

The Impact of Workshop on Implementation of Read-Answer-Discuss-Explain-And-Create (RADEC) Learning Model on Pedagogic Competency of Elementary School Teachers

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Abstract—It is important to improve teachers' pedagogic competence continuously. This study aims to investigate the impact of the workshop about the implementation of the Read-Answer-Discuss-Explain-And Create (RADEC) learning model on elementary school teachers' pedagogical competence to implement the RADEC learning model. This descriptive research involved 16 teachers from 8 elementary schools in Tasikmalaya City. All participants received workshop materials including 21st century skills, RADEC learning model, and practices to prepare, conduct and evaluate RADEC learning model implementation. The research instruments were questionnaire and observation sheets. Research data were processed quantitatively and qualitatively. The results show that after participating in the workshop many teachers can plan (86.1%), implement (83.3%) and evaluate (58.3%) RADEC learning model. The results of this study also show that most of the teachers (97.2%) are interested in implementing the learning model in their schools because the model is easy to understand and its implementation can help students to gain attitudes, knowledge, and various 21st century skills (critical thinking and problem solving, collaboration, communication and creative thinking). The results of this study indicate that the workshop about implementation of Read-Answer-Discuss-Explain-And Create (RADEC) learning model can improve elementary school teachers' pedagogic competence.

Keywords—Pedagogic competence, workshop, RADEC learning model, teacher, elementary school

I. INTRODUCTION

Teachers' workshop activities are effort to improve teachers' attitudes, knowledge and skills, so they can conduct their jobs better. In other words, they can work more productively and improve their performance. Workshop formulation is provided as: "systematic attitude/ knowledge / skill pattern development behavior demanded by a person to perform tasks or jobs well"[1].

The workshop activities can be useful for both schools and teachers. There are at least seven benefits of participating in workshop including: (1) improvement of school work productivity as a whole (2) the realization of a good relationship between superiors and subordinates; (3) the occurrence of a faster and more precise decision-making process; (4) improving the work morale of the entire workforce in organization with higher organizational commitment; (5) encouraging the attitude of openness of

management through the application of participative managerial style; (6) facilitating effective communication; and (7) functional conflict resolution [2].

Other benefits of workshop for teachers include: (1) helping teachers in making decisions better; (2) improving the ability of teachers to solve the problems they face; (3) internalization and operationalization of motivational factors; (4) the incentive of teachers to improve their work ability continuously; (5) improving teachers' ability to cope with stress, frustration and conflict which in turn enlarge self-esteem; (6) the availability of information on various programs that teachers can utilize their respective technical and intellectual growth; (7) increasing job satisfaction; (8) improving the recognition of one's ability; (9) enhancing the willingness of teachers to be more independent; and (10) reducing the fear of facing new tasks in the future [2].

Issue about what it is called learning organization is also raised [1]. In this case, the organization is treated as a system (a concept known as systems theory) that needs to respond to its environment to stay alive and prosper. According to this view, an organization will develop an ability to respond the changing within its environment; ensuring that internal transformations are constantly taking place. Thus, a school that wants to learn can be said as an organization that provides convenience to its members to do learning processes and constantly change their selves. One form of school as a learning organization is teachers' willingness to always learn to improve their skills, and one of them is through training activities. Thus, learning efforts do not only happen to their students.

Considering the situation and condition in Indonesia, it is necessary to make breakthroughs and improvements to the quality of teaching-learning processes in schools. As it is known that, a South African warrior, Nelson Mandela emphasized that a change in the world of education is very important. He considers education as the most powerful factor to the fate of a nation. Therefore, Indonesia needs innovative learning models to improve students' skills, especially critical thinking, problem solving, communication, collaboration and creative thinking skills. Many innovative learning models created by experts from developed countries. However, it is difficult to implement them in most of Indonesian schools. There are many obstacles that cause

difficulties. Thus, an innovative learning model has been developed by considering situation and condition in Indonesia [3]. The model is called Read-Answer-Discuss-Explain-and Create (RADEC) learning model. RADEC learning model can play as a tool for teachers to provide their students the skills of the 21st century (critical thinking and problem solving, communication, collaboration, and creative thinking skills) [4]. In order to help teachers in implementing the model, a workshop about implementation of the model has been conducted.

