THE EFFECT OF TEACHER PEDAGOGIC COMPETENCE AND LEARNING FACILITIES ON STUDENTS LEARNING ACHIEVEMENT:
(CASE ELEMENTARY SCHOOL IN CISARUA DISTRICT BOGOR)

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Abstract: The aims of the research: first the effect of teacher pedagogical competence on students learning achievement, second the effect of teacher pedagogical competence on student learning achievement, third the effect of learning facilities on student achievement and the last the effect of teacher pedagogic competence on learning facilities. It is conducted to the teachers Elementary school in the Cisarua District of Bogor. The population of the research is 683 teachers while the sample is 106, it is taken by using purposive random sampling technique. The research method using path analysis. The results of research there are effect teachers pedagogical competence and learning facilities on students learning achievement.

Keywords: Teacher Pedagogic Competency, Learning Facilities, Student Learning Achievement.

I. INTRODUCTION

In the Indonesian Teacher Code of Conduct, it is clear that the position of the teacher is in relation to student, namely as a guide. Supervisors contain quite deep meaning that can be meaningful, educate, teach, train, and so on as stated in RI Law No. 14 of 2005.

In relation to teacher code, academic qualifications include certain improve of education in addition to academic qualifications, teachers are required to have competencies, both scientific competencies as well as personal and community competencies outlined in four competencies, which include: pedagogic, personality, social, and professional competencies as well as competencies managerial. These competencies will affect the learning process for teachers and students[1].

Having known teacher pedagogical competence, learning facilities also greatly affect the learning process as an effective independent learning process, learning achievement will be obtained to the maximum. For this reason, learning facilities are needed to achieve student achievement. and vice versa if learning facilities are incomplete can interfere with the learning process, so that it has an impact on student achievement gained[2].

Based on the issues that the results of student learning achievement average national elementary school examinations in the district of Cisarua Bogor, there has been a decline. This possibility is caused by the lack of facilities for learning infrastructure, decreased teacher work motivation, decreased student motivation in facing national examinations, so
motivation needs to be improved in teacher competence, infrastructure and also motivate teachers and students in facing national examinations with various learning processes.

The success or failure of students in learning is caused by several factors that influence the achievement of learning achievement, which comes from within students who learn and from outside themselves. Learning achievement can be influenced by internal factors (physical / spiritual condition / condition of students) and external factors (family, school, community and surrounding environment), as well as the learning approach (approach to learning)\(^3\).

Considering the importance of pedagogical competence in the learning process, each school strives to equip learning tools to improve student learning achievement. Therefore, this study is attempted to investigate it needs to be proven in his research entitled "The Effect of Teacher Pedagogical Competence and Learning facilities on Student Learning Achievement Elementary School in Cisarua District Bogor".

A. The problem of statement

This study have problem statements such as:

1. Is there any effect on teacher pedagogical competence to student learning achievement?
2. Is there any effect on learning facilities to student learning achievement?
3. Is the any effect on teacher pedagogical competence to student learning facilities?
4. Is the any effect on teacher pedagogical competence and learning facilities to student learning achievement?

B. The aim of research

The aim of the research to:

1. Know the effect on teacher pedagogical competence to students learning achievement.
2. Know the effect on learning facilities to students learning achievement.
3. Know the effect on teacher pedagogical competence to learning facilities.
4. Know the effect effect on teacher pedagogical competence and learning facilities to students learning achievement.

II. THEORETICAL FRAMEWORK

A. Teacher Pedagogical Competence

Pedagogical competence is the ability of teachers to manage learning and teacher understanding of students\(^4\). The indicators of teacher pedagogical competency are understanding students 'characteristics, mastering learning theory, developing curriculum, mastering learning models and strategies, applying ICT in the learning process, learning activities that educate, developing students' potential, communicating with students and evaluating and evaluating.

B. Learning Facilities

Learning facilities include quality books, reference books, and a learning environment. By using the facilities properly, it will help to achieve student learning success\(^5\). Indicators of learning tools are learning tools, teaching aids and learning media that are used by teachers and students in the learning process in order to encourage the learning process for students.

C. Student Learning Achievement

The student learning achievement of a student can be known by conducting an assessment or measurement process through evaluation activities. An evaluation tool in measuring learning achievement is a test that has been well arranged so that the results can truly measure a student's abilities. The intended learning achievement is the result (mastery) achieved by students in a particular field of study after following the teaching and learning process in a school\(^6\). Assessment of student achievement from cognitive (knowledge), affective (attitude) and psychomorphic (skill) aspects.
III. RESEARCH METHODOLOGY

A. Research Framework

Figure I: Research Framework

B. Hypothesis

H1: Effect of teacher pedagogical competence on students achievement.

H2: Effect of learning facilities on student achievement.

H3: Effect of teacher pedagogical competence on learning facilities.

H4: Effect of teacher pedagogical competence and learning facilities on student achievement.

C. Data Source

The research using two data sources are primary and secondary data. Primary data were obtained from distributing questionnaires and interviews to elementary school teachers in Cisarua Bogor sub-district. While secondary data are sourced from upstream research and other relevant documentation.

