

Development of Learning Media for Early Childhood Christian Education Based on Book Creator

Ibelala Gea¹, Emmi Silvia Herlina², Warseto Freddy Sihombing³, Chintya Megaria Situmeang⁴, Marlinawati Situmorang⁵ and Yan Pratama Tarigan⁶

Abstract

This study aims to develop learning media for Christian education for early childhood based on book creator. The results of observations in the field show that the learning media for Christian education in kindergartens throughout North Tapanuli district is still minimal. Development is carried out using the ADDIE model, which consists of 5 (five) stages, namely analyze, design, develop, implement, and evaluate. The data collection instruments used are validation sheets for Christian Education material content experts, Early Childhood Education (ECE) experts, learning design experts, and learning media experts. Based on the validation test, the results were obtained that the Christian education learning media for early childhood with book creator developed has feasible and valid criteria to be used with a percentage for material experts 80% and ECE experts 85%, learning design experts 80%, learning media experts 83%, and product revisions have been carried out so that they can be tested in the field. The teacher response questionnaire sheet obtained the results that the learning media for Christian education for early childhood based on book creator developed has interesting and practical criteria used for learning with a percentage of teacher response questionnaires of 88%. The data generated from the teacher response questionnaire shows that the book creator developed is feasible, practical, and effective to use.

Keywords: Early Childhood, Kindergarten, Christian Education, Book Creator.

INTRODUCTION

Education needs to be given to children from an early age. Because according to experts, it is at this age that children's brain cells grow rapidly. The *child's* brain is like a sponge that absorbs everything around it. Early childhood is a time of sensitivity for children, a very appropriate time to instill moral and religious values.

The Indonesian big dictionary reveals that a child is a small human being, that is, one who is only six years old. Meanwhile, in Law Number 20 of 2003 concerning the National Education System, Article 1 paragraph 14 which says, Early Childhood Education (PAUD) is a coaching effort aimed at children from birth to the age of six which is carried out by providing educational arrangements to help physical and spiritual growth and development so that children have readiness to enter further education. Furthermore, article 28 states that Early Childhood Education can be held through formal, non-formal and/or informal education.

There are five aspects of child development that must be stimulated for early childhood, namely language, cognitive, physical motor aspects, social emotional and religious and moral values. Furthermore, in Government Regulation No. 4 of 2022 concerning National Education Standards, article 5 paragraph 2 states that the standards for the level of achievement of early childhood development are focused on aspects of child development which include (1) religious and moral values, (2) Pancasila values, (3) Physical motor, (4) cognitive, (5) language, (6) social emotional. In developing children's religious and moral value abilities, kindergartens in North Tapanuli Regency based on the results of the observations carried out, routinely hold worship activities every Friday, and always do prayer activities together before starting learning, during meals

¹ Institut Agama Kristen Negeri Tarutung E-mail: pakgea.iakn@gmail.com

² Institut Agama Kristen Negeri Tarutung, E-mail: emmisilvia@iakntarutung.ac.id

³ Institut Agama Kristen Negeri Tarutung, E-mail: asafremel@gmail.com

⁴ Institut Agama Kristen Negeri Tarutung, E-mail: megariachintya@gmail.com

⁵ Institut Agama Kristen Negeri Tarutung, E-mail: marlinasitumorang1976@gmail.com

⁶ Institut Agama Kristen Negeri Tarutung, E-mail: yanpratama1@gmail.com

and after learning activities. When worshipping with teachers and children, the media used by teachers when delivering the Word of God (sermons) is very limited, less attractive to children even without the use of props. Even though learning media is useful in the teaching and learning process of conveying messages or information related to the material presented.

Currently, teachers are required to be able to use technology in facing the era of Education 4.0. This research develops a technology-based learning media called *book creator*. As we all know, learning requires an emphasis on creativity rather than consumption. The best apps give students (and teachers) the freedom to build, write, code, draw, and combine many multimedia elements to differentiate the student learning experience and allow curiosity and creativity to be fostered. The advantages of book creators lie in the features that can be used such as templates, import capabilities, design options, and systematics. Students can design stunning digital books in no time or spend hours creating with multimedia.

