Multimedia-Based Hypercontent Module Development for Early Childhood Education during Covid-19 Pandemic

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***Abstract*—Implementation of early childhood education during Covid-19 pandemic is a new challenge for teachers and parents. Therefore, it is necessary to develop a hypercontent module for early childhood education because the module does not only contain material in text form that can be read or viewed by students but also contains learning videos that contain direct explanations from the teachers regarding certain materials and animations that possible to increase students' interest. This hypercontent module for early childhood education research will be developed using ADDIE development model consists of 5 steps, Analysis, Design, Development, Implementation, and Evaluation. The Hypercontent module is developed based on the results of studies and analysis of learning needs, after that product development is carried out in the form of a multimedia-based hypercontent module that will be validated by experts, the module is then tested by teachers and students (parents) to produce a valid Hypercontent Module for PAUD, practical or easy to use by teachers and students as well as parents who accompany students to study from home. The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" which was developed using the ADDIE model, has met the criteria through the process and validation results by material and media experts as well as trials through assessments by teachers and students at PAUD Masjid Al-Muslimun Makassar City. As for the result, the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" was declared valid/feasible and practical/easy to use for learning with a material validation score of 4.8 (very valid), a media validation score of 4.6 (very valid), a teacher assessment score of 4.4 (good) and a student assessment score of 4.7 (very good).**

Keywords: Modul, hypercontent, Early childhood education, ADDIE

I. INTRODUCTION

Early childhood education in Indonesia is carried out before elementary school. The implementation consists of 3 kinds, they are formal education including Kindergarten and Raudhatul Atfhal, non-formal education including Playgroup and Child Care, and lastly informal education by families or the environment. Early childhood education has developed with increasing quality every year with various models, methods and strategies as well as teaching materials or innovative learning tools being used to help children keep developing themselves. The increased quality of education was tested by the outbreak of Covid-19 pandemic that entered Indonesia since the beginning of 2020. The pandemic affected various sectors, especially education, and early childhood education was no exception. Learning, which could initially be carried out face-to-face in class, could not be carried out as usual due to the policy of learning from home to break the chain of transmission of the very dangerous Covid-19 virus. Limited learning facilities and infrastructure make learning carried out through alternative means by utilizing various platforms such as Google, Edmodo, and social media.

Implementation of early childhood education during Covid-19 pandemic is a challenge for teachers and parents. The Ministry of Education and Culture has asked Early Childhood Education teachers not to give their students various tasks during Covid-19 pandemic. Children are given the freedom to play at home with parental guidance and supervision. However, even so, it means that education and development of early childhood education is not carried out because Covid-19 is not yet known when it will end. If it continues like this, implementation of learning process for early childhood education will not run according to learning purposes supposed to be achieved. Pramana (2020) stated that there are many challenges and obstacles in the implementation of learning at home, both by educational institutions, teachers, students and parents. With high motivation from teachers, one way to continue to carry out the teaching and learning process in early childhood education is to visit students from house to another house to provide guidance or learning instructions while still implementing health protocols.

Various learning innovations began to emerge from elementary school until higher education or college but not with early childhood education. It needs a special approach or model with appropriate learning media for children's education. Previously, one of the forms of development of learning resources or modules had often been encountered from print to digital form or ebook. Current technological developments make it possible to combine the use of offline or printed learning resources or modules as well as online or digital. According to the Director General of Primary and Secondary Education (2018), it is stated that module is a form of teaching material that is packaged in a complete and systematic way, in which it contains a set of learning experiences that are planned and designed to help students master specific learning purposes. The minimum module contains learning purposes, learning materials/substances, and evaluation. The module functions as an independent learning tool, so students can learn at their own pace.

The module is a unit of the smallest teaching and learning program that contains objectives, learning materials, to evaluation, according to Sudjana (2017), the module in detail contains several things, including other instructional goals to be achieved, topics that will be used as the basis for the teaching and learning process, the subject matter to be studied, the position and function of the module, the role of the teacher in the learning process, the tools and resources used, teaching and learning activities, and worksheets that must be filled out by students.

