

HYPOTHETICAL MODEL OF TRAINING MANAGEMENT FOR CHEMISTRY TEACHERS OF SENIOR HIGH SCHOOLS IN SEMARANG

Anang Budi Utomo¹, Joko Widodo², Supartono², Haryono²

¹Student of Doctorate Degree,

²Management of Education

Post-Graduate Department of Semarang State University

Email: anangbu@gmail.com

ABSTRACT

Good training management is expected to make teachers to be more competent. Training is also conducted for chemistry teachers in Semarang to make them more competent as well. However, the training management administered for high school chemistry teachers in Semarang is not done well. The training that has been done was not suitable for the teachers' needs. It is due to the pedagogic skills of the teachers which one of them is they do not provide interesting and meaningful chemistry learning for the students. Therefore, the development of a better training management is needed.

This study aims to analyze the factual model of the training management for high school chemistry teachers, to design training models, and to plan hypothetical models of training management for High school chemistry teachers in Semarang.

The results of this study show that the training administered was not managed well. In this training, analysis of needs of the high school chemistry teachers' was not conducted, so its relevance was considered low and the learning process was also less attractive and meaningful for the students. The training also did not provide evaluation, so the reaction and the impact of the training could not be assessed. Based on the factual model, the model was designed to find a hypothetical model namely the development of the training management model of Chemo-entrepreneurship (CEP) integrated soft skill learning for chemistry teachers in Semarang.

Keywords: training management, hypothetical model, Soft Skills, Chemo-entrepreneurship

INTRODUCTION

Teachers urgently need special assistance in training and developing their professional skills (Jones and Walters, 2008: 227). One of the programs that can help teachers to train and develop their skills is through a systematic training. This means that the training activities should be carried out continuously and repeatedly, and are also planned and managed well. With systematic training that is managed well, more qualified teachers will be resulted, and those qualified teachers will continue to develop knowledge to support their professional world (Rival & Pure, 2008: 49).

Training for teachers is necessary because learning program is a conceptual framework that depicts the regular and systematic procedures that serve as guidelines for the planning,

implementation, evaluation, and follow-up in the teaching and learning activities (Arghode et al., 2013; Winataputra, 2001: 3). It is a must for teachers as educators to create an atmosphere of meaningful, fun, creative, and dynamic education as well as providing dialogue session in classroom. Teacher is a decisive factor for the success of education in school. This is because teacher is the center and source of teaching and learning activities which is very influential in improving the quality of education in schools (Boyd 2015; Aqib, 2000: 46).

Improving the quality of education can use integrated learning which is the learning model that aims to make students accustomed to see things from different points of view, or to train students to think more systemically (Zhou, 2013). Integrated learning is an approach that aims to make learning more thorough, and this is the learning which is based on a holistic learning paradigm. This learning model is also the one that sees learning as a process to link and integrate teaching materials in one subject with all aspects of student development, students' needs, and students' interests, as well as the needs and demands of the family social environment. Integrated learning sees the importance of looking at bigger picture rather than merely grouping learning into small parts that are separated from each other (Kim and Cho, 2015).

The concept of soft skills in education is actually not a new concept. Previously, the concept of broad-based curriculum (BBC) which is interpreted as a competence based curriculum as abroad, has been presented with the aim of providing learners with skills needed by the community where they live. However, the competence meant by this curriculum is still limited to normative learning objectives only, and they are not applicable in the real life. In the process of Chemo-entrepreneurship (CEP) integrated soft skills learning, it requires the ability of teachers to implement integrated soft skills that are suitable with the subject as well as applicable to the real life, to the learning process.

The training of CEP integrated soft skills is considered to be very appropriate to be administered to chemistry teachers. Training model which is done can be adjusted to the needs of the trainees who have a clear conceptual and operational foundation. CEP integrated soft skill learning is a learning model that is able to integrate hard skills and soft skills in a balanced way. This includes when teachers determine, implement, and evaluate the learning designs (Schulz, 2008; Zhang, 2012; K., 2009; Chabalengula et al., 2012).

