

A Tracer Study of Graduates of the Bachelor of Education in Early Childhood Education (B.Ed. in ECE) Programme in Dongkhamxang Teacher Training College, Academic Year of 2019 – 2020*

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Abstract

The purposes of this study were: 1) to assess the graduates' acquired and developed skills and competencies obtained from the Bachelor of Education in Early Childhood Education Programme; 2) to explore the employment situation of the graduates of the programme; and 3) to evaluate employers' satisfaction regarding the graduates' skills and competencies obtained from the programme. The sample size covers 108 graduates of the B.Ed. in ECE programme, academic year 2019-2020 and their fifty-nine employers. Data was collected through two sets of online questionnaires: 1) open-ended and close-ended questions for the graduates, and 2) open-ended and close-ended questions for the employers. The collected data was analysed to find the frequency, percentage, mean (μ), standard deviation (σ) and correlation value. The study found that the graduates perceived that the skills and competencies they acquired from the programme and the skills and abilities required at work were at the high level ($\mu = 4.17$, $\sigma = 0.41$); and the satisfaction with the learning facilities and the programme at the high level ($\mu = 4.26$, $\sigma = 0.42$). The employers' satisfaction with the graduates' skills and competencies was at the high level ($\mu = 4.31$, $\sigma = 0.49$). Particularly, their code of professional ethics for teachers and love towards the teaching profession and children was rated at the very high level ($\mu = 4.51$, $\sigma = 0.53$). The lowest rating at the high level ($\mu = 3.97$, $\sigma = 0.71$) was their knowledge and capacities to create knowledge through action research.

Keywords: Tracer study, Early childhood Education Programme

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Introduction

Dongkhamxang Teacher Training College (DTTC) is located in Dongkhamxang Village, Hadsaifong District, Vientiane Capital, Lao PDR. It is under the supervision of the Ministry of Education and Sports (MoES) and provides pre-service and in-service teacher training to teachers in Vientiane Capital, Bolikhamxay Province, and other provinces nationwide. The college's vision is: "Professional Teachers, Use Local Knowledge and Technology, Care about Natural Environments, Social Development, and Regional and International Connection".

The MoES developed the first-ever B.Ed. in ECE programme in 2012, with support of UNESCO. (Department of Teacher Education, 2012). The new curriculum was firstly implemented in DTTC in the academic year 2013-2014. Before the development of this new curriculum, in 2012 the staff members of the Department of Teacher Education (DTE) and teacher educators from eight teacher training colleges undertook a study visit to learn about early childhood teacher education curriculum development and implementation at Burapha University, Thailand, with support from UNESCO. The study group had hands-on experience in developing the course outlines for the diploma and bachelor's degree level for the pre-school teacher education programme in a two week-training session.

The curriculum was firstly implemented on 21 October 2013. It included 148 credits and 3,392 teaching and learning hours for a four-year period with eight semesters. There were four subject groups including fifty-five general subjects and three elective subjects. After its implementation for two years, UNESCO supported the mid-term curriculum evaluation conducted by experts from Burapha University, Thailand. Two years later, the final curriculum evaluation was undertaken to evaluate the four-year curriculum implementation cycle. This curriculum was also adopted in two other teacher training colleges, namely Luangnamtha and Salavan teacher training colleges.

In 2018, the curriculum was revised with support of UNESCO. The revised curriculum was endorsed in 2019 (Department of Teacher Education, 2019). Within the four-year programme, there are eight semesters, consisting of sixteen weeks in each semester. The total number of teaching and learning hours is 3,312, with twenty to twenty-five hours per week. There are four subject groups and forty-nine subjects altogether. Six to nine subjects are taught in each semester. The revised curriculum is accounted for 140 credits.

To date, DTTC has enrolled eight cohorts of student teachers for the B.Ed. in ECE programme, for a total of 643 student teachers. Among them, 435 student teachers from five

cohorts have graduated with the B.Ed. in ECE degree, while 208 student teachers from three cohorts are still studying in the programme.

