

Exploring Affective Mediation Digital Training Model for Training of Trainers (ToT) in Education

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ABSTRACT

Affective mediation in education setting is crucial in order for learners to enhance their motivation to learn, thus will encourage the learners to enjoy the teaching and learning session. Due to its capability therefore the purpose of this paper is to review and examines affective mediation digital training model for ToT (Train of trainers) for the past seven years (2009-2015) and seeks how affective mediation can be implemented in digital training for ToT in education. Ten papers were selected based on the digital training model for ToT in education and this study is related and scoped in Malaysia context. This paper was reviewed based on the components, elements as well as the theory and approaches that are adapted by researchers in their experiment. This study has contributed to the affective mediation development of working model of digital training for TOT in education.

Keywords: digital training for ToT, affective mediation in digital training.

I INTRODUCTION

The purpose of this paper is to review and examines affective mediation digital training model for training-of-trainers (ToT) for the past seven years (2009-2015) and seeks how affective mediation can be implemented in digital training for ToT in education. Since Malaysia is working to become a developed nation, it requires certain need that people are equipped with the basic literacy skills, thus lifelong learning can be achieved in order for the individuals to expand their capacity to learn (Fauziah, 2007).

A lifelong learning on the other hand can be achieved through training which aimed to improve knowledge, skills, and competences within a personal, civic, social, and/or employment related perspective (Georgieva, 2011; Loos & Fowler, 1999). Besides that, the existence of ToT was also beneficial in providing ongoing support to trainees (Suhreinrich, 2011), so that the lifelong learning can be attained. Since technology is being developed impressively, many studies on digital training model, also known as e-training or online training model have been successfully conducted. The models had contributed in human performances in ICT, students' understanding through blended learning in traditional classroom,

visually impaired students to improve their knowledge and IT skills, and helped teacher training agencies in China to increase their ability in implementing e-training during teaching (Pumipuntu, Kidrakarn & Chetakarn, 2015; Sriprasertpap, 2015; Mahajan & Nagendra, 2014; Yan, 2009). The effectiveness and evaluation of training model also have been conducted (Khawaja, 2012; Steensma, 2010; Hiner et al., 2009). However, studies on the affective involvement of trainers when intending to enhance the motivation of learners on digital training model for ToT are still lacking. It was found that the affective mediation elements are crucial in order for learners to enhance their motivation to learn, thus will encourage the learners to enjoy the teaching and learning session (Mahadi & Jafari; Fauziah, 2007).

Affective has been referred to a domain that relates to humans' emotions (Shackleton-Jones, 2010; Fauziah, Hood & Coyle, 2009; Tooman, 2006; Brett, Smith, Price & Huitt, 2003). When emotions were attached in learning process, the sense of information will occur (Shackleton-Jones, 2010) thus one will perform better in her/his learning (Jones & Bouffard, 2012). Mediation on the other hand defined by Fauziah et al. (2009) in their study was referred to the interventions. An intervention is when a mediator provides teaching to enrich the learning process to learners and will engage the learner to learn. When humans' emotions were concerned in the learning process, an effective learning will occur and learners' understandings are mediated affectively.

II DIGITAL TRAINING MODEL

The advances of technologies nowadays have grabbed the attention of educators and researchers (Varank, 2006; Marrison & Frick, 1993). A lot of tools and applications based on technologies have been developed purposely to help trainees engage in learning, increase their motivation to learn, as well as to help them understand the learning better (Nowaczyk & Weber, n.d.; Mishra & Sharma, 2004). The tools and applications were including digital training or also known as e-training and online training. However, developing such training needs a model to ensure that the content of the training meets the objectives and provide a better result (Akyurek, 2005).

From the previous studies, development of a digital training model had improved in students' computer

skills and learning outcomes (Pumipuntu, Kidrakarn & Chetakarn, 2015), helped in blended learning in traditional classroom and in the job training for students, teachers and educational officers (Sriprasertpap, 2015), and imparted IT knowledge and skills to visually impaired students (Mahajan & Nagendra, 2014). On the other hand, the studies on the effectiveness of the digital training model had also shown that a digital training model was effective to improve trainees' knowledge (Steensma & Groeneveld, 2010) and increase employees' job satisfaction (Khawaja, 2012). But, to date there is lacking of study in affective involvement of trainers through digital training model when intending to mediate learners to enhance their motivation to learn. Therefore, there is a need to conduct this study in order to develop an affective mediation digital training model in enhancing trainees' motivation to learn.