Based on the interview with the Chairman of the Chemistry Teacher Council (MGMP), of High School in Semarang, on January 29, 2014, it is known that there were 120 high school chemistry teachers in Semarang. The training that has been held for chemistry teachers was mostly about Curriculum Implementation. This means that the training only provided administrative material, and even it was less of materials related to how to develop learning materials which is essential for students. In addition, the training was not conducted in accordance with the need analysis.

The subjects of this study are, how is the factual model of the chemistry teacher training management carried out, how to design the models that are based on expectation, and how is the hypothetical development model of the training of Chemo-entrepreneurship integrated soft skill learning for high school chemistry teachers in Semarang done?

The aim of this study is to analyze the training management model of learning while the training is conducted, to make the model design, and to design a hypothetical model of training management development of Chemo-entrepreneurship integrated soft skill learning for high school chemistry teachers in Semarang.

METHOD OF THE STUDY

This study aims to thoroughly show the training management which is focused on the functions of management that includes planning, organizing, and controlling with the method used is case study. The approach used for this study is qualitative approach that is to deeply show the factual model of training management used currently, and to give solution of training management model suitable for chemistry teachers by making a design of conceptual model and planning hypothetical model of training management development of chemo-entrepreneurship (CEP) integrated soft skill learning for high school chemistry teachers in Semarang.

This development of training management model is conducted through two phases, based on McKenny (2001): (1) introductory study as needs and content analysis; and (2) model development as design, development, and evaluation. In detail, these research and development designs are as follows: (1) introductory study phases, including literature review, field study, and describing as well as analyzing the findings or models that are currently used, while the activities done are analyzing training management model which includes planning, organizing, implementing, and

evaluating in which those are what is administered to chemistry teachers and their media. It is also done by observing directly in the field of the study to observe the documents of training implementation and having discussions with the practitioners to dig some more information and any obstacle faced to seek for alternative problem solving, and the last, to describe and analyze the findings of the models. (2) developing phases, including: planning the design of training management model, planning the training media, conducting Focus Group Discussion (FGD), consulting to experts and practitioners, revising model, and planning hypothetical model.

