

Curriculum Needs Assessment to Enhance Professional Competency Development of Child Care Teachers at Child Development Centers under Local Government Organizations, Thailand

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Abstract

The research objectives were to study needs assessment, needs priority, and suggestions for professional competency development of child care teachers at child development centers under local government organizations. The study sample comprised 397 child care teachers. Research tools were a questionnaire and a focus group discussion guideline. Data analysis employed the techniques of frequency distribution, percentage, mean, standard deviation, paired-sample t-test, Modified Priority Needs Index, and content analysis. Research results are the following: 1) the means of the practice of professional competency development of child care teachers in real and expected conditions are different at .01 statistical significance in all dimensions -- indicating the needs of child care teachers for training in all dimensions of professional competency development; 2) needs priority for development in descending order are learner's development, curriculum and teaching management, quality service, and morality and ethics; 3) key suggestions for competency development are 3.1) teacher development enabling actual new learning process management techniques suitable for the 21st Century such as Web-Based Learning, Project-Based Learning, Student-Centered Learning, Self-Directed Learning, Collaborative Learning, and Problem-Based Learning; 3.2) development on learning and innovation skills suitable for 21st Century real life -- 4C's: creativity and innovation, critical thinking and problem solving, communication, and collaboration; and 3.3) development of curriculum and learning as (1) vision formulation oriented to 4C's, (2) community of collaboration building among stakeholders to feel ownership by shared vision design, (3) child development center system building for shared vision towards 4C's; (4) making 4C's as professional development framework, (5) injecting 4C's in curriculum and evaluation, (6) encouraging all teachers to instruct according to 4C's, and (7) building sustainable 4C's development culture.

Keywords: child development center, curriculum, local government organization, needs assessment, professional competency.

Introduction

At present the knowledge in various scientific fields has been developed very fast especially on technologies. The learning processes then must follow these changes. Learning is not only the transfer of knowledge from teacher to student called Education 1.0 as practiced in the past. In education, learning has been developed with technology as management tool as being called Education 2.0 without satisfying achievement. At present learning has been modified into Education 3.0 with the encouragement of self-learning by student through all multi-media forms. There are print and digital media with integration for teamwork and interactive learning adaptation with increasing use of online social media for education development. While these technological changes and knowledge transformation



have been very quick and endless, teacher must strive for self-development to step across barrier to the new world of learning, adapt learning process according to the changing student's behaviors and implement new technologies for tools to encourage learning. These are great challenges for teacher. The new learning society focuses not only on student as knowledge receiver but also as innovative knowledge creator. This is the crossing point for teacher to leave the Education 3.0 to the modern learning system or Education 4.0. Therefore, teacher is a major actor for this modern learning system change (Learning Innovation Center, Chulalongkorn University, 2014).

All countries nowadays are aware of educational reform with the objectives of efficient, standardized educational development to produce high quality human resources for the knowledge society age. Many countries are interested in career development of teachers. Teacher competency indicators have been defined as necessary factors for teacher career performance to achieve efficiency and enable teacher quality drive. The Singapore's Ministry of Social and Family Development (2012) sets up the three levels of teacher professional competency development. The Ministry describes the framework of professional characteristics that a teacher practitioner is expected to maintain and to build on at his/her current career stage. Each set of domain competencies at each level builds on the previous one. The teacher is expected to continue to meet the core competencies and to broaden and deepen his/her professional attributes knowledge, understanding and skills within a specific level.

For example, a teacher being considered for Level 2 would need to satisfy the Level 1 competencies as well as meet the competencies of Level 2. A teacher aspiring to achieve Level 3 would need to satisfy the standards that are specific to that level and meet the preceding standards for Level 1 and Level 2. It is like going up the steps that the lower steps must be firmed for advancing to the next higher steps. A teacher must have a secure foothold on the previous and lower ones. The relevant competencies are looked at as a whole in order to help teachers identify areas of strength and areas for further professional development. As a teacher progresses, he/she will be expected to demonstrate and extend the depth and breadth of knowledge, skill and understanding in terms of the teacher's mastery as well as increasing effectiveness in meeting the competencies, according to the role and in the context of the teacher. The core knowledge domains are child development, learning environments and curriculum, family and community engagement, and management, administration and leadership.

