

Implementation of the Sustainable Profession Development Program Online Based on Improving Pedagogic Competence and Professional Early School Learner Teachers

Syahrudin

Universitas Muhammadiyah
Makassar, Indonesia

Syahrudinudin30@gmail.com

Ahdan

Universitas Muhammadiyah
Makassar, Indonesia

ahdan@gmail.com

Ernawati

Universitas Muhammadiyah
Makassar, Indonesia

ernawati@gmail.com

Abstract--- This research aims to explain the application of sustainable professional development program based online to improving the competence of pedagogic and professionals teacher of early grade in elementary school. The research draft is conducted in quantitative and qualitative form of 30 early-grade elementary school teachers in South Sulawesi. The collected data methods are used for online media validation and test performance. Collected Data is analyzed with descriptive statistics. The results showed the validation of online-based Learning applications = 3.5 (very valid). The test shows a good category with an average percentage of 42.5% on four online-based learning activities that (a) get to know the online features, (b) write down the learning features, (c) write the name of the activity based online, and (d) Describe the utilization of features in each learning activity. Furthermore, the achievement of the pedagogic and professional competence indicators in the learners through an online-based ongoing professional development program is a high category. Therefore, teacher of early grade elementary school have the ability to compose a learning program plan and implement the learning process well in class after join a professional online-based sustainable development program.

Keywords: *sustainable profession development, online, pedagogic, professional*

I. INTRODUCTION

The teacher has a position as an educator which is one of the factors in the implementation of complete education, in addition to facilities and infrastructure, curriculum, costs, management systems and students themselves. In addition, teachers have a major role in the administration of education. It is shown that teachers are teaching staff or educators who

are responsible for the implementation of the learning process for students. According to Hasbullah (2015: 165) that teachers are the main actors of change in society, teachers are also creators of future cadres who will color human civilization.

The ideal teacher is the teacher who can present an interesting, motivational and inspiring learning process from the knowledge and experience of the ever-renewed teacher with positive feedback from a wide range of learning resources. So, learners as an ideal teacher improvement competency program by encouraging teachers to continue to learn and develop themselves at any time and anywhere, because the teacher is a learner.

The Learning Competency Program of learners is the process of organizing the teaching and learning activities in order to improve the skills and competence of the teachers in carrying out their profession duties. The enhancement includes activities aimed at the improvement and growth of ability (abilities), attitude, and skill (skill). From this activity is expected to produce a change in the behavior of the teacher that has a real change in the behavior affects the performance of teachers in the teaching and learning process in the classroom.

According Surapranata (2016) that the network mode (online) is a learning teacher program implemented by utilizing computer network technology and Internet. The online mode can be implemented by preparing a learning system that independently provides instruction and learning services to the participants without directly involving the forgiving people in the process of its

The 4th Progressive and Fun Education International Conference

Makassar, 6-8 August 2019

implementation. The instructional system includes the registration process, learning execution, final tests, and participant graduation and certificate issuance.

The learning approach in the online mode of sustainable professional Development program has the following characteristics: a) Demanding learners to build and create knowledge independently (Constructivism); b) Learners will collaborate with other learners to build their knowledge and solve the problems together (social constructivism); c) Making a community of learners that is inclusive; d) Use website Media (websites) that can be accessed through the Internet, computer-based learning, virtual classes, and digital classes; e) Interactivity, independence, accessibility, and enrichment.

Through online mode, participants have the freedom to study. Participants can learn whenever and wherever, so there is no need to leave their obligations as teachers in educating. Participants can interact with the mentor in a synchronous manner - learning interactions at the same time as using video convergence, telephone or live chat, or asynchronous - learning interactions at the same time not

simultaneously through learning activities provided electronically (Sary, 2017).

The online mode learning teacher system comes down from the participant's data and will be exported to the Learning Management System (LMS) to be registered as a teacher of online mode learner. Learning the online mode provided in the LMS, using the learner module developed into learning activities in the form of module text, images, video, and audio stored on the repository server. The data of the user's activities of online learner-mode teachers will be evaluated using the software analytic tool/reporting. Each participant's portfolio of learning will be recorded and stored in the participant database (Isjoni, 2010). The architecture of an online mode teacher learning system can be illustrated in online applications that are accessed anytime and anywhere.

