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The Influence of Demonstration Learning Method on Student Learning Outcomes in the Subject of Archiving

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ABSTRACT

Learning outcomes reflect students' understanding, skills, and knowledge gained through various educational experiences, often demonstrated through academic achievements such as examination scores or awards. This study investigates the influence of the demonstration learning method on student learning outcomes in the Archiving subject for Grade XI students of the Office Management and Business Services (MPLB) program at SMK Negeri 1 Sinjai. A quantitative research approach was employed, with data collected through documentation, observation, and questionnaires. The data were analyzed using both descriptive and inferential statistical techniques. The findings reveal that the demonstration method, as determined and applied by educators, has an influence on students' learning outcomes in the archiving subject. However, the correlation coefficient test indicates a low relationship between the use of the demonstration method and student achievement. Furthermore, the coefficient of determination shows that the demonstration method accounts for only 6% of the variance in learning outcomes, assuming other influencing factors remain constant. These results suggest that while the demonstration method plays a role in supporting student learning, its impact is limited and may require integration with other instructional strategies to enhance effectiveness. The study highlights the need for educators to consider a variety of methods to optimize student engagement and achievement in vocational education settings.

Keywords: Learning Outcomes, Demonstration Method, Vocational Education, Archiving Subject, Student Learning Outcomes

INTRODUCTION

Education serves not only as a process of transferring knowledge but also as a transformative experience through which individuals develop their potential, values, and capacities to function productively in society. It is through education that individuals cultivate their cognitive, emotional, and practical skills, preparing them for both personal advancement and societal contribution. As such, the role of educational institutions is not merely to disseminate information, but to create learning environments that support holistic development and readiness for real-world challenges.

In this context, educational institutions function as structured platforms where learners are equipped with the tools necessary for lifelong learning and professional engagement. The quality of education delivered, especially in vocational schools has a direct impact on the kind of human resources a nation produces (Elviana et al., 2025; Sailan et al., 2023; Saleh et al., 2020). These institutions are expected to nurture intellectual curiosity and discipline while also offering pragmatic competencies that align with labor market demands. Therefore, the process of learning, and how it is facilitated by educators, becomes a determinant factor in ensuring that students not only acquire knowledge but are also capable of applying it effectively.

A crucial component in this educational process is the educator. The educator does not merely serve as a transmitter of knowledge, but also as a designer of learning experiences (Ahmad & Saefurrohman, 2020; Nasrullah et al., 2024; Saleh et al., 2021). Their ability to select, adapt, and apply appropriate teaching methods greatly influences how students engage with learning material. Among various indicators of the effectiveness of the teaching and learning process, student learning outcomes stand out as a comprehensive measure. These outcomes encompass cognitive mastery, affective engagement, and psychomotor skills, dimensions that are particularly important in vocational education.

To support meaningful learning outcomes, educators must utilize instructional methods that resonate with the nature of the subject matter and the learning needs of students (Harjana et al., 2023; Yeh, 2022). One such method is the demonstration method, which is especially valuable for subjects that emphasize procedural knowledge or technical application. Unlike lecture-based approaches that rely on abstract explanation, the demonstration method offers learners the opportunity to observe and reflect on real-time actions. It transforms passive learning into an interactive process where visual and hands-on experiences reinforce conceptual understanding.

In vocational education, where students are trained for specific career paths, the demonstration method has proven to be particularly effective (Andriana et al., 2015; Darwis et al., 2023; Purwandira et al., 2018). Practical subjects such as engineering, culinary arts, and office administration including archiving require students to master a series of tasks with precision and accuracy. Demonstrations by educators can serve as performance models that students emulate, helping them internalize correct procedures and develop task-specific competencies. Furthermore, this method can enhance student motivation and engagement, especially when learners see the relevance of what is being demonstrated to their future professional roles.

