Digital pedagogical competence evaluation of teachers and strategies of school principals

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Abstract. The pedagogical competence describes the capability of a teacher in learning at school and improving teacher’s pedagogical competence needs support from the principal. This study aimed to describe the principal’s strategy in improving teacher's pedagogical competence. This type of research was qualitative. The data sources were principal and teachers in Sekolah Dasar Negeri 1 Sumbang. Interview and observation were used as instruments to collect the data. The steps of data analysis include data reduction; data validity; data display; and drawing conclusions. The results of this research indicate that the strategies undertaken by principals in improving teacher pedagogical competence include involving the teachers in seminar or training activities; participating in the activities of the teacher working group; and personal guidance based on the results of supervision of learning activities. The key to success in implementing this strategy is to create a conducive school climate.

1. Introduction

Teacher’s competence in learning usually known as pedagogical competence. Teacher’s pedagogical competence involves the capability in making learning plan; creating a comfortable situation during learning process; creating active learning in the class; using many methods and media; understanding the student’s condition, and making learning evaluation [1]. Pedagogical competence gives an effect to the teacher performance because the teacher has the ability to managing learning material that is delivered to the student by using several techniques and able to choose appropriate learning media. Effort that can be done to develop pedagogical competence such as, optimizing role of the principal as controller and educator; training for learning; giving a chance to the teacher to try several innovative learning strategies; using laboratory training; IT media-based learning design training; researching an action to solve the problem which appears to the student and optimization the teacher [2].

Improving teacher’s pedagogical competence needs support from the principal. Because of the principal as the functional staff has the responsibility to manage the school. The role of the principal has a significant relation to the teacher competence, it means the teacher will have a competence if the principal has a role in motivating and developing teacher’s competence [3]. The role of principal such as (1) assessing and supporting the teacher; (2) person who keeps the teacher from external pressure that
sometimes does not appropriate; (3) focus in maintain school developing by improving teacher’s capacity and school [4]. Coaching the principal through pedagogical competence such as, an activity to observe the class, conducted a meeting related to the result of observing activity in learning process, preparing learning program and interaction between teacher and student in the class, and coaching the teacher through the rule of the school by giving strengthening from reward or punishment to the teacher who breaks the rule [5]. The principal has to estimate a sufficient budget to access the learning source, provide the development program and made networking with other teachers to share the knowledge and self-development [6].

Sekolah Dasar Negeri 1 Sumbang, Banyumas, Central Java, Indonesia is one of the schools which have applied curriculum 2013 on the whole. There are 14 classroom teachers and 1 physical education teacher. Coaching which is done by the principal of Sekolah Dasar Negeri 1 Sumbang to improve teacher’s pedagogical competence does not work yet. Based on early observation is indicated that the teacher often collects the administration late, such as syllabus and lesson plan, the teacher tends to edit the lesson plan without any review, and lacking learning media usage. Therefore, it is needed hard work from the principal to make better coaching. To make it better, the principal has to make a better strategy to improve teacher’s pedagogical competence. Hence, this article aimed to describe the principal’s strategy in improving teacher’s pedagogical competence.

2. Method
The method in this article uses qualitative research. This article describes the principal’s strategy in improving the teacher’s pedagogical competence. Data was obtained from the principal and the teacher at Sekolah Dasar Negeri Sumbang 1 Public Elementary School by interviewing and observation techniques. Data collecting starts from interviews with the principal, then to strengthen the analysis of observations and interviews with the teacher. The steps of data analysis include (1) data reduction is the process of grouping data in accordance with the focus of the research objectives, data obtained based on the results of interviews and observations with principal and teacher; (2) data validity, to test the validity of the data using triangulation, it is done by checking the results obtained from the principal and teacher; (3) data display, data presented in the form of the text in the form of a description of the principal’s strategy in improving teacher’s pedagogical competence in Sekolah Dasar Negeri 1 Sumbang; and (4) drawing conclusions based on the results of data presentation.

3. Results and discussion

3.1. The process of making principal’s strategy in improving pedagogical competence
Principal as a manager in the school has the responsibility to manage the current resources, one of them is the teacher. The teacher has a big impact on the student’s learning. If a teacher has the right technique in managing the learning process, it gives an impact to the student’s learning motivation [7]. Further, when the teacher has a good relationship with the student, they will give a good response by giving a commitment that their achievement will increase [8]. Teacher motivation in the early learning process makes students more creative and loves the journey all life [9]. Thus, it is important for the teacher to have the ability to managing the learning process, it is related to the teacher’s pedagogical competence.

