

Management of Teacher Pedagogic Competency Development in Vocational High Schools

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ABSTRACT

The quality of education in Vocational High Schools (SMK) is strongly influenced by teachers' pedagogical competence, especially in the industry 4.0 era which requires continuous competence development through systematic human resource management. This study aims to analyze the management of pedagogical competence development of teachers at SMK Muhammadiyah Pondok Pesantren Imam Syuhodo, covering the stages of planning, implementation, and evaluation. Using a qualitative phenomenological approach and descriptive analytical method, data were collected through interviews, observations, and documentation involving principals, management teams, and teachers. Data validity was tested through source and technique triangulation, and analysis used the Miles & Huberman model. The results show that pedagogical competence development is managed through: (1) planning based on supervision, self-evaluation, and student feedback aligned with the school's vision; (2) implementation via In House Training, workshops, MGMP, lesson study, mentoring, and industry internships supported by the principal's role as supervisor and motivator; and (3) evaluation through classroom supervision, performance assessment, peer observation, and feedback from students, alumni, and industry. Success is supported by strong management, collaborative professional learning communities, and program relevance to business and industrial needs. The study concludes that systematic and continuous human resource management effectively enhances teachers' pedagogical quality, integrates Islamic values in learning, and produces competent, Islamic-charactered graduates, serving as a model for other vocational schools.

Keywords: Human Resource Management, Pedagogical Competence, Teacher Development, Vocational High School, Vocational Education

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INTRODUCTION

Education serves as the main pillar of a nation. Education has a significant role in facing the demands of the development of the times which are filled with competition in all aspects of life. Good quality education will produce superior human resources and be able to compete in the global era. In an increasingly competitive global context, vocational education plays a strategic role in preparing a skilled workforce that is ready to face the challenges of industry 4.0. Vocational High Schools (SMK), as educational institutions that aim to produce graduates who are ready to work, are required to continue to improve the quality of learning in order to produce graduates who are competent and in accordance with the needs of the business and industry (DUDI).

The quality of education in vocational schools is highly determined by the competence of teachers who play a role as the spearhead in the learning process. Competent teachers not only master the teaching materials, but also have adequate pedagogic skills in designing, implementing and evaluating effective learning. According to Mulyasa, pedagogic competence is the ability of teachers to manage student learning which includes understanding students, designing and implementing learning, evaluating learning outcomes and developing students to actualize their various potentials. In line with this, Sudjana emphasized that pedagogic competence is the ability of teachers to manage learning which

includes the concept of teaching readiness which is described in the mastery of knowledge, skills and attitudes that are reflected in the habits of thinking and acting.

The importance of teachers' pedagogic competence was emphasized by Sagala, who stated that pedagogic competence includes the ability to manage students, which includes: (1) understanding of the insight or foundation of education, (2) understanding of the characteristics of students, (3) curriculum or syllabus development, (4) learning design, (5) implementation of learning that is educational and dialogical, (6) technology in learning, (7) evaluation of learning outcomes, and (8) the development of students to actualize their various potentials. In addition, Uno explained that pedagogic competence is a set of basic abilities and skills that must be possessed by a teacher in carrying out his professional duties as an educator.

In the context of human resource management, teacher competency development is a strategic long-term investment. Mathis and Jackson define human resource management as the design of a formal system within an organization to ensure the effective and efficient use of human talent in achieving organizational goals. Meanwhile, Dessler emphasized that human resource management is a process that includes the acquisition, training, assessment and compensation of employees, as well as paying attention to labor relations, health, safety and justice issues. From an educational perspective, human resource management focuses on optimizing the potential of educators and education personnel to achieve quality education goals.

Robbins and Judge emphasized that human resource development is an effort made to improve the technical, theoretical, conceptual and moral abilities of employees according to the needs of the job or position through education and training. In the context of schools, Hasibuan explained that human resource management is a science and art in managing relationships and the role of the workforce so that it can function effectively and efficiently in supporting the achievement of the goals of the company, employees and society. As for Noe, et al. Define human resource management as policies, practices and systems that affect employee behavior, attitudes and performance.

