IMPLEMENTATION OF DISTANCE LEARNING AND ASSESSMENT IN KINDERGARTEN IN EMERGENCY CIRCUMSTANCES

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Abstract. This study aims to get a clearer picture of distance learning (DL) in kindergarten and its assessment, to provide recommendations for policy options related to DL in kindergarten to optimizing students' development and abilities in the emergency. This study was randomly sampling subjects, which are principals, teachers, and parents who had kindergarten-age children. The data collection was through interviews, documentation, and questionnaires deployed by Google form. The results of this study showed that the best format of DL in kindergarten is blended. The assessment for this blended learning that can be done both by teacher and parents are by using communication forum and checklist sheets. Policy options for DL in kindergarten are the use of package modules/books, home visits, activity sheets, television and radio, and the coordination of the government at central and regional administration, and education stakeholders. These policy options become necessary because of the quality of DL based on the knowledge and skills of the teacher/parents that corresponds to the child's developmental stage. DL in kindergarten is the fulfillment of education rights to children in any circumstances. This effort optimizing the children's development of abilities and potential as expected.

Key words: Distance Learning, Assessment, Kindergarten, Policy

INTRODUCTION

Fulfilled to the education of Children is a must even in various conditions (Rahma, 2018). Indonesia that is closed with disasters-prone should prepare appropriate learning methods that suit in any circumstances, including for kindergarten. Kindergarten education is the most substantial period in a person's life because it's the foundation of a child's life that is constructed to determine further development. Therefore it is necessary to provide proper stimulation so that children have more optimal physical-motor, socio-emotional, and cognitive development. Besides, the development of learning strategies considering the characteristics and stages of a child's development are necessary.

One of the learning innovations that kindergarten teachers can do in emergencies is by doing Distance Learning (DL). Planned DL to minimize negative effects on a child's physical and mental health, resulting from the limited activity and lack of interaction with peers (Brazendale et al., 2017) (Brooks et al., 2020) (Wang et al., 2019). Therefore, the strategy in DL must be meaningful and enjoyable and remain maximizes the child's development.

DL define as a learning process that utilizing technology to convey learning materials through the media, and there is no direct contact between the teacher and the student (Yerusalem RM, 2015). Correspondingly, DL is learning that implements a system that teachers and learners do not directly interact within the classroom (Munir, 2009). There are technology utilizes in DL such as computers and the internet. Munir revealed the learning of DL can be done by using...
online meetings, real audio, real video, video conferences, discussion groups, or chatrooms.

DL was firstly developed by the University of Wisconsin in the United States in 1891 (Munir, 2009). The goal of DL is to facilitate people who want to learn but have not much time and find difficulty adjusting their learning schedule from their work hours. Various models of DL have been created to attract students (Cavus, 2015). The utilization of diverse learning resources in DL should still have appropriate and measurable learning stages (Lau et al., 2018). The effective learning methods applied should meet the principles and the characteristics of kindergarten students, such as learning through work, play, and living together with their environment (Asgiti, 2019).

Especially in kindergarten, DL can only be done in emergencies, because kindergarten students have not been able to study independently yet. Kindergarten students still need guidance from their parents or other adults especially when using written materials like modules or workbooks. Also, when DL using ICT/gadgets as facilities to learn (Sari, 2015), students still need guidance and limitation of time to use it (Novitasari et al., 2016).

Kindergarten students are very dependent on assistance from their parents or other adults. Therefore, school readiness is necessary with a various educational backgrounds of kindergarten teachers. Communication and socialization to parents/other adults before the implementation of DL is the success key to be more optimal in learning. However, face-to-face learning in kindergarten students remains the best, as kindergarten learning is mainly aims to a developed character.

Kindergarten children’s based on their development need others to assist the growth of their development aspects (Wulansari BY, 2019). DL in kindergarten is very challenging hence needs further study to provide the best recommendation in its implementation.

