THE INFLUENCE OF TEACHER CREATIVITY ON SCIENCE LEARNING OUTCOMES OF ISLAMIC ELEMENTARY SCHOOL

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Abstract
This research was quantitative research using field research methods carried out at MI Manbaul Ulum Sinoman Pati with the aim of finding out whether there was an influence of teacher creativity on student learning outcomes in science subjects at MI Manbaul Ulum Sinoman Pati. The population in this study was all class V students from both class A and class B, with a total of 38 students. From this population, samples were taken for this research using saturated sampling techniques or total sampling, where members of the entire population are members of the sample. The data used in this research consists of primary data and secondary data. Primary data was obtained through questionnaires distributed directly to class V students, while secondary data was in the form of literature that was relevant to research on teacher creativity and science learning outcomes. Data collection was carried out by means of questionnaires and documentation. The data analysis technique used is descriptive statistics and hypothesis testing using the t-test. The results of the hypothesis test show that it is known that the calculated t-value is 8.231 with a significance level (2-tailed) of 0.000 with df = (n-k) = 38 - 2 = 36 so that the t-table is 1.688 at a significance level of 0.05. So, t count > t table or 8.231 > 1.688. So H0 is rejected, and Ha is accepted, so the meaning is that there is an influence of teacher creativity on student learning outcomes in science subjects at MI Manbaul Ulum Sinoman Pati.

Keywords
Science Learning Outcomes, Teacher Creativity, MI Manbaul Ulum Pati

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INTRODUCTION

In teaching and learning activities, teacher creativity is really needed because it can make students not bored, enthusiastic, and always have the enthusiasm to develop their creativity in learning, especially in student learning outcomes (Buchari 2010). Because in the teaching and learning process, teacher creativity is very influential on student learning outcomes. So, teacher creativity is a way of practicing, producing, and putting forward the newest ideas or newest concepts that have benefits for oneself, others, and the environment. Not only that, Slameto (2010) also stated that, in essence, the definition of creativity is an activity or attitude related to the discovery of something, namely producing or creating something new by using something that already exists without eliminating it Wijaya (dalam Fauzi, 2018) expressed that teacher creativity is very important, especially in order to improve the quality of student learning outcomes, because the more creative a teacher is, the easier it will be for a student to grasp the material presented by the teacher so that it can have an impact on their learning outcomes.

After the teaching and learning process is held, there is an evaluation that aims to assess the extent of the learning process experienced by students or what is usually called learning achievement in the form of Mid-Semester Examinations (UTS) and Final Semester Examinations (UAS) with standards determined by each school, by implementing Minimum Completion Criteria (KKM) (Mutiah, 2017). A student's learning success can be seen and known from the mastery of the subject matter he is studying and above the KKM.

Based on Law Number 20 of 2003 (Undang-Undang Nomor 20 Tahun 2003), as stated in Chapter Ten, article 37, it is stated that the primary and secondary education curriculum must contain one of the Natural Sciences (IPA) subjects. Then, in accordance with the regulations from the Ministry of Education and Culture Number 57 of 2014 (Kemendikbud Nomor 57 Tahun 2014) Article 5 Paragraph 2 regarding the basic concepts of science subjects, which are general group A subjects as intended in paragraph (1) letter a, are curricular programs which aim to develop attitudinal competence, knowledge, skills in living in society, nation and state.

As we know, facts in the field reveal that science is one of the subjects that is considered difficult, and teacher creativity really needs to contribute to student learning outcomes. Arikunto (2013) also believes that currently, Natural Sciences (IPA) subjects are considered difficult for students to understand. Because with this teacher's creativity, subjects, especially those that are considered difficult or even boring, will become more fun, arouse interest and enthusiasm for
students during the learning process, and it will impact the learning outcomes. Not only that, teacher creativity is also required to be able to adapt to an era that already has a determined national curriculum. Now, we have used the 2013 curriculum with the theme of change, and we have to be able to produce human resources (HR) who are productive, active, creative, innovative, and effective through strengthening integrated attitudes, skills, and knowledge (Murti, 2013).

