

Research Article

NEEDS ASSESSMENT TO ENHANCE TEACHING PROFESSIONAL COMPETENCIES OF RAJABHAT UNIVERSITY' S PRESERVICE TEACHER STUDENTS IN PHYSICAL EDUCATION

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Suthigron Kaewtong^{1*} Pimpa Moungsirithum² and Ittipat Suwathanpornkul³^{1,2,3}Srinakharinwirot University, Bangkok 10110, Thailand

*Corresponding Author, E-mail: suthigron.k@nsru.ac.th

Abstract

The purposes of this research were 1) to study the actual and desirable competencies of Physical preservice teacher students, and 2) to study the necessary need in enhancing Physical preservice teacher students' competencies. The research method was a survey research and divided into three steps which including 1) determining the conceptual framework, 2) studying the actual and desirable competencies for enhancing the teaching competencies of Physical Education preservice teacher students, and 3) assessing the needs for preparing before practicing the teaching profession to enhance the competencies of Physical Education preservice teacher students. The sample was 136 of supervisor Physical Education teachers by using purposive sampling. Data were analyzed by Percentage, Mean, Standard Deviation and Priority Needs Index (modified).

The research results showed that: 1) the actual competencies of Physical Education preservice teacher students in overall was rating at Good ($\bar{x} = 3.65$, S.D. = 0.76) and desirable competencies of Physical Education preservice teacher students in overall was rating at Very Good ($\bar{x} = 4.59$, S.D. = 0.51), 2) the needs assessment for preparing before practicing the teacher profession to enhance the competencies of Physical Education preservice teacher students in overall of every topic were necessary with the needs between 0.13 – 0.37.

Keywords: Needs Assessment, Physical Education, Preservice Physical Education Teacher, Teaching Professional Competencies

Introduction

Education makes people in building society and nation. The Ministry of Education by office of the Education Council made the National Education Plan 2017-2036 to frame the goals and direction of the country and to focused on the Thai people abilities to access opportunities and educational equality which to create the effective learning process and develop people to be competent for work that corresponds with the needs of

the job market and the needs of the country and consistent with the Ministry of Education's Educational Development Plan No.12 B.E. 2017-2021 by defining the second strategy to produce teachers in accordance with the needs of all levels of educational management, including having faculty members and educational personnel who are competent according to professional standards to have full teaching potential (Office of Permanent Secretary, 2017, p. 53)

The aspiration of education as a mechanism for the country's human development which to be an important force in developing a nation's capacity to build self-reliance and the competition. Moreover, for the economics progress and stability in the world society on the basis of Thai education, it is vital to ensure that education is a vehicle for the nation's quality so that, the problem with teachers and teaching profession are something that they need to speed up the process of improvement. In addition, education can develop the quality of teachers according to their intentions, creating a new generation of professional and creative teachers. The Faculty of Education is where who would like to become teachers and develop teaching competencies with contents and learning processes and training that is effective in developing teachers to give them the skills and leadership which they need to lead the transition to a professional teacher.

The need for good and quality teachers must focused on the process of graduation with educational professions, and standard quality in producing teachers according to the needs of society and the perception of social reflection, and competence of Thai teachers should be in this day therefore that cannot be overlooked. Chaowatanakul (2010, p. 46) claimed that the teacher production process did not affect the teacher development to become researchers in terms of knowledge, attitudes, skills, and learning support sources. This results in a lack of knowledge and techniques in managing a variety of teaching and learning. However, from the above reflection, agencies involved in the production of educational professional graduates must be aware of standards and production processes to enable future teachers to have desirable and quality competencies.

At present, institutions were producing educational personnel both public and private sectors, must comply with the Teachers Council of Thailand regulations on the teaching profession. Teacher professionals must have qualifications at least a bachelor's degree in education or equivalent or have other qualifications recognized by the Teachers Council of Thailand with the following standards of knowledge and professional experience: 1) a change in the world's social context and the concept of sufficiency economy philosophy, 2) developmental psychology, educational psychology and counseling in analysis and development of students' potential, 3) course content, teaching science, and digital technology in learning management, 4) learning measurement and evaluation and research for problem solving and student development, 5) using Thai, English for communication and using digital technology for education, and 6) designs and procedures for educational quality assurance.

The development of the new generation of teachers' quality, the past of Thailand's education has suffered many problems, one important problem was the problem of teachers and educational personnel which has been problematic since the production, development and maintenance of the teaching profession standard. Moreover, problems with the production process, Phajjit et al. (2019, p. 34) said that the conditions and problems of students during the vocational training There are 6 issues that are most commonly encountered, namely 1) the aspect of creating a learning management plan, 2) the aspect of learning management, 3) the aspect of the classroom

management, 4) the selection or creation of learning media, 5) the measurement aspect and evaluating students' learning outcomes, and 6) conducting research in the classroom.