According to Permendiknas No. 16 of 2007, pedagogic competence is one of the four core competencies that teachers must have, including the ability to understand students, design and implement learning, evaluate learning outcomes, and develop students' potential. Permendikbud No. 50 of 2020 emphasizes the importance of strengthening the link and match between vocational schools and industry, which requires teachers to have the latest pedagogic and professional competencies that are in line with industry demands.

The development of teachers' pedagogic competencies through a systematic human resource management approach is very crucial, especially in the current era of educational digitalization. Lyle Spencer & Signe Spencer, in Moehariono emphasize that competence is the characteristic that underlies the effectiveness of an individual's performance in his or her work. Therefore, competency development must be carried out in a structured and continuous manner to ensure that teachers can adapt to the latest technological developments and learning methodologies.

SMK Muhammadiyah Pontren Imam Syuhodo as one of the vocational education institutions under the auspices of the Muhammadiyah organization, has a special responsibility in preparing graduates who are not only technically competent but also have a strong Islamic character. This condition requires teachers at the vocational school to have superior pedagogic competence in integrating Islamic values with modern vocational learning that is relevant to the needs of the industry.

However, the reality on the ground shows that there are still various challenges in the development of teachers' pedagogic competencies in vocational schools. Several previous studies have examined this problem from various perspectives. First, research conducted by Wibowo and Sutrisno with the title "Development of Pedagogic Competency of Vocational Teachers through Continuous Training Programs" revealed that the majority of vocational school teachers still experience limitations in mastering learning technology and innovative learning methods. This study found that 68% of vocational school teachers have not been

optimal in implementing technology-based learning, and 72% of teachers still use conventional methods in the learning process. Second, Sari and Prakoso's research entitled "Human Resource Management in Improving Teacher Professionalism in Vocational Schools" shows that the human resource management system in most vocational schools has not been running optimally. This study identified that 45% of vocational schools do not have a structured human resource development program and 38% of vocational schools do not conduct periodic teacher performance evaluations. These findings indicate a gap in the implementation of effective human resource management in the vocational education environment. Third, research by Handayani, et al. With the title "Analysis of Pedagogic Competency of Vocational Teachers in the Era of the Industrial Revolution 4.0" found that the pedagogic competence of vocational school teachers still needs to be improved, especially in the aspect of utilizing digital technology for learning. This research shows that only 34% of vocational school teachers are able to integrate digital technology optimally in learning, while 59% of teachers still need intensive assistance in developing digital pedagogic competencies.

Based on the three studies, it was identified that there was no comprehensive study that specifically analyzed the implementation of human resource management in the development of pedagogic competencies of teachers in Muhammadiyah Vocational Schools that have special characteristics such as Muhammadiyah Vocational School Pontren Imam Syuhodo. Previous studies have focused more on the general aspects of competency development or human resource management separately, but no one has examined in depth how the integration of the two in the context of SMK Muhammadiyah has a uniqueness in combining vocational education with Islamic values.

Therefore, this research is important to be conducted to comprehensively analyze how human resource management can be optimized to develop the pedagogic competence of teachers at SMK Muhammadiyah Pontren Imam Syuhodo. This research is expected to make a theoretical and practical contribution in the development of an effective human resource management model for vocational education institutions, so as to improve the quality of learning and ultimately produce competent and characterful graduates.