The development of the module in question is the hypercontent module. Hypercontent module is an innovation in developing a printed module in which there is a QR-code that can be scanned through a smartphone to see other learning materials or materials contained in the hypercontent module. The barcode's content can be in multimedia form such as images, videos, audio, and animations that have been prepared in advance for use or might combined with modules in printed form. Hypercontent does not only contain text, but also contains multimedia elements in images, animations, video and audio form. One way that can be used to connect learning content, both text content and integrated content, is with barcodes. Learning materials developed with a combination of Qr-code technology are part of information technology-based learning, where subject matter can be accessed and studied by students from inside the classroom as well as when students are outside the classroom. (Rahmadi, 2018). Multimedia is a collection of computer-based media with a communication system whose role is to receive or distribute information in the form of writing, images, audio, and video. (Susilowati, 2018)

Hypercontent module is an ICT-based learning resource which is basically learning by utilizing a network. Although the module is in printed form, the barcode embedded in it can be accessed through a smartphone that is connected to the internet. The concept of learning with hypercontent material sources is developing along with the rapid development of technology in information, especially with regard to online learning. Learning process that is systematically designed with hypercontent is called hypercontent designed instruction (Simonson, 2005). According to Harlina (2019), hypercontent is a

concept used to describe the existence of content or subject matter that is connected to other subject matter content simultaneously.

Education is currently being carried out online or learning from home, including early childhood education, so that parents who were previously confused about helping children learn from home can be helped and learning can be directed according to the instructions and materials that have been loaded in the multimedia-based hypercontent module. According to Isa (2015), learning materials accessed through barcodes are one of the actualizations of blended learning, which is understood as learning that combines face-to-face learning with non-face-to-face learning. The accessibility of learning materials that are linked to a QR-code is one of the characteristics of online learning because it can be accessed through the internet. The multimedia elements embedded in the QR-code can be seen and studied by the students through the smartphone of their parents or guardian who accompanies the students while studying. Parents help children to scan barcodes to open the multimedia elements of the hypercontent module and then watch or learn from them. The role of digital technology is also needed in facing 21st-century education. As it is today, the use of smartphones is familiar to both students and teachers (Bukhori, 2019).

Multimedia refers to various teaching materials that form one unit and combined in modules called kit so that they can be used for independent or group study without having to be accompanied by a teacher (Miarso, 2015). Combining various types of learning resources can provide different experiences for students, and also help heterogeneous students in understanding the subject matter. According to Rusman (2015) Multimedia can also be used in conducting simulations to train certain competencies. Multimedia display in animation allows students to conduct experiments without having to be in the laboratory.

Siang (2019) stated Hypercontent learning has a character that can be developed in learning tools, especially internet-based modules. Internet-based modules place users not only using the module as a learning resource, but also as a guide in learning, the stages that must be carried out and how the learning is carried out. Abdalraheem and Rabane (2006) also found the use of textbooks in the classroom is still very dominant so that by combining it with technology it is hoped that it can help improve the quality of learning. Komalasari (2020) Modules as teaching materials are one of the main factors besides teachers, students are learning facilities that support learning, so modules that are well designed according to students' needs will greatly assist the writing learning process.

Multimedia-based hypercontent modules specially developed for early childhood education can provide children with a more realistic learning experience compared to learning through instructions given by telephone or social media groups. Koderi (2017) stated digital modules are able to increase the effectiveness and efficiency of learning, increase motivation, activeness and student learning achievement, and increase the effectiveness of the learning process for teachers when used with smooth internet access. The learning videos inside module contain a direct greeting from the teacher, an explanation of the subject matter and also motivation from teachers to students. Various practical materials can also be explained and exemplified through videos or animations in hypercontent modules. Based on this explanation, the researcher believe that now is the right time to develop modules by utilizing technology for early childhood education, which is Multimedia-Based Hypercontent Module Development for Early Childhood Education during Covid-19 Pandemic in Makassar.

II. METHODS

This research uses a research and development approach which is used to produce certain products. Research and development according to Putra (2015) is a method that systematically aims to seek and find, formulate, improve, develop, produce, test the effectiveness of superior products, models,

methods, services, stages. The purposes to be achieved through this research and development are to produce modules multimedia-based hypercontent for early childhood education that is valid, practical, and effective to be used for both face-to-face and online learning due to certain conditions such as covid-19 pandemic.