For practicing the student teacher's professional experience of the Bachelor of Education program in Physical Education of Rajabhat University. A survey was conducted on the conditions and problems of the students in the past. There were seven issues among students in teaching professional experience which found most interest: 1) school curriculum, 2) learning management, 3) educational measurement and evaluation, 4) classroom management, 5) creating of innovation and action research, 6) implementation of educational technology, and 7) the desirable characteristic which related to the Faculty of Education, Srinakharinwirot University (2011) who claimed that the states and problems of students during teaching practicum revealed 6 issues: 1) the preparation of learning plans, 2) learning management methods, 3) classroom management, 4) selection or creation of instructional media, 5) measurement and evaluation of student learning outcomes, and 6) conducting classroom research.

From the problem issues which raised from teaching practicum, the process of finding a way to solve the problem from training preservice teacher students in teaching practicum is necessary and urgent issue which have many ways to solve these problems. Since reappraisal of the course in various components has been a matter content and learning experience on subject learning and evaluation. It may take time to resolve problems and can develop student's potential before starting a teacher's career. Researchers were involved in the development of Physical preservice teacher students pointed out that an assessment of needs was necessary to investigate the problem because of the difference between the current status and the status which should be. Therefore, an important basis for planning and defining the development guidelines in accordance with current conditions and needs, and this led to why researchers are interested in evaluating the need to prepare for a teaching practicum of Physical preservice teacher students which will enhance Physical preservice teacher students teaching competencies.

Research Objectives

1. To study the actual and desirable competencies of Physical preservice teacher students
2. To study the necessary need in enhancing Physical preservice teacher students' competencies

Research Methodology

Population in this research were lecturer with experience in Physical preservice teacher students' supervision in Rajabhat University where launch the Bachelor of Education in Physical Education in total of 32 institutions with 216 lecturers.

Sample were lecturer with experience in Physical preservice teacher students' supervision in Rajabhat University where launch the Bachelor of Education in Physical Education in total of 32 institutions which random by institution and approximate sample group size using sample group by Krejcie's & Morgan's at 95% confidence, including 136 people.

Research Conduction Processes

1. The study of documents and research related to the students' competency in teaching professional experience in order to collect basic information for using in content analysis, synthesis and defining the competency framework of students in the Bachelor of Education Program in Physical Education.

2. Organize content issues to develop research tools which consists of a competency opinion required to practice professional experience. The questionnaire consisted of 3 parts as follows:

Part 1 Questionnaire on personal information of respondents which is a check list survey by asking for information about gender, status, educational level academic position and length of working experience.

part 2 Questionnaire on the competency of physical education preservice teachers students using rating scale of 5 levels: highest, high, fair, small, smallest, which consists of all 7 competencies: 1) school curriculum, 2) learning management, 3) educational measurement and evaluation, 4) classroom management, 5) creating of innovation and action research, 6) implementation of educational technology, and 7) the desirable characteristics.

Part 3 Other Comments and Suggestions

3. The questionnaire created for 5 experts to check the structure and content. The criteria for consideration were Consistent (+1), Not Sure (0), and Inconsistent (-1). The consistency (IOC) is in the range of 0.60 – 1.00 then be revised according to the recommendations.

4. The questionnaire was used to experiment with 30 people who were involved in teaching professional experience who were not the sample group and to determine the Reliability, using Cronbach's Alpha Coefficient with the reliability is 0.96 was implemented.

5. Bring the results of the data analysis to improve and correct for further data collection.

6. Contact to request a letter from the Graduate School for cooperation in collecting data.

7. The researcher collected data from the sample group by using the questionnaire to collect data with supervisors of teaching professional experience of Physical Education at Rajabhat University.

8. The data obtained from the questionnaire were analyzed by using statistical methods.

Data Analysis

Researchers divided the analysis into 2 steps as follow;

Step 1: Preliminary information on the respondents to describe the background information with a basic statistic which were frequency and percentage.

Step 2: An analysis of the needs assessment to enhance teaching professional competencies. The researcher analyzes by using Mean, Standard Deviation. The assessment of needs of Physical preservice teacher students by analysis the difference between the actual and the expected competencies and ordering by mean difference score which using the Modified Priority Index (PNI modified) by Wongwanich (2007) method as a method for determining the potential difference (Importance: I) with the actual performance (Degree of Success: D) and divide by the actual state. The calculation formula is $PNI\ modified = (I - D) / D$ and the order of magnitude. Necessary according to PNI modified. The evaluation criteria for PNI modified value of 0.28 or more are considered as urgent need. The prioritization section of the necessary requirements, use a descending index sort.