Based on the issues above, this paper describes the impact of workshop about implementation of Read-Answer-Discuss-Explain-And-Create learning model on pedagogic competency of elementary school teachers. The impact includes the impact of workshop on teachers' abilities to plan, implement and evaluate based on the model.

II. METHOD

This research is a descriptive qualitative research; the research results try to describe and interpret the object as it is [5]. Descriptive research is a form of research intended to describe the phenomena that exist, both natural phenomena and man-made phenomena. The phenomenon may be the form, activity, characteristics, changes, relationships, similarities, and differences between one phenomenon with other phenomena [6;7]. This study involved 16 female teachers from 8 elementary schools in Tasikmalaya. Data collection tools were nonparticipant observation and interview assistance. Data were analyzed descriptively based on Miles and Huberman model.

In the data collection, researchers just observed and recorded what happens. This method is widely used to assess the behavior of teachers in the school [8]. Data processing includes editing, coding (Encoding) and scoring activity [8,9]. The data analysis process began by reviewing all data obtained through observation and interview assistance. The method of analysis used in this research was percentage descriptive analysis.

III. RESULTS AND DISCUSSIONS

This descriptive research on the impact of the workshop about the implementation of RADEC learning model on pedagogic competence of elementary school teachers involved 16 female elementary school teachers from 8 elementary schools in Tasikmalaya. The speakers in this workshop were Prof. H. Udin S. Saud, Ph.D., Prof. Dr. H. Rahman, M.Pd., and developer of the RADEC learning model, Dr. paed. H. WahyuSopandi, M.A.

The data from interview indicate that the learning process carried out by the teacher has not been practicing 21st century skills; it can be seen in the interview excerpt below.

"... what is important for us is that material is delivered entirely according to the time allocation. Otherwise we will be blamed, so we do not consider about the students' skills. There are many teaching materials. If we also train students in 21st century skills, the above time allocation will not be enough. Actually we want to train students in these skills, but the situation and conditions

are not possible. Thus, we only use the lecture and discussion methods. It is fast and easy because other models are complicated ...". (Interview with Mrs. TI, a teacher at Elementary School A, April 18th, 2018).

The amount of teaching material seems to be the dominant cause of the difficulty of teachers in developing quality learning in the classroom, as stated by the following teacher.

"... I am confused about what kind of learning process can be done in elementary school because of many teaching materials." (Interview with Mrs. NN, a teacher at elementary school G, April 12nd, 2018).

Despite the fact that teachers think they do not develop 21st century teacher skills, teachers still think that developing 21st century skills for students is important. In line with this thought, teachers need training related to developing 21st century skills. They need training in learning models that can develop 21st century skills, and the model is easy to apply in classroom. All teachers expect their students to have 21st century skills; it can be clearly seen from following teacher's statement.

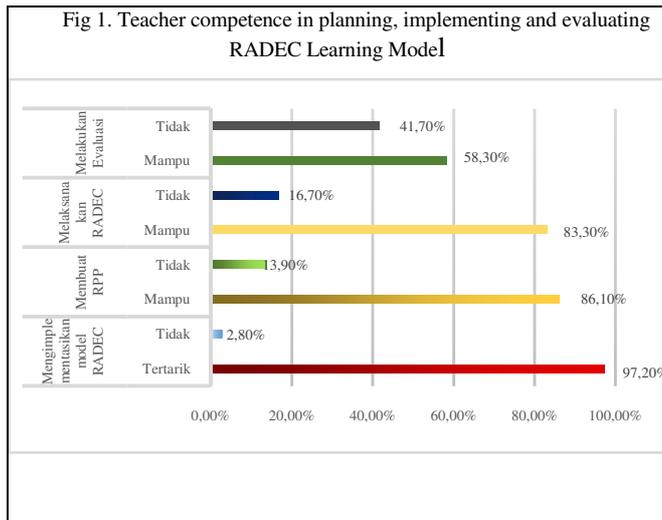
"... the ability to think creatively and solve problems is important for students especially in today's sophisticated and competitive era." (Interview with SK, a teacher at elementary school C, April 3rd, 2018)

The above statement explains how teachers understand the importance of students mastering 21st century skills. Thus, the teacher needs to be trained to apply a learning model that can develop 21st century skills and can match the situation and conditions in Indonesia. One of the innovative learning models that in its development take full account of the situation and conditions in Indonesia is the RADEC learning model.

