The Influence of Teacher’s Infrastructure and Teacher’s Creativity on Teacher’s Performance

Sarmidi¹, Nur Ahyani², Happy Fitria³

¹SMP Negeri 2 Namang, Kepulauan Bangka Belitung, Indonesia, ²Univeritas PGRI Palembang, South Sumatra, Indonesia, ³Badan Riset dan Inovasi Nasional, Jakarta, Indonesia

Corresponding author e-mail: sarmidi btn78@gmail.com

Article History: Received on 6 February 2024, Revised on 15 March 2024, Published on 8 April 2024

Abstract: Education is an important aspect of society that requires various skills, strategies, and learning models. Innovation is very important to overcome educational problems. The quality of the learning process depends on organizing and managing input from teachers, students, money, and resources. Creativity in learning is a system that is not easy to control but is very important for effective learning. However, monotonous learning can lead to monotony, lack of motivation, and lack of passion in students. The author observes the poor quality of junior high school teachers in Namang District, the absence of a social studies laboratory, learning media facilities, and certification. Many teachers are not linear in their areas of competence. This research aims to determine the influence of infrastructure and teacher creativity on teacher performance in junior high schools in Namang District, Central Bangka Regency. This research will be conducted at junior high schools in Namang District, Central Bangka Regency, using quantitative research with a descriptive approach. The population is teachers in Namang District with a sample of 53 respondents. The research will be carried out through pre-research, followed by a trial phase, where questionnaires will be distributed. Observational data collection techniques, and documentation. Research suggests improving facilities and infrastructure in schools, especially in UKS rooms, to ensure students can relax and unwind. Teacher creativity is essential for effective teaching, offering a variety of methods and practices to avoid monotony. Apart from that, teacher performance also needs to be improved, especially in providing individual guidance to students who have problems. Schools should encourage active and enthusiastic teachers to increase their overall efforts in education.

Keywords: Infrastructure, Teacher’s Creativity, Teacher’s Performance

A. Introduction

Since many of them employ intelligence to create new things, humans are among those who encourage the rapid development of information and technology. Many
facets of this construction, such as each person’s level of efficacy and efficiency, are of concern, not only for personal interests but comprehensively.

This is related to the demands of the times which continue to change all the time, so humans must continue to innovate. Aside from that, creativity is strongly tied to both competitiveness and teamwork in addition to effectiveness and efficiency. Innovation is an idea, item, event, or method that is perceived or observed as something new for a person or group of people (society), whether in the form of invention or discovery (Rusdiana, 2014).

The idea of innovation is a concept or idea that arises from individuals or groups to develop something to solve a problem. According to Rusdiana (2014), modernization and innovation are strongly associated because they both involve societal transformations. Innovation serves as a visual representation of modernization’s reality, demonstrating the advancement of knowledge and technology as well as the social, political, educational, and health spheres.

One area that needs improvement is education; there should be significant advancements made in teaching techniques, strategies, and learning models. Innovation in education refers to creative problem-solving. Aspects about the elements of the education system, both broadly (the national education system) and narrowly (the level of educational institutions), are included in educational innovation (Rusdiana, 2014). Education innovation can take the shape of teacher-created learning models and innovative ways to provide content to students in a way that fosters the ideal learning environment. Problems in the education sector can be said to be complex due to limited capabilities, so reform action is very necessary.

Keeping up with scientific and technological advancements is the goal of educational innovation, which also aims to guarantee that every Indonesian citizen has access to both in-class and after-school education (Rusdiana, 2014). Consequently, as education is one of the key determinants of a country’s success, it requires particular attention. The process of transforming something into something else is called education. An input is something that moves the process forward, and an output is something that comes out of the process. The decision-making process, institutional management, program management, teaching and learning process, and monitoring and evaluation process are among the processes involved in micro-scale education, specifically at the school level. It should be noted that the teaching and learning process is the most crucial of these processes (Angrainy et al., 2020).

The process is said to be of high quality if the organization and harmonization and integration of school input, namely teachers, students, money, equipment, and other supporting equipment is available. Alignment is carried out in a harmonious and
An integrated manner to create a pleasant learning situation, encourage motivation and interest in learning, and be able to empower students.

