

The Influence of Learning Communities on the Pedagogical Competence of Teachers at SMP Negeri 8 Yogyakarta

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Abstract: Teachers play a central role in improving the quality of learning, where pedagogical competence is a crucial factor in achieving their effectiveness in teaching. However, amidst the dynamics of curriculum changes, teachers often face complex challenges, especially regarding pedagogical competence. One approach considered to be helpful is through the formation of teacher learning communities. This research aims to investigate the influence of learning communities on the pedagogical competence of teachers at State Junior High School 8 in Yogyakarta. This study is a descriptive research using a quantitative approach. The sample used consists of the entire population, totaling 61 teachers from State Junior High School 8 in Yogyakarta, with a 5% error rate. Data collection techniques used were questionnaires and documentation. To test the hypotheses, simple regression techniques with t-test were employed. The results of this research indicate a positive influence of GBB learning community activities on the variation (increase/decrease) in pedagogical competence of teachers at State Junior High School 8 in Yogyakarta by 34.6%. From data processing, a regression coefficient (b) value of 0.988 was obtained, at a significance level of 5%. Furthermore, partial calculations (t-test) were conducted, revealing a calculated t-value of 5.591 with a significance value of 0.001. With degrees of freedom 59, the obtained t-table value is 1.671. As the t-table value is less than the t-value, the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. Therefore, it can be concluded that learning communities partially have a significant influence on teacher pedagogical competence.

Keywords: Curriculum, Guru Bhawara Belajar, Pedagogical Competence, Teacher Competence, Teacher Learning Community..

Introduction

Education plays a central role in preparing a generation that is competent and adaptive to change. The quality of education is greatly influenced by the competence of teachers. The competencies that professional teachers must possess include pedagogical competence, personality competence, social competence, and professional competence (Okpatrioka & Sopian, 2023). In this context, pedagogical competence is an important aspect that determines the success of the learning process in schools. Referring to the Regulation of the Director General of Teachers and Education Personnel of the Ministry of Education,

Culture, Research, and Technology Number 2626/B/HK.04.01/2023 on the Teacher Competency Model, pedagogical competence includes creating a safe and comfortable learning environment for students, effective student-centered learning, and student-centered assessment, feedback, and reporting. Based on this, according to Hamdi et al., (2022), it is very important for teachers to understand the pedagogical competencies they need to possess and develop, so that they can carry out the teaching and learning process optimally.

However, in reality, in the current era of the Merdeka Curriculum, many teachers still face various obstacles in developing their pedagogical competence. Khusna & Priyanti (2023) state that

teachers' pedagogical competence can vary depending on the context and conditions of each region or educational institution. There is variation in the quality of pedagogical abilities between one teacher and another. Destiana & Utami (2017) reveal that teachers who face various obstacles in developing their pedagogical competence are hindered by several factors, including a lack of pedagogical insight, limited facilities and infrastructure, additional workload, and lack of utilization of the latest technology. These conditions certainly affect the effectiveness of the teaching and learning process, which ultimately impacts student learning outcomes.

To address these issues, the Government of the Republic of Indonesia, through the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek), has launched the Learning Community (Kombel), which aims to assist teachers, education personnel, and other educators in discussing and resolving various learning problems that arise during the implementation of the Merdeka Curriculum (IKM) (Meuthia, 2023). The existence of learning communities is seen as a means for teachers to develop their competencies. Teacher competencies can be acquired not only through formal education but also enhanced through non-formal education such as training, webinars, and reflective learning, both online and offline (Khusna & Priyanti, 2023). With this community, it is hoped that teachers can receive greater support in developing their pedagogical competencies.

Currently, the Learning Community has been utilized by many schools in Indonesia, including SMP Negeri 8 Yogyakarta, which has a community called Guru Bhawara Belajar (GBB). GBB offers various activities such as sharing best practices, seminars, and training focused on enhancing pedagogical skills. These activities are designed to provide teachers with opportunities to learn from their peers, gain new insights, and develop skills relevant to the challenges they face in the classroom.

This research aims to examine the extent of the impact of the GBB Learning Community on improving teachers' pedagogical competencies and to analyze the obstacles encountered during the implementation of the learning community activities at SMP Negeri 8 Yogyakarta. The

utilization of the Learning Community is expected to provide significant support in developing teachers' pedagogical competencies, which will ultimately enhance the quality of education at the school. With this research, it is hoped to make a positive contribution to efforts to improve the quality of education in Indonesia.