Learning in online mode learners involves forgiving, mentor and participant. The online mode application of learners will combine interaction between the participants and the mentor and or forgiving, which is only done online. The model app's online mode of learners is like in the following image 1.

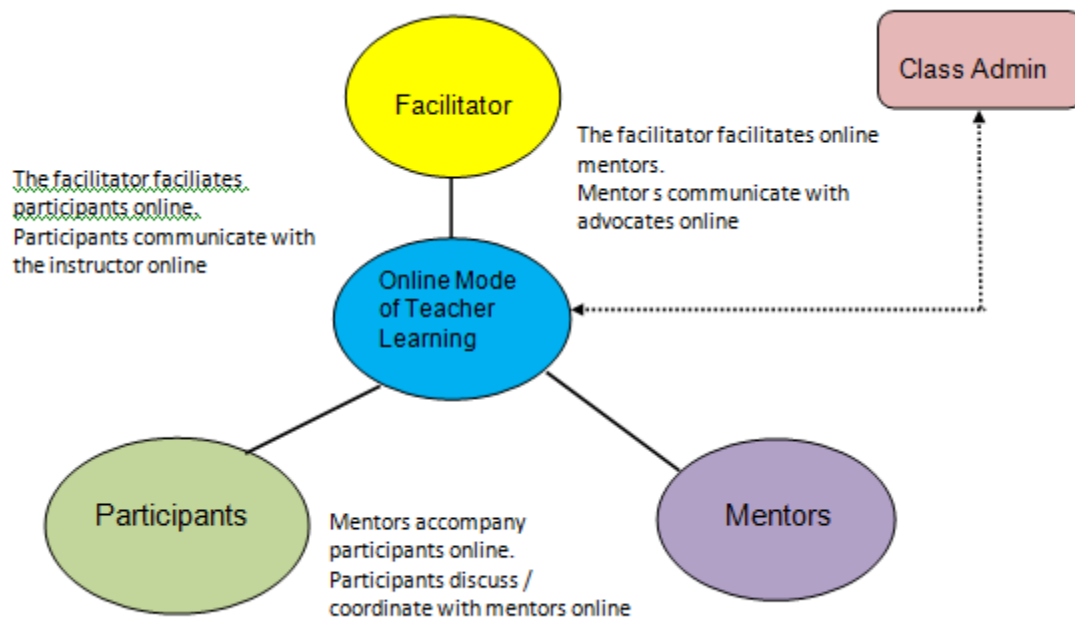


Figure 1. Model learning application online teacher mode

The application of online applications in increasing pedagogic and professional competence for teachers is a new innovation of human resources development in the world of education. However, the

online mode application of learner teachers is not the only teacher improvement model (Syahrudin, 2015). But the online mode can be used as one of the solutions in the development of learning models by teachers in

schools. Therefore, this article describes the application of the teacher's online applications to improve pedagogic competence and teacher professionals.

II. METHOD

This research is a development study that will examine the content of online-based learners teachers according to the need for a sustainable professional development system for early-grade elementary teachers. Control of system content is done with a centralized system in an online LMS learning mode teacher. Furthermore, data from research instruments are analyzed to provide a cuncuative and qualitative description of the increase of pedagogic competence and professional learning teachers through the application of sustainable profession development program based online.

The variables in this research are the application of sustainable professional development based online in increasing the competence of learners teachers. The competencies that are intended in this study are pedagogic competence and professional competence. Data that supports the variables above are (1) online based ongoing professional development applications, (2) online-based model mentoring, (3) online-based activity implementation mechanisms, (4) online roles to improve teacher competence learners, (5) online based learning activities, and (6) increased pedagogic competencies and professional learner teachers through online applications.

The instruments used in this study are:

1. An observation note about the application of sustainable professional development program based online. The observation notes in this study are the result of validation of online features.
2. Test teachers work learners. Test performance based on the sheet of activity on the module of pedagogic competence and professional teacher of learners.