Through the workshop on the implementation of the RADEC learning model, teachers obtain new information and experience related to the model that is able to develop 21st century students' skills and develop teacher's pedagogical competencies.

The workshop materials included continuous professional development, 21st century skills, RADEC Learning Model, and then practiced to prepare, conduct and evaluate RADEC learning model implementation. After participating in the workshop, the teachers did lesson study related to the implementation of the RADEC learning model and then they conducted classroom action research in their own school.

The following graph describes the research results, the impact of the workshop about the implementation of the RADEC model on elementary school teachers' pedagogic competence.



Based on the above graph, it can be explained that the lowest average score is the ability of teachers in evaluating RADEC learning model (58.30%), and the highest average score is 86.10% on planning RADEC model. Based on scores in planning, conducting and RADEC learning model, teachers' pedagogic competence still need to be improved. This is in accordance with the following interview result.

"... I was confused when I had to evaluate students' learning achievements because I was just used to asking, or even forgetting not evaluating ..." (Interview with Mrs. EU, a teacher at elementary school FB, April 12nd, 2018).

Even so, the teacher is very enthusiastic about implementing RADEC learning model in the classroom. For those steps (syntax), this learning model is easy to remember and understand. It can be seen from the following interview result.

"... I think I can implement RADEC model in class again because the stages are easy for me to remember. With this model, children learn at home before they study in class. Despite being forced, this can be a good habit ... with God's permission after this I try again to other materials ..." (Interview with Ms. GN, a teacher at elementary school H, 12nd April, 2018).

Other findings from interview with teachers show that the RADEC model can train 21st century skills and equip students with a good attitude. It can be seen from the following interview results.

"Through discussion, high-level thinking skills of children can be trained, communication skills are also explored, although there are still many who are shy and do not dare to talk. But that is not a problem because it requires time ..." (Interview with Ms. SN, a teacher at elementary school D, 12nd April, 2018).

"... students become more active and responsible for their duties, both individually and in groups ... become more orderly and fairly disciplined ..." (Interview with Ms. HH, a teacher at elementary school E, April 12nd, 2018).

Based on these results, it appears that the RADEC learning model provides opportunities for students to achieve a deep understanding of the concepts learned. In addition, not only students' knowledge increased, but also positive development of student attitudes is optimally. Students get a sense of meaning in what they have learned. Thus, it can be said that the RADEC learning model is able to help students understand concepts, possess 21st century skills and develop their better attitudes.

The improvement of teachers' pedagogic competence can be done through various types of workshop [10] which refer to four types of excellent programs: (1) quality improvement program through workshop and implementation of innovative learning or assessment or training and lesson study, (2) scientific teacher productivity improvement program through training and implementation of classroom action research, (3) qualification and competency improvement program.

In relation to the impact of the workshop on the implementation of the RADEC learning model of elementary school teachers' pedagogic competence in Tasikmalaya, the survey results show that 100% of teachers stated that the Read-Answer learning model -Discuss-Explain-and Create (RADEC) is a new and innovative learning model. It was also revealed that 97.2% of teachers are interested in implementing the Read-Answer-Discuss-Explain-and Create (RADEC) learning model in their schools; only 2.8% of teachers do not want to do it. It was also revealed that 86.1% of teachers were able to make planning of learning activities with RADEC model; only 13.9% had not been able to do so. It was also found that 83.3% were able to carry out learning activities using the RADEC model, although quite a lot were not yet ready for 16.7%. It is also found that 58.3% of teachers have evaluated learning activities with RADEC model and 41.7% who have not been able to do so. These data indicate that the workshop activities have a good impact on teachers' pedagogic competence in planning, implementing, and evaluating the RADEC learning model at elementary schools in Tasikmalaya and the learning model has been conducted in most schools of workshop participants. This fact is also supported by teachers' statements that most of them recognize the RADEC learning model as an innovative learning model and almost all workshop participants respond positively to the implementation of the RADEC learning model in schools.

