A CASE STUDY OF PROFESSIONAL GROWTH OF CROSS-DISCIPLINARY PRESCHOOL EDUCATION MASTER STUDENTS

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ABSTRACT

China entered the baby boom era with the announcement of Second Child Policy in 2015, this has led to increase of child birth rate and subsequently a growing shortage of preschool teachers. To solve this issue, Chinese State Council drafted the policy proposal on training of cross-disciplinary talents in higher education allowing people with different bachelor degree to become preschool teachers. Cross-Disciplinary Preschool Education Master Degree (CDPEM) program offered in some universities is an outcome of this policy. The purpose of this study is to explore in depth professional growth experiences of these CDPEM students. Findings of the study can be input to decision of the continuity of this policy. The study was conducted using qualitative research method. In-depth interviews of three Chinese CDPEM participants were used to collect data. These three CDPEM participants respectively have Chinese Literature, English Education and Applied Chemistry background. Findings is discussed according to the characteristics of professional growth, personalities and experiences, and strategies to overcome problem faced during the Master course. The results of professional growth experiences are summarized into four themes: professional attitude and motivation, professional ability, professional knowledge and professional philosophy. Data analysis indicated that these three CDPEM students have strong desire of professional development, and consistently striving for professional identity, however they have low self-efficacy, perceived weak professional knowledge, perceived lack of professional ability and poor research ability. The background knowledge from Bachelor degree, real-life experience, inherent motivation and attitude towards learning influence their professional development in the course. These students develop their own authentic internal strategies towards ascertaining professional identity. The external strategies are cultivation of research ability and internship as well as participation in universities joint projects. The policy of CDPEM is feasible as a short-term measure to counter shortage of preschool teachers however the shortcomings need to be overcome to ensure quality of preschool teachers produced through CDPEM program.

Keywords: cross-disciplinary preschool education master, professional growth, qualitative method

INTRODUCTION

In the last two decades, Chinese economy has been in a period of rapid development and experiences massive transformation. The society's demand and requirements for high-level talents (manpower) has greatly increased in tandem with the transformation of its economy. In order to enhance employment competitiveness, many people began to enrol in post

graduate studies either immediately after graduation or after years of working. In the China Education Online Survey Report on National Postgraduate Admissions, 2020, the number of Master degree students in universities admitted was approximately 805,000 in 2019 (in its planning it was supposed to be only 189,000), in 2020, there is an additional 20% of this enrolment (*Retrieved from: http://www.gov.cn/zhengce/2018-11/15/content_5340776.htm*). This expansion of enrolment happened more to teachers training majors.

Meanwhile, China entered the baby boom era as a consequence of the Second Child Policy in 2015. This phenomenon has led to the urgent need for high-quality manpower in preschool field. Naturally, a large number of students who did not do preschool education in their bachelor degrees chose to cross over to enter preschool education Masters, it is anticipated that this group will inevitably grow. However, the background major of these students are complex, they come from diverse disciplines. Problems exist in this current cross-disciplinary postgraduate education because of the constraint on selection, curriculum setting, teaching pattern, tutor ability, and management situations (Li, 2013). The term cross-discipline is used referring to the situation where students crossing to another disciplines from their original bachelor degree study. The relative lack of training models in colleges has further increased the professional growth problem of this group (Cvijovic et al., 2016). Under the background of the urgent need for high-quality talents in the field of preschool education in China, it is very important to pay attention to the professional growth and training of these preschool Master degree students who already possessed a qualification in another field, they are Cross-disciplinary Preschool Education Master (CDPEM) students. Cross-disciplinary is a trend in training Masters of education and it also can meet the needs of the society for integrated talents (Yanchun et al., 2011).

In preschool, teaching is generally cross disciplinary, the CDPEM students who were more familiar with single discipline are fist exposed to this idea of cross disciplinary in their Master degree course. CDPEM students, although they are in the pre-employment stage of teachers' careers, their expected social mission and educational responsibilities are the same as other teachers (Li, 2017; McCormick & Brennan, 2001). However, these CDPEM students lack of previous experience and professional knowledge in early childhood education, and even zero foundation in professional skills to teach young children. The professional growth of these students will not be smooth when they first embark into their Master degree, they need to learn through observation, trial and error, self-exploration and experiences. Facing such difficulties and pressures in the professional learning process, the direction of self-professional growth is often not clear (Husband & Short, 1994). Preschool education is an important period in the development of a person's life. The children should not be used as a test product for the professional growth of preschool teachers. Therefore, attaching importance to the professional growth of the CDPEM students is an important task in the process of promoting the development of Chinese preschool education talent pool.

