

The Experimentation of Self Development Training and Innovative Work Model for Office Administration Vocational High School Teachers in Central Java Province

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Abstract. The objective of research was to validate and to test the feasibility of training model for Office Administration-Vocational High School Teachers in Central Java province that had been developed previously. This validation and feasibility test on training model employed expert validation and quasi experiment methods. The sample of research consisted of chairpersons of Subject Teacher Discussion (MGMP) for Office Administration coming from 10 Regencies/Cities in Central Java Province. The result of research showed that considering the result of expert practitioner validation, the model had been valid with minor revision on media and material presentation aspect variable. Considering the result of experiment, generally there was an increase from pretest to posttest scores.

Keywords: Teacher Competency, Effectiveness of Self-Development Training and Innovative Work Model.

1 Introduction

Teacher competency is very important in a successful education [1] [2] [3] [4] [5] [6] Generally, teacher competency is divided into 4 main competencies: pedagogic, personality, professional, and social.

Teacher competency is dynamic in nature, thereby requiring sustainable development according to time need and development [4] [6]. The process of developing and improving teacher competency should be conducted simultaneously and continuously in order to be maintained and sustainable.

In Indonesian case today, teacher competency development has not been maintained optimally so that majority teachers still have below standard competency. One of education levels with low teacher competency test score is Vocational High School. Considering the result of Teacher Competency Test in 2015, majority Vocational High School teachers are still below the standard specified. The research conducted by Murtini, Sawiji, Rapih, (2017) found that the cause of low teacher competency is the limited training followed and incompatibility

between training material and teachers' need, so that majority teachers get inadequate facility to develop its competency.

The follow-up of preliminary study conducted by [7] develops a training model based on need and compatibility to the prospect participants of training. Therefore, a Self-Development Training and Innovative Work Model for Vocational High School teachers of Office Administration in Central Java Province is developed. This training model development is based on a comprehensive need analysis so that problem mapping and characteristic of prospect participants can be explored in detail to be the material to develop this training model.

The application of training model is closely related to the quality of training process. Training model plays a very important role in achieving successful training process, meaning that a training model design developed well using correct procedure has large opportunity to be used maximally and to improve the quality of training [8].

To validate and to test the feasibility of model developed, a gradual and sustainable test is required to produce a final teacher training model that can actually solve the problem elaborated. Considering this phenomenon, this research aimed to validate and to test the feasibility of self-development training and innovative work model for Office Administration-Vocational High School teachers in Central Java Province.

2 Method

Considering the objective of research, to validate and to test the feasibility of model developed, this research employed 2 research stages. In the first stage, this research employed practitioner test/expert acting as model validator. In the second stage, this research conducted a small-scale trial using quasi experiment research method. The design employed was one group pretest and posttest design. In trial stage, Student Teams Achievement Division (STAD) type of cooperative learning model was used. The experiment method with pretest and posttest single group design can be illustrated in figure below.

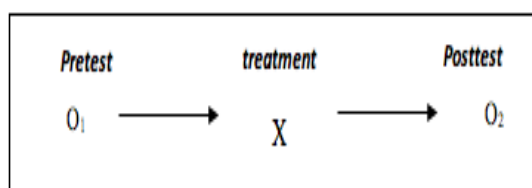


Fig. 1. *One group pretest-posttest design*

The sample of research serving as the subject of research all at once consisted of 10 respondents: 5 chairpersons of Subject Teacher Discussion (MGMP) for Office Administration-Vocational High School and 5 teachers of Office Administration-Vocational High School coming from 5 regencies/cities in Central Java Province. The sampling technique used was purposive sampling one. The research instruments employed were questionnaire and test. Questionnaire was used to conducted expert validation, while test was used to collect the data of training model trial score. Data of research was analyzed using descriptive analysis and Wilcoxon test. Descriptive analysis was used to present and to test the data from validation

questionnaire. Meanwhile Wilcoxon test was used to analyze the difference of mean posttest and posttest. Data analysis was carried out with SPSS 22 software help.

3 Results

3.1. Results of Expert Validations

The result of questionnaire is distributed to expert practitioners to get scoring of model tested. Questionnaire is developed based on main variable divided into 3 aspects: media, material, and benefit. In detail, the result of expert practitioners can be seen in table 1.

