

Conference Paper

Enhancing the Pedagogical Competence of Inclusive School Teachers in Handling Children with Special Needs

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Abstract

This study aimed to: 1) analyze the level of pedagogic competence of inclusive school teachers in dealing with children with special needs; 2) carry out activities to increase this competence; and 3) investigate the impact of these activities. An action research design was used. Data were collected through pretest and posttest questionnaire instruments and interviews. Two cycles of activities to increase the level of pedagogic competence were carried out: cycle 1 involved training and cycle 2 involved a workshop. The results showed that the training and workshops were effective in improving the pedagogic competence of inclusive school teachers in dealing with children with special needs and in improving the skills of teachers in preparing learning tools according to the learning needs of students, and this effect was significant.

Keywords: teacher pedagogical competencies, inclusive schools, children with special needs

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1. Introduction

The teacher is a central figure in the world of education so that the teacher has a dual role in addition to being a teacher as well as an educator (1). Teachers in schools not only transfer knowledge but also foster the character of their students. Optimization of the process of teaching and learning activities can occur with good interaction between teachers and students. Therefore, teachers are expected to have ideal competencies in order to be able to optimize learning in the classroom. Teacher competence is a description of the abilities that must be mastered by teachers in order to become professional teachers. One of the competencies that teachers must have is pedagogical competence. As a Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007 which stipulates that teachers must meet the required standards of academic qualifications and competencies (2). A teacher to meet the standards of pedagogic competence, personality, social, and professional (3). The

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competencies that teachers must possess do not only apply in regular schools but are also important to be developed in schools providing inclusive education.

Increasing the pedagogical competence of teachers of children with special needs in inclusive schools is one of the ways that needs to be taken to provide educational services that can accommodate the abilities and needs of every student in inclusive schools. Efforts to fulfillment students need, especially children with special needs in inclusive schools that can be done by teachers as a form of implementation of their pedagogical competences, include mastering student characteristics for identification and assessment, mastering theories about learning methods and strategies to determine learning methods and approaches used in learning process.

Another aspect of pedagogical competence that an inclusive education teacher needs to have is mastering curriculum development to determine curriculum modifications and IEP/PPI, having ethics and communicativeness to motivate students during learning, mastering assessment techniques to determine the success of the implementation of learning programs, mastering how to use the results evaluation for remedial, enrichment and follow-up. By increasing the pedagogical competence of teachers of children with special needs in inclusive schools, the education provided will be more able to accommodate the abilities and needs of each student. Efforts to meet the needs of students, especially children with special needs in inclusive schools that can be done by teachers as a form of implementing their pedagogical competencies include mastering student characteristics for identification and assessment, mastering theories about learning methods and strategies to determine learning methods and approaches used in the learning process. learning.

Strategic steps that need to be taken to overcome the complex challenges that teachers have to face for children with special needs in inclusive schools include programs to improve teacher pedagogical competencies. This study will examine a comprehensive picture of the pedagogical competence of inclusive school teachers in Sleman Regency and improve the pedagogic competence through training activities and workshops.

2. Related Works/Literature Review

The definition of pedagogic competence in National Education Standards is the ability of teachers to manage student learning which includes an understanding of students. Design and implementation of learning, evaluation of learning outcomes, and development of students to actualize students. So that in learning, the teacher can create

an atmosphere in learning to be optimal and comfortable so that it fosters something that is expected to be a positive student perception. This positive perception will foster student motivation in learning, so that it can influence student actions in achieving the desired goals and achieving the learning objectives, then learning achievement becomes satisfying and the learning media being taught is achieved, making students more creative in asking questions and having fun. Through this role, teachers must specifically become people who can enable students to learn [1].

Inclusive schools are special education services that are appropriate for children with special needs. Inclusive schools are the right vehicle for inclusive education because inclusive schools are regular schools that fulfill the needs of children who have differences and potential intelligence and special talents in one systemic unit [2]. The implementation of education both in formal and non-formal channels in inclusion settings must be evenly distributed to all children, including those with disabilities and those with talents because every citizen has the same right to obtain a quality education [3].

The term of children with special needs is not a translation or another word for children with disabilities, but children with special needs cover a broad spectrum, that is children with temporary special needs and children with permanent special needs (persons with disabilities). Therefore, when mentioning children with special needs must always be followed by a phrase of children with disabilities. So, children with disabilities are part or members of children with special needs. Therefore, the logical consequence is that the scope of special needs education work becomes very broad, in contrast to the scope of special education work which only concerns children with disabilities [4].

