The Influences of Teacher Professional Competencies and Infrastructure on Teacher Performance Through Teaching Devices of Technical Implementation

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Abstract
The purpose of this study was to determine the effect of professional competence of educators and infrastructure on the performance of educators through learning tools at the State Senior High School UPT in the Regional Education Office Branch of Makassar City. The research approach applied is quantitative. The type of research is a survey, namely analyzing data and facts that support the information needed to support the research discussion in answering and solving the problem's core. The analytical test used is Path Analysis. The research sample was 163 educators at the State Senior High School UPT in the Region I Education Office Branch of Makassar City. From research conducted in September 2019 at the State Senior High School UPT in the Regional Education Office Branch of Makassar City, the following results were found: 1. Educators' professional competence has a positive and significant effect on the completeness of learning devices. 2. Learning infrastructure has a positive and significant effect on the completeness of learning devices. 3. Completeness of Learning Tools has a positive and significant effect on Educator Performance. 4. Professional Competence of Educators has a significant effect on Educator Performance. 5. Learning infrastructure has a positive and significant effect on teacher performance. 6. There is a positive and significant indirect effect of educators 'professional competence on educators' understanding through the completeness of its learning tools. 7. Without a significant indirect effect of learning infrastructure on educators’ performance through the completeness of learning tools.

Keywords:  
Educator Professional Competence, Infrastructure learning tools' completeness, Educator Performance
1. Introduction
The performance of educators is part of the factors that affect the quality of education in Indonesia. The level of development in the quality of education can be indicated by the teachers' high and low performance. It is an urgent point to know the version of educators in our country and the factors affecting their performance to educate the nation's life.

Performance is commonly understood as performance, which is a description of the condition of an individual's work in carrying out a job. Handoko (2001) says that "the extent to which a person's success in doing his job is called the level of performance." The principal factor in this research is not to equate the notion of performance in a broad sense (performance) with performance in a narrow mind (job performance), which is often expressed in terms of job performance. If later in the study the term performance is found, then the thing that is meant is performance in terms of work performance.

Learning is one form of teacher performance. All teacher activities that it implements must become one unit, inspire, and absorb various jobs in line with the level of talents, needs, interests, including the competence of students and the competence of educators in managing subject matter while applying various adequate types of learning technology. According to the National Education System Law in 2003, the definition of learning is a process of interaction in a learning environment between learning resources and educators and students. It can be said that the learning process is a process that contains various activities of teachers and students that have a causal correlation and take place in learning activities to achieve learning goals.

This description affirms that there is an educator workload that requires the ability to master the subject matter to be taught and master the method of teaching the subject matter of choice in learning. In the teaching and learning process, the selection of teaching materials and learning strategies that educators will use must be matched with the characteristics of prospective learners who will learn and the applicable curriculum. Good mastery of the equipment that must be taught is the primary condition for an educator's success to lead well. Without good mastery of teaching materials, an educator will not have reasonable confidence in learning the students he teaches. Mastery of teaching materials is a substantive (core) requirement as a personal treasury obligation for educators.

It is essential to know that the term professionalism in education means that educators are real people who have talents as educators and understand and know students from their characteristics and uniqueness. As stated in the Law of the Republic of Indonesia (UURI), no. 14 of 2005 concerning Teachers and Lecturers, emphasizes that teachers are professional educators. Whose main job is to educate, guide, teach, train, direct, evaluate, and assess students in the pathways of formal education, primary education, secondary education, and early childhood education. Educators must master at least one type of scientific field. An educator must be engraved in him an attitude of professional integrity. As stated in article 2 paragraph (1), it "serves to increase the role and dignity of teachers as agents of learning to improve the quality of national education".

According to Wardman Djojonegoro, who has served as Minister of National Education in an interview session with the Indonesian Education Television on August 16, 2004, in (Enco Mulyasa 2017) that to contribute to improving the quality of human resources (HR), there are at least three main requirements that are important to pay attention to in education development, namely: (1) professional teachers and education personnel, (2) building facilities, (3) quality books.