Based on preliminary observations made by researchers, it was found that the science learning process in class V MI Manbaul Ulum Sinoman Pati needs teacher creativity such as methods, strategies, and learning media because science learning is a type of learning where the material is difficult to explain and must be reinforced with various aspects.

It is known that the science learning results of students in class V at MI Manbaul Ulum Sinoman Pati are in the standard category because there are still those who comply with the KKM, get a score of 75, and only a few get a score of 92 (Legger data of UAS scores for class V students at MI Manbaul Ulum Sinoman Pati academic year 2023/2024) (Legger data of UAS scores for class V at MI Manbaul Ulum Sinoman Pati academic year 2023/2024). This is due to the lack of enthusiasm of students in participating in the process of learning activities during science subjects because there is an opinion that the lessons are difficult and not easy to understand, as seen when the teacher explains that there are students who talk and joke with their classmates, make music using tables and others. Some efforts that have been made by the head of the madrasah are by giving directions to science teachers to always develop the knowledge they have acquired during college and have training so that students are more enthusiastic about studying science because this subject is one of the compulsory subjects in Madrasah Ibtidaiyah (Law Number 20 of 2003) (Undang-Undang Nomor 20 Tahun 2003).

The creativity possessed by science teachers at MI Manbaul Ulum is very good, but they tend to still use methods that are not optimal, such as lecturing, using PowerPoint and then displaying it via a projector, sometimes using icebreakers in the middle of the lesson, using pictorial media and rarely uses experimental methods because the facilities are not yet optimal. At MI Manbaul Ulum, there are two science teachers: science teachers who teach classes I, II, and III, and science teachers who teach classes IV, V, and VI. Referring to Republic of Indonesia Law Number 14 of 2005 article 8 (UU RI No 14, 2005 article 8), which states that there are four teacher competencies, including 1) pedagogical competency. It is the ability of a teacher to manage students; 2) personality competency is an ability seen from a psychological aspect or an ability that arises from the teacher's personality,
which shows the identity of his personality; 3) social competence is the ability to interact with other people, 4) professional competence is the ability seen from actions rationally and meeting certain specifications when the teacher carries out community service duties in education (Sagala, 2009). In this case, a science teacher at MI Manaul Ulum Sinoman Pati has been pre-screened by the head of the foundation so that he is deemed fit to teach science subjects and has maximized these competencies during the teaching and learning process in the classroom because of these four pillars of teacher competency is a very influential factor in achieving school learning and education goals, but actually this competency is obtained from several other influencing factors such as educational background, length of experience in teaching, etc (Wibowo dan Hamrin, 2012). This is also related to school accreditation, and student learning outcomes must be better so that they can compete with other schools with high quality. Several efforts are being processed by the principal of MI Manaul Ulum Sinoman Pati, such as involving science teachers in PAKEMB training (Active Creative Effective Fun and Meaningful Learning) with the hope of creating a more lively learning atmosphere, KKG activities, and MGMP activities that delve deeper into science subjects, preparation of learning tools, and teaching practice.