Research Findings

The research of needs assessment to enhance teaching professional competencies of Rajabhat University's Preservice teacher students in Physical Education shows that;

Table 1 Summarizes the results of the study of needs for enhancing the competency of Bachelor of Education in Physical Education of Rajabhat University

Assessment List	Expected Condition			Real Condition			Need	
	(I)			(D)			PNI _{modified}	
	\bar{x}	S.D.	Level	\bar{x}	S.D.	Level	(I-D)/D	No.
1. School curriculum	4.29	0.60	Most	3.36	0.89	High	0.27	4
2. Learning management	4.66	0.48	Most	3.69	0.72	High	0.26	5
3. Measurement and evaluation	4.65	0.48	Most	3.59	0.75	High	0.29	2
4. Classroom management	4.65	0.52	Most	3.83	0.69	High	0.21	6
5. Creating the innovation and action research	4.41	0.62	High	3.22	0.81	High	0.37	1
6. Educational technology	4.60	0.53	Most	3.58	0.78	High	0.28	3
7. The desirable characteristics	4.82	0.37	Most	4.26	0.64	Most	0.13	7
Total	4.59	0.51	Most	3.65	0.76	High		

1. Based on the preliminary data of the questionnaire, it appears mostly Male rather than Female by 116 of Males (85.29%) and 20 Female (14.71%). The level of education of the sample group shows that mostly have Master's degrees (90 people, 66.18%) and Doctorate degrees (46 people, 33.82%) which found that the position of the Lecturer was the most 99 people, Assistant Professor 36 people and Associate Professor at 1 person and the duration of the operation was more than 10 years in 67 peoples (49.26%) working between 5 to 10 years is 61 people (44.85%) and working for less than 5 years is 8 people (5.88%).

2. The need for enhancing competencies of students and teachers in Physical Education found as follow,

2.1 The actual competencies in enhancing the competencies of teachers in all aspects of Physical Education were at a Good level ($\bar{x} = 3.65$, S.D. = 0.76), found that the highest 3 competencies were the desirable characteristics at Good level ($\bar{x} = 4.26$, S.D. = 0.64), followed by the learning management at Good level ($\bar{x} = 3.83$, S.D. = 0.69) and lastly, Educational Technology implementation at Good level ($\bar{x} = 3.69$, S.D. = 0.72), respectively.

2.2 Expected competencies in enhancing the competencies of students Physical Education preservice teacher students found that in overall, all aspects were at a Very Good level ($\bar{x} = 4.82$, S.D. = 0.37), and found that the top 3 Mean values where the desirable characteristics was Very Good ($\bar{x} = 4.81$, S.D. = 0.40), followed by learning management at Very Good level ($\bar{x} = 4.66$, S.D. = 0.48). The measurement and evaluation had a Very Good level ($\bar{x} = 4.66$, S.D. = 0.48), and classroom management was a very Good level ($\bar{x} = 4.65$, S.D. = 0.52) respectively.

2.3 Evaluation of the need for preparing teaching experience professional to enhance competencies of students in physical education of Rajabhat University In general, all aspects have necessary important value (PNI_{modified}) was between 0.13– 0.37, in descending order of the first 3 items, which were the areas with the highest

$PNI_{modified}$ value and the importance of enhancing students competencies of Physical Education preservice teachers. The first is classroom management in creating the innovation and action research ($PNI_{modified} = 0.37$), followed by measurement and evaluation of education ($PNI_{modified} = 0.29$), the use of educational technology ($PNI_{modified} = 0.28$) and school curriculum ($PNI_{modified} = 0.27$), respectively, while the lowest PNI modified was desirable characteristics ($PNI_{modified} = 0.13$) with details as following Table.

Discussions

1. Preliminary data of the respondents found that most of male higher than female. participants in this study were lecturer and supervise in the Department of Physical Education at Rajabhat University and have experience in Physical Education teacher training found that the most have master's degree qualifications (90 people, 66.18 %) and have Doctoral degree qualifications (46 people, 33.82 %). Academic positions found that the most were 99 lecturers, followed by the Assistant Professor, (36 people), and Associate Professor (1 person), and working experience found that 67 people worked more than 10 years (49.26%), and follow by 61 people worked between 5 - 10 years (44.85 %), and worked for less than 5 years was 8 people (5.9 %), which included the level of experience in the Physical Education teacher profession of the respondents showed that the informant in the study of needs to enhance the competency of students which related to Sanrattana (2011, p. 12) who described that the need assessment is important to develop the curriculum and instruction which were the process that have to plan the curriculum to develop learners' high competencies.