RESULT AND DISCUSSION OF THE STUDY

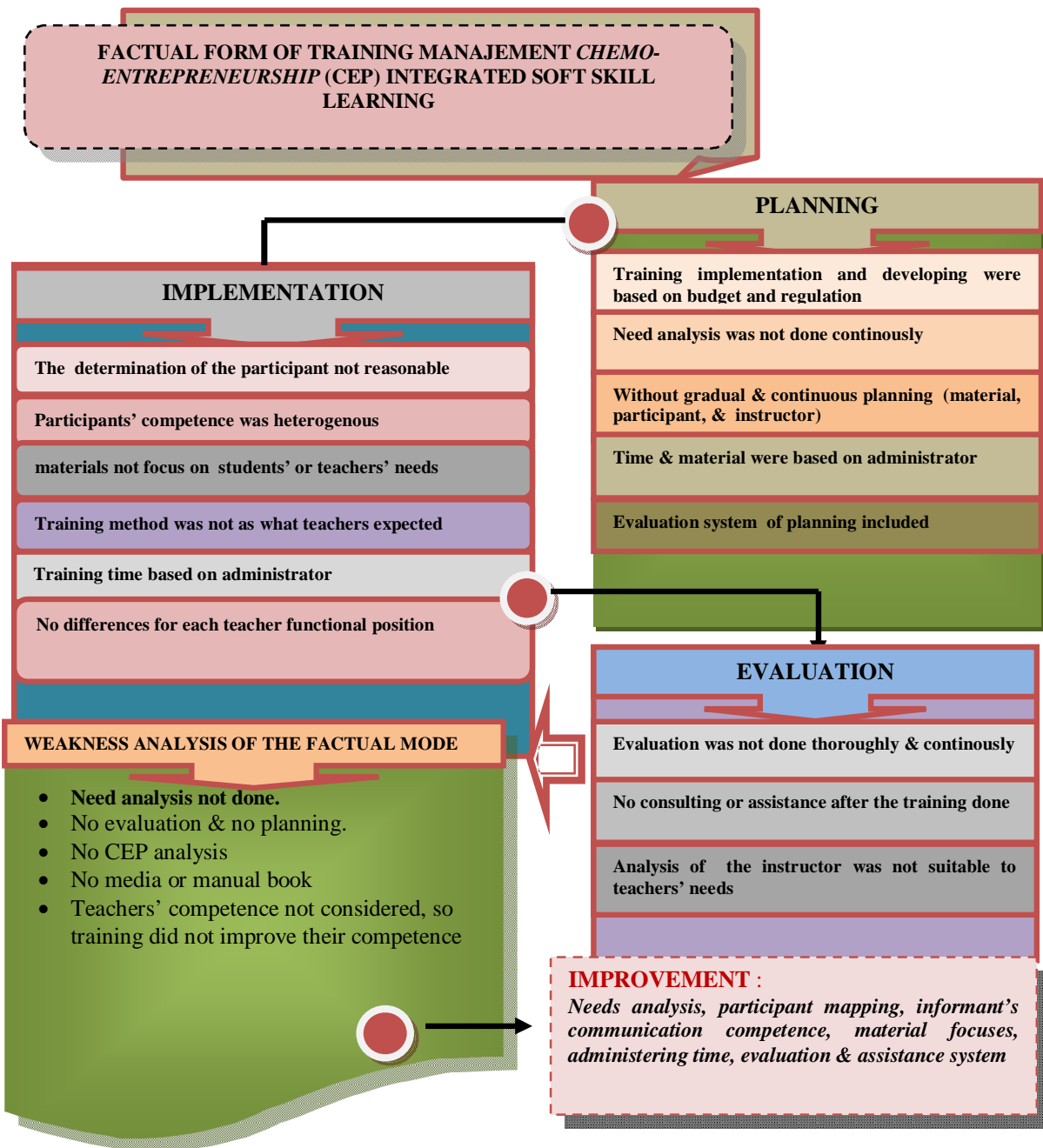
The design of the model that were used in this study implemented the approach of training management system. Generally, the components comprise three phases namely: planning, implementing, and controlling.

In phase of planning, it consists of: (1) determining training purposes; (2) determining the material and analysis of the training; (3) grouping trainee candidates by identifying their initial ability before the training; (4) formulating the purpose or result of the training that is about to be achieved.

The phases of implementing consist of: (1) determining a pre-test based on each training material in which the training results as its basis. (2) developing training materials; and (3) developing training strategies.

