

# Implementing Continuing Professional Development Programs: Perceptions of Civil Servant Vocational Teachers at State Vocational High Schools

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**Abstract.** The main purpose of this study is to describe the perceived competencies and gaps of Civil Service Vocational School teachers at State Vocational Schools (SMKN) implementing Continuing Education Programs (CPD) in the context of Indonesian policy. The surveyed population was civil service vocational teachers of the Vocational Schools (SMKN) who taught vocational areas. Surveys are used to collect data and analyze data with descriptive statistics, using comparative hypothesis testing (t-tests) with pairwise difference tests. Her seven dimensions of adequacy and gap levels in the implementation of CPD program policies consist of: (1) Understanding CPD. (2) Purpose and Benefits of CPD. (3) CPD patterns and activity. (4) CPD Content. (5) CPD support. (6) Effects of CPD. (7) her CPD performance of the teacher; The average score for the seven-sided gap is 0.75 points. The seven-sided fit value was assessed as 80%. This indicates that there is still a 20% gap in the implementation of CPD program policies by his VET teachers in the public sector. in the meantime. The largest discrepancy in implementing the additional training concept with a value of 0.85 points or achieved fitness value is 76.96% in terms of additional training support. We also find differences in the implementation of program guidelines for in-service teacher training based on the results of the paired-sample t-test. From this it can be concluded that there should be a difference in the current state of implementation regarding aspects of programs and political further training measures for teachers of public sector vocational schools. This means that there is a discrepancy in teachers' perceptions of current CPD practices and what CPD practices should be.

**Keywords:** Vocational high school; continuing professional development, vocational teacher. CPD Policy

## 1. Introduction

Efforts to improve the performance, competence, and professionalism of SMK teachers as well as the quality of SMK graduates are a challenge for SMKs to meet and prepare workers who have qualifications and competencies following the demands of the labour market. Therefore, the knowledge, expertise, skills, competence and professionalism of VHS teachers are very important in contributing to the birth of quality VHS graduates.

Vocational Teacher Professional Development or known as the Continuing Professional Development (CPD) program is a formal and informal vocational teacher activity carried out

at school and outside of school. In the context of Indonesia, CPD is a teacher development policy program called "Pengembangan Keprofesian Berkelanjutan" (PKB). The purpose of CPD is an effort to update, improve and develop the knowledge, competence, expertise and skills of teachers, enabling them to overcome the challenges faced by teachers and work professionally in their main tasks and duties as vocational teachers. The pattern of professional development also shows the importance of the professional development process because teachers are related to the development of the preferred role, motivation and aspirations of teachers, whether directed at increasing skills or increasing hierarchies [1], [2]. Professional development is needed to keep teachers up-to-date (update) their knowledge with changing conditions and increasingly diverse student needs [3]. According to Villegas-Reimers, CPD helps teachers develop their professional knowledge and understanding. A teacher is understood as a reflective practitioner who enters a profession with knowledge but acquires new knowledge and experience based on previous knowledge [4], [5]. The main problem in CPD policy in Indonesia is related to the relevance of implementation by teachers. identified that there are still many activities that are not relevant to the real needs of teachers.

The CPD policy is entirely very good, but it must be understood that the CPD policy is complex and multi-faceted, therefore it is necessary to identify the key aspects of the policy. The policy must be in accordance with the perspectives of schools, government and teachers [6]. The CPD program is designed to help teachers develop their professional skills both on their own and in groups [7], [8]. The program also helps them become active learners who engage in the specific tasks of teaching, evaluating, observing, and reflecting [9]. CPD also helps extend the work outcomes of teachers into career development or advancement. [10] The requirement for good teaching by teachers encourages teachers to learn from time to time, and professional development is seen as a long-term process, so a series of related experiences rather than just one considered effective, as it allows teachers to combine previous knowledge with new experience.[4], [5]. It should be understood that vocational teachers have main competencies: teaching competence and competencies related to vocational practice in specific areas of expertise competence [11].

## **2. Research Method**

The data collection method of this study used a questionnaire. The questionnaire is the teacher's perception of the current state (actual) and (ideal) conditions of CPD implementation. The data analysis of this research used inferential statistical analysis with a comparative hypothesis test (t-test), namely the paired difference test (Paired Sample Test). The sample consisted of 57 civil servant vocational teachers from 11 state vocational schools. The questionnaire consists of seven variables/aspects containing as many as 60 statement items. The sampling technique used here is a purposive sampling technique, this is because CPD policies in Indonesia are prioritized to be implemented by civil servant teachers. Therefore, The focus of this research is on the implementation of CPD programs conducted by vocational school teachers with civil servant teacher status.