In other words, students not only master the knowledge taught by the teacher, but this knowledge has also become the content of the students’ conscience, is internalized, put into practice in everyday life, and what is more important is that students can learn independently and teach effectively. Establishing a safe and orderly school environment requires a favorable physical and non-physical school climate. A positive learning environment includes things like the school community’s optimism and high hopes/expectations, the school’s health, and student-centered activities. can encourage pupils’ passion for learning, therefore more concentrated work is required.

In addition to the equipment required for instruction, schools also need to have infrastructure—that is, the fundamental facilities required to carry out the primary function of the educational unit, which is the learning process. One of the components of an educational institution is its learning tools. Minister of Education’s 2007 National Education Regulation Number 24. The existence and administration of learning tools and infrastructure must be done so in a way that is appropriate and correct due to their significance in the learning process. An ideal learning process can be implemented more easily when there is well-managed infrastructure available for teachers, who are the primary educators in the classroom. Learning infrastructure is a benefit that helps pupils grasp what their teachers are trying to teach them faster.

Creativity in the classroom is a component of a system that is inextricably linked to education and teachers. In addition to covering one component of the human self, such as cognitive, psychomotor, and affective aspects, the function of teacher creativity encompasses other facets of the human self as well. Generally speaking, the primary purpose of teachers’ creativity is to aid in the timely and effective completion of their work. The following are some reasons why teacher creativity is important for learning: (1) It helps students absorb information more thoroughly; (2) It encourages students to observe and analyze societal or natural phenomena more scientifically; and (3) Teacher creativity products will encourage student creativity.

Namang District is one of the sub-districts in Central Bangka Regency. This sub-district is a buffer sub-district of the main sub-district so the Namang sub-district is currently a sub-district that is currently pursuing development and one of them is development in the education sector.
Based on the data above, there are 1,756 state elementary school students with 92 teachers. Plus employee data of 42 people with a total of 69 classrooms, and 10 library rooms. The public elementary school education data above gives an idea that education in the Namang sub-district is currently good and provides ample opportunities for the entire community to be able to go to school in the Namang sub-district. Phenomena in the field show that generally, the learning behavior of teachers in elementary schools is still limited to understanding the meaning of teaching, where the teaching process is unidirectional from the teacher to the students. As a result, learning is often monotonous, less interesting, and less motivating, and tends to give rise to a passive attitude in students.

Based on the author’s observations of state junior high school instructors in Namang District, it seems that despite multiple training sessions, the teachers’ techniques of instruction remain largely unchanged and the quality of instruction is still subpar. Instructors seldom use supplementary media in the classroom and instead simply employ the lecture technique. Teachers must emphasize the purpose of learning to gain more control over the teaching process if they hope to become good educators. Teachers must therefore embrace creative learning practices and stop seeing their
pupils as only objects to be studied; instead, they should see them as subjects to be studied.

In general, creativity can be defined as a pattern of thinking or ideas that arise spontaneously and imaginatively, which characterizes artistic results, scientific discoveries, and mechanical creation. Creativity includes new results, whether completely new to the scientific or cultural world or new to the individual himself. According to Munandar (2004), “Creativity is the ability to change and enrich the world with discoveries in the fields of technology, art, and discoveries in other fields.” According to Law no. 14 of 2005, concerning teachers and lecturers, Article 1 Paragraph (1) that “Teachers are professional educators who educate, teach, guide, direct, train, assess and evaluate students in early childhood education in formal education, basic education, and secondary education”.

Creativity is a person’s ability to create or produce something new or original, previously unknown, or solve new problems faced. Meanwhile, the definition of a teacher is the manager of the teaching and learning process. Teacher creativity is the teacher’s ability to create new things in teaching so that there is variation in teaching which will make students more active and creative. When done correctly, teaching may be essentially described as creative. Teaching effectively and creatively in environments that support it is the secret to successful creative development. To get the desired results, this is not an easy task and calls for proficiency and inventiveness in learning activities. traits or attributes of innovative educators as stated by Perdamean (2009) include flexible, optimistic, respectful, agile, humorous, inspiring, gentle, disciplined, responsive, and empathetic.

