The Strategies of the Early Childhood Teachers to Provide Learning Activities at Home During the Pandemic of Covid-19

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Abstract. This research was cnducted to determine the learning strategies carried out by early childhood teachers in Indonesia during learning at home in the pandemic of covid-19. There are three points of issues. The first issue is about online learning or distance learning to provide a meaningful learning experience without being burdened with demands to complete all curriculum achievements for the requirement to go the next grade and graduation. Another point is about curriculum focusing on life skills education, including regarding the pandemic of covid-19. The third issue revolves around learning activities and assignments that may vary between students according to their respective interests and conditions, including considering gaps in access and learning facilities at home. The research employed an online survey. Data were collected from 576 respondents spread across Indonesia. Based on the data collection, about 46.7% of teachers developed lesson plans for online learning, and around 31.22% of teachers provided innovative learning at home. Further, about 22.08% of teachers communicated effectively with parents regarding the learning and assessment process. Some of the issues regarding learning at home are internet network facilities for specific areas and gadgets (for certain people). The solution is to opt for offline learning through local and national television or face-to-face learning at children's homes.

1 Introduction

The Covid-19 virus phenomenon that has swept the world has led WHO to consider this situation as a global pandemic. Through their policy, many state leaders have closed

their countries and closed all activities of their citizens to stop the transmission of the covid-19 virus. Likewise, the Indonesian government in March 2020 announced its policy to prevent the spread of the covid-19 virus, i.e., the work from home policy. The Ministry of Education and Culture, as an institution responsible for the education of Indonesian children, issued an online learning system policy. Online learning is regulated in the Ministry of Education and Culture Circular Letter No.4 of 2020 concerning the Implementation of Education in the Coronavirus Disease (covid-19) Emergency Period. The letter discuses three points. The first is online learning or distance learning to provide a meaningful learning experience without being burdened by the demands of completing all curriculum achievements as the requirement to go to the next grade and graduation. The second point focuses on learning competencies regarding life skills education, especially during the covid-19 pandemic. The last point states that learning activities and assignments can vary depending on student respective interests and conditions, considering gaps in access/learning facilities at home [1].

Referring to the ministry's policy, teachers, especially early childhood education teachers are required to modify all the learning strategy in their learning syllabus. In general, a strategy is an effort made to attain desired goals. Referring to the fourth edition of KBBI or the Indonesian dictionary, a strategy is careful planning of activities to achieve specific goals. The term strategy means "deciding which so to do." The point of this statement is that someone decides to do something [2]. In other words, the strategy is the design of a series of activities to achieve specific goals. In education, a strategy is defined as "a plan, method or series of activities designed to achieve a particular educational goal" [3]. It can be interpreted broadly that the strategy is the process of making decisions about a plan to be carried out.

Learning strategies are fundamental to optimize the teaching and learning process. Another advantage is that the teaching and learning process can be achieved optimally and according to the lesson plan [4]. The accuracy or appropriateness of choosing the strategy to be used in the learning process allows one to facilitate students to meet the expected goals in the learning process [5]. According to Newman and Mogan as quoted by [6], the basic concepts of teaching and learning strategies include four aspects: a) Determining specifications and qualifications for changes in learning behavior, b) Deciding approaches and solutions to teaching and learning problems, c) Choosing procedures, methods and techniques learn how to teach; d) Norms and criteria for the success of teaching and learning activities. Referring to the description of the strategy above, the strategy is everything that the teacher accommodates, such as setting goals, determining activities, determining communication methods, and determining evaluation, to ensure the attainment of goals.

With the covid-19 pandemic and the Ministry of Education and Culture's policy, teachers need to develop strategies that fit to the conditions of the children at home. However, teachers need to consider the basic elements of learning strategies to help students meet the learning goals. Thus, this study aims to obtain data on how early childhood education teachers' strategies are designed for learning at home during the covid-19 pandemic.