The results of this research support and strengthen the findings of previous research conducted by Vasudevan (2013), which found that a teacher’s creativity can improve a student’s abilities because if a teacher has a creative nature when presenting his material, it will influence his learning outcomes as well. Further research that also supports this is research conducted by (Mutiah 2017), which found that the influence of teacher creativity on student learning outcomes was 17%. Then, research conducted by Sari (2018) stated that there was an influence between teacher creativity and student learning outcomes of 64.51%. Furthermore, research conducted by Mahmud et al. (2022) stated that there was a correlation between teacher creativity and student learning outcomes of 13.197%. Then, research conducted by Enu et al. (2015) examined Ghana’s learning ability from the four factors studied, namely internal factors, family, friends, and teachers. The largest percentage was owned by the teacher factor, namely 48%. The results of this research are also in line with Wijaya’s theory (Fauzi 2018), page 34, which states that the more creative a teacher is, the easier it is for students to understand the lessons delivered by that teacher, thus having an impact on improving learning outcomes.
The similarity with previous studies in this research is that they both discuss the realm of teacher creativity in the teaching and learning process, while the difference with this research is the time, place, and focus of the research. This research was conducted in August – September 2023 at MI Manbaul Ulum Sinoman Pati with a focus on research on learning outcomes in science subjects. This development in the 2013 curriculum can be realized to help encourage students to be better at observing, asking questions, reasoning, and socializing what they receive during the learning process. The 2013 curriculum is implemented in several schools in Indonesia as education providers, one of which is MI Manbaul Ulum Sinoman Pati (Hidayat dan Patras, 2013). The aim of this research is to find out whether there is an influence of teacher creativity on student learning outcomes in class V science subjects at MI Manbaul Ulum Sinoman Pati.

METHOD

This research is quantitative research using the field research method, or researchers came directly into the field to collect data, which was carried out from 14 August 2023 to 14 September 2023 at MI Manbaul Ulum Sinoman Pati for the 2023/2024 academic year. The population in this study was all class V students from class A and class B, totaling 38 students using a saturated sampling technique, or the population became the research sample itself. This research aims to find the influence between teacher creativity and science learning outcomes.

In this research, variable X uses indicators from Munandar (2009) regarding teacher creativity in teaching, which consists of two dimensions. The first is creative thinking (aptitude), which includes originality, flexibility, fluency, and elaboration. The second dimension is a creative attitude (non-aptitude), which includes curiosity, being imaginative, feeling challenged by diversity, daring to take risks, and having an appreciative nature.

The data used in this research includes primary data, namely data obtained directly by researchers in the field by means of respondents filling out questionnaires given by researchers, while secondary data used by researchers is literature that is relevant to this research, such as journals, theses, books, legger, etc. Then, the data collection technique carried out by the researcher is 1) Questionnaire. In doing this, the researcher collects data by giving questions or statements to respondents via written sheets, and in this research, the researcher uses a Likert scale with alternative answers: A if always, B if often, C if sometimes, D if never, 2) Observation. The researcher went to the field and then observed the phenomenon that occurs directly to investigate the creativity of the teacher who teaches science subjects in class V, 3) Documentation. The researcher
collected data, both in the form of images and writing, which are needed in this research.

Before the questionnaire was distributed to actual respondents, the researcher used a tryout or trial of the instrument with validity and reliability tests. Then, before entering the hypothesis testing analysis section, validity and reliability tests were carried out with the aim of measuring the validity or level of validity of the instruments in this research. According to Istiarini dan Sukanti (2012), validity is a calculation of the validity of an instrument because an instrument will be valid if it has high validity, and an instrument will be declared invalid if it has low validity. Arifin (2017) also stated that instruments that are validated have a high level of validity, which means that they are suitable to be used as measuring tools to measure what should be measured in a study. Therefore, a study requires high validity to be worthy of being a measuring tool.

Further, after carrying out validity and reliability tests, the researcher used data analysis techniques to test the prerequisites that measure the acceptability of data that can be entered into a simple linear regression test by carrying out a normality test with the aim of finding out whether the data is normally distributed or not when testing is carried out repeatedly (Sujuarweni 2012) after the data is normally distributed, the researcher carried out a linearity test to find out whether there is a significant relationship between the dependent variable and the independent variable being studied. After both data are declared to be normally and linearly distributed, hypothesis testing is carried out using the correlation test, coefficient test, and t-test to determine whether the proposed hypothesis is accepted or rejected.

The hypothesis in this research is:

H0 = There is no influence of teacher creativity on student learning outcomes in science subjects at MI Manbaul Ulum Sinoman Pati.

