The Training Design for Vocational Teachers in Bengkulu

Marjon1*, Khathibul Umam Zaid Nugroho1

1Universitas Bengkulu, Jl. W. R. Supratman, Kandang Limun, Muara Bangka Hulu, Bengkulu 38371

*marjonunib@gmail.com

Abstract. The research objective was to produce a valid, practical and effective training model to improve the performance of vocational teachers. This research is the development of a virtual online training model. We test the validity, practicality and effectiveness of the training model. Validity is determined by justifying three experts. The trainees were 50 Vocational High School teachers. Data collection was carried out by using validity sheet instruments, practicality sheets, and training participants' performance tests. Data were analyzed using mean and percentage. The results of this study are that MD-DV is a valid, practical and effective training model to improve the performance of vocational teachers. We recommend that to improve employee performance, MD-DV training is needed.

1. Introduction

The efforts to improve teacher competence have been carried out by the government and education observers, but their achievements are still not satisfactory [1]. In many ways, the community is not satisfied with the teacher's performance. Therefore, the government, through the Ministry of Education and Culture, organizes programs to improve the teaching profession. Teacher professionalism is measured through competency tests. To determine the description of the level of teacher competence, the government assesses teacher competency through teacher competency exams (UKG). UKG results are a representation of Indonesian teacher competence. Data shows that teacher competence is low [2][3]. Therefore, a training model was needed for teachers that can overcome the low competency of teachers. This is a valid, practical and effective model to improve teacher competence.

According to [4], the competence based training was an approach to the training offered, focuses on practical activities in its implementation, and at the same time is a learning innovation to improve the competency of participants in carrying out their main tasks and functions. The result of study [5] was that the Training Model able to improve mastery of teacher competencies using distance learning approaches based on modular teaching materials were appropriate. It model was valid and practical based on the accuracy of the formulation of the model components, the substance of the model content, readability, and linguistic.

One model of training that meets the above criteria is The Kirkpatrick Model. According to [6][7][8] the model has served the training and development arena in the field of measurement and evaluation of training effectiveness. Originally designed to measure the effectiveness of training initiated by the company, this model proposes an increase in training effectiveness linearly. That is, a higher level can
only be fulfilled if a lower level is met. Before, during and after training, the Kirkpatrick Model can be applied to show the value of training to organizations.

According to Kirkpatrick's Model [9], evaluation must always begin with level one. Furthermore, over time and the available budget, must move sequentially through level two, three and four. This activity is herarchic [7]. The information from each of the previous levels serves as the basis for the next level of evaluation. Each successive level represents a more appropriate measure of the effectiveness of a training program. However, we need a more thorough analysis, at the same time [9].

Donald L. Kirkpatrick [10] stated that, Kirkpatrick's four evaluation levels of the training model. These four levels are used to measure: student reactions (what they think and feel about training); learning (resulting in increased knowledge or ability). This is a level of behavior and capacity building, and its implementation. Finally, the effects on the business or environment result from the performance of the trainees.

According to [11], there are three reasons for evaluating a training program. First, evaluation can reveal how to improve the program in the future. Second is to determine whether a program must be continued or not. Finally, justifying the existence of the training department and its budget. Therefore, one way to improve the competency of training participants is to design a new TVET (Technical and Vocational Education Training) strategies for the youth to access the world of work [12].

Haaga-Helia [13] state that, the development of vocational teacher education is related to economic diversification and the creation of citizen society. Trade, banking, transportation, industry and services are sectors that are established together with agriculture. This leads to the establishment of institutes that prepare students for vocations and needs for vocational teachers.

The results of the development of the teacher training model in German there are three emerging models. These models were: 1. The Consecutive Model; 2. The Top-Up-Model; 3. The Blended Model [14].

According to [14], the most dominant model seems to be the Consecutive Model, besides the Top-up-Model, and the Blended Model. Consecutive models are the three main, small, and vocational education structures as integral parts of the two cycles of study. The Top-up Model only introduces one teacher training at the technical or vocational level. Whereas, Blended Models offer a two-cycle system. It introduced two teacher training courses at the Bachelor level. Also, with vocational and didactic education modules that are open to students from other faculties. Grollmann [15] stated that so far there have been various patterns of vocational teacher education, profiles and recruitment practices. Every assessment of the quality of vocational teachers (theory or practice) needs to be considered about the background of the institutional environment in which they practice, as well as professional culture.

