SSN:2509-0119



Vol. 33 No. 2 July 2022, pp. 222-229

# E-Learning System Implementation Program for Kindergarten Level

Mercurius Broto Legowo<sup>1)</sup>, Budi Indiarto<sup>2)</sup>, Deden Prayitno<sup>3)</sup>

<sup>1,3</sup>Department of Information Systems

<sup>2</sup>Department of Informatics

Faculty of Information Technology, Perbanas Institute

Jakarta, Indonesia



Abstract—The Community Partnership Program, the form of mentoring the implementation of the E-Learning System for the level of kindergarten, is a new paradigm in community service activities that support improving kindergarten-level learning through the e-Learning System implementation. This program aims to implement Social Learning Theory in the implementation of the E-Learning System, and to assist in the management of E-Learning at the Kindergarten level, especially during the Covid-19 pandemic. This case study had conducted at the Fatahillah Islamic Kindergarten in the Depok area, West Java, Indonesia. The general problem in this study reveals that most Kindergarten teachers and parents in children's education have a lack of understanding of social learning in the elearning system and a problem of lack of understanding by managers to understand the operational procedures for managing the elearning system. The results of this study in this program assisted in the making of learning modules based on social learning theory and assistance in managing e-Learning systems. In this study, the program has contributed to the implementation of good e-learning, at the Kindergarten level in the Depok Region of West Java, especially in the Fatahillah Islamic Kindergarten.

Keywords—E-Learning System; mentoring; social learning; kindergarten

### I. INTRODUCTION

Early childhood is a time of imbalance because children are out of focus which causes them to be easily carried away by emotional outbursts so that they are difficult to guide and direct[1]. At this time, parents are not only preoccupied with learning problems in their own children, but also need a way of social interaction for the formation of good behavior and stable emotions in individual children. Early childhood education is education that still requires the guidance of parents or adults around them [2]. The role of schools and teachers is very large in learning healthy living in children. Schools play a role in providing commitments to make regulations that support the progress of social education for their students[3]. Digital literacy should be introduced since children are still at an early age in the form of activities or playing activities while learning to form and build a strong character foundation in a child, one of which is children's social sensitivity[4]. The application of social learning theory in the e-learning system at the Kindergarten education level will present a very important role, namely in implementing the acceleration of the learning process of Kindergarten students during the Pandemic. The learning process from home through online learning should ideally still be able to accommodate the learning needs of students to develop talents and interests according to their education level, namely Kindergarten[5].

A common problem for most kindergarten teachers and parents in children's education is the lack of understanding of social learning, especially during the Covid-19 pandemic. Not realizing that this can make it easier to market their products through social media or social networks, which are the platforms most often used by the public.

The existence of Kindergarten in the West Java Provincial Government, especially the Depok area is very strategic in the context of early childhood education and local kindergarten students. For this reason, to improve the learning process through the e-Learning System at the Kindergarten level in Depok, West Java, it is necessary to get more serious attention in order to increase the ability of school managers, especially their teachers to compete by making programs for implementing Social Learning Theory in e-learning at Kindergarten Level.

Bandura, as a pioneer of social learning theory suggests that social learning theory is the view of psychologists who emphasizes behavior, environment, and cognition as key factors in the development of children's personalities[6]. Social Learning Theory views the formation of individual personalities as a response to social stimuli[1]. In this theory learning is done through observation, mental state of the surrounding environment, and changes in individual behavior after making observations (attention, remembering, reproduction of motion, and motivation). This is what will be implemented in the Kindergarten e-Learning System, which can be website-based[7], or through Mobile Learning[8], which is appropriate for children. preschooler. Kindergarten education is one level of education that implements e-learning learning methods during the Covid-19 pandemic[9]. Learning through the e-learning system is learning that eliminates distance and time with the help of an internet-based digital platform so that it supports the learning process without any physical interaction[8]. On the other hand, e-learning-based learning sometimes makes students feel bored, because the things that are displayed are only the same things every day, namely the teacher provides material through agreed learning media and students collect assignments given by the teacher to their students. However, a study shows that the effectiveness of online learning during the Covid-19 pandemic carried out by teachers and children in kindergarten has been effective[5]. The application of Social Learning Theory in the E-Learning System is expected to be able to produce kindergarten students who still have the individual character of children who have social sensitivity both in the family and society.