Meanwhile, Both internal (psychology and genetics) and exterior (social and cultural environment) elements might affect a teacher’s creativity. Internal factors are fundamental to the human condition; within each person is the desire to improve upon their previous state of affairs and align their actions with their capacity for self-actualization. Similar to this, a teacher who is performing the obligations of an educational implementer undoubtedly wishes to advance and improve in quality. In the meantime, he is influenced by outside forces in his immediate surroundings, specifically the social environment (or living conditions) in which he engages with others.

As an educator, teachers are required to be more creative than students. The importance of creativity for a student will be the importance of creativity for the teacher. The importance of teacher creativity in learning according to Talajan (2012) includes 1) teacher creativity is useful for increasing student interest in subjects. The application of teacher creativity products, for example in the form of instruments that can invite students to learn in the real world through visualization, will be able to reduce students’ boredom and increase their interest in lessons; 2) teacher
creativity is useful in transferring information more completely. The results of innovation in the form of educational aids will provide complete data or information, this can be seen in the activation of students’ senses, including the senses of sight, hearing, and smell, so that students seem to encounter situations that are like the real thing; 3) teacher creativity is useful in stimulating students to think more scientifically in observing societal phenomena or natural phenomena which are objects of study in learning; 4) teacher creativity will stimulate student creativity.

School principals can try to boost teacher creativity in the classroom by doing the following: (1) supervising teachers; (2) offering guidance and development; (3) rewarding teachers who demonstrate high levels of creativity; (4) offering teacher apprenticeships; (5) conducting case studies; (6) creating a pleasant work environment; and (7) granting teachers freedom. In addition, in addition to the principal’s efforts, teachers are making efforts to foster creativity in the classroom by, among other things, (1) broadening their horizons, (2) improving the physical learning environment, (3) cultivating openness, and (4) making the best use of technology.

Research by Anggraini, Happy Fitria, and Yessi Fitiani shows that: infrastructure influences teacher performance (Anggraini dan Harapan., 2020). Dedi Sutansyah’s research shows that management of facilities and infrastructure has a strong influence on teacher performance (Sutansyah, 2019). Research by Nur Hidayati and Ufik Dzuroidah states that there is an influence of educational facilities and infrastructure on teacher performance at MTs Negeri 4 Banyuwangi (Hidayati & Dzuroidah, 2020). The results of Suciati’s research show that the online learning model can overcome the implementation of learning during the COVID-19 pandemic through teacher creativity and initiative in managing learning at home (Suciati, 2020).

Based on the researcher’s initial observations in several junior high schools where this research was conducted, the researcher found problems such as all junior high schools in Namang sub-district, Central Bangka Regency, there are no social studies laboratories yet, social studies learning media facilities and media in Namang sub-district, Central Bangka Regency are not yet complete and not all exist, teachers in Namang District, Central Bangka Regency, there are still many who are not yet certified. Several teachers who teach social studies at SMP in Namang District, Central Bangka Regency are not linear in their competency majors.

Then, some of the teachers in junior high schools in the Namang sub-district are not yet proficient or use IT, computers, or laptops. both training at the district level, at the provincial level, or the national level. There are still many teachers with honorary status at the junior high school level in Namang District, Central Bangka Regency. Not all junior high school teachers in Namang District, Central Bangka,
have passed the appointment of CPNS, P3K, or regional honorary employees, because of competency tests from other regions. Of those who took the teacher test in Namang District, Central Bangka Regency, not all of them received assistance with teacher infrastructure and facilities for secondary school teacher learning in Namang District, Central Bangka Regency.

Based on this, the author intends to conduct research with the title The Influence of Teacher Infrastructure and Teacher Creativity on Teacher Performance in SMP Negeri in Namang District, Central Bangka Regency.