RESEARCH METHODS

This research is a development research with the ADDIE method. The subjects at this stage are content experts, namely Christian Education experts, one ECE expert, and one learning design expert, learning media expert and Kindergarten teacher with the qualification of S1 Teacher Education-Early Childhood Education (PG-PAUD). The expert on the content of Christian education materials in this development research is Binsen Samuel Sijabat, an expert on Christian Education. From the expert in Early Childhood Education is Dr. Natalina, M.Pd. she is a lecturer with an early childhood education background and researcher, majoring in Elementary School Teacher Education. The learning design expert is Dr. Lustani Samosir, M.Pd. a lecturer and researcher at the State Christian Institute (IAKN) Tarutung. The learning media expert who was asked for his willingness to *review* the draft development of teaching media for Early Childhood Christian Education was Dr. Angela Kay Dubois, a lecturer and researcher at the State Christian Institute (IAKN) Tarutung.

The data collected through the implementation of formative evaluation is grouped into four parts, namely: (1) the first stage of evaluation data in the form of data on the results of material content expert tests, learning design experts, and learning media experts, (2) the second stage of evaluation data in the form of data on the results of individual trials and field trials, in the form of data from kindergarten teacher reviews. The instruments used to collect data in this development research are questionnaires and interview guidelines. Questionnaires and interview guidelines were used to collect data from reviews from Christian Education material experts, Early Childhood Education experts, learning design experts, learning media experts, and Kindergarten teachers. This qualitative descriptive analysis technique is used to process data from reviews of material content experts, learning design experts, and learning media experts, and field tests conducted on Kindergarten teachers. This data analysis technique is carried out by grouping information from qualitative data in the form of inputs, responses, criticisms, and suggestions for improvement contained in the questionnaire and interview results. The results of this data analysis were then used to revise the learning media product of Christian education *book creator* Early Childhood.

DISCUSSION AND RESULTS

Biblical Basis and Reasons for Using Book Creator

Human beings are born having a conscience, reason and mind, living in a social environment that has morals and ethics as a value system in interacting. Moral can be interpreted as a teaching how to behave, act in accordance with the religious and cultural teachings prevailing in the midst of society.

In Deuteronomy 6, it says that parents have a role to nurture and educate children. In verse 7 of Deuteronomy chapter 6 it says: "Thou shalt teach it again and again to thy children and speak of it when thou shalt sit in thy house, when thou art on the way, when thou lie down, and when thou risest up." From this verse, it can be concluded that parents must teach the law of God or Torah to children continuously and wherever they are so parents are very instrumental in passing on the faith.

The child is highly expected his presence, due to the generasi of the successor of the offspring. Genesis 1:28-29 clearly says: "Multiply and multiply...." Later in Genesis one also clearly states that man (including the son)

was created in the likeness of God. Children are created in the same image and image as God according to Mery Kolimon as quoted by (Team KTAK Anak Bersinar Bangsa Gemilang Jaringan Peduli Anak Bangsa 2018) has the meaning that every child has a Divine capacity: every child is born with potential, creativity, the capacity to think, love, learn, and grow into a person who is maturing, becoming like God. Children's talents and talents are different, but those differences in talents and talents do not make one child more valuable than the other. It further says, if the child is created in the image of God it means that the child must be treated with love and respect. Every child is endowed with dignity and dignity by God, meaning that the child must be treated in respect and love as a glorious creation of God. Racial background, gender, color, socio-cultural, economic, legal status and Health should not be grounds for demeaning a child. If we accept and value children then we accept and value God and vice versa.

In line with the biblical view that it is important to convey faith to early childhood, education experts also state the importance of moral education being given early. The family in this case the parents play a role in shaping the personality patterns of the child, providing basic knowledge and skills of life, instilling life values such as moral and religious values. The masa school is also seen as the right place to develop children's morals.

