The Effect of Teacher’s Performance and Principal Leadership on Educational Quality Improvement

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A principal as an innovator is reflected in the way he performs his works in a constructive, creative, delegative, integrative, rational, pragmatical, exemplary, disciplined, adaptable and flexible manner. Partially, the variable of principal leadership has a positive effect on educational quality improvement which means that principal leadership partially has a strong role in affecting educational quality improvement. Partially, the variable of teacher performance has a positive effect on educational quality improvement which means that the teacher's performance partially has a strong role in affecting educational quality improvement. Simultaneously, the principal leadership and teacher's performance have a positive and significant effect on educational quality improvement, it shows that the variables of principal leadership and teacher performance have a high role in affecting educational quality improvement. The value of R2 obtained is 0.973 or 97.3% which indicates that the principal leadership and teacher's performance in describing the variation that occurs within the educational quality improvement is 97.3% while the remaining 2.7% is affected by other variables or factors. The form of synergic cooperation between the principal and teachers should still be in the scope of educational development including the formulation of short-term and long-term school programs and joint evaluation of school work performance.

Keywords: Principal Leadership, Teacher's Performance, Development, Educational Quality, Improvement.
Introduction

In developing and managing a school, a principal should understand the school needs that he leads including the needs of teachers, students and the school community. A principal and a teacher as educational personnel should not only master the field of science, instructional materials and methods, but also should be able to motivate learners to possess a range of skills and broad insight into education. High-performing teachers will constantly strive to demonstrate high achievement in order to improve the quality of teaching so that in the end, the quality of learning can be improved. Educational development is perceived as a need for a nation to move forward. Educational development is a process of developing/improving education which is conducted in phases and in order that it leads to the desired goals or objectives. According to Komariah and Triatna (2005: 2) the educational process has the levels of input, process and output. And high-low quality of education is measured by the level of inputs and processes. If the input is low and the process is low then the output becomes low. The purpose of education entails good, noble, proper, true and beautiful values for life. Therefore, the purpose of education is twofold: to serve as a direction for all educational activities, something to be achieved by all educational activities.

The process of education is an activity to mobilise all components of education by educators directed towards achieving educational goals. How the process of education is implemented greatly determines the quality of achievement of educational goals. In order to improve educational quality, schools as the forefront of education should be provided with the greatest opportunity available in being actively involved in making decisions in education. Schools should play a major part and the community is required to participate in quality improvement that has become the school’s commitment for the sake of societal progress. By streamlining all elements in education, it is expected that the quality of education will improve and in order to ensure everything is in accordance with proper mechanism, the role of a principal as a school leader is highly necessary. A leader is the one whose duty is to lead, while leadership is a talent and or a character that a leader must have. In summary, leadership is the power to influence people, either to do something or not to do something. James M. Black in Manajemem: a Guide to Executive Command in (Sadili Samsudin, 2006) puts forth that leadership is the ability to convince and motivate others to work together as a team under their leadership in order to achieve a certain goal. It can be inferred that leadership is an activity in guiding a group of people in such a way so as to achieve a particular goal (Indra fachrudi; 2006).

At school, leadership roles are performed by a principal. A principal is a functional teacher who is assigned to lead a school where the learning process is conducted, or where there is an interaction between the teacher delivering the lesson and the student receiving the lesson (Wahjosumidjo, 2002). Principal leadership is immensely defined for an individual. A
solution can be provided with the involvement and assistance of others to meet unlimited tasks and demands, resources that the principal collects are a practical alternative. A common approach or team can improve leadership efficiency and effectiveness (Ibtisam Abu-Duhou, 2002). School Management Guide book by the Ministry of National Education (2000: 13) reports that the principles of leadership that the principal needs to understand and implement in developing the school where he leads include being: a). Constructive, b). Creative, c). Participative, d) Cooperative, e). Delegative, f). Integrative, g). Rationale and objective, h) Pragmatic, i). Exemplary, j). Adaptable and flexible. Based on the principles of leadership mentioned above, a principal should be able to apply a leadership style in order to succeed. The principal leadership style that must be applied depends on the circumstances of the staff under his leadership. In addition to having various styles, the principal’s roles as a manager include: (a) The role of interpersonal relationships; (b) Informational roles; and (c) Decision maker (Wahjosumidjo, 2002). But in the new paradigm of education management, the principal must at least serve as educator, manager, administrator, supervisor, leader, innovator and motivator. The success of principal leadership can be measured using those seven function dimensions (Mulyasa, 2009).