DL complexity for kindergarten starts with the absence of teachers directly, in the meantime they are required to optimize their pupil’s social-emotional development. On the other hand, most parents as guidance for children in studying at home, are hectic with their economic activities that can not be left behind. This creates contradictions because DL requires self-regulation, which is difficult to fulfill by kindergarten students. Therefore, this study is conducted to get a clearer picture of DL in kindergarten and the assessment to provide policy options for optimizing the ability and the development of the students. However, studies on DL in kindergarten are still infrequently implemented. Therefore, this study is necessary to be able to provide alternative solutions to the implementation of DL in kindergarten.

METHOD

The research methods used are mixed-methods with sequential explanatory strategy approaches. This approach is done to collect and analyze quantitative data followed by the collection and analysis of qualitative data built on preliminary quantitative results (Creswell, 2008). The use of mixed methods combines the power of both quantitative and qualitative approaches and allows for substantial exploration of a problem (Hong et al., 2014). It means questionnaires were developed, then conducted interviews to gain a further understanding of some aspects of quantitative response. According to the type of data required in this study, the instrument uses in this study is a type of non-test instruments.

The subjects of this study were principals, teachers, and parents who have kindergarten-age children. The sampling was taken from several kindergartens randomly. Their data is collected by questionnaires through a google form, interviews, and documentation. These instruments to obtain information related to the implementation of DL, such as information of sustainability of learning, learning modes, and skill and knowledge of the teachers and parents as pupils assistant. Processing techniques used are editing, coding, and tabulation. The data is analyzed by using non-statistical analysis for qualitative data and statistical analysis for quantitative data.
RESULT AND DISCUSSION

DL in kindergarten can be done in a state of emergencies because kindergarten students have not been able to study independently yet. The emergencies in this study referred to include (1) health emergencies; (2) an demographic emergency; (3) and conflict zone emergencies. This research aspect is an even distribution of learning opportunities related to the emergencies, with the focus on models of the DL, offline DL model needed, and materials needed by teachers for DL.

Questions posed to teachers through googleform concerning offline learning in DL, 35.7% some of them states that the appropriate DL form is a home visit. Through home visits, teachers can coordinate with the parents about the tasks that can be adjusted with the child's home conditions and provide an assignment that can be done together with the parents. Besides, teachers will have to acknowledge the situation of the child's home that allows an obstacle.

The questions asked to the parents and teachers during interviews and surveys are about the importance of learning needed for DL. It was obtained the majority of respondents, as many as 65.10% of parents wanted a parental guide to assist kindergarten students to study at home. The DL guidelines are needed so the parents can develop all their children's potential even at home. The survey results stated by 34.5% of teacher respondents are in line with the guidance needed. They wanted a guide on planning DL. This guide hopefully consists of how learning activities are prepared, so the objectives of the curriculum and the children's interests and needs can meet.

Aspects of learning tools

A clearer picture of DL and assessment to provide policy options related to PJJ in kindergarten to optimizing students' development and abilities in this study focuses on 3 aspects to achieve the expected objectives. There are Learning sustainability aspects, learning modus aspect, and Knowledge and skills aspects, with the following explanations: it is obtained in interviews with parents that as many as of respondents stated that the form of DL outside the network (without using the internet) is best suited to the current situation and conditions by using modules/package books. However, the results obtained during interviews with teachers obtained 77.8% of respondents stated prefer using the activity sheet. The results of the survey to teachers and parents showed that as many as of respondents answered the most appropriate is home visits. Judging from the results of interviews and surveys conducted by teachers and parents obtained revealed different results, some stated more appropriate to use modules/package books, some stated using the activity sheet, and others by making home visits.

The question of packaging the presentation of appropriate modules/learning resources according to the results of parent interviews obtained 38% of respondents answered the learning modules arranged based on the age of the learners. The results of interviews with teachers showed that 33.33% of respondents answered the learning modules based on the aspects of learners' developmental aspects and themes. However, for the survey results of teachers and parents obtained 38.6% of respondents answered 3, namely learning modules arranged based on themes. This shows that the packaging of the presentation of learning modules/resources can be arranged based on the age of the learner, aspects of development, and theme in accordance with the principles of learning-oriented towards the development of the child.