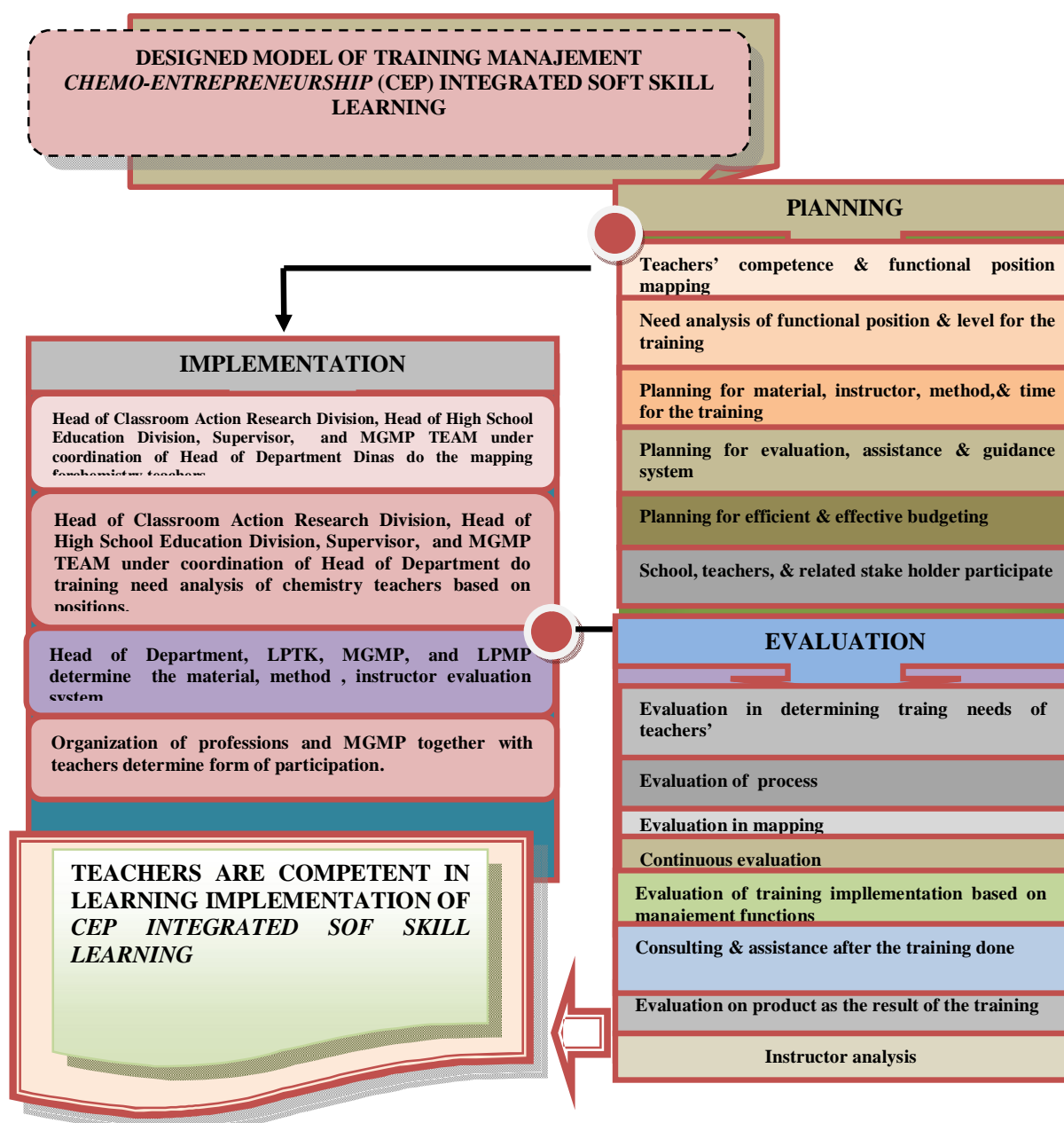
According to the data analysis which refers to training management system, it is obtained result and finding of the study as follows: In the first phase, planning does not require deep analysis of need, in fact it emphasizes the programs from the central government. Next, in this phase, the determination of the participant is not selective which includes the information about participants' initial ability before the training. The target of the training is not clearly explained as well as the result that has to be achieved by the participants. In this phase, the training materials are mostly based on the expectations of the administrator rather than based on the needs of the participants, in this case, high school chemistry teachers. In addition, in controlling, research is conducted without adequate evaluation or follow up assistance for the participants.

Here is the factual model of training management for chemistry teacher:

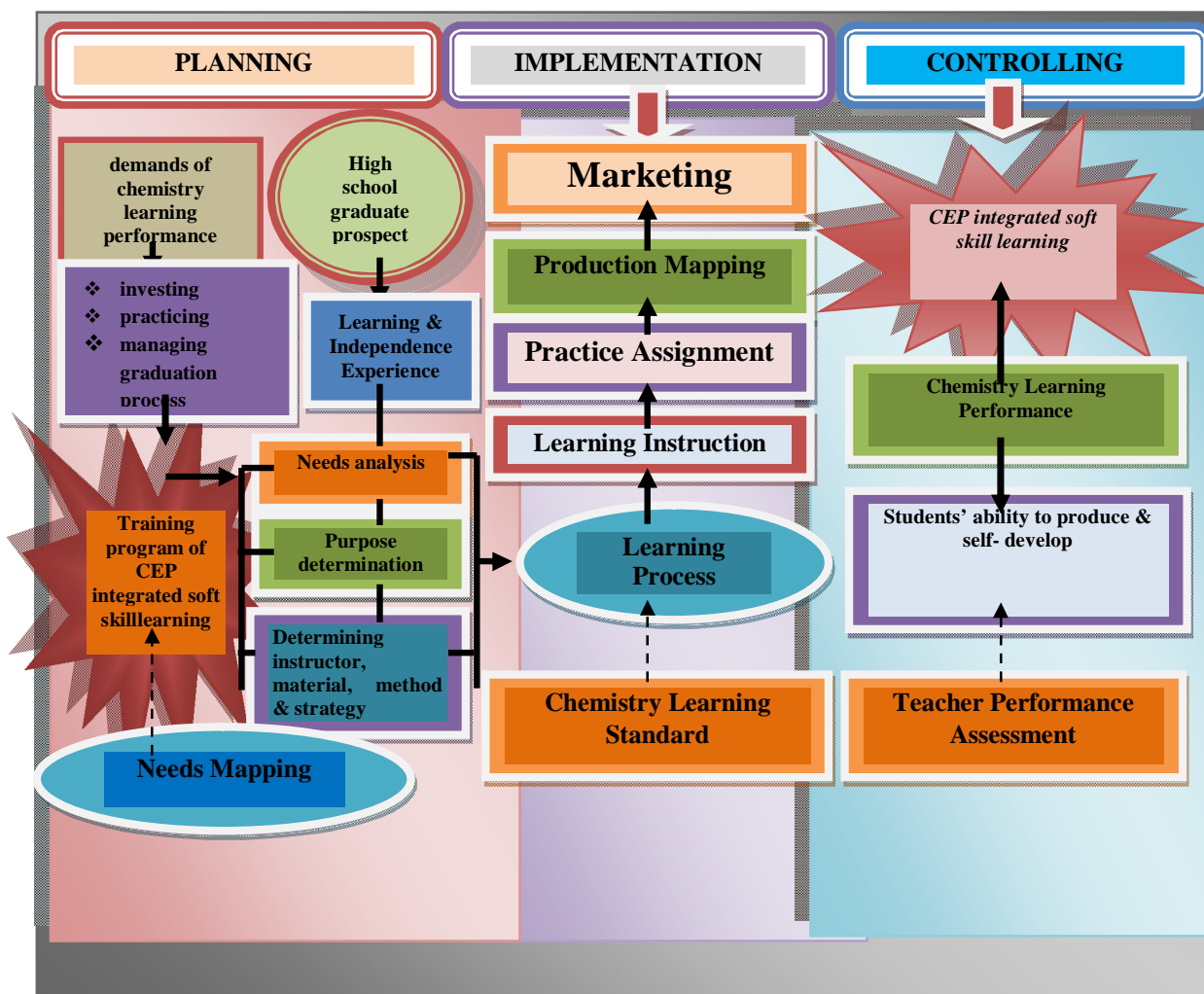


According to the findings of the study, the researcher analyzed and suggested to develop the model of training management for chemistry teachers which includes: training model draft, participant and instructor manual books, and other supporting media needed, in which contain comprehensive training management model so that chemistry teaching and learning process are

more attractive and meaningful. The design of development model of training management for chemistry teacher is as follows:



So, it is obtained the form of hypothetical training management model of CEP integrated soft skill learning for high school chemistry teachers in Semarang as the following:



CONCLUSION

Based on the result of the study that has been conducted, it is then concluded:

1. The training management model that has been done this whole time for the high school chemistry teachers in Semarang, has not been managed well. The training conducted was even without doing analysis on the needs of the chemistry teachers. The training was mostly administered by private party and only very few held by government. Even those trainings done by government were only as top down in order to succeed government's programs, and the training materials were mostly in administrative for which is not evaluated adequately.

2. It is required to design training management model development of Chemo entrepreneurship (CEP) integrated soft skill learning for high school chemistry teachers in Semarang, so the training management will be well planned so that the chemistry teaching and learning become more interesting and meaningful.
3. Hypothetical model obtained is the development of the factual model that still needs validation. This is expected that the final model will be the development model of training management of chemo-entrepreneurship (CEP) integrated soft skill learning for high school chemistry teachers in Semarang.

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