B. Methods

This research will be carried out at junior high schools in Namang District, Central Bangka Regency. The type of research used in this research is quantitative research with a descriptive approach. According to Sugiyono (2016), quantitative research methods can be interpreted as research methods that are based on the philosophy of positivism, used to research certain populations or samples, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative/statistical to test hypotheses. has been established.

The population in this study were all teachers in junior high schools in Namang District, Central Bangka Regency. As many as 60 teachers came from junior high school teachers in Namang District, Central Bangka Regency. Arikunto (2017) suggests that the population is the entire research subject. If someone wants to research all the elements in the research area, then the research is population research, the study or research is also called population study or census study. The sample obtained was 53 respondents. So the sample used in this research was a sampling population of 53 junior high school teachers in Namang District, Central Bangka Regency (Suharsimi, 2017) suggests that the sample is part or representative of the population studied. It is called sample research if we intend to generalize the results of sample research.

The data collection carried out by the researcher is that first the researcher carries out pre-research, then the trial stage, at this stage the researcher distributes questionnaires or research instruments.

1. Questionnaire

Questionnaires are often also referred to as questionnaires. This technique is a series or list of questions or statements that are arranged systematically and then sent to be filled in by the respondent (Bungin 2005).
2. Observation

According to Sugiyono (2016), Observational data collection techniques are used if the research concerns human behavior, work processes, and natural phenomena, and if the number of respondents being observed is not too large.

3. Documentation

One of the data needed in this research is in the form of documents so it is necessary to use data collection techniques using documentation. According to Arikunto (2013), Documentation techniques are a method of collecting data that produces important notes related to the problem being studied, so that complete, valid data will be obtained and not based on estimates.

C. Results and Discussion

**Analysis of the influence of infrastructure on teacher performance in junior high schools in Namang District, Central Bangka Regency**

Based on the test results, it can be seen that the infrastructure variable has a partial and significant effect on teacher performance, so it can be concluded that the first hypothesis is accepted. The theoretical framework of thinking is that infrastructure influences teacher performance in junior high schools in Namang District, Central Bangka Regency so that if the school infrastructure is good, performance is expected to be good.

The results of testing hypothesis -1 using the SPSS version 26 tool show that partial infrastructure has a positive and significant effect on teacher performance with t calculated $7.447 > t$ table 1.999 so that Ho1 is rejected and Ha1 is accepted and the significance is 0.000 < 0.05 and the magnitude of the influence of infrastructure on the performance of 0.485 or 48.5%. This means that in the theoretical framework, there is a significant influence of infrastructure on teacher performance in junior high schools in Namang District, Central Bangka Regency.

The description of the data in the form of average infrastructure facilities at the Namang District SMP Negeri, Central Bangka Regency, obtained an average score of 3.91 which is in the very good category. Then the dominant indicator in the infrastructure variable is the statement that there is a prayer room which is quite good with a value of 4.43, while the indicator with the lowest value is the statement that the UKS room is quite adequate with the number 3.33. So overall the teacher infrastructure indicator is in the very good category.
The description of the data in the form of average teacher performance obtained an average score of 4.46 which is in the very good category. Then the dominant indicator in the teacher performance variable is the statement that as a teacher you are required to do your work sincerely and responsibly with a value of 4.59, while the indicator with the lowest value is the teacher makes a separate schedule to guide students who experience problems in learning with a value of 4.20. So overall the indicator of Teacher performance is in the very good category.

Respondents’ perceptions of school infrastructure at the Namang District SMP Negeri, Central Bangka Regency with an average coefficient value of 3.91 on a scale of 1-5 which is in the very good category. Respondents’ perceptions of teacher performance obtained an average score of 4.46 which is in the very good category. In other words, the infrastructure at the Namang District SMP Negeri, Central Bangka Regency is very good, and the performance of teachers at the Namang District SMP Negeri, Central Bangka Regency is also very good so it must be maintained or improved in the future.