Regarding human resources for the B.Ed. in ECE programme, DTTC has eighteen teacher educators and four guest lecturers from the Vientiane Capital Education and Sports Services, the General Psychology Department of the Faculty of Education of the National University of Laos, the Early Childhood Education Section under the Research Institute for Educational Sciences (RIES) and the Inclusive Education Centre of MoES. The teacher educators in this programme hold MA degrees, and are selected to be in charge of teacher training each semester. Before the curriculum implementation, relevant teacher educators were trained on the revised curriculum, facilitated by academic experts who have extensive knowledge and teaching experience in the field of early childhood education, especially from Burapha University, supported by UNESCO. The resource persons from Burapha University also helped provide and guide the development of content for each subject. Moreover, the Department of Teacher Education (DTE) conducted monitoring missions to provide guidance and technical support on the curriculum implementation.

Before the curriculum implementation, relevant teacher educators participated in a capacity development workshop on curriculum implementation facilitated by experts from Burapha University and with support from UNESCO. After that, the trained teacher educators then trained their peers at DTTC. Subsequently, the Office of the Kindergarten and Primary Education of DTTC assigned relevant teacher educators to teach each subject of the revised curriculum according to the timetables. Then, they gave the course outlines to each assigned teacher educator to prepare their lessons and teaching materials. Upon completion, the developed teaching materials were stored at the Office of the Kindergarten and Primary Education. The same Office prepared monitoring sheets and held the teaching observation or lesson study two to three times in each semester. The student teachers' learning outcomes in each subject are measured in grades: A, B, B+, C, C+, D, D+ and F. The average grade of each cohort is at the good level.

DTTC is committed to improving the quality of the B.Ed. in ECE programme to reach the regional and international standards. The graduate tracer study is a method used for reflecting the curriculum effectiveness and relevance to the employment needs. Tracer studies are common research methods for educational institutions to check on the employability of their graduates (de Ocampo, Bagano, & Tan, 2012). Likewise, Rogan and

Reynolds (2016) asserted that a Graduate Tracer Study (GTS) is useful for policy and equity implication in higher education. Hence, DTTC conducted a graduate tracer study in order to use the findings to revise the B.Ed. in ECE curriculum and implement the revised/improved curriculum in the future.

Objectives

1. To assess the graduates' acquired skills and competencies obtained from the programme;
2. To explore the employment situation of the graduates of the programme; and
3. To evaluate employers' satisfaction regarding the graduates' skills and competencies obtained from the programme.

Research Methodology

Target population

The target groups for this tracer study include 108 graduates (all females) of the B.Ed. in ECE programme and fifty-nine employers (54 females, 4 males, 1 N.A).

Timeframe

This tracer study was conducted during a period of three months from July 12-16 2021 to September 30, 2021.

Data collection methods

1. The study team collected information regarding the graduates' and the employers' mobile phone numbers, WhatsApp, and Facebook accounts from their subject teachers and former classmates.
2. A WhatsApp group and a Messenger group were created.
3. The study team sent the link to access the online questionnaire to the graduates in WhatsApp and Messenger groups as well as to each individual, together with information regarding the objectives of the tracer study and how to answer the questionnaires. For the graduates who did not understand how to answer them, the study team connected with them directly to clarify. For the employers who did not use WhatsApp or Facebook, the study team called them to collect their answers and recorded their voices.

4. After the online questionnaire links were sent to everyone in the target groups, the study team daily checked the progress of the questionnaire responses until the deadline. Finally, the information of the graduates and their employers was completely collected.

Data collection instruments

The data collection tools were online questionnaires via Google Forms which were divided into two types:

1. The open-ended and close-ended questionnaire to evaluate the graduates, consisting of four parts and a total of thirty-two questions:
2. The open-ended and close-ended questionnaire to evaluate the employers' satisfaction towards the graduates, consisting of three parts and a total of sixteen questions.

Data analysis

After the data was collected by the study team, it was analysed using the SPSS programme to find the frequency, percentage, mean (μ), standard deviation (σ) and correlation value.

Research results

The research results are presented in three parts as follows:

Part 1: Evaluation results of the graduates' acquired skills and competencies from the programme

1) Graduates' acquired and developed skills and competencies from the programme; and the relevance of the acquired skills and competencies with their job requirements

From the analysis of the graduates' acquired and developed skills and competencies from the programme; and the relevance of the acquired skills and competencies with their job requirements, the following results were found:

The graduates' acquired and developed skills and competencies from the programme

Based on the graduates' opinions on their acquired and developed skills and competencies from the programme, the results are presented in Table 1.