2   Method

The research employed a survey method through social media surveys and online interviews in collecting all data. Researchers sent a questionnaire through the WhatsApp and Facebook applications to obtain data from 576 respondents from Jakarta, Central Java, Yogyakarta, East Java, West Java, Bali, Banten, West Nusa Tenggara, East Nusa Tenggara, South Sumatra, Jambi, Lampung, West Kalimantan, East Kalimantan, North Maluku, and Gorontalo. This descriptive research employed a quantitative approach. The data analysis conducted in this study was content analysis. Researchers analyzed data obtained from 576 respondents. The data were displayed in the form of percentages using the SPSS-17 application, resulting in meaningful data, which answers research questions.

Criteria of the respondents were: 1) early childhood education teachers in Indonesia who can operate the internet via smartphones because respondents needed to fill the questionnaires through social media platforms, 2) implementing learning from home during the Covid-19 pandemic, and 3) willing to fill out a questionnaire.

3   Result and Discussion

Generally, the survey obtained 40 statement items consisting of 10 negative statements and 30 positive statements. The data from several trends in learning strategies carried out during the Covid-19 pandemic. Around 46.7% of teachers made online learning plans, around 31.22% of teachers provided innovative forms of learning at home, and about 22.08% of teachers communicated the learning process and assessment. This data can be seen in the following Fig. 1.

Based on the survey results, 68.1% of teachers compiled activity plans based on weekly activity plans previously designed, while the remaining 31.9% of teachers did not make plans based on the previous plans. Approximately 68.6% of teachers developed learning objectives based on semester programs designed at the beginning of each school year, yet 31.4% of teachers did not set learning objectives. Around 72.4% of teachers referred to basic competencies stated in the curriculum in designing games
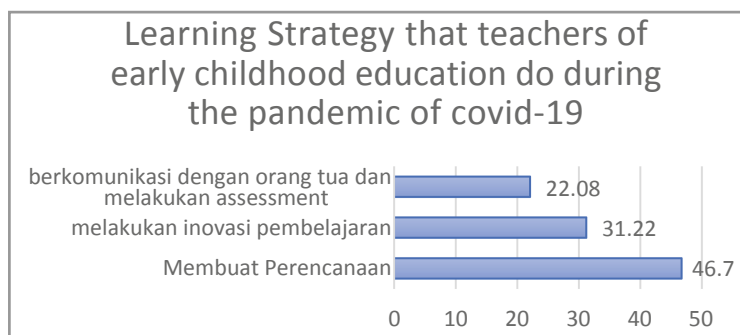

Fig. 1. Learning Strategy that teachers of early childhood education implemented during the pandemic of covid-19
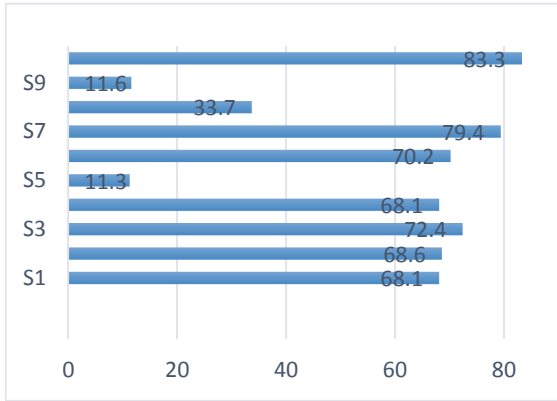
Fig. 2. Teachers Developing the Lesson Plan/Learning objectives for study from home activity

while studying at home, 27.6% of teachers did not refer to the basic competencies in designing the activities. In developing activities based on the learning material designed, about 68.1% of teachers developed the activities accordingly. Approximately 31.9% of teachers did not develop activities based on learning materials. Around 11.3% of teachers organized activities without looking at any references. In arranging activities based on the themes, about 70.2% of the teachers followed the theme. Still, 29.8% of teachers only assigned students to watch television learning programs by the government from their home. As many as 79.4% of teachers arranged activities based on the children's abilities. Only 33.7% of teachers arranged activities based on children's interests. Approximately 11.6% of teachers designed activities based on parents' requests. Lastly, around 83.3% of teachers did not create a list of children's activities during the Covid-19 pandemic, resulting in a monotonous activity, i.e., watching educational TV programs. This data can be seen in the following Fig. 2.

