



DEVELOPMENT OF AN INSTRUCTIONAL MODEL FOR ENHANCING SELF-DEVELOPMENT COMPETENCY AND PRODUCTIVITY CREATIVITY FOR SOCIAL DEVELOPMENT OF THAI NURSING STUDENTS

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Abstract

General education for human development is an important subject for imbuing students' recognition of the importance of self-development, desirable characteristics of graduates, intelligence, curiosity as well as self- and social responsibility. This research aimed to develop the instructional methods to enhance the values for the society, was based on the concepts of instructional model development, knowledge creation and creative and productive education. The purpose of study was to develop an instructional model for enhancing self-development competency and productive creativity for social development. It consisted of 2 phases: 1) developing the instructional model, and 2) experimenting and evaluating the effectiveness of the developed model. For the latter, it was based on a one-group pretest-posttest design with 79 first-year nursing students. It lasted for 16 weeks. Content analysis and descriptive statistics including percentages, means, standard deviations and t-test were employed in the data analysis.

Results: The developed model focused on the promotion of uninterrupted self-development by devising a self-development plan and record folder. Meanwhile, the learning through team interaction and the introduction of problem-solving projects for the institute or society were also promoted. In this regard, the instructional model consisted of 4 steps: 1) enhancing self- and social development motivation, 2) identifying learning objectives and goals, 3) pursuing team-based learning and productive creativity, and 4) evaluating learning performance for self- and social development. According to the experimentation results, the developed model was able to enhance self-development competency and productive creativity for social development of Thai nursing students.

The general education for human development course has been provided in order that learners could learn collectively and recognize the critical thinking for creating works or projects resulting in learners' greater responsibility for themselves, social work team and environment.

Keyword: self-development competency, productive creativity, social development, Thai nursing students

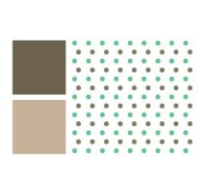


Introduction

According to the ASEAN Community by 2015, developing human resources for the strengthening of the ASEAN Community is an important issue. A major goal of nursing education is to provide nursing students with the necessary competencies to become lifelong learners (Bolhuis 2003; Patterson et al. 2002) and social responsibility workers. Self-directed learning is essential in assisting registered nurses to meet demands in rapid changes of health care system, society needs and the ASEAN Community. Nurse educators have an important role to facilitate their nursing students to acquire the self-development competencies (O'Shea, 2003) and the productivity creativity for social development. Nursing students must be exposed to self-development competencies and productivity creativity for social development to obtain the knowledge, skills, and attributes unique to their personal and professional growth. It has been proposed that many competencies are required for students to become self-directed learners: self-assessment of learning gaps; evaluation of self and team; reflection; information management; critical thinking; and critical appraisal. Each of these skills are not mutually exclusive but are interrelated in such a way that students use all or a combination of them simultaneously to direct and control their learning. They need to be able to manage and monitor their own and team learning. This means that nursing students engaged in continuous learning should have the ability to be self-directed (Williams, 2001). The development of instructional process is an important element for enhancing educational quality to equip the graduates with desired competency and identity. (Joyce, 2008)

General education for human development course is crucial for imbuing students with graduate characteristics and wisdom. The significance of self-development and social-development should also be recognized in the production of graduates. It is a subject for real development of human-holistic development of way of living in light of behavior, mind and wisdom for the growth and flourishes in harmonious and systematically collaborative manner. With regard to such instruction of Prachomkiao College of Nursing, Phetchaburi Province, it puts an emphasis on student development leading to learning achievement under National Qualifications Framework for Higher Education. The assessments thus are made; while, the results are used in instructional development in continuation to the brainstorm sessions on instructional development guidelines for learning achievement according to the curriculum. The encouragement of students to pursue self-development and critical thinking has been recognized for its importance. Meanwhile, the solutions have been synthesized for prevention of problems and improvement that benefit one-self and society as a whole along with the knowledge application to present solutions for social problems. The authors, as the lecturers, have thus developed an instructional model for enhancing self-development competency and productive creativity for social development. Such model is based on the creative and productive education concepts focusing on the creative and analytical thinking development and the creativity for social development. Also, the instruction takes into account learning motivation enhancement, self-comprehension and self-development in order to develop students' desired characteristics and lay a solid foundation that imbues students with self-development competence and greater self- and social responsibility.