The target audience of this PKM program are Kindergarten teachers, especially those at Fatahillah Islamic Kindergarten, as a case study located on Jl. Swadaya II No.81, RT. 05 / Rw 02 Beji, Depok, West Java. Fatahillah Islamic Kindergarten as a business entity in the management of Early Childhood Education includes an A-accredited Islamic Kindergarten, which has been licensed since October 28, 1982 with a permit from the Regional Office of the Ministry of Education and Culture of West Java No:1393/BPD/1982. however, school management has consistently received attention in the community, especially in the Beji area, Depok. The average student who is educated per academic year is 45 students who are divided into 3 classes where TK B is 2 classes and TK A is 1 class from a class capacity of 4 classes with 20 students per class. The solution for understanding in applying social learning theory in the E-Learning System at the Kindergarten level is by providing assistance in the form of education and counseling by the PKM Team, so that it is hoped that it will be able to produce kindergarten students who still have the individual character of children who have social sensitivity. both in the family and in society. Another solution is to provide an understanding of the management of the e-learning system in Kindergarten so that the online learning process runs as it should.

The main purpose of the Community Partnership Program (PKM) is to develop a group of people who are not economically productive (general/ordinary people), help create peace and comfort in social life and improve thinking, reading and writing skills or other skills needed [9]. In particular, the Mentoring Program in implementing the e-Learning system for Kindergarten level in the Depok Region of West Java, including:

- (1) Overcoming the problem of interaction and social sensitivity in the online learning process by providing counseling on how to apply social learning theory in kindergarten e-Learning,
- (2) Overcoming the problem of interaction and social sensitivity in the online learning process by providing comprehensive e-Learning System training.

It is hoped that the Community Partnership Program for the socialization of mentoring programs in the implementation of the elearning system at the kindergarten level has a real contribution to support the government's pre-school education program.

# II. METHOD OF IMPLEMENTATION

The method of implementation of this community partnership program is a combination of training, workshops and practice. The training is intended to deliver material on snacks, canteens and a healthy school environment; while workshops and practices are held to provide skills to teachers to create interactive and interesting learning media for students. This means that schools and

teachers are not only given ready-to-use materials, but also given training on making learning media according to the Independent Curriculum at the kindergarten level. The results of the workshop can be applied in learning with students. The basic contribution to the target audience is for schools to understand the importance of implementing social learning theory in a structured e-learning system in the kindergarten curriculum, and obtaining a fun and interactive learning model for students online.

The method of implementing the Community Partnership Program explains the steps in implementing the solutions offered to overcome the problems of PKM partners in this case, Fatahillah Islamic Kindergarten. Illustration of the method of carrying out activities, shown in Figure 1.

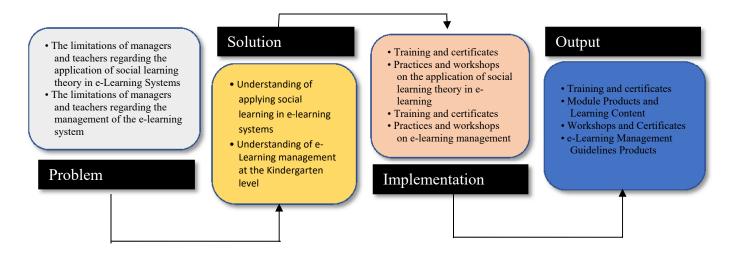


Fig. 1. Flow of Implementation Method of Community Service Activities

To achieve the objectives of this PKM program, proper implementation methods must be used and the participation or involvement of PKM partners must be used. Meanwhile, the description of the stages of implementing activities and partner participation are tabulated in Table 1 and Table 2. While the evaluation of program implementation and program sustainability is shown in Table 3.

