Original Article

Organizational Leadership Strategies in Improving the Quality of School Education in the Digital Era

Erfizal Fikri Yusmansyah¹, Agnesia Candra Sulyani², Niken Larasati³, Hasna Nurhasanah⁴, Aldila Choirun Nisa⁵, Ahmad Rizki Firdaus⁶

¹Telkom Indonesia, ²-⁸Telkom Corporate University

Correspondence Author: erfizal.fikri.y@gmail.com

Abstract:

This research explores the function of leadership in the digital age. Educational institutions, especially secondary schools, need to adapt to the rapid development of technology. The quality of education is important to keep pace with the high demand for human resources in the future. The Indonesian Ministry of Education states that there are four competencies (4C) that students must have in facing the digital era, namely critical thinking and problem solving, creativity and innovation, collaboration, communication. The quality of organizational leadership in the secondary school environment is determined by the leadership of the principal. This research concludes that school quality is determined by instructional and transformational principal leadership strategies. These two types of leadership can influence teacher performance indirectly through changes in school climate. Improved teacher performance has a direct impact on student performance. Thus, principals’ instructional and transformational leadership strategies are the main factors in determining the quality of secondary school education in the digital era.

Keywords: leadership, digital era, school climate, education quality, school principal
Introduction

Entering the 21st century, the world shows rapid changes in all aspects of life, resulting from developments in the field of technology. One aspect that has undergone changes is education. The development of these changes occurred both in terms of infrastructure, work systems, and human resource needs (Ngongo et al., 2019). According to the Ministry of Education and Culture itself, currently Indonesia has entered 21st century education. The characteristics are easy access to information, the implementation of the use of machines (computerization), able to reach all routine work (automation), and can be done anywhere and anytime (communication) (R&D of the Ministry of Education and Culture, 2013).

Currently, education is in the age of knowledge (knowledge age) with an extraordinary acceleration of knowledge increase (Fernandes, 2019). Therefore, education in the digital era has an important role to prepare the younger generation to face future demands. In this case, learners must have skills in thinking and learning. Based on information from the Ministry of Education and Culture (2021), there are four competencies (4C) of students that must be possessed in facing the digital era, namely critical thinking and problem solving, creativity & innovation, collaboration, communication.

Education is the most important instrument and the main highlight in every country. The progress of a country is often measured by the level of quality of education (Afif, 2019). This is then used as a goal by developing countries to catch up with the education aspect, from developed countries. Education in Indonesia in this digital era is still not perfect. However, with digital transformation, it is expected to change the education order to be more qualified.

The digital era now provides benefits in the form of easy searching, collecting, and documenting teaching materials to students. Learning in the digital era has significant differences with learning in the previous era. In the digital era, the learning environment must be aligned with the use of information and communication technology. For example, using computers, smart phones, and the internet as independent and dynamic learning aids.

Every education unit is required to play a role in global competence, and this expectation can be achieved if supported by superior human resources. Schools as an important vehicle in the formation of quality human resources can be realized through the level of educational units. Quality educational institutions can be realized if supported by leaders who understand leadership and quality management (Ginting & Haryati, 2012).

Educational institutions in the digital age need leadership with a plan to create a brighter future through changes made. In the world of education, digitalization will bring very fast progress (Afif, 2019). To achieve a high quality of education, effective leadership in educational organizations is required. One approach to leadership that can be applied is the organizational leadership strategy.

The essence of leadership is the ability possessed by individuals to be able to utilize, develop, and empower everything in the universe, whether in the form of human resources or natural resources (Artanto, 2022). Organizational leadership is important because leaders have a strategic role in efforts to achieve organizational goals according to the vision and mission of the organization (Suranta, 2002). In the context of education, organizational leadership is influential in the quality of education produced. Among a number of factors that play a role, teachers and principals are the most instrumental parties in determining whether or not the quality of education is good or not the...
achievement of educational goals at the education unit level (Sagala, 2009). Improving the quality of education can be done by forming competencies in accordance with learning outcomes (Voronov, 2015). Leadership in the field of education has the understanding that leaders must have skills in influencing, encouraging, guiding, directing, and moving others that have something to do with the implementation and development of education and teaching or training so that all activities can run effectively and efficiently which in turn will achieve the goals of education and teaching that have been set (Wulandari et al., 2019).

