

ANALYSIS OF VOCATIONAL TEACHER TRAINING NEEDS FOR PKK SUBJECTS (CREATIVE PROJECTS AND ENTREPRENEURSHIP)

Widya Puji Astuti, Asep Herry Hernawan

Universitas Pendidikan Indonesia, Jl. Dr. Setiabudhi No. 229, Bandung City 40154, Indonesia

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ABSTRACT

Several previous studies have revealed that training provides positive and significant benefits to employees. Vocational school teachers are seen as needing to improve their competence in order to meet the demands of their work. This research aims to conduct an analysis of the training needs for vocational school teachers who teach PKK subjects within the framework of the Merdeka Curriculum. Survey methods and quantitative approaches are the methods and approaches applied in this research. The population in this study was 22 teachers who taught PKK (Creative Projects and Entrepreneurship) subjects at SMKN 1 Pacet Cianjur. The sampling technique used in this research was saturated sampling. Data collection in this research used a questionnaire prepared on a Likert scale. The data in this study were analyzed using descriptive statistics. The results obtained in this study indicate that teachers at SMKN 1 Pacet Cianjur who teach PKK (Creative Projects and Entrepreneurship) subjects need training to improve and develop their competencies. The majority of teachers consider that they need advanced training about PKK subjects. The advanced level training teachers require is focused on training regarding learning materials and implementation of learning. The implications of the research show that educational institutions need to prioritize developing the competencies of their teachers and provide training that is able to meet the needs identified in this research.

Author Correspondence:

Widya Puji Astuti,
Department of Curriculum Department
Universitas Pendidikan Indonesia
Jl. Dr. Setiabudhi No. 229, Bandung City 40154
E-mail: widya.astuti80@upi.edu

INTRODUCTION

Training is an active learning method carried out to improve the abilities and performance of a particular person or group by transforming skills, knowledge, and attitudes (Mamaqi, 2023). Training also refers to an effort to develop abilities, knowledge, and skills that will impact employee productivity in quantity and quality (R & Kavitha, 2019). Studies prove that training positively and significantly influences employee performance because it helps employees improve their abilities in carrying out the tasks assigned to them (Wardhani & Sopiah, 2023). Numerous studies also underscored the importance of training in fostering continuous improvement and professional development within organizations. For instance, Chinaza Adaobi & Owusuaa-Konadu Snr (2022) emphasizes that training programs contribute to employee skill development and knowledge enhancement, ultimately leading to improved job performance and organizational effectiveness. Research by Hassett (2022) suggests that training initiatives not only enhance individual employee performance but also foster a positive organizational culture characterized by continuous learning and development. This, in turn, leads to higher employee engagement, job satisfaction, and retention rates within the organization.

Teachers, as vital employees within the educational system, require ongoing training to enhance their competencies and meet the evolving demands of their profession (Pérez Cañado, 2016). Teachers are essential in formulating, developing, and implementing the curriculum. Teachers also have a role in ensuring that the learning given to their students is carried out effectively (Saifulloh, 2016). Research by Van Driel & Berry (2012) underscores the importance of continuous professional development for teachers to stay abreast of new pedagogical approaches, curriculum changes, and advancements in educational technology. This highlights the essential role of training in equipping teachers with the necessary knowledge and skills to effectively fulfill their responsibilities in the classroom. Moreover, teachers also play a role in facilitating communication between

their students or between themselves and their students, not just conveying the knowledge they have (Joubert, 2019). Research by Roorda et al. (2017) suggests that fostering positive teacher-student relationships and promoting open communication channels are essential for creating a supportive learning environment conducive to student engagement and academic success.

The significance of training for teachers extends beyond mere pedagogical development, encompassing the enhancement of their professional, personality, social, and pedagogical facets (Tovkanets, 2022). Research by Malm (2009) underscores the importance of comprehensive teacher training programs that address various dimensions of teacher competence. These programs not only focus on improving pedagogical skills but also aim to foster personal growth, enhance social interactions, and promote professionalism among educators. Legislative mandates, such as Law Number 14 Article 10 Paragraph (1) of 2005 concerning Teachers and Lecturers, emphasize the multifaceted competencies required of teachers Cilic et al. (2015). This legislation highlights the necessity for teachers to possess pedagogical, personality, social, and professional competencies to effectively carry out their roles in the educational setting. Consequently, training initiatives have become increasingly vital in aligning teacher competencies with regulatory requirements and educational standards.

