# Developing an E-Module-Based Classroom Action Research Training Model

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| Article Info | Abstract |
|---|---|

The problem in this research is that the teachers have not carried out any independent action research to improve the learning quality and promotion. The purpose of this research is to analyze the actual model of classroom action research training for senior high school (SMA) teachers that have been carried out for years, to analyze the hypothetical model of an E-Module-based classroom action research training for high school teachers, and to analyze the final model of the E-Module-based classroom action research (CAR) training for SMA teachers. The method used in this study was research and development. The data were collected using interviews, documentation, observation, questionnaire, and test. The research results indicate that the final model of the E-Module-based classroom action research training is highly effective. The results of the extended trial show that the E-Module-based classroom action research training is able to properly facilitate teachers to implement and write a CAR research report independently and easily. E-Module-based CAR training assists teachers in understanding the CAR. This is understandable because E-Module-based CAR can be accessed anywhere and anytime through the Internet. The conclusion of this research is that E-Module-based CAR training makes it easy for teachers to conduct classroom action research because participants can access the E-Module via the browser.

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**INTRODUCTION**

Classroom Action Research (CAR) is one way that can be used by teachers to understand the problems occurring in the classroom and to know how to do solve them. By conducting research, the actual problems faced by the teachers in the subjects they teach can immediately be solved in order to correct or improve the instructional practices that are less successful in for better and more effective condition.

According to Asrori (2007: 6), classroom action research is defined as a form of research that is reflective to perform certain actions to improve and enhance classroom practices to become more qualified so that students can obtain good learning outcomes. According to Hamdani (2011: 326), classroom action research is essentially a scientific activity that is able to reflect learning activities in the classroom through scientific research that can be accounted to the procedures and requirements which can be conducted without reducing the teachers' attention to the classroom and the students' achievement. Furthermore, the Agung (2012: 64) says that classroom action research is a form of research conducted by educators; it is a type of research that aims to give teachers the opportunity to resolve the problems of teaching and beyond in the classroom carefully, systematically, and using the applicable rules.

For the purposes of learning implementation, through the relevant educational institutions, the government has to equip teachers with the CAR training to improve the learning quality.

Training is learning that is set to improve the current learning performance. According to the concept of the state administrative agencies, training is more emphasized in the process of improving the ability of an individual in carrying out their duties (Admodiwirio, 2002: 35). According to Nadler (1982), training is a learning process that is prepared to improve the performance of a job in hand. Nadler emphasizes on human resource development. Meanwhile, according to Rothwell (2003: 352), training is an organized learning activity aimed at improving the individual performance through changes in knowledge, skills, or attitudes. In a broad sense, training intends to fulfill the essential job requirements, update skills, prepare people to improve their career, improve their knowledge and skills, as well as generate new insight or even create new knowledge.

According to Sulistiyani (2009: 219), the purpose of research is the systematic process of changing the behavior of the employees to a direction to improve their organizational goals. According to Mendoza (2009: 2), the purpose of training in working situations is to enable individuals to acquire the skills (competencies) so that they are able to perform given tasks or jobs adequately.

Furthermore, according to Meldona (2009: 238), the benefits of training are (1) to assist in the development of an individual's skills; (2) to help improve the efficiency, effectiveness, productivity, and quality of work; (3) to meet the personal needs of the participants; (4) to improve working knowledge and expertise at all levels; (5) to transfer new knowledge and science.

Through such training, teachers are expected to master good skills in implementing learning in the classroom. CAR training for the teacher should have been able to provide competence to teachers in applying CAR independently and implementing learning well.

In fact, there are many teachers who have not implemented CAR independently to improve the quality of learning and for the teachers' promotion. Based on the preliminary observations, it was illustrated that the teacher's competence in understanding the CAR was still low. There are various possible causes for the low learning process conducted by the teacher. The possibilities include (1) lack of the teachers' competence in the areas of classroom action research; (2) teachers' poor understanding of the benefits of the classroom action research; (3) lack of teachers' competence in classroom action research; (4) lack of Classroom Action Research products produced by the teachers; (5) only a

few number of teachers to be promoted within the last 3 years.

In improving the quality of teaching and learning processes in schools, it takes a teacher's ability to perform CAR. Classroom action research is research that teachers conduct to analyze the potential and weaknesses of the learning process. Ironically, the motivation of many high school teachers in Brebes to conduct classroom action research is still weak. This is due to ignorance of the teachers in conducting the research.

The lack of the teacher's true understanding of Classroom Action Research necessitates a CAR training model that is able to provide a direct and real experience that is not only emphasized on the theoretical aspects alone but also provides the opportunity for the teachers to master the applicable competence that will form competent and professional teachers. Therefore, it is necessary to develop a technique of solving the problem in the form of an e-Module-based classroom action research training model, so that the professionalism of the senior high school teachers in Brebes can be improved and their promotion can be given regularly.