Specifically, the professional characteristics for teacher of young children are defined by the Office of Early Childhood Development, Virginia Department of Social Services (2008). They are 1) **commitment to quality** -- focusing on integrating high quality standards and practices into the development, implementation, and management of programs serving young children and their family; 2) **professional development** -- demonstrating commitment to acquiring and maintaining current professional knowledge and to ongoing professional development. This includes acquiring the necessary skills to engage in competent research and to contribute to the professional and popular literature in order to expand the base of knowledge within the profession and for the public at large. The other characteristics are 3) **advocacy** -- advocating high quality early childhood care and education programs that serve young children and their families, and 4) **ethics** -- interacting with colleagues, families, board members, and the broader community in ethical ways to build authentic partnerships that support the healthy growth and development of young children.



Due to rapid change in social conditions many teachers can not adapt or self-develop to cope with the new requirements. The child care teachers at child development centers under local government organizations in Thailand have been affected tremendously. The 52,000 new child care teachers in the country need professional competency development while the large number makes it difficult for development planning and implementation. The local government organizations lack the clear model or guideline for the development needs. These deficiencies are in agreement with the research findings on the problems of professional competency development of early childhood teachers. The problems are 1) On working practices -- the teachers lack understanding, knowledge and experience, quality learning media; ignore and lack understanding on child nature causing child care failure; lack good relationship with parents and community; 2) On self-development -- most teachers receive no training after degree study; lack love of reading and research for self-development on knowledge and teaching skill; lack enthusiasm in self-improvement; coupled with little government-supported training and seminars for early childhood teachers; 3) On professional ethics -- most teachers lack opportunity for professional development, professional ethics, morality, appropriate behavior representing the role model for children, work commitment, and professional pride (Chuensuksomwang, 2013; Office of Education Council, 2014; Yaowaman Wiset, 2005; Omotuyole & Okudo, 2014; Caparotta, 2012).

However, the planning for development action on any issues should start with context assessment for understanding of the present or real condition of an organization and to learn of organization needs for appropriate responses in any dimension. The aid for this planning process is the needs assessment research. This is the systematic process to define the gap between desired or expected goal and the real conditions. The information gained then is prioritized according to the significance of the gaps (differences). The major needs will be selected to find causes and define guidelines for solution. The results from the needs assessment reflect the existing context of the organization. The information from the needs assessment is the significant basis for further planning and development guidelines in line with the real context and responsive to the organization needs. This information is the benchmark for defining clear development objectives and enable confidence in responding correctly to the organization needs (Wongwanit, 2005; Sleezer, Russ-Eft & Gupta, 2014; Altschuld & Kumar, 2010; Altschuld & Eastmond, 2010; Royse, Staton-Tindall, Badger & Webster, 2009). Therefore, this research was to conduct the curriculum needs assessment to enhance the professional competency development of childcare teachers at child development centers under local government organizations to bring about action to solve the problems and develop efficiency for professional training.

Research questions

Do childcare teachers at child development centers under local government organizations have professional competency development needs in any dimensions? How are those needs prioritized? What are the development guidelines?

Research objectives

The research objectives were to compare the real and expected conditions, find needs priority, and suggest guidelines for professional competency development of childcare teachers at child development centers under local government organizations.



Research scope

- 1. The research population comprised 52,251 childcare teachers at child development centers under local government organizations in 4 regions in the 2015 academic year.
- 2. Research variables were professional competency development needs of childcare teachers at child development centers under local government organizations in 4 dimensions 1) learner's development, 2) curriculum and teaching management, 3) quality service, and 4) morality and ethics.

Research framework

This study assessed the needs with systematic process to define the difference between the real and expected conditions. The information gained was analyzed for needs assessment with Modified Priority Needs Index (PNI_{modified}) according to Wongwanit (2005); Sleezer, Russ-Eft & Gupta (2014); Altschuld & Kumar (2010); Altschuld & Eastmond (2010); Royse, Staton-Tindall, Badger & Webster (2009). The needs then were selected according to the prioritized significance for finding causes and guidelines for professional competency development of childcare teachers at child development centers under local government organizations. The research framework is shown in Figure 1.

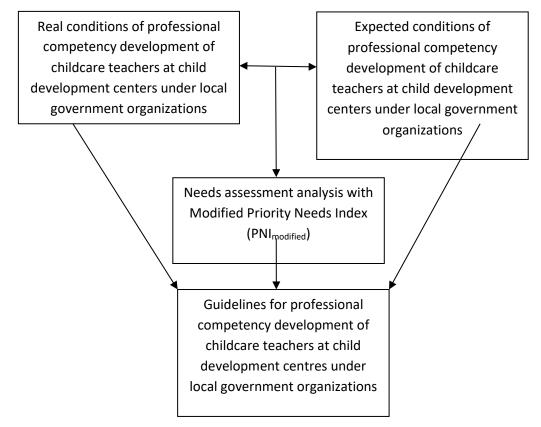


Figure 1. Research framework

Research method

This study was a completed needs assessment research with 2 phases. Phase 1 was the needs assessment for professional competency development of child care teachers with survey questionnaire. Phase 2 was the analysis of the needs priority and guidelines for professional competency development of child care teachers with focus group discussion.