### A. Methods of Implementation of Activities Related to Problems

The method of implementing activities is related to the stages in 2 (two) different problem areas that are handled by partners, as shown in Table 1.

**Problems Implementation Method** No The limitations of teachers and guardians of • Training for understanding the application of social learning students regarding the application of social learning theory to the learning process in the learning process through the e-Learning • Practices and workshops in the field of the learning process by system making kindergarten learning modules 2 The limitations of managers and teachers in • Training for understanding related to e-Learning system understanding and managing the e-Learning system management in kindergarten • Practices and workshops on e-Learning system management

technology

by understanding technical matters related to science and

TABLE I. METHODS OF IMPLEMENTATION OF ACTIVITIES RELATED TO PROBLEMS

# B. Partner Participation in Program Implementation Method

PKM Partners are expected to participate in the implementation of activities proposed by the PKM Team, related to what programs are implemented and how PKM Partners participate, as shown in Table II.

TABLE II. PARTNER PARTICIPATION IN PROGRAM IMPLEMENTATION

No	Program Implementation	Partner Participation
1	Provide education and training in the application of social learning theory for the learning process through the kindergarten e-Learning system	Providing a place, attending education and training on the application of social learning theory for the learning process through the e-Learning system kindergarten
2	Provide education; Education; Training in e- Learning system management	Provide a place, follow Education; e-Learning system management training

#### C. Evaluation of Program Implementation and Program Sustainability

The description of the steps for evaluating program implementation and program sustainability in the field after PKM activities have been completed, is described in Table 3.

TABLE III. EVALUATION OF PROGRAM IMPLEMENTATION AND PROGRAM SUSTAINABILITY

No	Evaluasi Program	Keberlanjutan Program	
1	Provide education and training in the application of social learning theory for the learning process through the kindergarten e-Learning system	Has learning modules that are influenced by the application of social learning theory in its e-Learning system	
2	Provide education; Education; Training in e- Learning system management	Have knowledge and skills to manage Kindergarten e- Learning System effectively and efficiently	

### III. RESULTS AND DISCUSSION

The results of the Community Partnership Program include the results of the implementation of education and training programs in the application of social learning theory and the management of the e-learning system. Furthermore, the results of these results are discussed by the PKM Implementation Team. Location Survey of PKM Partners in the Early Stages of PKM in early 2022 for 2 weeks on a date in January at Kindergarten in Depok, West Java.

# D. Results of the E-Learning System Implementation Assistance Program

This PKM partner is the Fatahillah Islamic Kindergarten in the Depok City area, West Java which is an early childhood education institution that has been established since 1982 and currently has an A accreditation. Determining the solution to the problems of PKM partners in this PKM program will answer the main or main problems faced by partners as follows:

(1) The solution to overcome the problem of social interaction and sensitivity in the online learning process is by providing counseling on how to apply social learning theory in Kindergarten E-Learning through this community partnership program. The results of implementing Social Learning Theory in E-Learning from the implementation of PKM activities are as follows: In this training activity, the teacher is free to choose the type of Daily/Weekly Learning Plan for which the learning module will be made. The results of the training on the application of social learning are shown in Table IV.

TABLE IV. APPLICATION OF SOCIAL LEARNING THEORY IN KINDERGARTEN E-LEARNING SYSTEM

SOCIAL LEARNING THEORY	KINDERGARTEN LEARNING THROUGH E-LEARNING SYSTEM			
Atention	Learning -1	Discussion-1	Documentation-1	
Pay attention to the behavior of the model to be able to learn it	Inviting children to pay attention to garbage in the school environment	The teacher makes a discussion about children's attention to garbage and cleanliness	Video about behavior in models related to waste and waste hygiene in an environment, either at school or at home	
Retention	Learning -1	Discussion-1	Documentation-1	
Individuals learn to record events that he wants to imitate in his memory system	Listen to a story from a book or video about the importance of cleanliness	The teacher makes a discussion about the importance of cleanliness	Video about behavior in models related to waste and cleanliness	
Reproduction	Learning -1	Discussion-1	Documentation-1	
Individuals tend to show their abilities or reproduce what they remember in the form of behavior	Pick up trash and distinguish organic and inorganic waste	The teacher makes a reflection on the student's shortcomings regarding the type of	Video about children's garbage collection and differentiating types of waste (parents can make it at home)	
		waste	,	
Motivation	Learning -1  Making simple trash can		Documentation-1	

