

## Participatory Curriculum Administration on Creative Environment Integration of Rajamangala University of Technology Lanna

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### Abstract

The purposes of this research were to study the approaches for the participatory curriculum administration creatively integrating the environment used by Rajamangala University of Technology Lanna (RMUTL) and to evaluate the desired objectives of the curriculum, namely the creative thinking skill aspect in students. The target group selected by purposive sampling technique was 180 representatives of RMUTL faculty curriculum boards, administrators, instructors and entrepreneurs in the Chiang Mai community. The research instruments included questionnaires and behavioral observation checklists. The collected data were analyzed by using descriptive methodology and by calculating percentage, mean, and standard deviation. As a result of the study, there are seven steps developed in the administration of the curriculum that creatively integrated the environment. In this case, the participation of the target group in the administration of environment-integrated curriculum was at a high level while the students' participation was at a moderate level. The students' desired characteristics in regards to the curriculum's objectives of creative thinking skills was at a high level.

**Keywords:** Participatory Curriculum Administration; Creative Environment

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## Introduction

Nowadays, the world increasingly faces environmental degradation that continuously affects the well-being and quality of life. Environment Agency 1 Chiang Mai (2008) reported that the problems faced were littering, wasting electrical power and water consumption, prompting the organization to analyze, plan and develop strategies to solve these environmental problems. All agencies of the community urgently were required to prevent and resolve these problems. All levels of the educational community needed to recognize and prioritize priority the education of learners to safeguard and create the environment of social responsibility toward the physical environment. The Academic Department (2002) stated that the quality of school curriculum depended on systematic and efficient course administration factors. This is consistent with the Ministry of Education (2001) also stated that for more quality to develop educational curriculum, it is necessary to adjust paradigms and methods focused on the distribution of power to the academy's performance. Rajamangala University of Technology Lanna is a professional higher educational institution which aimed to produce quality hands-on graduates with social responsibility and creative environment to meet the needs of the labor market. This allows students to graduate with a desirable quality focused on participatory management, coupled with the creative development of the learner. This is consistent with the urgent educational policy of the government to enhance the quality of higher education in Thailand to produce and develop quality, social responsibility and creative environment. The Ministry of Education (2001) also stated that for higher quality to develop educational curriculum, it is necessary to adjust paradigms and methods focused on the distribution of power to the academy's performance. Saylor, William and Arthur (1981) also suggested that all of those related to education should have been involved in the curriculum administration. Besides, Moolkum (2004) suggested that Instructors are responsible for organizing activities for learners to learn from their experience and to interact with the community by managing groups of experience allowing them to expand the communal and individual learning scaffolds. This is consistent with the results of educational research which Praveenkiatkun (2007) found that participants will learn better and more meaningful when the content of courses is integrated into life. Thus, an integrated curriculum is a good choice to develop students with desirable features based on the course associated with the events or problems in daily life. Therefore, it was essential for schools to have integrated administration of a curriculum to develop knowledge, ability and thinking skills for naturally creating the environment.

Researchers, administrators and teachers of RMUTL became interested in studying how to approach the creation and administration of a participatory curriculum that creatively integrated the environment with objectives related to instilling creative thinking skills in learners.

This research focused on the integration of knowledge and creative learning and resulted in a curriculum administration affecting the highest efficiency of educational management that is easy to translate to other countries in the ASEAN Economic Community.

### **The purposes of this research**

1. To study the approaches of RMUTL for the participatory curriculum administration creatively integrating the environment.
2. To evaluate the participants' creative thinking skills, desired characteristics of the curriculum's objectives.

### **Research methodology**

#### **The scope of research**

The target group consisted of 180 representatives for studying the participation and evaluation of RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs. They were selected by purposive sampling technique which included 40 RMUTL faculty curriculum board members and administrators, 40 instructors, 80 undergraduate second year students randomly selected from the second year of 2013 academic year and 20 entrepreneurs from the Chiang Mai community.