The decree of the Minister of Education and Culture number 0296/U/1996 serves as the basis for principals’ performance assessment. The principal as an educator should have the ability to guide teachers, non-teacher educational personnel and learners to develop. Specifically, the principal as a manager and administrator must have the ability to manage curriculum, manage the students’ administration, manage personnel administration, administer the administration of educational facilities and infrastructure, have appropriate strategies to empower educational personnel through cooperation, provide opportunities to improve his profession and encourage the involvement of all education personnel in various activities that support the school program. A school principal as a supervisor is reflected in his ability to prepare and implement the educational supervision program and utilize the results. The success of a principal as a supervisor, among others, can be demonstrated by (1) the increased awareness of teachers to improve their performance and (2) the increase in teachers’ skills in performing their duties.

The principal as a leader must have a special character that includes personality, basic skills, experience and professional knowledge, as well as administrative and supervisory knowledge (Wahjosumijo; 2002). A principal as an innovator is reflected by the way he does the work in a constructive, creative, delegative, integrative, rational, pragmational, exemplary, disciplined, adaptable and flexible manner. As a motivator, a principal must have an appropriate strategy to provide motivation to educational personnel in performing various tasks and functions. By performing their roles and functions, it is expected that the school will succeed and that teacher competence can be improved.
Problem of Research

Teachers can be regarded as a major component in the educational process. According to Law No.14 of 2005 on teachers and lecturers, a teacher is a professional educator with the main task of educating, teaching, guiding, directing, training, assessing and evaluating learners on early childhood education on formal, primary and secondary education.

Performance is how far a teacher is able to carry out his work and how well the results are achieved (As, ad; 2001). There are several factors that affect teacher performance, among others: 1) Effectiveness and efficiency, 2) Authority, 3) Discipline authority, 4) Discipline, and 5) Initiative (Listianto and Setiaji, 2005). There are three aspects that teachers should acquire in order to improve his quality so that their performance gets better, namely: (a) teachers should intensify brainstorming in developing the course materials and how to interact with students; (b) teachers should conduct multiple research at their schools, as only based on the research results at the workplace, teachers can improve their performance; (c) teachers should publicise and expose their research results in print media (Zamroni; 2000).

Research Focus

Other notions on teaching skills of teachers mentions that teacher's performance consists of preparing, teaching, planning and programming including: material mastery, course materials analysis, annual and quarterly/semester programming, lesson unit programming, teaching planning, daily examination results analysis and teaching implementation (Budiono, 1994). Educational development is an effort to improve the process of guiding human beings to their maturity, guiding human beings to being responsible and creating ideal, insightful, creative, scientific and innovative humans. Educational development lies on the following principles of educational improvement: 1) Increasing the professional leadership, 2) Improving the quality of school learning, 3) Improving school management, 4) Increasing the effectiveness of school budget use (School Operational Funds), 5) Implementing the standards of educational quality, 6) Participation of all teachers in school activities, 7) Evaluation of the implemented systems failures, 8) Making new breakthroughs in educational achievement, 9) Commitment to the vision of education, 10) Commitment to making changes, 11) Making adjustments to the programs implemented, 12) Assessment of provisory performance, 13) Commitment to the long-term program

Methodology of Research

The type of this research is descriptive quantitative using a survey approach. The types and sources of data used in this study were comprised of primary data obtained from the questionnaires and secondary data obtained from documentation studies in the forms of
evidence, records or historical reports that had been prepared in the published archives (documentary data). The instrument feasibility validity was tested using product moment. The reliability was tested using r technique Cronbach Alfa ($\alpha$). The classical assumption test is necessary to ensure the usability of multiple linear regression test instrument, i.e. multicollinearity test, done by looking at collinearity statistic and correlation coefficient value among independent variables. The heteroscedasticity test was aimed at discovering whether there is an inequality on variances from one residual to another observation. Detection of heteroscedasticity can be done by scatter plot method by plotting the value of ZPRED (prediction value) with SRESID (residual value). Autocorrelation test is the correlation that occurs between residuals in one observation with other observations on the regression model. A frequently used test method is the Durbin-Watson test (DW test). The analysis method used in this study is linear regression analysis which aims to determine the effect of an independent variable on a dependent variable (Multi Regression Analysis). Furthermore, the analysis method used to test the effect of the two variables simultaneously is using multiple linear regression, then hypothesis was tested either simultaneously or partially. Determination Test (R2) is done to find out how big free variable can explain dependent variable.