Research and development oriented to products produced through research stages which include the validation process of feasibility, practicality and effectiveness. Sudjana (2009) stated to develop learning tools, a development model that is in accordance with the system and educational needs is needed. The model is a set of systemic procedures to demonstrate a process, such as a needs assessment, media selection, and evaluation of the product or learning process. In this case, the researcher will develop a multimedia-based hypercontent module for early childhood education using the ADDIE Model. A good learning resource is one that has passed the test and meets the criteria of being valid, practical, and effective. A good digital module must first be tested for validity, practicality, and effectiveness. (Yulkifli, 2022)

This model consists of five phases or stages, they are analysis, design, development, implementation, and evaluation. The ADDIE model was chosen because it is an appropriate development model to be used in research and development of learning products. The accuracy of selecting the development model is very influential on the resulting product. Whether the product is good or not, it can be seen from the application and benefits of the product for its users. (Maribe. 2009).

This study will test the subject consisting of content experts, media experts and PAUD teachers and PAUD students as users of the developed product. This research was conducted at Al-Muslimun Mosque Early Childhood Education Makassar. The test subjects were determined using the purpose sampling technique. Purpose sampling technique was carried out intentionally by the researcher in accordance with the research purposes. Instrument data collection used in this study included validation instruments by media experts and material experts, observation instruments for teacher and student activities, and response instruments for teachers and students (parents) after using multimedia-based hypercontent modules.

The data found in this study were then analyzed by collecting the results of the assessment, input, feedback, criticism, and suggestions for improvement through instruments obtained from assessments from experts, teachers and parents and students. The results of this data analysis are then used to revise the learning products being developed. Multimedia based hypercontent modules for early childhood education are validated prior to field trials. The goal is to obtain data from the developed instrument. After that, a trial was conducted to obtain data from users of learning products, which are teachers and students (parents).

III. RESULTS AND DISCUSSION

III.1 Result

III.1.1 Description of Multimedia-Based Module Development Needs

The curriculum that is constantly evolving and being updated makes every teacher required to be the person who understands the curriculum. In the curriculum analysis stage, the researcher examines the lesson plan that will be used by the teacher to teach. The initial focus of the researcher is to see the learning purposes that must be achieved by students. The researcher reviewed the lesson plan while conducting unstructured interviews with the teacher. The results show that there is an important material for early childhood education students to understand, which is “stunting”, considering the vulnerability of early childhood to the occurrence of stunting in them and can be an additional reference for parents in preventing stunting happen to their children. The process of education towards

an early age is believed to have cumulative effects that will be carried over and affect the physical and mentality of children along with their growth and development (Mansur, 2011). The application of appropriate and appropriate learning resources and media as needed will greatly help the child's learning process. The same thing was also conveyed by Novan (2012) that the purpose of ECCE is to develop various potentials of children from an early age as an initial provision before taking higher education so that they can easily adapt to their environment.

Teachers have implemented varied and interesting methods in face-to-face learning but still experiencing difficulties in online learning in the midst of Covid-19 pandemic. The online learning process is only through whatssapp group chats, besides the limited appropriate learning media for students make learning materials cannot be delivered optimally. Teachers also give instructions for parents to accompany their children while studying, but it is still not optimal because there are no references to guide parents at home in assisting their children to learn.

The age of early childhood education students at Al-Muslimun mosque in Makassar is in the range of 3-6 years old. Children at this age are very happy to play so that the learning process can be inserted or designed in games form in order to attract children's attention. Especially during the Covid-19 pandemic, learning carried out from home makes it difficult for parents to guide children to study or play but has learning values in it. The use of technology can be an alternative to attract children's attention, but students' limited ability and understanding can be a problem in learning from home. This is a challenge as well as an opportunity through the use of technology that is simple but can have a positive impact on early childhood education learning. These opportunities could become real with every parents' to guide their children in utilizing the technology for learning purposes.

Identification of student needs is part of problem identification, after conducting curriculum analysis and analyzing student characteristics. The needs of students are identified based on two aspects, namely material needs, namely to find out subject matter that is difficult or not yet understood by students and learning media needed by students in order to increase their interest in learning even though learning from home due to the covid-19 pandemic. The following describes the results of the identification of student needs.