3. Material & Methodology

This study uses a quantitative approach with an action research design. The aim is to determine the improvement of the pedagogical competence of inclusive school teachers in handling children with special needs. This approach was chosen because it is in accordance with the problems revealed. The participants of this study were all inclusive school teachers in Sleman Regency, Indonesia. The sample selection used the total sampling method. This technique was used because the entire population became the research sample. The participants were 29 inclusive school teachers. Collecting data through questionnaires and interviews. The instrument used is a question of pre and post test. Actions are carried out in 2 cycles. Cycle 1 is done through training, while cycle 2 has a workshop. Data were analyzed using quantitative descriptives. Considering the type, the general trend of the data will be presented as a percentage,

while the qualitative data are grouped according to the problem category, then taken specifically.

4. Results and Discussion

4.1. Results

In cycle 1 of this research, the researchers conducted training to equip inclusive school teachers with knowledge that related to children with special needs and their learning needs. The material presented by the researchers in cycle 1 of this study included basic concepts of children with special needs and their learning needs, basic concepts of inclusion, and management in inclusive education.

Previously, the researchers gave a pre-test to the teachers who were the respondents in this study. After the training, the teacher is also given a post-test related to the material given. Table 1 below is the statistical test results that describe the differences in the pre-test and post-test scores of the 30 research respondents of teachers.

TABLE 1: Difference in value of Pre-Test and Post Test in cycle 1

| | | Paired Differences | | | | | T | df | Sig. (2-tailed) |
|--------|------------|--------------------|----------------|-----------------|---|--------|---------|----|-----------------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Pre - Post | -2.724 | 1.437 | .267 | -3.271 | -2.178 | -10.211 | 28 | .000 |

Based on the result of the pre-test and post-test scores that were given to the teachers, it showed that in cycle 1 there was an increase in the average score of 2.724 with a sig. 0.000. This showed that the teacher’s knowledge regarding the concept of children with special needs and their learning needs were increasing.

The result of interviews with the teachers also showed that initially they felt confused about facing their students with special needs. In their understanding, children with special needs are only children who experience physical barriers, however after cycle 1 was going on the teacher’s understanding of children with special needs developed. They understand that children with special needs are not only children who have physical barriers, but also cognitive barriers and other barriers so that learning needs to be adjusted to accommodate students’ abilities and needs.

The teachers' understanding of research respondents about the concept of children with special needs and learning needs that have increased in this cycle 1 has not been matched by the teacher's practical ability to prepare learning tools for children with special needs in inclusive schools where they teach. The result of the documentation study also showed that the learning tools that teachers have been using are general in the form of syllabus and lesson plans that apply classically. For this reason, this research is continued in the second cycle to overcome these problems.

In the second cycle of this study, the researcher emphasized the treatment (action) in the form of workshops to improve the skills of the research respondents' teachers in setting up learning tools related to inclusive education that were applied in their respective classes. The material presented in cycle 2 includes technical materials for accommodating curriculum design and IEP (Individual Educational Program). The 30 teachers as respondents in this study directly practiced in making accommodative curricula and IEP based sarcastically according to the problems they experienced in class while teaching children with special needs. In addition to practical work, pre-test and post-test were also given to the teachers as research respondents to measure their level of ability related to learning tools in the implementation of inclusive education.

Based on the results of the pre-test and post-test of 30 respondent teachers in this study were obtained statistical test results as follows:

TABLE 2: Difference in value of Pre-Test and Post Test in cycle 2

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|--------|--------------------------------------|--------------------|----------------|-----------------|---|-------|--------|----|-----------------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Pre-Test Results - Post-Test Results | -.933 | 1.982 | .362 | -1.673 | -.193 | -2.580 | 29 | .015 |

Based on the result of the statistical analysis of the pre-test and post-test scores that the teacher has done, it was obtained that in cycle 2 there was an increase in the average score of 0.933 with a sig value. 0.000. This showed that teachers' knowledge related learning tools in the implementation of inclusive education has increased.

The result of the interviews showed that previously the teacher only used the classical syllabus and lesson plan during teaching in an inclusive class. Knowledge of accommodative RPP and IEP is new to them. Based on the result of the interviews, it was

also known that in cycle 2 the teachers of research respondents were not only able to recognize the learning device but also could practice composing it.