Literature Review

According to teacher professional development theory, the professional development of teachers is divided into pre-service and post-service stages (LaBoskey, 1994). Most studies of teacher professional development focuses on post-service stage, such as the professional growth of new teachers (Kagan, 1992; Moir & Stobbe, 1995) , the research objects involve teachers (Kirova & Bhargava, 2002; Wu et al., 2018) and university lecturers (Korhonen &

Törmä, 2016). There is not so many studies involving the professional growth of pre-service teachers, a small number of researches focused on the theoretical level of pre-service teacher professional growth and development (Daniel et al., 2013; Kagan, 1992). Professional growth as a dimensional system that includes professional knowledge, ability, philosophy and awareness were not fully explored. From the perspective of a cross-disciplinary post graduate studies, there are researches focus on the talent training model of universities (Luo & Zhao, 2010; Song et al., 2017) and their professional adaptation status (Hansen et al., 2011, (Schinke et al., 2012). Literature review on the researches regarding preschool education master degree students, indicated the presence of researches on the training model and educational practice (Ecclestone, 2017; Ognevyuk & Sysoieva, 2015), but not many had conducted serious and detailed research on the professional growth of interdisciplinary students at the university level (Luecht et al., 1990; Sandholtz, 2000), past researches hardly involved the professional growth of the preschool education master.

CDPEM students indeed face certain challenges in the process of professional growth, and have their own particularities, which urgently needs our attention. Researching and promoting the professional growth of preschool teachers is a major topic of current and future early childhood education reform (Pearson & Rao, 2006). Under the background that Chinese preschool education urgently needs high-quality talents, it is important to attach importance to the cultivation of professional development among the CDPEM students.

Aims of the Study and Research Questions

The purpose of this study is to explore the professional growth experience of CDPEM students at the end of their study in the Master degree program. In order to achieve this purpose, this study focuses on the following four research questions;

  i)   What are the kind of professional growth the CDPEM students' experience?
  ii) What are the characteristics of the professional growth of the three CDPEM students?
  iii) How do the personalities and prior experiences of the CDPEM students influence their professional growth during the Master degree course?
  iv) What experiences can be learned from professional growth experiences of these CDPEM students?

METHODOLOGY

This study used a case study method , can be defined as an intensive study about a person, a group of people or a unit, which is aimed to generalize over several units (Gustafsson, 2017). Through interviews with participants, their professional growth stories were explored and analysed to reveal the meaning behind them. These stories may be events that have occurred or were happening in daily life or during their learning journey. Analysis of these stories gave rise to construction of themes reflecting participants' behaviour and experience based on theoretical framework adopted in this study.

Participants of Study

The participants of this study consisted of three CDPEM students. Purposive sampling and maximum variation sampling can be used to select sample (Etikan et al., 2016). Purposive sampling can provide the greatest amount of information for the research question and is adopted in this study (Palinkas et al., 2015). The three participants selected have different undergraduate majors and were active in pursing their studies. It is believed that they can provide as much information about professional growth as possible. The demographic information of three CDPEM students is given in Table 1. They were at the end of their 2-year study when data was collected from them.

Table 1
Demographic of Participants and Future Career Intention

Samples	Gender	Age	Master's Degree	Undergraduate Major	Career Intention after study
Student A	Female	25	Full-time preschool education master.	Chinese Literature	Vocational school teacher teaching preschool education.
Student B	Female	30	Full-time preschool education master.	English Education	International kindergarten teacher.
Student C	Female	26	Full-time preschool education master.	Applied Chemistry	Public kindergarten teacher.

Interview

Interview is the main method of collecting data in this study. The information is obtained through verbal interaction between the researcher and participants. In order to have a deeper understanding of the professional growth process of the three participants, their family members, classmates, and professor were also interviewed for understanding of the professional growth process of these three participants from different aspects, these interviews however were brief. The interviewees are as stated in Table 2.