School facilities and infrastructure are still one of the inhibiting factors faced by the world of education in Indonesia today. Low financial power, mismanagement, collusion levels, corruption, and nepotism (KKN) are still high, and other factors, which are complications of diseases that cause school conditions to be far from the minimum requirement of the eight national education standards. Many incomplete school buildings, a limited number of classrooms, the insufficient laboratory space. Including the incomplete laboratory equipment and materials that are very much needed in learning activities are some of the fundamental problems that are still being worked on.

Eko Frandi Suprianto, 2013; difficulties that hit the teacher in making learning tools are the lack of knowledge and some of the existing tools. The results show that further action can be taken, namely, the need for socialization in learning tools to make correct learning tools and then increase teachers' quality in Indonesia.
Fuad Hasan, the former Minister of Education and Culture of the Republic of Indonesia, argued in line with the statement that, no matter how good the curriculum is, if qualified teachers do not accompany it, then everything will be in vain. On the other hand, a lousy curriculum can be supported by qualified teachers. So that it is imperative, improving the quality of teachers should be the primary concern in efforts to improve the quality of education.

Donni Juni Priansa (2014) says that teachers are individuals who are required to be able to describe and translate the values contained in the curriculum, then in learning activities in the classroom, these values are transformed to students.

The Indonesian people's hope to see quality education in their country cannot be denied that it relies heavily on all educators who are active and serve throughout the archipelago. Educators' task is not easy to apply, so maximum competence is required in their service. The four competencies of educators, namely pedagogic competence, professional competence, personal competence, and social competence must be implemented optimally and in a balanced manner in an educator's life journey.

Based on empirical facts through the results of my monitoring in the natural environment, especially in the city of Makassar regarding teaching and learning activities at UPT SMA Negeri, there are still several conditions that occur, among others, as follows: Class without teachers (educators) when the teaching and learning process is running; Educators are late to class when the teaching and learning process is running; Educators leave the classroom early when the teaching and learning process is running; Educators teach at the school without preparing a lesson plan (RPP); Educators teach without bringing attendance lists of students (students).

2. Literature Review

The origin of the word competence is competent, which means knowing (capable), having authority; in power (determine, decide) things (Indonesia Dictionary 1990: 453). Much. Ilyas Ismail, in the Dissertation Journal 2010: 53, states, "competence comes from English, namely competence. The meaning is the same as being competent. It means knowledge, skill, authority, power, having the ability, attitude, and so on. Thus, competence is the skills, abilities, knowledge, and skills of a person in a particular field. So, competence is defined as an adequate ability to perform a gift or a task and the required skills".

RI Law, No. 20 of 2003 concerning the National Education System, Chapter XI regarding Educators and Education Personnel, Article 39 Paragraph 2 states that educators are tasked with planning and implementing the learning process (Kanto et al., 2020; Lionardo et al., 2020; Rachman et al., 2019). They were conducting training and mentoring, assessing learning outcomes, and conducting research and community service, especially for educators at universities. According to Ibrahim (2003: 3), in managing the teaching and learning process, the learning tools needed can be in the form of student worksheets (LKS), syllabus, lesson plans (RPP), and student textbooks.

Based on the Big Indonesian Dictionary of the Language Center (2014), it means, namely, anything that can be used to achieve goals or objectives. Furthermore, infrastructure, namely whatever is the core support for implementing a process (development, project, business, etc.) (Big Indonesian Dictionary of the Language Center, 2014; Nuraini et al., 2019; Umanailo, 2020, 2019). These two things have differences; the facilities are more intended for easily moved items (portable) such as machines and computers, then infrastructure is more for all stationary objects (stationery), for example, buildings, and so on.