The problem in this research is how is the actual model of the Classroom Action Research Training that has been organized for the senior high school teachers; how to design a hypothetical e-Module-Based classroom action research training model for high school teachers; how is the final e-Module-Based classroom action research training model for the high school teachers.

The purposes of this study are to analyze the models of the actual classroom action research training model that have been implemented over the years by the high school teachers; to analyze the hypothetical e-Module-Based classroom action research training model for the high school teachers; to analyze the final e-Module-Based classroom action research training model for the senior high school teachers.

The e-Module-Based classroom action research training is part of efforts to facilitate the teachers to improve the quality of learning and develop writing CAR proposals and reports easily and independently. The e-Module-Based classroom action research training model will provide convenience for the teachers in preparing CAR proposal and report. The teachers will have the knowledge and skills in preparing CAR proposal and report. The teachers will also have a positive attitude (motivation) to implement innovation in teaching. Therefore, e-Module-Based classroom action research training is a training model that is highly effective in effectively facilitating the teachers in preparing CAR proposal and report. This is in accordance with the opinion of Sharma (2013: 16) stating that the effectiveness of the training is the extent to which participants are able to learn and apply knowledge and skills acquired during the program. This is influenced by attitudes, interests, values and expectations of the trainees and the training environment. The advantages of the online learning resources as learning media have been demonstrated convincingly by several studies. Research conducted by Alomari (2009) showed that the learning that is based on online learning resources is capable of supporting the students' ability to gather information as a source of learning materials. Therefore, the use of online learning resources and is not only beneficial in interactivity and accessibility but can also enhance the independence of the students in actively learning. Arani (2004) reported the results of his research that the use of online learning resources is more effective than traditional methods to deliver a lecture in front of the classroom. The development of the e-book technology has encouraged the combination of printing technology with computer technology in learning activities.

The results of this study are expected to provide benefits in the form of an e-Module-Based classroom action research training model for high school teachers that can be used as a reference material in similar studies in the future; to yield a product in the form of an E-Module that provides convenient facilities for the teachers preparing  CAR proposals and reports easily and independently; to produce training packages in the form of training

programs, training manuals, coaches' guidebooks, instructors' guide books, e-module training. Such training packages are expected to be a guide for the organization of training.

## METHODS

The approach used in this study was the Research and Development. Selection of Research and Development (R & D) design in this study was based on the purpose of the research that is to produce an E-Module-Based CAR training model. The development model of this study consists of four stages, namely (1) a preliminary study to obtain information on the CAR training model ever held, followed by an analysis of the strengths and weaknesses of the model; (2) the development of the E-Module-Based CAR training model; (3) the validation of the E-Module-Based CAR training model by experts and practitioners; (4) the assessment of the an E-Module-Based CAR training model.

The subject of this study was senior high school teachers in the District of Brebes. For the purposes of the FGD, this study involved 15 senior high school teachers in Brebes district. For the limited trial, ten SMA teachers from high schools in Brebes district were involved. For the extended trial, 25 teachers from various high schools in Brebes district took part in this study.

Interviews, questionnaires, documentation, testing and observation were employed as means of data collection techniques in this training. Therefore, the instruments used for collecting the research data were the questionnaires, documentation guide, test, and observation guide. In this study, quantitative descriptions were used for analyzing the data from the preliminary study. Analysis of qualitative descriptions was used for analyzing the data from the interviews, documentation, and the responses of the experts on the training model developed.

## RESULTS AND DISCUSSION

### Results

To be able to develop a training model according to the needs of trainees, it is necessary to analyze the quality of the training that has been followed and the analysis of the training needs teachers as the participants of the training. From a preliminary study on the quality of the available CAR training, information about the response of the teachers was obtained as follows: (1) there was 63.31% of design training; (2) 64.90% of training program; (3) 63.08% of existing teaching materials (4) 67.98% of training instructor; (5) 64.20% of training facilities.