Table 2:
Interviewees

Category	Interviewee
Participants	Student A
	Student B
	Student C
Auxiliary Interviewees	Professor and one Classmate of students A
	Professor, Husband and one Classmate of student B
	Professor, Internship mentor, and Roommate of student C

Credibility and Ethical Responsibilities

Qualitative research is often considered to be 'subjective' in its very nature. However, the qualitative researcher sees subjectivity as a necessity to understanding, rather than as pure relativism (Stake, 2005). The nature of qualitative research requires tedious attention to credibility. In order to increase credibility, the recorded interviews were transcribed, once

transcripts of the interviews were completed, members' check were done where the participants will read the transcripts. The result of the data analysis was also shared with the participants to ensure accurate interpretation of what they meant during the interviews.

Ethical responsibilities were taken care of in this study. Several protocols were in place to assure the anonymity and rights of all participants involved in the study. Before starting interview, the participants were informed in the consent form that they have the right to withdraw from the research at any time. The researcher also attempted to choose the most suitable research schedule and site for interviews. All collected data will be stored in a password-protected laptop, which only researchers can use.

FINDINGS AND DISCUSSIONS

In the process of qualitative data analysis, interviews were transcribed and repeatedly read and analyzed focusing on professional development of the participants. Thematic analysis was conducted. Findings is discussed according to kind of professional growth, characteristics of professional growth, personalities and experiences, strategies to overcome problem faced during the Master degree course.

Kind of Professional Growth

The first research question is concerned with the kind of professional growth experienced by the CDPEM students. Professional growth is defined as continuous practice and reflection during the duration of the participants' graduate study (Hine, 2013). Professional growth is known to be constantly changing and developing in terms of acquisition of professional knowledge, ability, awareness and professional philosophy (Korthagen & Vasalos, 2005). This change and development of professional growth in the case of preschool education gives rise to professional maturity of preschool education teachers, and strengthen their professional image.

In this study, the kind of professional growth of the participants was extracted through in-depth interview. Table 3 shows the final categories extracted from each participants. There are 17 codes which were found across the three CDPEM participants.

Table 3
Example of Themes and Categories of Professional Growth Extracted from Interviews

Theme	Categories	Original Data (excerpt)
Professional Attitude and Motivation	Self-efficacy	*Sometimes I have thoughts in my heart and I dare not raise my hands to speak for fear of making a joke (A).*
		After class, I didn't dare to communicate with the teacher in depth. I felt that I was a "layman", and I could only choose to be silent and not dare to fight in front of the professional (C).
	Development Ability	*Starting with the research thinking that a graduate student should have, the method of "discovering problems-solving problems" tells me how to do research (B).*
	Development Plan	*When I have time in the future, I will make up for the skills of piano and dance (B).*
		I want to go to an international kindergarten of a foreign company so that I

		can take advantage of my English background (C).
	Development Behavior	*I will read some foreign academic journals on early childhood education to learn about the latest research hotspots abroad (C).*
		This is my "zero" starting point. Before, I was a stumbling block after all, so I bought some professional undergraduate textbooks to study by myself (A).
	Development Awareness	*I am eager for knowledge, and I hope to communicate with qualified teachers, who can explain my problem with professional concepts (A).*
		School learning is only a small part of the preschool education major, and a lot of knowledge needs to be learned by yourself (B).
Professional Philosophy	Professional Identity	*Regarding review methods and exam strategies, God has been giving me wisdom, so the exam went smoothly (B).*
		The major of preschool education gave me a lot of inspiration and insights in educating children (A).
	Keep Enthusiasm	*I use my enthusiasm to accept it, and I feel like a chicken blood [ ] every morning (B).*
	Educational Beliefs	*Believing in fate and God's arrangement is like studying preschool education (C).*
		I am going to an international kindergarten of a foreign company, so that I can give full play to my English background (B).
	Eager to Grow	*I do have a lot of difference in professional knowledge. I am eager for knowledge and hope to communicate with qualified teachers, who can explain my problem with professional concepts (C).*
Professional Knowledge	Theoretical Knowledge	*In my spare time, I have part-time substitute courses-health field courses, and have a deep and systematic understanding of some professional system knowledge (A).*
		Theory is not formal, but can be used to explain a certain phenomenon (B).
	Practical Knowledge	*Intensive training. Although every course was arranged in a short and hasty way, it did give me great gains (C).*
		Thank you for the joint training of this platform, which allowed me to gain a lot of preschool education skills and knowledge that I have vacated (C).
	Subject Background Knowledge	*My undergraduate major is secretarial education, so I used the research method of combining quality in the thesis (A).*
		I want to go to an international kindergarten of a foreign company so that I can take advantage of my English subject background (C).
	Expand Knowledge	*I usually read some foreign academic journals on early childhood education to understand the latest research hotspots abroad (C).*
Professional Ability	Research Ability	*I feel that thinking about problems is deeper than before, and looking at things more from the essence (B).*
		I'm trying my best to supplement the theory and research methods (A).
	Educational Ability	*Be familiar with the educational requirements of all aspects of daily life in the kindergarten, learn the various teaching plans of the class, learn to make teaching aids, and train in different age groups (C).*
	Professional Reflection	*Why didn't I feel refreshed in my topic selection? I think I should also choose the topic based on my experience and interests (A).*
		Why the result of thinking is like this? Which link went wrong (C)?
	Professional Skill	*In terms of skills, I am indeed a lot worse. As an cross-disciplinary graduate student, there is no way to surpass the preschool major, even undergraduates in terms of skills (B).*