Suppose you pay attention to the general provisions of Minister of National Education, Number 24 of 2007. In that case, infrastructure is the essential equipment to operate a school or madrasah's functions, while facilities are portable learning equipment. Infrastructure includes, for example, courtyards, parks, fields, green open spaces, shade trees, roads to schools, etc. Meanwhile, educational facilities include chairs, tables, classrooms, buildings, and all learning intermediaries. Completeness of learning tools means fulfilling instruments or components of learning devices, such as syllabus, lesson plans, annual programs, semester programs, minimum completeness criteria (minimal learning completeness), and others.

Completeness means the fulfillment of the required instruments or equipment, or components. Completeness of learning tools means fulfilling appliances or pieces of learning devices, such as lesson plans, syllabus, semester programs, annual programs, minimum completeness criteria (minimal learning completeness), and others.
Nazarudin (2007) said that the learning device is anything or various preparations in the form of the results of the composition of teachers, whether in groups or individually, so that the evaluation and implementation of learning can be done systematically and get the results as expected, then what is meant by learning tools includes the syllabus, Semester Program, Annual Program, Effective Week Analysis, Minimum Completion Criteria, and Learning Implementation Plan. Performance is commonly understood as performance, which is a description of the condition of an individual's work in doing a job. Handoko (2001) says that "the extent to which a person's success in doing his job is called the level of performance".

The origin of the word competence is competent, which means knowing (capable), having authority; in power (determine, decide) things (Indonesia Dictionary 1990). Professional competence is the ability to master subject matter in-depth and breadth, which includes the ability to master learning material in academic units, curriculum, and the scientific core that governs the material, including the ability to master the methodology and scientific structure. There are many theories about performance that we can find in the world of everyday education that experts have put forward both in education and in other fields. One of them is at the KBBI Language Center. Performance means achieved, demonstrated achievements, workability (Ministry of National Education, 2014).

Performance is the achievement of a person in particular expertise or field in carrying out his job or assignment delegated from a superior effectively and efficiently (Hadari Nawawi 1996). Furthermore, Nawawi argues that performance is a competency possessed by a person in carrying out an activity so that achieving his training in achieving goals can be seen.

Based on the Big Indonesian Language Center Dictionary (KBBIPB) (2014), the means are all things that can be used to obtain a goal or purpose. Furthermore, infrastructure, namely all matters that function as the core support for implementing a process (development, project, business, etc.) (KBBIPB, 2014). These two things have differences. Facilities are more related to easily moved objects (portable), such as machines and computers. At the same time, infrastructure tends to be associated with stationery, including buildings and so on.

Suppose you pay attention to the general provisions of Permenedi (Regulation of the Minister of National Education) No. 24 of 2007. In that case, infrastructure is the primary facility for operating school or madrasah functions, while mobile learning equipment facilities. Infrastructure includes, for example, courtyards, parks, fields, green open spaces, shade trees, roads to schools, and others, while educational facilities include chairs, desks, classrooms, buildings, including learning intermediary equipment. The supporting facilities include traffic lights, signs, roads, which can be said to be infrastructure.

The origin of the word competence, namely competent, means knowing (capable), having authority, in power (determine, decide) things (Kamus Besar Bahasa Indonesia 1990). According to Ibrahim (2003), in managing the teaching and learning process, the required learning tools can be in the form of student worksheets (LKS), lesson plans (RPP), syllabus, and student textbooks. The concept of educator performance is that every individual who is given the trust or task to work in a particular organization is expected to be able to make the highest contribution and show satisfactory performance towards the achievement of the goals of the organization.

A. P. Mangkunegara (2004) explains the word performance. The word performance comes from the term job performance, which is also termed actual performance, namely the achievements that have been obtained/achieved for someone honest or work performance. So, a definition is born which says that performance is the result of work in quantity and quality performed by an employee in carrying out his duties following the responsibilities assigned to him.

Suppose you pay attention to the general provisions of Regulation of the Minister of National Education, No. 24 of 2007. In that case, infrastructure is the main facility to operate a school or madrasah, while facilities are mobile learning equipment. Infrastructure includes, for example, courtyards, parks, fields, green open spaces, shade trees, roads to schools, etc. Meanwhile, educational facilities include chairs, tables, classrooms, buildings, including learning intermediary equipment.