2. Needs to enhance students' competencies found that the actual competencies in enhancing the competencies of all Physical Education preservice teacher students in all aspects were at Good and found that the highest 3 competencies were the desirable characteristics at Good level, followed by the learning management at Good level and lastly, Educational Technology implementation at Good level, respectively. The expected competencies in enhancing the competencies of students Physical Education preservice teacher students found that in overall, all aspects were at a Very Good level, and found that the top 3 Mean values where the desirable characteristics was Very Good, followed by learning management at Very Good level. The measurement and evaluation had a Very Good level, and classroom management was a very Good level, respectively. According to research findings, there is a difference between actual performance and expected performance, then prioritize by choosing the most necessarily needs to study. The aim of needs assessment is an informed study to complement the implementation planning to inform decisions about remedial action, development of budget allocation, and the preparation of corporate action plans Wongwanich (2010, p. 23)

3. Evaluation of the need for preparing teaching experience professional to enhance competencies of students in physical education of Rajabhat University In general, all aspects have necessary important value ($PNI_{modified}$) was between 0.13 – 0.37, in descending order of the first 3 items, which were the areas with the highest $PNI_{modified}$ value and the importance of enhancing students' competencies of Physical Education preservice teachers. The first is Creating of Innovation and Action Research ($PNI_{modified} = 0.37$), followed by Educational Measurement and Evaluation ($PNI_{modified} = 0.29$), Implementation of Educational Technology ($PNI_{modified} = 0.28$) This supported by the study of Wongwanich (2007, p. 35) who said that the primary goal of classroom research is for teachers to find

solutions to solve problems that arise in the development of learners' learning, where research conducts concurrently with teaching and learning which similar to Baumgartner and Jackson (1999, pp. 321–346) who said that measurement and evaluation will help group learners to suit the teaching, practicing, learning about practicing which group learners will arrange the similar characteristics together the correction of defects can also be done correctly, and related to Paopanao (2011, p. 148) who resulted that competence in information technology and communication skills for learning is necessary to teaching professional development at the greatest level. Office of the National Education Commission (2010) Article 30 which states that “*educational institutions should develop the effective teaching and learning processes as well as encouraging teachers to do research to develop appropriate learning for learners in each educational level*”. Therefore, teachers have to do research, especially action or classroom research in Physical Education (CAR-PE) to recognize students, and promote, and develop students' learning according to the standards and indicators of each curriculum level which will be the benefits to students' learning include teaching and teacher work advancement.

Research Suggestions

From the need assessment of pre-teaching professional experience in order to enhance the competencies of Physical Education teacher students, it was found that the reason for the need is that students should develop the necessary competencies in Creating of Innovation and Action Research urgently followed by Physical Educations' Educational Measurement and Evaluation, and Implementation of Educational Technology. Institutions where producing teachers or those organizations involved in the production and development of Physical Education teacher students should be developed in such areas above first. The development guidelines should provide a training course for Physical Education teacher students with an emphasis on knowledge and skills for Physical Education teacher students to practice in action.

Results of this research is a conceptual framework for research and development of training courses for developing capacities in teaching professional teacher experience of Physical Education preservice teacher students in the Bachelor of Education program of Department of Physical Education in Rajabhat Universities.

References

- Baumgartner, T. A., & Jackson, A. S. (1999). *Measurement for evaluation in physical education and exercise sciences* (6th ed). Boston, MA: McGraw-Hill.
- Chaowatthanakun, K. (2010). *The development of a mentoring model for enhancing competency in teaching and conducting classroom action research for pre-service mathematics teachers* (Doctoral dissertation). Bangkok: Silpakorn University.
- Office of the National Education Commission. (2010). *The National Education Act B.E. 2553 and Amendments Second National Education Act B.E. 2553*. Bangkok: Thailand.
- Office of the Permanent Secretary. (2016). *The 12th MOE's education development plan (2017-2021)*. Bangkok: Ministry of Education.

- Paophanao, S. (2011). *The study of information technology and communication competencies for learning of undergraduate students in Rajamangala University of technology Rattanakosin Wangkrakangwon Campus* (Master thesis). Bangkok: Silpakorn University.
- Phajjit, P., Tingsabhat, S., & Wattanaburanon, A. (2019). A needs assessment in professional teacher preparation to enhance competencies of physical education teacher students Rajabhat University. *Journal of Phetchaburi Rajabhat University*, 9(3), 30-36.
- Sanrattana, U. (2011). Need assessment for curriculum and instruction development. *Journal of Education Khon Kaen University*, 34(1-2), 9-20.
- Srinakharinwirot University. (2011). *Seminar document on Teaching Practice during Study (Teacher Students of Bachelor of Education (B.Ed. 5 years)*. Bangkok: Faculty of Education Srinakharinwirot University.
- Wongwanich, S. (2007). *Needs evaluation research* (2nd ed.). Bangkok: Chulalongkorn Publisher.
- Wongwanich, S. (2010). *Classroom action research*. Bangkok: Chulalongkorn Publisher.