The research method is implemented through applied research based on grounded teory. Applied research is conducted with the aim of implementing, testing, and evaluating the ability of a theory applied in solving practical problems. In addition, the grounded teory approach is used to examine the content of learner teachers through a sustainable online based professional development program in education and learning (Sugiyono, 2009:9).

The data obtained in this research there are two types, namely primary data and secondary data. Primary data in the form of scores or values obtained through media validation results and secondary data is a test of the performance through the examinati

on of tasks on the worksheet in the module.

All collected data is recorded and tabulated based on the aspects made by variables. Then the data is given its respective scores to facilitate the interpretation. Data obtained through a professional

development application of the ongoing online mode of learner teachers are analyzed using descriptive statistical techniques.

III. RESEARCH METHODS

Results

The online mode application Program of learner teachers is a webside account of the learning process and improvement of teacher competence online (in the network). Teachers as participants can learn online and interact with your forgiveness and or mentor, as well as fellow online learner teachers. Online-based learner learning interactions both online and face-to-face will form a community of learners.

The data analysis results are described as follows:

- a) The average value of validity for the preliminary session aspect in online mode learning is $\bar{V} = 3,4$. Therefore, it can be concluded that this value belongs to the "valid" category ($2,5 \leq \bar{V} \leq 3,5$). So, in terms of the aspects of the preliminary session in online learning, the learning teacher is declared to meet the validity criteria.
- b) The average value of validity for the aspects of the learning session presented through the online mode of the learning teacher is $\bar{V} = 3,5$. Therefore, it can be concluded that this value belongs to the "very valid" category ($3,5 \leq \bar{V} < 4,0$). So, in terms of the aspects of the learning session that are presented through online learning learners, this media is stated to fulfill the validity criteria.
- c) The average value of validity for the closing session aspects presented through the learner's online mode is $\bar{V} = 3,6$. Therefore, it can be concluded that this value belongs to the "very valid" category ($3,5 \leq \bar{V} \leq 4,0$). So, in terms of the closing session aspects which are presented through online learning of teacher, this media is stated to fulfill the validity criteria.
- d) The average value of the total validity and online mode of continuous professional development of learning teachers is $\bar{V} = 3,5$. Therefore, it can be concluded that this value belongs to the "very valid" category ($3,5 \leq \bar{V} \leq 4,0$). So, in terms of the overall aspects of online professional development of early grade elementary school teachers, this media is stated to meet the validity criteria.

The teacher based online mentoring model is shown on the ability to understand the features of the learner's system. The understanding of these features is applied to the ability to practice the use of page, book,

lesson, file, folder, message, forum, blog, e-Portfolio, chat, quiz on LMS Moodle.

Further more analysis of the participant's ability to operate online features through a mentoring model. There are four activities of the learning based online mode which is (a) know the features used in online-based learning, (b) write the learning features

used in each session appropriately, (c) write The name of the activity at each session, and (d) describe the utilization of features in each learning activity.

a. Get to know the features of online applications

The value of participants in knowing the online-based learning features of sustainable learner teachers can be seen in the following table 1

Table 1. recognizes online-based learning features

Class Interval	Frequency	Percentage (%)	Category
90 – 100	14	46.7	Very Good
80 – 89	10	33.3	Well
70 – 79	5	16.7	Enough
< 70	1	3.3	Less
Total	30	100	

Table 1 above shows that the total value of understanding the features of an online based elementary school learning teacher was 14 respondents (46.7%) obtained very good category value, 10 respondents (33.3%) obtained a good value, there were 5 respondents (16.7%) have enough category value, and only 1 respondent (3.3%) that acquire less value. The results of descriptive statistical analysis showed

that respondents ' understanding of the online features of sustainable professional development program teachers has been excellent. Because the application of online applications can be carried out well.

b. Write learning features in every online media session

The value of participant's ability to write the learning features used for each session can be seen in the following table 2.