Learners in Kindergarten are in the age range of 4-6 years. The age of 4-6 years according to Piaget's theory enters at the preoperative stage. A feature of the child at the preoperative stage is to use symbols when using an object or action to present something that is not present. The child is not yet able to think abstractly. Therefore, media is needed to convey Christian education to children in kindergarten. In terms of remembering, memories in childhood have a short range. Young children only remember events that have a strong impression. In order for the child's memory to last a long time the incident must be unique, the child actively participates in the incident, retelling or re-doing, talking to their mother about past events.

In general, the story telling method is used to convey moral messages, instill character education and values to children. But using the media in delivering the material is much better. If in classroom learning, the teacher teaches only in the form of lectures, where the student listens only, then the student can only catch from the lesson only 10% of what he hears. However, if a teacher presents material by involving students directly, which means that students are active in doing assignments both individually and in groups and reporting the results, the student will be able to remember up to 90% of what has been done (Ardiana et al. 2021).

In the era of Education 4.0, teachers are required to be creative in teaching, one of which is by utilizing technology. Book creator is one of the technology-based media that is interesting for children, considering that *book creator* media has interesting images for children, has audio so that children can listen to bible stories through book creator media. mentions that *book creator* are worthy of being used as media, *book creator* learning media is one of the interesting learning media for parents as student mediators. (Diana, Sianipar, and Harianja, n.d.), students' responses to the implementation of learning show a positive response by using *book creator* media.

The data collected through the implementation of formative evaluation is grouped into three parts, namely: (1) the first stage of evaluation data in the form of data from the test results of experts on the content of Christian education materials, ECE experts, learning media experts, and linguists; (2) the second phase of evaluation data in the form of data on the results of individual trials and field trials, in the form of data from reviews of kindergarten teachers. The instruments used to collect data in this development research are questionnaires and interview guidelines. Questionnaires and interview guidelines were used to collect data from reviews from Christian education experts, Early Childhood Education (ECE) experts, learning design experts, learning media experts, and Kindergarten teachers.

To process the data of the results of the review experts used qualitative descriptive analysis techniques. This data analysis technique is carried out by grouping information from qualitative data in the form of inputs, responses, criticisms, and suggestions for improvement contained in the questionnaire and interview results. The results of this data analysis were then used to revise the learning media product *bookcreator* of Early Childhood Christian education.

RESULTS

The development model used in the development of the early childhood Christian Education *book creator learning* media is the ADDIE Model. This model is arranged programmatically with a systematic sequence of activities in an effort to solve learning problems related to learning resources that are in accordance with the needs and characteristics of the learner. This model consists of five steps, namely: (1) analysis, (2) *design*, (3) *development*, (4) *implementation*, and (5) *evaluation*).

Analysis is the first stage in applying the ADDIE model to design and develop early childhood Christian education *book creator learning* media. At this stage, the author conducts a process of assessing the needs of learning media for early childhood Christianity. The authors collected data and information related to the learning problems of Christian education encountered in Kindergarten schools. The problems faced are related to the learning of Christian education in Kindergarten, including: limited media. The limited media for Christian learning for children is due to teachers who are not creative enough to make teaching media, and funds.

The second stage in implementing the ADDIE model is *design*. At this stage, the author designed a learning medium for Early Childhood Christian Education using *book creator*. The *design* stage is carried out with the following terms of reference:

Who is learning designed for? (Kindergarten/ Early Childhood learners);

What abilities does the child want? (Knowing God as the Creator of the Universe and knowing God's creatures);

How can the learning media be used properly? (learning strategies);

How to determine the level of mastery of the material that has been achieved? (Q&A).

In designing learning media, referring to these four questions to find out the user (learner), objectives, methods, and assessments. Based on this question, in designing the *book creator learning* media, Early Childhood Christian Education focuses on 4 activities, namely the selection of material in accordance with the characteristics of students and the demands of competencies, learning strategies, forms and methods of assessment and evaluation. Because the user of this product is an early childhood, the author in designing learning media must be careful in choosing images, adapted to the child's condition, which is attractive to children. The same goes for the form of writing, and the selection of material and audio. The result of the design stage is a *blue print* in the form of an outline of the learning material of the *book creator* of Early Childhood Christian Education.