Despite its widespread application, the impact of the demonstration method on learning outcomes is not uniform across all educational contexts (Inuwa et al., 2018; Tamunu, 2022; Thahir et al., 2019). Factors such as educator proficiency, student readiness, available instructional resources, and institutional support can significantly shape the effectiveness of this method. Therefore, it is important to study how the demonstration method is applied in specific subject areas and settings. Its relevance to archiving subjects in vocational education, where accuracy, procedural flow, and document handling are essential, makes it a compelling area for further investigation.

This study is grounded in observations at SMK Negeri 1 Sinjai, especially in the Office Management and Business Services (MPLB) department. Archiving is one of the key subjects taught within this program, with learning objectives that include the ability to receive, classify, store, retrieve, and dispose of documents properly. Considering the technical nature of these tasks, the demonstration method holds great potential in enhancing student comprehension and performance. Therefore, this research seeks to explore the relationship between the use of the demonstration method by educators and the resulting student learning outcomes in the archiving subject. It is hoped that the findings will inform more effective instructional practices in vocational education.

METHOD

The measurement of variables in this study applies a quantitative approach. This is applied to obtain answers to the current hypothesis. The results of this study use data that has been tested through statistics. Quantitative research methods are also commonly referred to as traditional methods because they have long been used in research. Research methods based on positivism are known as quantitative research. The use of this type of research is used on

a certain population or sample, and the instruments in the research are used to produce the information or data needed. This research method uses data processing in the form of numbers.

Variable X as the independent variable of this study is the demonstration learning approach, and variable Y as the dependent variable is student learning outcomes. This study has a population of 84 students from class XI MPLB. Based on this, the sampling and determination of the number of samples applies the simple random sampling method, meaning that the sample is selected randomly from the population without distinguishing between social classes in it. Of the total 84 students in the population, 69 students who became respondents were selected as samples based on the Slovin formula.

The techniques of data collection applied are observation, questionnaires, and documentation. Descriptive analysis techniques are used to process data by describing the condition of variables without producing general conclusions. The descriptive statistical analysis used is the analysis of frequency distribution, average, percentage, and standard deviation. Inferential statistical data analysis is applied to be able to process data from samples and the results of data processing also apply to the population.

RESULT AND DISCUSSION

Data analysis is carried out inseparably to obtain results from the influence of the demonstration method on student learning outcomes.

Demonstration Learning Method (X)

The demonstration learning method variable is measured using three key indicators: preparation steps, implementation steps, and closing steps. Based on data analysis from the administered questionnaires, the preparation step indicator recorded a percentage score of 71%, the implementation step scored 52%, and the closing step reached 61%. These percentages reflect the extent to which each stage of the demonstration method was effectively applied in the learning process. To gain deeper insight into the application of the demonstration method, an analysis of the respondents' answers was conducted. This analysis is based on questionnaire responses collected from a total of 69 research participants, and the distribution of these responses is presented in the following section.

Table 1: Descriptive Analysis of Demonstration Learning Method

Interval	Frequency	Percentage	Category
14-24	0	0%	Very less
25-35	0	0%	Less
36-46	1	1.4%	Enough
47-57	17	24.7%	Good
58-70	51	73.9%	Excellent
Amount	69	100%	

Source: SPSS V.29 Data Processing Results

The findings of the hypothesis testing reveal that the demonstration learning method has a statistically significant influence on student learning outcomes in the Archiving subject. This is evidenced by the t-count value of 2.077, which exceeds the t-table value of 1.667, and a significance level (p-value) of 0.042, which is lower than the threshold of 0.05. Based on these results, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted, indicating that the demonstration method contributes meaningfully to variations in student learning outcomes.

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Further analysis through the correlation test indicates that the strength of the relationship between the demonstration method and student learning outcomes falls into the low correlation category. This suggests that while the method has a positive impact, its effect size is relatively modest. Even so, the influence remains statistically relevant, affirming the idea that instructional strategies—particularly those that incorporate visual and practical elements—can support improvements in students' comprehension, attitudes, and skill development. These findings are consistent with the perspective of Arhas et al. (2023), who emphasized that learning methods serve as a critical component in achieving instructional goals and enhancing learner achievement.