Consolidated findings from Table 3, it can be deduced that the kind of professional growth of CDPEM students includes (i) professional attitude and motivation, (ii) professional philosophy, (iii) professional ability and (iv) professional knowledge, as shown in Figure 1. Some participants' response were negative towards these categories as they experienced deficiency and setback in these areas.
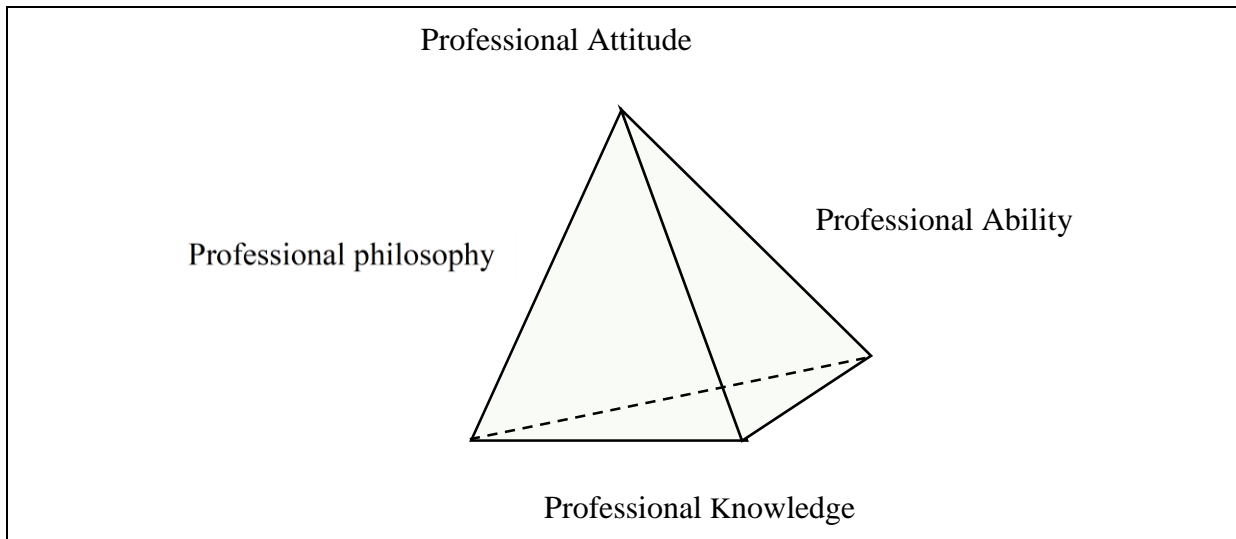
Figure 1. Kind of Professional Knowledge in Professional development among CDPE Master Students

Characteristics of Professional Growth

The second research question is concerned with the characteristics of the professional growth of the three CDPEM students. The most common characteristics of three CDPEM students is that they have a strong desire of professional development, and consistently striving for professional identity. However, it was also found that generally they have low self-efficacy, weak professional knowledge, lack of professional ability and poor research ability. Table 4 is a documentation of quotes from the interviews indicating these themes.