Table 2. renders online application features

Class Interval	Frequency	Percentage (%)	Category
90 – 100	12	40.0	Very Good
80 – 89	15	50.0	Well
70 – 79	3	10.0	Enough
< 70	0	0	Less
Total	30	100	

Table 2 above shows that the total value of the ability to write the application features of the ongoing professional development program based on the first class of elementary school learners is 12 respondents (40%) obtained very good category value, 15 respondents (50%) obtained a good value, there were 3 respondents (10%) obtain sufficient category value, and no respondent (0%) that acquire less value. The results of descriptive statistical analysis show that respondents ' writing skills to the online features of learners are good. Because the application of

sustainable professional development program is online based can be used by learners teachers well.

c. Write the type of activity on each session in online media

The value of the participant's ability to write the name of the activity in each session correctly corresponds to the learning features in the application of the ongoing professional professional development program of learners can be seen in the following table 3.

Table 3. renders the type of activity at each session in online media

Class Interval	Frequency	Percentage (%)	Category
90 – 100	7	30,0	Very Good
80 – 89	14	40.0	Well
70 – 79	5	20.0	Enough
< 70	4	10.0	Less
Total	30	100	

The table 3 above shows that the total value of the participant's ability to write the name of the activity at each session correctly matches the learning features in the application of the ongoing professional teaching program based on the early class elementary school learning teachers are 9 respondents (30%) obtained very good category value, 12 respondents (40%) obtained a good value, there were 6 respondents (20%) obtain sufficient category value, and only 3 respondents (10%) that acquire less value. The results of descriptive statistical analysis show that the ability of respondents to write the name of the activity on each

session correctly according to the learning features in the online media teachers of early grade elementary school learners are good. Because the application of sustainable professional development program is online based can be used by learners teachers well.

d. Describe the utilization of online media application features

The value of participants describing the utilization of features in each learning activity based online learner teachers can be seen in the following table 4.

Table 4. Descriptions of each online based learning activity

Class Interval	Frequency	Percentage (%)	Category
90 – 100	7	23.3	Very Good
80 – 89	14	46.7	Well
70 – 79	5	16.7	Enough
< 70	4	13.3	Less
Total	30	100	

According to table 4 above, shows that the total value of participants ability to describe the benefits of features in each learning activity in the application of the sustainable professional development program of elementary school learners is 7 respondents (23.3%) obtained a very good category, 14 respondents (46.7%) obtained a good value, there were 5 respondents (16.7%) obtained enough category value, and only 4 respondents (13.3%) that acquire less value. Descriptive statistical analysis results show that respondents ability to describe the benefits of features in every learning activity in the online media application teachers of early grade elementary school learners are good. Therefore, the application of sustainable professional development program based

online can be used by the learners of well learned teachers.

Therefore, the implementation of the ongoing professional professional development program is based on an early-class elementary school learner teacher can be implemented through a method of mentoring four activities. These four activities are applications of learners ' online features that are (a) know the features used in online-based learning, (b) write the learning features in online applications, (c) write the name of the activity in each session correctly, and (d) describe the utilization of features in each learning activity.

Based on the analysis above, it can be illustrated results of online based coaching to four activities on the following chart.