Furthermore, it is necessary to develop an E-Module-Based CAR training model. The results of the preliminary study that aimed to uncover the teachers needs of CAR training show an average percentage of the teachers' responses as follows: (l) 89.07% of training design; (2) 86.79% of training program; (3) 86.86% of training material; (4) 88.78% of instructor; (5) 86.80% f facilities. From the factual CAR training model that has been held so far it was discovered that the participants did not have sufficient competence to prepare CAR proposals and reports independently. The findings of the preliminary study can be seen in Figure 1.
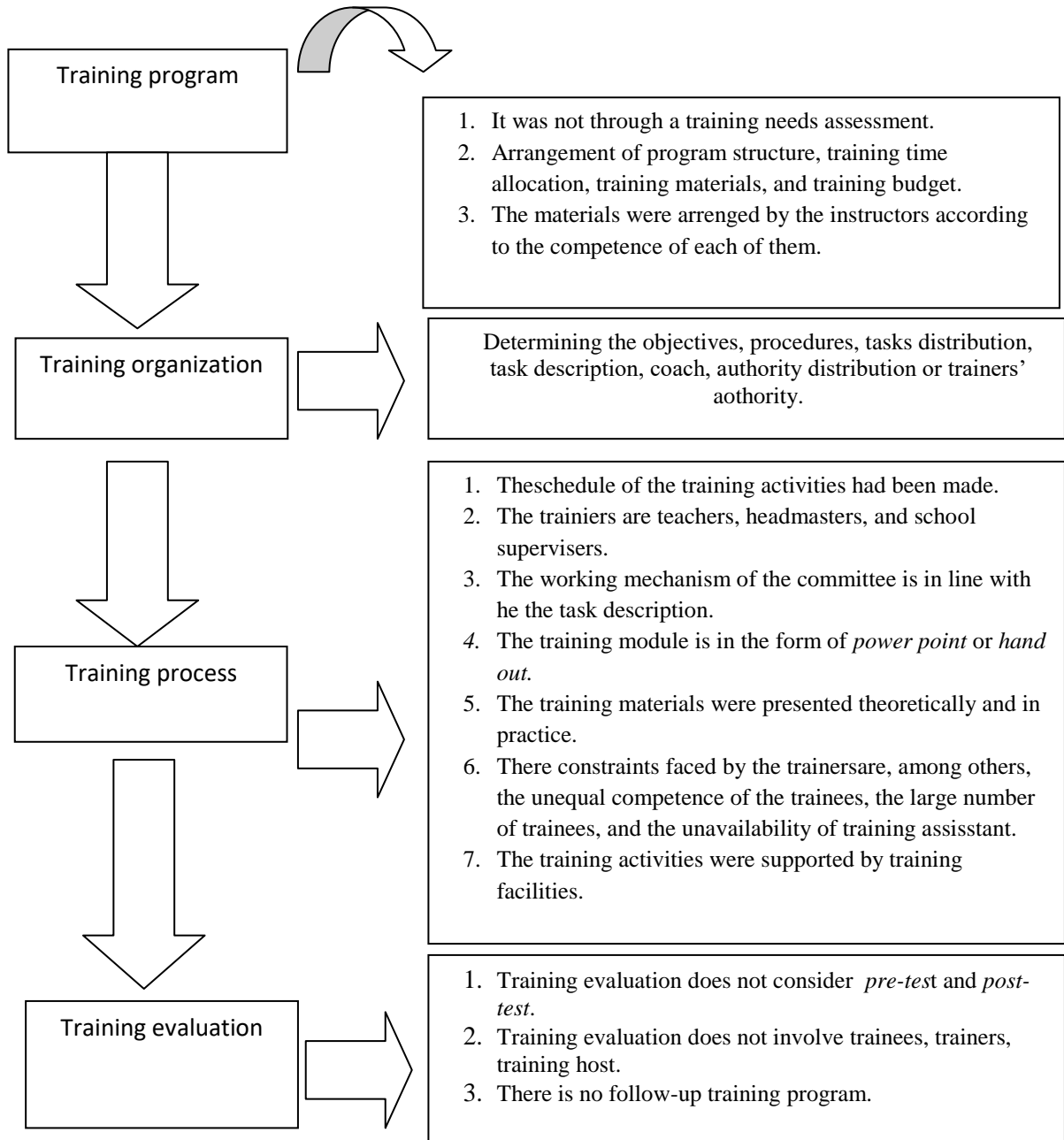
**Figure 1.** Scheme of the actual CAR training model

Considering the results of the field studies and the results of the teachers' responses to both the quality of the training ever performed and the training needs, it is necessary to develop an E-Module-Based training model by designing a hypothetical model. The development of the hypothetical E-Module-Based training model consists of three major parts: (1) the introduction; (2) the E-Module-Based training model design; (3) the concluding section. The hypothetical E-Module-Based training model can be seen in Figure 2.