The use of devices based on interviews with parents and teachers showed that as many as 47.9% of respondents answered mobile phones and as many as 34.9% of respondents from googleform answered mobile phones. This indicates the use of devices that are easiest to use by parents and teachers in distance learning is using mobile phones. However, the survey results were obtained that as many as 48.2% of respondents answered can use laptops, mobile phones, zoom applications, google meet, and others.
However, for the form of DL in the network (using the internet) that best suits the current situation and conditions both the results of interviews with teachers, parents, and surveys of parents and teachers show that by using social media communication forums (such as WhatsApp). The data obtained from interviews with parents was 56.10%, teachers were 46.8%, while the survey data showed 17.9%. This indicates that the use of communication forums through WhatsApp is the easiest and the most familiar to the parents and teachers.

Related to barriers to the implementation of learning activities at home using the internet, as many as 17.5% of respondents answered the internet network unsta bil ity. This is because Indonesia's geographical condition is demographic, has consist of islands and oceans so to get internet access is rather difficult. Related to the obstacles of organizing learning activities in the off-network home (without internet use) showed that as many as 2.3% of respondents answered the situation and conditions, because of the parents work load, the time to accompany the child is not maximal, lack of parental support to the learning of learners, and also limited understanding of parents to accompany the learning of learners.

Analysis of Aspects of Knowledge And Skills of Teachers and Child Learning Assistants. Data shows that the majority of parents and teachers choose learning activities using the internet per week more than three times (69.60% of interviews with parents; 56.7% of interviews with teachers; 54.2% of teacher and parent questionnaires). This means that parents need teachers to accompany their children to study at home because children have a tendency to be more manageable when meeting with their teachers. More specifically, it was emphasized that the frequency of online learning was carried out once a day (95.2% of interviews with parents and 61.4% of teacher and parent questionnaires). This means that parents need teachers to accompany their children to study at home because children have a tendency to be more manageable when meeting with their teachers. More specifically, it was emphasized that the frequency of online learning was carried out once a day (95.2% of interviews with parents and 61.4% of teacher and parent questionnaires). Referring to the characteristics of cognitive development and ability to focus at the age of 2-6 years, children at the elementary level of kindergarten are able to survive to receive learning in a short time, this is in line with the data shown that more than 80% of parents and teachers choose to carry out online learning activities between 30 minutes to 1 hour per day.

Parents and teachers in their role as child learning assistants, need a multisensory learning resource experience (Hsiung and Deal, 2013), meaning that the learning resources need to accommodate children's learning needs by the stages of development. Most respondents chose the form of learning resources in the form of activity sheets (61.5% of parents and 54.5% of teachers) with the frequency of providing learning resources once a week (96.6% of teachers and parents). An activity sheet or worksheet is a learning resource that contains learning activities such as cutting, sticking, folding, coloring, drawing, and other activities based on the age level of child development. But it does not close the possibility that this activity sheet can be a source of supporting learning in online learning activities, which is measured through question items that respondents can use devices consisting of laptops, mobile phones, and zoom applications, google and the like (48.2% of teacher and parent respondents).

Referring to the evaluation aspect of distance learning activities, the majority of respondents chose that there needs to be a communication forum for teachers and parents to support learning assistance activities in their main home if distance learning activities are carried out without using the internet network (78% of interviews with parents; 60% of interviews with teachers; questionnaires 58.2% of teachers and parents). The learning assistance was also strengthened by the statement of 80.7% of respondents that the need for home visits as personal counseling for parents, namely activities to exchange ideas to maintain the mental health of parents during child care (Mikolajczak, Gross, Roskam, 2019).

About child learning evaluation, the majority of respondents chose a checklist sheet to detect the attainment of children's learning development (60% of interviews with parents, 51.6% of interviews with teachers, and 48.9% of surveys with parents and teachers). Checklist sheet makes it easy for teachers and parents to
control children's learning so that children do not become lost generation (www.unicef.org), which is the time when a generation loses their learning knowledge because they do not get optimal learning information. Through the checklist sheet, teachers and parents can collaborate to provide solutions to learning problems that occur in children.