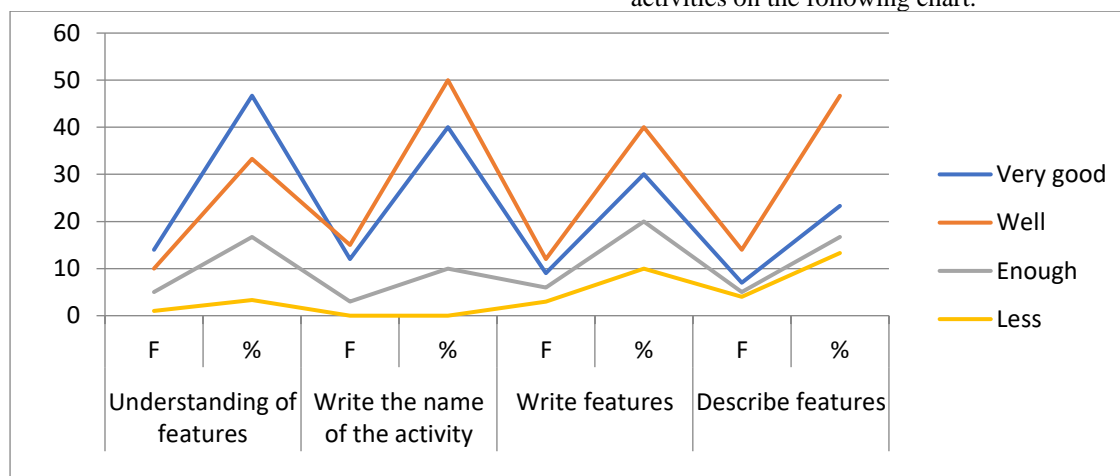


Figure 2. Online application supervision data chart

Based on the graph above, the understanding of features shows 24 respondents (80%) already

obtained the value of the category is very good and good, only 6 respondents (20%) who gained enough

The 4th Progressive and Fun Education International Conference

Makassar, 6-8 August 2019

and less categories. The ability to write name activity shows 27 respondents (90%) who obtained the value of the category very well and well, only 3 respondents (10%) who acquire the value of the category sufficiently, and no one respondent earns the value less. The ability to write features shows 21 respondents (70%) who obtained the value of the category is very good and good, there are 9 respondents (30%) who derive the value of the category fairly and less. Ability to describe features showing 21 respondents (70%)

who obtained the value of the category is very good and good, there are 9 respondents (30%) who derive the value of the category fairly and less.

Furthermore, the achievement of pedagogic competence indicators and learner teacher professionals is explained with a sustainable professional development instrument based online. Data on achieving pedagogic competence as in the following table.

Table 5. Pedagogic competence achievement

Num	Pedagogic Competency Achievement Indicator	High		Medium		Low	
		F	%	F	%	F	%
1.	Explain the stages of learners behaviour and personal development	20	66,7	7	23,3	3	10
2.	Identifying potential learners	17	56,7	10	33,3	3	10
3.	Describe the characteristics of child's physical development	15	50,0	13	43,3	2	6,7
4.	Explaining the development of learners intellectual abilities	10	33,3	15	50,0	5	16,7
5.	Describing the social behaviour traits of learners that are socially good and poorly qualified	17	56,6	8	26,7	5	16,7
6.	Explain the moral aspects of learners	20	66,6	8	26,7	2	6,7
7.	Explaining learning difficulty factors	25	83,3	5	16,7	0	0
Sum		124	59,1	66	31,4	20	9,5

When it illustrated into a bar chart, the total frequency of the competency achievement of the

pedagogic indicators of the learner's teacher, looks like the following.