Materials and Methods

Study area

This research was conducted at SMP Negeri 8 Yogyakarta. The selection of this location was based on the presence of an active teacher learning community, namely Guru Bhawara Belajar (GBB), which allowed for the investigation of its influence on teachers' pedagogical competence.



Figure 1. Front view of State Junior High School 8 Yogyakarta as the research location.

Procedures

Research Design and Participants

This study employs a quantitative method with a simple regression analysis design to model the relationship between variables (Sugiyono, 2015). The subjects of this research were the entire population of teachers at SMP Negeri 8 Yogyakarta, totaling 61 individuals. The research was carried out from May to June 2024.

Data Collection

The data collection technique used was a questionnaire with a 1-4 Likert scale to measure score variability. The questionnaire instrument was designed to measure two main variables: participation in the learning community

(independent variable, X) and teachers' pedagogical competence (dependent variable, Y).

Data Analysis

Prior to conducting the regression model analysis, prerequisite tests were performed, including normality and linearity tests. The normality test used the Kolmogorov-Smirnov method, while the linearity test used the F-test. The main data analysis technique used was simple linear regression analysis. The hypothesis testing in this research used the t-test or parameter significance test to measure the extent to which each independent variable affects the variation of the dependent variable (Muh Alwy Yusuf et al., 2024) with the following hypothesis formulations: H0: The Learning Community does not positively affect the Pedagogical Competence of Teachers at SMP N 8 Yogyakarta. Ha: The Learning Community positively affects the improvement of Pedagogical Competence of Teachers at SMP N 8 Yogyakarta.

Results and Discussion

Table 1. Results of the Linearity Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
KOMPETENS PEDAGOGIK * X1	Between Groups	(Combined)	1970.213	4	40.208	2.391	.059
		Linearity	.100	1	.100	.006	.940
		Deviation from Linearity	1970.113	3	41.044	2.440	.055
	Within Groups		185.000	1	16.818		
	Total		2155.213	6			

Source: obtained from primary data (IBM SPSS Statistic 27)

Based on the table above, the linearity test between the independent variable (GBB Learning Community) and the dependent variable (Pedagogical Competence) shows a deviation from linearity value of 0.055. According to the criteria, if the deviation from linearity value is greater than the

Result

1. Prerequisite Analysis Tests

a. Normality Test

The normality test aims to determine whether the distribution of the research data follows a normal distribution or not. Once the distribution is known, the data can be processed for further analysis. The normality test is conducted using the Kolmogorov-Smirnov test. If the variable's value is above 0.05, it can be said that the variable is normally distributed. Based on the calculation results, the residual significance value is 0.200, which, according to the existing criteria, allows us to conclude that each variable is normally distributed.

b. Linearity Test

The linearity test aims to determine whether the relationship between the independent variable and the dependent variable is linear or not. The test used to assess linearity is the F-test. In this analysis, the F-test refers to the F coefficient value on the "deviation from linearity" row listed in the ANOVA table from the output generated by the SPSS 27 program (Table 1).

significance level of 0.05, it indicates a linear relationship. In this study, it is proven that the deviation from linearity between the independent variable and the dependent variable is greater than the significance level, thus it can be concluded that the Learning Community variable and the

Pedagogical Competence variable have a linear relationship. This means that the relationship or correlation can be represented by a straight line. If there is a positive linear relationship or correlation, then as one variable increases, the other variable also increases, and vice versa.

2. Hypothesis Test

Based on the research results conducted with the teachers of SMP Negeri 8 Yogyakarta through distributing questionnaires, several data points were obtained. This data was derived from a series of statistical tests. The data processing resulted in a regression coefficient (b) of 0.988 at a 5% significance level. Subsequently, partial calculations

(t-test) were performed, yielding a t-value of 5.591 with a significance value of 0.001. With a degree of freedom of 59, the critical t-value (ttabel) is 1.671. By comparing the t-value with the critical t-value, it can be seen that the t-value > critical t-value according to the criteria, thus H0 is rejected and Ha is accepted. From this statement, it can be concluded that the Learning Community positively affects the variation (increase/decrease) in Pedagogical Competence. According to Table 2, the coefficient of determination is 0.346 or 34.6%. This figure indicates that variable X influences variable Y by 34.6%, while the remaining 65.4% is influenced by other factors outside the variables studied.

Table 2. Regretion Result

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.588 ^a	.346	.335	4.887

a. Predictors: (Constant), KOMBEL GBB

b. Dependent Variable: KOMPETENSI PEDAGOGIK

Source: obtained from primary data (IBM SPSS Statistic 27)

Although the improvement in pedagogical competence among teachers at SMP Negeri 8 Yogyakarta is supported by factors outside the variables studied, this analysis shows that the learning community has a significant impact on enhancing pedagogical competence.