Table 1 Graduates' acquired and developed skills and competencies from the programme

Evaluation Items	N = 108		Level
	μ	σ	
1. Knowledge in managing early childhood education	4.18	0.56	High
2. The ability to manage the learning-teaching according to the 3 characteristics and 5 core principles of education, in line with the national kindergarten curriculum of the Ministry of Education and Sports	4.22	0.55	High
3. The ability to manage plays and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner.	3.99	0.60	High
4. The ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship.	4.00	0.74	High
5. Knowledge and capacities to create knowledge through action research	3.81	0.67	High
6. Code of professional ethics for teachers; and love towards the teaching profession and children	4.56	0.49	Highest
7. The ability to work with others and preserve the Lao culture and tradition.	4.43	0.59	High
Summary	4.17	0.41	High

From Table 1, it is found that the skills and competencies that the graduates acquired during the study, in general, are at a high level ($\mu = 4.17$, $\sigma = 0.41$). When considering the list of evaluation items, it is found that item No 6. Code of professional ethics for teachers; and love towards the teaching profession and children has the highest average rating at a highest level ($\mu = 4.56$, $\sigma = 0.49$), while the lowest average rating level is item No 5. Knowledge and capacities to create knowledge through action research at a high level ($\mu = 3.81$, $\sigma = 0.67$).

The relevance of the acquired skills and competencies with the job requirements

From the survey, the opinions of 68 graduates and 59 employers who are being employed regarding the relevance of their acquired skills and competencies with their job requirements can be presented in Table 2.

Table 2 The relevance of the graduates' acquired skills and competencies with the job requirements

Evaluation Items	Graduates		Level	Employers		Level
	N = 68			N = 59		
	μ	σ		μ	σ	
1. Knowledge in managing early childhood education	4.21	0.56	High	4.22	0.55	High
2. The ability to manage the learning-teaching according to the 3 characteristics and 5 core principles of education, in line with the national kindergarten curriculum of the Ministry of Education and Sports	4.28	0.54	High	4.42	0.56	High
3. The ability to manage plays and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner.	4.16	0.63	High	4.41	0.56	High
4. The ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship.	4.03	0.64	High	4.46	0.59	High
5. Knowledge and capacities to create knowledge through action research	3.90	0.62	High	4.14	0.68	High
6. Code of professional ethics for teachers; and love towards the teaching profession and children	4.46	0.55	High	4.63	0.48	Highest
7. The ability to work with others and preserve the Lao culture and tradition.	4.31	0.58	High	4.49	0.53	High
Summary	4.19	0.43	High	4.39	0.44	High

From Table 2, it is found that 68 graduates who are being employed rated the relevance of their acquired skills and competencies with their job requirement, in general, at a high level ($\mu = 4.19$, $\sigma = 0.43$). When considering the list of evaluation items, it is found that the item No. 6 has the highest average rating at a high level ($\mu = 4.46$, $\sigma = 0.55$). The item with the lowest average rating is No.5 at a high level ($\mu = 3.90$, $\sigma = 0.62$). The overall, the graduates' skills and competencies which are required by the employers, are at a high level ($\mu = 4.39$, $\sigma = 0.44$). When considering the list of evaluation items, it is found that the item No.6 has the highest average rating at a highest level ($\mu = 4.63$, $\sigma = 0.48$). The item with the lowest average rating is No. 5 at a high level ($\mu = 4.14$, $\sigma = 0.68$).

2) Graduates' satisfaction with learning experiences, learning facilities and curriculum

Regarding the analysis of the graduates' satisfaction with learning experiences, learning facilities and curriculum, the following results were found:

The satisfaction of the graduates with learning experiences

From the analysis of the satisfaction of the graduates with learning experiences, the results can be presented in Table 3.