Teacher’s pedagogical competence involves mastering student characteristic, learning theory and learning principal, curriculum, learning development activity, information technology, learning evaluation, and follow up [10]. Teacher’s pedagogical competence are involved using appropriate learning method, using learning media, guiding the student, caring of student’s progress, and giving score and evaluation. Pedagogical competence has a contribution to the effectiveness of the learning process [11]. Pedagogical competence in this article focus on the teacher’s ability in arranging learning instrument and using learning media. Because of all the teacher in Sekolah Dasar Negeri 1 Sumbang have finished their own study in college. It means that they have well-pedagogical competence. But, they are lack of awareness to improve their selves, while the teacher is pushed to upgrade their pedagogical competence in the class.
Self-development to the teacher is a strategy from the principal to improve teacher’s pedagogical competence. The strategy which is used to develop pedagogical competence such as class visit every month; giving persuasive coaching to the teacher; involving teacher in every activity; promoted teacher’s well-being life; completed the facility and infrastructure of education; supervise and evaluate teacher’s performance by giving a coaching, giving reward to the best teacher and giving education supervise [12]. Strategy formulation in improving teacher’s pedagogical competence which is done by principal of Sekolah Dasar Negeri 1 Sumbang involves (1) planning which means reviewing the result of evaluation about pedagogical competence to the whole teacher such as, planning, scoring, following up, and academic ability the year before; (2) organizing means to put the teacher based on their academic ability and pedagogical competence which mostly low-capability teachers are placed in the middle class and so does high-capability teacher; (3) implementation which means the principal made a strategy like a program through the involvement of the teachers in seminar or training, taking a part in teacher working group activity; and personal guidance based on the result of supervise during learning process; and (4) supervise which means the principal conducted a supervision and followed up to the teacher after they followed the program. The way which is done by the principal is interview, review, administration, and the result of supervision by analyzing the map based on strength and the weakness.

3.2. Strategy implementing of principal in improving teacher’s pedagogical competence

The principal strategy of Sekolah Dasar Negeri 1 Sumbang in improving teacher’s pedagogical competence are involving teachers in seminar or training activity, following teacher working group activity; and personal guidance based on the result of supervision during the learning process.

3.2.1. Seminar or training. The seminar is a particular which is used in the unique intellectual activity. Exchanging idea which is focused on the resources (book, drama, or film) and showed specially to get deeper resources [13]. While, training is planned-effort and systematic to modify or develop the knowledge or skill or attitude through the learning experience, to reach the effective performance in every activity [14]. Training approach likely experience, reflective and interactive are recommended to see the teacher’s needed and increasing the motivation also teacher’s interest as a participant in training [15]. The goal of seminar or training is to get the ability so they can do their job well.

Seminar or training which is followed by teachers is an activity related to education. This activity conducted based on the approval of Education Authorities. According to the principal of Sekolah Dasar Negeri 1 Sumbang, last seminar or training which is followed by teachers discussed curriculum 2013. Every school delegated 1-2 person or if they registered their name personally, they still allowed but they didn’t receive accommodation fee from school. Each teacher gets their own turn to join this activity, in order to educate their selves and share knowledge. Seminar or training usually followed by many participants and it is the weakness of seminar or training. Some of them are just come and accomplish the invitation but they didn’t notice the program and agenda.

The responsibility of the principal which involving the teacher in seminar or training is asking the teacher about the result of the seminar or training. It is an audit if the teacher followed the program well. The criteria of good according to the principal of Sekolah Dasar Negeri 1 Sumbang is when they are able to explain the result of the seminar well and able to share with others. Further, the principal delivered to other teachers to take part in a seminar or training. The principal of Sekolah Dasar Negeri 1 Sumbang emphasizes to make peer tutoring activity in sharing knowledge. The-same-age friendship probably makes people more comfortable to express their problem, probably makes mutualism relation, and feels more comfortable while asking the question about the problem-solving process than just giving an instruction [16].

3.2.2. Teacher working group. The principal tried to involve the teacher in every activity which is conducted by the Education Board, such as seminar or training. Besides, the principal also requires the teacher to followed teacher working group. It is important because in that forum there is a tutor who helps to improve the learning process in the class. In addition, the effect of the personal relationship
between the teacher which is made in a group able to find and implement the strategy to take action in improving teaching and learning [17]. Afterward, if the group that has been made runs well, it has an impact on the teacher’s satisfaction which can increase their health and psychology prosperity between the teachers [18]. Teacher working group in Sumbang District established based on support from Education Board Banyumas, Regional Coordination, and all the Principal in sub-district Sumbang. The program of teacher working group is learning problem discussion, arranging learning instrument, learning material, training, seminar, and scientific work publication.