## **3. Result and Discussion**

The results study show that there was a difference between the implementation of CPD that is currently being carried out by vocational teachers and the ideal perception of the implementation of CPD. This is evidenced by the acquisition of T-test scores and probability

or sig. (2-tailed) = 0.000 < 0.05 . Therefore, it can be concluded that there are differences in the application of aspects of CPD to SMK teachers. This means that there are differences in the perception of SMK teachers about the current implementation of CPD with the implementation of the supposed CPD. In other words, there are differences in the ideal conditions for implementing the CPD aspects carried out by SMK teachers. The results of the gap in this study are an indication that there has been a deviation of objectives and relevance which should aim to improve the competence and performance of vocational teachers in improving their teacher and vocational competencies.

#### A. Level of Suitability Gap in the Implementation of CPD Aspect.

The level of discrepancy and the suitability of the application of CPD for civil servant vocational teachers is a conclusion obtained through the teacher's perception or assessment of the facts that occur or are currently doing with the perception or assessment of the situation that should occur regarding the implementation of CPD program policies. The level of gap and suitability of the implementation of the CPD program policies is an implementation related to the professional development aspects of vocational teachers. The level of suitability and gaps in the application of aspects of the CPD consists of 7 aspects, namely: (1) understanding; (2) goals and benefits; (3) patterns and activities; (4) content; (5) support; (6) impact; and (7) teacher performance. The average score for the seven-sided gap is 0.75 points. In contrast, suitability scores from seven dimensions received a value of 80%. This indicates that there is still a 20% gap in the implementation of CPD programs by VET high school civil servants. in the meantime. The maximum discrepancy in further training runs is a value of 0.85 points or a fit value of 76.96%. Additionally, there are differences in the implementation of program policy aspects of professional development by vocational school teachers at public vocational schools based on the results of various tests. From this it can be concluded that there are real deviations from the current state of practice regarding aspects of further training measures carried out by teachers of technical schools. This means that there is a discrepancy in the teacher's perception of her current CPD implementation and her CPD implementation as it should be. These results are relevant and similar to the results of a preliminary study conducted[12]

**Table 1.** Level of Gap and Conformity of Implementation of Aspects  
Aspects of CPD

Variable/Aspects	Teacher's Perception	Mean	Gap Level	conformity (%)
Understanding CPD	Should be	3.81	0.73	80.31
	Current state	3.06		
CPD's Purpose and Benefits	Should be	3.79	0.72	81.00
	Current state	3.07		
CPD Patterns and Activities	Should be	3.70	0.71	79.72
	Current state	2.98		
contents of the CPD	Should be	3.77	0.74	80.37
	Current state	3.03		
Support CPD	Should be	3.69	0.85	76.96
	Current state	2.84		
Impact of CPD	Should be	3.78	0.73	80.68
	Current state	3.05		
Teacher's CPD Performance	Should be	3.75	0.71	81.06

Current state	3.04
<b>Average</b>	<b>0.75</b>
	<b>80</b>

Based on Table 1, the average value of the gap between the seven aspects of CPD for civil servant vocational teachers is 0.75 points. Meanwhile, the average value of the level of conformity of the seven aspects of CPD for vocational teachers got a score of 80%. This indicates that teachers' perceptions of implementation related to aspects of CPD for vocational teachers still have a gap of 20% or a lack of 20% to achieve the ideal conditions expected by teachers for the implementation of the CPD program. Meanwhile, the aspect of "CPD support" received the largest gap value with a value of 0.85 points and the smallest conformity value of 76.96%. This concludes that teachers lack support in implementing CPD. Based on the statement items proposed in the instrument, the support is (1) short and long-term program support; (2) funding support; (3) internal and external resource support; (4) community support; (5) management support and school culture; (6) follow-up support from the school leadership; (7) CPD coordinator support; and (8) peer support. This is in line with the results of Widayati's research, which revealed that they had not received maximum support, especially financial support and short-term and long-term CPD program support [13]. Meanwhile, the goals and focus of CPD are almost always determined by the principal, there should be an agreement between the principal and the teacher in choosing the purpose, form and focus of CPD activities, because it will have an impact on teachers [14].