Learning sustainability aspects based on the distance learning principles, there are divided into three: (1) Online learning where learning that uses the internet network as the main source in obtaining learning information; (2) offline learning is when using other media without having to connect through the internet network as a way of obtaining learning information, and (3) blended learning is learning using the internet network and without internet network as a way of obtaining learning information. These three types of DL can facilitate children with all circumstances, such as children, with no difficulties with signals and gadgets, as well as limited access to technology, signals, and can be used in various situations.

1. **Learning modus aspect.** The learning modus and learning resources can be accessed in the form of learning video recordings, live streaming, learning source links, flash drives containing learning source video files, to modules containing activity sheets.

2. **Knowledge and skills aspects of the teacher/parents.** Focused on teacher skills and willingness of parents to assist their children learning at home. So guidance for teachers and parents to support the optimization of children’s learning development is indispensable. This guide expected to contain a schedule of learning activities, media, learning methods, assessment of children’s learning developmental achievements, and how to deal with the learning motivation of kindergarten students.

From these three aspects, the most precise and appropriate DL in kindergarten for an emergency circumstance is blended learning which combines online and offline learning, and the form of is assessment. Here is an overview of the blended learning implementation and its assessment conducted in kindergarten as follows:

1. **Planning**
   a. Planning is an important part of DL thus children obtain stimulants to develop cognitively, physical-motor, language, socio-emotional, and religious-moral abilities to the fullest. Important for children to develop all aspects optimally. Planning tools that can be used to help teachers and parents in learning activities, including:
   b. A guide to parents, a which contains the schedule of learning activities in every meeting, learning topics of each meeting, activity sheets or media, various methods use, instructions, and steps for learning activities, as well as tips and tricks on the implementation of distance learning. A teacher guide, contains a schedule of learning activities per meeting, activity sheets, or learning media that needed, various methods had been used, instructions, and steps for the implementation of learning, as well as tips and tricks on the implementation of distance learning.
   c. Planning activities, basically, is the same as composing a daily learning plan (RPPH), but in distance learning, RPPH is packaged into a simpler form. This RPPH of focusing on the learning steps that contain: topics of the activity, indicators/learning objectives, the student grouping by the age stage, duration/frequency of learning, the media-materials used.

2. **Implementation**

   Learning tools for teachers and parents for online and offline learning at least contain the following components
   a. Publication of learning activities, The publication of learning activities can be done through social media as well as similar platforms like short messages. This publication is important as part of the
equalization and availability of access to learning information. In emergencies, for example, the publication of activities can be done by coordinating with local governments as well as sticking to some flyers or posters in strategic places.

b. Learning media, The provision of learning media such as activity sheets, origami paper, and the form of stationery become important for the implementation of distance learning activities. Online media such as zoom apps, google meetings, live streaming on youtube, and other platforms is important to prepare the implementation of DL that can be held effectively.

c. Learning methods, The implementation of distance learning is very different from learning directly. So teachers and parents need a strategy to implement DL. For example, before offline learning students are asked to finish project or experiment activities, and then when online learning, students are asked to present the process and ask for teachers' feedback. As offline learning, the parents need to master and learn the most effective methods to keep children enthusiastic when learning. Such as project methods, practiced through cooking activities. Invite the children to process cakes, make jelly, and cook rice, and after that retell the experience.

3. Assessment

Determine how to assess the result of the learning is necessary. Assessment mostly used for online and offline learning are:

a. Child Development Achievement Checklist. This list is important for teachers and parents to monitor children's learning achievements. Teachers are expected to give guidance things to learn. This guidance supposes not in the form of lectures, with a maximum duration of around 10 minutes. The list contains learning indicators that have been compiled in the planning section and structured very practically and easily to use by parents and teachers.

b. Teacher and parent communication forum. This forum contains feedback that can be used by teachers and parents about the assessment of the implementation of online and offline learning.

The online learning intended here is learning that utilizes technology, so direct meetings still can happen, for example using social media (WhatsApp Group) or other applications as a tool of learning. Offline learning is direct learning with a certain frequency of time conducted by the teacher by providing guidance/modules/activity sheets given as a guide for parents to assist the child in the learning process. Blended learning is intended by using online and offline learning. This blended learning is the most suitable and appropriate used in kindergarten.