Ha = There is an influence of teacher creativity on student learning outcomes in science subjects at MI Manbaul Ulum Sinoman Pati.
FINDINGS AND DISCUSSION

Findings

After testing with SPSS software, the following data was obtained:

<table>
<thead>
<tr>
<th>Table 1. SPSS Normality Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One-Sample Kolmogorov-Smirnov Test</strong></td>
</tr>
<tr>
<td>Unstandardized Residual</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Normal Parameters&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
</tr>
<tr>
<td>Test Statistic</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
<tr>
<td>a. Test distribution is Normal.</td>
</tr>
<tr>
<td>b. Calculated from data.</td>
</tr>
<tr>
<td>c. Lilliefors Significance Correction.</td>
</tr>
</tbody>
</table>

Source: Primary Data (processed) SPSS, 2023

Based on Table 1 above, it is known that the significance value is 0.081 > 0.05, so it can be concluded that the residual value is normally distributed.

<table>
<thead>
<tr>
<th>Table 2. Linearity Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANOVA Table</strong></td>
</tr>
<tr>
<td>Sum of Squares</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Hasil Belajar IPA * Kreativitas Guru</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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<td></td>
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</tbody>
</table>

Source: Primary Data (processed) SPSS, 2023

Based on Table 2 above, it is known that the Deviation from the Linearity value is 0.483 > 0.05, so it can be concluded that there is a linear relationship between teacher creativity (variable x) and science learning outcomes (variable y). Next, to find out how many percentages of the influence of creativity on science learning outcomes, use the Model Summary column.
Based on Table 3 data, it is known that the value of the coefficient of determination (R Square) is 0.653 or 65.3%, which means that teacher creativity only contributes 65.3% to the science learning outcomes of class V students at Manbaul Ulum Sinoman Pati and the rest is determined by other variables outside this research model.

Table 4. Coefficient Test Results (t-Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>41.815</td>
</tr>
<tr>
<td></td>
<td>Kreativitas Guru</td>
<td>.558</td>
</tr>
<tr>
<td>a. Dependent Variable: Hasil Belajar IPA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data (processed) SPSS, 2023

It is known in Table 4 above that the constant value (a) is 41.815, while the teacher creativity value (b or regression coefficient value) is 0.558, so the equation is:

\[ Y = a + bX \]

\[ Y = 41.815 + 0.558X \]

From this equation, it can be interpreted that the influence of teacher creativity on science learning outcomes is 0.558, and if there is an addition or increase of 1 unit, science learning outcomes will increase by 0.558. Then, it is also known that the value of the regression coefficient is positive, so it can be concluded that the direction of influence of variable x (Teacher Creativity) on Y (Science Learning Outcomes) is positive. From this conclusion, it can be interpreted that the higher the level of teacher creativity, the higher the student learning outcomes will be.
It is also known that the calculated t value is 8.231 with a significance level (2-tailed) of 0.000 with \( df = (n-k) = 38 - 2 = 36 \), so the t table is 1.688 at a significance level of 0.05. So \( t_{\text{count}} > t_{\text{table}} \) or 8.231 > 1.688. So \( H_0 \) is rejected, and \( H_a \) is accepted, which means that there is an influence of teacher creativity on student learning outcomes in science subjects at MI Manbual Ulum Sinoman Pati.

**Discussion**

The results of the analysis obtained from the research data that has been carried out are that teacher creativity can influence student learning outcomes. This can be seen and proven from the results of teacher creativity having a positive influence on learning outcomes, which is shown through the results of a simple linear regression calculation of 0.558, which has a positive value.

Based on the results of hypothesis testing through the t-test, it shows that \( t_{\text{count}} > t_{\text{table}} \) or \( 8.231 > 1.688 \), then \( H_0 \) is rejected and \( H_a \) is accepted, or in other words, there is an influence of teacher creativity on science learning outcomes. It is estimated that the magnitude of the influence of creativity on learning outcomes is 65.3%. The remainder is outside this research model.