#### **B. Level of Differences in Perceptions of Civil Servant Vocational Teachers.**

Another issue driving the implementation of CPD program guidelines is very weak and unsatisfactory acquisition of teacher competency test scores on the professional and pedagogical aspects of teacher competencies. In particular, the proficiency test results of vocational school teachers are still below national standards. This figure shows that there are still many vocational school teachers who do not reach the ideal, and there is a need to increase their participation in further training implementation. This situation shows that the capacity building and participation of Indonesian teachers in development is still weak. This situation also shows that professional development of vocational school teachers is still far from the goal of improving teacher performance and competence. However, there are four problems in implementing CPD for Indonesian teachers: (1) A teacher's 24-hour class load is considered to be very heavy. (2) teachers are not seriously prepared to become researchers; (3) Inappropriate management of faculty performance evaluation system. (4) Local government policy to draw teachers into the political sphere [15].

**Table 2.** Result of Paired Samples t-Test

<b>Pair Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>T value</b>	<b>Sig (2-tailed)</b>
The Circumstances Should be with the Current Circumstances Understanding CPD	0.751	0.492	11.537	0.000
The Situation Should Be With The Current Situation The Purpose and Benefits of CPD	0.725	0.513	10.662	0.000
The Current Circumstances of CPD Patterns and Activities	0.716	0.496	10.884	0.000
The Situation Should Be With The Current	0.746	0.483	11.665	0.000

Situation Of CPD Contents				
The Situation Should Be With The Current Situation CPD Support	0.851	0.531	12.101	0.000
The Situation Should be with the Current Situation The Impact of the CPD	0.726	0.610	8.987	0.000
The Situation Should Be With The Current Situation Of The Teacher's Performance	0.712	0.428	12.546	0.000

The calculation results for each pair variable can be described as follows, (1) Aspects of understanding the CPD, the value of t-count = 11,537 and the value of sig. (2-tailed) is  $0.000 < 0.05$ . This means that there are differences in the perception of the implementation of CPD in the aspect of understanding CPD; (2) Aspects of the objectives and benefits of the CPD, the value of t-count = 10,662 and the value of sig. (2-tailed)  $0.000 < 0.05$ . This means that there are differences in the perception of the implementation of CPD on the objectives and benefits of CPD; (3) Aspects of the pattern and activities of CPD, the value of t-count = 10,884 and the value of sig. (2-tailed)  $0.000 < 0.05$ . This means that there are differences in the perception of the implementation of CPD in the aspects of the pattern and activities of CPD; (4) Aspects of the CPD Content, the value of t-count = 11,665 and the value of sig. (2-tailed)  $0.000 < 0.05$ . This means that there are differences in the perception of the implementation of CPD in the aspect of the content of the CPD; (5) Aspects of CPD support, the value of t-count = 12,101 and the value of sig. (2-tailed)  $0.000 < 0.05$ . This means that there are differences in the perception of the implementation of CPD in the aspect of CPD support; (6) Aspects of the impact of CPD, the value of t-count = 8,987 and the value of sig. (2-tailed)  $0.000 < 0.05$ . This means that there are differences in the perception of the implementation of CPD in the aspect of understanding CPD; (7) Aspects of teacher CPD performance, the value of t-count = 12,546 and the value of sig. (2-tailed)  $0.000 < 0.05$ . This means that there are differences in the perception of the implementation of CPD on the performance aspect of the teacher's CPD. Of all the acquisition of the value of t-count and probability or sig. (2-tailed) =  $0.000 < 0.05$ , it can be concluded that there are differences in the implementation of aspects of CPD for vocational teachers at VHS. This means that there are differences in the perception of vocational teachers in VHS about the current CPD implementation with the supposed CPD implementation. In meaning, there are actual differences with the ideal state of implementation on aspects of CPD carried out by vocational teachers at VHS.

#### 4. Conclusion

The implementation of the CPD program for civil servant Vocational school teachers are done through implementation the CPD program policy as a mandatory activity for civil servant vocational teachers. At the school level, the implementation of CPD so far has only attended education and training organized by the education department. Participation is based on the offer so the teacher cannot carry it out independently based on the needs of the teacher's reflection. Obstacles found in the field in the implementation of the CPD program include: (1) limited enrollment and inappropriate timing for each future training offering; (2) Participants bear part of the funds; (3) Materials less relevant to teacher needs. This happens because at the planning level of professional development activities for SMK teachers No plans at individual teacher level or at school level. What stands out is related to support in the implementation of the CPD program. Then based on the results of research with a high level of gap contained in the aspect of CPD support. This means that the implementation of the CPD program it has not been fully supported, teachers should have full support from all parties. Statements from the support aspect

include (1) short and long-term support programs; (2) funding support; (3) internal and external resource support; (4) community support; (5) management support and school culture; (6) follow-up support from the school leadership; (7) CPD coordinator support; and (8) peer support. Among these statements, the highest is funding support.