METHOD

This study uses a qualitative paradigm with a phenomenological approach to explore and understand the management of pedagogic competency development of teachers at SMK Muhammadiyah Pontren Imam Syuhodo. The descriptive method of analysis was chosen to provide an in-depth picture of the phenomenon that occurred, with a focus on efforts to improve the quality of teaching through relevant programs. Data were collected through in-depth interviews, observation and documentation, involving principals, management teams and teachers as research subjects. Primary data sources are obtained from direct interviews, while secondary data sources include related documents and literature. The validity of the data was tested through triangulation of sources and techniques, while the analysis techniques used refer to the Miles & Huberman approach, the data following the steps of data reduction, presentation and drawing of conclusions. This analysis involves grouping data, identifying patterns and developing findings. The conclusion of the data analysis results will provide a comprehensive overview of the management of teacher pedagogic competency development at SMK Muhammadiyah Pontren Imam Syuhodo.

The informants in this study were selected purposively based on their direct involvement in the management and development of pedagogic competencies at SMK Muhammadiyah Pontren Imam Syuhodo. The number of informants consisted of 10 people, namely one principal in charge of teacher development policy, two members of the school management team who played a role in the planning and implementation of competency improvement programs, and seven teachers from various fields of expertise representing various professional experiences and backgrounds. The teachers have between five and twenty years of teaching experience, with most having participated in various professional development programs such as In House Training (IHT), workshops, and MGMP activities.

The selection of informants is based on the criteria of active involvement in competency development activities, availability and willingness to provide in-depth information, representation across areas of expertise, and adequate professional experience to provide a reflective view of learning practices. With these characteristics, the informant is considered to be able to provide a comprehensive overview of the management of pedagogic competency development of teachers at SMK Muhammadiyah Pontren Imam Syuhodo.

FINDINGS AND DISCUSSION

Planning for the Development of Teachers' Pedagogic Competency

Planning for the development of teachers' pedagogic competencies at SMK Muhammadiyah Pontren Imam Syuhodo is carried out through several steps. Every year the school carries out supervision, teacher self-evaluation, and listens to input from students to find out development needs. In addition, coordination meetings are held regularly, both at the beginning of each semester, as well as monthly meetings, to discuss learning programs and evaluate school activities. The teacher development strategy is prepared in two main paths, namely external development through MGMP, training, seminars and workshops, and internal development in the form of lesson studies, mentoring and training based on teacher needs.

This planning is always aligned with the school's vision and mission. As a Muhammadiyah-based school, teacher development does not only emphasize the technical aspects of teaching, but also in integrating Islamic values and the formation of students' character. Identification of needs is carried out through classroom observation, analysis of student learning outcomes, teacher council meetings, and special needs audits such as strengthening literacy and the use of technology. This process involves many parties, ranging from school principals, curriculum waka, teachers, curriculum development teams, school committees to supervisors from the education office. The main indicators of pedagogic competence that are expected to include the ability to design learning that is in accordance with the curriculum, innovative learning implementation, comprehensive evaluation, and effective classroom management.

This finding is in line with Mulyasa's view that teacher development planning must be based on the real needs of teachers, not just the same. Identifying needs through classroom observations, teacher meetings and student feedback also reflects the concept of needs assessment in human resource management as proposed by Robbins & Judge. In addition, the involvement of various parties in the planning process shows a participatory approach, in accordance with Sagala's view that the success of educational planning is highly determined by the participation of all school residents in developing development strategies.

Furthermore, the integration of the school's vision and Islamic values in planning is an important step. Tilaar emphasized that education must pay attention to the cultural context and character of the nation so that teacher development does not only emphasize technical aspects, but also moral and spiritual. Thus, planning in this school targets intact pedagogic competencies, covering cognitive, affective aspects and religious character. This is also in line with Rusman's opinion that pedagogic competence includes planning, implementation, evaluation and the ability to utilize information technology to create more innovative learning.

Implementation of Teacher Pedagogic Competency Development

The implementation of teacher pedagogic competency development at SMK Muhammadiyah Pontren Imam Syuhodo is carried out through various structured programs. The school routinely holds In House Training (IHT), workshops, and seminars, both with internal and external speakers from universities and industry practitioners. In addition, teachers are also encouraged to actively participate in MGMP activities at the district and provincial levels. Some teachers even play the role of provincial MGMP administrators so that they can bring new experiences to be shared with colleagues at school. This development is carried out not only once a year, but also in the form of short workshops every three to four months, as well as monthly sharing sessions that allow teachers to exchange experiences.