Results of Research

In general, it was recorded that none of the respondents disagreed or strongly disagreed on the questionnaire items of principal leadership, teacher’s performance and educational quality. Most respondents voted “agree” followed by “strongly agree”.

Figure 1 P-P Plot Graph

Source: Research Results, 2016 (Data Processed)
In figure 1, the above Normal plot Graph shows the points spread around the diagonal line and spread in accordance with the diagonal line direction. From this graph it can be concluded that this regression line model has met the normality assumption.

In table 1, the VIF value for the variable of principal leadership, teacher’s performance and educational quality improvement is smaller than 10. While the tolerance value is greater than 10. Thus, it indicates that the independent variables in this study are not correlated or that there is no correlation between the independent variables.

Table 1. Multicollinearity test results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>5.272</td>
<td>1.034</td>
<td>2.075</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>Kepemimpinan</td>
<td>.401</td>
<td>.081</td>
<td>.444</td>
<td>4.959</td>
</tr>
<tr>
<td></td>
<td>Kinerja_Guru</td>
<td>.561</td>
<td>.060</td>
<td>.561</td>
<td>6.260</td>
</tr>
</tbody>
</table>

Source: Research Results, 2016 (Data Processed)

An important assumption of the classical linear model is that the disturbance arising in the population regression is homoscedasticity where all the disturbances have similar variances, Gujarati (1995: 228). One way to detect the presence of heteroscedasticity is by using a scatterplot image. If the points are spread below and above the number 0, and do not form a pattern, then it can be concluded that there is no heteroscedasticity in the regression model. The test results are presented in the following figure:

Figure 2. Heteroscedasticity Test Results
Based on Figure 2, generated by SPSS program output, it clearly shows that the points are spread below and above the number 0, and do not form a pattern. Thus, it can be concluded that there is no heteroscedasticity element in the regression model.

An autocorrelation test was performed to observe a close relationship amongst the error terms. This test was performed using the Durbin-Watson test. The results of the Durbin-Watson test are presented below:

**Table 2: Autocorrelation Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.986a</td>
<td>.973</td>
<td>.971</td>
<td>.789</td>
<td>2.026</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Kinerja_Guru, Kepemimpinan

b. Dependent Variable: Pengembangan_Pendidikan

From the results of autocorrelation test, it was obtained that the value of Durbin-Watson Table is 2.026 which is significant by 5%. Then the value of dL is 1.240 and the value of dU is 1.556. The determination of autocorrelation value can be seen in the following table.

**Table 3: Basis for determining autocorrelation**

<table>
<thead>
<tr>
<th>BASIS</th>
<th>There is Autocorrelation</th>
<th>No Autocorrelation</th>
<th>No Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>d &lt; dl or d &gt; 4 – dl</td>
<td>du &lt; d &lt; 4 – dl</td>
<td>dl &lt; d &lt; du or 4 – du &lt; d &lt; 4 - dl</td>
<td></td>
</tr>
</tbody>
</table>

**Table 4: Determination of Autocorrelation**

<table>
<thead>
<tr>
<th>d</th>
<th>dL</th>
<th>dU</th>
<th>4 - dL</th>
<th>4 - dU</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,026</td>
<td>1,240</td>
<td>1,556</td>
<td>2,760</td>
<td>2,444</td>
</tr>
</tbody>
</table>

**Source:** Research Results, 2016 (Data Processed)
Based on the table, the value of dl is 1,240 and the value of d is 2.026 and the value of dU is 1.240, then the determination model is dU < d < 4 - dl, or 1.556 < 2.026 < 2.444. Thus, it can be concluded that the model has no autocorrelation.