The hope of the preparation of this paper is to understand the relationship between variables that are part of the secondary school education system. By understanding this relationship, it is hoped that we can better examine and learn how to improve the quality of education by improving one or more variables related to quality.

LIBRARY STUDY
Understanding and Functions of Leadership

Leadership is the ability to influence the behavior of a person or group with the intention of achieving a common desired goal. While the leader is a person or group of people such as the head, commander, chairman, and so on. From some of these understandings, it can be concluded that leadership is a process of influencing the activities of a person or group in a particular situation for a common goal. Leadership is the process of interaction between the leader, who is led, and the situation (Ginting & Haryati, 2012).

Principal

The principal as a school leader has a high and full responsibility, directly in building commitment and working with all components in the school in efforts to develop the quality of education. School principals have a strong role in coordinating, mobilizing, and harmonizing all available educational resources to support the improvement of education quality (Ginting & Haryati, 2012).

Based on Permendikbud Number 6 of 2018 concerning the Assignment of Teachers as School Principals, currently the position of principal is no longer an additional task, but as a basic task. Article 1 paragraph (1) of Permendikbud Number 6 of 2018 states that "The Principal is a teacher who is given the task to lead and manage educational units which include Kindergarten (TK), Extraordinary Kindergarten (TKLB), Elementary School (SD), Elementary School (SDLB), Junior High School (SMP), Extraordinary Junior High School (SMPLB), Senior High School (SMA), Vocational High School (SMK), Extraordinary High School (SMALB), or Indonesian School Abroad". Permendikbud Number 6 of 2018 makes full school principals as school leaders and managers, no longer burdened with teaching duties. This is so that the principal can focus on carrying out his duties to improve the quality of the school. Article 15 paragraph (1) states that "The Principal’s workload is entirely to carry out the main duties of managerial, entrepreneurial development, and supervision to teachers and education staff". Meanwhile, in paragraph (2) it is stated that "The workload of the Principal as referred to in paragraph (1) aims to develop schools and improve the quality of schools based on 8 (eight) national standards of education".

Based on Ginting & Haryati (2012), school principals need to have 5 competencies; (1) personality competence, (2) managerial competence, (3) entrepreneurial competence, (4) supervision competence, and (5) social competence. The quality of schools based on 8 National Education Standards (SNP) are; (1) Graduation Standards, (2) Content Standards, (3) Process Standards, (4) Assessment Standards, (5) Educator and Education...

**Leadership Strategy**

Strategy is a way used in mobilizing all the capabilities of all the resources available in an organization so that they can work together to achieve the goals that have been set. It can be said that strategy is a determining factor for the success of an organization. Without a strategy, an institution will not be able to be sure how to take advantage of new opportunities ([Sriwahyuni et al., 2019](#)). By applying the leadership style needed in an institution or organization, it will bring the institution to a stable and effective condition ([Sanjaya, 2012](#)). Strategic management activities include formulation, implementation, and evaluation that are useful for helping organizations formulate better, logical, systematic, and rational strategic decisions so that they can achieve organizational goals ([Rahman & Darmiyanti, 2022](#)).

In the leadership of educational organizations, there are generally 3 groups involved, namely principals, teachers, and students. The headmaster has an important role in the school organization, the principal can influence teachers and students through the leadership strategies he does. In the context of principal leadership, organizational leadership is divided into two, namely instructional leadership and transformational leadership.

**Instructional Leadership**

Instructional leadership is the actions that a principal takes, or delegates to others, to enhance student learning. Simply put, instructional leadership is the leadership of the principal who prioritizes the teaching and learning process in his leadership. School principals in this case need to prioritize teaching quality as the school's top priority ([Ahmad, 2014](#)). In general, instructional leadership includes the formulation of the school's vision and mission, curriculum management, and the creation of a teaching climate for fellow teachers ([Hallinger & Murphy, 1985](#)).

**Transformational Leadership**

Transformational leadership focuses on various conditions that need to be changed if the learning system is to be improved ([Geijsel et al., 2003](#)). Transformational leadership is a situation where there is a process between the leader and his followers reaching the highest level in terms of morality and motivation, such as in terms of upholding humanity, justice, independence, and not based on emotions, greed, jealousy or likes and dislikes ([Rofik, 2019](#)).