The claim that the UKS space is more than sufficient is the infrastructure indication with the lowest value. This suggests that additional work is necessary to fix and enhance the UKS room at the junior high school in the Namang subdistrict. This study is consistent with research by Fudin (2020), which found that teacher performance is moderately impacted by the infrastructure in schools. The study’s results included a correlation coefficient value of 0.531 and a determinant coefficient of 0.283 (Fudin, 2020). Research by Anggi Angrainy, Happy Fitria, Yessi Fitiani (2020). The results of the research concluded that: 1) infrastructure influences teacher performance (Anggraini dan Harapan., 2020).

Dedi Sutansyah’s research 2018. The results of the research show that: (1) Management of facilities and infrastructure has a strong influence on teacher performance. From the correlation coefficient analysis, the value $r = 0.436$, meaning there is a moderate correlation (Sutansyah, 2019). Infrastructure is a very important tool for educational institutions and is part of the eight National Education standards. Because of the importance of infrastructure in the world of education, every agency is racing to meet the standard criteria for educational infrastructure to advance a quality learning process (Ristianah, 2018).

Following government regulations No. 19 of 2005 concerning national education standards, which outline the requirements for national educational infrastructure and facilities in Chapter VII, Article 42 makes it very clear that, first and foremost, all educational institutions must have the furnishings, learning resources (books, media, and other materials), consumables, and other equipment necessary to support conducive, organized, and sustainable learning activities Republic of Indonesia Government (2005).
In addition, the results of the recapitulation of teachers’ work periods indicate that teachers have had a very lengthy work period, which supports the improvement in teacher performance. More than 23 teachers, or 37.7%, have worked for more than a year, while 39% have worked for five to fifteen years. This suggests that initiatives to enhance teacher performance will benefit from the additional experience that comes with teaching junior high school students.

Analysis of the influence of teacher creativity on teacher performance in junior high schools in Namang District, Central Bangka Regency

The second hypothesis is accepted since the test findings demonstrate that the teacher creative variable has a partial and considerable impact on teacher performance. According to the theoretical framework, teacher creativity affects junior high school performance in Namang District, Central Bangka Regency. As a result, good performance is expected if school teachers have high levels of originality. With a t count of 13,613 > t table 1.999, the results of testing hypothesis -2 with the SPSS version 26 tool indicate that teacher creativity has a partially positive and significant effect on teacher performance. This means that Ha2 is accepted and Ho2 is rejected, with a significance level of 0.000 < 0.05 and a magnitude of 0.485, or 48.5%, the influence of teacher creativity on performance. This indicates that teacher creativity and performance in junior high schools in Namang District, Central Bangka Regency, are significantly influenced by the theoretical thinking framework.

The data description is an average of 4.44 which is in the very good category. Then the dominant indicator in the creativity variable is the statement that the teacher has a good response to students and the teacher has empathy for students with a value of 4.62, while the indicator with the lowest value is the teacher provides a choice of learning methods with the number 4.21. So overall the indicator of teacher creativity is a very good category. The average instructor performance score, which is used to describe the data, was 4.46, falling into the very good group. With a value of 4.59, the statement “As a teacher, you are required to do your work sincerely and responsibly” is the dominant indicator in the teacher performance variable. The indicator with the lowest value, “The teacher makes a separate schedule to guide students who experience learning problems,” has a value of 4.20. Thus, the indication of teacher performance as a whole falls into the “very good” category.

Respondents’ perceptions of teacher creativity obtained an average score of 4.44 on a scale of 1-5 which is in the very good category. Respondents’ perceptions of performance obtained an average score of 4.46 which is in the very good category. In other words, the creativity of teachers at the Namang District SMP Negeri, Central Bangka Regency is very good and the performance of teachers at the Namang District SMP Negeri, Central Bangka Regency is also good.
The fact that a teacher creates a different timetable to assist pupils who struggle with learning is the lowest indication of the teacher’s creativity variable. This suggests that to support kids who are having difficulties with the learning process, schools need to give them careful consideration. When it comes to helping kids who need guidance to overcome obstacles, schools are supposed to have their methods and approaches.