**Table 5:** Analysis of the effect of Principal Leadership (X1) and Teacher’s Performance (X2) on Educational Quality Improvement (Y)

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>5.272</td>
<td>1.834</td>
</tr>
<tr>
<td>Kepemimpinan</td>
<td>.401</td>
<td>.081</td>
</tr>
<tr>
<td>Kinerja_Guru</td>
<td>.561</td>
<td>.090</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Pengembangan_Pendidikan

**Source:** Research Results, 2016 (Data Processed)

Based on table 5, then the regression equation for this study is as follows:

\[ Y = 5.272 + 0.401 \, X_1 + 0.561 \, X_2 \]

Where:

- \( Y \) = Educational Improvement
- \( X_1 \) = Principal Leadership
- \( X_2 \) = Teacher’s performance

The regression equation is described below:

Standardised regression coefficient X1 (Principal Leadership) obtained a positive effect on educational quality improvement (Y). This means that any increase in leadership style can enhance educational development. Standardised regression coefficient X2 (Teacher’s performance) obtained a positive effect on educational quality improvement (Y). This means that any improvement on teacher’s performance can potentially improve educational development. To test the effect of independent variables on the dependent variable partially, a t test was performed. In this study, a partial test was conducted to determine the effect of principal leadership and teacher’s performance on educational quality improvement. The hypothesis test was conducted by comparing the t count value with t table value with the following decision criteria:

If \( t_{\text{count}} < t_{\text{table}} \), then \( H_0 \) is accepted or \( H_1 \) is rejected

Jika \( t_{\text{count}} > t_{\text{table}} \), then \( H_0 \) is rejected or \( H_1 \) is accepted
By using a significance level of 5% (α = 0.05), the two sides are 2.5% or 0.025 and degrees of freedom (df) consists of: df (n) = n – k = 27 – 2 = 2,060
It was obtained that the \( t \) tabel = 2,060

**Table 6: Partial Test (T Test)**

| Source | Research Results, 2016 (Data Processed) |

<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>1</td>
<td>(Constant)</td>
<td>5,272</td>
<td>1,834</td>
<td>2,875</td>
</tr>
<tr>
<td></td>
<td>Kepemimpinan</td>
<td>401</td>
<td>0,081</td>
<td>4,959</td>
</tr>
<tr>
<td></td>
<td>Kinerja_Guru</td>
<td>561</td>
<td>0,090</td>
<td>6,260</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Pengembangan_Pendidikan

**Table 7: Simultaneous Test (F Test)**

| Source | Research Results, 2016 (Data Processed) |

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>541,728</td>
<td>2</td>
<td>270,864</td>
<td>435,148</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>14,939</td>
<td>24</td>
<td>.622</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>556,667</td>
<td>26</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Pengembangan_Pendidikan

b. Predictors: (Constant), Kinerja_Guru, Kepemimpinan

**Source:** Research Results, 2016 (Data Processed)

The coefficient of determination aims to measure how far the ability of the model (independent variables (principal leadership, teacher’s performance)) goes in explaining the variation of dependent variables (educational quality improvement). The value of the coefficient \( R^2 \) is presented in in the following table:

**Table 8: Chi Square (Coefficient of Determination)**

| Source | Research Results, 2016 (Data Processed) |

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
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<tr>
<td>1</td>
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<td>.971</td>
<td>.789</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Kinerja_Guru, Kepemimpinan

b. Dependent Variable: Pengembangan_Pendidikan

**Source:** Research Results, 2016 (Data Processed)
Principal Leadership has an effect on educational development. Principal leadership will have a positive impact on educational development. Partial test results showed the value of t count for the variable of principal leadership is 4.959 which is greater than the t_{table} of 2.060 with a significant value of 0.00 and smaller than 0.025. This indicates that the effect of principal leadership has a positive and significant effect on educational development. This finding is in line with supported theories, Dharma (2003) who argues that: "Educational leadership refers to the particular qualities that the principal must have in order to assume his responsibilities successfully”. Anwar (2003:70) puts forth that in the world of education, leadership can be interpreted as the principal's efforts in leading, influencing and providing guidance to educational personnel as subordinates in order to meet educational and teaching objectives through a set of activities that have been established.