From the statistical analysis of the performance of high school teachers in South West Sumba Regency, NTT, it was found that there was a significant influence of the principal's leadership on teacher performance through transformational leadership. This proves that the transformational leadership aspects of school principals are able to make a significant positive contribution to the performance of high school teachers in South West Sumba Regency, NTT. The transformational leadership function of the principal can help the principal carry out his role effectively in the midst of changing demands that emphasize the quality of education services ([Sene, 2016](#)).

**School Climate**

Supardi ([2013](#)) said that the school climate is an atmosphere around the school that is conducive to the learning process that can improve the academic achievement of students. There is a negative and significant relationship between school climate and performance goal orientation in students ([Nurcahyanti & Setyawan, 2014](#)). In this context, a positive school climate is a school climate with high educational standard.
achievements. Research conducted by Nurcahyanti & Setyawan (2014) shows that students tend to have a low performance goal orientation when the school climate is positive, students will tend to have an orientation to get high grades in recognition of the achievements of others. This shows that education in Indonesia is more results-oriented than process-oriented, in accordance with the independent learning curriculum that applies outcome-based education (Suryaman, 2020).

Teacher Performance

Teacher performance is defined as the achievement of teacher work in carrying out their duties as a teacher, in accordance with the competencies that must be possessed (Syafii et al., 2023). Teacher competence is contained in the national education government regulation Number 16 of 2007. This competency consists of 4 main competencies, including pedagogic, personality, social, and professional competencies. These key competencies are broken down into 24 core competencies. The derivatives of these competencies are found in table 1.

Table 1 Teacher competence in Indonesia (Ministry of Education and Culture, 2007).

<table>
<thead>
<tr>
<th>No</th>
<th>Key Competencies</th>
<th>Core Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pedagogic competence</td>
<td>1.1 Mastering the characteristics of students from physical, moral, social, cultural, emotional, and intellectual aspects.</td>
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<tr>
<td></td>
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<td>1.2 Mastering learning theory and educational learning principles.</td>
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<td>1.3 Develop a curriculum related to the field of development that is covered.</td>
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<td>1.4 Organizing educational development activities.</td>
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<td>1.5 Utilize information and communication technology for the benefit of organizing educational development activities.</td>
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<td></td>
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<td>1.6 Facilitate the development of students' potential to actualize their various potentials.</td>
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<td></td>
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<td>1.7 Communicate effectively, empathetically, and courteously with learners.</td>
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<td></td>
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<td>1.8 Conduct assessment and evaluation of learning processes and outcomes.</td>
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<td>1.9 Utilize the results of assessment and evaluation for the benefit of learning.</td>
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<td>1.10 Take reflective actions to improve the quality of learning.</td>
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<tr>
<td>2</td>
<td>Personality Competencies</td>
<td>2.1 Act in accordance with Indonesia's national religious, legal, social and cultural norms.</td>
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<td></td>
<td></td>
<td>2.2 Present oneself as an honest person, noble character, and role model for students and society.</td>
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</table>
### Key Competencies

#### Core Competencies

<table>
<thead>
<tr>
<th>No</th>
<th>Key Competencies</th>
<th>Core Competencies</th>
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<tbody>
<tr>
<td>2.3</td>
<td>Presenting oneself as a steady, stable, mature, wise, and authoritative person.</td>
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<td>2.4</td>
<td>Demonstrate work ethos, high responsibility, pride in being a teacher and a sense of self-confidence.</td>
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<td>2.5</td>
<td>Uphold the professional code of ethics for teachers.</td>
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<td>3</td>
<td>Social Competence</td>
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<tr>
<td>3.1</td>
<td>Be inclusive, act objectively, and do not discriminate due to considerations of gender, religion, race, physical condition, family background, and socioeconomic status.</td>
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<tr>
<td>3.2</td>
<td>Communicate effectively, empathetically, and respectfully with fellow educators, education personnel, parents, and the community.</td>
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<tr>
<td>3.3</td>
<td>Adapt in the place of duty in all regions of the Republic of Indonesia that have socio-cultural diversity.</td>
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<tr>
<td>3.4</td>
<td>Communicate with one’s own professional community and other professions orally and in writing or other forms.</td>
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<tr>
<td>4</td>
<td>Professional Competence</td>
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<tr>
<td>4.1</td>
<td>Mastering the material, structure, concepts, and scientific mindset that supports the subjects being taught.</td>
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<td>4.2</td>
<td>Mastering competency standards and basic competencies of subjects/areas of development that are taught.</td>
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<tr>
<td>4.3</td>
<td>Develop creatively designed learning materials.</td>
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<tr>
<td>4.4</td>
<td>Develop professionalism on an ongoing basis by taking reflective actions.</td>
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<tr>
<td>4.5</td>
<td>Utilize information and communication technology to communicate and develop themselves.</td>
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Thus, good teacher performance will be seen from how well the application of teacher competence in carrying out their duties.