Based on the survey examining the teacher's form of activities, around 56.4% of respondents stated that they assigned students some tasks using Worksheets manually through an online application during the Covid-19 pandemic. As many as 70.5% of teachers provided practical life activities (helping with housekeeping, cooking, watering flowers, washing shoes, etc.). Approximately 50.7% of respondents provided craft activities (making masks from paper, drawing pictures, making stoves from cardboard, etc.). Only about 37.4% of teachers asked children to do activities that children love at home and asked them to compile their list of activities during the covid-19 pandemic. Furthermore, about 62.7% of teachers provided various and varied activities (practical life activities, worksheets, craft activities) for children at home every day. This data can be seen in the following Fig. 3.

Based on the survey results on the delivery of activity information to parents, most of the teachers (77.5%) provided information on activities every day through WhatsApp groups or other social media. Approximately 44.3% of teachers provided various activities for one week through WhatsApp groups or other social media to parents. There were 23.4% of teachers who did not provide games for children and instead gave instructions
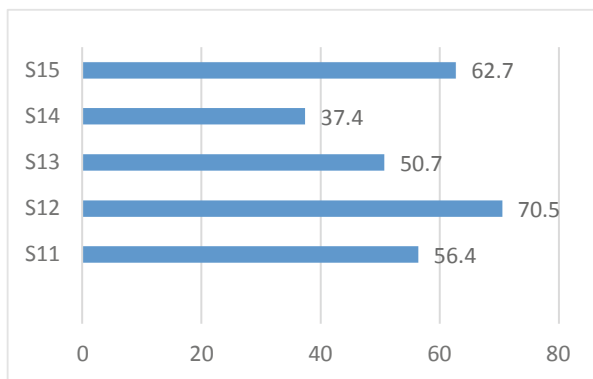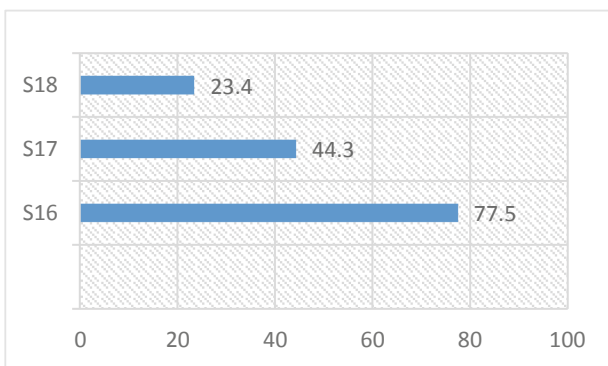
Fig. 3. Activities developed by the teacher

Fig. 4. The method of delivering information on activities to parents

about the activities children should do during the Covid-19 pandemic on the first day of learning at home. This data can be seen in the following Fig. 4.

Based on the survey results on communication between teachers and parents, specifically the forms and communication tools used, around 83.3% of teachers in schools created WhatsApp Groups to communicate with parents. This was done before the covid-19 pandemic and during the pandemic. About 36.3% of teachers use meeting platforms such as zoom, Google, and other meeting platforms. Based on the frequency of communication carried out, around 77.8% of teachers communicated with children every day, 42.7% do it once a week, and 40% do it every two weeks. About 10.5% of teachers never communicated with parents and children. Based on the subjects invited to communicate, 30.7% of teachers communicated with parents but not with the children while studying at home. 22.9% of teachers only communicated with children. About 82.4% of teachers communicated with parents and children. This data can be seen in the following Fig. 5.

Based on the survey on the form of documentation collected, 59.4% of teachers only asked parents to record children's activities using video. Approximately 69.8% of
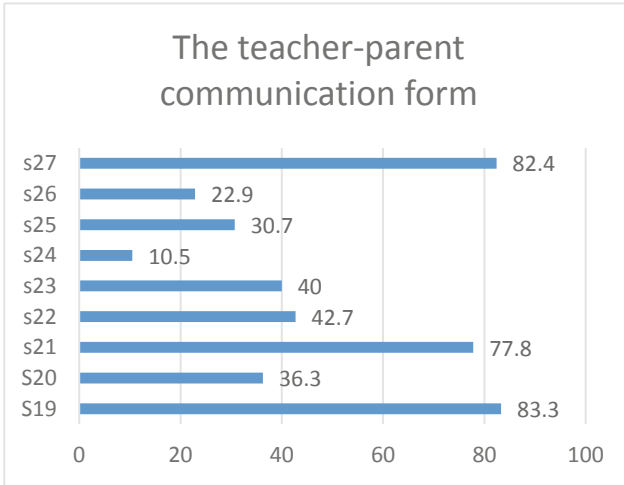
Fig. 5. The teacher-parent form of communication