This research is a pilot study in the participatory curriculum administration creatively integrating the environment of RMUTL including the participation of RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs in the Chiang Mai community. It also included the synthesis and evaluation of students' desired characteristics regarding the curriculum's objectives in the creative thinking skill aspect from the learning behaviors of RMUTL second year undergraduates studying in the 2013 academic year.

#### **The research instruments**

The research instruments included questionnaires and behavioral observation checklists.

Questionnaires for RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs in the Chiang Mai community which are 5 rating-scaled and open-ended. The reliability of the questionnaires was measured by alpha-cronbach coefficient at value of 0.85.

Questionnaires for 5 experts to evaluate the suitability of the curriculum through Index of Item Objective Congruence (IOC) which is more than 0.60 acceptable value.

Behavioral observation checklists for evaluating the students' desired characteristics regarding the curriculum's objectives in creative thinking skill aspects.

## The procedures of research

The procedures of research methodology are as follows:

1) Survey the current state of the environment and the problems that arise in RMUTL and context of communities nearby and study the literature, concept or theory of participatory management, creative thinking skills, actual evaluation and related researches.

2) Publish the knowledgeable document about the participatory management, and the curriculum management integrated creative environment and distribute to the RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs in the Chiang Mai community.

3) Brainstorm among the invited experts, RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs in the Chiang Mai community to define the approaches and the preparation of the curriculum management integrated creative environment. As well as evaluating, the appropriateness of the curriculum management by the five experts was included.

4) Appoint the RMUTL curriculum administration committee to develop the curriculum integrated creative environment and required the instructors to implement and to evaluate the curriculum and learners' behaviors.

5) Collect the data to find the approaches of RMUTL for the participatory curriculum administration creatively integrating the environment and the participation of RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs in the Chiang Mai community from the questionnaires, interviews, and analysis of the materials. The other data were also collected for evaluating the participants' creative thinking skills, desired characteristics of the curriculum's objectives from the behavioral observation checklists.

6) Analyze the collected data using methodology from content analysis and descriptive methodology and calculating percentage, mean, and standard deviation to determine if indeed the objectives of use of creative thinking skills had been met. The criteria for interpretation were as follows:

Criteria for the interpretation of participation in the curriculum administration

Average ( $\bar{X}$ ) 1.00 to 1.49 means the lowest participation

Average ( $\bar{X}$ ) 1.50 to 2.49 means low participation

Average ( $\bar{X}$ ) 2.50 to 3.49 means moderate participation

Average ( $\bar{X}$ ) 3.50 to 4.49 means high participation

Average ( $\bar{X}$ ) 4.50 to 5.00 means the highest participation

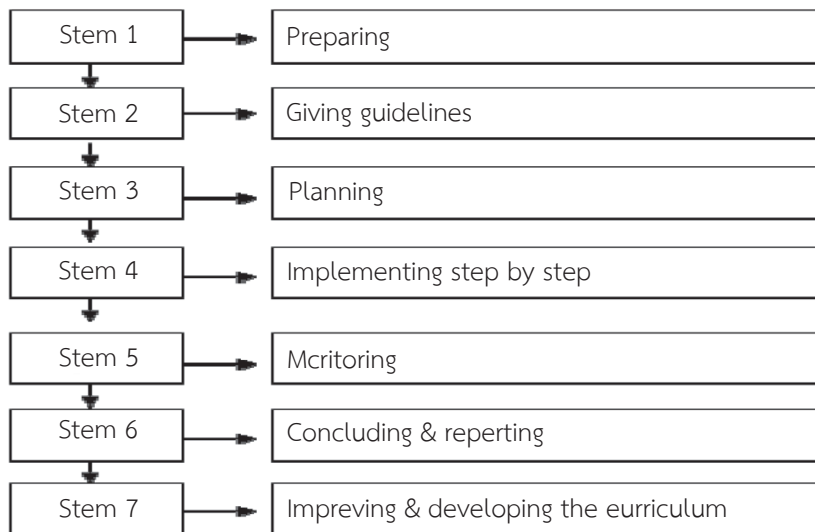
Criteria to interpret the evaluation of the desirable characteristics observed from learners' behaviors

- Average ( $\bar{X}$ ) 1.00 to 1.49 means the lowest desired characteristics
- Average ( $\bar{X}$ ) 1.50 to 2.49 means low desired characteristics
- Average ( $\bar{X}$ ) 2.50 to 3.49 means moderate desired characteristics
- Average ( $\bar{X}$ ) 3.50 to 4.49 means high desired characteristics
- Average ( $\bar{X}$ ) 4.50 to 5.00 means the highest desired characteristics

## The research results

The approaches for the participatory curriculum administration creatively integrating the environment included 7 steps which were shown in illustration 1.