This research is in line with Astrid Permata Putri’s 2015 research. Based on the results of data analysis and hypothesis testing, shows that the work climate contributes significantly to the creativity of SDN teachers in Tanjung Harapan District, Solok City (Putri, 2017). Then research (Ratnasari & Sutjahjo, 2021). The results of this research imply that creativity has an insignificant effect on job satisfaction, and creativity has an insignificant effect on teacher performance. Creativity is the ability to create new combinations based on existing data, information, or elements, creativity (creative thinking or divergent thinking) is the ability, based on available data or information, to find many possible answers to a problem, where the emphasis is on quantity, appropriateness, and diversity of answers.

A teacher’s creativity may result in the creation of a completely new and unique teaching approach (one that they came up with on their own), or it may take the form of a modification of several different previously developed tactics. The findings of observations made in the field demonstrate that teachers modify the learning process frequently, come up with creative ways to provide learning resources, and provide students the flexibility and initiative to conclude every teaching and learning experience.

The results of demographic calculations from the level of education show that the majority or 90% of teachers have a bachelor’s level of education, so it is hoped that a high level of education can provide knowledge and creativity in the teaching and learning process so that it is hoped that performance will increase.

**Analysis of the influence of infrastructure and teacher creativity together on teacher performance in junior high schools in Namang District, Central Bangka Regency**

The third hypothesis is accepted since the test results demonstrate that the factors of teacher creativity and infrastructure have a strong, simultaneous impact on teacher performance. According to the theoretical framework of thinking, at SMP in Namang District, Central Bangka Regency, teacher creativity and infrastructure work together to influence teacher performance. As a result, it is expected that good teacher performance will result from strong infrastructure and creative teaching.
With a calculated $f$ of $91.203 > f$ table of $3.15$, the results of testing hypothesis - 3 with the SPSS version 26 tool demonstrate that teacher infrastructure and creativity have a partially positive and significant effect on teacher performance. As a result, $H_a3$ is accepted and $H_o3$ is rejected, with a significance level of $0.000 <0.05$ and a magnitude of $0.759$ or $75.9\%$ that comes from their combined influence on performance. This indicates that in the Namang District SMP Negeri, Central Bangka Regency, the theoretical framework significantly influences both teacher infrastructure and creativity on teacher performance at the same time.

This is in line with research by Nur Hidayati, and Ufik Dzuroidah 2020. The research results show that there is an influence of educational facilities and infrastructure on the performance of MTs Negeri 4 Banyuwangi Sumberberas Muncar Banyuwangi teachers by $39\%$(Hidayati & Dzuroidah, 2020). Research by Anggi Angrainy, Happy Fitria, Yessi Fitiani (2020). The results of the research concluded that: 1) infrastructure influences teacher performance (Angrainy et al., 2020).

D. Conclusion

Based on the results of data analysis, the variables of infrastructure and teacher creativity have both partial and simultaneous effects on teacher performance, which can be explained 1) there is a significant influence of infrastructure on teacher performance in junior high schools in Namang District, Central Bangka Regency with $t$ count $7,447 > t$ table 1.999 and has a contribution effect of $48.5\%$ on variable $Y$ and the other $51.5\%$ is influenced by other factors outside variable $X1$; 2) there is a significant influence of teacher creativity on teacher performance in junior high schools in Namang District, Central Bangka Regency with $t$ count $13,613 > t$ table 1.999 and has a contribution effect of $75.9\%$ on variable $Y$ and the other $24.1\%$ is influenced by other factors outside variable $X2$; 3) there is a significant influence on influence of infrastructure and teacher creativity together on teacher performance in junior high schools in Namang District, Central Bangka Regency with calculated $f$ of $91.203 > f$ table of $3.15$ and having a contribution effect of $75.9\%$ on variables $Y1$ and The other $24.1\%$ is influenced by other factors outside variables $X1$ and $X2$.

E. Acknowledgement

We would like to express our acknowledgment to our respondents, colleagues in SMP Negeri 2 Namang Kabupaten Bangka Tengah, and Universitas PGRI Palembang who helped us with this article.

References

Anggraini dan Harapan. (2020). The Influence of Certification Allowances and Commitment to Work to Teachers’ Performance. 2(1), 60-80.