Table 1 Students' comprehension about stunting

No.	Questions					Score (%)
	1	2	3	4	5	
S1	0	0	0	1	1	40
S2	0	0	0	1	1	40
S3	0	0	0	0	1	20
S4	0	0	1	1	1	60
S5	1	1	0	1	1	80
S6	1	0	1	0	0	40
S7	0	0	1	1	1	60
S8	0	0	0	1	1	40
S9	1	1	0	1	1	80
S10	0	0	0	1	1	40
S11	0	0	0	1	1	40
S12	1	1	0	1	1	80
Average Percentage						**51.66**

Based on table 4.1 on students' comperhension of material about stunting, the average percentage of 12 students who filled out the questionnaire obtained a score of 51.66%. The score indicates that students do not know about stunting and its prevention. This shows that students need stunting material to be studied with attractive learning designs. The scores obtained are in the lower category and become the basis for researchers in designing hypercontent modules based on material about stunting.

Table 2 Utilization of Multimedia in Learning Process

No.	Questions						Score (%)
	1	2	3	4	5	6	
S1	1	1	0	1	1	0	66,67
S2	0	1	0	1	1	0	50,00
S3	0	0	0	1	0	0	16,67
S4	1	1	1	1	0	0	66,67
S5	0	0	0	1	0	0	16,67
S6	0	0	0	1	0	0	16,67
S7	0	1	0	1	0	0	33,33
S8	0	1	0	1	1	0	50,00
S9	1	1	0	1	0	0	50,00
S10	1	0	0	1	1	0	50,00
S11	1	1	1	1	0	0	66,67
S12	0	1	0	1	0	0	33,33
Average Percentage							**43.06**

The data presented on table 4.2 on multimedia utilization in learning process, the average percentage of 12 students who filled out the questionnaire assisted by their parents each got a score of 43.06%. This shows that multimedia utilization in learning is still lacking, this is understandable considering the level of education and students' age who might not be able to use multimedia by utilizing advanced technology. However, during Covid-19 pandemic, multimedia utilization can be used as the best alternative through modules with simple technology that can be used by students with their parents' from home. These results become the basis for developers to design modules which is easy to use by teachers and students (parents).

III.1.2 Multimedia-based Hypercontent Module Development Design

The design of the multimedia-based hypercontent module is a follow-up to the steps of curriculum analysis, student characteristics, and identification of needs that have been carried out previously. At this step, the researcher will arrange the learning purposes and subject matter and create a storyboard for the multimedia-based hypercontent module.

The researchers made goals preparation and subject matter about stunting in coordination with Al-Muslimun early childhood education teachers. Learning objectives are arranged so that learning is well directed and can be a benchmark for teachers and students about learning objectives that must be achieved by students. Learning purposes that must be achieved by students using multimedia-based hypercontent module stunting material include mentioning the meaning of stunting, mentioning fruits and its vitamin content, distinguishing vegetables and fruit, mentioning the benefits of drinking milk, and mentioning examples of healthy and clean living behavior.

Utilizing a multimedia-based hypercontent module for stunting material which consists of several sub-materials, including nutrition (good and healthy food), activities (exercise and maintaining cleanliness), and a healthy lifestyle, it is hoped that it will facilitate the achievement of learning objectives. Researchers are very careful in preparing learning purposes and materials considering the level of education and students' age so that learning purposes and materials must be arranged and designed in such a way that they are easy to learn and understand by early childhood education students.

The preparation of the storyboard is carried out as a stage after the objectives and learning materials have been prepared by making sketch images that are made sequentially (plots) with the elements that will be included in the product being developed, namely a multimedia-based hypercontent module. Storyboard shows images in sketches form of multimedia-based hypercontent modules that will be developed, such as module's arrangement, texts' position, images, and videos. The product developed is a multimedia-based hypercontent module which there is a video developed by the developer himself and combined with videos relevant to stunting material.

Multimedia-based hypercontent module because in addition to images there are also greeting videos, explanations, and teacher instructions to students in learning stunting using a multimedia-based hypercontent module. The video that will be inserted in the module is made with a script that is adapted to the characteristics of the students so that the video able to attract their interest. In addition, researchers also pay attention to material proportion presented in text and video form, so it is appropriate and balanced to be accepted by students.