During inactivity of teacher working group was supervised by representatives of principal and the chief of teacher working group by instructing the teacher to be open and communicative to the things which are considered as the challenge in the learning process. According to the principal of Sekolah Dasar Negeri 1 Sumbang, the activity of teacher working group was conducted alternately, from the teacher class 1 up to teacher class 6. The activity of teacher working group in 2018, focuses on the implementation of curriculum 2013, because of the target from the government is all of the schools have applied curriculum 2013. Teacher working group conducted discussion related to curriculum 2013, the challenge in this curriculum is giving the score for the student. Scoring system in curriculum 2013 involves the cognitive aspect, effective, and skills. It is being discussed by the teacher in teacher working group, how to make learning instrument, giving scores, and input the result into the e-report card.

The principal supports the teacher to follow teacher working group. They do not only give support, but also give supervise. The principal of Sekolah Dasar Negeri 1 Sumbang did two-way communication with the teacher. The principal also asked the teacher to report the result of teacher working group activity. If there was a problem, the principal will give time to discuss each other. The discussion started from personal, afterward, if there was a serious problem and it needs to be discussed with the teacher, so it will be discussed in a group. The discussion is a sharing media from the principal with the teacher. Because the teacher expected that the principal was able to make communication formally and informally. This relation created a school environment more conducive and increase teacher’s satisfaction [19].

3.2.3. Personal guidance. Personal guidance described one-on-one interaction that happened between the experienced-people and inexperience-people. The benefit of personal guidance is self-effectiveness, like self-awareness and pride, career readiness, like career-planed and making decision, and the result of education, like attendance and achievement [20]. Personal guidance which is given to the teacher usually is a follow-up from the principal after doing supervision. In order to create mutualism communication, the principal has to be open to the teacher. The relation of principal and teacher determine school climate [21]. School climate can increase a student’s achievement [22].

Personal guidance which is done by the principal of Sekolah Dasar Negeri 1 Sumbang based on the supervision to the teachers from planning, implementing, and learning to evaluate. Planning became a modal for the teacher to make the learning process success [23]. Planning which is done by the teacher is preparing learning instrument like, material book, syllabus, lesson plan, media, and props. The role of the principal in planning which is done by the teacher is, before entering the class, the principal gives a briefing and checks the completeness learning instrument which is made by the teacher. It is more flexible because it can be done anywhere they need help after teaching hour. For the next plan, the principal makes time to give suggestion to the teacher. In the planning, the principal found that some teachers prefer editing to make the new one. Even though the principal gives a chance to the teacher to access the sample of the lesson plan, but it must be reviewed. Another case, some teachers have not collected a lesson plan on time. According to the principal of Sekolah Dasar Negeri 1 Sumbang, the lesson plan should be collected before the learning process begins. It will be noticed by the principal and will be discussed with the teachers.

In the teaching-learning process, the principal has two schedules, those are scheduled-supervision and unscheduled-supervision. Scheduled-supervision was conducted for all teachers in every semester. Scheduled-supervision which is conducted by the principal is following the learning process in the class till the end, the principal gives the score to the learning activity which is done by the teacher. While
unscheduled-supervision conducted when the teacher teaching in the class. Sometimes, the principal walk around to observe the learning process. The use of learning media like LCD in the class is lack. So, it used in turn. The principal gives a suggestion to the teacher. School environment made into learning media. Learning evaluation which is done by the teacher is giving the score for their cognitive, affective, and skills. The role of the principal in observing the teacher in learning to evaluate and giving a chance to the teacher for consulting about scoring instrument.

The result of teacher observation from planning, implementing, and evaluating of learning is the awareness of the teacher in arranging lesson plan, the usage of learning media, and inputting score. The solution of the principal, in this case, are personal guidance and creating school climate more conducive. The conducive school climate is the key to handle all the challenge in the school. The pressure from the school environments like learning, institution environment, and school improvement process is the main standard to grow school environment more conducive [24]. Every school principal can change the school climate and develop many strategies by desiring on school’s characteristic, the school’s background, and school citizens [25].

The principal has an important role in making the school environment [26]. The principal of Sekolah Dasar Negeri 1 Sumbang tried to build a conducive climate in school by being open and giving a chance to the school employees to share each other. Because of the corporation between teacher and principal became the strength to create school quality better in the future [27]. Hence, the way that has been done by the principal of Sekolah Dasar Negeri 1 Sumbang does not only give instruction but also a briefing by giving the experience to get a solution in every problem. The improving of teacher’s pedagogical competence in personal guidance can be seen by the principal in the next supervision. If the last solution runs well, it means that personal guidance which is done.

4. Conclusion

Based on the explanation above known that the strategy of the principal in improving pedagogical competence include involving the teachers in seminar or training activities; participating in the activities of the teacher working group; and personal guidance based on the results of supervision of learning activities. This strategy begins with planning, organizing, implementing, and supervising. The key to success in implementing this strategy is to create a conducive school climate.

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