III AFFECTIVE MEDIATION IN EDUCATION

Affective mediation according to Fauziah (2007) was related to affective involvement of trainers when intending to enhance the learners' motivation to learn. Trainers also provide learning to learners and encourage them to engage in learning. In addition, the used of dimensions such as global values and praising to learners would enhance the learners' motivation to learn, especially to the less able ones (Fauziah et al., 2009; Fauziah, 2007). The learners' motivation to learn on the other hand is crucial in order for them to feel the learning activities are enjoyable (Mahadi & Jafari, 2012). With the benefits that learners will acquire from the affective mediation, trainers (teachers and/or educators) should see their role as a mediator so as placing affective mediation concept as core to provide better teaching and learning process.

IV METHOD

This study uses Systematic Literature Review (SLR) on ten selected papers that were based on the digital training model for ToT in education and this study is related and scoped in Malaysia context. This paper was reviewed based on the components, elements as well as the theory and approaches that are adapted by researchers in their experiment. The reviewing process started with the relevant selection of sources from the main online database such as ScienceDirect, Emerald Insight, ERIC and little from Google Scholar. The keywords used while searching the sources were such as "training", "training model", "digital training", "e-training", "training of trainers" and "affective mediation". At the initial searches, the ScienceDirect database returned 5,460 open access articles while Emerald Insight and Eric database returned 3,343 and 2,541 respectively when using the relevant keywords. Next, the relevant articles were

selected and being compared to each other to determine any duplication among them. The title and the abstract of the selected articles were then reviewed independently and re-selected based on the criteria of this study. The next part of the review was screening the content of the selected articles to determine the suitability of the article for this study.

A. Review Criteria

At the end of the reviewing process, only 10 articles were selected which related to the digital training model for ToT. Those related articles were selected based on the following criteria:

1. The article is an empirical study related to the digital training model for ToT.
2. The research methods are well explained by the author; means that the author had listed the components of the model and provided a clear reason on why the components were needed. On the other hand, the author also had provided the process on how those components were obtained.
3. The literature from various countries which was published from the year 2009 to 2015; a systematic literature review that tends to review the latest studies which are relevant to the need of this study.
4. Relevant articles; are the articles which were discussed on any online or digital training used to train teachers. Although database searching resulted in massive result, but mostly were discussed on using online or digital training tool to train students in classroom, which is totally not related to this study.

V FINDINGS

From the reviewed studies, three findings were highlighted which has helped to carry out this study. The findings were divided into three; category of study, roles of digital training model, and the domain of studies. Category of study defined the level which the studies reviewed has given impact on this study. Roles of digital training model on the other hand defined the objectives to be achieved from the reviewed studies, and domain of studies highlighted on the field/domain which the studies had contributed into.

A. Category of Study

Table 1 summarizes the result of the reviewed studies. The result was categorized into three types of effects; positive, partially positive and negative or no effect. In summary, a ToTal of six studies reported positive effect from the digital training model which comprised 60% of the ToTal reviewed studies. Three studies reported partially positive and a study

reported no effect which comprised 30% and 10% respectively of the ToTal reviewed studies. The result showed in the Table 1 below.

Table 1. Category of Studies.

Result	Studies	ToTal	Percentage
Positive	(Sriprasertpap, 2015), (Rossemi et al., 2010), (Yan, 2009), (Pumipuntu, Kidrakarn & Chetakarn, 2015), (Mahajan & Nagendra, 2014) and (Syamsul & Norshuhada, 2014)	6	60%
Partially positive	(Groeneveld, 2010), (Khawaja, 2012) and (Ozturan & Kutlu, 2010)	3	30%
No effect	(Sanders & Hampson, 2014)	1	10%

B. Roles of Digital Training Model

It is now necessary to have new generation of training that imports the use of technology such as assistive technology to ensure full access, participation and equality for all trainers including the disabled ones, and in an effort to implement the cost-effective training for trainers (Mahajan & Nagendra, 2014). On the other hand, the use of digital training in this 21st century was beneficial not only to students but also to teachers and educational officers when the digital training was able to go for a lifelong learning (Sriprasertpap, 2015). Akyurek (2005) claimed that a model is needed in developing such training so the content of the training will meet the training objectives. Based on the studies reviewed, the objectives of having digital training was described as roles of digital training that can be referred in the Table 2 below.