teachers asked parents to take pictures of their children's activities for documentation. About 75.7% of teachers asked parents to record children's activities with videos and photos. About 33.5% of teachers recorded children's activities using videos and or photos and asked parents to write reports based on their observations. Only 37.6% of teachers asked parents to report children's activities through specific applications, such as Google classroom or other applications provided by schools. About 47.7% of parents keep the teachers informed regarding students' activities through WhatsApp statuses, and 76.9% of teachers asked parents to send documentation of children's activities via WhatsApp groups or personal messages. Only about 6.1% of teachers told parents not to have to report anything about children's activities at home. This data can be seen in the following Fig. 6.

Based on assessment types, around 60.8% of teachers analyzed parent reports' results through a simple application and linked them to the lesson plans and weekly programs. About 72.1% of teachers performed an analysis based on parents' documentation and linked it to the lesson plans and weekly programs previously designed. In terms of the assessment of children's activities based on predetermined basic competencies, around 55.1% of teachers assessed the activities. There are about 80.3% of teachers analyzed children's activity assessments based on child development. Finally, around 16.6% of teachers did not evaluate the results of parents' reports on children's activities at home. Most teachers assessed the students' activities based on the documentation submitted by parents. This data can be seen in the following Fig. 7.

Learning in early childhood at school stimulates children's development, including moral development, language development, physical development, cognitive development, and social-emotional development. Bredekamp [7] opines that early childhood education is a program that serves children from birth to eight years of age, which is designed to enhance children's intellectual, social, language, emotional, and physical development. Early childhood students need a learning program, considering they are
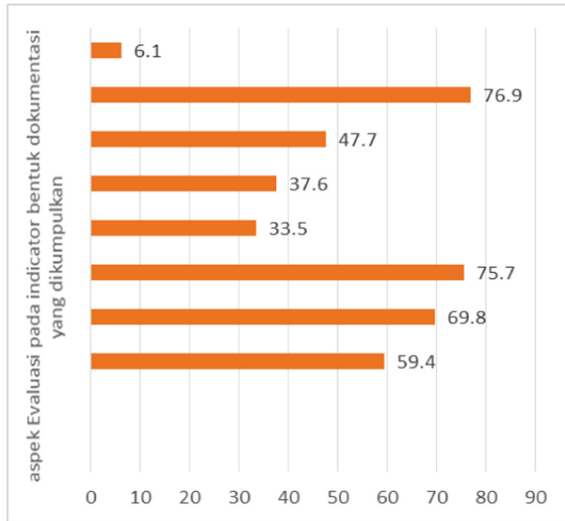
Fig. 6. The evaluation aspect on the indicators of the form of documentation collected
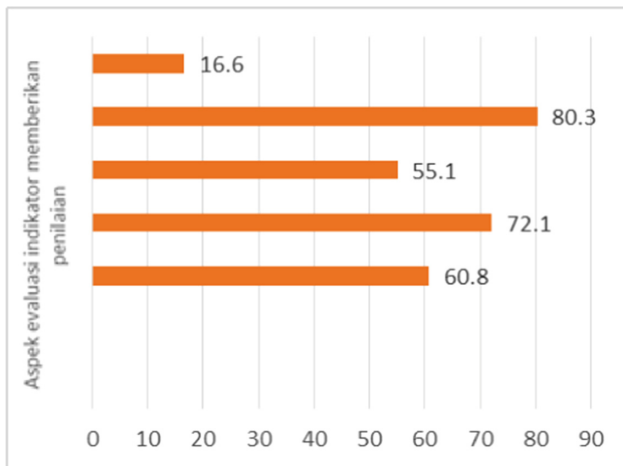

Fig. 7. Test results Electron transfer microscopy method of Titanium Dioxide (TiO2) Nanoparticles magnified 20.000 times.

in the golden age phase. The golden age is a period in which the development of the human brain occurs rapidly (up to 80% if it is maximally stimulated). This period only occurs once in a lifetime. For this reason, the golden age is also called a critical period, because if it is wrong to provide stimulation at that time golden age, the development of children can be disrupted throughout life [8].