Based on the three models above, we chose one model, namely the Consecutive Model. The reason we chose it was that the Consecutive Models offered programs that were very focused on teacher training. It also produces graduates who have become experts in their fields [14]. Their recommendation is that research for the future i must consider three fields - theory, values, and the art of applied empirical research. Juha, must concentrate their efforts in areas where they are most skilled [16].

Based on the previous description, then this paper discusses validity, practicality and effectiveness from implementation of the Consecutive Model for vocational teacher in SMK at Kota Bengkulu.

2. Methods

This research is the development of a virtual online training model. We developed this model including syntax, social systems, reaction principles, support systems and the impact of education and training. In the implementation, we test the validity, practicality and effectiveness of the model of training. Validity is determined through the justification of three experts. Practices are determined by experts and field application tests. The effectiveness of the education and training model is carried out through training participants' performance tests. The participants of this training are 50 teachers of the Vocational School
in Kota Bengkulu. Data collection was carried out using a validity sheet instruments, practicality sheets, and training participants' performance tests. Data were analyzed using mean and percentage.

3. Result and Discussions

Based on the results of the validation of the three validators above on the virtual online training model, and the training tool for vocational teachers as one of the supporting systems for the virtual online training model, it was found that the developed virtual online training model was very valid with an average score of 4.37 (maximum score 5).

Furthermore, the practicality test aims to determine whether the developed training model is practical. Practical criteria are experts and practitioners giving an assessment that a training model developed can be applied. Also, the realization of the implementation of the education and training model in the classroom shows that the developed training model can be applied. To determine the practicality of the learning model developed, the practicality test was carried out through an assessment: (1) the feasibility of the application of a virtual online training model (MD-DV) by users; (2) observation of MD-DV implementation. The results show that the average score of the assessment of the feasibility of applying MD-DV by experts is 4.42 with a very practical category. Users also gave an assessment that the virtual online training model (MD-DV) was very feasible to be applied with a mean practical assessment score of 4.53. This assessment shows that MD-DV is very feasible to be applied in vocational teacher training.

The application of a virtual online training model is very practical. The same thing happened in the implementation of the trial found that the implementation of the Exercise Sheet was 91.50%; the implementation of the training participants' activities was 85.65%. The steps in the model can be implemented very practically at 83.50%. The implementation of the Training Implementation Plan for Vocational Teachers can be carried out very practically at 81.50%. This means that the implementation of the training participants' activities is very practical. Therefore, MD-DV is very feasible to be applied in vocational teacher education and training in Bengkulu Vocational School. The results of the implementation show that the average implementation of MD-DV for vocational school teachers in Bengkulu is very practical. In detail the practicality of MD-DV is that 85.70% of the syntax is implemented; amounting to 84.85% of the Social System implemented; amounting to 87.23% The Reaction Principle runs very practically; amounting to 85.75% Supporting System implemented; and 85.90% of the Impact of Training for Vocational Teachers is very practical. Thus, it can be concluded that all components of MD-DV are carried out very well in a very practical category, which means that MD-DV is implemented very practically.

The effectiveness of MD-DV was obtained from the performance test of Bengkulu Vocational Training participants. The data of the training participants' performance tests through the implementation of MD-DV are scores of 15.75% of poor categories, good categories of 53.50%, and very good category scores of 30.75%. This shows that there are 84.25% of the training participants with good and very good performance. It also means that MD-DV is an effective training model. The results of this study indicate that MD-DV is a valid, practical and effective training model to improve the performance of vocational teachers.

These results support previous research, such as [17] knowledge, skills and attitudes, are the most important criteria of employees to work efficiently at any institution. This is the most significant asset in the organization's human resources in achieving competitive advantage. Therefore, training helps employees to get a clear view of their work. Training can develop knowledge and skills and help employees better understand the information provided. Effective training programs are considered successful in achieving organizational goals.

Therefore according to Topno [18], in an effort to improve employee competence through training, it is necessary to evaluate training and sustainable development. Therefore, an evaluation of the training and development process on the performance and behavior of the training participants continues, so that an effective training model is produced [19].
4. Conclusion

The conclusion of this study is that MD-DV is a valid, practical and effective training model to improve the performance of vocational teachers. Thus it is suggested that to improve employee performance, MD-DV training is needed.