All equipment can be used as materials and tools to achieve the goals and objectives in a production process (for example, hoe, sickle, etc.) It is a general meaning of means. The whole equipment is the primary support for the implementation of production (such as workplaces, factories, ditches, roads, land, etc.) is a general definition of
infrastructure. For example, in the land transportation section, trains, taxis, buses, motorbikes, cars are a means of transportation because humans directly use them. The supporting facilities include traffic lights, signs, roads, which can be said to be infrastructure.

Completeness means the fulfillment of the required instruments or equipment, or components. Completeness of learning tools implies completing appliances or pieces of learning devices, such as syllabus, lesson plans, annual programs, semester programs, minimum completeness criteria (minimal learning completeness), and others. Samsudin (2006: 159) defines performance as the level of task implementation that individuals can achieve by using predetermined boundaries and existing capabilities to achieve organizational goals. Another case with Nawawi (2005: 234) defines performance as the result of carrying out a job. This definition of Nawawi expresses the meaning that performance is a behavior or individual action that can be observed by others directly or indirectly.

3. Methodology
The research approach is quantitative and uses a path analysis tool (Path Analysis), SPSS version 16. This research was conducted with educators' research subjects at UPT SMA Negeri in the Regional Education Office Branch of Makassar City. The data collection technique is done by distributing a questionnaire (questionnaire). The sample taken is random sampling (Sumadi Suryabrita (2011: 35) says that among the various sampling techniques that are considered the best is random sampling. Questionnaires are circulated online, with a target of at least 163 people. The sample in this research is to use the Slovin formula (in Riduwan, 2005; Mu’adi et al., 2020; Nawawi et al., 2020).

4. Results
In this section, it will be calculated coefficient of the model I path as well as the coefficient of model II path, with explanations as below:

Coefficient of Line I:

<table>
<thead>
<tr>
<th>Coefficients Path Analysis Test</th>
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<tbody>
<tr>
<td>Line 1 Analysis</td>
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</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>10.480</td>
<td>1.525</td>
<td>6.872</td>
<td>.000</td>
</tr>
<tr>
<td>Educator Professional Competency (X1)</td>
<td>.427</td>
<td>.070</td>
<td>.422</td>
<td>6.069</td>
</tr>
<tr>
<td>Learning Infrastructure (X2)</td>
<td>.311</td>
<td>.065</td>
<td>.333</td>
<td>4.784</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Completeness of Learning Equipment (Y1)

Source: Primary Data 2019

Based on the output of Coefficient Line I in the table section "Coefficients," it can be known that both variables have significance values, i.e., X1 = 0.000 and X2 = 0.000 less than 0.05. The meaning shown by this result is The Regression of Model I, where X1 (Professional Competency educators) and X2 (Learning Infrastructure Facilities) have a significant influence on Y1 (Completeness of Learning Devices).

The nominal value of R Square in the table "Model Summary" is worth 0.435. The fact indicates that the contribution of X1 and X2 influence to Y1 is worth 43.5 %. In comparison, the remaining 56.5 % contribute from other variables that are not studied or not included in this study.

<table>
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<tr>
<th>Table 2. Test-Path Analysis Model Summary Path 1</th>
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<td>Model Summary</td>
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</table>

a. Predictors: (Constant), Learning Training Facilities (X2), Educator Professional Competency (X1)

Source: Primary Data 2019

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Furthermore, to determine the value of e1 can be reached by using the formula $e_1 = \gamma (1 \cdot 0.435) = 0.565$. Through path analysis test path, I where $Y_1 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + e_1$ means $Y_1 = 0.000 + 0.422 \cdot X_1 + 0.333 \cdot X_2 + e_1$ is shown that if $X_1$ (Professional competency educator) increases by one, then $Y_1$ (completeness of learning device) also increases, meaning positive influence. In other words, the more competent an educator is, the more complete the learning tools. Similarly, if $X_2$ (learning infrastructure) has increased by one, then $Y_1$ (completeness of learning devices) also increases, meaning there is a positive influence. In other words, the more the infrastructure to make school learning devices, the more complete the learning tools of an educator.