The researchers had employed the concepts of creative and productive education by Phaithoon Sinlarat (2011), model of teaching (Joyce, 2008), self-directed learning, and cooperative learning as the research conceptual framework. It also put an emphasis on the learner's possession of desirable characteristics or a person having the competence in generating creative ideas and creating new things for society as well as 4 characteristics of the young generation - Critical mind, Creative mind, Productive mind and Responsible mind (CCPR). They should bear in



mind the analytical thinking, creation of new things for themselves and society, production of innovation and self-, social- and environmental responsibility.

Methodology

Design: This study was a research and development project commencing from April 2011 until February 2012. It was divided into 2 phases. Phase 1 – developing an instructional model for enhancing self-development competency and productive creativity for social development; it involves the synthesis of model development guidelines on the basis of the exploration of relevant documents and research papers. The (draft) model had been developed; while, the suitability and congruence were evaluated by senior experts. Phase 2 - trial and assessment of an instructional model for enhancing self-development competency and productive creativity for social development; a one-group pretest posttest design has been used in the experiment with 79 first-year nursing students. In this regard, the assessment of the effectiveness of developed model was based on the level of competency, creativity, learning accomplishment and satisfaction towards such instructional model.

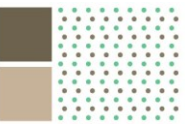
Sample and Setting: 79 first-year nursing students studying in the first semester of the academic year 2011 in Prachomklao College of Nursing, Phetchaburi Province were the population in the sample group. 73 of them are female (92.4%), while the other 6 students were male (7.6%). They were between 18 and 21 years old, while the average age was 18.51 years old.

Instruments: The instruments were developed after examining the relevant concepts, theories and documents. The first one involved the assessment of the suitability and congruence of an instructional model for enhancing self-development competency and productive creativity for social development. For the second one, it had 5 sets used in the experiments: the assessment form of self-development competency and productive creativity for social development, the assessment form of the diary on self-development competency and productive creativity for social development, the subjective test, and the assessment form of nursing students' satisfaction towards an instructional model for enhancing self-development competency and productive creativity for social development

1) The assessment form of the suitability and congruence of an instructional model for enhancing self-development competency and productive creativity for social development – it was used by 3 senior experts for the examination of the suitability and congruence. The index of consistency (IOC) was equivalent to 0.93.

2) The assessment form of self-development competency and productive creativity for social development employs five-level rating scale and assesses the knowledge, skills and personal characteristics that enhance self-development leading to learning achievement in conformity to general education on human development. It consisted of creativity for social development and 5 aspects of National Qualifications Framework: (1) ethics and moral (2) knowledge (3) intellectual skill (4) interpersonal relations and responsibility (5) numerical analysis skill, communications and use of information technology and. This assessment form was 77-item questionnaire for pre- and post-trial assessment of sample group requiring 15 minutes to complete. It had 2 parts - Part 1: General Data (2 items) and Part 2: Self-development competency and productive creativity for social development (75 items). According to the quality test, IOC and Reliability are equivalent to 0.94 and 0.91, respectively.

3) The assessment form of self-development diary was a rubric assessment with total score of 16. The researcher employs it for self-development diary assessment. The score criterion was



as follows: 14-16 Points – Very Good, 13 Points – Good, 10-12 Points – Fair, Less than 10 Points – Improvement Needed. According to the quality test, IOC was equivalent to 0.92.

3) **The assessment form of the creativity for social development** was used by the researcher for assessing the creativity for social development on collective basis. It had 4 sections: preparation, proceedings, creative work presentation and creative work quality and contained 25 items. According to the quality test, IOC was equivalent to 0.91.

5) **The subjective test** consisted of 10 items and had been reviewed by Test Review Committee. It was used after the end of trial and IOC of 0.90.

6) **The assessment form of nursing students' satisfaction towards instructional model for enhancing self-development competency and productive creativity for social development** employed five-level rating scale for the assessment of the sample group's satisfaction after the end of trial. It has 17 items. According to the quality test, IOC and Reliability were equivalent to 0.92 and 0.71, respectively.

The trial of model had been pursued as follows:

- To Coordinate and prepare the readiness of lecturers who were urged to experiment the developed model and to ask for permission in using the premises, computers, accessories and audio visual equipment
- To prepare pre-trial readiness of the sample group – the population is explained about the objectives of the study, protection of human subjects and research proceedings. They were also urged to sign the participation approval form on voluntary basis.
- To conduct the instructional activities according to the developed model – students were divided into sub-group of 9-10 persons; such instruction is conducted for 15 weeks.