With the workshop, activities that have been conducted included instructional training and innovative assessment, lesson study training, and classroom action research's training, teachers should have sufficient conceptual knowledge, ability to carry out lessons activities and innovative assessment intensively and optimally, and conduct continuous classroom action research through the RADEC learning model. The low abilities of teachers to plan, implement, and evaluate RADEC learning model indicate that the role of teachers as agents of change is difficult to be realized optimally. In fact, the abilities to plan, implement, and evaluate are very important for teachers in advancing the process and product learning students. Innovative learning and assessment are new forms of ideas for the teacher as an

updating agent in learning to be able to facilitate learners in obtaining progress in process and learning outcomes [11].

In the implementation of lesson study, there are 8 (eight) opportunities that can be gained by teachers which can help develop their professionalism [12], namely (1) careful thinking about learning objectives, subject matter, and field of study, (2) developing the best learning that can be developed, (3) deepening the knowledge of the subject matter taught, (4) thinking deeply about the long-term goals to be achieved related to the students, (5) designing collaborative learning, (6) ways and processes of learning and student behavior, (7) developing strong pedagogical knowledge powerfully, and (8) viewing the learning outcomes themselves through the views of students and colleagues. The eight opportunities seem to have not been able to be achieved by the teachers optimally. This statement is supported by research findings that reveal that teachers' ability to plan, implement and evaluate learning outcomes by applying the RADEC learning model is relatively low. The low abilities to plan, implement and evaluate learning outcomes with the RADEC learning model indicates that teachers' pedagogic competence is still relatively low and still need to be continuously improved.

Another indicator that also reflects the low professionalism and competence of teachers is the survey findings that reveal the low level of conceptual knowledge about classroom action research. Classroom action research which is very potential for coaching teachers' professional competence has not been conducted by many teachers. On the other hand, the experts stated that "Classroom action research can be used as a basis for professional coaching and teacher competence improvement" [13;14;15]. Teaching practices through classroom action research can improve the teaching profession, as classroom action research can help develop teacher competencies in solving learning problems including content quality, efficiency, and effectiveness of learning, process, and student learning outcomes [13;14;15].

The low level of teacher's conceptual knowledge of innovative learning and assessment, lesson study, and classroom action research indicates that the implementation of innovative learning and assessment, lesson study, or classroom action research for teachers is not optimal. Although teachers claim to have attended trainings and are able to implement them in lessons, the processes and outcomes are less likely to reflect the principles of instructional innovation and assessment, lesson study principles, or classroom action research principles. This statement is supported by the survey findings that most teacher-made plans and lessons learned have not indicated the implementation of innovative learning or assessment, lesson study, or classroom action research.

The low productivity of teachers in supporting their professional development is due to constraints in implementing innovative learning and assessment, lesson study, and classroom action research. These constraints are that many teachers do not have standard operating procedures (SOPs) for innovative learning and assessment, lesson study, or classroom action research. In addition,

conceptual knowledge that is not yet optimal and applied knowledge of teachers on innovative learning and assessment, lesson study, and classroom action research will lead to not yet optimal quality of learning process experienced by students in schools. The learning process that has not been optimal will cause students' learning achievements which are also not optimal. As it is known, the acquisition of learning can be in the forms of conceptual understandings or problem-solving abilities. These findings reveal that the quality of students' conceptual understandings and problem-solving skills is still low. Acquisition of student learning can be improved by providing coaching of teachers' services and productivities. Teacher productivities can be enhanced through in-service training activities, both through training about learning and innovative assessment, lesson study, as well as classroom action research training. These service activities can have a positive impact, not only in improving teacher competence, but also increasing student acquisition. Therefore, the improvement of teacher competency ability becomes very important to be conducted continuously. Facilities that strongly support the efficiency and effectiveness in improving teachers' competence can be trainings of innovative learning models, innovative assessment, lesson study, as well as classroom action research.

IV. CONCLUSIONS

Based on the research results, it can be concluded that the workshop has a positive impact on improving teachers' pedagogic competence. However, there are indications that some teachers are still lack abilities to plan, implement and evaluate lesson by using RADEC learning model. It has an impact on their low pedagogic competence. Most of their lesson plans and implementations have not yet reflected the implementation of fully RADEC learning model. Most of them did not yet have good skills in planning, implementing and evaluating related RADEC learning models. Their conceptual knowledge and applied knowledge about the RADEC learning model is still in low category. All these imply that they still need guidance and practice to plan, implement, and evaluate based on RADEC learning model.

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