Based on the t test results, it is inferred that the more sustainable the leadership, the better the educational development will be. In contrast, the more unsustainable the leadership, the lower the educational development will be. Teacher’s Performance Indicators determined by an ideal teacher personality, acquiring specific field of study, mastering the learning materials, being able to arrange programs, being able to carry out the programs, being able to conduct assessment, being able to guide, being able to cooperate and being able to conduct research on educational development will have a positive effect on educational development. The value of t_{count} for teacher’s performance variable is 6.260 which is greater than the t table value of 2.060 and the significant value of 0.00 is smaller than alpha 0.025. Based on the results obtained, then the H0 is rejected and H1 is accepted for teacher performance variable. Thus, partially, the variable of teacher performance has a positive and significant effect on educational quality improvement which means that teacher’s performance plays a major role in influencing quality development. This is supported by several theories, such as Falah (2005: 32-45) who argues that the teachers’ work outcomes (performance) is one step in improving the quality of service to students.

Based on t test results, it is concluded that the more sustainable the teacher’s performance, the better the educational development will be. In contrast, the more unsustainable the teacher's performance, the lower the educational development will be. Educational development is influenced by a large number of factors. In this study, the factors in principal leadership and teacher’s performance are reviewed. The research results showed that there is a simultaneous positive and significant effect between principal leadership and teacher’s performance on educational development. It was simultaneously obtained that F_{count} = 453.148 and F_{table} = 3.39, in this case the F_{count} is greater than the F_{Table} and significant value is 0.00 less than alpha value of 0.05. It is decided that the H0 rejected and H1 is accepted. Thus, it is indicated that the independent variables (principal leadership, teacher’s performance) are able to explain the diversity of the dependent variable (educational development) and is accepted. The regression analysis performed showed that the coefficient
of determination simultaneously (R2) seen from Adjust R Square value is equal to 0.973 or 97.3%. These results indicate that simultaneously, principal leadership and teacher’s performance have an effect on educational development by 97.3%, while the remaining 2.7% is influenced by other factors beyond the scope of this study.

Based on the calculation of multiple linear regression analysis using SPSS 20.0 program, it was obtained that the regression equation is \( Y = 5.272 + 0.401 X_1 + 0.561 X_2 \). This equation indicates that every increase of one unit of principal leadership will be followed by an increase in educational development by 0.401 if principal leadership is considered constant. If the increase of teacher’s performance of one unit is followed by an increase of educational development equal by 0.561 if teacher’s performance is considered constant. Based on the regression equation, it can be interpreted that principal leadership and teacher’s performance have an effect on educational development. Based on the research results, it can be concluded that principal leadership and teacher’s performance have a positive effect on educational development. These findings are supported by several theories, such as Butterworth (1992:35) who argues that the determinant factor in the process of quality education is the effectiveness of principal leadership. Utami, (2003:1). Teachers as national education implementers are a key factor. Increased student achievement is influenced by the quality of the learning process in the classroom. Arikunto (1997:4) states that an education process is influenced by the factor of teacher.

**Conclusions**

Based on the results of research and discussion elaborated in the first chapter to the fourth chapter, we came to the following conclusions: Partially, the variable of principal leadership has a positive effect on educational quality improvement which means that principal leadership partially has a strong role in influencing educational quality improvement. Partially, teacher’s performance variable has a positive effect on educational quality improvement which means that partially, the teacher’s performance has a strong role in influencing educational quality improvement. Simultaneously, principal leadership and teacher’s performance have a positive and significant effect on educational quality improvement. This indicates that the variable of principal leadership and teacher’s performance have a high role in influencing educational quality improvement. The R2 value obtained is 0.973 or 97.3% which thus indicated that principal leadership and teacher performance in explaining variations that occurred in educational quality improvement is 97.3% while the remaining 2.7% is explained by other variables or factors.
Suggestions

Principal leadership and teacher performance are the factors that play a role in educational quality improvement. Therefore, it is suggested to keep improving principal leadership and teacher’s performance by: the principal leadership sustaining his leadership position in leading the school and improving on this, such as supervising teachers, motivating teachers and students, being the innovators of school work programs, and so on. Teachers’ performance all the while needs to be maintained. Since teachers are at the forefront of learning in schools, teachers need to improve their competencies, such as participating in teacher training and joining in a Subject Matter Teachers Forum. The form of synergic cooperation between the principal and teachers should still be in the scope of educational development including the formulation of short-term and long-term school programs and joint evaluation of school work performance.
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748