Development is the third stage carried out in applying the ADDIE model to create learning media for Christian education in kindergartens that is interesting, effective and efficient. At this stage, the learning media for Early Childhood Christian Education is produced or adapted so that it can be used in teaching Christian education in Kindergarten. This teaching media is interpreted as a means or media used in delivering Christian education for early childhood. In this third stage, the author carries out teaching material preparation activities. Activities for collecting teaching materials/ materials, making illustrative drawings, typing, and audio.

After the learning media for the *book creator* of Christian education has been developed, the next step is to test the resulting product. The following describes the results of product development trials ranging from expert trials with expert subjects of Christian education to field trials with kindergarten teacher trial subjects. These teaching materials in electronic form incorporate many multimedia elements such as images, audio, video, animation, and interactivity that aim to increase learner engagement and facilitate better understanding of the teaching material.

In this trial, the content expert of Christian education material that was used as a trial subject was Binsen Samuel Sidjabat, Ed. D. Subjects were asked to assess the development product in terms of content/material through closed and open questionnaires. The results of the expert assessment of the content of the material through a closed questionnaire are presented in Table 1.

Table 1. Assessment of the Content of Christian education Materials

No	Criterion	Score
1.	Accuracy of the title with the content of the material	4
2.	Clarity of material/content	4
3.	Clarity of the examples given	4
4	Conformity between the final test and the material nisi	3
5	Conformity with the Bible	5
	Sum	20

Based on the data in Table 1, the percentage of assessment by material content experts can be calculated, which is 80%. In the open questionnaire, there were several inputs from material content experts: (1) there were sentences too long, (2) writing techniques were seen in the text, there were some that needed to be revised, and (3) Language was adapted to early childhood.

Furthermore, the subject in the trial of early childhood education (PAUD) material was Dr. Natalina Purba, M.Pd. The results of the closed questionnaire are presented in the following table.

Table 2. Content Assessment of Early Childhood Basic Education Materials

No	Criterion	Score
1	Accuracy of the title with the content of the material	5
2	Clarity of material/content	4
3	Compatibility of Languages used with early childhood languages	3
4	Suitability of the material to an early age	5
	Sum	17

Based on the data in Table 2, the percentage of assessment by material content experts can be calculated, which is 85%.

In the open questionnaire of ECE experts, there are several responses, namely: (1) a good book, in the future it will be developed again, for example, the material for the birth of Jesus, (2) for early childhood the most preferred is a picture so that the writing should be small and large in size.

The assessment of learning design elements is carried out by learning design experts. The subject of the learning design expert trial was Dr. Lustani Samosir, M.Pd. The results of the closed questionnaire are presented in the following table:

Table 3 Assessment of Learning Design Experts

No	Criterion	Score
1	<i>Cover Quality</i>	5
2	Attractiveness of cover design	5
3	Accuracy of <i>typing lay out</i>	3
4	Consistency of material spacing, heading, subheading, and typing	3
5	Clarity of writing/typing	3
6	Accuracy of the way of presentation of the material	4
7	Accuracy of illustration image placement	5
8	Clarity of the order of presentation of the material	4
	Sum	32

Based on the data in table 3, the percentage of assessment by the learning design can be calculated, which is 80%.

The assessment of learning media elements is carried out by learning media experts. The subject of the learning media expert is Dr. Angela Kay Dubois. The results of the closed questionnaire are presented in the following table.

Table 4. Expert Assessment of Learning Media

No	Criterion	Score
1	Accuracy of illustrations used in covers	4
2	Conformity between the material and the media used	4
3	Image quality	5
4	Image size accuracy	4
5	Accuracy of image placement	4
6	Text quality	4
	Sum	25

Based on the data in table 4, the percentage of assessment by learning media experts can be calculated, which is 83%. In the open questionnaire, learning media experts provide three inputs: (1) images adapted to early childhood and in the form of *cartoons* (2) the writing must be small, large and clear.