Empirical evidence from previous studies supports the notion that comprehensive training programs positively impact teacher competence and effectiveness in the classroom (Abdul Karim et al., 2021; Janssen et al., 2019; Kryptoutou & Sofianopoulou, 2019; Melara Gutiérrez & Gonzalez López, 2021). These studies highlight the correlation between teacher training and improved pedagogical practices, enhanced interpersonal skills, and greater professionalism among educators. Thus, the consensus among researchers reinforces the importance of ongoing training initiatives in nurturing well-rounded and competent teachers capable of meeting the diverse needs of students and the educational community. Vocational High School (SMK) is a level of secondary education that prepares explicitly graduates to be ready to work (Marna et al., 2018). This situation not only demands students but also requires teachers in vocational schools to have competencies that will be useful for their students when they enter the world of work (S. Putra, 2020). The PKK (Creative Projects and Entrepreneurship) subject in the Merdeka Curriculum is implemented using a project-based learning (PjBL) approach to actualize and express the competencies that students have in making products or services creatively but still have economic value. The existence of PKK subjects in vocational schools increasingly requires teachers to have sufficient competence to support the implementation of learning.

Judging from several previous studies that have been carried out, it is known that training has a positive and significant influence on teacher performance (Pambreni et al., 2023; Rais, 2019; Rindra Risdiantoro, 2021; Zeke et al., 2021). These previous studies stimulated researchers' interest in analyzing the training needs of vocational school teachers who teach PKK subjects. Another reason that drives researchers' interest is the consideration that the PKK subject is one of the subjects that requires a thorough understanding to achieve learning objectives. Moreover, needs analysis in developing training is the first step that must be carried out to prove that the training being designed is genuinely the training that is needed (Denby, 2010). Hence, the primary objective of this research is to conduct an analysis of the training needs for vocational school teachers who teach PKK subjects within the framework of the Merdeka Curriculum. This study seeks to delve into the specific requirements and areas for improvement identified within the context of teacher training. The training needs analysis conducted in this research draws upon preliminary studies and previous research findings, thereby providing a comprehensive understanding of the existing gaps and challenges. Through this analysis, the aim is to identify key areas where training interventions can be tailored to enhance the competencies of vocational school teachers teaching PKK subjects, ultimately contributing to the overall effectiveness and success of the educational process within the vocational school setting.

METHOD

This research applied survey methods and quantitative approaches. The population in this study was 22 teachers who taught PKK (Creative Projects and Entrepreneurship) subjects at SMKN 1 Pacet Cianjur. Considering the small sample population, the sampling technique used in this research was saturated sampling. Saturated sampling is a sample determination technique that uses all population members as samples in research (Sugiyono, 2017).

Data collection in this research used a questionnaire prepared on a Likert scale. Questionnaires are distributed online, respondent answer data is collected via Google Form. The questionnaire is also used as a research instrument and has been tested for validity and reliability. The validity and reliability tests in this research were tested using the Pearson Product Moment validity test ($0.000 < 0.05$) and the Cronbach Alpha reliability test ($0.746 > 0.06$), which overall shows that this instrument is valid and reliable. The data in this research was then analyzed using descriptive statistics to help describe the distribution of research data. The details of the sample characteristics in this study are as follows.

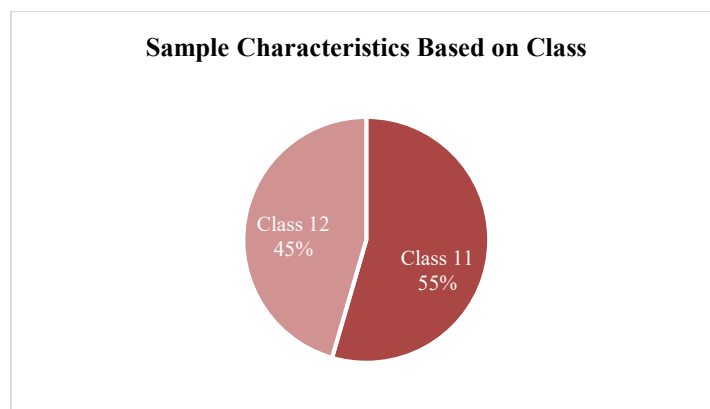


Figure 1. Sample Characteristic Based on Class
Source: Processed by the Author (2024)

Referring to Figure 1, it can be seen that the sample in this study consisted of 12 grade 11 teachers (55%) and 10 grade 12 teachers (45%). This means that most of the sample in this study were teachers who taught PKK in grade 11, and there were no teachers who taught grade 10. Apart from that, the sample in this study was also grouped based on gender and age. When viewed from gender, it is known that the number of each gender is balanced; namely, 11 teachers are female (50%), and 11 teachers are male (50%) (see Figure 2). Meanwhile, if we look at age, it is known that there are three teachers aged between 20-30 years (13%), seven teachers aged between 30-40 years (32%), nine teachers aged between 40-50 years (41%), and three teachers aged 50-60 years (14%). This condition shows that most of the samples in this study were in the 40-50 year age range (see Figure 3).