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## References

- [1] O. Avidov-Ungar, "A model of professional development: teachers' perceptions of their professional development," *Teachers and Teaching: Theory and Practice*, vol. 22, no. 6, pp. 653–669, 2016, doi: 10.1080/13540602.2016.1158955.
- [2] D. Richter, M. Kleinknecht, and A. Gröschner, "What motivates teachers to participate in professional development? An empirical investigation of motivational orientations and the uptake of formal learning opportunities," *Teach Teach Educ*, vol. 86, p. 102929, Nov. 2019, doi: 10.1016/J.TATE.2019.102929.
- [3] M. Badri, A. Alnuaimi, J. Mohaidat, G. Yang, and A. al Rashedi, "Perception of Teachers' Professional Development Needs, Impacts, and Barriers: The Abu Dhabi Case," *Sage Open*, vol. 6, no. 3, 2016, doi: 10.1177/2158244016662901.
- [4] E. Villegas-Reimers, *Teacher professional development: An International review of the literature. Paris: UNESCO-International Institute for Educational Planning (2003)*. 2003.
- [5] A. Murray, "Empowering Teachers through Professional Development."
- [6] A. Kennedy, "Understanding continuing professional development: the need for theory to impact on policy and practice," *Professional Development in Education*, vol. 40, no. 5, pp. 688–697, 2014, doi: 10.1080/19415257.2014.955122.
- [7] Cobb, Velma L, "An International Comparison of Teacher Education. ERIC Digest", Accessed: Sep. 21, 2022. [Online]. Available: <https://files.eric.ed.gov/fulltext/ED436486.pdf>
- [8] P. Andersson, M. Hellgren, and S. Köpsén, "Factors Influencing the Value of CPD Activities Among VET Teachers," *International Journal for Research in Vocational Education and Training*, vol. 5, no. 2, pp. 140–164, Aug. 2018, doi: 10.13152/IJRVET.5.2.4.
- [9] B. D. Bantwini, "District professional development models as a way to introduce primary-school teachers to natural science curriculum reforms in one district in South Africa," *Journal of Education for Teaching*, vol. 35, no. 2, pp. 169–182, May 2009, doi: 10.1080/02607470902771094.
- [10] F. & P. Makhola. Arends, *Beginner teachers in South Africa : school readiness, knowledge and skills*. Cape Town: HSRC Press, 2009. Accessed: Sep. 22, 2022. [Online]. Available: <https://searchworks-lb.stanford.edu/view/8701888>
- [11] P. Andersson and S. Köpsén, "Continuing professional development of vocational teachers: Participation in a Swedish National Initiative," *Empirical Research in Vocational Education and Training*, vol. 7, no. 1, 2015, doi: 10.1186/s40461-015-0019-3.
- [12] Muksin; Sukardi; Sunarto, "Continuing Professional Development (CPD) Model for Vocational High School Teachers in Indonesia," *Turkish Journal of Computer and Mathematics Education*, vol. 12, no. 9, pp. 1243–1253, Apr. 2021, Accessed: Nov.

- 06, 2022. [Online]. Available:  
<https://turcomat.org/index.php/turkbilmamat/article/view/3471>
- [13] A. Widayati, J. MacCallum, and A. Woods-McConney, "Teachers' perceptions of continuing professional development: a study of vocational high school teachers in Indonesia," *Teacher Development*, vol. 25, no. 5, pp. 604–621, Jul. 2021.
- [14] Y. Zeng and C. Day, "Collaborative teacher professional development in schools in England (UK) and Shanghai (China): cultures, contexts and tensions," *Teachers and Teaching*, vol. 25, no. 3, pp. 379–397, Apr. 2019, doi:  
10.1080/13540602.2019.1593822.
- [15] Mawardi, "Pengembangan Keprofesian Berkelanjutan (PKB) dan Kewajiban Memenuhi Jam Mengajar: Kebijakan Dilematis?," *Scholaria*, vol. 2, no. 1, pp. 91–115, Jan. 2012, Accessed: Sep. 21, 2022. [Online]. Available:  
[https://repository.uksw.edu/bitstream/123456789/3188/2/ART\\_Mawardi\\_Pengembangan%20Keprofesian\\_Full%20text.pdf](https://repository.uksw.edu/bitstream/123456789/3188/2/ART_Mawardi_Pengembangan%20Keprofesian_Full%20text.pdf)