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┌─────────────────────┐        ┌──────────────────────────────────────────┐
│  Training Analysis  │──┐  ┌─→│ 1. Training Quality Analysis               │
└─────────────────────┘  │  │  │ 2. Training Needs Analysis                 │
         │               └──┘  └──────────────────────────────────────────┘
         ↓
┌─────────────────────┐        ┌──────────────────────────────────────────┐
│Training Program     │───────→│ Formulating introduction including (1)     │
│Design               │        │ background, (2) Training objectives, and   │
└─────────────────────┘        │ (3) Competence to be achieved              │
         │                     └──────────────────────────────────────────┘
         │
         │   ┌───────────────────────────┐   ┌──────────────────────────────────┐
         │   │ Designing training        │   │ Designing training implementation,│
         │   │ evaluation and follow-up, │←──│ including the design of (1)        │
         │   │ including (1) Evaluation  │   │ implementation strategies, (2)     │
         │   │ Objectives and (2)        │   │ Program Structure, (3) Materials,  │
         │   │ Follow-up Program         │   │ (4) training approaches, (5)       │
         │   └───────────────────────────┘   │ Training Process, (6) time and     │
         │                                   │ venue, (7) target, (8) resources,  │
         │                                   │ (9) Committee, (10) facilities,    │
         │                                   │ (11) training schedule             │
         ↓                                   └──────────────────────────────────┘
┌─────────────────────┐        ┌──────────────────────────────────────────┐
│Training Development │───────→│ Preparation of training packages:          │
└─────────────────────┘        │ 1. Training program book                   │
         │                     │ 2. Training guidebook                      │
         │                     │ 3. Instructor's guidebook                  │
         │                     │ 4. Training E-Module                       │
         ↓                     └──────────────────────────────────────────┘
┌─────────────────────┐        ┌──────────────────────────────────────────┐
│Training             │───────→│ Training Implementation:                   │
│implementation       │        │ 1. E-Module-Based CAR Training (theory and │
└─────────────────────┘        │    practice) for 3 days                    │
         │                     └──────────────────────────────────────────┘
         ↓
┌─────────────────────┐        ┌──────────────────────────────────────────┐
│Training Evaluation  │───────→│ 1. Assessment of trainne, trainer,         │
└─────────────────────┘        │    committee                               │
         │                     │ 2. Follow-up program                       │
         │                     └──────────────────────────────────────────┘
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┌──────────────────────────────────────────────────────────┐
│ Hypothetical model of the e-module-based CAR training     │
└──────────────────────────────────────────────────────────┘
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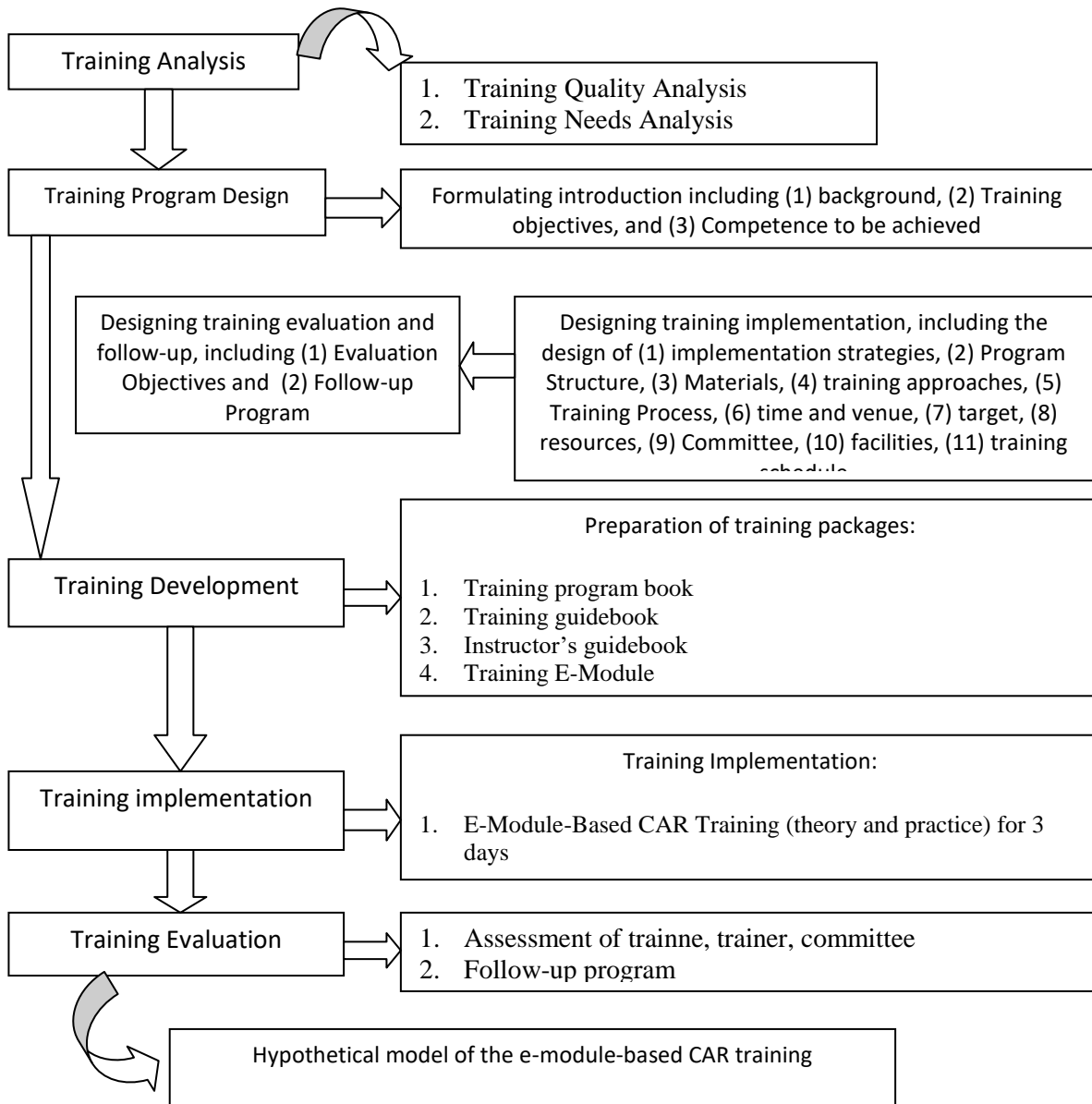
**Figure 2.** Scheme of the Hypothetical E-Module-Based CAR training model