Discussion

This study confirms a significant positive influence of the learning community on the pedagogical competence of teachers at SMP Negeri 8 Yogyakarta. The statistical evidence, showing a contribution of 34.6% and a significant t-test value, provides a quantitative foundation. However, the crucial discussion lies in explaining the mechanisms and contextual factors that underpin this relationship. This indicates that the learning community can support the improvement of teachers' pedagogical competence at SMP N 8 Yogyakarta. This aligns with the statement that learning communities can serve as a platform for members' personal development through interactions with others, acquiring new knowledge, developing skills, increasing self-confidence, and expanding networks (Sekar & Kamarubiani, 2020).

This study also reinforces previous research conducted by Khusna & Priyanti (2023), which states that there is a significant influence and relationship between learning communities and teachers' pedagogical competence.

There are many reasons why individuals join a learning community, including interest, learning content, and career relevance (Sekar & Kamarubiani, 2020). Learning communities provide teachers with opportunities to exchange knowledge, experiences, and best teaching practices. Teachers can learn from each other, enhance their skills, and become more effective in teaching students. According to Zubaidah (2010), interactions among teachers within a learning community allow them to exchange experiences, share best practices, and learn from one another. Learning communities also provide space for discussions, developing effective teaching strategies, and exploring innovations in education. Through participation in these communities, teachers can continuously learn and grow professionally. Discussions also offer opportunities for reflection, feedback, and support to improve teaching skills. Learning communities also serve as sources of inspiration and motivation

for teachers, helping them gain new enthusiasm, creative ideas, and solutions to teaching challenges. Additionally, learning communities create a safe and collaborative environment where teachers feel supported, heard, and motivated to continue growing in their careers (Khusna & Priyanti, 2023).

In its implementation at SMP Negeri 8 Yogyakarta, there is a learning community named Guru Bhawara Belajar (GBB). This community was established on January 22, 2023, based on the decision of the principal of SMP Negeri 8 Yogyakarta, number 188/017, regarding the Formation of the School Learning Community Board "Guru Bhawara Belajar (GBB)." The learning community was created by the principal as a means to enhance teacher competence at SMP Negeri 8 Yogyakarta. The steps taken by the principal to create a conducive climate within the learning community will improve the comfort for educators. Effective management by the principal in overseeing the learning community system will positively contribute to the role of the community and enhance the pedagogical competence of educators.

In the initial stage of the GBB learning community activities at SMP Negeri 8 Yogyakarta, the activities were aligned with SE Dirjen GTK Nomor 4263 tahun 2023, which stipulates that each educational unit must have a school-based learning community centered on student learning with an inquiry cycle. Furthermore, DuFour (2009) in his book *Revisiting Professional Learning Communities at Work* states that learning communities focus on three main aspects: focusing on student learning goals, fostering collaboration and collective responsibility, and being oriented towards student learning outcomes. In the initial stage of the learning community activities, socialization and reinforcement regarding the importance of learning communities were also conducted for all school members. This was done to establish a shared ideology that each member of the school should actively participate in and support the learning community activities at the school.

In its implementation, the GBB learning community activities follow several stages:

1. Initial Reflection: Teachers discuss student learning outcomes based on data from each class

or subject, which could include assessment results or other relevant sources. Based on this data, teachers reflect and determine the agenda or priority topics to be discussed in the learning community.

2. Sharing Experiences: Teachers share their experiences in teaching or learning to find the best solutions for the issues discussed during the initial reflection.
3. Documenting Activities: Activities and discussion results are documented as learning materials for community members.
4. Reflecting on Practices: Teachers reflect on the practices that have been conducted.

Furthermore, the community directly addresses a key barrier to professional development identified in the literature: isolation. The traditional model of teaching can often confine educators within their classrooms. The GBB community systematically breaks down these walls by fostering a culture of shared responsibility, as highlighted by DuFour (2009). The "how" of this process involves creating a safe space for vulnerability, where teachers can openly discuss failures and seek advice without fear of judgment. This environment is critical for meaningful pedagogical growth, as it encourages risk-taking and innovation in teaching methodologies. The peer feedback received in this supportive setting provides teachers with diverse perspectives on their practice, which is a powerful catalyst for improving their pedagogical competence.