Furthermore, trials in the field were carried out on kindergarten teachers throughout North Tapanuli Regency as many as 15 people who were taken from 15 kindergartens. The test results are shown in Table 5.

Table 5. Teacher Assessment in Field Trials

No	Criterion	Teacher Assessment														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Physical display	5	5	4	4	4	5	5	5	4	4	4	4	5	5	5
2	Size and typeface used	3	4	3	3	3	3	3	3	3	3	3	3	3	3	4
3	Material Clarity	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
4	Practical	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	Clarity of exposure to the material	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5
6	Suitability of the material to early childhood	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
7	The degree of conformity between the image and the material	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Sum		31	32	30	30	31	31	31	30	30	30	30	30	32	32	33
Presentation (%)		88	91	86	86	88	88	88	86	86	86	86	86	86	91	94
Average Presentation		88														

In the open questionnaire, there are several inputs from kindergarten teachers, including: (1) the cover to be designed more attractively, both in terms of color and image, (2) in terms of writing there are still some errors in typing that must be corrected, before being reproduced, (3) too dense words, not appropriate for children aged (4) for the application of examples need to provide real examples, (5) The space given should be more regular than nothing more than 1 space.

The results of the expert assessment of the content of Christian education materials based on closed questionnaires show that the percentage obtained by teaching materials is 80%. That percentage when converted into the conversion table of the achievement rate of scale 4 is at good qualification. This means that the teaching media is slightly revised.

The revisions made to the teaching media based on the input of Christian education experts are: (1) there are sentences that are too long, (2) writing techniques are seen in the text, there are some that need to be revised, and (3) Language is adapted to early childhood.

The results of the ECE expert's assessment of development products based on closed questionnaires showed that the percentage of teaching media acquisition was 85%. When converted into a 4-scale achievement rate conversion table, this percentage is at good qualification. This means that the teaching materials need a little revision. The thing that ECE experts advise is to minimize writing. Thus, the revision carried out is to reduce the writing and vary the cartoon images.

Learning design experts assess that the percentage of teaching materials obtained based on closed questionnaires is 80%. This percentage when compared to the conversion table of the achievement rate of scale 4 is at good qualification. This means that teaching media requires only minor revisions.

The results of the assessment of learning media experts based on closed questionnaires showed that the percentage of teaching media for Early Childhood Christian education *book creator* was 83%. When converted into a 4-scale achievement rate conversion table, this percentage is at good qualification. In the open questionnaire, learning media experts provided three inputs. Based on the three inputs provided, revisions were made to the teaching materials. There are also revisions to teaching materials based on expert input from learning media are: (1) improving drawings and being adapted to early childhood, (2) reducing writing and enlarging writing. The field trial subjects were 15 kindergarten teachers, with a background in S1 Teacher Education-Early Childhood Education (PG-PAUD). The percentage of teaching materials according to their assessment through closed questionnaires is 88%. The percentage is in very good qualifications, so the teaching materials are revised sufficiently according to the input provided through the open questionnaire. There are also revisions to teaching materials based on the input of learning media experts, namely: (1) improving the cover to make it more attractive to children, (2) correcting incorrect writing, (3) reducing writing and multiplying images, (4) correcting double spacing.

CONCLUSION

The development of *bookcreator-based* Early Childhood Christian Education learning media was developed with the ADDIE (Analyze, Design, Development, Implementation, and Evaluation) model. After *the teaching media prototype* has been developed, trials are carried out. The trial conducted was an expert trial that included Christian education material experts, Early Childhood Education (PAUD) material experts, learning design experts, learning media experts and Kindergarten teachers with a PG-PAUD Education background of 10 people.