In order to produce the final training model as expected, a test on the hypothetical model was administered. The trial of the hypothetical model was conducted in a limited field in the form of training model implementation for high school teachers. The limited trial began with a test in a small group. The result of the test was an average percentage of responses to the E-Module-Based CAR development by 86.53%. The average value of the response was 86.53%. This implies that the development of the E-Module-Based CAR training model is very good. The mean percentage was derived from the responses to the aspect of page layout by 88.50%, of the introduction by 84.17%, of the aspects of the core module by 85%, of the closing by 85%, and of the references by 90%.

The trial of the E-Module-Based CAR training model in the small group it also provided inputs on an alternative answer to the exercise is expected to be amended so that wrong answers could be corrected or replaced with other alternative answers. The e-module includes instructions for use, along with videos for learning and proposal examples. Such inputs

were accommodated by making improvements to the E-Module-Based CAR training model.

After going through the small group stage, the trial proceeded to an extended field test. The extended field test intends to determine the extent of the effectiveness of the E-Module-Based CAR training model under development. The effectiveness of the E-Module-Based CAR training model was indicated by the increase in teachers' knowledge, their skills in developing a CAR proposal, and their positive attitude towards the implementation of the E-Module-Based CAR training model.

As explained in the previous section, the extended field test was undertaken in the form of the E-Module-Based CAR training that is intended for high school teachers in the District of Brebes. The implementation of the E-Module-Based CAR training model was attended by 25 teachers. Teacher trainees came as representatives of various high schools in the District of Brebes, they were from state senior high schools. The training was held at SMAN 2 Brebes.

In implementing the E-Module-Based CAR training, the teachers were firstly briefed on how to install and use the E-Module by the existing guidance. After the briefing on how to install and use the E-module, the further training activities were practical guidance to teachers on how to prepare and implement a CAR based on the E-Module-Based CAR training model. The training activities were guided by an instructor in charge of it in the classroom by using an LCD projector. The training approach used was an interactive discussion that created the training in a conducive environment.

In order to know the effectiveness of the E-Module-Based CAR training model, pre-test and post-test for the trainees were administered. For the pre-test and post-test purposes, 25 test items were prepared. Data obtained from the two tests were then analyzed with the SPSS-I6 program. Meanwhile, the data on the teachers' skills and attitudes towards the implementation of the training and the training packages were analyzed with the help of the MS Office Excel 2010 program.

The mean average of the pre-test scores is 15.28 (61.12%). The highest score is 20 and the lowest score is 10. The number of participants who were able to achieve results above 50% is 21 participants and those whose achievement is above 75% are 3 teachers.

The average score of post test is 20.04 or 80.16% achievement. The highest score is 24 and the lowest score is 17. The number of participants obtaining scores above 50% is 25 participants and those whose achievement is above 75% are 17 people or 68% of all of the participants (25 teachers).

The result of the pre-test shows that the teachers' knowledge of classroom action research before training is generally good; the average achievement was 15.28 or 61.12%. However, not all participants could understand CAR well. Meanwhile, the post-test illustrated that there was an increase of the teachers' knowledge of the CAR. This is evident from the average scores achieved i.e. 20.04 participants or an average of 80.16% achievement. The post test results indicate that there is an increase in the teacher's knowledge of the E-Module-Based CAR training model.

In order to determine the effectiveness of the training model, the data on the pre-test and post-test were statistically analyzed using the t-test available in the SPSS.16 program. Before the t-test, the data were firstly tested for their homogeneity. Homogeneity test is intended to determine whether the obtained data are from homogeneous samples. By using the obtained results of the SPSS.I6 program it was discovered that the homogeneity test resulted in a significant value of 0.209. This value was is greater than the 5% significance level of 0.05. The result of the above analysis shows that the pre-test and post-test data are derived from homogeneous samples. Furthermore, the t-test available in the SPSS.l6 program was employed.

By using the SPSS program, the t-test resulted in the followings: (l) Comparing the pre-test and post-test scores it was generally found that the mean of the test scores increased, from 15.28 becomes 20.04. It implies an increase of competencies achieved by trainees after they attended the training using the E-Module-based

CAR training model; (2) the standard deviations showing the heterogeneity of the data before and after training are 2.76164 and 2.05102 respectively; (3) the standard error of the mean before and after training was 0.55233 and 0.41020 respectively. The standard error of the mean describes the ratio of the sample means to the average of all possible samples.