III.1.3 Overview of the Validity, Practicality and Effectiveness of Multimedia-based Hypercontent Modules

The development of multimedia-based hypercontent modules with stunting material in early childhood education Al-Muslimun Makassar guided by the learning objectives to be achieved, learning materials and storyboards that have been prepared in the previous stage. While the video that will be inserted in the module is the result of the direct recording process. The module is designed using attractive graphic images to attract students' attention. The module developed in a package consists of 2 modules, they are module for teachers and module for students.

The module for teachers contains descriptive material about stunting and how to prevent it. While the module for students contains a healthy lifestyle through the introduction of healthy and nutritious food and good activities to do in order to maintain health. The module for students also contains instructional videos and brief material explanations related to stunting and a healthy lifestyle embedded in the form of a QR-code and can be accessed by scanning the QR-code through a smartphone.

Table 3 Hypercontent Stunting Module Display

No.	Pictures	Description
1	 	Covers of teacher's book and student's l
2	 	Guidance
3	 	Material contained in module
4	 	Game in graphic form

This research product in is a multimedia-based hypercontent module which is still a prototype and entering the validation step by content experts and design experts. The multimedia-based hypercontent module, entitled "Aku Anak Sehat Pencegahan Stunting pada Anak", was then given to material and media experts for validation.

The determination of the validator refers to expertise in the appropriate field of science required by the development of this research product. Material and media validators have fields of knowledge and work that are in accordance with the research product being developed. Material validation test result data for multimedia-based hypercontent module material entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak", which has been developed, is given to material experts for feedback/assessment which is described as follows.

Table 4 Validation Results by Material/Content Expert

No.	Aspects	Indicators	Score	%
1	Content	Clarity of the material presented	4	80
		Learning materials in accordance with the national curriculum	5	100
		Conformity of the content in the module with the learning objectives	4	80
2	Language	The language used corresponds to the enhanced spelling	5	100
		Use easy-to-understand language	5	100
		Completeness of materials needed by students	5	100
3	Learning Quality	Providing new knowledge	5	100
		Easy-to-understand for the students	5	100
		Attract and motivate the students	5	100
4	Time	Material contained in the module can be studied according to the learning schedule	5	100
		Average Percentgae	**4.8**	**96**

The data presented on table 4.5, the subject matter that is presented in the multimedia-based hypercontent module material entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" obtained an average score of 4.8 with a percentage of 96% being in the very valid category. These results indicate that the material presented in the module is appropriate and feasible to use with minor revisions. While the two indicators, namely the clarity of the material presented and the suitability of the content of the module with the learning objectives, received special attention from the validator to add more interesting material and pictures considering that this module will be used in early childhood education. This is in accordance with the advice given by the validator in the assessment questionnaire.

The next stage is the design validation test. The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak", which has been developed, is given to media experts for assessment, which is presented in the following table.

Table 5 Validation Results by Media/Design Expert

No.	Indicators	Score	%
1	Color, text, and image compatibility	5	100
2	Image clarity	4	80
3	Accuracy of type and font size choice	5	100
4	Clarity of pictures and videos	5	100
5	Accuracy of background color choice	5	100
6	Compatibility of the text color with the backg color	5	100
7	Learning flow in the module is clear	4	80
8	Conformity with learning materials	4	80
9	Conformity of media with the learning purpo clearly conveyed	4	80
10	The color combination is contextual and inter	5	100
11	The layout of each page is balanced	5	100
	Average Percentage	**4,6**	**92,7**

The data presented on table 4.6 of the multimedia-based hypercontent module design entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" obtained an average score of 4.6 with a percentage of 92.7% being in very valid category. The validator states that the color combination used in the module is appropriate because it uses soft colors and people might not get easily tired when reading it. The validator also provides suggestions for adding explanations to the user manual regarding the need for parental assistance in order to use this module. These results indicate that the design in the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" is feasible and has met the requirements for the next step with minor improvements.