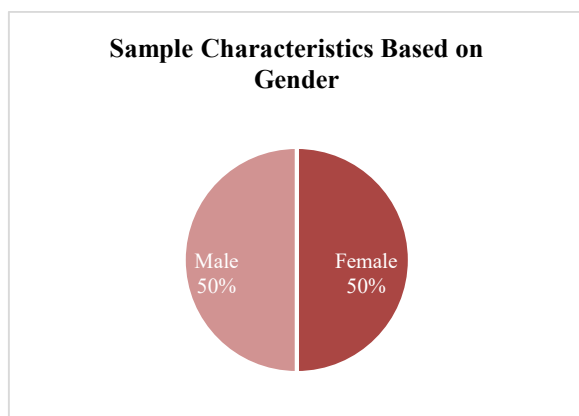


Figure 2.
Sample Characteristic Based on Gender
Source: Processed by the Author (2024)

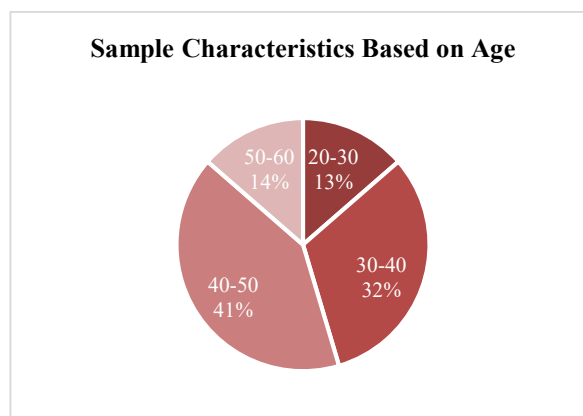


Figure 3.
Sample Characteristic Based on Age
Source: Processed by the Author (2024)

RESULTS AND DISCUSSION

Based on the survey result, it is known that the teachers who teach PKK subjects at SMKN 1 Pacet Cianjur come from different educational backgrounds and are irrelevant to the subjects they teach. These teachers also have different teaching hours. These results can be seen in Table 1 below.

Table 1. Description of Educational Background and Teaching Load

No.	Initial of Teacher's Name	Educational Background	Teaching Hours Load	No.	Initial of Teacher's Name	Educational Background	Teaching Hours Load
1.	RIS	Bachelor of Agriculture	6 JP	12.	S	Bachelor of Economics	8 JP
2.	AFM	Bachelor of Agriculture	4 JP	13.	DR	Bachelor of Agriculture	6 JP
3.	RRS	Bachelor of Education	2 JP	14.	AA	Bachelor of Computer Science	8 JP
4.	AS	Bachelor of Education	4 JP	15.	WP	Bachelor of Engineering	4 JP
5.	H	Bachelor of Education	2 JP	16.	GK	Bachelor of Tourism	2 JP
6.	MS	Bachelor of Education	2 JP	17.	SAS	Bachelor of Art	2 JP
7.	GY	Bachelor of Education	2 JP	18.	ILA	Bachelor of Education	2 JP
8.	DCR	Bachelor of Education	2 JP	19.	RG	Bachelor of Education	2 JP
9.	GSAP	Bachelor of Computer Science	2 JP	20.	AZAR	Bachelor of Education	2 JP
10.	DS	Bachelor of Agriculture	2 JP	21.	DS	Bachelor of Tourism	2 JP
11.	MN	Bachelor of Applied Tourism	2 JP	22.	TH	Bachelor of Education	4 JP

Source: Processed by the Author (2024)

Table 1 shows that the teaching load of PKK subject teachers at SMKN 1 Pacet Cianjur needs to be more balanced. In addition, some teachers come from educational backgrounds preneed to be more the subjects they teach. Several previous studies revealed that the irrelevance of academic background to the subjects taught by teachers can impact teacher performance in teaching (Imtiyas & Simatupang, 2022; Zhou et al., 2022). This condition also makes it possible for teachers' abilities to fail to be optimal in delivering theoretical and practical learning material (Abarua et al., 2023; Z. H. Putra et al., 2022). If this condition is not immediately addressed and a solution is not found, it could impact the achievement of learning objectives (Rahmawati, 2015).