Table 4
Characteristics of Professional Growth

Themes	Samples of quotes from interviews with the three participants.
Strong desire for development	Do and reflect; Eager to grow; Like academic atmosphere; Theory can explain the phenomenon; Stress grows with me; Looking for all possible; Hungry for guidance; Constantly set goals; Load forward; Extensive Reading; Keep exploring; Teaching how to fish; I want to improve, absorb knowledge
Consistently striving for professional identity	Not only to improve academic qualifications; Some achievements; Warm acceptance; Based on love; Interest, taking advantage; Happy people; Sense of accomplishment and happiness; Lifelong commitment to preschool; Welcome the rainbow, meaningful, Practical major
Low Self-efficacy	Layman; become a monk late in life; Zero point; Dare not raise your hand; Sit in the last row; Become someone else; Choose silence; Half a beat slower than the other students; Weak intelligence; Shoot oneself in the foot; I'm not good at it; Heterodox doctrines; Do not get anywhere; Fish in troubled waters.
Weak Professional Knowledge	Fake graduate student; Knowledge is for examinations; Become a passer-by; I can't learn; Too few books on Education; Repeated futility; A lot of things need self-study; Incomplete knowledge; Far exceeded my ability.
Lack of Professional Ability	Theory cannot be applied to practice; I don't know anything; It's no use; Make up for Piano loopholes; Poor skills; The limbs of dancing are not in harmony; Skilful idiot; No systematic study; Can't be perfect; Professional skills loopholes; Limb discordance; Skill obsession; Passive learning.

Poor Research Ability	The paper is off topic; The topic selection of the thesis is lack of novelty; Thinking is superficial; Think more deeply than before; The topic of the thesis is to the point; Topic selection combined with interest; I don't understand; Hand in hand education; It's not what I expected; Spent a lot of time.

Experiences and Personalities

The third research question is concerned with the personalities and experiences of the CDPEM students which influenced their professional growth in Master degree course. Table 4 shows the characteristic of the participants in terms of their professional growth. What causes these patterns of professional growth can be traced back to their experiences and personalities as shown in this section. In a short period of two years, the three students have grown from "layman" to preschool education professionals. The three students encountered different experiences in the professional growth path during their studies. The factors that affected their professional growth were different, and their professional growth paths were different. Through interviews with the participants, the following categories regarding experiences were discovered: background knowledge from Bachelor degree, real-life experience during the course. Categories related to personalities are self-reflective, motivation, persistence in learning with a purpose.

Background Knowledge from Bachelor Degree

The three participants selected in this study were not preschool education major during their undergraduate. Student A's, undergraduate major is Chinese Language specializing in literature and history. Graduates of Chinese Language need to master systematic secretarial and basic theoretical knowledge of office management, and they need to have strong learning and creative abilities. The objectives are to prepare students to adapt to the front-line secretarial work of economic and social production and management services.

The undergraduate major of Student B was English Language. This major has relatively high requirements for English listening, speaking, reading, writing and translation. The goal of training is to have a solid basic knowledge of English language so that they are able to work in secretariat job using English as well as s an English teacher in primary and secondary schools Talents (Seferoğlu, 2006).

In contrast, Student C bachelor degree training is vastly different from the other two students. Student C was trained in Applied Chemistry, and the bachelor degree awarded is a science degree. Student C learned engineering and technical knowledge in chemistry. This undergraduate training requires good scientific literacy with scientific experiment training, and scientific thinking in basic chemical research and applied basic research. The employment direction is to engage in scientific research and management in scientific research institutions or enterprises and institutions. The different background knowledge gained from the participants' undergraduate studies influence their professional growth during their studies in the Kaster degree of preschool education.

Real Life Experience during the Course

The three students have real life experience related to early childhood during the course as a requirement of the course. The future career choices indicate the aspirations and the paths the participants want to draw for themselves. Student A encountered problem in the kindergarten interview she went to during the course, she attributed it to insufficient professional skills. But she managed to secure her internship as a part-time substitute in a vocational college during postgraduate studies. Thus she expressed that she felt comfortable when facing the tasks of training vocational college teachers and not with the children. She accepted her 'shortcomings', find the presumably second best choice for her, thus she sets her future career position as a vocational college teacher.

> *'I am really poor in professional skills, and vocational colleges are more suitable for me'* (A).

For Student B, preschool major has always been her initial choice. After much thoughts and with her perceived advantage of her English academic background, coupled with her own interests and expertise, she positioned her career as an international kindergarten teacher. She planned her career well. Student C went for a placement interview and according to her, her advantage of possessing professional dance skills landed her with a job in a public kindergarten. Her career orientation is to be a public kindergarten teacher in a provincial capital city.

Student C also had experience in joint training during her postgraduate study.

