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The Role of Demonstration Strategy in Improving Student Learning Performance

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A R T I C L E I N F O

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ABSTRACT

The purpose of learning activities in the classroom, as explained by Mager, is to focus attention on student behavior or performance as a form of observable output and an indicator that students have followed the learning process. Based on the results of this study, the alternative hypothesis formulated can be accepted, so it can be concluded that the demonstration method applied in learning has a real influence. This method is proven to be effective and feasible to use as one of the approaches that can increase student activeness in the learning process. As one of the alternative learning methods, demonstration provides opportunities for students to be more active, think critically, and expand their learning experience, especially when they are asked to practice the material they have understood. Therefore, the use of demonstration methods in the classroo m can support the improvement of students' understanding and skills more thoroughly.

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1. INTRODUCTION

After the class, the teacher asked the students questions and found that many did not comprehend, since no pupils could explain how to perform all of the above (Beers, 2003)(Durkin, 1978) (Owu-Ewie & Eshun, 2015). To avoid wasting the teacher's efforts, it's vital to research what affects teaching and learning (Morgan & Hansen, 2008) (Munn & Drever, 1990) (McBer, 2001)(Kukla-Acevedo, 2009). Mager believes that classroom instruction should focus on student conduct or action (performance) as an output that can be observed and proves that pupils have learned (Zimmerman, 2011) (Coe et al., 2014). Teachers teach and mentor students. A teacher is intended to help students gain different experiences to help them become independent in modern society (Herman & Mandell, 2005) (Paris & Winograd, 2003) (Serbessa, 2006)(Chitpin, 2011) (Grow, 1991). Demonstrations can help kids become independent in communal life (Brown, 1992). Demonstrations turn imagination into something students can see, hear, and feel (Garfinkel, 1963) (Gutiérrez, 2016).

How to communicate material to pupils effectively and efficiently is a common issue in teaching, especially Islam. In addition to other issues, teachers often neglect to vary their teaching approaches to increase quality (Akbari, 2015) (Günther, 2006). Starting from the concept of teaching method, which is a manner of delivering learning materials to meet stated goals, teaching methods are a vital aspect of a teaching system and determine the success or failure of a teaching and learning process. The success of curriculum implementation depends on instructors' capacity to implement and apply it (Cronin-Jones, 1991) (Baylor & Ritchie, 2002). The teacher's ability is mostly based on his knowledge and obligations (Carlone et al., 2011).

A teacher can better choose a method for a given circumstance by understanding its nature (Pajares, 1992). Thus, techniques must match students, material, and instructional environments. A

method's superiority depends on goals, student characteristics, situations and settings, teacher abilities and personalities, and facilities and infrastructure (Höttecke et al., 2012). Teachers utilize the lecture approach to present topics in class. The teacher lectures to students (Meguid & Collins, 2017) (Roehl et al., 2013).

In the field of education, the effectiveness of teaching methods significantly influences student learning outcomes. The continuous evolution of instructional strategies has emphasized the need to adopt approaches that actively engage students in the learning process. One such approach is the demonstration strategy, which presents material in a visual and practical manner, allowing learners to observe concepts in action. Demonstration teaching offers a dynamic learning experience by showing rather than merely telling. Unlike traditional lecture methods, which often rely heavily on verbal explanation, demonstration encourages active observation, critical thinking, and participation. It is especially effective in subjects that require skill acquisition, procedural knowledge, or hands-on application.

he growing need for improved student learning performance calls for innovative strategies that not only deliver knowledge but also foster deeper understanding. Performance here refers not only to academic scores but also to students' ability to apply, analyze, and synthesize knowledge. Teaching strategies must therefore adapt to support diverse learning styles and cognitive development levels. The demonstration method plays a crucial role in bridging the gap between theory and practice. Through visual aids, physical models, or real-time experiments, students gain clearer insights into abstract concepts. This method enhances retention and comprehension, particularly for learners who benefit from kinesthetic and visual stimuli.

According to educational theorists such as Edgar Dale and Robert Mager, students learn more effectively when they are involved in the learning process through observation and action. Mager emphasized the importance of student behavior as the observable outcome of effective teaching. In this context, the demonstration strategy aligns well with student-centered learning philosophies. espite its benefits, the demonstration method is not always maximized in classroom settings. Many teachers still rely heavily on lectures, especially in environments with limited resources or large student populations. This creates a need to explore and reinforce the role of demonstration in improving learning performance, especially when teaching practical or skill-based content.