The t-test with paired samples correlations models results in the significant value of 0.00 and a correlation value of 0.675. Analysis with paired samples correlations is an analysis that intends to show whether there is a relation between the mean value of pretest and that of post-test for the teachers. The result of the t-test model of the paired samples correlations shows that the significant value is smaller than $\alpha$, i.e. a significant value of (0000) $<\alpha$ (0.05). It can be concluded that there is a significant relation of the teachers' competence before and after the training. The strength of the correlation can also be considered from the value of 0.675 which indicates that the pre-test and post-test data strongly correlate to one another.

The results of the t-test illustrate that the training presented to the teachers with the E-Module-Based training model provides a significant effect in improving the competence of the teachers in implementing the CAR. This illustrates that the E-Module-Based training model is a training model that fits the needs of the teachers in implementing the CAR and preparing its the report.

The t-test with a paired sample for means model results in the t-value of -11.627 and significant value of 0000. The T-test model with paired samples for means intends to determine whether there are differences between the data derived from the pre-test and the corresponding data derived from the post-test. For that purpose, the results of the t-test were compared with t-table values. The T-table was obtained from pursuing the number of participants (25) and in the t-table resulting the t-table value of 2.064. By comparing the statistical value and t-table value it is seen that t-stat <t-table. It also appears in the sig-stat that there is a significant difference between the pre-test and the post-test values and the trainees.

The significant difference between the pre-test and post-test scores in the E-Module-Based training indicates that the E-Module-Based training model is capable of improving the knowledge of teachers in implementing the CAR and preparing its report. By looking at means differences between the pre-test and post-test scores, it can be inferred that the E-Module-Based training model provides great impact for the improvement of the teachers' competence in understanding the CAR.

The results of the observation show that most of the trainees already have the skills in preparing CAR proposals. The capability achieved by the participants is a result of the implementation of E-Module-Based training model. Therefore, the E-Module-Based training model is very effective to provide knowledge and skills to the teachers in developing a CAR proposal and implementing the CAR.

These results are in line with Sharma's opinion stating that the effectiveness of training is the extent to which the participants are able to learn and apply knowledge and skills acquired during the training program. The improvement of the teachers' knowledge and skills in preparing the CAR proposals is expected to have an impact on teachers' profession so as to manage an active and interactive learning as well as capable of guiding the learners to achieve optimal success.

This is in line with the opinion of Orlich stating that the function of the teachers' profession in teaching is largely determined by the attitude the teachers' performance on their learners where they could actively interact or not. The highest level of the teachers' profession is deliberately creating and placing top priority on the success of the learners.

**Discussion**

The results of the extended trial show that the E-Module-Based CAR training model is able to properly facilitate teachers to implement a CAR and write its report independently and easily. The E-Module-Based CAR training model assists teachers in understanding the CAR.

The results of this study which illustrate the effectiveness of the E-Module-Based CAR training model is very important. The model will be able to assist teachers in preparing CAR proposal and report. It is certainly very significant given that most teachers have not had adequate ability to develop CAR proposals and reports inhibiting the teachers in improving the learning quality.

The high effectiveness of the E-Module-Based CAR training model which is reflected in the high percentage of the teachers' achievement of in preparing CAR proposals and the difference in means between the pre and post-test is because of the E-Module-Based CAR training model that is able to bridge the gap between the needs of the teachers and their limited ability in implementing CAR. In this case, the teachers are facilitated in independently preparing the CAR report that is E-Module-Based.

The observation of the participants' attitude illustrates that they strongly agree with the development of the E-Module-Based CAR training model. It could also be understood that the E-Module-Based CAR training model has been able to facilitate teachers in implementing CAR so that they are able to write a CAR report independently and easily. The high percentage of the trainees' attitude in responding to training model also illustrates that the developed E-Module-Based CAR training model is in accordance with the needs of the teachers.

These results are in line with the opinion of Sharma stating that the effectiveness of the training is influenced by attitudes, interests, values, and expectations of the trainees and the training environments. It is likely that the training program will be more effective if the participants have a strong desire to learn, engage optimally in their work, and have a career plan.

Based on the results of the analysis and discussion of the pre-test and post-test values, the analysis of the observation results of the trainees' skills, and the results of the observation concerning the teachers' attitude towards the implementation of the training, it can be concluded that the E-Module-Based CAR training model has a very high level of effectiveness. In other words, the E-Module-Based CAR training model is very effective to provide skills for teachers in preparing CAR reports independently.

The magnitude of the effectiveness of the E-Module-Based CAR training model is also reflected from the participants' responses to the implementation of the general training which is a mean percentage of 88.40% that is predicated as very good. The participants' responses came from their responses to the aspects of the training model development by 88%, to the aspects of training administration by 87%, to the trainers by 87.10%, and to such training support as facilities and consumption by 88.40%.

The teachers' positive response to the development of the E-Module-Based CAR training model indicates that the training program is developed according to the needs of the teachers. The E-Module-Based CAR training model was designed for the practical activities of preparing CAR proposals spending 80% of the total time allocation available for the training. The E-Module-Based CAR training model is supported with training packages in the form of training guide books. The implementation the E-Module-Based CAR training model for senior high school teachers is in line with the design, i.e. 80% of the time allocation is in the form of practices on the preparation of CAR proposals.

