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Creative Thinking Learning Model course materials for Making Learning Strategies

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ABSTRACT

This paper describes the second year of research, from the development research that has been carried out in the first year. This study involved 57 students who were taking the Dance Training Design course at the Dance Education Study Program, UNJ. The aim is to obtain data on the level of student creativity in making learning strategies for dance training, through the implementation of creative thinking learning model course materials, which were developed in the first year of research. This study uses a qualitative approach to integrate the concept of creative thinking learning models with the ability to make learning strategies. Observation data through, written interviews, and document study of student learning outcomes. The results of the study were based on the pattern theme found from the data source. The results of the analysis are: (1) 49.2% of students can create their own learning strategies; (2) 33.3% students can understand existing learning strategies, by adding learning steps that are tailored to the training objectives; and (3) 17.5% of students followed the existing learning strategies. In conclusion, the implementation of creative learning model course materials can stimulate ideas for students in making learning strategies. Creative thinking learning model will be effective and efficient to increase student creativity, applied according to concept, systematically and integrated as course material.

Keywords: creative thinking, creativity level, learning strategy.

Introduction

This paper describes the results of the second year of research at the field trial stage. The first year of research is research and development using the instructional system development approach proposed by Dick, Lou and Carey (2009), produce an improved creative thinking learning model, based on the formative evaluation activities at the expert review stage; one-to one, small group. This second year research describes the results of the formative evaluation at the field trial stage. The study involved 57 students in the Dance Training Design Course at the Dance Education

Program, Jakarta State University. The objectives were to obtain data on: (1) the level of student creativity in making learning strategies for dance training; and (2) aspects that must be improved from the creative thinking learning model.

This research was conducted for several reasons, namely; (1) the demands and needs of creative thinking skills that are indispensable in the 21st century. However, in reality these needs are not optimal yet can be achieved through learning. In the 21st century soft skills formulation, it is stated that soft skills that must be possessed: (1) learning and innovation skills, include: creativity and innovation skills, critical thinking and problem solving skills, communication and collaboration skills; (2) information, media and technology skills, including: information literacy, media literacy, ICT (information and communications technology) literacy; and (3) life and career skills, covering: flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility. (Partnership 21, 2008: 13); (2) the obligation of lecturers as a driving force for strengthening human literacy through learning, must facilitate students so that they have high competitiveness with these various soft skills; (3) research on creativity and creative thinking has been done by many others. However, no one has integrated a creative thinking learning model to create learning strategies for dance training. Research that has been conducted by others including Supriyanto, et al (2019) entitled Improving Creative Thinking Ability with Posing Learning Problems. Research by M. Nusnowati, et al (2015) entitled developing creative thinking skills and creative attitude throught problems Based on green vision chemistry environment learning, Research by Runisak (2016) entitled improving students' creative thinking skills in mathematics through the 5E learning cycle with metacognitive techniques. Dariman (2018) entitled students to think creatively with the 4'R application in text project-based learning procedures. Research conducted by Hasan (2019) entitled activeness, critical, and creative thinking skills of students in learning-based inquiry and cooperative learning; and (4) the final causative factor for this research was the results of the formative evaluation at the expert review stage; one-to-one, small groups in the previous study 60% of students have not been able to create creative learning strategies in the Dance Training Design course.

The urgency of this research is because of the conditions that require students to be trained to think creatively, so that later when they pursue the profession to become an educator they have high creativity skills in solving learning problems, and can develop the creativity of their students. This paper presents the results of research on creative thinking learning model subject matter in the Dance Training Design course practiced by students, explaining three things, namely the characteristics of the creative thinking learning model, data on the level of student creativity in making learning strategies, and aspects that must be improved in creative thinking learning model.

Materials and Methods

This research uses a qualitative approach. This research is conducted by collecting data on work document studies and student learning outcomes, written interviews, literature review and journal reflective. Observations were not made because this research was conducted during the Covid 19 pandemic, students studied online. The quantitative results of the test are also not explored in this paper. Data collection activities are carried out starting at the stage where students plan, develop and revise learning strategies. The syntax of creative thinking learning model is integrated with students in the following activities: (1) finding ideas; (2) explore ideas; (3) evaluating ideas; (4) embody ideas. Students must make a learning strategy project. They must determine the type of training, the training objectives, make the main steps for learning, and organize teacher and student activities. The focus is on developing the main steps of learning and teacher-student activities in the learning strategy. The challenge is that they have to make the main learning steps for training different from the others. In this activity, the lecturer acts as a student consultant and plays an active role in responding to students in completing projects to make learning strategies. All the results of data collection were then analyzed based on the theme of the pattern for conclusion.