From illustration 1, the first step of the procedures, the current state of the environment



**Illustration 1** The procedures of the participatory curriculum administration creatively integrating the environment

and the problems that arise in RMUTL and context of communities nearby were surveyed. The literature, concept or theory of participatory management, creative thinking skills, actual evaluation and related researches were studied and also published in preparing the guidelines for developing the participatory-integrated curriculum. The next step included brainstorming among the invited experts, RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs in the Chiang Mai community to define the approaches and preparation of the curriculum administration integrated creative environment, as well as, evaluating the appropriateness of the curriculum administration by the 5 experts. Next is planning the development and implementation of the curriculum by the appointed RMUTL curriculum administration

committee. After that, the participatory-integrated curriculum was implemented step by step; Awareness-A1, Attempt-A2, and Achievement-A3 by the instructors. Then, the RMUTL curriculum administration committee monitored implementing the integrated curriculum by evaluating the curriculum and learners' behaviors. After that, the data about the participatory curriculum administration creatively integrating the environment, the participation of RMUTL faculty curriculum boards, administrators, instructors, students and entrepreneurs in the Chiang Mai community and the participants' creative thinking skills, desired characteristics of the curriculum's objectives were analyzed and synthesized to conclude and report to the committee. In the last step, the results of evaluation and feedback from the committee and the target group were applied to improve and to develop the integrated curriculum for the next academic year. In addition, the participation was at a high level for RMUTL faculty curriculum boards, administrators, instructors and entrepreneurs in its community while the students' participated at a moderate level. In this case, most of the stakeholders were very satisfied with participating in the creation of a curriculum that once administered would creatively integrate the environment.

The results of the students' desired characteristics in regards to the curriculum's objectives in the creative thinking skill observed from the learning behavior checklists were shown in table

**Table 1** The students' desired characteristics regarding the curriculum's objectives in the creative thinking skill observed from the learning behavior checklists. (number of students = 40)

Lists of learning behavior	Operating level		Meaning
	( $\bar{x}$ )	(S.D.)	
1. Plan their work and collaborate with others.	4.32	0.70	high
2. Participate in public relations, knowledge of the environment both in the university and the community.	4.35	0.69	high
3. Be eager to learn and participate in activities.	4.52	0.73	<b>highest</b>
4. Be able to create their own knowledge.	4.25	0.65	high
5. Be able to solve the problem by themselves.	4.43	0.75	high
6. Have a habit to pay attention to learn all times.	3.45	0.80	moderate
7. Be able to link the learning in the classroom to real life.	4.35	0.75	high
8. Participate in promoting environmental issues in the development of the university and community.	4.38	0.73	high
9. Save cost of water and use water effectively.	4.25	0.70	high
10. Save cost of electricity and use power effectively.	4.23	0.73	high
11. Use the appliances to save and reduce rubbish.	3.45	0.80	moderate
12. Be able to create new own valuable work.	4.13	0.70	high
13. Have good interaction skills to work with others.	4.25	0.65	high
14. Apply waste materials for other benefits.	4.48	0.75	high
15. Make products related to the context of the university creativity.	3.55	0.75	high
16. Have work, projects or activities to solve environmental problems in the community.	3.50	0.82	high
17. Have a participation in self-evaluation and group evaluation.	3.36	0.75	moderate
18. Have a participation in the evaluation of their learning progress and that of the group.	4.05	0.72	high
19. Improve better work step by step continuously.	4.45	0.75	high
20. Publish or perform their environmental work to the community.	4.25	0.65	high
<b>Total average</b>	<b>4.10</b>	<b>0.70</b>	<b>high</b>