The high percentage of the participants' responses to the implementation of the training in general suggests that the theme of the training is in line with the training program, the suitability of the E-Module-Based CAR training model in support of the teacher's task, the timely implementation of the training, the training atmosphere that is supportive and comfortable, the organization of the training supported by completeness of the training materials (E-module), the positive attitude of the training organizers, and the availability of devices to support the training activities.

The participants' relatively high response to the trainers suggests that the trainers' content/substance training mastery is very good. The methods used by the trainers during the training are also very good. The techniques of presentation performed by the trainers were

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excellent. The availability of good interaction between the trainers and the participants has made the trainers be capable of managing the time very well. The trainers are able to improvise very well and can utilize the training devices very well.

Meanwhile, the high response of the teachers to the training facilities suggests that the training was held in a good room, with supporting sound system and completed with good training equipment and catering service.

During the trial of the products, besides validating the training model, the test also validated the training packages. This validation was in the form of teachers' feedback provided through questionnaires. The result of the teachers' responses to the training program is averagely 89%. It indicates that the initial part of the program is designed with interesting titles, containing a preface in accordance with the contents of the program, and lists the table of contents which corresponds to the contents of the program. The introductory part of the program is compatible with the description of the background and the training objectives. It contains a description of the conformity with the purpose of the training, and it is furnished with descriptions of the competence to be achieved during the training.

In the implementation part of the training, there is compatibility between parts of the text in explaining the strategy for implementing the training, the structure of training programs, the training materials, the training approach, the training process, the time and place of training, the training target, the training resource, the committees, the training facilities, and the training schedules. In the evaluation part, there is the suitability of the text that explains the purpose of the training evaluation and follow-up of the training program. In the conclusion, there is compatibility of the text presenting the summary of the training program.

Teachers' responses to the development of the participant's guidebooks provide information on the average percentage of 85.84% or qualified as very good. The high response of the teachers to the guide book suggests that the systematic development of the guidebooks is in accordance with the training program.

The teachers' responses to the development of training module provide information on the average of 85.84%, which means that it got very good feedback. This implies that the development of training manuals got a good response. This training module is arranged systematically as follows: (1) cover page, which is interesting, has a proportional size font, consistent format in writing the title, subtitles, and the subheadings in the entire document, is consistent in image placement and in the choice of font; (2) The introductory section includes description and explanation about the background of the E-Module preparation. It also contains description and explanation about the purpose of learning and structure of the training materials, (3) The core of the E-Module includes training materials in accordance with the purpose of the training, sequence of the training materials in accordance with the arrangement of the training materials, and summary of the learning objectives; (4) The bibliography is consistently written.

Trainees' responses to the E-Module provide information on average of 85.84%, which means that it very good feedback. The positive response indicates that the development of the CAR E-Module is in line with the needs of the training participants. The final form of the E-Module-Based training model is presented in Figure 3.
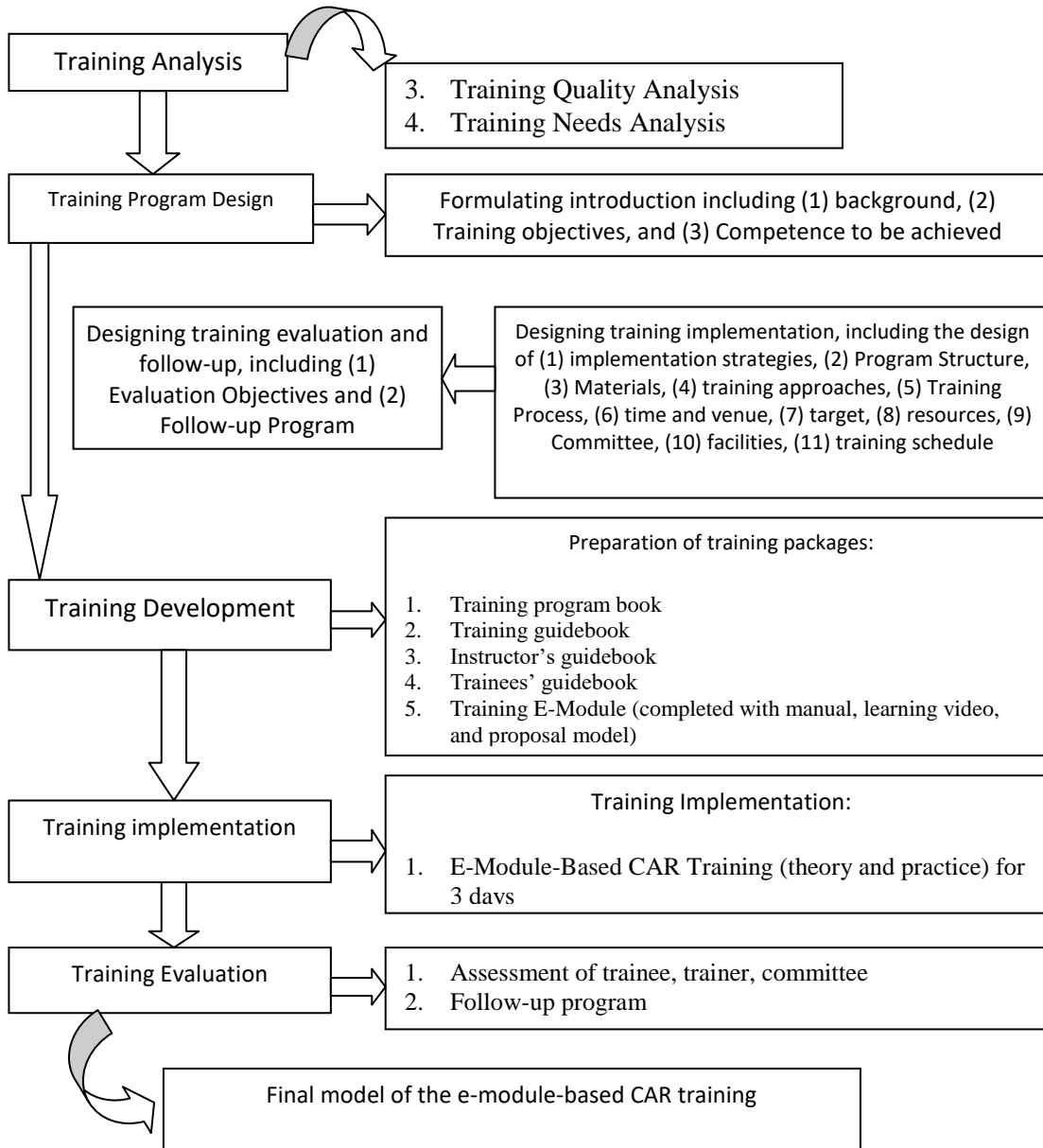
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┌─────────────────────┐      ┌─────────────────────────────────────────┐
│  Training Analysis  │      │  3.  Training Quality Analysis           │
└─────────────────────┘      │  4.  Training Needs Analysis             │
                             └─────────────────────────────────────────┘