The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" was then revised according to validator's suggestions. After that, it was tested in the learning process, partly online from their houses and partly offline at Al-Muslimun Mosque early childhood education in Makassar considering that activity restrictions are still in effect due to COVID-19 pandemic. Teachers and students use the module during learning process and then provide feedback/assessments, specifically for early childhood education students, their parents helped them to fill out the assessment instrument for the module.

The responses/assessments by two early childhood education teachers to the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" include several aspects. They are the ease of delivering learning purposes, student activity, conformity to the students' characteristics, ease of learning process, suitability and clarity of the material as well as the quality of module's display.

The assessment of early childhood education teachers at Al-Muslimun Mosque on the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" is presented as follows.

Table 6 Feedback/Assessment by Teacher

No	Rated Aspects	Teache	Teache	Avera	%
1	Make it easier for teachers to deliver learning purposes	4	4	4	80
2	Activating students during learning process	4	5	4,5	90
3	In accordance with students' various characteristics	4	4	4	80
4	Easy to use and very helpful for learning process	5	4	4,5	90
5	In accordance with the subject matter being presented	4	5	4,5	90
6	Material presentation is evident and easy to understand	4	5	4,5	90
7	Display's quality is attractive	4	5	4,5	90
	Average Percentage	**4,1**	**4,6**	**4,4**	**87,5**

The results of teachers' response/assessment on the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" in table 4.7 obtained a score of 4.4 with a percentage of 87.5% which is in the good category. The teacher commented that this module was interesting because of there are various pictures and the type of paper used for the module. The teacher also gave suggestions to add reading material and pictures to the module.

The responses/assessments by students (parents) to the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" include several aspects, they are display's

quality, material clarity, conformity of images and text. Students in filling out the questionnaire were accompanied by their respective parents, considering that there were still some students who were not fluent in reading, understanding and filling out the questionnaire.

Table 7 Results of Students' (Parents') Responses/Assessments

No.	Questions						Avera	%
	1	2	3	4	5	6		
S1	5	5	5	5	5	5	5	100
S2	5	5	5	5	5	5	5	100
S3	5	4	4	5	5	5	4,7	93,3
S4	5	5	5	5	5	5	5	100
S5	5	5	4	4	5	5	4,7	93,3
S6	5	5	4	5	5	5	4,8	96,7
S7	5	4	4	4	4	4	4,2	83,3
S8	4	4	4	5	5	5	4,5	90
S9	5	5	4	5	4	4	4,5	90
S10	5	5	4	5	4	5	4,7	93,3
S11	4	5	5	4	4	4	4,3	86,7
S12	5	5	5	5	4	4	4,7	93,3
Rata-rata dan Persentase							**4.7**	**93,3**

The data presented on table 4.8, responses/assessments' results by 12 students who were accompanied by their parents on the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" in table 4.8 shows an average score of 4.7 with a percentage of 93.3% being at very good category. This shows that students accompanied by parents are able to use the module and make it easier for students to understand the material presented in the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak".

III.2 Discussion

The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" was developed using steps with reference to the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model. The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" can be used in printed form and file form during learning process. The research product consists of two modules produced in this development, they are teacher module which contains material on stunting and its prevention, while student module contains material on introducing healthy foods and activities that are good for health and it is equipped with a video that can be accessed through the QR-code because it has been embedded in the module. Embedding video in QR-code form on the module is called hypercontent.

Hypercontent is a technology that can be utilized for learning resources development. In this case, books or printed modules so that they not only contain text and images but also videos that can make it easier for students to understand certain learning materials. In addition, it can also contain greetings and study instructions, also to motivate students to keep studying when learning process cannot be carried out offline or face to face due to Covid-19 pandemic. According to Rahmadi (2018), Learning materials developed with a combination of Qr-code technology are part of information technology-based learning, where subject matter can be accessed and studied by students from inside the classroom as well as when students are outside the classroom.