The results showed DL conducted online mostly used WhatsApp Group created by teachers to convey learning, and to communicate with parents. This application is user friendly and common by parents and teachers. For virtual meetings, mostly used zoom, google meet and others. The use of virtual meetings adapted to the conditions of schools, teachers, parents, and students. Besides, the teachers and parents are still not familiar in using technology devices such as laptops, android mobile phones, and other learning apps.

Teachers for learning by using social media like WhatsApp Groups to providing learning materials or give tasks periodically to the children. Parents/companions are expected to assist their children in learning. When the task given are finished, parents provide the child's learning activities result such as photos, videos, or notes. Thus, teachers can provide feedback and assessments based on this. The obstacles faced by teachers and parents in the implementation of online DL are the limited availability of devices, internet quotas, signals, and poor network. Also, the various ability of parents and teachers in the use of technological devices.
Offline DL did by giving tasks periodically. The mechanism is parents come to school or teachers make home visits. Most assignments are done once a week. The task given is generally in the form of an activity sheet that can be done by children with an assist from their parents. Then, the parents return the results of the child's activities to the school or the teacher takes it back during the next visit to the student's home.

The obstacle to offline DL is not all parents can accompany/assist their children in the learning process due to economic or home conditions. The role of parents in learning is very important because teachers cannot visit every day. Besides, the ability of the parents to stimulate their child's development are varied. So that parents require guidelines or guidance to assist their child in the learning process.

Distance learning can also combine both online and offline learning. The learning process is also a combination of the two. For online learning, most of the parents use WhatsApp Group because it is user-friendly and commonly used. As for offline DL, teachers making home visits or parents come to school periodically to pick up and/or collect tasks, as well as consult with the teachers. Home visits are usually done once a week or once a month and bring a sheet of activities that can be used by parents to assist children to learn. The obstacles and difficulties of this learning are, the lack of stimulation obtained by the child because the teacher only visits once a week or once month. Another problem is that not all parents have an android mobile phone to access social media in learning. Also, parents' different abilities to assist children in homes. Parents work load is also another problem because not always parents can accompany the child in the learning process.

The blended learning in DL focuses on content like life skills, self-reliance, and religion. So needs to be monitored directly whether the content is received by students well. DL can be arranged by teachers weekly, so the assigned tasks allocate for one-week learning activity. The purpose of a weekly basis is not to burden students in doing the task. DL must contain at least the following components: schedule, program planning, methods and media, and assessment. The planning is arranged from the development stage theme, compiling learning materials, operational standards procedures (SOP), compiling schedules, and assessment. Examples of DL development implementations in kindergarten can be adopted, adapted, and developed by teachers. Based on the implementation overview and its assessment, the policy options are as follows:

1. **Teacher**
   a. Guide/Module/Pocketbook
      The most suitable and appropriate DL in kindergarten is blended learning. This is because at this age stage the child still needs an example that can be imitated. Also, parents and teachers want direct or indirect interaction happens between teachers and students. Therefore it is necessary to develop guidelines/modules/pocketbooks for teachers and parents in implementing the DL. The guide/module/pocketbook for teachers contains about 1) effective coordination and communication strategies between teachers and parents regarding learning activities and achievement of children's learning outcomes, types of tasks or activities that students will perform, flexible schedule of learning adjusting parental activities; 2) make the plan of learning at home so that the activities can meet the objectives of the curriculum, interests, and needs of the child to develop as optimally as possible; and 3) guidance/tutorials how to use technology devices and applications that are used in the learning process.

Giving inspiring activities in various modes is also necessary for teachers because not all teachers have the same ability to create and innovate DL plan activities. The guidance/module/pocketbook is arranged based on expected form like the age stage of the learner, development aspects of the child, and...
themes. Accordance with the principles of learning-oriented towards the child development stage. It needs to be noticed in developing a guide/module/pocketbook, to consider the cognitive development characteristics of students aged 2-6 years, who can focus on learning within between 30 minutes to 1 hour per day.