From table 1, the students' desired characteristics regarding the curriculum's objectives after the curriculum administration as a whole was at a high level ( $\bar{x} = 4.10$ ). In considering all items, it was found that the highest level of learning behavior was being eager to learn and participate in activities ( $\bar{x} = 4.52$ ). They had the habit of only paying attention to learn all time and using the applications to save and reduce rubbish, considered as at a moderate level ( $\bar{x} = 3.45$ ), whereas participating in self-evaluation and group evaluation was at the lowest average ( $\bar{x} = 3.36$ ).

## Discussion

Resulting from the study, the participatory curriculum administration creatively integrating the environment included 7 steps: preparing, giving guidelines, planning, implementing step by step, monitoring, concluding & reporting, and improving & developing the curriculum. This is consistent with the statement of Ministry of Education (2001) that the process of curriculum development starts from setting a goal before selecting and arranging the content of activities

and experiences, in accordance with the goal. After that, implement and evaluate the curriculum to verify and locate faults, this is followed by development of the evaluation of results and always appropriately updating the curriculum. That may be because curriculum administration is a team management activity that embraces planning, implementing and supervising as the main components of the curriculum. This can be supported by what Jacobs (1989) stated that the quality of curriculum depends on factors such as a course management system which is an important role of school or educational institution. Universities must create their own course called school curriculum. As a result, administrators and instructors must work creatively to develop curricula apart from teaching. These considerations are also required for effective curriculum administration. In this case, their responses from questionnaires, there was participation at a high level of RMUTL faculty curriculum boards, administrators, instructors and community-based entrepreneurs in the administration of the environment-integrated curriculum and most of the stakeholders were very satisfied with their participation. It is reasonable because RMUTL allowed all involved participants to partner and be intimately involved with each step of the curriculum administration. Moreover, in the student cohort, as a whole the curriculum's objectives were met at a high level after administration: the curriculum allowed instructors to use more activities geared toward encouraging students to think critically and creatively. It also required learners to construct their own knowledge and develop an evaluation of this knowledge. This is consistent with Moolkum, S. and Moolkum, A. (2002) stated that the instructors need to select only the most important matter necessary for learners to sustain life by linking the content of courses nearby or related. Thus, an integrated curriculum is a good choice to develop students with desirable features based on the course associated with the events or problems in daily life. As a result, the students had a greater responsibility for studying and developing better attitudes to change their learning behaviors, thus producing in them more ideas to create new things from their own knowledge, because they now were interested and not just rote repeating. This is consistent with what Praveenkiatkun (2007) found that participants will learn better and more meaningful when the content of courses is integrated into life and he also said that the instructor is responsible for teaching and has to be interested in students' learning behavior with the right actions and activities they can precipitate a change in learners' attitudes. With new attitudes, the students now have the framework for more creative ideas. And this also conforms to Moolkum (2004) who suggested that the integrated curriculum assisted learners to construct their own new knowledge and link it up with their prior knowledge.



## Conclusion

The approaches used by RMUTL for participatory curriculum administration creatively integrating the environment formed the basis of this research. It was particularly useful for RMUTL faculty curriculum boards, administrators, instructors and entrepreneurs from the Chiang Mai community to develop a curriculum effectively and creatively with the input of all shareholders, because the endeavor created community within the organization and allowed students to participate in its evaluation. Besides, the development process outlined in this study, implementing and monitoring for improving and developing the curriculum appropriately was just as important. The training processes promoted students' creative thinking skills. The instructors' interest and responsibility could support students' learning behavior and the tone of their feeling. In addition, students tended to change their attitudes which in turn created an environment where they developed their thinking into more creative ideas by themselves, and not orchestrated by the teacher or administrator. The recommendation discussed that schools could implement these seven steps of curriculum administration to develop the learners' knowledge, ability, and thinking skills by naturally creating an environment. To accomplish this, the instructors need to select only the most important matter necessary for learners to sustain life by linking the related content of courses.

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