

The Effect of Learning Media, Facilitators, Learning Models and Training on Teacher Competency In In-Depth Learning Training in Sukoharjo District

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ABSTRACT

This study aims to analyze the influence of learning media, facilitators, learning models, and training on teacher competence in the Deep Learning Training Program in Sukoharjo Regency. This research employed a quantitative descriptive approach using a survey method. The population consisted of all participants of the Deep Learning Training Program for teachers in Sukoharjo Regency in 2025, totaling 103 teachers. The sampling technique used was a census method, in which the entire population was taken as the research sample. Data were collected through questionnaires and analyzed using multiple linear regression with the assistance of SPSS version 27. The results showed that learning media had a positive and significant effect on teacher competence with a t-value of 10.182 and a significance value of 0.000. Facilitators also had a positive and significant effect on teacher competence with a t-value of 7.693 and a significance value of 0.000. The learning model had a positive and significant effect on teacher competence with a t-value of 3.218 and a significance value of 0.002. Training likewise had a positive and significant effect on teacher competence with a t-value of 3.583 and a significance value of 0.001. Simultaneously, learning media, facilitators, learning models, and training significantly influenced teacher competence with an F-value of 138.373 and a significance value of 0.000. The coefficient of determination (Adjusted R Square) of 0.843 indicates that 84.3% of teacher competence is influenced by learning media, facilitators, learning models, and training, while the remaining 15.7% is influenced by other factors outside the scope of this study.

Keywords: Learning Media, Facilitators, Learning Models, Training, Teacher Competence.

INTRODUCTION

Education is the basic foundation in forming superior and competent human resources. National education functions to develop abilities and shape the character and civilization of a dignified nation in order to enlighten the life of the nation, aiming to develop the potential of students to become people who believe in and fear God Almighty, have noble morals, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens. (Law Number 20 of 2003 concerning the National Education System).

The quality of education is highly dependent on teacher competence as the spearhead of classroom learning (Pratama & Lestari, 2020). As educators, teachers undoubtedly influence the learning process and play a significant role in achieving educational goals, contributing to student success. Teacher competence, particularly pedagogical and professional competence, plays a vital role in the learning process. Teachers who are able to effectively design, implement, and evaluate learning will be able to encourage students to achieve optimal learning outcomes. Various efforts

must be made to improve teacher competence, including pedagogical competence. A teacher's teaching ability depends on motivation, qualifications, experience, training, talent, and other factors. Improving the quality of education in schools can be achieved through various steps, such as strengthening the readiness of new students, improving teacher competence, updating the curriculum, improving the quality of learning and evaluation of learning outcomes, providing adequate teaching materials, and providing adequate learning resources (Bakri, 2024).

The learning media used in training plays a crucial role in supporting participant understanding. Interactive and relevant learning media can help teachers absorb learning concepts more effectively. Research shows that the use of learning media significantly improves teachers' pedagogical competency scores. The learning media used in training is the Learning Management System (LMS). An LMS is a learning system that supports blended learning models. This application is software for administering, documenting, tracking, and reporting a series of online learning programs and activities. An LMS offers facilities and features related to text, graphics, animation, simulation, audio, and video that can be used to optimize learning quality (Sulistyorini, 2022).

The facilitator plays a crucial role because he or she is the determining factor in the success of the participants, particularly in improving teacher competency. A competent and experienced facilitator can create an inspiring learning environment and encourage teachers to actively ask questions and engage in discussions. Facilitators who lack mastery of the material can reduce the effectiveness of the training (Afiah, 2024).

Furthermore, the learning model also significantly influences the success of the training. The training uses a blended learning model. Blended learning is a combination of face-to-face (offline) and online learning. This blended learning approach transcends time and space and facilitates access to education because it can be conducted anywhere, even through an available LMS. This allows participants to be more creative and innovative in seeking information and solving problems, thus improving learning outcomes (Sarah, 2022).

One strategy used by the government to improve the quality of learning is through In-Depth Learning Training. This training is a form of competency improvement in building understanding and implementation of learning to realize quality learning by emphasizing a learning atmosphere that is respectful through the creation of a learning atmosphere and a conscious, meaningful, and joyful learning process through holistic and integrated thought, feeling, and exercise (Technical Instructions for In-Depth Learning Training for Teachers, Principals, and School Supervisors, 2025). The purpose of the Learning Training is to equip teachers with the ability to design interactive, critical thinking, and student-centered learning. (Rizal, 2023)

Based on this background, it is important to conduct research to quantitatively assess the influence of learning media, learning modules, facilitators, and learning models, as well as Teacher Training, on improving teacher competency.