> *I am grateful to the joint training platform for increasing my learning opportunities and allowing me to gain a lot of knowledge about preschool education skills that I do not have* (C).

Although Student C was initially expected to face more problems among the three classmates in preschool education as she came from a science background, during the joint training internship, she really got in touch with professional theory and professional experience in early childhood.

Motivation

"Motivation" refers to the inner force that causes, maintains and promotes individual actions (Dornyei & Ottó, 1998). From the interviews, it can be deduced that these CDPEM students were motivated to do this course through many factors of society, family, school, and themselves such as in the quotes below:

> *At first, I choose a preschool education major to study for a postgraduate degree was more about improving my academic qualifications and helping myself to get a better job, but now for me, it's more than just improving my academic qualifications* (A).

It can be seen that Student A initially took the preschool education major to improve her academic qualifications, hoping to increase employment opportunities. But for Student B,

it's not like that. Student B is mother of a one-year old baby, she hoped that by studying preschool education hopes will bring her more ideas of educating children.

The reason for Student C to enroll in CDPEM is that she likes the preschool education major, her choice was based on her own interests and hobbies.

> *I like preschool education, I love children, and hope to be an excellent preschool teacher in the future* (C).

Student C has another reason for enrolling in the preschool master course, she has failed to study her favorite majors during her Bachelor degree, so for her the postgraduate can reposition a starting point to make up for the regrets and shortcomings.

Self-reflective

Student A reflected that the two characteristics that sustain her to continue to grow in the field of preschool education are self-reflection and research ability. Student A is a reflective person. Facing her weakness of professional knowledge in the first semester of postgraduate, she had a low self-efficacy at one time. In the process of continuous reflection, she gradually found her own learning direction.

> "*After listening to my senior sister's debate, I reflected on myself. Why didn't my topic selection feel refreshing? I think I should also choose topics based on my experience and interests*" (A).

Through continuous self-reflection, Student A used her strength of self-reflection, and decided to capitalize on her 'advantage' of her bachelor degree, pushed through the hurdles of determination of the direction of her graduation thesis, and gained growth in the research process which is a major component of her study.

Persistence in Learning with a Purpose

In contrast, the two characteristics that have greatly helped Student B in her professional growth are extensive reading and educational research. She derived her motivation to read extensively when she discovered her need to find out how to be good parents to her child, she has a practical reason to persist in her reading.

> '*I will pay attention to some foreign early childhood education journals and learn relevant knowledge about early education for 0-3 years old as I want to know how to bring up my child*' (B).

When Student B encountered child-rearing problems in the process of parenting child, she will take the initiative to consult relevant educational monographs, which not only expands the breadth of her knowledge, but also expands the depth of preschool majors, and accelerates her professional growth through extensive reading.

Strategies to Overcome Problem

The last research question is related to lessons learnt from the experiences of the three participants. Two categories of strategies were discovered: internal and external strategy. Internal strategies were ways undertaken by participants themselves, in this study, the internal strategies discovered are realizing their advantage through their bachelor degree and self-reflection towards ascertaining professional identity. The external strategies are cultivation of research ability and internship as well as universities joint projects.

Internal Strategy: Building on the Advantage through Their Bachelor Degree

Internal strategy is the most direct, important and fundamental reason for promoting the professional growth of interdisciplinary preschool education Master degree students. The results of the qualitative data show that there are three most important internal strategies that promote the professional growth of these three students, which are take advantage of their experience in their undergraduate major, professional recognition, and professional reflection ability.

According to knowledge transfer theory, when learners encounter problems in the learning process, they can use the accumulation of previous knowledge and learning experience to solve the problems faced at the present stage, thereby effectively integrating the new and old knowledge and obtaining better new knowledge (Pérez-Nordtvedt et al., 2008). Master degree students do not walk into the classroom with empty heads. If they want to improve their preschool education professional abilities faster and better, they need to connect with the advantage of their undergraduate professional background and flexibly find a fit point between their previous bachelor degree majors and preschool education Master degree majors. This integration of multiple disciplines can in fact facilitate the cross-disciplinary preschool Master degree students to grow professionally faster and more effectively, much anxieties can be relieved.

It is important for the CDPEM students to realise this advantage of theirs and find their strength much like what Student A said;

> '*Through kindergarten internships, I found that new recruited teachers have difficulty adapting to the job. My undergraduate major is Chinese education, and I have an advantage in writing, so I used a qualitative research method in my thesis. In the process, I feel that my research capabilities have been greatly improved*' (A).