The results of the Christian education material expert test showed that the percentage of teaching media acquisition was 80%. This percentage is at good qualifications, the teaching media is revised to taste. Early Childhood Education (PAUD) material experts showed that teaching media presentations were 85%. This percentage is at good qualification. The results of the learning design expert test assessed that teaching media was at a percentage of 80%. This percentage is at good qualification, which means the teaching materials only need a little revision. The percentage given by learning media experts is 83%. This means that the teaching materials are in good qualifications and need a little revision. During a field trial involving 15 kindergarten teachers in North Tapanuli district, their assessment results showed a percentage of 88%. This means that teaching materials are very well qualified.

All trial activities, ranging from expert judgement to field tests also produce various inputs through open questionnaires and direct interviews with the subjects. Based on the inputs provided, further revisions were made that led to the improvement of teaching material products.

REFERENCES

- Aprillianti, Prima, and Wendri Wiratsiwi. "Pengembangan E-Book Dengan Aplikasi Book Creator Pada Materi Bangun Ruang Untuk Siswa Kelas V Sekolah Dasar." *Prosiding Seminar Nasional Penelitian Dan Pengabdian Masyarakat* 6, no. 1 (2021): 80–88.
- Daniel Nuhamara, Haryati, James Wambrauw, Justitia Vox Dei Hattu, Mayyolin Carolina Tuassun, M. Nur Widpranoto, Setiyadi, Susi Rio Panjaitan, S.S. Benyamin Lummy, Tornado Gregorius Silitonga, Yoel M. Indrasgoro. *Teologi Anak: Sebuah Kajian/ Tim KTAK (Anak Bersinar Bangsa Gemilang Jaringan Peduli Anak Bangsa)*. Jakarta: Litertur Perkantas, 2018.
- Himmah, Ulil, Munawir Yusuf, and Nur Arifah Darajati. "Identification of E-Module (Book Creator) Utilization as a News Writing Learning Media to Support Public Transparency." *7th International Conference on Learning Innovation and Quality Education (ICLIQE 2023)* 6, no. 2 (2023): 289–97. <https://jurnal.uns.ac.id/shes>.
- Michael Recard, Ana Widyastuti, Vina Febiani Musyadad, Dina Chamidah, Nenny Ika Putri Simarmata, and Hayani Emmi Silvia Herlina, Siti Saodah Susanti, Donald Loffie Muntu, Lastiar Roselyna Sitompul, H. Cecep. *Perkembangan Peserta Didik Konsep Dan Permasalahannya*. Medan: Kita Menulis, 2021.
- Ni Luh Ika Windayani, Ana Widyastuti, Emmi Silvia Herlina, Dina Chamidah, Rini Novianti Yusuf, and Karwanto Ince Weya, Dede Ajeng Arini, Agung Prihatmojo. *Pengantar Teori Perkembangan Peserta Didik*. Medan: Kita Menulis, 2021.
- Purba, Romirio Torang. "Perkembangan Moral Menurut Kohlberg Dan Implementasinya Dalam Perspektif Kristen Terhadap Pendidikan Moral Anak Di Sekolah Dasar." *Aletheia Christian Educators Journal* 3, no. 1 (2022): 11–20. <https://doi.org/10.9744/aletheia.3.1.11-20>.

- Puspitasari, Verdiana, Rufi'i, and Djoko Adi Walujo. "Pengembangan Perangkat Pembelajaran Dengan Model Diferensiasi Menggunakan Book Creator Untuk Pembelajaran BIPA Di Kelas Yang Memiliki Kemampuan Beragam." *Jurnal Education and Development Institut 8*, no. 4 (2020): 310–19.
- Suhendi Syam, H. Cecep, Ade Ismail Fahmi, Dina Chamidah, Wika Karina Damayanti, and Abdul Haris Agung Nugroho Catur Saputro, Nur Muthmainnah Halim, Emmi Silvia Herlina. *Pengantar Ilmu Pendidikan*. Medan: Kita Menulis, 2021.
- Tarigan, Yan Pratama, Bestian Simangunsong, Warseto Freddy Sihombing. "Children ' s Theology : Learning Media for Sunday School Children Using Book Creator in Indonesia." *The International Journal of Education, Theology, and Humanities* 3, no. 1 (2023).