Subsection

Creative thinking learning model subject matter integrated into student assignments to create learning strategies requires adequate reading material. Therefore, literature review and journal reflection techniques should be used by students to explore learning strategies that have been

created by others, for the purpose of obtaining creative ideas for making learning strategies for dance training.

Result and Discussion

This study basically integrates the creative thinking learning model course material when students make learning strategies for dance training. Elements in the learning model include: syntax, social system, principles of reaction, support system, instructional effects, murturant effects based on elements of the teaching model in Joyce & Weil (2009).

Table 1. Creative thinking learning model

Sintax	Social System	Principles of Reaction	Support System	Instructional Effects	Nurturant Effects
Find ideas	Provides freedom to express ideas of learning strategies to be designed	Discuss ideas obtained after observing from various media	Print media, visual media, audio visual media to stimulate ideas	Students are able to find ideas for learning strategies	Students are able to find ideas for problem solutions
Deep ideas	Provide the opportunity to conduct a reference study about learning strategies that are relevant to the idea	Discuss the results of the reference study analysis that are relevant to the idea	Reference on learning strategies	Students are able to analyze various existing learning strategies	Students are able to analyze various problem solutions that have been done by others
Evaluating ideas	Provide direction on how to select and determine the main steps of a learning strategy	Provide corrections to the main steps of learning strategies prepared by students	Email, zoom meeting to provide corrections	Students are able to determine the main steps in the learning strategy	Students are able to determine the main steps that are relevant to the problem
Realization of ideas	Provide direction and opportunity to develop main steps, teacher and student activities in the learning strategy	Provide corrections to learning strategies made by students	Work document template and learning strategy assessment instrument	Students are able to make arrangements of main steps, teacher activities and student activities in learning strategies	Students are able to design problem solutions systematically and systemically

The first syntax for find ideas, students generate ideas on the types and objectives of the training. Data obtained from the idea of training types: (1) 46 students (80.7%) chose the type of training for dance skills, with details of 24 types of dance training for adolescents, 18 types of dance training for children 6-10 years old, and 4 types of dance training for early childhood; (2) 10 students (17.5) chose the type of training for dance instructors; and (3) 1 student (0.01) chooses the type of training to complete work in one team. The idea of training objectives obtained data, 24 students (42.1%) wrote that the training participants had advanced dance skills, 18 students (31.5%) wrote that the training participants had basic dance skills; 4 students (7.0%) wrote that the training participants had a confident attitude and movement skills, 10 students (17.5%) wrote down the training objectives to have knowledge of dance teaching methods and dance skills, and 1 student (0.01 %) write down the aim of dance training to have an attitude of being able to work together in a work team. (Student work document, 15 May 2020).

In the second syntax, deep ideas, students are asked to carry out 2 activities, namely: (1) conducting a literature review related to the idea of the type of training and training objectives. 95% of students studied 3-4 references, 2% of students studied 1-2 references, and 3% of students studied more than 4 references. (Student work document, May 22, 2020). Limited references to student training and time become obstacles in reviewing references (Student interview, 29 May 2020); (2) gathering information from dance instructors about the main steps of learning dance in dance training. The data obtained were general steps that were taken, namely warming up the body, mimicking the motion exemplified by the instructor, independent training, evaluation by the instructor and performance for the test. The general steps taken by the dance instructor become the standard for determining the level of student creativity.

The third syntax evaluates ideas, students make a selection and determine the main steps of the learning strategy to achieve the designed dance training objectives. From this activity, it was obtained data that 28 students (49.2%) could make the main learning steps that were different from other instructors in general. The following is an example of student learning outcomes.