Data Analysis: Descriptive statistics were used to assess the demographic data and scoring of the study's instruments. The t-test was used to compare the mean scores of the pre-test and post-test competencies.

Results

The results were based on the research objectives as follows:

• **The developed instructional model for enhancing self-development competency and productive creativity for social development.** It consisted of the principle, objectives, learning process, expected learning outcomes, evaluation, social system, principle of action and support system.

Principle: the developed instructional model put an emphasis on the creation of new knowledge based on the existed one. The interaction and real-world learning have rendered to self- and social responsibility through problem analysis and creativity for self- and social development.

Objectives: To enhance self-development competency and productive creativity for social development of nursing students.

Learning process:

- Enhancing self- and social development motivation
- Identifying learning objectives and goals
- Pursuing collaborative learning for productive creativity
- Evaluating learning performance for self and social development

Expected Learning Outcomes: the nursing students have self-development competency and productive creativity for social development and specified learning achievement.

Evaluation: based on the self-assessment of competency, self-development portfolio, and project for social development of nursing students.

Social System: the learners have learned from the interrelation, responsibility for assigned tasks and collaborative creation of new knowledge for self, collective and social development.

Principle of reaction: the learners' motivation was enhanced by learning and understanding themselves and society as well as creating an open environment that supports learning and promotes creativity in the learners.

Support system: the learners must have responsibility for themselves and society, collaborative learning and creative thinking. (Figure 1)

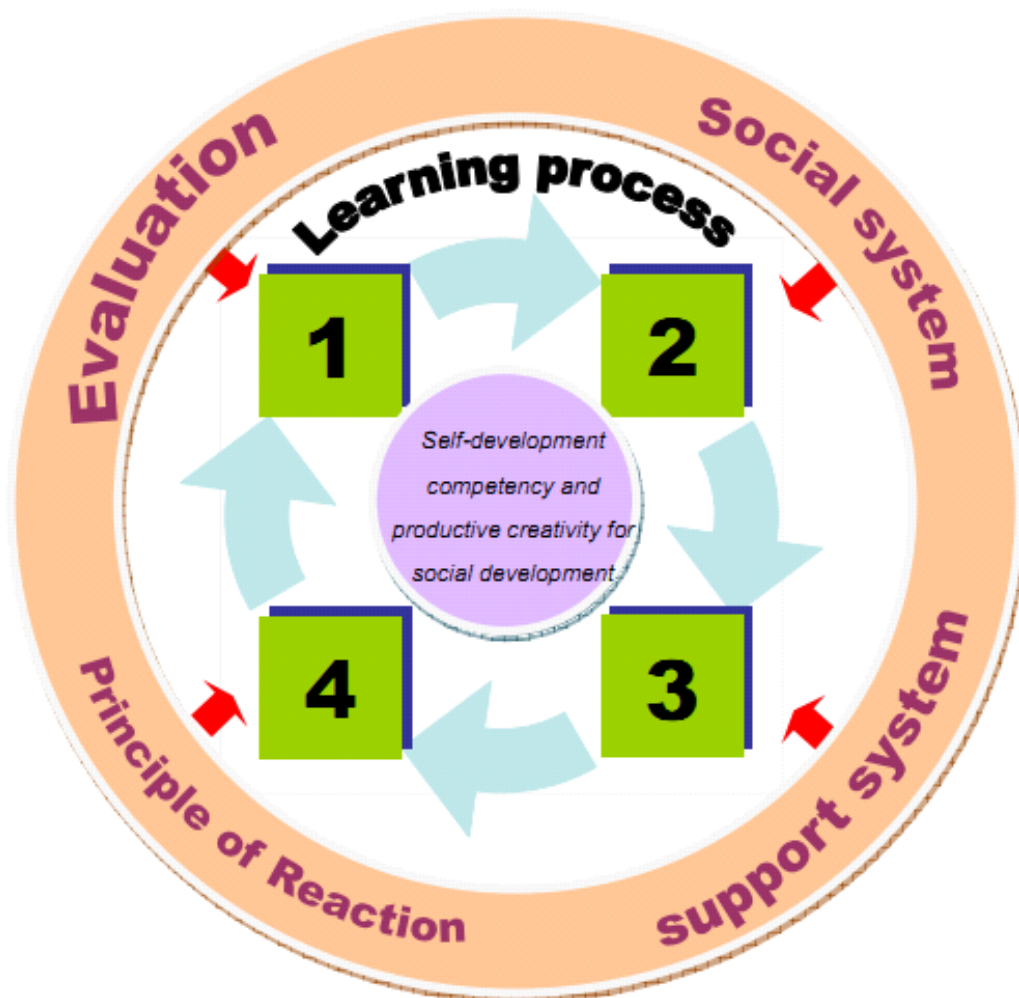


Figure 1 The developed model

- **The developed model effectiveness**

The developed model effectiveness is as follows:

- **Self-development competency and productive creativity for social development** – Table 1 shows the comparison of pre- and post- trial average of self-development competency and productive creativity for social development.

Table 1: Comparison, using paired *t*-test, of means and standard deviation of self-development competency and productive creativity for social development before and after trial. (n = 75)

| Competencies | Pre-trial | | Post-trial | | t | P |
|--|-----------|-------|------------|-------|-------|------|
| | \bar{x} | SD | \bar{x} | SD | | |
| Ethics and Moral | 3.63 | .3663 | 3.81 | .3453 | 3.54 | .001 |
| Knowledge | 2.83 | .5359 | 4.12 | .4406 | 18.71 | .000 |
| Intellectual Skill | 3.30 | .4455 | 3.93 | .3798 | 12.58 | .000 |
| Interpersonal Relations Skill and Responsibility | 3.78 | .4658 | 4.08 | .4238 | 5.82 | .000 |
| Numerical Analysis Skill, Communications and Use of Information Technology | 3.33 | .4307 | 3.85 | .4648 | 9.23 | .000 |
| Creativity for Social Development | 3.09 | .4637 | 3.83 | .5104 | 11.61 | .000 |
| Total | 3.37 | .3679 | 3.95 | .3417 | 13.98 | .000 |

$p < .01$

- **The assessment of learning achievement is as follows**

- **Test and group behavior scores:** 100% of learners had test scores that meet the criteria. According to group behavior assessment by means of self- and peer assessment, the majority of them had test scores at ‘Very Good’ level with the scores of 16-20 (50.63%). Meanwhile, the same number of learners is at ‘Good’ and ‘Fair’ level (20.25%).

- **Self-development diary record scores:** according to the individual scores of self-development diary record, most of them are at ‘Good’ level with the scores of 10-12 (78.48%). The highest score at ‘Very Good’ level was 15 points. Meanwhile, the lowest point at ‘Improvement Needed’ level was 9 points (1.26%).

- **Score of the assessment of the creativity for social development:** according to the scores of the creativity in each group, all groups’ scores were at ‘Good’ level. The sample group had initiated the social development projects both inside and outside the educational institutes.

- **Nursing students’ satisfaction towards instructional model for enhancing self-development competency and productive creativity for social development:** the average score as a whole was at ‘Good’ level (average of 3.81). In this regard, ‘the lecturer’s expertise in the instruction’ accounts for the highest average score at ‘Good’ level (average of 4.06). Then, the average scores of ‘the instructional model encouraged students to initiate the social development project’ and ‘the instructional model enhances students’ creativity’ were 4.03 and 4.00, respectively. However, ‘use of different media’ had the lowest average score of 3.43 at ‘Fair’ level.



Discussion and Conclusion

Self-development, social responsibility and lifelong learning skill are very critical issue for nursing students in this knowledge based society and the ASEAN Economic Community. College of Nursing has to provide with academic and extracurricular programs for developing nursing students competencies. The findings of this study support Phaithoon Sinlarat (2011) and correspond to creative and productive education concepts as well as support the sustainable development concept. The developed model enhanced learners' self-development competency and productive creativity for social development. Nursing students were able to engage in self-development and analysis of relevant situations. They also initiated the new projects for solving social and environmental problems. This is regarded as the developed model meets the needs of present generation without any negative impact to the future generations. That is to say that the sustainable development should take into consideration the balance between social and economic development and environmental protection.

This study had achieved the instructional guidelines for first-year nursing students in enhancing their self-development competency and productive creativity for social development. The application of the developed instructional model enables students to pursue self- assessment and analysis. They are capable to plan continual self-development, to think creatively; to analyze the situations affecting themselves; society and environment; and to initiate self-development project. Long-term study should thus encourage students to continue pursuing the project along with the assessment of possible impacts on the society. This may then lead to the sustainable development strengthens the society and ASEAN community as a whole.

Acknowledgments

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