The result of the documentation study showed that the accommodative RPP and IEP that the teachers have compiled during the implementation of this research is generally in accordance with the standard rules of preparation and is in accordance the problems the teacher encountered while teaching children with special needs in the classroom so that they can be applied in the learning process.

4.2. Discussion

Based on the results of the analysis of the problem conditions that exist in inclusive schools, it is closely related to the need to achieve professional teacher competency standards and learning that is able to accommodate the needs of students. One standard that has an important role in the success of student learning is pedagogical competence. This statement is in accordance with an opinion that the quality of the pedagogical competence of PLB teachers has an important role in the process of teaching and learning interactions [5]. The results of the preliminary study show that the pedagogical competence of teachers is currently in the fairly good category, so it requires improvement efforts so that these competencies are in good or very good results. Efforts made to improve teacher pedagogic competence are through training and workshops.

Follow-up efforts to improve teacher pedagogic competence were carried out in 2 cycles. The first cycle of action is in the form of training for teachers which begins with equalizing perceptions of the definition of children with special needs and continues with the delivery of material and reflection on indicators of teacher pedagogic competence so that it is known which indicators have not been mastered by teachers and their solutions. During the activity the teacher looked enthusiastic with the many discussions that were delivered. The training for teachers carried out in cycle I in this study proved effective in increasing teacher competence regarding the understanding of children with special needs and their learning needs. Teacher training as a program that aims to improve professional competence and pedagogic competence, must be carried out continuously, and developed to obtain a training model that can invite and inspire teachers to improve their competence independently [6].

As a follow-up to the results of the training in cycle one, cycle 2 was conducted to measure teacher readiness in the practice of preparing learning tools as an effort to increase pedagogic competence. Workshops related to the preparation of learning tools

in the second cycle of this research also further improve the pedagogic competence of teachers. Teachers are trained to design lessons, prepare media, and learn resources to prepare evaluation tools based on the abilities and needs of children with special needs in their class [7]. Regulation of the Minister of National Education of the Republic of Indonesia No. 65 of 2013 concerning Basic and Secondary Education Process Standards stated that the preparation of learning tools is part of learning planning. Learning planning is designed in the form of a syllabus and lesson plans which refer to the content standards. Beside that, in learning planning includes the preparation of learning media and resources, assessment tools, and learning scenarios [8].

Based on the results of each cycle, it can be seen that after the workshop in cycle II, the workshop participants were able to plan and develop the necessary evaluation framework based on the cases they experienced while teaching children with special needs in their classes. These results are in accordance with the statement that a teacher must be able to plan learning, implement a quality learning process, and assess and evaluate learning outcomes [9, 10]. The implementation of quality learning is certainly related to the readiness of teachers, such as the choice of methods, the availability of media, and the readiness of students. A good teacher is a teacher who can make lesson plans, so that they are able to make good learning strategies to ensure that the choice of methods, availability of media, and students can work together to create meaningful learning. Furthermore, in the preparation of learning tools a teacher in an inclusive school must consider the IQ and character of each student with disabilities who goes to school with regular (inclusive) children.

As one of the learning tools in inclusive education practice, the Individualized Educational Program (IEP) or Individualized Education Program (PPI) is a professional tool to protect the principles contained in the concept of inclusive education [11]. Individualized education programs emerge along with the dynamics of service development for Children with Special Needs in the world, especially the development of services for children with special needs in the United States. IEP is an important element, which is a characteristic of the concept of education for all, namely where children with special needs can learn together with regular children, which is called mainstreaming education. With training in making IEP, trainee teachers can more accommodate the abilities and needs of students with special needs in their classes. IEP is a teaching program that is related to the abilities and needs of individual learners which are set up in cooperation with the school, parents, and children themselves so that in its implementation it does not deviate from the learning objectives and the achievement of the abilities of children with special needs. There is an increase of participation and cooperation for all parties

involved in the preparation of Individual Learning Programs is an important aspect in implementing inclusive education [11].

5. Conclusion

Based on the results of research and discussion, it can be concluded that

1. Action research applied as a method in this research in the form of training in cycle 1 and workshop in cycle 2 has been proven effective in increasing the pedagogical competence of inclusive school teachers in handling children with special needs.
2. Training and workshops carried out in 2 cycles effectively can improve teacher pedagogical competence related to teachers' understanding of children with special needs and their learning needs and can improve skills in the set up of learning devices related to the learning needs of children with special needs.

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