Following up on these conditions, researchers then surveyed the training needs analysis. Based on the results of the survey carried out, it is known that the majority of teachers expressed the need for the implementation of training to support their competence in teaching PKK subjects. These results can be seen in Figure 4.

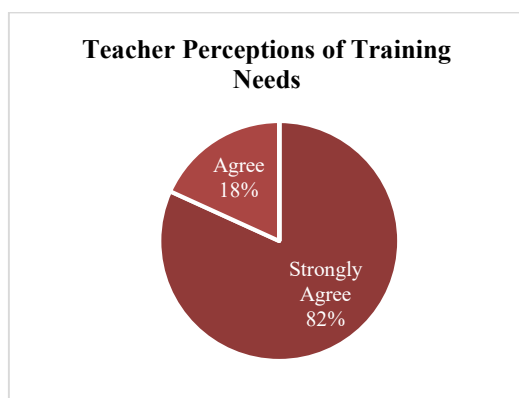


Figure 4.

Teacher Perceptions of Training Needs
Source: Processed by the Author (2024)



Figure 5.

Level of Training Needs
Source: Processed by the Author (2024)

Figure 4 shows that most teachers strongly agree that they need training. This is proven by 18 teachers (82%) who strongly agreed, while four other teachers (18%) chose to agree. The results obtained in this research show that all teachers realize that they need training to support their competence in teaching PKK subjects. This aligns with research conducted by Redjeki et al. (2021), which proves that training can improve teacher competence. The study conducted by Maritasari et al. (2020) also shows that the existence of training, apart from having a positive and significant influence on teacher competence, also has a positive and significant influence on teacher performance in teaching.

Furthermore, in the survey conducted, researchers divided the analysis of training needs based on levels, namely basic level training and advanced level training. Basic-level training is training aimed at beginners who still need to gain basic knowledge and skills in their field (van den Akker et al., 2012). Meanwhile, advanced-level training is aimed at participants with essential knowledge and skills in their field. Advanced training aims to deepen participants' knowledge and skills as well as introducing participants to more complex concepts and techniques (Foley, 2020). Referring to the results of the survey conducted, it was found that 16 teachers (73%) needed advanced level training, while six teachers (27%) needed basic level training. This means that most PKK subject teachers at SMKN 1 Pacet Cianjur require more advanced level training than basic level training because they already have basic knowledge and skills related to PKK subjects (see Figure 5).

The training materials at each level are developed differently based on considerations of the implementation level and the training participants' abilities. Advanced-level training is divided into two needs analyses: training for developing teaching materials for PKK subjects and training for implementing learning for PKK subjects. The division of the two needs analysis for advanced-level training is based on several previous studies that are relevant to the objectives of this research (Anggraini & Mahmudah, 2020; Atin et al., 2023; Cahyadi, 2019; Marbun & Prastawa, 2023; Novita et al., 2024; Sibagariang & Simbolon, 2023; Vidiанти, 2022) The details of each material at both levels of training offered in this research to PKK subject teachers at SMKN 1 Pacet Cianjur are shown in Table 2 below.

Table 2. Details of Training Materials

Basic Level Training	Advanced Training
1. Concepts and principles of entrepreneurship	Teaching Materials
2. Characteristics of entrepreneurs	1. Develop PKK teaching modules
3. Business opportunities	2. Developing PKK teaching materials
4. Preparation of a business plan	3. Choose the right learning method
5. Marketing strategy	4. Develop interesting learning media
6. Financial management	Learning Implementation
	1. Implement project-based learning
	2. Implementing student-centered learning
	3. Facilitate students to learn independently
	4. Assessing student learning outcomes authentically

Source: Processed by the Author (2024)

Table 2 shows that the material details at each training level offered in this research are prepared concerning different objectives. The need for advanced training chosen by most teachers in this study shows that teachers already know the basic concepts of entrepreneurship that underlie PKK subjects. Meanwhile, matters related to learning materials and the implementation of PKK learning still require much improvement in mastery. Learning materials and implementation are elements tied into the curriculum components. The existence of these elements helps teachers in their learning practices. Capabilities related to developing learning materials and implementing learning in training can support a teacher's professional development (Moore et al., 2021). A study by Li & Xu (2020) also revealed that teaching materials support teachers' ability to perfect the learning material they teach to their students.