The results of this study are expected to provide an empirical overview of the factors that most determine training success and provide input for organizing institutions in designing training programs that are more effective, impactful, and appropriate to the needs of teachers in the modern education era.

RESEARCH METHODS

This study uses a quantitative descriptive approach. The author chose to use a quantitative descriptive method to determine the magnitude of the influence and significance between the variables of learning media, facilitators and learning models, in-depth learning training on improving teacher competency. This study was conducted at the In-Depth Learning Training for Teachers in Sukoharjo Regency in 2025 located at BBGTK Central Java, with the research time being carried out for 3 months from January 2026 - March 2026. The population was participants of the In-Depth Learning Training for Teachers in Sukoharjo Regency in 2025. The population in this study was 103 teachers. The number of samples taken was at least 25% of respondents from the population. The sample from this study took 75% of the population, namely 103 teachers who participated in in-depth learning training. In this study, the sampling technique used the census technique, meaning that all populations were used as research samples. The variables used in this study consisted of 2 variables, namely the independent variable (X) and the dependent variable (Y). The independent variables consist of learning media (X1), facilitator (X2), learning model (X3), and the dependent variable is teacher competence (Y). After the data tabulation was carried out, the data was processed using multiple linear regression analysis tools with the help of SPSS 27 software. The regression equation model used is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Information :

Y	: Competency Variable
X1	: Learning Media Variables
X2	: Facilitator Variable
X3	: Learning Model Variables
X4	: Training Variables
a	: constant
b1, b2, b3, b4	: correlation coefficient
e	: error term/nuisance error

RESULTS AND DISCUSSION

Multiple Linear Regression

The multiple linear regression equation is as follows:

$$Y = -0.453 + -0.365X_1 + 0.433X_2 + 0.089X_3 + 0.143X_4.$$

The equation can be explained as follows:

- 1) $a = -0.453$, this means, if the learning media factors (X1), facilitator (X2), learning model (X3) and training (X4) are considered constant, then it

will result in competenceParticipants in in-depth learning training for teachers in Sukoharjo Regency (Y) decreased by 0.453.

2) $b_1 = 0.365$, this means, if the learning media factor (X1) increases by 1 unit and the other variables are constant, then the competenceParticipants in in-depth learning training for teachers in Sukoharjo Regency(Y)increased by 0.365.

3) $b_2 = 0.433$, this means that if the facilitator factor (X2) increases by 1 unit, and the other variables are constant, then the competenceParticipants in in-depth learning training for teachers in Sukoharjo Regency(Y)increased by 0.433.

4) $b_3 = 0.089$, this means that if the learning model (X3) increases by 1 unit, and the other variables remain constant, then the competencyParticipants in in-depth learning training for teachers in Sukoharjo Regency (Y) increased by 0.089.

5) $b_4 = 0.143$, this means that if the training factor (X4) increases by 1 unit, and the other variables are constant, then the competencyParticipants in in-depth learning training for teachers in Sukoharjo Regency (Y)increased by 0.143.

For further details, please see the SPSS data processing results table as follows:

Table 1Summary of Multiple Linear Regression Results

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	-,453	,774	-,585	,560
Instructional Media	,365	,036	10,182	,000
Facilitator	,433	,056	7,693	,000
Learning model	,089	,028	3,218	,002
Training	,143	,040	3,583	,001

Source: SPSS Data Processing 2026

t-test

Table 2 t-Test Results

Hypothesis	t-count	t-table	Sig	Standard	Information
H1	10,182	> 1,984	0,000	0.05	H0 Accepted
H2	7,683	> 1,984	0,000	0.05	H0 Rejected
H3	3,218	> 1,984	0.002	0.05	H0 Rejected
H4	3,583	> 1,984	0.001	0.05	H0 Accepted

Source: Processed data, 2026

So because t-count > t-table and the level of significance < 0.05, then partially there is a positive and significant influence, however if t-count < t-table and the level of

significance > 0.05 then partially there is no influence of the independent variable on the dependent variable.