### Quality of Education

The quality of education involves various components and dimensions that are interrelated with each other, covering contexts and processes that continue to develop in the context of education, especially in schools. In general, it can be stated that the key to the quality of national education lies in the quality of teaching and learning activities in the classroom. The quality of teaching and learning activities is ultimately measured by the quality of learning outcomes achieved by students (Ginting & Haryati, 2012).

The quality of education is supported by educational components which, if well organized, will achieve good quality as well. These components are inputs, processes, and outputs. According to Sallis (in Fadhli, 2017), schools with ideal quality are schools with the following characteristics: 1) high moral values and positive character, 2) superior achievements and according to expectations, 3) support from various stakeholders, 4)
abundant resources, 5) implementation of innovative technology, 6) visionary leadership, 7) a sense of concern for students, 8) curriculum has relevance to changing times.

Improving the quality of education is an effort in the development of human resources that affect national development (Syafii et al., 2023). Quality resources are obtained from quality educational institutions. Quality educational institutions will be achieved with the leadership of an effective principal in carrying out his role. Therefore, quality improvement is a strategy carried out by school principals as leaders in creating quality education (Rahman & Darmiyanti, 2022).

**Student Competencies**

The purpose of education in schools is to prepare students, produce people who believe and fear God Almighty, have noble morals; develop the potential of students to become a responsible and democratic society; mastering science and technology; have a work culture ethos; can enter the workforce and can attend further education. Everything is a basic need of students that must be achieved (Haris, 2018).

Research from Hallinger, Bickman, and Davis (1996) shows that principal leadership has no direct relationship to student achievement. However, they found that there is ample evidence to suggest that headteachers can influence indirectly through the school’s learning climate.

**Methods**

The type of research used is qualitative. Qualitative research is a method based on the philosophy of postpositivism, used to examine natural object conditions, where researchers are key instruments (Sugiyono, 2019), the purpose of research in natural object conditions is the opposite of experimentation (Artanto, 2022).

The research was conducted by processing information from literature studies of various scientific journals. Studies are conducted by linking various concepts in organizational leadership in an educational context with national and international research journals. Data relevant to the topic or problem to be discussed are used literature study techniques (Ginting & Haryati, 2012). Literature study is a data collection technique by seeking information from literature books, journals, regulations, research reports, scientific essays, mass media, and written sources both print and electronic (Mukhlasin, 2019).

**Results**

This chapter contains the researcher’s ideas related to what has been done and what has been observed and analyzed. Leadership in educational organizations can encompass many different aspects of a school climate. One of them is principal leadership, or commonly referred to as Principal Leadership. Principals can influence the school climate directly through instructional and transformational leadership strategies. OT, on the other hand, has significant indirect effects on teacher and student performance. This change is an indirect change because it is mediated by changes in school climate which can be explained in the following figure.
Based on Figure 1, 6 relationships can be known, including:

a. The Principal's Relationship with Leadership Strategy

School principals are required to have strong management and leadership skills in order to be able to make decisions and initiative initiatives to express school goals in school quality development leadership strategies. Of course, also in the realization of the formation of the program, the principal is based on idealism values applied in his leadership strategy which is contained in theory, both related to the concepts of management, leadership, and quality culture (Ginting & Haryati, 2012).

b. The Relationship of Instructional Leadership to School Climate

School climates can be created through instructional leadership with a focus on creating a peer learning climate (Developing School Learning Climate Program) (Hallinger & Murphy, 2008). The principal's main instructional focus is the improvement of teaching and learning activities between teachers and students in the classroom. One element of instructional leadership in school climate change is the principal's attention to improving teacher professionalism through MGMP (Subject Teacher Deliberation). In this way, the principal can influence the teacher’s performance indirectly.

c. The Relationship of Transformational Leadership to School Culture and Climate

The impact of transformational leadership attitudes can provide influence stimuli for educators in the form of innovative behavior, intellectual thinking, culture, adding scientific insights, directing vision and mission, providing consultation, providing positive feedback and giving gifts (Wibowo, 2021). Principals with good transformational leadership have been shown to support individual teachers, improve cooperation, and help
them to work together with each other (Geijsel et al., 2003).