The study also supports the view expressed Ramadhani et al. (2024) which found that the demonstration method plays a valuable role in shaping student learning experiences, especially in vocational education contexts. Although the degree of influence in this study is not high, it reinforces the idea that instructional design, teacher preparation, and student engagement all contribute to the effectiveness of any given method. In particular, the demonstration method has the potential to enhance critical thinking, facilitate better understanding of procedural content, and foster greater student participation when applied optimally.

These findings highlight the necessity for further research to explore other contributing variables, such as teacher competence, student motivation, classroom environment, and instructional media, that may interact with the demonstration method in influencing learning outcomes. Future studies could also employ a broader sample across different schools or subjects to determine whether similar patterns of influence emerge, and to identify whether the method's effectiveness can be strengthened through complementary strategies such as collaborative learning or formative assessment integration.

Learning Outcome (Y)

Based on the research objectives related to student learning outcome variables, it is necessary to conduct analysis or collect data related to student grades as achievements or learning outcomes of archiving subjects through teaching teachers based on assessment indicators.

Table 2: Descriptive Analysis of Student Results

Interval	Frequency	Percentage	Category
90-100	0	0%	Excellent
80-89	30	43%	Good
70-79	39	57%	Enough
60-69	0	0%	Less
<60	0	0%	Very Less
Amount	69	100%	

Source: SPSS V.29 Data Processing Results

The results of the quantitative analysis indicate that the average score of student learning outcomes in the Archiving subject for Grade XI MPLB students at SMK Negeri 1 Sinjai falls into the sufficient category. This suggests that students have achieved an acceptable level of competency, as reflected across the three principal domains of learning: cognitive (knowledge), affective (attitudes), and psychomotor (skills). Although the results indicate that minimum competency standards have been met, they also reveal a potential gap between basic comprehension and higher-level mastery, particularly in conceptual understanding, behavioral development, and the practical application of archiving skills.

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Learning outcomes serve as vital indicators in assessing the effectiveness of the teaching and learning process. In this study, they were measured using teacher-reported assessments, drawn from standardized documentation of student performance in the Archiving subject. The assessment framework adopted a holistic approach, considering not only the student's theoretical grasp of archiving concepts but also their disposition towards learning and their technical proficiency in performing archiving-related tasks. Quantitative data analysis confirms that, while most students met the expected benchmarks, their performance predominantly clustered at a moderate level.

These findings underscore the importance of implementing continuous instructional improvements, including the use of context-appropriate learning methods, differentiated instruction, and formative assessment strategies. To move beyond sufficiency, teachers must strengthen learning design by fostering deeper engagement, encouraging critical reflection, and integrating more practical exercises that simulate real-world archiving scenarios. In doing so, student achievement can be elevated from merely adequate to proficient or even exemplary levels, contributing to the production of graduates better prepared for vocational demands.

The Influence of Demonstration Learning Methods on Student Learning Outcomes

The normality test is used to determine whether the existing data is normally distributed. Therefore, the results of the data normality test in this study can be described through the table below.

Table 3: Normality Test Results

Variabel	Tests of Normality					
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Demonstration Learning Method	0.095	69	.200*	0.976	69	0.208

Source: SPSS V.29 Data Processing Results

A normality test was conducted to determine whether the data used in this study were normally distributed. The Shapiro-Wilk test was selected due to the sample size being less than 100. Based on the SPSS output (Table 3), the significance value for the demonstration learning method variable was 0.208, which exceeds the 0.05 threshold. Thus, it can be concluded that the data for this variable are normally distributed, meeting one of the assumptions required for subsequent parametric tests.