Table 2. Roles of Digital Training

Roles	Studies	ToTal	Percentage
Develop IT knowledge	(Mahajan & Nagendra, 2014), (Sriprasertpap, 2015), (Rossemi et al., 2010), (Yan, 2009), (Pumipuntu, Kidrakarn & Chetakarn, 2015), (Norizan & Nor, 2011)	6	50%
Long life / interactive learning	(Sriprasertpap, 2015), (Rossemi et al., 2010), (Pumipuntu, Kidrakarn & Chetakarn, 2015), (Norizan & Nor, 2011)	4	33.3%
Improve knowledge / trainers' satisfaction	(Ozturan & Kutlu, 2010), (Norizan & Nor, 2011)	2	16.7%

As can be seen in the Table 2 above, three main roles of digital training have been highlighted. Out of 10 articles being reviewed, seven of them described that digital training was able to develop IT knowledge, create long life or/and interactive learning, and able to improve knowledge or/and satisfaction among trainers. On the other hand, in order to make the digital training plays its roles, the model of the digital training was developed by implementing relevant components, elements, as well as theories. Those relevant components, elements and theories were gathered and can be referred in the following Table 3.

Table 3. Components and Elements of Digital Training Model

Components	Elements
Student profile, topics to be taught, cognition process, generics contents for every learning styles, tools and equipment, instructional material, administering the training model, certified teacher, training system, training factors (eg. multimedia presentation, interaction and learning instrument), collaborative learning factors (eg. individual accountability, interpersonal skills)	Creativity as the main aim of learning, learning management system, instruction media for learning content, interactive online activities, evaluation, sufficient online resources, a platform with high usability, professional managers, professional tutors

As listed in the Table 3 above, the components and elements has been used to develop digital training model. However, none of them were discussing on the affective mediation theory in digital training that able to enhance trainers' motivation to learn. Thus this study aims to implement the affective mediation theory (Fauziah, 2007) and the relevant components and elements from the reviewed studies into a digital training model in education.

E. Domain of Studies

Table 4 below reported the result of the reviewed studies based on the domain of the target behavior of the digital training model. As a result, education was the major domain of the digital training model with 50 of percentage, followed by social/community and health domain with the percentage of 40 and 10 respectively. This result shows that education is an important domain to have the digital training model. Although health and social/community domain showed less percentage among the studies, however the digital training model can also be implemented in those domain since the use of digital training is not specified to be used in certain domain.

Table 4. Domain of Studies

Domain	Study	ToTal	Percentage
Education	(Mahajan & Nagendra, 2014), (Sriprasertpap, 2015), (Rossemi et al., 2010), (Yan, 2009), (Pumipuntu, Kidrakarn & Chetakarn, 2015),	5	50%
Health	(Mahajan & Nagendra, 2014)	1	10%
Social / Community	(Yan, 2009), (Ozturan & Kutlu, 2010), (Khawaja, 2012), (Steensma & Groeneveld, 2010)	4	40%

VI CONCLUSION

Digital training is an effective way for trainers especially in Malaysia education to meet the challenge of massive and routine training. This study has contributed to the body of knowledge in term of technology development and practical use of the digital training for TOT in education in Malaysia. On the other hand, this study has also contributed to the affective mediation development of working model of digital training for TOT in education. Besides that, this study eventually helps towards sustainable development of the society by enhancing learners' motivation to learn through affective involvement of the trainers in education. It could be a driving factor to improve human psychological in handling emotions or feelings aspects and behaviors problem among the trainees. When trainees' emotions or feelings involved in the learning, an engagement between learners and learning will happen, thus will contribute to effective fun learning. In conclusion, the reviewed studies showed that digital training model can be an effective contribution in developing the digital training tool as a medium to deliver effective training. On the other hand, the theory of affective mediation which able to motivate trainers' to learn could also be implemented in the digital training model.

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