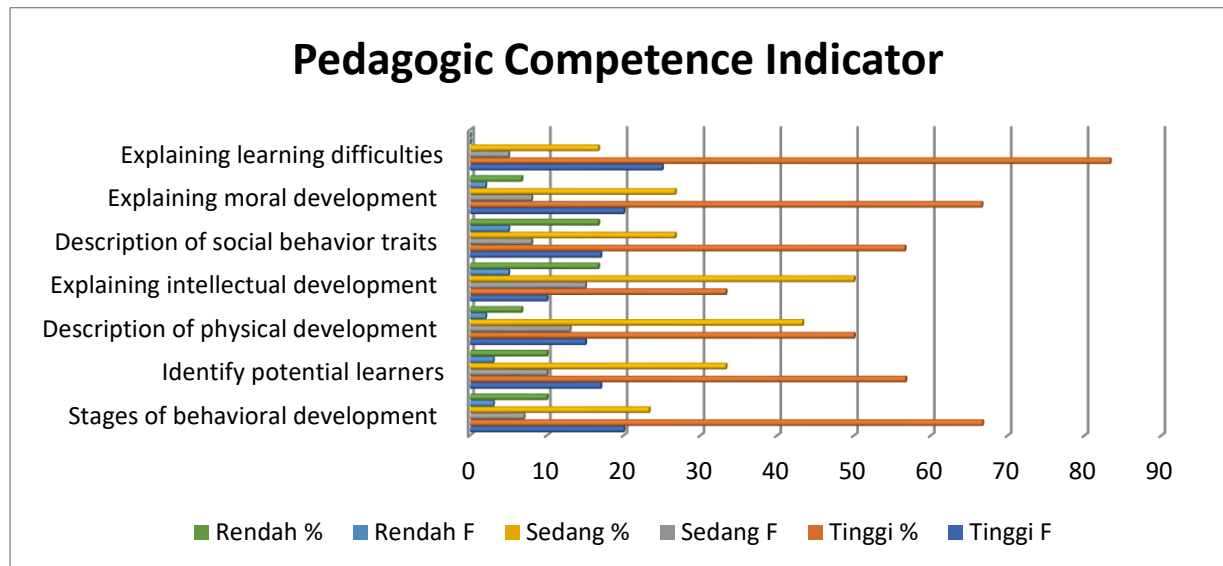


Figure 3. Achievement graph indicators pedagogic competence

Table 5 and Figure 3 above show that the total value of the pedagogic competence indicator achievement of early grade learners indicates that the pedagogic competence indicator in high category is 124 respondents (59.1%), the medium category as 66 respondents (31.4%), and a low category of 20 respondents (9.5%). The results of descriptive statistical analysis showed that the achievement of the

pedagogic competence indicator on the online based learners is high category. Therefore, early grade elementary school learners have the ability to have a well planned learning program after joining a professional development program based online.

The instrument used to uncover the professional competence improvement of early grade elementary school learners is the assessment of

The 4th Progressive and Fun Education International Conference

Makassar, 6-8 August 2019

competency achievement indicators. The data about achieving professional competencies as in the following table.

Table 6. Professional competency achievement

Num	Professional Competency Achievement Indicator	High		Medium		Low	
		F	%	F	%	F	%
1.	Explaining the nature of Indonesian.	25	83,4	4	13,3	1	3,3
2.	Apply a variety of Indonesian language in learning.	20	66,7	7	23,3	3	10,0
3.	Distinguish acquisition and language learning.	12	40,0	13	43,3	5	16,7
4.	Identifying Indonesian language rules	17	56,7	10	33,3	3	10,0
5.	Apply the types of skills speaking in language learning.	15	50,0	10	33,3	5	16,7
6.	Explaining the reading skills procedure.	21	70,0	7	23,3	2	6,7
7.	Implement these types of writing skills in learning.	10	33,3	11	36,7	9	30,0
Sum		120	57,2	62	29,5	28	13,3

When it illustrated into a bar chart, the total frequency of the competency achievement of the pedagogic indicators of the learner's teacher, looks like the following.