The text and graphics in the module are designed to be easy to read, easy to understand, and attract students' attention to learn by using the module. Other than being able to be used for offline or face-

to-face learning, this module can also be used in distance learning or learning from home by students with parental assistance. This is in accordance with Rihlah's opinion (2020) that educators cannot work alone without parents' help who always accompany their children during online learning process considering the ongoing Covid-19 pandemic. Inside the module, there is a video embedded in QR-code which can be watched by parents and students to help the learning process from home. Nurlatifah (2021) stated children need to be guided and given direct examples in carrying out this clean and healthy lifestyle, so that they become more enthusiastic. Good communication and cooperation are the keys to the success of this clean and healthy lifestyle, even at this time, it is the key to efforts to live a peaceful life with the Covid-19 pandemic.

Embedding video makes the module contain various media elements that can help students to learn or it can be called multimedia. The multimedia elements in this module consist of text, images or graphics and video in QR-code form which is the main attraction for students in learning to use the module. With that being said, Arsyad (2016) stated that multimedia is something that aims to deliver information that is fun, interesting, easy to understand, and clear from a combination of elements of text, images, video, audio and animation.

Multimedia is in accordance with the demands of learning in the digital era with advances in information and communication technology. In addition, the use of interactive multimedia by teachers in learning is in accordance with the needs for the development of teachers' pedagogic competencies (Komalasari K, 2019). Babiker (2015) shows that multimedia is effective in learning so that teachers need to develop multimedia applications as sources and media in learning. Martín-Sanjosé (2015) had carried out tests that show statistically that the increase in knowledge in the classroom using computer games is better than in the control class without using computer technology for learning.

Through this study, researcher found that the production of a multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" is valid and feasible to use with very good criteria.

The module that has been developed is declared valid and feasible because it has gone through the process and stages of development starting from the analysis of learning needs to the production stage which is guided by the objectives, materials and storyboards and then validated by content experts and design experts. The results of content validation obtained a very valid score, which means that the material compiled in the module has been developed in accordance with the student's learning needs.

The results of the validation by design experts on the modules that have been developed get a score that is in the very valid category, meaning that the module designs that have been developed are in accordance with the needs of students, although there are still slight revisions based on the notes provided by the validator.

The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" was reviewed by the developer and then revised based on validator's suggestions. After that, a trial was conducted to obtain teachers' and students' responses/assessments. The results of the teacher's response analysis obtained a score that was in the good category. Through a trial to 12 students who were accompanied by their parents, shows a very good response. The result of the response given by teachers' and students', it shows that they have no difficulty in using the multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak".

The results of this development show that multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" is very easy to use by teachers and students ofcourse with parental guidance and this module also able to help teachers to explain learning materials to students.

According to Musyaffak (2014) learning media that contains multimedia content inside, such as images, videos, animations, text, and audio is very useful for students, because it is easy to use and could be a huge help during learning process.

The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" is also able to provide hands-on experience for students because the module not only contains material but also contains games in attractive graphic designs such as counting the number of animals and also a game which seeing and selecting the right path can be taken towards certain objects that can improve students' understanding of the material in the module. Saroinsong (2021), children are not always only given learning through (Child Worksheets), but children also need learning media that can be used anywhere and anytime. Saputri (2018) stated Interactive multimedia combined with games can help students understand the subject matter because it is in accordance with the characteristics of students who have an interest in the world of play.

Learning by utilizing a multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" in order to pay attention to several aspects, such as a multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" which can be used in printed or file form. The use of module by students when studying from home must be accompanied by parents. Parents are expected to assist their children in accessing videos embedded in the QR-code and can be scanned through smartphones connected to the internet.

IV. CONCLUSION AND RECOMMENDATION

The multimedia-based hypercontent module entitled "Aku Anak Sehat, Pencegahan Stunting pada Anak" which was developed using the ADDIE model has met the criteria for use in learning because it has passed validation tests by material and media experts and trials through assessments by teachers and students in early childhood education at Al-Muslimun Mosque Makassar. Test results on, the multimedia-based hypercontent module entitled “Aku Anak Sehat, Pencegahan Stunting pada Anak” is declared valid/feasible and practical/easy to use in learning.

The development of media or learning modules should be carried out by every teacher at all levels of education so that the media or modules used are in accordance with students' characteristics needs, especially for students at early age and elementary school. Teachers must always be able to continuing to develop their competencies, especially in developing modules or teaching materials by inserting technology in them. Parents need to actively assist students in learning, especially for children who are still at an early age or elementary school.

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