The principle is easy to make and does not burden educators administratively, but needs to be present as part of the learning documentation as well as a reference in reflecting and assessing students' learning. Based on the "Free Curriculum" for the level of early childhood education (PAUD) or kindergarten. The Independent Curriculum is a curriculum with diverse intracurricular learning, where the content will be more optimal so that students have enough time to explore concepts and strengthen competencies[10]. There are 4 learning themes, such as: I love the earth, I love Indonesia, Play and learn together, and My imagination. So in this training, the theme "I Love the Earth" was chosen with the topic "Softing Garbage". Learning objectives with these themes and topics for Learning Outcomes (CP) of religion and character are to demonstrate good behavior and noble character, while for the achievement of identity learning, namely to maintain personal hygiene and health, recognize and understand information. For the achievement of basic literacy learning is to show curiosity, increase awareness in preserving nature, the physical environment and the social environment.

The types of solution outputs that the solution is based on include:

- 1. Training Documentation for implementing social learning in e-Learning System
  - 2. Module application of social learning theory in e-Learning system.
- (2) The solution to overcome the problem of managing online learning during the Covid-19 Pandemic is by providing training in the overall management of the e-Learning System through this community partnership program. This training aims to provide

an understanding of Kindergarten managers and teachers regarding the scope of the E-Learning system, specifically the Learning Management System for Kindergarten education levels. The scope described in the training is shown in Figure 2.

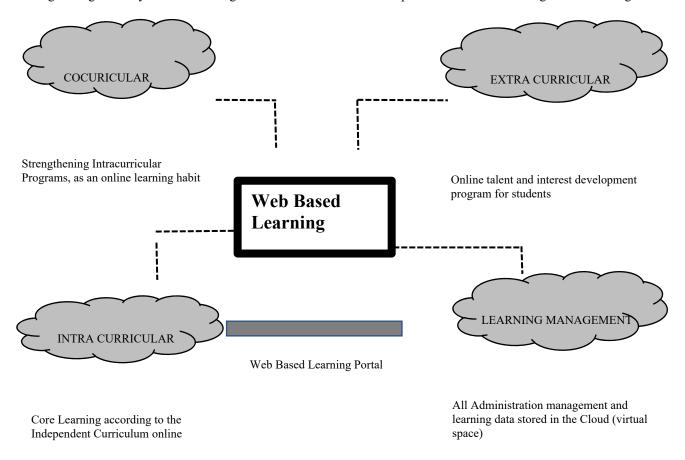


Fig. 2. Scope of E-Learning System Management

The types of solution outputs that the solution is based on include:

- 1. Documentation of e-Learning System management training effectively and efficiently
- 2. Guidelines and procedures for managing the e-learning system for kindergarten

# E. Discussion

The results of the evaluation of the implementation of this mentoring program based on activities in the field that have been carried out, specifically for kindergarten managers and teachers as partners in this PKM, can be shown in Figure 3.

# **Evaluation of Mentoring Program Activities**

- Understanding of Kindergarten level e-learning system management
- Understanding the application of social learning theory in e-learning systems

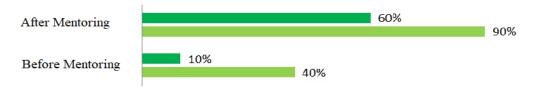


Fig. 3. Evaluation of the Implementation of Community Partnership Program Activities

Based on the results of the evaluation of the implementation of e-learning mentoring activities at the Kindergarten level for kindergarten managers and teachers who followed it, it was revealed that the understanding of the application of social learning theory in e-learning increased from 40% to 90% of kindergarten managers and teachers began to understand learning social media applied in the e-learning system. Meanwhile, at the time of the activity to understand the management of the e-learning system at the kindergarten level, from 10% of MSME participants had not used it, 60% of MSMEs had an agreement to make e-learning system management guidelines.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

The students of Kindergarten or Early Childhood Education Programs are the generation that will determine the future of the Indonesian nation. The Community Partnership Program (PKM) in the form of mentoring the implementation of the E-Learning System at the Kindergarten level is a new paradigm in community service activities that support improving the implementation of kindergarten-level learning through the e-Learning System.