D. Population, Samples and Sampling Techniques

The population of research in elementary school in Cisarua District, Bogor. The collection of data carried out through questionnaires. In this case, the Cisarua Bogor sub-district has 36 elementary schools. It is conducted to the teachers Elementary school in the Cisarua District of Bogor. The population of the research is 683 teachers while the sample is 106, it is taken by using purposive random sampling technique. Data source sampling technique with certain considerations. These sample can be seen in the following table:

<table>
<thead>
<tr>
<th>No.</th>
<th>Object of Research</th>
<th>Population</th>
<th>Sampel</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SD Al Amaniyyah</td>
<td>17</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>2</td>
<td>SD Negeri Ciburial</td>
<td>16</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>3</td>
<td>SD Negeri Cikoneng</td>
<td>17</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>4</td>
<td>SD Negeri Cilember 01</td>
<td>18</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>5</td>
<td>SD Negeri Kopo 01</td>
<td>20</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>6</td>
<td>SD Negeri Kopo 02</td>
<td>21</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>7</td>
<td>SD Negeri Kopo 03</td>
<td>20</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>8</td>
<td>SD Negeri Batulayang</td>
<td>22</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>9</td>
<td>SD Negeri Cibeureum 01</td>
<td>20</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>10</td>
<td>SD Negeri Cibeureum 02</td>
<td>20</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>11</td>
<td>SD Negeri Cibeureum 03</td>
<td>18</td>
<td>3 Teacher</td>
</tr>
<tr>
<td>12</td>
<td>SD Negeri Cibeureum 04</td>
<td>18</td>
<td>3 Teacher</td>
</tr>
</tbody>
</table>
E. Data Analysis

In the research using descriptive methods with quantitative and qualitative approaches, namely methods that describe the actual situation systematically, factually and accurately regarding teachers pedagogical competence and learning facilities on student achievement. Software in research uses STATA (Statistics and Data) version 13.

IV. RESEARCH FINDING

Path analysis is an advanced part of regression analysis. Regression analysis is usually used to test whether there is a direct impact given by independent variable to the dependent variable. Meanwhile, path analysis does not only directly test direct impact, but also explains the indirect impact given by independent variables through intervening variables on the dependent variable.

Tabel II: Result of Path Analysis

<table>
<thead>
<tr>
<th>Source</th>
<th>55 df</th>
<th>R2</th>
<th>Number of obs = 106</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2602.4562</td>
<td>0.4602</td>
<td>45.3442</td>
</tr>
<tr>
<td>Residual</td>
<td>598.45181</td>
<td>105</td>
<td>8.935416</td>
</tr>
<tr>
<td>Total</td>
<td>2100.9073</td>
<td>105</td>
<td>257.15548</td>
</tr>
</tbody>
</table>

Source: Program STATA 13
Based on research data that has been obtained. The results of the research indicate that the first hypothesis proposed in this study is that the level of teacher pedagogical competence influences student achievement. The results of testing the hypothesis in this study indicate that H1 is accepted, meaning that the level of teacher pedagogical competence influences student achievement. The table shows the column t variable pedagogical competence of teachers is worth 9.82 which means higher than 2, therefore teacher pedagogical competence can affect student achievement.

The second hypothesis proposed in this study is that the level of learning facilities influences student achievement. The results of testing the hypothesis in this study indicate that H2 is accepted, meaning that the level of learning means influences student achievement. The table shows the column t variable means learning worth 3.04, which means higher than 2, therefore learning tools can affect student achievement.

Third hypothesis proposed in this study is that the level of teacher pedagogical competence influences learning facilities. The results of testing the hypothesis in this study indicate that H3 is accepted, meaning that the level of teacher pedagogical competence influences the means of learning facilities. The table shows the column t variable means learning worth 3.26 which means higher than 2, therefore the pedagogical competence of teachers can affect learning facilities.

The last hypothesis proposed in this study is the influence of teacher pedagogical competence and learning facilities on student achievement. The results of testing the hypothesis in this study indicate that H4 is accepted, the teacher pedagogical competence and learning facilities directly influence on student achievement. The table shows the column t variable remuneration is 3.34 which means it is higher than 2, therefore the teacher's pedagogical competence and learning tools directly influence student achievement.

V. CONCLUSION

Based on the results of the analysis and discussion that has been carried out namely regarding the influence of teacher pedagogical competence and learning facilities on student achievement in elementary schools in the Cisarua District Bogor, conclusions can be drawn. Teachers' pedagogical competencies directly influence student achievement. This shows that the higher the teacher pedagogical competency level, the higher the level of student achievement, the learning facilities have a direct effect on student achievement, this shows that the higher level of learning means the level of student achievement is getting high.

The teacher pedagogical competence directly influences the learning facilities. The research that the higher the teacher pedagogical competency, the higher the level of student learning facilities. And the teacher pedagogical competence and learning facilities directly influence on student achievement that the higher the teachers pedagogical competency and learning facilities, the higher the level of student achievement.

From the results of the research conducted, the suggestions given can be used as useful input for interested parties including, teachers must improve pedagogical competence of teachers who must become professional teachers, learning facilities available in order to support the learning process activities and teachers must continue to innovate in organizing learning activities so that in learning to improve student achievement.

REFERENCES

[8] Law Number 14 Year 2005 article 10 paragraph 1 concerning Teacher and Lecturer.