by researchers can be seen in the following table:

Based on the results of expert assessments, it is known that the digital storybooks that have been developed by researchers are suitable and suitable for use in learning, especially to stimulate empathy in children with an average score of 88% in the "very suitable" category. In line with researchers, Ni Ketut Sumiati and Luh Ayu Tirtayani previously researched the use of Audio-Visual Based Digital Picture Storybooks to Stimulate Early Childhood Empathy Abilities, stating that digital storybook media can influence children's empathy abilities, this can be seen through the validity of the media with 85% from media experts and material experts and in the trial received a score of 97%.

CONCLUSION

Development of digital storybook media which was developed with the aim of being used as supporting media to instill empathetic character in early childhood group 0B RA Al-Kariim Cirebon Regency. This media development was developed using the Borg & Gall model. Digital Storybook Media is considered feasible and can be used as seen from the development process, the product validity results from the expert team, both media experts and material experts, show the criteria "Very Feasible". Apart from that, revisions have been carried out in accordance with the revision notes obtained from the validation and trial stages with the aim of product improvement. Digital storybook media is also considered effective and can be used as an alternative media to instill empathetic character in young children, this is because the digital storybook media created by researchers has quite interesting visualizations and also has background sound so that it can attract children's interest. The effectiveness of this digital storybook media can be seen from the increased empathy in children.

REFERENCES

- Arik, G. K. (2024). Predictors of Media Emotion Regulation and Its Consequences for Children's Socioemotional Development. *Psikiyatride Guncel Yaklasimlar - Current Approaches in Psychiatry*, 16(3), 569–584. <https://doi.org/10.18863/pgy.1368538>
- Busyaeri, A., & Muharom, M. (2016). Pengaruh Sikap Guru Terhadap Pengembangan Karakter (Peduli Sosial) Siswa Di Mi Madinatunnajah Kota Cirebon. *Al Ibtida: Jurnal Pendidikan Guru MI*, 2(1), 1–17. <https://doi.org/10.24235/al.ibtida.snj.v2i1.177>

- Hasan, M. M. D. H. K. T. (2021). *Media Pembelajaran. Tahta Media Group.*
- Iis, N. (2012). Pengembangan Empati Anak Usia Dini Melalui Mendongeng Di Taman Kanak-Kanak Asiyah Pariaman. *Jurnal Ilmiah Pesona Paud*, 1(4), 1–11. Diambil dari <http://ejournal.unp.ac.id/index.php/paud/article/view/1667>
- Jannati, Z., & Hamandia, M. R. (2021). Persepsi Mahasiswa Tentang Urgensi Empati Dalam Berkomunikasi Di Era 5.0. *Jurnal Komunikasi Islam dan Kehumasan (JKPI)*, 5(2), 59–72. <https://doi.org/10.19109/jkpi.v5i2.10981>
- Khadijah. (2015). *Media Pembelajaran Anak Usia Dini. Perdana Publishing.*
- Muhtadi, A. (2014). Pengembangan Empati Anak Sebagai Dasar Pendidikan Moral, 1–15.
- Nastiti, D. (2022). Implementasi Karakter Disiplin Pada Anak Usia Dini Guna Mengurangi Perundungan Pada Anak. *Jurnal Pajar (Pendidikan dan Pengajaran)*, 6(4), 1083. <https://doi.org/10.33578/pjr.v6i4.8629>
- Priska, V. H. (2020). Pentingnya Menanamkan Karakter Sejak Dini. *EduPsyCouns: Journal of Education, Psychology*, 2(1), 193–201. Diambil dari <https://ummaspul.ejournal.id/Edupsycouns/article/view/433>.
- Purwanto, A., & Maimunah, R. (2022). AWLADY: Jurnal Pendidikan Anak Evaluasi Implementasi Pendidikan Karakter Pada Anak Usia Dini di Masa Pandemi Covid-19 ANIM PURWANTO. *AWLADY: Jurnal Pendidikan Anak*, 8(2), 2528–7427. Diambil dari www.syekhnurjati.ac.id/jurnal/index.php/awlady
- Ridwan, M. (2023). *Pengembangan Materi Pembelajaran Biografi Tokoh Pendidikan Berbasis Articulate Strolyline Untuk Pemelajaran Bahasa Lampung Siswa Kelas 7 SMP Kabupaten Pringsewu.*
- Rizkiyah, P., & Ningrum, M. A. (2022). Pengembangan Buku Cerita Bergambar Berbasis Digital Untuk Meningkatkan Kecakapan Literasi Digital Anak Usia Dini. *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini*, 4(1), 115. <https://doi.org/10.35473/ijec.v4i1.1230>
- Sari, L. D. K., & Wardani, K. W. (2021). Pengembangan Buku Cerita Bergambar Digital untuk Meningkatkan Karakter Tanggung Jawab Siswa di Sekolah Dasar. *Jurnal Basicedu*, 5(4), 1968–1977. <https://doi.org/10.31004/basicedu.v5i4.1138>
- Sutanti, T. (2017). Bimbingan Klasikal Dengan Teknik Simbolik Model Sebagai Alternatif Solusi Untutkt Meningkatkan Empati Pada Anak Usia Dini. *Prosiding Seminar Bimbingan dan Konseling*, 1(1), 369–380.
- Syavira, N. (2021). Pengembangan Media Pembelajaran Berbasis Powerpoint Interaktif Materi Sistem Pencernaan Manusia Untuk Siswa Kelas V Sd. *OPTIKA: Jurnal Pendidikan Fisika*, 5(1), 84–93. <https://doi.org/10.37478/optika.v5i1.1039>

Ufairah, N. (2018). Bullying Pada Anak Usia Dini. *Motoric*, 1(1), 8. Diambil dari <https://jurnal.narotama.ac.id/index.php/paudmotoric/article/view/550>