The success rate of program implementation is measured by the outcomes achieved. The outputs of this program are (1) learning modules that apply social learning theory in e-learning materials at the kindergarten level; and (2) guidelines for managing Kindergarten learning through the e-Learning system. The results of this PKM evaluation showed a significant increase in the knowledge of kindergarten managers and teachers. To keep the outcomes of this program sustainable, the results of the training can be followed up on other themes and topics in the independent curriculum, then teachers can develop their own learning media for students without going through the mentoring process from the PKM Implementation Team.

As a suggestion from the evaluation and sustainability of the program, the community empowerment program must be able to make the school continue or follow up the program independently.

# V. ACKNOWLEDGEMENT

The author would like to thank the Directorate of Research and Community Service (DP2M) Perbanas Institute-Jakarta for its full support in the Community Partnership Program (PKM) in 2022.

# REFERENCES

- [1] Q. Ainiyah, "Social Learning Theory dan Perilaku Agresif Anak dalam Keluarga," *J. Ilmu Syari'ah Dan Huk.*, vol. 2, no. 1, pp. 94–98, 2017.
- [2] Y. K. W. Widiastuti, U. E. E. Rasmani, and S. Wahyuningsih, "Mengkaji Penerapan E-Learning pada Anak Usia Dini," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 5, no. 2, pp. 1240–1247, 2020.
- [3] A. Triwijayati, Melany, F. S. W. W. B, L. L. Wilujeng, B. Pramudya, and D. Prasetyo, "Pengembangan Media Pembelajaran Interaktif pada Guru Guna Meningkatkan Pemahaman Siswa akan Jajanan Sehat," *Int. J. Community Serv. Learn.*, vol. 4, no. 2, pp. 98–108, 2020.
- [4] S. Shomiyatun, "Menanamkan Budaya Literasi Pada Anak," *Abdau J. Pendidik. Madrasah Ibtidaiyah*, vol. 1, no. 2, pp. 148–172, 2018.

# E-Learning System Implementation Program for Kindergarten Level

- [5] S. M. Efastri and C. C. Islami, "Efektivitas Pembelajaran Online pada Masa Pandemi Covid-19 di Taman Kanak-Kanak," *J. Obs. J. Pendidik. Anak Usia Dini*, vol. 6, no. 2, pp. 868–875, 2021.
- [6] T. Tarsono, "Implikasi Teori Belajar Sosial (Social Learning Theory) Dari Albert Bandura Dalam Bimbingan Dan Konseling," *Psympathic J. Ilm. Psikol.*, vol. 3, no. 1, pp. 29–36, 2018.
- [7] K. Septyanto, A. H. Mustofa, and D. Aribowo, "Pengembangan E-Learning Berbasis Website Menggunakan Metode Waterfall," *ELINVO Electron. Informatics, Vocat. Educ. J.*, vol. 5, no. 1, pp. 89–101, 2020.
- [8] G. Kokkalia, A. S. Drigas, and A. Economou, "Mobile learning for preschool education," *Int. J. Interact. Mob. Technol.*, vol. 10, no. 4, pp. 57–64, 2016.
- [9] P. Foti, "Research in e-learning in Greek Kindergarten Schools during the Pandemic of COVID-19: Possibilities, Dilemmas, Limitations," *Eur. J. Open Educ. E-learning Stud.*, vol. 5, no. 1, pp. 19–40, 2020.
- [10] M. Munawar, "Penguatan Komite Pembelajaran dalam Implementasi Kurikulum Merdeka pada Pendidikan Anak Usia Dini," *Tinta Emas J. Pendidik. Islam Anak Usia Dini*, vol. 1, no. 1, pp. 65–72, 2022.