Teacher creativity also has an important role in improving student learning outcomes because the more creative the teacher is, the easier it is for students to understand the lesson so that good learning outcomes will also be created (Fauzi, 2018:34). Lapeniene dan Dumcience (2014) also argue that when teachers have creativity in teaching, it will make learning in the classroom fun so that students are motivated to follow lessons and this will then have an impact or influence on their learning outcomes.

The results of this research also support research that has been carried out previously, namely that teacher creativity has an important role in improving a person's ability to learn because when teachers teach in a state of creativity, it can influence students' learning outcomes (Vasudevan 2013). The results of the influence of creativity show that there is a positive influence of 16.6%, which means that there are other factors that influence a person's learning outcomes besides teacher creativity but are discussed in other research models outside the research model on teacher creativity (Hanifah, 2016). Research conducted by Pebrianto et al. (2015) suggests that learning outcomes can be influenced by teacher creativity by 58%, with variable quality stated to be high.

Furthermore, the results of this research also support the behaviorist learning theory, which states that the learning process is a process of change in attitude due to the encouragement of a stimulus, which can be observed from the results of a continuous process between the teacher who has the role of driving the stimulus and the students as a response to the stimulus activity (Slavin,
2000). The desired response is a manifestation of the stimulus given by the teacher to the students, so teacher creativity is needed to get a better response from students because changes in attitudes can be seen from the learning results (Mutiah, 2017). This is also in line with research findings conducted by Agung (2010) that the quality of student learning outcomes is the result of quality teachers who are also capable of developing their creativity. Because creative teachers who teach will determine the success or failure of a student’s learning outcomes, this indicates that whether the teacher’s creative contribution is large or small, it greatly influences the increase or decrease in student learning outcomes (Wahab, 2015). The existence of teacher creativity is a disclosure of the definition of person and product, which is a person's ability to create something new and relatively different, both in the form of ideas and in real work (Riasati, 2013) and the existence of teacher creativity in teaching can be called the existence of different variations and renewal to transfer their knowledge in utilizing models, media, learning evaluation, etc. (Syah, 2011).

From the explanation above, it can be stated that in the teaching and learning process, a teacher contributes to student learning outcomes, especially in the aspect of teacher creativity. However, the contribution made, whether big or small, by a teacher cannot be ignored because teachers are the main factor in the educational process, which always plays a role in optimizing the learning success of their students.

From this research, it can be clearly seen that a teacher must continue to upgrade his skills in the aspect of creativity to make the learning process more enjoyable for students so that students do not quickly get bored and find it difficult to improve their learning outcomes (Murti, 2013). In accordance with Minister of Education and Culture Regulation Number 65 of 2013 (Permendikbud Nomor 65 Tahun 2013) concerning the existence of standards for primary and secondary education processes, the learning process in educational units should be interactive, inspiring, fun, challenging, and motivate students to play a more active role in learning activities. Not only that, from this research, the school can find out that the creativity of science teachers in the school is good and must continue to be improved. Therefore, the school needs to support and encourage these teachers to increase their creativity in teaching and provide facilities to these teachers in ways such as involving teachers at their schools to take part in several trainings and seminars to hone and improve their creativity in teaching.
CONCLUSION

The results of data analysis in this study show that there is an influence of teacher creativity on student learning outcomes in science subjects. This can be seen from the results of the hypothesis test, which shows a calculated t value of 8.231 with a significance level of 0.000 with df = (n-k) = 38 - 2 = 36 so that the t table is 1.688 at a significance level of 0.05. So t count > t table or 8.231 > 1.688. So H0 is rejected, and Ha is accepted, so the meaning is that there is an influence of teacher creativity on student learning outcomes in science subjects at MI Manbaul Ulum Sinoman Pati. Thus, it can be concluded that there is a fairly strong influence between teacher creativity and student learning outcomes in science subjects at MI Manbaul Ulum Sinoman Pati, as seen from the level of influence of 65.3%.

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