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The survey research population comprised all 52,251 child care teachers at child development centers under local government organizations in 2015 academic year. The sample size of 397 teachers was derived from Yamane equation with 95% confidence and by multi-stage sampling. The 40 focus group participants were selected from teachers at child development centers under local government organizations in four regions -- 10 from each region -- by purposive sampling. The criteria selected were teachers with outstanding teacher award, with at least senior professional academic position and with more than 5 years experience. The research tools were questionnaire, focus group discussion guideline. Data analysis employed the techniques of frequency distribution, percentage, mean, standard deviation, paired-sample t-test, Modified Priority Needs Index, and content analysis.

Research results

The findings are the following. 1) The professional competency development of child care teachers in reality as a whole are at medium level while the expected conditions are at very high level with .01 statistical significant differences in all dimensions. These indicate the child care teachers need all dimensions of professional development. 2) Needs priority for development according to PNI_{modified} in descending order are learner's development, curriculum and teaching management, quality service, and morality and ethics (See Figure 2). 3) Key suggestions for professional competency development of child care teachers are:

- 3.1) Development for teachers being able to manage new learning process suitable for the 21st Century such as Web-Based Learning, Project-Based Learning, Student-Centered Learning, Self-Directed Learning, Collaborative Learning, and Problem-Based Learning.
- 3.2) Development on learning and innovation skills suitable for real life conditions in the 21st Century (4C's) as creativity and innovation, critical thinking and problem solving, communication, and collaboration.
- 3.3) Development of curriculum and learning as (1) vision formulation oriented to 4C's, (2) community of collaboration building among stakeholders to feel ownership by shared vision design, (3) child develop center system building for shared vision towards 4C's; (4) making 4C's as professional development framework, (5) injecting 4C's in curriculum and evaluation, (6) encouraging all teachers to instruct according to 4C's, and (7) building sustainable 4C's development culture.



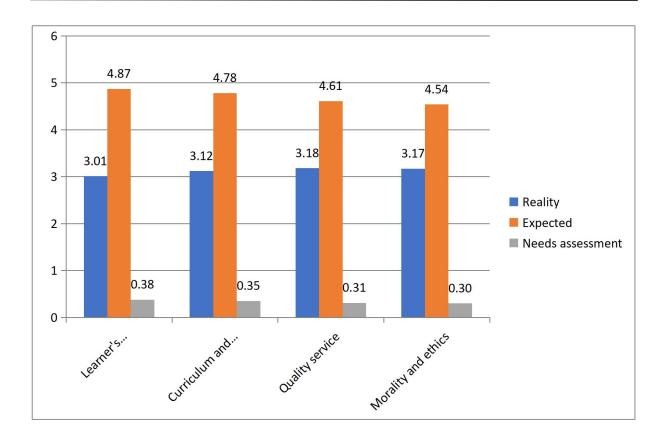


Figure 2. Gaps between expected conditions and real conditions derived from the needs assessment in all 4 dimensions of professional competency development of child care teachers in local government organizations.

Discussion

Some key points from research results are considered below.

1. The real conditions of professional competency development of child care teachers in all dimensions are at medium level and the expected conditions are at very high level with the differences between them at .01 statistical significance. The results indicate that there are development needs in all dimensions. This is because the development at the localities must cope with increasing number of child care teachers while there is a lack of personnel planning and systematic process. So the resulted operation is rated at medium level with the expected professional competency development needs at very high level. The results are in line with Chuensuksomwang (2013) finding that the professional competency development of early childhood teachers with the real and expected conditions differ at .01 statistical significance in all dimensions. They are teaching -- learning management, learner's development evaluation, collaboration among parents and community; self-development -- acquiring knowledge, classroom action research, teamwork; morality and ethics -- role model behavior, love in teaching profession, discipline and responsibility. and faith Chuensuksomwang findings demonstrate the early childhood teachers need all dimensions of professional competency development. Caprotta (2012) also studied the needs of stakeholders of early childhood education management -- classroom teachers, assistant teachers, child care teachers, and educational supervisors -- in 3 dimensions. They are 1) teaching preparation, 2) missed opportunity for professional development, and 3) needs for professional development.