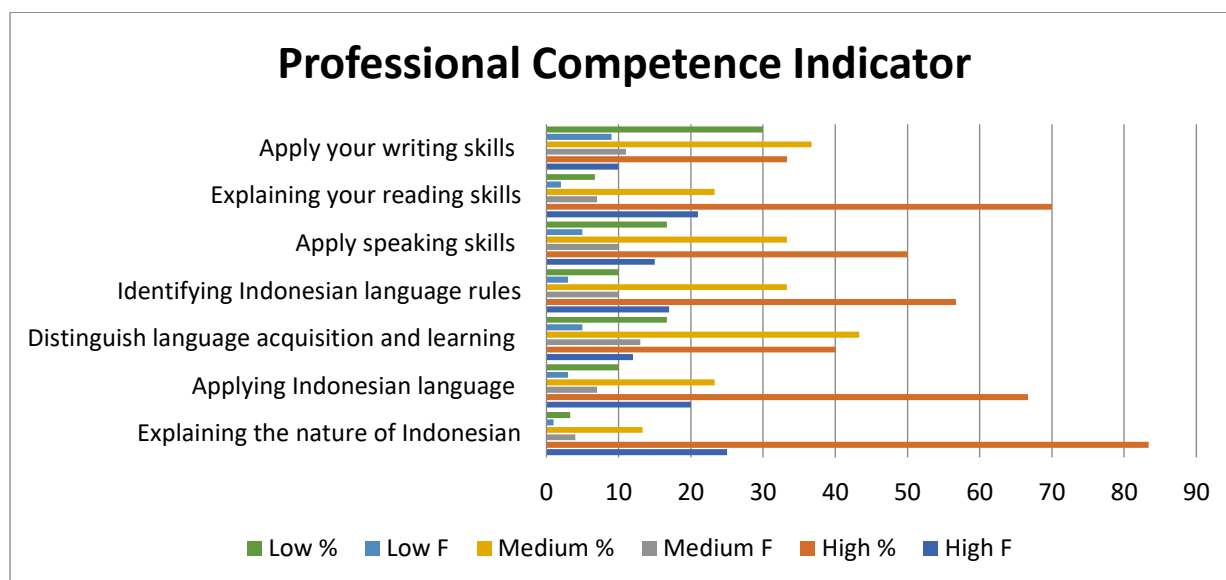


Figure 4. Performance graph indicators pedagogic competence indicator

Table 6 and Figure 4 above show that the total value of achievement of the professional competency indicator of early grade learners indicates that a professional competency indicator in high category is 120 respondents (57.2%), medium category as 62 respondents (29.5%), and a low category of 28 respondents (13.3%). The results of descriptive statistical analysis show that achieving professional competency indicators in online based learners is a high category. Therefore, early grade elementary school learners have the ability to teach well in the classroom after following the development of sustainable professional based online.

Discussion

The learning approach in the online mode learners has the following characteristics: (1) demanding learners to build and create knowledge

independently (constructivism); (2) Learners will collaborate with other learners to build their knowledge and solve problems collectively (social constructivism); (3) Make a community of learners that is inclusive; (4) Utilize the website media (websites) that can be accessed through the Internet, computer-based learning, virtual classes, and or digital classes; (5) Interactivity, independence, accessibility, and enrichment.

A general overview of each learning model on online learners, participants has the flexibility of learning time. Participants can learn anytime and anywhere, so there is no need to leave their obligations as teachers in educating. Participants can interact with mentor in synchronous mentor learning interaction at the same time, such as video converence, phone or live chat, or asynchronous learning interactions at a time

that is not concurrent through the learning activities that have been provided electronically.

The expert validation data is data that obtained based on material expert assessment and media expert through the validation format of learning design instruments Online mode development of sustainable professional elementary school learners. The validated design of the online mode learning consists of an introductory session, a learning session, and a closing session.

The introductory session is about the introduction and demonstration of the system, the policy of development and coaching of the teacher profession, the general explanation of the activities of teachers learning online mode, advice and how to use the modules, and learning flow. Learning sessions contain materials that must be mastered according to the demands of the learning outcomes evidenced by the bill. The learning activities conducted in the learning session are the introduction of sessions, learning activities, session forums, reflections, uploading tasks and latihan, participant reactions, self assessment, and session summative tests. Furthermore, the closing session is the last session in the learning process of the teacher in online mode where participants will engage in activities such as: conclusion and feedback, evaluation of the organization of online learners, and final tests.

Based on the results of the validation on the online media development of sustainable profession teacher learners that the average total value of validity is obtained $\bar{V} = 3,5$. Therefore, this value belongs to the category "Very Valid" ($3,5 \leq \bar{V} \leq 4,0$). So, reviewed from the whole aspect of the online mode of sustainable professional development teacher of elementary school learners, this media is stated to meet the criteria of validity. Furthermore, the application of the ongoing professional development applications of the first class elementary school learning teachers can be implemented through a method of mentoring four activities. The four activities are (a) know the features used in learning online mode, (b) write the learning features used in each session correctly, (c) write the name of the activity at each session, and (d) describe the utilization of features in each learning activity.

The achievement of pedagogic competence indicators and learner teachers professionals is explained with the ongoing online based professional development instruments. A pedagogic competence achievement indicator (1) explains the stages of students behavioral and personal development, (2) Identifying potential learners, (3) describing the characteristics of children's physical development, (4) explaining the development of students intellectual abilities, (5) describe the traits of social behaviour of learners who are socially good and poorly trained, (6) explain the stages of developmental learners moral aspects, and (7) explain factors learning ebd.