The integration of demonstration strategies can increase students' motivation and confidence. When students are given opportunities to observe a task or concept being executed before attempting it themselves, they are more likely to engage with the material. This approach helps reduce anxiety and supports active learning, both of which contribute to academic success. Demonstration supports differentiated instruction, allowing educators to meet varied student needs. It facilitates inclusive learning by making complex ideas accessible to learners of different abilities and backgrounds. With appropriate scaffolding, even students with lower prior knowledge can perform better when demonstration is used as a guiding method.

This study is particularly relevant in today's educational landscape, where learning outcomes are under increased scrutiny. Improving student performance is a primary goal across all levels of education. By investigating the role of demonstration strategy, educators and policymakers can better understand how to optimize teaching techniques to support student success. This research aims to explore how the demonstration strategy can serve as an effective instructional method to enhance student learning performance. It will examine the method's practical application in classroom settings, its impact on student engagement and understanding, and the conditions under which it is most effective. The findings are expected to offer valuable insights for educators seeking to adopt more interactive and outcome-oriented teaching strategies.

2. RESEARCH METHOD

This study employs a descriptive analytical method, combining both library research and field data collection, as outlined by Vaismoradi et al. (2013), Dey (2003), and Wasserman & Faust (1994). The population of the research includes individuals, objects, events, and phenomena relevant to the implementation of the demonstration method in classroom learning. Following the sampling guidelines from Bell & Waters (2018) and Fu (1997), the study selected 40 students out of a total of 134, adhering to the principle that if the population is under 100, all subjects should be included, and if over 100, a

proportion (10–25%) is considered representative. Data were collected through observations, interviews, and posttests to investigate how teachers and students apply the demonstration method in real classroom settings. The qualitative data from observations and interviews were analyzed descriptively to explore the depth of interaction and implementation patterns. The posttest results were then statistically tested using a t-test to measure the effectiveness of the demonstration strategy in improving student performance. To assess the success of the demonstration method, the researcher formulated two hypotheses: the alternative hypothesis (Hi)—that the demonstration method leads to significant improvement in learning outcomes and can be relied upon as an effective teaching strategy; and the null hypothesis (Ho)—that the demonstration method does not significantly influence student performance. Though a pretest was not used, the posttest results provide insight into the learning impact following the application of the demonstration method, particularly in the context of Islamic education.

3. RESULTS AND DISCUSSIONS

Data can be evaluated as follows based on description. Instructional Data Lecture Method: Introduction, the teacher discusses last week's material and asks questions for 10 minutes. The corpse is cleaned with clean water from head to toe, starting with the right side. The corpse is then soap-washed. Students can ask questions at the end. Score Learned Lecturing and demonstrating Scores from 26 pre- and post-testers:

Table 1. Scores of students' test results with 2 methods

No.	Student Name	Score with Lecture Method	No.	Student Name	Score with Demonstration Method
1	Students 1	89	1	Students 1	93
2	Students 2	86	2	Students 2	83
3	Students 3	78	3	Students 3	83
4	Students 4	80	4	Students 4	83
5	Students 5	89	5	Students 5	90
6	Students 6	89	6	Students 6	93
7	Students 7	93	7	Students 7	88
8	Students 8	82	8	Students 8	93
9	Students 9	91	9	Students 9	86
10	Students 10	91	10	Students 10	95
11	Students 11	88	11	Students 11	90
12	Students 12	65	12	Students 12	86
13	Students 13	95	13	Students 13	95
14	Students 14	91	14	Students 14	89
15	Students 15	74	15	Students 15	90
16	Students 16	89	16	Students 16	90
17	Students 17	91	17	Students 17	95
18	Students 18	95	18	Students 18	95
19	Students 19	94	19	Students 19	95
20	Students 20	95	20	Students 20	95
21	Students 21	91	21	Students 21	95
22	Students 22	83	22	Students 22	93
23	Students 23	88	23	Students 23	83
24	Students 24	95	24	Students 24	88
25	Students 25	91	25	Students 25	93
26	Students 26	94	26	Students 26	92
	average	87,96		average	90,42

The average student score shows that the demonstration method works. It will be estimated using educational statistics principles because scientifically this is not yet acceptable:

Table 2. Calculation to Obtain "t"