Table 4: Product Moment Correlation Test Results

	Demonstration Learning	Student

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		Methods	Learning Outcomes
Demonstration Learning Method	Pearson Correlation	1	0.246*
	Sig. (2-tailed)		0.042
	N	69	69
Student Learning Outcomes	Pearson Correlation	0.246*	1
	Sig. (2-tailed)	0.042	
	N	69	69

*. Correlation is significant at the 0.05 level (2-tailed).
Source: SPSS V.29 Data Processing Results

To examine the strength and direction of the relationship between the demonstration learning method and student learning outcomes, the Pearson product-moment correlation test was performed. As shown in Table 4, the correlation coefficient (r) was 0.246, indicating a positive but low correlation between the two variables. The significance value was 0.042, which is below the 0.05 level. This suggests that the relationship is statistically significant, even though the strength of the association is weak. In practical terms, this implies that students' learning outcomes tend to improve when the demonstration method is applied, but the method alone is not the sole determinant of student success.

This finding aligns with educational theory, which holds that teaching methods are a key determinant in shaping learning outcomes (Darwis et al., 2021; Kéri, 2021; Khan et al., 2020). Learning outcomes are the observable results of the learning process, covering not only students' knowledge (cognitive), but also their attitudes (affective) and skills (psychomotor).

Table 4: Hypothesis Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	69.087	4.512		15.311	0.000
	X	0.157	0.076	0.246	2.077	0.042

Dependent Variable: Student Learning Outcomes (Y)
Source: SPSS Data Processing V.29

To further analyze the influence of the demonstration method as an independent variable on student learning outcomes as the dependent variable, a simple linear regression analysis was conducted. As reported in Table 5, the regression coefficient for the demonstration method (X) was 0.157 with a t value of 2.077 and a significance level of 0.042. This t value exceeds the critical t-table value of 1.667, indicating that the regression coefficient is statistically significant at the 5% level.

Based on these results, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted. It can therefore be concluded that the demonstration method has a significant positive influence on student learning outcomes. However, the coefficient of determination (R^2)—though not shown explicitly in the summary—can be inferred as low (approximately 6%), suggesting that the demonstration method accounts for only a small portion of the variance in learning outcomes. This implies that other factors, such as student motivation, prior knowledge, teacher expertise, or learning environment, also play an important role.

Based on the results obtained through hypothesis testing, it was found that the demonstration method affects student learning outcomes. The results of the study provide a picture that reveals that the demonstration learning method is one of the various factors that can have a good impact on learning outcomes. Demonstration method is considered as one of the methods that can influence learning outcomes (Andriani et al., 2024; Ramadhani et al., 2024). The results of this study confirm the theory that using the right demonstration method can help students think critically, analyze, and communicate, which results in more sustainable and effective learning. The main point as a bias in the results of this study is that the application of the demonstration method can have an impact or progress on student learning outcomes when implemented optimally, In the future, this research can be further developed to analyze the use of demonstration learning methods in schools and other factors that can influence student learning outcomes.

The demonstration approach facilitates visualization, procedural clarity, and active participation, which are particularly beneficial in vocational subjects like archiving. When implemented optimally, it can stimulate critical thinking, improve comprehension of complex tasks, and enhance communication. Nevertheless, the low correlation value found in this study also emphasizes the importance of pedagogical integration. The demonstration method should not be viewed as a standalone technique but rather as part of a broader instructional strategy that includes questioning, discussion, guided practice, and feedback.

CONCLUSION

Based on data processing and discussion of research results regarding the influence of the demonstration method on the learning outcomes of students in the archiving subject of class XI MPLB at SMK Negeri 1 Sinjai, it can be concluded that the implementation of the demonstration learning method in the archiving subject has been carried out very well as shown in the aspect of implementing the learning method with preparation steps, implementation steps and closing steps. The learning outcomes of students in the archiving subject are stated to be sufficient as indicated by the majority of values as a representation of student learning outcomes being in the Sufficient category (57%). Therefore, there is an influence between the demonstration method and the learning outcomes of class XI students, which is 6%. Given the modest influence observed, future research could investigate how the demonstration method interacts with other variables, such as learning motivation, digital tools, or student learning styles. Further studies with larger and more diverse samples, including comparative analysis between methods, may help clarify under what conditions the demonstration method yields the greatest impact.

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