Furthermore, the instrument used to uncover the professional competence improvement of early grade elementary school learners is an assessment of competency achievement indicators. The indicators of achieving professional competence are (1) explaining the nature of Indonesian, (2) apply a variety of Indonesian language in the learning, (3) distinguish language acquisition and learning, (4) identify the rules of the Indonesian language, (5) applying the types of skills speaking in language learning, (6) explaining the procedure of reading skills, and (7) implementing the types of writing skills in learning.

IV. CONCLUSION

The continuing professional development program in improving pedagogic and professionals competence in early grade elementary school learners in this study has done web application based learning. The average total value of validity and online based applications of the ongoing profession of learner teachers acquired is $= 3,5$. Therefore, this value belongs to the category "Very Valid" ($3,5 < < 4,0$). Therefore, the application of sustainable professional development is online based on early-class elementary school teachers meeting the criteria of validity.

The application of sustainable professional development applications based on the early grade elementary school learners can be implemented through a method of mentoring four activities. These four activities are the app features of the learning teacher online application that is (a) know the features used in online-based learning, (b) write the learning features used in each session appropriately, (c) write the name of the activity at each session, and (d) describe the utilization of features in each learning activity.

The achievement of pedagogic competence indicators and professionals of early grade learners shows high category. The results of the descriptive statistical analysis concluded that the achievement of the pedagogic and professional competency indicators in the online-based learners is high category. Therefore, early grade elementary school learners have the ability to develop a learning program plan and implement the learning process well in class following a professional online based sustainable development program.

Based on the results of the research, the first class teachers are advised to make use of the learning media online mode to improve pedagogic and professional competence. The online application of sustainable profession based development can improve pedagogic competencies and professional elementary school learners teachers. Further advised to the

The 4th Progressive and Fun Education International Conference

Makassar, 6-8 August 2019

education manager to always encourage teachers to familiarize themselves with the use of ICT media through an online application of sustainable professional development.

REFERENCES

- (1) Baedhowi. *Guidelines for Sustainable Professional Development Management*. Jakarta: Directorate General of Quality Improvement of Educators and Education Personnel of the Ministry of National Education. 2010.
- (2) Budiningsih, C. Asri. *Learning and Learning*. Jakarta: Rineka Cipta. 2008.
- (3) Graham, S. *Blogging For ELT*. British Council. 2005.
- (4) Hasbullah. *Education Policy in the Theory, Application, and Objective Conditions of Education in Indonesia*. Jakarta: Raja Grafindo Persada. 2015.
- (5) Judge, Arif. *ICT Based Learning Development Strategy*. (Online) Vol. 5. (www.google.com, accessed September 5, 2016).
- (6) Hunaenah. *Andragogy*. Continuous professional development training module. Bandung: Science PPPPTK. 2015.
- (7) Isjoni. *Utilization of Teaching Technology: Hope for Indonesia*. Yogyakarta: Student Library. 2007.
- (8) Jury, Mohamad. *Application of E-learning in innovative learning*. (Online) Vol 2 No1. (www.google.com, accessed on November 20, 2016)
- (9) Lockwood, Fred and Anne Gooley. *Innovation in Open & Distance Learning; Successful Development of Online and Web-Based Learning*. London: Pentonville Road. 2001.
- (10) Pannen, Paulina. *Utilization of Information Technology in Improving the Quality of Indonesian Language Learning*. Jakarta: Open University. 2003.
- (11) Sary, Intan Rahima. *Technical Guidelines for the Continuing Professional Development Program*. Jakarta: Directorate General of Teachers and Education Personnel of the Ministry of Education and Culture. 2017.
- (12) Simamora, L. *E-Learning Education Horizons: Concepts and Developments Supporting Technology*. Jakarta: UT. 2003.
- (13) Sugiyono. *Educational Research Methods (Quantitative, Qualitative and R & D Approaches)*. Bandung: Alfabeta. 2009.
- (14) Surapranata, Sumarna. *Technical Instructions for the Modes Learner Teacher Competency Improvement Program in the Network*. Jakarta: Directorate General of Teachers and Education Personnel of the Ministry of Education and Culture. 2016.
- (15) Syahrudin. *Web-Online Writing Innovation*. Makassar. CV. Permata Ilmu. 2014.