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Research Article

Develop of Training Based on the Competency Model for the Adiwiyata School Team

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Abstract

This research was motivated by the absence of valid, practical, and effective guidelines and training tools for the Adiwiyata Team in the implementation of the Movement Environment Care and Culture (MECC) in the schools. The objectives of the research were to analyze the training of the School Adiwiyata Team in the current implementation of the MECC, and to determine the validity, practicality, and effectiveness of the school Adiwiyata team training model in the implementation of the MECC. The method used is Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model. The results of the development are in the form of products, namely 1) Competency-Based training model book which is proven to be valid with a value of 0.88 (Very High); 2) Trainer's handbook is proven valid with a value of 0.85 (Very High) and participant's book is proven valid with value 0.93 (Very High). It is known that this competency-based training model is proven to be practical with an average value of $K = 0.86$ (Very High) and is proven to significantly improve the competence of the Adiwyata School Team with a sig value of $0.00 < 0.05$. It was concluded that the developed model proved to be valid, practical, and effective. The research results imply that the competency-based training model can be applied in the MECC training for the Adiwiyata school team. It is recommended that 1) the MECC guidance team at the central and provincial levels socialize the competency-based training model to the Adiwiyata school team; and 2) the Implementation of competency-based training is carried out according to the references in the model book.

Keyword: Training, Competency, School, Adiwiyata, Padang.

Adiwiyata Okul Takımı için Yetkinlik Modeline Dayalı Eğitim Geliştirme

Öz

Bu araştırma, okullarda Hareket Çevre Bakımı ve Kültürü'nün (MECC) uygulanmasında Adiwiyata Ekibi için geçerli, pratik ve etkili kılavuzların ve eğitim araçlarının bulunmamasından kaynaklanmaktadır. Araştırmanın amaçları, MECC'nin mevcut uygulamasında Okul Adiwiyata Ekibinin eğitimini analiz etmek ve MECC'nin uygulanmasında okul Adiwiyata ekibi eğitim

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modelinin geçerliliğini, uygulanabilirliğini ve etkinliğini belirlemekti. Kullanılan yöntem Analiz, Tasarım, Geliştirme, Uygulama ve Değerlendirme (ADDIE) modelidir. Geliştirme sonuçları ürünler şeklindedir, yani 1) 0.88 (Çok Yüksek) değeri ile geçerliliği kanıtlanmış Yetkinlik Bazlı eğitim model kitabı; 2) Eğitmen el kitabının 0.85 (Çok Yüksek) değeri ile, katılımcı kitabının 0.93 (Çok Yüksek) değeri ile geçerliliği kanıtlanmıştır. Bu yetkinlik bazlı eğitim modelinin K = 0,86 (Çok Yüksek) ortalama değeri ile pratik olduğu ve 0,00 <0,05 sig değeri ile Adiwyata Okul Takımının yetkinliğini önemli ölçüde geliştirdiği kanıtlanmıştır. Geliştirilen modelin geçerli, pratik ve etkili olduğu sonucuna varılmıştır. Araştırma sonuçları, Adiwiyata okul takımı için MECC eğitiminde yetkinlik temelli eğitim modelinin uygulanabileceğini göstermektedir. 1) merkezi ve il düzeyindeki MECC rehberlik ekibinin yetkinlik temelli eğitim modelini Adiwiyata okul ekibine sosyalleştirmesi; ve 2) Yetkinlik bazlı eğitimin uygulanması model kitaptaki referanslara göre yapılır.

Anahtar Sözcükler*: Eğitim, Yetkinlik, Okul, Adiwiyata, Padang.*

Introduction

One of the efforts to prevent pollution and environmental damage at an early level is through environmental education and inculcating an attitude of caring and environmental culture in schools (Jannah et al, 2013). This effort was carried out with the Movement Environment Care and Culture (MECC) which was launched in 2019 (Tresnawati, 2020). In technically Prihartono et al (2019) explained MECC is a refinement of the Adiwiyata program which has been running since 2006. In fact, until now the implementation of the movement has not been optimal. As reported by Manobe (2021) the implementation of the Adiwiyata program has not been effective. In the city of Padang, the number of schools that have passed as Adiwiyata schools is still minimal, wherein in 2018 only three (3) schools were declared to have passed the proposed 18 schools.

The results of literature studies and observations that have been carried out show that this movement is not optimal, one of which is because the Adiwiyata school team does not have the expected competence. The Adiwiyata school team is a pioneer and mover and implementer of every stage of activity. The competency of the Adiwiyata school team is related to the training received. So far, the Adiwiyata school team training is only conducted once a year. In addition, the training carried out does not have standard guidelines and materials, making it difficult for the training process and understanding of the training participants themselves.

Nada et al (2020) stated that MECC was born to preserve the quality of the environment through schools. And then Syah & Edinov (2019) stated increasing students' understanding of the environment will affect clean and healthy living behavior in their life. The long-term impact of MECC is the creation of a generation that cares and is environmentally cultured in the concept of sustainable development. Improving the human resources of the School Adiwiyata Team is one of the internal factors in the formulation of strategies to improve the implementation of the Adiwiyata program for the future (Prihartono et al., 2019). Pribadi & Benni (2020) added that increasing human resources can be done through planned and systematic and measurable training activities which in turn will increase the competence of trainees in carrying out their work duties and responsibilities. Competence is important in predicting work. Something more valuable than academic intelligence. Something is a factor that distinguishes someone who can show optimal performance from someone who is not able to show optimal performance (McClelland, 2009).