Internal Strategy: Self-Reflection towards Ascertaining Professional Identity

CDPEM students have professional identity crisis in the beginning. They have to shed themselves of their previous professional identity and embrace the new professional identity in preschool education. The anxieties related to professional identity is prevalent and reflected in the interviews conducted (Table 2). Ascertaining this new professional identity is the prerequisite for continuous learning and ability development of this group of students and affect their professional development. The internal strategy related to ascertaining

professional identity lies in self-reflection. American psychologist Posner puts forward the formula for teacher professional growth: teacher growth = experience + reflection (Wu et al., 2018), Student A in the study said,

> *'there is a senior doing empirical research, and the results of the paper are completely contrary to common sense of life. The teacher asked her if she has thought about why the results are like this? Did you analyze which part of her might be wrong?* (A).

External Strategy: Cultivation of Research Ability

The professional growth of CDPEM students can be promoted not only through internal strategies, but also through external strategies. External strategies can be helped by supervisor and university through scaffolding such as cultivation of research ability. CDPEM students come to the course not only with a wealth of knowledge of various subjects but also a broad learning horizon, as well as a yearning to learn. Although the CDPEM students' professional knowledge in preschool education is weak, and their educational theories and acquired research methods are limited, they could not solve specific learning problems in preschool education by relying on one's own efforts. Student A reiterated that her supervisor told her to start with research thinking to do research.

> *'My doctor told me how to do research in the way of discovering problems-solving problems. I started to construct the framework of the thesis, compile questionnaires, ask teachers for comments, send questionnaires, and start learning SPSS software and later I slowly understood'* (A).

In the process of writing paper, Student A's research ability has been continuously improved, and she has continued to grow and make breakthroughs on the professional path. What Student A needed was this scaffolding from her supervisor, as an adult student she could then pick it up from there.

External Strategy: Joint Project and Internship

Opportunity to do real life educational practice is pertinent, and it is a key link to promote the growth of CDPEM students.

> *'At first, I wrote a learning story to summarize the experience of one day in kindergarten. I rarely consciously explore and think about the 'what' behind things, and the corresponding 'why' and 'how' questions. When I record the story later, I added some photos to illustrate the story, so I feel that the learning story I wrote is flesh and blood'* (C).

Universities joint training refers to a talent training model in which two or more universities jointly train students for professional development. Different universities have different ways of cultivating talents, some focus on the development of professional practices, and some focus on the development of professional knowledge. Universities joint training is instrumental for the professional development of Student C.

'*Thanks to the school for providing us with joint training opportunities, which allowed me to systematically get in touch with the professional skills of preschool education*' (C).

For student C, the biggest difficulty in the professional learning process is the lack of professional knowledge and professional skills. Joint training provided her with an opportunity to make up for the lack of professional knowledge and professional skills.

CONCLUSION

This study uncovered that the CDPEM students' professional development evolved around professional knowledge, philosophy, attitudes, ability, and motivation which is consistent with other studies. The professional growth of all these three participants can best be described as strong desire for development, striving for professional identity, low self-efficacy, perceived weak professional knowledge, perceived lack of professional ability, perceived poor research ability. They are rather negative in their professional image although they have gone through two years of master program in preschool education. It is discovered that these characteristic of professional growth is influenced by their experiences and personalities. Experience is related to background knowledge of their prior bachelor degree and the real-life experience offered in the Master degree preschool education course. Personalities of being self-reflective, persistence in learning with a purpose play a role in the participants' professional growth. The coping strategies used by the participants are two folds: internal and external strategies. Internal strategies are related to participants realized and capitalized on their advantage of their first degree and self-reflection in the quest of professional identity. External strategies are what the university has done and it included brushing up their research skills and participation in internship and universities joint projects. Table 5 is a brief depiction of the professional development path of each of the participants.

Table 5
Professional Development Growth

Participant	Motivations in participating in CDPEM	Greatest Influence towards professional development	Personal characteristic	Future Career Choices
Student A	Improve academic qualifications	Knowledge and skills obtained in first degree	Self-reflective	Vocational college teacher
Student B	Learn parenting knowledge	The need to bring up her child	Persistent to learn with a purpose	International kindergarten teacher
Student C	Fulfil interests and hobbies	Experience gained from participation in university Joint program	Strong sense of professional development	Public kindergarten teacher

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