Based on the agreed implementation of the GBB learning community activities at SMP Negeri 8 Yogyakarta, there are two types of activities:

1. Scheduled Activities

The GBB Learning Community regularly holds its activities once a week on Fridays after the end of classes, ensuring that it does not disrupt student learning. All teachers are required to participate. The sessions typically feature internal teachers from SMP N 8 Yogyakarta, with occasional external experts who have specialized knowledge in relevant fields. This is intended to facilitate peer learning, reflection, and feedback. As of June 2024, the GBB Learning Community has conducted 8 discussion sessions and 2 webinars with participants from other

educational institutions. The topics covered are diverse and selected based on their relevance to the current needs and conditions of the teachers. This approach is expected to increase individual interest in participating in the discussions and webinars organized by the learning community.

The findings suggest that the scheduled activities, such as weekly forums and webinars, are not merely procedural gatherings. Instead, they create a systematic environment for the

social construction of knowledge. During these sessions, the practices of initial reflection and sharing experiences enable teachers to deconstruct their teaching methods, confront pedagogical challenges collectively, and co-construct new strategies. This process moves beyond individual trial-and-error, accelerating the acquisition and refinement of pedagogical skills in a way that isolated training cannot.



Figure 2. Scheduled Activities of the GBB Learning Community

2. Incidental Activities

These activities are unscheduled and tailored to needs. They can occur during breaks, casual conversations, or when facing difficulties or problems during teaching. Typically, these activities are spontaneous. The documented incidental activities further indicate that this collaborative culture has permeated the school's informal interactions, creating a continuous learning loop outside of scheduled meetings.



Figure 3. Incidental Activities of the GBB Learning Community



According to Waluyo in Zubaidah (2010), learning communities, as an innovation, are not easily implemented directly and successfully immediately but require a long process from start to finish, similar to stages from inception to full implementation. Therefore, learning communities are often considered part of Continuous

Professional Development and emphasize the principle of ongoing improvement. To achieve the desired goals, several ideal conditions are required:

1. Stability in educational policy
2. Support from educational bureaucracy
3. Ability to accept change
4. A curriculum that allows for development
5. A culture of self-reflection
6. A culture of collaboration
7. A culture of documentation

The most noticeable obstacles experienced by teachers are the heavy workload at school and the simultaneous tasks coinciding with the implementation of the learning community. This makes some teachers feel that participating in the learning community requires a sacrifice of time. The lack of awareness among teachers to view participation in learning community activities as a necessity rather than an obligation is also an issue that needs to be addressed. These challenges can limit the depth of engagement and reflection, thereby constraining the community's potential impact. This suggests that the GBB community is a powerful, but not standalone, solution. Its effectiveness is amplified when integrated with supportive institutional policies that protect teacher time and foster an intrinsic culture of continuous improvement.

Teachers need to recognize that participating in learning community activities is essential for enhancing their capacity and developing their existing pedagogical competencies. As the demands in the educational world evolve over time, teachers need to update their competencies as educators.

Conclusions

This study examines the impact of learning communities on the enhancement of pedagogical competence among teachers at SMP Negeri 8 Yogyakarta. The results show that the learning community has a significant positive effect on teachers' pedagogical competence. Data analysis using simple regression revealed that participation in the learning community contributes 34.6% to the variation in teachers' pedagogical competence, with a regression coefficient of 0.988 at a 5% significance

level. The t-test results show a t-value of 5.591, which is greater than the t-table value of 1.67109, thus confirming the hypothesis that the learning community has a positive impact.

Additionally, this study highlights the importance of learning communities as a means for professional development among teachers. Learning communities enable teachers to share best practices, engage in discussions, and receive constructive feedback. Through activities such as regular discussions and webinars, teachers can enhance their pedagogical skills, gain new knowledge, and expand their professional networks. Despite barriers such as tight schedules and a lack of awareness of the importance of learning communities, the benefits obtained indicate that learning communities are an effective strategy for supporting teacher competence and overall educational quality.

Based on the findings that show a positive impact of learning communities on teachers' pedagogical competence, it is recommended to expand participation in learning communities by addressing barriers such as tight schedules and a lack of awareness. This can be achieved by integrating learning community activities into teachers' work schedules flexibly and implementing outreach programs that emphasize direct benefits for professional development. Additionally, it is crucial to continually update discussion materials and webinars to remain relevant to current needs and to provide institutional support to ensure the sustainability and effectiveness of the learning community. It is hoped that this will maximize the contribution of learning communities to improving pedagogical competence and educational quality at SMP Negeri 8 Yogyakarta.

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