┌─────────────────────┐      ┌─────────────────────────────────────────┐
│ Training Program    │─────▶│ Formulating introduction including (1)   │
│ Design              │      │ background, (2) Training objectives, and │
└─────────────────────┘      │ (3) Competence to be achieved            │
                             └─────────────────────────────────────────┘

   ┌──────────────────────────┐   ┌──────────────────────────────────────┐
   │ Designing training       │   │ Designing training implementation,   │
   │ evaluation and follow-up,│◀──│ including the design of (1)           │
   │ including (1) Evaluation │   │ implementation strategies, (2)        │
   │ Objectives and (2)       │   │ Program Structure, (3) Materials, (4) │
   │ Follow-up Program        │   │ training approaches, (5) Training     │
   └──────────────────────────┘   │ Process, (6) time and venue, (7)      │
                                  │ target, (8) resources, (9) Committee, │
                                  │ (10) facilities, (11) training        │
                                  │ schedule                              │
                                  └──────────────────────────────────────┘

┌─────────────────────┐      ┌─────────────────────────────────────────┐
│ Training            │      │      Preparation of training packages:  │
│ Development         │─────▶│ 1. Training program book                 │
└─────────────────────┘      │ 2. Training guidebook                    │
                             │ 3. Instructor's guidebook                │
                             │ 4. Trainees' guidebook                   │
                             │ 5. Training E-Module (completed with     │
                             │    manual, learning video, and proposal  │
                             │    model)                                │
                             └─────────────────────────────────────────┘

┌─────────────────────┐      ┌─────────────────────────────────────────┐
│ Training            │      │      Training Implementation:           │
│ implementation      │─────▶│ 1. E-Module-Based CAR Training (theory   │
└─────────────────────┘      │    and practice) for 3 days              │
                             └─────────────────────────────────────────┘

┌─────────────────────┐      ┌─────────────────────────────────────────┐
│ Training Evaluation │─────▶│ 1. Assessment of trainee, trainer,       │
└─────────────────────┘      │    committee                             │
                             │ 2. Follow-up program                     │
                             └─────────────────────────────────────────┘

          ┌─────────────────────────────────────────────┐
          │ Final model of the e-module-based CAR        │
          │ training                                     │
          └─────────────────────────────────────────────┘
```

**Figure 3.** Scheme of the E-Module-Based training model.

## CONCLUSION

The E-Module-Based training model was prepared in three phases: Introduction, E-Module-Based training model design, and conclusion. The E-Module-Based training model developed through the ADDIE management phases, i.e. Analysis of existing training models and analysis of training needs, Design of the E-Module-Based training model, Development of the E-Module-Based training model, Implementation of the E-Module-Based training model, and Evaluation of the E-Module-Based training model. The E-Module-Based training model proved to be highly effective.

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