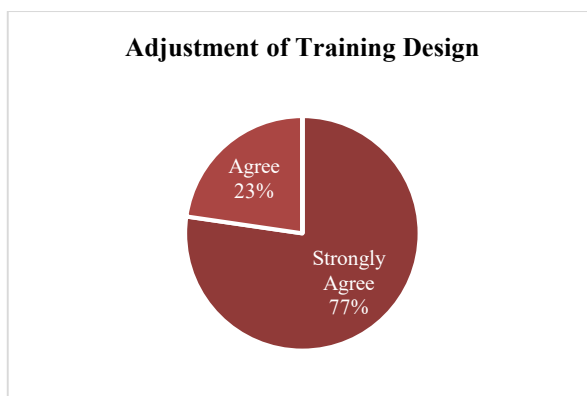


Figure 6. Adjustment of Training Design
Source: Processed by the Author (2024)

This research then confirmed the need to adapt advanced training to each area of expertise covered by the teacher. The survey results show that some teachers have different backgrounds to the PKK subjects they teach. The survey results on this matter show that most teachers agree that advanced level training should be designed so that it can be adapted well to each area of expertise (see Figure 6). This aligns with the understanding that the curriculum must be designed according to the needs of each field (Bocanegra-Valle, 2016). Moreover, some teachers also have more teaching hours than other teachers, so advanced training plans should be applicable or can be applied in various situations and conditions. This applicable training design can be a form of curriculum development that is quality, innovative, and supports the practical development of individual abilities (Wu, 2019).

Overall, this study found that training for vocational school teachers who teach PKK subjects at SMKN 1 Pacet Cianjur still requires advanced-level training to support the demand for competency fulfillment in the subjects they teach. The importance of training for vocational school teachers who teach PKK subjects is crucial in improving the quality of vocational education. Vocational school teachers have a significant responsibility in preparing students to enter the world of work with relevant and necessary skills (Johnston et al., 2016). The PKK subject, which is implemented in the Merdeka Curriculum, emphasizes a project-based learning approach to encourage student creativity and create economic value in the products or services produced. Therefore, vocational school teachers who teach PKK must have sufficient competence to support effective learning implementation. This opinion aligns with the findings of van Griethuijsen et al. (2020) study, which found that competency-based learning provided to teachers can positively influence teacher competence and increase student satisfaction with the quality of education, guidance, and interpersonal skills. Training tailored to their needs is critical in optimizing teaching and learning in the classroom (Zhang & Liang, 2023). With the increasing complexity of the demands of the world of work today, vocational school teachers need to be well-prepared to guide students in developing skills that are relevant to the needs of the job market (Ridlo et al., 2018). Through proper training, teachers can improve the quality of learning, provide better guidance to students, and, in turn, help increase job opportunities and career readiness for vocational school students (Virkkula, 2022). The research implications show that educational institutions need to prioritize developing the competencies of their teachers and provide training that can meet the needs identified in this research. This condition is based on the lack of efforts to develop competency among PKK subject teachers at SMKN 1 Pacet Cianjur.

CONCLUSION AND SUGGESTION

This research shows that teachers at SMKN 1 Pacet Cianjur who teach PKK (Creative Projects and Entrepreneurship) subjects need training to improve and develop their competencies. This need is driven by the encouragement of diversity in educational backgrounds and the teaching hour load of teachers at SMKN 1 Pacet Cianjur. The majority of teachers consider that they need advanced training about PKK subjects. The advanced level training teachers require is focused on training regarding learning materials and implementation of learning. Meanwhile, basic-level training that contains the concepts and basics of entrepreneurship is less needed by teachers because most teachers already have these basic competencies. However, this research emphasizes that the training design for vocational school teachers who teach PKK subjects needs to be designed to be adapted well to each area of expertise, which refers to the need for an applicable training design. This study still has several research limitations. These limitations indicate that the study did not further explore the design of advanced training, which was initially identified in the needs analysis conducted. Additionally, the study did not further investigate the influence that differences in

background and teaching hour load have on teachers' desired training needs. This research only elaborates on these findings with similar previous research and does not confirm them with the sample in the study. Referring to the limitations in this research, this research provides further recommendations for developing similar research. It is hoped that future research will conduct a more in-depth analysis of training needs and specifically focus on advanced-level training needs for vocational school teachers who teach PKK subjects. It is also hoped that further research will explore more deeply the influence arising from differences in educational backgrounds and teachers' teaching hour loads on training needs.

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