5. References

[1] Marjon and K. U. Z. Nugroho, “The Competence of Bengkulu City Junior High School Based on Academic Qualification and Gender,” Semin. Adv. Math. Sci. Eng. Elem. Sch. Mercur. Hotel Yogyakarta, 16 August 2018 Website http://samses2018.upiconf.org, no. August, 2018.

[2] D. Herawaty, “Profil Kompetensi Guru Matematika Jenjang SMP di Kota Bengkulu,” J. Penelit. Pendidik. Mat. dan Sains, vol. 22, no. 1, pp. 77–83, 2015.

[3] J. Susnaini and S. A. Gusri, “The Effect of Emotional Intelligence , and Self Efficacy toward The Job Performance,” Semin. Adv. Math. Sci. Eng. Elem. Sch. Mercur. Hotel Yogyakarta, 16 August 2018 Website http://samses2018.upiconf.org, no. August, pp. 6–9, 2018.

[4] A. I. Hidayat and U. S. Sa’ud, “Model Pendidikan Dan Pelatihan Berbasis Kompetensi Bagi Widyaiswaraw Muda,” J. Adm. Pendidik., vol. xxii, no. 2, pp. 23–38, 2015.

[5] R. Susilana and H. Asep Hery, “Pengembangan Model Pendidikan Dan Pelatihan Guru Sekolah Dasar Berbasis Bahan Ajar Modular Melalui Dualmode System,” 2014.

[6] Gog Soon Joo and S. J. Feng, “The Kirkpatrick Model: The end is the beginning,” Ski. Futur. SG, no. March, 2017.

[7] D. L. Kirkpatrick, “Kirkpatrick ’ s learning and training evaluation theory,” http://www.businessballs.com/kirkpatricklearningevaluationmodel.htm, pp. 1–9, 2013.

[8] A. Bailey, “The Kirkpatrick / Phillips model for evaluating human resource development and training,” Learn. Des. Online, pp. 1–3, 2005.

[9] E. Winfrey, “Kirkpatrick’s four levels of evaluation,” Encycl. Educ. Technol., pp. 1–6, 1999.

[10] D. L. Kirkpatrick, “Donald L Kirkpatrick ’ s training evaluation model - the four levels of learning evaluation,” ilm Approv. Cent., pp. 1–6, 1994.

[11] D. L. Kirkpatrick and J. D. Kirkpatrick, “Evaluating: part of a ten-step process,” Berrett-Koehler Publ. Eval. Train. programs, pp. 3–20, 2009.

[12] S. Majumdar, “Technical and Vocational Education The Role of Teacher Training in and Training (TVET) in Africa,” iiCBA, vol. 13, no. 2, pp. 3–6, 2011.

[13] Haaga-Helia, “Vocational Teacher Development Programme HANDBOOK 2018-2019,” Helsinki: http://www.haaga-helia.fi, 2018.

[14] F. Bünning and A. Shilela, The Bologna Declaration and Emerging Models of TVET Teacher Training in Germany. 2006.

[15] P. Grollmann, “The quality of vocational teachers: Teacher education, institutional roles and professional reality,” Eur. Educ. Res. J., vol. 7, no. 4, pp. 535–547, 2008.

[16] R. Kiely, “A transformative learning model for service-learning: A longitudinal case study,” Michigan J. Serv. Learn., vol. 12, no. 1, pp. 5–22, 2005.

[17] M. R. Karim, K. N. Huda, and R. S. Khan, “Significance of Training and Post Training Evaluation for Employee Effectiveness: An Empirical Study on Sainsbury’s Supermarket Ltd, UK,” Int. J. Bus. Manag., vol. 7, no. 18, pp. 141–148, 2012.

[18] H. Topno, “Evaluation of training for development. Participatory evaluation: a case
study,” *IOSR J. Bus. Manag.*, vol. 5, no. 2, p. 6, 2012.

[19] K. Alvarez, E. Salas, and C. M. Garofano, “An Integrated Model of Training Evaluation and Effectiveness,” *Hum. Resour. Dev. Rev.*, vol. 3, no. 4, pp. 385–416, 2004.