Table. 2 Examples of student learning outcomes make the main learning steps for training

Student Code	Type of Training	Training Objectives	Learning Strategies
A	Dance training for advanced teens	Participants have advanced Betawi dance skills	Orientation Read Ask Find a concept Imitate Showing
B	Basic dance training for children	1. Participants have a confident attitude 2. Participants are able to express themselves with motion	Tell a story Question and answer Observe Exploration Practice
C	Contemporary dance technique training for teenagers	Participants have the creativity to make contemporary dance	Demonstrate Imitate Adjust Evaluate Showing
D	Dance training for dance instructors	1. Participants are able to understand dance teaching methods 2. Participants have advanced dance skills	Observe Read Follow Demonstrating
E	Training for dance performance production leaders	1. Participants are able to understand the systems, principles, procedures and ways of evaluating dance performance management 2. Participants are able to design dance performances 3. Participants are able to build motivation, responsibility and commitment to dance performance management crew	Explain Discuss Designing Practicing Rate
F	Dance training for teamwork	1. Students have a cooperative attitude 2. Students have advanced dance skills	Observe Divide the group Practicing Display results

At this stage, data were also obtained from 19 students (33%) to modify the learning steps that have been carried out by others by adding 1-2 learning steps, and 10 students (17.5) wrote down the same steps that others did. (Student work document, 29 May 2020). How students determine the main steps of learning to read references. Student obstacles in this stage are due to limited references about learning strategies for training. Easy-to-find references are general learning strategies and learning strategies for cognitive learning outcomes (Interview, 15 June 2020).

The fourth syntax is realization of ideas, students formulate the main steps of learning for training equipped with descriptions of instructor and student activities using various methods and media, obtained data from 57 students writing instructor and student activities according to the main learning steps that have been determined in the fourth stage (evaluation of ideas). Variations occur because there are students who write in detail and there are students who write briefly but completely and accurately mention the activities, methods and media used for learning. (Student work document, 19 June 2020). The following are student learning outcomes in describing the main steps into the activities of the trainer and participants.

Table 3. Examples of student learning outcomes in making learning strategies for training

Student Code	Type of Training	Training Objectives	Learning Strategies		
			The Main Step	Coach Activity	Participant Activities
A	Advanced dance training for teens	Participants have advanced Betawi dance skills	Orientation	The trainer introduces himself, presents the training objectives and presents the Cokek dance video	Participants listened to and watched the Cokek dance video presented by the trainer
			Reading	The training asks participants to read reading material about the Cokek dance	Participants read reading material that has been provided by the trainer
			Asking questions,	The trainer provides the opportunity to ask questions related to the material	Participants submit questions to the trainer
			Discovering concepts	The trainer asks the participants to conclude the characteristics of the Cokek dance from the material seen from the video and read	Participants concluded the characteristics of the Cokek dance based on videos and readings
			Imitating	The trainer demonstrates the Cokek dance	Participants imitate the Cokok dance which was performed by the trainer
			Performing	The trainer asks participants to perform the Cokek	Participants appear to dance the Cokek dance

				dance they have learned	that has been learned
E	Training for dance performance production leaders	1. Participants are able to understand the systems, principles, procedures and ways of evaluating dance performance management	Explain	The trainer explains the material	Participants listen
			Discuss	The trainer asks participants to discuss the material	Participants discuss the material
		2. Participants are able to design dance performances	Design	The trainer asks participants to make an outline for the design of dance performance activities	Participants make an outline for the design of dance performance activities
		3. Participants are able to build motivation, responsibility and commitment to dance performance management crew	Practice	The trainer asks participants to make complete and detailed dance performance activity design with the group	Participants make a complete and detailed dance performance activity plan in the group
			Assess	The trainer asks participants to evaluate the documentary video of dance performances from the perspective of dance performance production and relate it to the designs that have been made	Participants assess observing documentary videos of dance performances from the perspective of dance performance production and linking them to the designs that have been made

Based on research involving 57 students who made learning strategies for dance training, most (49.2%) could be categorized as creative in making learning strategies and able to create something new (Munandar, 1999: 33). This indicator is included in creative-productive talent (Munandar, 1999: 84). The ability to make learning strategies is the ability to make prototypes. Prototype is a manifestation of innovation (Kelley, 2001: 133) and innovation is one of the characteristics of

creativity (Campbell, 1986: 11). Innovation is the result of the ability to think creatively, characterized by fluent thinking, flexible thinking, rational thinking, detailing and elaborating skills and assessment skills. (Guilford in Munandar 1992).