Table 3 The satisfaction of the graduates with learning experiences

Evaluation Items	N = 108		Level
	μ	σ	
1. The teaching and learning management complies with and covers the curriculum content	4.29	0.62	High
2. The teaching and learning management is in line with the nature and purpose of each subject of the programme	4.25	0.54	High
3. Activities/programmes for development and enhancement of skills and capacities, such as promoting teamwork, are provided.	4.14	0.61	High
4. The learning assessment is in line with the curriculum.	4.22	0.60	High
5. Teacher educators are knowledgeable and experienced.	4.33	0.58	High
6. Teacher educators are a good role model for behaviours and practices.	4.34	0.61	High
Summary	4.26	0.42	High

From table 3, it found that graduates' satisfaction towards learning experience is at high level ($\mu = 4.26$, $\sigma = 0.42$). The teachers are behavioral model is at high level ($\mu = 4.34$, $\sigma = 0.61$). The activities or projects to enhance skill and capacity such as enhancing team working is at high level ($\mu = 4.14$, $\sigma = 0.61$).

The satisfaction of the graduates with learning facilities

The analysis of the satisfaction of the graduates with learning facilities can be displayed in Table 4.

Table 4 Satisfaction of graduates with learning facilities

Evaluation Items	N = 108		Level
	μ	σ	
1. Library facilities and resources are adequate for learning.	3.86	0.80	High
2. Materials and documents are suitable and can be used to facilitate learning.	4.00	0.69	High
3. The practice/training rooms have sufficient and suitable equipment.	3.81	0.65	High
4. The ICT system can facilitate self-directed research	3.74	0.68	High
Summary	3.85	0.57	High

From Table 4, it is found that the overall satisfaction of the graduates with learning facilities is at a high level ($\mu = 3.85$, $\sigma = 0.57$). When considering the list of evaluation items, it is found that the item No. 2 has the highest average rating at a high level ($\mu = 4.00$, $\sigma = 0.69$). The item with the lowest average rating is No. 4 at a high level ($\mu = 3.74$, $\sigma = 0.68$).

The satisfaction of the graduates with the B.Ed. in ECE curriculum

From the analysis of the graduates' opinions towards their satisfaction with the B.Ed. in ECE curriculum, the results can be presented in Table 5.

Table 5 Satisfaction of the graduates with the B.Ed. in ECE curriculum

Evaluation Items	N = 108		Level
	μ	σ	
1. The curriculum is up-to-date and relevant to the current situation	4.36	0.66	High
2. The subjects offered in the curriculum	4.09	0.67	High
3. The subject contents covered in the curriculum	4.18	0.62	High
Summary	4.21	0.55	High

From table 5, it shows graduates' satisfaction towards BA kindergarten curriculum is at high ($\mu = 4.21$, $\sigma = 0.55$). The current up-to-date curriculum is at high level ($\mu = 4.36$, $\sigma = 0.66$), it is the highest level if compared with other items. The high level ($\mu = 4.09$ and $\sigma = 0.67$) for subjects in the curriculum.

3) The support from the Dongkhamxang Teacher Training College that enable the graduates to address the demands of their workplaces and communities

The graduates' application of the knowledge acquired from the programme

The analysis results of the graduates' opinions towards their application of knowledge from the curriculum can be displayed in Table 6.

Table 6 The graduates' application of the knowledge acquired from the programme knowledge and skill after the curriculum training

Evaluation Items	N = 68		Level
	μ	σ	
1. To what extent can you apply the acquired knowledge from the programme to perform your current responsibilities at work?	4.06	0.59	High
2. To what extent do the acquired knowledge and skills from the programme benefit your current task?	4.21	0.61	High
3. To what extent does the programme match with the requirements of your current work?	4.32	0.60	High
4. How sufficient the acquired knowledge and skills from the programme are for you to perform your current work?	4.18	0.59	High
5. To what extent does the acquired knowledge and skills from the programme match with your current work?	4.16	0.70	High
Summary	4.19	0.49	High

From Table 6, it is found that the graduates' use of knowledge gained from the curriculum, in general, is at a high level ($\mu = 4.19$, $\sigma = 0.49$). When considering the list of evaluation items, it is found that the item No.3 has the highest average rating at a/the high level ($\mu = 4.32$, $\sigma = 0.60$). The lowest average rating item is No.1 at a high level ($\mu = 4.06$, $\sigma = 0.59$).

The employers' perception of the graduates' knowledge and capacities

The analysis results of the employers' perception regarding the knowledge and capacities of the graduates can be displayed in Table 7.