The role of the principal and vice principal of the curriculum is very dominant in the implementation of the program. The principal acts as a supervisor, facilitator, as well as motivator, by observing the class at least once per semester, providing constructive feedback and facilitating training. The curriculum waka plays a role in designing development activities that are relevant to the needs of teachers, for example workshops on the preparation of teaching modules, learning technology training and comparative studies to other schools that have good practices. Teachers are also given space to develop themselves independently, such as participating in online training, reading educational literature and utilizing teacher community forums.

In addition, the school provides support in the form of special budget allocation, flexible schedules and access to learning facilities. Partnership programs with the world of industry are also run, not only for students, but also for teachers through internships at partner companies. Thus, teachers gain first-hand experience of the latest technological developments and the needs of the world of work, which are then integrated into learning. These activities show that the implementation of competency development in this school is sustainable and collaborative, and emphasizes the importance of mutual learning between teachers through peer teaching, lesson study, and mentoring.

This finding is in line with Mulyasa's view that the development of teacher competencies is not enough only through formal education, but must be supported by continuous training programs, workshops and collaborative activities. The implementation of programs that emphasize collaboration, such as lesson study and peer teaching, is also in line with the collective learning theory put forward by Joyce & Showers, that teachers will thrive when they engage in the practice of shared experiences and shared reflection. The support of resources from schools in the form of budgets and facilities strengthens the role of education management as explained by Hoy & Miskel, that the availability of human resources is a key factor in the successful implementation of development programs.

In addition, the involvement of teachers in MGMP at the district and provincial levels reflects the concept of a professional learning community, where teachers can learn from each other, build networks and improve their pedagogical capacity collectively. The teacher internship program to the industrial world is in line with the demands of link and match in vocational education as regulated by the Ministry of Education and Culture, which emphasizes the need for vocational teachers to understand the development of the world of work so that learning is more relevant. Thus, the implementation of pedagogic competency development at SMK Muhammadiyah Pontren Imam Syuhodo can be seen as a tangible manifestation of the application of the principles of continuous, collaborative and contextual learning according to the needs of the times.

Evaluation of Teacher Pedagogic Competency Development

The evaluation of the development of pedagogic competencies of teachers at SMK Muhammadiyah Pontren Imam Syuhodo is carried out through a multi-dimensional approach. The principal carries out class supervision at least once a semester for each teacher using standard assessment instruments that include aspects of planning, implementation and evaluation of learning. In addition, there is a periodic teacher performance assessment, including a review session after supervision to provide constructive feedback. Evaluation also involves feedback from students, both formally through questionnaires and informally through direct conversations, to find out the extent of the learning methods applied by teachers so that they are felt to be effective.

In addition, schools implement pee teaching and peer observation mechanisms that allow teachers to observe each other's teaching practices and provide input. Evaluation of the success of competency development programs is also carried out through indicators of student learning outcomes, such as graduation rates, academic achievements, and achievement of student competency competitions. The results of the alumni tracer study and feedback from the industry world are additional information to assess whether teacher competency development is relevant to the needs of the world of work. The principal emphasized two main indicators in evaluating the success of pedagogic competency development, namely

improving teachers' teaching skills and their impact on the quality of student learning outcomes.

These findings are in line with Uno's view that teacher evaluations should be carried out on an ongoing basis to find out the extent to which pedagogic skills have developed and how they impact learning. Academic supervision-based evaluations conducted by principals are also in line with Glickman's concept that constructive supervision can help teachers reflect on their teaching practices and plan systematic improvements. The use of feedback from students in the evaluation process shows the application of the principle of participatory evaluation, which according to Arikunto is important to obtain an objective picture of learning effectiveness.