Coefficient of Line II:
As opposed to Coefficient Line II's result in the "coefficient," it is stated that all three variables have significance values. Namely $X_1 = 0.008$, $X_2 = 0.000$, and $Y_1 = 0.000$. Where $X_1$, $X_2$, and $Y_1 < 0.05$, these results indicate the meaning that the regression of $X_1$, $X_2$, and $Y_1$ has a significant influence on $Y_2$. The nominal value of R Square contained in the table "model summary" is 0.607. This means that the contribution of $X_1$, $X_2$, and $Y_1$ to $Y_2$ is 60.7 %. Simultaneously, the remaining 39.3 % contributed to other variables not studied or not included in this study.

<table>
<thead>
<tr>
<th>Table 3. Coefficients Path Analysis Test - Path Analysis 2</th>
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<tbody>
<tr>
<td><strong>Coefficients</strong></td>
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<td>Model</td>
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<td>1</td>
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<tr>
<td>Educator Professional Competency (X1)</td>
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<tr>
<td>Learning Infrastructure (X2)</td>
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<tr>
<td>Completeness of Learning Tools (Y1)</td>
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<td>a. Dependent Variable: Educator Performance (Y2)</td>
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**Source:** Primer Data 2019

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<th>Table 4. Summary Line 2 Model Path Analysis Test</th>
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<td><strong>Model Summary</strong></td>
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<td>Model</td>
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<td>-------</td>
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<tr>
<td>1</td>
</tr>
<tr>
<td>a. Predictors: (Constant), Completeness of Learning Equipment (Y1), Learning Training Facilities (X2), Educator Professional Competencies (X1)</td>
</tr>
</tbody>
</table>

**Source:** Primary Data 2019

Furthermore, to get the value $e_2$ can be obtained by formula $e_2 = \gamma (1 - 0.607) = 0.393$. Through Path Analysis test line II where $Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 Y_1 + e_2$ means $Y_2 = 0.002 + 0.172 \cdot X_1 + 0.264 \cdot X_2 + 0.474 \cdot Y_1 + e_2$, it is shown that if $X_1$ (Professional competency of educators) has increased by 1 then $Y_2$ (educator performance) also increases, meaning there is a positive influence. In other words, the more competent an educator is, the better the performance. Similarly, if $X_2$ (learning infrastructure) increases by one, then $Y_2$ (educator performance) also increases, meaning there is a positive influence. In other words, the more infrastructure for making school learning devices used, the better the performance of educators. Furthermore, if $Y_1$ (completeness of learning devices) increases by 1, then $Y_2$ (educator performance) also increases, meaning there is a positive influence. In other words, the more complete the learning tools that educators have, the better the performance.

5. Conclusion
The Professional Competency of Educators is good. It guarantees the availability or completeness of learning equipment well; The Learning Infrastructure is adequate. It leads to the fulfillment of the Completeness of Learning Equipment properly; When the Completeness of Learning Devices is fulfilled, it causes educator performance to be
good; When the Professional Competency of Educators is good, it causes the Performance of Educators to be good; Where the learning infrastructure is adequate, it causes educator performance to be good; When the Professional Competencies of Good Educators and the Completeness of Learning Tools Are Fulfilled together, it causes educators to be good; Adequate School Learning Infrastructure with Complete learning equipment is fulfilled together without giving a positive and significant influence that is not directly to educators' performance at the State High School Branch of Education Office Region I Makassar City. This is due to the lack or fewer educators who use the School Computer Laboratory in making learning devices compared to educators who use school computer laboratories. In other words, the effectiveness and efficiency of the use of school infrastructure by educators in making learning devices are still lacking.

References


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