The results achieved by students can create learning strategies for dance training themselves. The learning strategy is one of the learning sub systems. Instructional strategy is used generally to cover the various aspects of choosing a delivery system, sequencing and grouping clusters of content, describing learning components, that will be included in the instruction, specifying how students will be grouped during instruction, establishing lesson structures, and selecting media for delivering instruction (Dick, Carey and Carey, 2009: 166). The five stages of the learning strategy include preinstructional activities, content presentation, learner participation, assessment, follow-through activities (Dick, Carey and Carey, 2009: 178-179). The success of most students can make their own learning strategies, because the process of integrating creative thinking learning model material includes syntax: finding ideas, exploring ideas, evaluating ideas, and realizing ideas that are practiced systematically, strictly, and the lecturer pays close attention to each syntax. The syntax is developed on the basis of humanistic learning theory that creativity can develop during human life. This is because it is related to the basic human instincts by Maslow explained by the hierarchy of human needs. At the highest level of need, namely the need to self-actualize, a person has a need for self-potential development. This potential can grow because of strong motivation (Schunk, 2012: 484). In order for this motivation to be strong, students in learning are given a sense of security, educators pay attention to why students do something, and educators need to understand students and create an environment to strengthen learning. (Schunk, 2012: 485). In the context of this study, elements of the learning model, including: social system syntax, principles of reaction, support system, are designed to be student-centered, so that students can make creative work. Learning practices whose activities provide opportunities for students to be free to argue, discover, choose and determine, try to compile, provide strong motivation for students to be creative, resulting in work on learning strategies to solve learning problems. The implementation of this learning is in line with the techniques for developing creativity, including those developed by Treffinger. Treffinger classifies it into 3 levels, namely the development of divergent thinking functions, the development of multiple thought processes, and engagement with real challenges. (Akbar, et al, 2001: 31-42). Jackson and Shaw provide an example of providing opportunities for students to experience and practice their own creativity through stimulating, relevant, and

authentic learning experiences in their subject matter field which is also a creativity development technique (Rahmawati, et al: 2019). The attitude that needs to be cultivated towards students is the spirit of being a pioneer (Kelley, 2001: 21-27). Attitudes that need to be developed to maintain creative ideas are the ability to work hard, think independently, never give up, be able to communicate well, are interested in small concepts, intellectual curiosity, do not immediately reject new ideas, and a steady direction in life (Campbell, 1986: 35-43).

Finally, the integration of creative thinking learning model subject matter into the practice of making learning strategies for dance training in the Dance Training Design course can be said to help students in making learning strategies. The nurturant effects of this activity are that students are able to make problem-solving designs. However, there are still 10 students who have not been able to produce creative learning strategies. This is because the stimulus for the growth of new ideas is not optimal. The process of extracting information from limited references, and inadequate task completion time. In this connection, it is necessary to improve the implementation of the second syntax in the creative learning model, by increasing the time for more reference study activities, so that the reference study is more in-depth. It is believed that in-depth reference study activities can be a source of inspiration and a medium for maturing the embryos of new ideas.

Conclucion

This research has explored the creative thinking learning model subject matter that is practiced in the classroom, so that it becomes a goal and a means for students to express their creativity through the task of making learning strategies. The elements in the creative thinking learning model that are practiced produce learning outcomes. 49.2% of students can create their own learning strategies, 33.3% students can understand existing learning strategies, by adding learning steps that are tailored to the training objectives; and 17.5% of students followed the existing learning strategies. The creative thinking learning model has provided opportunities for students to argue, find, choose and determine, and realize their creative ideas to make their own learning strategies. However, the challenge of improving the concept and application of creative thinking learning model subject matter remains to be done, because in fact there are still 17.5% of students in the less creative category. The trick is to improve the implementation of the idea deepening stage. Students are asked to explore learning strategies that have been found by others, through in-depth reference review activities, so that students can get creative ideas and optimal student learning outcomes.

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