b. Activity Sheet
Kindergarten students with a range of ages 2 - 6 years need a multisensory learning experience (Hsiung, S.C., & Deal, 2013). It can be accommodated with an activity sheet. The primary use of this activity sheet is for parents and teachers who have limited knowledge, skills, and access to learning resources online. However, it still possible that this activity sheet to supporting learning resources in online learning activities, which use devices like laptops, mobile phones as well as zoom applications, google, and others. This activity sheet can be used as a therapeutic medium that makes it suitable for emergencies. The activity sheet consists of various activities that interactive and fun. It is believed can treat post-catastrophic trauma in a child. The activity sheet contains learning activities such as cutting, sticking, folding, coloring, drawing, and other activities based on the child's developmental age. Specifically, the form of learning resources is based on thematic integrative. The activity sheet covers all aspects of developing children from cognitive, psychomotor, and psychosocial which are integrated.

c. Home Visits
Indonesia's diverse geographical makes teachers home visit a fairly important part of the DL. Teachers Home visits are expected to provide learning resources to support parents in assisting their children while learning at home. It also evaluates how DL that had been done as well as strengthening and motivating students. The assessment form carried out during home visits is teachers' and parent's communication forums. Where parents can exchange thoughts, convey complaints, obstacles so that teachers can provide solutions when accompanying the child to study. This is important because children tend to be more manageable when meeting their teachers.

d. Learning assessment used besides communication forums is a checklist sheet. These sheets use to detect the development of stability of children's learning. The development of the children needs to be controlled to avoid losing knowledge due to not getting optimal learning information. The checklist sheet is one of the assessments that both teachers and parents can provide solutions to learning problems that occur. This checklist sheet can also be used to develop a character. Teachers are given a checklist sheet so that parents can fill in activities that the child does.

2. Parents
Guidance/modules/pocketbooks for parents hopefully can guide parents who assist students to study at home so that all their potency can develop optimally. Parents hope can ensure that their child has a meaningful and challenging learning experience that corresponding to a child's abilities and needs. Parents need teachers to provide clear assignments and can be done independently by the student's so that parents do not feel burdened. Therefore, it is necessary to arrange appropriate guidelines/modules/pocketbooks for parents that easy to use by students to learning at home.

The diverse abilities of parents and the socio-economic condition of the parents also affect the child's learning at home. Therefore, this guidance/module/pocket book can give assignments that fulfill the principles of students learning such as fun, challenging, and self-established. Also, this guidance/module/pocket book hopefully has substance.
as if tips on how to assist the child during learning at home, how to communicate during the learning process, and how to use the device/application in the learning process. Besides, the learning process should be coherent and equipped with indicators of learning achievement, so it easier for parents to assist the students learning process as well as their child's development.

Economic support and parental involvement in supporting children readiness for school still needs to improved because the economic and parents' education background still inadequate to provide the facilities and infrastructure to support the readiness of early childhood student to the next level of schooling (Nurhayati, 2018).

3. The Government
a. Television and Radio Media
Indonesia's current geographical and socio-economic conditions require technology devices with a wide range of learning resources in every household have. An alternative learning resource means here are to maximize the utilization of television and radio channels. A broader scope of Television and radio programs can develop by cooperating with related parties in the region. Television and radio programs should be varied and be interactional.

b. Coordination between central, local government, and other education stakeholders
Good coordination between the central and local governments regarding the implementation of DL in kindergarten is inevitable. Not only related to policy and budget, but also in the information medium that directly affects the learning process. Therefore, universal contributions are needed from educational stakeholders optimally

CONCLUSION
Based on the results of this study, DL in kindergarten is more appropriate by using blended learning so that DL learning becomes more optimal for the development of emotional-social aspects and the readiness of parents as a companion at home. The assessment form for DL uses a checklist sheet, and the teacher and parent communication forum is the most appropriate and easy to do. This assessment can be used to detect children's learning development skills because they do not get optimal learning information in an emergency. Policy options for DL in kindergarten are the use of modules/package books to prepare parents in accompanying their children to study, home visits by teachers, activity sheets, television, and radio, as well as government coordination in central and local areas, as well as education stakeholders. DL in kindergarten is one way to realize quality education by providing opportunities for educational stakeholders to be able to contribute and cooperate.

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