Although previously explained that transformational leadership affects teacher performance, several studies explain that school principals do not directly affect teacher performance, but through school climate change intermediaries (Widiyanti, 2018).

d. The Relationship of School Climate to Teacher Performance

Previous research has found that school climate directly affects teachers’ organizational commitment and job satisfaction. School climate can directly affect organizational variables as a benchmark for teacher performance. On the other hand, the principal’s attitude and values do not directly affect teacher performance, but are mediated through changes in school climate (Dou et al., 2016).

School climate is closely related to the process of creating an atmosphere and perceptions formed by teachers of a conducive working atmosphere. A conducive working atmosphere is expected to help teachers achieve the goals of the institution which will ultimately improve the quality of educational organizations in general. Thus, it can be said that teacher performance also increases along with the improvement of the quality of the school climate (Rahawarin and Arikunto, 2015).

e. The Relationship between Teacher Performance and Student Competence

Teacher performance directly affects student achievement, because teachers interact directly with students in the learning process. Although at this time there are various kinds of alternative learning resources such as books, journals, magazines, and the internet, teachers remain an important figure in learning (Naim, 2016).

Ginting & Haryati (2012) also argue that teachers as the main implementers of education in schools are expected to have insight into the quality of learning applied in the teaching and learning process in their classes. This step is a process quality approach and will directly support the quality of the product / final quality of education in the form of quality graduates.

<table>
<thead>
<tr>
<th>Grouping Student Competencies</th>
<th>Competency Derivatives</th>
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<tbody>
<tr>
<td>Personal Competence</td>
<td>a. Creativeness</td>
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<td></td>
<td>b. Liveliness</td>
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<td></td>
<td>c. Critical thinking</td>
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<td></td>
<td>d. Responsibility</td>
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<tr>
<td>Organizational Competence</td>
<td>a. The ability to see the potential of others</td>
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<td></td>
<td>b. Independence</td>
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<td></td>
<td>c. Communication skills</td>
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<tr>
<td></td>
<td>d. Able to give opinions</td>
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<tr>
<td></td>
<td>e. Ability to reach an understanding</td>
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<tr>
<td>Analytical Competence</td>
<td>a. The ability to make conscious choices</td>
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<tr>
<td></td>
<td>b. Think systematically</td>
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<td></td>
<td>c. Ability to analyze and plan</td>
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<tr>
<td></td>
<td>d. Problem-solving skills</td>
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<tr>
<td>Technical Competency</td>
<td>a. Professional knowledge</td>
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<tr>
<td></td>
<td>b. Professional experience</td>
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<td></td>
<td>c. Practical experience</td>
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In an organization, competence will greatly affect the attitude of each member.
Competence can affect the adaptability, flexibility, proactive nature, and voluntary spirit of members in an organization (Hande, 2014).

Conclusion

Based on the results and discussion, the following points can be concluded:

1. The principal’s leadership strategy has a very important role in developing the quality of school quality. The principal’s expertise in school management has an indirect impact on school performance.

2. Instructional leadership by principals contributes to creating a positive school climate. By focusing on the teaching and learning process in the classroom between teachers and students, the principal can keep the learning situation conducive.

3. Transformational leadership has a significant impact on the school climate. Principals through transformational leadership can support individual teacher performance by enhancing cooperation and facilitating collaboration. However, it is important to underline that these impacts are mediated by the school climate, so that principals affect teacher performance indirectly.

4. School climate affects teacher performance directly. This performance improvement is in the form of increased organizational commitment and job satisfaction.

5. Teacher performance directly affects student competence. Good teachers can improve students’ competence in personal, organizational, analytical, and technical groups.

Broadly speaking, the principal’s leadership strategy determines the quality of education in the context of secondary schools. Principals can influence teacher performance indirectly through instructional and transformational leadership strategies. The teacher will directly influence the improvement of student competence, which determines the level of quality of education. Thus, the principal’s instructional and transformational leadership strategies are major factors in determining the quality of secondary school education in the digital age.

References


Suranta, S. (2002). The impact of employee motivation on the relationship between