Model Feasibility Test

Table 3. Model Feasibility Test

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	344,301	4	86,075	138,373	,000b
	Residual	60,961	98	,622		
	Total	405,262	102			

Source: Processed data, 2026

From the results of SPSS data processing, the F-count value was obtained at 138.373 > F-table 2.46 with a significance level of 0.000 < 0.05. Because the F-count value of 138.373 is greater than the F-table 2.46 and the significance level is 0.000 < 0.05, then together the independent variables, namely learning (X1), facilitator (X2), learning model (X3) and training (X4) on competencyParticipants in in-depth learning training for teachers in Sukoharjo Regency(Y)

Analysis of the Coefficient of Determination (R²)

Table 4 Model Feasibility Test

Model	R	R Square	Adjusted R Square
1	,922a	,850	,843

Source: SPSS data processing, 2025

By using the SPSS program, it can be obtained that R² is 0.843 or 84.3%, meaning that together there is an influence between the independent variables, namely learning (X1), facilitator (X2), learning model (X3) and training (X4) on teacher competence (Y) of 84.3%, while the remaining 15.7% is influenced by other factors, which were not studied, such as motivation, work ethic, work environment, talent, interests and others.

Discussion

From the results of the data analysis, it can be explained that answering the hypothesis is as follows:

1. The influence of learning media on teacher competence

Based on the results of SPSS data processing summarized in table 2, the results of the t-count of learning media were 10.182 > t table = 1.984 and a significance level of 0.000 < 0.05, so H₀ was rejected, meaning that learning media had a significant effect on teacher competence (Y).This is reinforced by research by Sulistyorini (2022)and Bakri (2024), that learning media can influence teacher competence.

The use of learning media has a significant impact on teacher competence, as it helps teachers improve the quality of the teaching and learning process. Learning media can include images, videos, presentations, digital applications, the internet, or visual aids used to facilitate the delivery of material to students. By utilizing learning media, teachers are required to be more creative and innovative, and able to adapt learning methods to technological developments and student needs.

The influence of learning media on teacher competence can be seen from several aspects. First, learning media improves teachers' pedagogical competence, as they become better able to design engaging, interactive, and easily understood learning. Teachers also become more skilled in selecting learning methods, strategies, and evaluations that are appropriate to the characteristics of their students.

Second, learning media impacts teachers' professional competence. Teachers are required to master information and communication technology to continuously develop their knowledge and skills. The use of digital media makes it easier for teachers to find learning resources, update materials, and convey information effectively.

Third, learning media can improve teachers' social and communication competencies. By using media, teachers interact more frequently with students through discussions, presentations, and technology-based learning. This helps teachers build better communication with students and fellow educators.

Furthermore, learning media also increases teacher motivation in teaching. More engaging learning creates a more active and enjoyable classroom atmosphere, thus increasing teacher confidence in delivering the material. Thus, the use of learning media not only helps students understand the material but also encourages the overall improvement of teachers' competencies in carrying out their professional duties.

2. The influence of facilitators on teacher competence

Based on the results of SPSS data processing summarized in table 2, the results of the facilitator's t-count were $7.693 > t_{table} = 1.984$ and a significance level of $0.000 < 0.05$, so H_0 was rejected, meaning that the facilitator had a significant influence on teacher competence (Y). This is reinforced by Ulfa's research (2024) that the facilitator's competence has an influence on teacher competence.

Facilitators have a significant influence on teacher competence, particularly in improving their professional, pedagogical, social, and personal abilities. A facilitator provides guidance, direction, training, and support to teachers in the competency development process. In training activities, workshops, seminars, and mentoring at school, the facilitator's role is crucial in helping teachers understand the material, learning methods, and the application of technology in the teaching and learning process.

The influence of facilitators on teacher competence can be seen in their increased ability to design and implement learning. Facilitators help teachers understand effective learning strategies, the use of instructional media, and how to effectively manage a classroom. The guidance and examples provided by facilitators make it easier for teachers to develop their pedagogical competence.

Furthermore, facilitators also influence teachers' professional competence. Through training and mentoring, teachers acquire new knowledge, the latest educational insights, and skills that support improved teaching quality. Competent facilitators are able to provide solutions to problems faced by teachers in the learning process, thereby increasing their confidence and improving their performance. Socially, facilitators help foster good communication and cooperation among teachers. Discussions, experience sharing, and collaboration during training make teachers more open to exchanging ideas and learning experiences. This can improve teachers' social skills in the workplace. Thus, facilitators positively influence teacher competence by providing motivation, guidance, knowledge, and learning experiences that support the improvement of teachers' quality and professionalism in carrying out their educational duties.