The relationship between the results of the evaluation and student learning outcomes and the needs of the world of work strengthens the relevance of teacher competency development with the goals of vocational education. According to Finch and Crunkilton, vocational education will be successful if teachers consistently evaluate learning based on the demands of industry and the world of work. Thus, the evaluation at SMK Muhammadiyah Pontren Imam Syuhodo is not only oriented to the internal processes of the school, but also considers the success of graduates in the community and the world of work. Evaluations like this show that there is a continuous teacher development management cycle starting from planning, implementation, to assessing the real impact on the quality of learning and graduates.

Discussion

The findings of the research on the management of teacher pedagogic competency development at SMK Muhammadiyah Pontren Imam Syuhodo show the integration between human resource management theory, teacher competency model, and instructional supervision theory in vocational education practice. In the perspective of human resource management (HRM) as stated by Dessler (2017) and Robbins & Judge (2019), teacher competency development is an integral part of the development function which is oriented towards improving individual capabilities through a systematic process: needs-based planning, implementation of relevant training, and evaluation of learning outcomes. This is evident in the planning steps in schools that begin with needs assessment through supervision, teacher self-evaluation, and student input, showing conformity with the principles of strategic human resource development where improving teacher competence is directed to support the vision and goals of educational institutions.

From the point of view of the teacher competency model, these findings are in line with the Spencer & Spencer (1993) framework on the Competency-Based Model, which emphasizes that competence includes knowledge, skills, and attitudes that can be observed in professional performance. The pedagogic competencies developed include the ability to design, implement, evaluate learning, and manage classrooms effectively – in line with the national standards in Permendiknas No. 16 of 2007 concerning teacher competence. Development carried out through activities such as lesson study, peer teaching, mentoring, and industry internship illustrates the application of experiential learning principles (Kolb, 1984), where teachers learn through direct experience, reflection, and repetitive practice that improves pedagogic skills contextually.

In the aspect of instructional supervision, the academic supervision practices applied by the principal show the application of Glickman's (2009) theory of Developmental Supervision, which emphasizes the collaborative relationship between supervisors and teachers through reflective dialogue, constructive feedback, and follow-up planning. Layered evaluation – through supervision, peer observation, student feedback, and learning outcome analysis – illustrates a participatory approach to supervision that is oriented towards improving the quality of learning.

The integration of Islamic values and character formation in the planning and implementation of teacher development strengthens the relevance of Tilaar (2000) and Sagala (2010) theories on contextual education that place moral, spiritual, and cultural development as part of educator professionalism. In the context of vocational education, the involvement of

teachers in industrial internship activities and MGMP also reflects the principle of link and match as mandated in Permendikbud No. 50 of 2020, which requires alignment between teachers' pedagogic competencies and the needs of the business world and the industrial world (DUDI).

The findings of this study show that the management of teacher pedagogic competency development at SMK Muhammadiyah Pontren Imam Syuhodo has applied the principles of modern MSDM theory, performance-based competency models, and participatory instructional supervision. This approach not only improves the technical professionalism of teachers, but also fosters pedagogical reflection, professional collaboration, and the integration of Islamic values in learning practices, thereby contributing to the creation of competent and characterful graduates.

CONCLUSIONS

This study concludes that the management of pedagogic competency development of teachers at SMK Muhammadiyah Pontren Imam Syuhodo runs through stages of planning, implementation and evaluation that are integrated with each other. Planning is carried out based on the real needs of teachers and in line with the school's vision, implementation is realized through training programs, workshops, MGMP to industry internships, while evaluation includes supervision, performance assessment, student feedback and alumni tracer study. The results of the study show that the success of teacher pedagogic competence development is determined by the support of school management, collaboration between teachers, and the relevance of the program to the needs of the industrial world. Thus, the implementation of systematic and sustainable human resource management can improve the pedagogic quality of teachers, strengthen the integration of Islamic values in learning, and produce graduates who are competent and have Islamic character.

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