Table 1. Tabulation of questionnaire resulting from expert practitioner validation

Respondent	Aspect			Total score
	Media	Material	Benefit	
Respondent 1	24	21	29	74
Respondent 2	21	19	29	69
Respondent 3	18	18	25	61
Respondent 4	18	15	24	57
Respondent 5	18	20	29	67
Respondent 6	21	20	31	72
Respondent 7	20	16	22	58
Respondent 8	20	17	24	61
Respondent 9	19	18	24	61
Respondent 10	19	21	29	69
Total Score				649
Converted Score				81.125

Considering the result of expert practitioner validation, total score is 649 and the converted score is 81.125. The result shows that model had been considered as valid. The result of expert validation indicates that the lowest score occurs in appearance and material presentation aspect variables thereby still requiring minor revision in appearance and material presentation aspect variables.

3.2. Results of Experiment Test

The result of experiment stage includes pretest and posttest scores. The result of statistic test about pretest and posttest scores can be seen in Table 2.

Table 2. Results of variance test

		Ranks		
		N	Mean Rank	Sum of Ranks
Post Test - Pre Test	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	5 ^b	3.00	15.00
	Ties	5 ^c		
	Total	10		

Table 3. The results of wilcoxon test

Test Statistics ^a	
	Post Test - Pre Test
Z	-2.032 ^b
Asymp. Sig. (2-tailed)	.042

Negative Ranks or (negative) difference between pretest and posttest result is 0 in N, Mean Rank, and Sum Ranks. This zero (0) score shows that there is no decrease from pretest to posttest score. There is positive rank or (positive) difference between pretest and posttest results. In this case there are 5 positive data (N) meaning that the scores of 5 teachers increase from pretest to posttest. Mean rank is 3.00, while the total positive rank is 15.00.

Ties value are the equality between pretest and posttest scores, in this case the ties score is 5 so that it can be seen that there equal score between pretest and posttest in 5 teachers. Considering the output of statistic test, it can be found that Asymp Sig (2-tailed) score is 0.042. Because 0.042 is < (less than) 0.05, it can be concluded that Ha is supported. It means that there is a difference between pretest and posttest scores. The result of research showed that there is a significant increase from pretest to posttest scores. It indicates that training model offered successfully improves teachers' competency particularly in the term of subject material development based on information technology, learning media development based on information technology and ability of developing learning model independently.

4 Discussion

The results of the study showed that there was a significant increase between the pre-test and post-test scores. This shows that, the training model offered is quite successful in improving teacher competencies, especially in terms of the development of subject matter based on information technology, the development of learning media based on information technology and the ability to develop learning models independently. The training conducted emphasizes certain aspects that have been identified at the stage of research needs analysis. The most dominant aspect is the introduction of information technology mastery as a material development tool, media or learning model.

The test results are in line with research conducted by [9] which shows that teacher training provides a significant impact in improving teacher competency. In the study it was explained that, good training is training that is truly compatible with the integrity of the training participants. In his research stated that, giving training and strengthening discipline significantly affected teacher performance [9]. The key to success in the training model offered is in the availability of accurate data on the factors needed by the trainees.

At the problem identification stage, a complete and comprehensive data search will provide a clear picture in the development of a training model. In his research also stated that needs analysis is a very important factor in the preparation of a training model [10]. Deep self-development for teachers is a factor that is so important that it needs strong support from various parties. In line with the research conducted by [4] the development of teacher competencies must be carried out with 2 approaches, namely the approach from outside and from within.

The outside approach is the availability of training and other supporting facilities, while the internal approach is a strong motivation in a teacher to move forward and try to continue to develop his competence. The test results of the development of this training model provide a

clear picture that the factors of training preparation and implementation hold a very dominant factor. The availability of competent facilitators and facilities support is a determinant of the success of the training program.

The model tested in this study focused on a main competency and narrowed down to the main needs of the trainees. The results of this study are also in line with research conducted by [6] that a good and effective training must focus on one of the core competencies so that in the transfer of skills can run optimally between facilitators and trainees.

5 Conclusion

Considering the result of expert practitioner validation, the total score is 649 and the converted score is 81.125. The result indicates that the model has been stated as valid with the lowest score occurring in media and presentation aspect variables. In addition, the result of experiment test shows that there is a significant difference or increase from pretest to posttest result. Generally, the result of validity test and experiment on training model in self-development and innovative work for Office Administration-Vocational High School teachers is valid but this model still need minor revision in media and presentation aspect variables to be trialed further in large-scale (main field experiment).

Acknowledgment. This research would not have been possible without the financial support of the Institute of Research And Community Service, Sebelas Maret University. We are especially indebted to Prof. Dr. Ravik Karsidi, MS, Rector of Sebelas Maret University, and Prof. Sulistyo Saputro, Ph.D Head of Institute of Research And Community Service, Sebelas Maret University who have been supportive of this research.

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