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Caprotta's study finds that 1) highly needed on early childhood teaching preparation from those concerned is the consultation among teaching colleagues or educational supervisors for advices and exchange of ideas; 2) the missed opportunity for professional development is due to high training expenses and time and place inconveniences; 3) needs of professional development on knowledge and skill of efficient teaching management. Omotuyole and Okudo (2014) studied professional development of early childhood teachers in urban and countryside areas of Logos state, Nigeria. The survey study finds that most teachers did not receive trainings after college graduation, had no opportunity to improve and develop knowledge and skills efficiently. They also received very little government support for training and seminars.

- 2. The priority needs ranking with modified PNI technique reveals that the needs for learner's development is very high. These results may be due to learner's quality is the ultimate goal for development of knowledge, skill, aptitude together with value in line with society and fast changing context. Moreover, learner's development is the process to foster morality and ethics along with life skills, physical and mental hygiene, democracy, Thai pride, and learner's aid management system (Office of Basic Education Commission, 2010). The learner's development is the concept studied by Friesen and Gifford (2012). They state that the 21st Century teachers must develop learner by knowing how to develop student in all dimensions such as 1) teaching life skills, ethical leadership, responsibility, self adaptation, responsibility to self, others and society; 2) teaching core subject and 21st Century subjects comprising world knowledge, finance, business, economy, and entrepreneurship, citizen's literacy, health awareness. Besides, the 21st Century teachers must know how to develop student individually in physical, emotional, societal and intellectual dimensions. For instance, the 21st Century teachers must 1) know student's thinking and learning process, 2) understand individual differences and adjust teaching to each student's peculiarity, 3) collect data for research development, and 4) find strengths and weaknesses of student for improvement.
- 3. Major guidelines for professional competency development of child care teachers are developing teachers to be able to manage new knowledge learning process, developing learning skills and innovation, and seriously developing curriculum and knowledge learning according to the 21st Century. Since the goal and policy of the Ministry of Education increasingly focuses on the learner with the tendency to adjust learner's characteristics suitable for the 21st Century skills such as 3Rx7C and 4C's (Panit, 2012).

Presently, the transformation to the 21st Century knowledge society with the drive of digital technology has been occurring rapidly. Many scholars agree that this fast paced drive is just the beginning with accelerating speed in the next steps. Some scholars have mentioned the present as innovation society. These changes nevertheless have been affecting education concepts with many new theories and thinking being developed. The goal of education is learning for being human who can live with quality along with the changing world. Many scholars agree that when society changes, those who teach the same way hoping to get the same results in the past will make student's learning not suitable to the present and future. Teachers then are significant actors who need to develop themselves in keeping up with changes (Sanratana, 2013).

In support of technology literacy, Panit (2012) stated that the present Generation Z is the group who regularly access to the internet or commonly called netizens. The new age

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children must have different characteristics to live in society happily. The 21st Century skills for the new young generation are 3Rs -- Reading, (W)Riting, (A)Rithmetics; and 7Cs -- Critical thinking & problem solving, Creativity & innovation, Cross-cultural understanding, Collaboration, teamwork & leadership, Communication, information & media literacy, Computing & ICT literacy, Career & learning skills. The skills above needs five learning factors -- authentic learning, mental model building, internal motivation, multiple intelligences, and social learning.

Therefore, those stakeholders in education in the government, private sector or those agencies as members of society must adapt their role in line with the changes mentioned above. Teacher has to change their tasks from instructor role to a learning inspirer pushing learner for real practice or learning by doing. Teacher must change his/her role into a "coach" and or "learning facilitator" to guide students to create knowledge themselves (Kangpheng & Kunlong (2012)

Suggestion

Suggestions for applying this research are as the following.

- 1. For implementation from this research.
- 1.1 The higher authorities should document from the lessons or experience learned from child care teachers who have succeeded in educational management for professional competency development and share the lessons to other child care centers for adaptation.
- 1.2 The related organizations' executives should give high priority to this early childhood education management with driving force from the policy level and support activities enabling professional competency development in 4 dimensions -- learner's development, curriculum and teaching management, quality service, and morality and ethics.
- 1.3 Each local government organization executive should have a policy for needs assessment of child care teachers in the centers before training in order to learn the real cause of the particular teachers' needs. The assessment results can be used for the training topics to respond to the needs suitable to each local context.

2 For further research.

- 2.1 Next research should be on model development, learning program, or training package for professional competency development of child care teachers in 4 dimensions -- learner's development, curriculum and teaching management, quality service, and morality and ethics.
- 2.2 This study focused on country-wide needs assessment. There should be research work on needs assessment of child care teachers in particular regions of the country with different context settings for results suitable to the real needs problems for the professional competency development responsive to the valid problems and needs.



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