Table 7 The employers' perception of the graduates' knowledge and capacities

Evaluation Items	N = 59		Level
	μ	σ	
1. The graduates can apply knowledge and experiences to complete the assigned tasks.	4.31	0.62	High
2. The graduates can complete the tasks as required by the institution.	4.32	0.62	High
3. The graduates can complete the tasks as required by the community.	4.22	0.58	High

Evaluation Items	N = 59		Level
	μ	σ	
4. The graduates have the knowledge, skills and competencies necessary for the assigned tasks.	4.36	0.51	High
5. The graduates are essential to your institution.	4.41	0.56	High
Summary	4.32	0.48	High

From Table 7, it is found that the employers' perception of the graduates' knowledge, in general, is at a high level ($\mu = 4.32$, $\sigma = 0.48$). When considering the list of evaluation items, it is found that item No.5 has the highest average rating at a high level ($\mu = 4.41$, $\sigma = 0.56$). The lowest average rating item is No. 3 at a/the high level ($\mu = 4.22$, $\sigma = 0.58$).

Part 2: The relationship between the curriculum and the employment

The relationship between the graduates' acquired skills and competencies from the programme and the required skills and competencies at work and required by the employers and the acquired skills and competencies of the graduates for work

The analysis results of the relationship between the graduates' acquired skills and competencies from the programme and the required skills and competencies at work and required by the employers and the acquired skills and competencies of the graduates for work can be seen in Table 8.

Table 8 The analysis of the relationship between the graduates' acquired skills and competencies from the programme and the required skills and competencies at work and required by the employers and the acquired skills and competencies of the graduates for work

Skills and Competencies	graduates		employers	
	Size of correlation (Spearman's rho : ρ)	Level of correlation	Size of correlation (Spearman's rho : ρ)	Level of correlation
1. Knowledge in managing early childhood education	0.65	Quite high	0.35	Quite low
2. The ability to manage the learning-teaching according to the 3 characteristics and 5 core principles of education, in line with the national kindergarten curriculum of the Ministry of Education and Sports	0.45	Medium	0.44	Medium

Skills and Competencies	graduates		employers	
	Size of	Level of	Size of	Level of
	correlation (Spearman's rho : ρ)	correlation	correlation (Spearman's rho : ρ)	correlation
3. The ability to manage plays and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner.	0.47	Medium	0.49	Medium
4. The ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship.	0.46	Medium	0.64	Quite high
5. Knowledge and capacities to create knowledge through action research	0.55	Medium	0.55	Medium
6. Code of professional ethics for teachers; and love towards the teaching profession and children	0.55	Medium	0.47	Medium
7. The ability to work with others and preserve the Lao culture and tradition.	0.42	Medium	0.58	Medium
Summary	0.55	Quite high	0.62	Quite high

From Table 8, it is found from the analysis of the overall correlation between the graduates' acquired skills and competencies from the programme and the required skills and competencies at work, is at a quite high level ($\rho = 0.55$). When considering the list of evaluation items, it is found that the item with the highest correlation is item No.1: Knowledge in managing early childhood education, with a quite high level of correlation ($\rho = 0.65$). On the other hand, the item with the lowest correlation is item No.7: The ability to work with others and preserve the Lao culture and tradition, with a medium level of correlation ($\rho = 0.42$). The results of the analysis show that the overall relationship between the skills and competencies required by the employers and the acquired skills and competencies of the graduates for work correlates at a quite high level ($\rho = 0.62$). When considering the list of evaluation items, it is found that the item with the strongest correlation is No. 4: The ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship at a quite high level

($p = 0.64$), and the item with the weakest correlation is No. 1: Knowledge in managing early childhood education at a quite low level ($p = 0.35$).

The relationship between the graduates' acquired skills and competencies from the programme and the skills and competencies required by the employers, with the analysis of data from all graduates.

The analysis results of the relationship between the graduates' acquired skills and competencies from the programme and the skills and competencies required by the employers can be presented in Table 9.