3. The influence of learning models on teacher competence

Based on the results of SPSS data processing summarized in Table 2, the t-count results for the learning model were $3.218 > t_{table} = 1.984$ and a significance level of $0.002 < 0.05$, so H_0 was rejected, meaning the learning model had a significant effect on teacher competence (Y). This was reinforced by Research by Lestari (2021) and Sarah (2022) stated in their research that there is a significant influence of using learning models on teacher competence.

Learning models have a significant influence on teacher competence because they serve as guidelines for teachers in designing, implementing, and evaluating the teaching and learning process. Appropriate learning models help teachers create effective, active, creative learning that is tailored to students' needs. By implementing various learning models, teachers are required to continuously improve their teaching abilities and skills. The influence of learning models on teacher competence can be seen in pedagogical competence. Teachers become better able to choose learning strategies, methods, and approaches that are appropriate to student characteristics and learning objectives. The use of models such as cooperative learning, problem-based learning, discovery learning, and project-based learning encourages teachers to be more innovative in managing the classroom and increase student participation.

Furthermore, learning models also influence teachers' professional competence. Teachers must understand the material in depth to be able to apply learning models effectively. In the process, teachers are also required to continuously learn, develop their insights, and adapt to developments in educational science and technology. In terms of social competence, the application of learning models makes teachers more active in communicating and interacting with students and fellow teachers. Teachers learn to build collaboration, provide

motivation, and create a conducive and enjoyable learning atmosphere. This helps improve teachers' ability to build good relationships in the educational environment. Thus, learning models have a positive influence on teacher competence because they can improve teachers' abilities in planning lessons, managing classes, using innovative methods, and increasing professionalism in carrying out their duties as educators.

4. The influence of training on teacher competence

Based on the results of SPSS data processing summarized in table 2, the t-count results for training were $3.583 > t_{table} = 1.984$ and a significance level of $0.001 < 0.05$, so H_0 was rejected, meaning that training had a significant effect on teacher competence (Y). This research is strengthened by research Sopiansyah (2022) stated in his research that training influences teachers' pedagogical competence in the skills aspect.

Training has a significant impact on teacher competence because it enables teachers to acquire new knowledge, skills, and experiences that support improved learning quality. Training is a human resource development effort aimed at enhancing teachers' abilities in carrying out their professional duties. By participating in training, teachers can understand the ever-evolving developments in science, technology, learning methods, and education policies. The impact of training on teacher competence can be seen in the improvement of teachers' pedagogical competence. Training helps teachers understand learning strategies, the development of learning materials, classroom management, and effective evaluation techniques. Teachers become more capable of creating active, creative, and innovative learning that meets the needs of their students.

Furthermore, training also improves teachers' professional competence. Teachers gain new insights into learning materials, the use of educational technology, and the development of more modern teaching methods. This enables teachers to become more skilled and confident in delivering material to students. Socially, training provides opportunities for teachers to discuss, collaborate, and exchange experiences with other teachers. These interactions help improve communication and collaboration skills within the educational environment. Training can also foster positive attitudes, discipline, and responsibility in teachers, thus supporting the development of personal competence. Therefore, training positively impacts teacher competence by enhancing teachers' abilities, skills, knowledge, and professionalism in implementing effective and high-quality learning processes.

CONCLUSION AND SUGGESTIONS

Based on the results of research that has been conducted regarding the influence of learning media, facilitators, learning models and training on teacher competency in in-depth learning training in Sukoharjo Regency, it can be concluded several things as follows: Learning media has a significant effect on teacher competency in in-depth learning training in Sukoharjo Regency; Facilitators have a

significant effect on teacher competency in in-depth learning training in Sukoharjo Regency; Learning models have a significant effect on teacher competency in in-depth learning training in Sukoharjo Regency; Training has a significant effect on teacher competency in in-depth learning training in Sukoharjo Regency. Based on the conclusions, several suggestions are submitted as follows: For schools, it is hoped that they can improve training programs and provide learning facilities that support the development of teacher competency. In addition, for teachers, it is hoped that they will be more active in participating in training, seminars, workshops, and utilizing innovative media and learning models to improve the quality of learning. For facilitators, it is hoped that they will be able to provide more optimal guidance and motivation so that teachers can understand and apply training materials well and For further researchers, it is hoped that they can add other variables that influence teacher competency so that the research results become broader and deeper.

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