Playing at home stimulates children's development naturally or spontaneously; thus, a school is a place where children get the stimulation that is deliberately programmed. It

is said to be programmed because schools develop various learning tools systematically. The teacher is someone who determines the success of learning, and so the teacher must have multiple skills to help maximize student development. These abilities include determining learning strategies that are in accordance with the characteristics of their students. With the Covid-19 pandemic situation, the government of all countries has made a policy of staying at home. Such a policy, without question, has implications for the learning system in schools, which must also be done at home. For this reason, teachers need to come up with strategies to optimize student development.

Based on the survey results, several teachers have implemented strategies according to their respective regions' conditions. Some areas with good internet networks will take advantage of a variety of online learning platforms, both synchronous learning system and asynchronous learning system (i.e., by sending videos or lesson plans to parents) [9]. Because of this system, learning can be optimally carried out as not all regions have good internet networks, and not all parents in Indonesia have the gadgets that meet the requirement for accessing online learning apps. The Education Office in each province continues to make online learning accessible for all, ranging from simplifying basic competencies (regulations) to implementing a home visit policy for areas with no internet access (this approach was conducted with strict healthy protocols).

The collaboration between teachers and parents is further strengthened to sustain the learning process. Some areas with good internet networks enable students to use various social media platforms, thus help teachers connect with the students and monitor learning progress every day. Parent cooperation is important, even during the normal situation, because it is one of the inherent and significant curricula [10] in schools. Parents are also an essential element in preparing school readiness for early childhood [11]. In the evaluation aspect, based on the facts from the survey results, the teacher continues to assess with parents' help. The teacher attempts to analyze the documentation and the students' work that parents have collected while studying at home. Thus, despite the Covid-19 pandemic, teachers still carry out their professionalism as a pedagogue. Teachers still make plans, carry out the learning process with parents' help and carry out evaluations to monitor children's development and improve learning activities [12].

Despite the pandemic, teachers still have to pay attention to learning strategies according to early childhood learning principles. The principles of learning through playing are as follows: (1) Children acquire knowledge through playing. This is in line with the learning theory by Frobel [13]. Playing is a fun activity for children to easily acquire knowledge and allow the information to be retained in long-term memory [14]. (2) Children as active learners; children will understand the knowledge through active learning [15]. (3) Children learn through their five senses (concreteness principle). Early childhood is the stage of cognitive sensory-motor development and concrete pre-operational [16]. (4) The activities is carried out in a conducive and innovative environment both indoors and outdoors. (5) Implemented with a thematic and integrated approach directed at developing intelligence's overall potential according to student interests [17].

4 Conclusion

Based on the survey results from 40 statement items consisting of 11 negative statements and 30 positive statements, several trends in learning strategies were carried out during the Covid-19 pandemic. Around 46.7% of teachers developed online learning plans, around 31.22% of teachers provided innovative forms of learning at home. About 22.08% of teachers communicate the learning process and assessment. Based on the results of research and discussion, the learning strategy carried out by teachers during the covid-19 pandemic is offline/asynchronous by 70.5%. Teachers provided practical activities or routine activities to enable students to help their parents with activities, such as housekeeping, cooking, watering flowers, and cleaning shoes. Approximately 62.7% of teachers provided various activities that blended practical life, worksheets and crafting. Of 576 respondents, around 68.1% of teachers arranged the lesson plans based on weekly program plans that had been made previously.

The learning objectives can be achieved and optimize children's development. These notions function as a recommendation for teachers to keep developing lesson plans, designing more diverse and meaningful activities. For parents, collaboration with teachers is not only carried out during the covid-19 pandemic. It is expected that the cooperation is sustainable because children's education is a collective responsibility.

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