Table 9 The analysis of the relationship between the graduates' acquired skills and competencies from the programme and the skills and competencies required by the employers

Skills and Competencies	Relationship	
	Size of correlation (Contingency Coefficient; C)	Level of correlation
1. Knowledge in managing early childhood education	0.03	Low
2. The ability to manage the learning-teaching according to the 3 characteristics and 5 core principles of education, in line with the national kindergarten curriculum of the Ministry of Education and Sports	0.17	Low
3. The ability to manage plays and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner.	0.31	Quite low
4. The ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship.	0.29	Quite low
5. Knowledge and capacities to create knowledge through action research	0.22	Quite low
6. Code of professional ethics for teachers; and love towards the teaching profession and children	0.06	Low
7. The ability to work with others and preserve the Lao culture and tradition.	0.09	Low
Summary	0.20	Quite low

From Table 9, the results of the analysis of the relationship between the graduates' acquired skills and competencies from the programme and the skills and competencies required by the employers correlate at a quite low level ($C = 0.20$). When considering the evaluation items, it is found that the item with the strongest correlation is No. 3: The ability to manage plays and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner at a quite low level ($C = 0.31$); and the item with the weakest correlation is No. 1: Knowledge in managing early childhood education at a low level ($C = 0.03$).

The satisfaction of the graduates with their work

In the analysis of the graduates' satisfaction with their work, the results are presented in Table 10.

Table 10 The satisfaction of the graduates with their work

Evaluation Items	N = 68		Level
	μ	σ	
1. To what extent are you satisfied with your responsible task/position?	4.35	0.48	High
2. To what extent are you proud of your current responsible task?	4.24	0.57	High
3. To what extent are you motivated to complete your assigned work?	4.47	0.53	High
4. To what extent are you satisfied with your engagement in additional assigned activities aside from your main responsibility?	4.32	0.58	High
5. To what extent are you satisfied with your salary/remuneration?	4.39	0.73	High
Summary	4.26	0.43	High

From Table 10, it is found that the graduates' satisfaction level with their work is at a high level ($\mu = 4.26$, $\sigma = 0.43$). When considering the list of evaluation items, it is found that item No. 3: To what extent are you motivated to complete your assigned work?, has the highest average rating at a high level ($\mu = 4.47$, $\sigma = 0.53$). On the other hand, the item with the lowest average rating is No. 2: To what extent are you proud of your current responsible task?, at a high level ($\mu = 4.24$, $\sigma = 0.57$).

Part 3: Evaluation results of the employers' satisfaction with the graduates' skills and competencies

The employers' satisfaction with the graduates' skills and competencies

Based on the analysis of the employers' satisfaction with the skills and competencies of the graduates, the results are presented in Table 11.

Table 11 The employers' satisfaction with the graduates' skills and competencies

Evaluation Items	N = 59		Level
	μ	σ	
1. Knowledge in managing early childhood education	4.25	0.57	High
2. The ability to manage the learning-teaching according to the 3 characteristics and 5 core principles of education, in line with the national kindergarten curriculum of the Ministry of Education and Sports	4.32	0.60	High
3. The ability to manage plays and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner.	4.27	0.69	High
4. The ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship.	4.41	0.61	High
5. Knowledge and capacities to create knowledge through action research	3.97	0.71	High
6. Code of professional ethics for teachers; and love towards the teaching profession and children	4.51	0.53	Highest
7. The ability to work with others and preserve the Lao culture and tradition.	4.47	0.53	High
Summary	4.31	0.49	High

From table 11, it found that employers' satisfaction towards graduates' skills and effective performance is at high level ($\mu = 4.31$, $\sigma = 0.49$). The ethics in teacher profession and friendliness to children is at highest level ($\mu = 4.51$, $\sigma = 0.53$), it is the highest level if compared with other items. The knowledge and capacity in developing knowledge by doing research is at high level ($\mu = 3.97$, $\sigma = 0.71$).

Discussion

The following are a few points of discussion derived from the study.

1. The evaluation results of the graduates' acquired skills and competencies during the study are found to be, in general, at the high level ($\mu = 4.17$, $\sigma = 0.41$). When considering the list of evaluation items, it is found that item No 6. Code of professional ethics for teachers; and love towards the teaching profession and children has the highest average rating at a high level ($\mu = 4.56$, $\sigma = 0.49$), while the lowest average rating level is item No 5. Knowledge and capacities to create knowledge through action research at a much level ($\mu = 3.81$, $\sigma = 0.67$). The study confirms that the graduates have the ability to manage their learning-teaching