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The general aim of the research is to develop a relevant and effective training model for the Adiwiyata school team in implementing the MECC. Specifically, the research objectives are 1) Analyzing the training of the Adiwiyata school team in the current implementation of the MECC; and 2) Determine the validity, practicality, and effectiveness of the Adiwiyata school team Training model in the implementation of the MECC.

Research methods

This research is a type of research and development with a Model Analysis, Design, Development, Implementation, and Evaluation (ADDIE) approach (Almomen et al., 2016). The data obtained from this study consisted of primary data, and secondary data. Qualitative data analysis was carried out for data obtained from interviews and literature studies. The qualitative data obtained were presented in tabulated forms, while the quantitative data were analyzed by calculating the Kappa moment coefficient for validity and practicality, and the independent t-test was used to see the effectiveness (Oktaviani et al., 2020).

Results

The results of the needs analysis on the implementation of the Adiwiyata school team training are 1) it requires the implementation of competency-based training; and 2) a competency-based training model is needed that has a model book, trainer manual book, and participant book. The detailed tabulation of this needs analysis is presented in Table 1 below.

Table 1
Results of needs analysis

No	Conditions of Training Implementation	Expected	Required	Follow up
1	Training is held twice a year	The school adiwiyata team has competence in accordance with their duties and responsibilities	Implementation of competency-based training model	A competency-based training model is needed for MECC
2	The Adiwiyata Builder team does not have a standard training model as a reference in carrying out the training for adiwiyata school team	The Adiwiyata builder team have a standard training model as a reference in carrying out the training for Adiwiyata school team in the school.	Competency-based training model is needed	It is necessary to develop a competency-based training model for Adiwiyata school team in the school

Source : Analyze result, 2021

The results of this analysis are therefore three (3) books were designed in the form of 1) a PBK training model book; 2) a trainer's manual and; 3) a participant book. The results of expert

validation of the three products according to the Kappa moment coefficient (K) are very high at 0.89. The details are presented in Table 2 below.

Table 2
Product validation results according to Kappa coefficient moment (K)

No	Product Development	K	Category
1	Book of model	0,88	Very High
2	Book of trainer's guide	0,85	Very High
3	Book of participant	0,93	Very High
	Average	0,89	Very High

Source : Analyze result, 2021

The results of the practicality of Kappa moments according to the Adiwiyata school team as many as 15 people were K = 0.84, according to the trainer as many as three (3) peoples K = 0.84 (very high) and according to expert observers as many as two (2) peoples K = 0.91 (very high). So the average value of K = 0.86 (very high) is shown in Table 3 below.

Table 3
Practical test results in Kappa coefficient moment (K)

Evaluator						Average K	Note
Adiwiyata school team (15 peoples)		Trainer (3 Peoples)		Expert Observer (2 Peoples)			
Value K	Note	Value K	Note	Value K	Note	0,86	Very High
0,84	Very high	0,84	Very high	0,91	Very high		

Source : Analyze result, 2021

The results of the effectiveness of the model were carried out by conducting a pre-test and post-test to the Adiwiyata school team of 30 peoples. The data obtained are presented in Table 4 below.

Table 4
Description of class data before and after

Data Processed		Before	After
N		30	30
	Valid	0	0
		56	82
	Missing	7,36	5, 96
		40,00	70,00
Mean		70,00	95,00
SD (Standard Deviation)		1680	2460
Minimum value			
Maximum value			
Summary			

Source : Analyze result, 2021

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Table 4 shows the distribution of the data from the pre-test and post-test results conducted on the Adiwiyata school team. It can be seen that there is no missing data and all valid data are 30. The total average value after the model is used is 82. This figure is higher than the average value before the model is used, which is = 56. The total value after using the model = 2,460. This figure is higher than before using the model, which was 1,680.

The normality test results obtained sig alpha $0.255 > 0.05$ in the class before and sig alpha $0.055 > 0.05$ in the class after. This means that the two classes are normally distributed. Homogeneity test results obtained sig alpha value $0.375 > 0.05$, which means the data is homogeneous.

The results of the independent t-test were obtained by Asymp. Sig $0.00 < 0.05$ for both groups. This means that there is a significant increase in the knowledge of the Adiwiyata school team after the training implementation.

Conclusions

It was concluded that the competency-based training model of the developed module proved valid, practical, and effective. The research results imply that the competency-based training model can be used or applied in MECC training for the Adiwiyata school team. This training model product provides a practical contribution, especially making it easier for the Adiwiyata school team to understand MECC. It is recommended 1) that the MECC guidance team at the central and provincial levels socialize the competency-based training model to the Adiwiyata school team; and 2) that the implementation of competency-based training is carried out according to the references in the model book, including using the instructions for trainers, in the trainer's book and the material in the participant's book.

Acknowledgments

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