No.	Student Name	Test Results		D = (Y – X)	D^2 = $(Y - X)^2$
		Score with Lecture Method	Score with Demonstration Method		
1	Students 1	89	93	-4	16
2	Students 2	86	83	3	9
3	Students 3	78	83	-5	25
4	Students 4	80	83	-3	9
5	Students 5	89	90	-1	1
6	Students 6	89	93	-4	16
7	Students 7	93	88	5	25

8	Students 8	82	93	-11	121
9	Students 9	91	86	5	25
10	Students 10	91	95	-4	16
11	Students 11	88	90	-2	4
12	Students 12	65	86	-21	441
13	Students 13	95	95	0	0
14	Students 14	91	89	2	4
15	Students 15	74	90	-16	256
16	Students 16	89	90	-1	1
17	Students 17	91	95	-4	16
18	Students 18	95	95	0	0
19	Students 19	94	95	-1	1
20	Students 20	95	95	0	0
21	Students 21	91	95	-4	16
22	Students 22	83	93	-10	100
23	Students 23	88	83	5	25
24	Students 24	95	88	7	49
25	Students 25	91	93	-2	4
26	Students 26	94	92	2	4
	average	87,96	90,42	-64=²∑D	1184=∑D²

The sign - ("minus) here is not an algebraic sign; therefore it should be read: there is a difference / difference in scores between Variable X and Variable Y of 64: $\sum D = 64$ and $\sum D^2 = 1184$. By obtaining $\sum D$ and $\sum D^2$, we can know the amount of Standard Deviation of the score difference between Variable X and Variable Y (in this case SDD):

$$\frac{SD_D}{N} = \frac{\sqrt{\sum D^2 - (\sum D)^2}}{(N)} = \frac{\sqrt{1184 - (64)^2}}{(26)} = 6{,}265$$

With the SDD obtained of 6.265, we can further calculate the Standard Error of the Mean score difference between variable X and variable Y:

$$SE_{M_D} = SD_D = \frac{6.265}{\sqrt{N-1}} = \frac{6.265}{\sqrt{26-1}} = 0{,}251$$

The next step, we give an interpretation of to, by first calculating the df or db: df = N - 1 = 26 - 1 = 25. with a df of 25 we consult the "t" Value Table, both at the 5% significance level and at the 1% significance level. It turns out that with a df of 25, the critical price of t or ttable at 5% significance is 2.06; while at 1% significance level tt is obtained at 2.79. By comparing the magnitude of "t" that we obtained in the calculation (to = 9.823) and the magnitude of "t" listed in the Table of Values "t" (tt.ts.5% = 2.06 tt.ts.1% = 2.79) then we can know that to is greater than tt; ie : 2,06 < 9,823 > 2,79.

The researcher's data on the conventional approach, demonstrative method, and score outcomes can be explained as follows. When compared to the average score of students' test scores using the demonstration technique, the demonstration approach has had a real influence. It can be a teacher's mainstay. The Nihil Hypothesis is rejected because to is bigger than tt, hence the difference in student scores before and after applying the new approach "M" is persuasive (=significant).

4. CONCLUSION

The results of the t-test conducted in this study indicate that the demonstration method had a significant and positive impact on student learning. Students who were taught using this method showed improved performance and better understanding of the material, supporting the effectiveness of the approach. This suggests that the demonstration method can be a reliable instructional strategy to enhance student achievement. Teachers are encouraged to apply the demonstration method in future lessons, especially when the subject matter requires practical, visual, or step-by-step explanation. It offers clear advantages in helping students grasp complex concepts by providing them with concrete examples during the learning process. When used appropriately, the demonstration approach fosters greater student engagement and retention of knowledge. The study also identified certain limitations in using this method. Not all content is suitable for demonstration, and some topics may be difficult or time-consuming to present in this way. In some cases, the time required for preparation and execution can interfere with other lesson plans. Additionally, the absence of proper tools or materials can prevent students from fully understanding the lesson content. Another challenge lies in students' ability to interpret and follow the demonstration accurately. Without sufficient guidance, students may find it difficult to determine the correct steps or outcomes. Moreover, the success of the demonstration strategy

greatly depends on students' motivation and willingness to learn, which varies among individuals Despite these limitations, the findings confirm the alternative hypothesis of this study—that the demonstration method has a real and meaningful effect on student learning outcomes. When implemented thoughtfully and supported by appropriate resources and teacher preparation, the demonstration method can serve as a powerful tool to improve learning and make instruction more interactive and effective.

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