according to the three characteristics and five core principles of education, in line with the National Kindergarten Curriculum of the Ministry of Education and Sports; the ability to manage playtime and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner; the ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship; the knowledge and capacity to create knowledge through action research; awareness of and adherence to the code of professional ethics for teachers; love towards the teaching profession and children; and the ability to work with others and preserve Lao culture and traditions. The satisfaction rate of graduates with learning experiences is at a high level because the teaching and learning arrangement is consistent with the curriculum content and correlates with the content and learning objectives of the course. The degree programme includes activities to develop the skills of the graduates, such as promoting teamwork, conducting assessments of learning in accordance with the curriculum, and preparing teachers with knowledge, experience to be good role models. The graduates' satisfaction with the overall facilities is at the high level due to the fact that the library facilities and resources are adequately equipped for learning, the materials and documents are suitable and can be used to facilitate learning, the practice/training rooms have sufficient and suitable equipment, and the ICT system facilitates self-directed research. The satisfaction of the graduates with the B.Ed. in ECE curriculum is also at a high level because the curriculum is up-to-date and relevant to the current situation, the subjects offered in the curriculum are appropriate, as are the subject contents covered in the curriculum. The graduates' use of knowledge gained from the curriculum, in general, is at a high level because the graduates can apply the knowledge acquired from the programme to perform their current responsibilities and tasks at work. Finally, the employers' perception of the graduates' knowledge, in general, is at a high level due to the graduates' ability to apply their knowledge and experiences to complete their assigned tasks as required by the institution and community. Because of the programme is the vehicle that contains the good (contents), the teacher is the driver who delivers the goods (Contents) to the consumers of the goods learners. Therefore the teacher is at the centre of activities in curriculum implementation. Alebiosu (2005) is of the opinion that the programme is the instrument that dictates the affairs of every educational system.

2. The relationship between the graduates' acquired skills and competencies from the programme and the skills and competencies required by the employers correlates at a quite low level ($C = 0.20$). When considering the evaluation items, it is found that the item with the strongest correlation is No. 3: The ability to manage plays and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a

creative manner at a quite low level ($C = 0.31$); and the item with the weakest correlation is No. 1: Knowledge in managing early childhood education at a low level ($C = 0.03$). This is because the graduates studied from the programme that was developed for them but the employers might need more skills and competencies from the programme. Hence Dongkhamxang Teacher Training College should study the employers' need was the first step of curriculum development (Taba, 1962)

3. Evaluation results of the employers' satisfaction towards graduates' skill and effective performance is at much level shown by $\mu = 4.31$, $\sigma = 0.49$. The ethics in teacher profession and friendliness to children is at very much level shown by $\mu = 4.51$, $\sigma = 0.53$, it is the highest level if compared with other items. The knowledge and capacity in developing knowledge by doing research is at much level shown by $\mu = 3.97$, $\sigma = 0.71$, however, it is the lowest level if compared with other items. This is because the graduates have the skills and ability to manage the learning-teaching according to the three characteristics and five core principles of education, which is in line with the National Kindergarten Curriculum of the Ministry of Education and Sports. They have the ability to manage playtime and learning-teaching activities in nurseries, kindergartens, multi-grade classrooms and pre-primary classrooms in a creative manner; the ability to create an enabling environment for children to play and learn, regardless of their race, language, religion, gender, age, disability and socio-economic hardship; the knowledge and capacities to create knowledge through action research; the awareness of and adherence to the code of professional ethics for teachers and love towards the teaching profession and children; and the ability to work with others and preserve Lao culture and traditions. Tracer study not only excel in measuring output/outcome but can also help in explaining it, and therefore allow for outcome-oriented assessments of study achievements (Schomburg, 2003).

Recommendations

1. Recommendations towards improving the quality of the B.Ed. in ECE programme based on the study results are as follows:

- 1) The duration for teaching practicum at the nursery level should be increased.
- 2) The curriculum should focus more on enhancing the ICT competencies of the graduates.
- 3) Dongkhamxang Teacher Training College should conduct action research to strengthen learners' development.

2. Recommendations on future research studies

1) Dongkhamxang Teacher Training College should conduct tracer studies of the graduates of the B.Ed. in ECE programme after their graduation for a longer period, e.g. three or five years.

2) The future graduate tracer studies should include additional target participants, e.g. teachers, students' parents, and communities.

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