

Development of a Training Program to Enhance Master's Degree Students' Engagement in Preschool Education Major in Yunnan Province, China

Received: 13 March 2025

Revised: 14 May 2025

Accepted: 23 September 2025

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Abstract: *The research aimed to address the training results that are inconsistent with the reality of the employer, which can precisely be remedied by teacher training. The results of the research found that teachers expect training integrated into daily teaching work and closely linked to practice. The study sought to answer the central question the influenced factors of the development of preschool masters' degree students, the current student outcome of training master's degree students in preschool education in Yunnan Province, the perceived school environment and student engagement impact their student development for preschool education master's degree students in Yunnan Province, and the training program for enhancing the pre-service teacher competencies for masters' degree in preschool education in Yunnan Province. To achieve this, a mixed-method approach was employed, utilizing primary method for data collection, such as interviews and surveys conducted on a sample of 414 for surveys and 12 interviews. The data were collected from 2023 to 2024 and analyzed using statistical analysis and thematic analysis. The findings show that the exposure to different pedagogical methods and child psychology helps pupils to implement teaching methods based on evidence that cover to the holistic requirements of young learners. Additionally, the interdisciplinary research that assess psychology, neuroscience, and education assist appreciate the complications of ECE learning, making them for different roles in practice and academia. Based on the findings, it is concluded that when constructing the higher education environment, it is imperative to establish a clear environmental orientation and gain a profound understanding of how specific environmental factors influence various types of student engagement behaviors.*

Keywords: Perceived School Environment, Student' Engagement, Training Program, Preschool Education Major, Master's Degree in Preschool Education

Introduction

The quality of education of preschool is greatly relied on the engagement a competence of educators. In the province of Yunnan, the education of pre-school has been increasing in significance because of the raising recognition of early childhood education (ECE) as a main basis for lifelong learning. However, the issues persist in making sure that educators, especially students of master's degree specializing in education of preschool, are sufficiently prepared and engaged for their prospective roles (Kurchatova & Shapochka, 2022). The lack of organized programs of training developed to increase their association has led in differing motivation levels, effectiveness of teaching, and

professional commitment. This research assesses to make a program of training developed to enhance the level of engagement of master's degree students in the preschool education major in Yunnan, assessing both practical and knowledge implementation. Different factors add to the levels of engagement of master's degree students in education of preschool. These comprise of designing of curriculum, methodologies of teaching, opportunities of field experience, and support of institution (Kurchatova & Shapochka, 2022). Conventional approaches of teaching may not adequately assess the complications of ECE that needs child-centered, interactive, and research-notified teachings. Additionally, restricted hands-on experience and insufficient programs of professional development can minimize motivations and readiness of students to implement their knowledge in actual settings of preschool (Galindo-Domínguez & Bezanilla, 2021). As a result, a well-formulated program of training that assesses practical exposure, strategies of innovative pedagogy, and ongoing mentorship is important to promoting engagement and effectiveness of students.

Moskalenko et al. (2018) assesses its importance in developing results of education. The engaged educators show a greater degree of adaptability, enthusiasm, and commitment to the development of students. In the notion of education of preschool, engagement is now more important as younger children need interactive, growing, and developmentally suitable experiences of learning. By improving the master's degree student's engagement specializing in education of preschool, this research helps to bridge the gap between practical application and theoretical learning, making sure that future educators of preschool in province of Yunnan are well-developed to add meaningfully to ECE.

This study assesses the existing levels of engagement of master's degree students in the major of preschool education, finds main issues they experience, and develop a robust training to assess those issues. The program will be developed focused on theories of education, best practices in training of teachers, and feedback from pupils an educator. It will include reflective practices, experiential learning, and interactive methodologies to increase motivation of students and professional competence. Moreover, the results of this research will add to enhancing education of preschool in Yunnan by making greatly associated and capable educators who can positively effect ECE environment of learning.

Research objective

1. To explore the influencing factors of the engagement of preschool masters' degree students.
2. To identify current student outcome of preschool master's degree programs in Yunnan Province.
3. To determine the early childhood educator competencies of employees in kindergartens in Yunnan Province.
4. To propose and verify a training program to enhance for masters' degree in preschool education in Yunnan Province.

Research question

1. What are the influenced factors of the engagement of preschool masters' students?

2. What is the current student outcome of training master's degree students in preschool education in Yunnan Province, China?
3. To what degree do the perceived school environment and student engagement impact them student development for preschool education master's degree students in Yunnan Province, China?
4. What is the training program for enhancing the student engagement for masters' degree in preschool education in Yunnan Province, China?

Research hypothesis

H1: The perceived school environment by students pursuing a Master's degree in preschool education significantly impacts their level of student engagement in Yunnan Province, China.

H2: The student engagement significantly impacts the development of students pursuing a Master's degree in preschool education in Yunnan Province, China.

Conceptual framework

This research mainly planned to develop a feasibility study of a training program for a master's degree in preschool education; this study is based on three significant theories. The first theory is the Input-Environment-outcome (I-E-O) model of Astin (1993); the Input-Environment-outcome (I-E-O) program was proposed by Alexander W. Astin of the University of California, Los Angeles (UCLA) in 1993, which focused on the perceived school environment. The second theory is the Student Engagement Theory (Kahu, 2013), which focuses on student engagement that influences learning and social engagement. The third theory is Student Development Theory (Astin,1993), which focuses on student development that influences cognitive and affective outcomes; there is an emotional part to it.

In this regard, the conceptual framework of this study described in Figure 1.1 shows the three significant steps based on the program of this study:

In step 1, the researcher explored the impact of student development and perceived school environment and student engagement on early childhood teacher competence through a systematic literature review method.

In step 2, the researcher made a questionnaire for masters' degree in preschool education students based on the literature review.

In step 3, the training program was developed, and analyzed accordingly.

The Input-Environment-Output (IEO) model offers a robust framework for assessing and designing programs of education, ensuring that main factors impacting learning outcomes and student engagement are properly assessed. In the notion of making a program of training to increase Master's students' engagement in the education of pre-school in Yunnan province, the IEO model can be applied to increase the effectiveness of program (Jung et al. 2022).

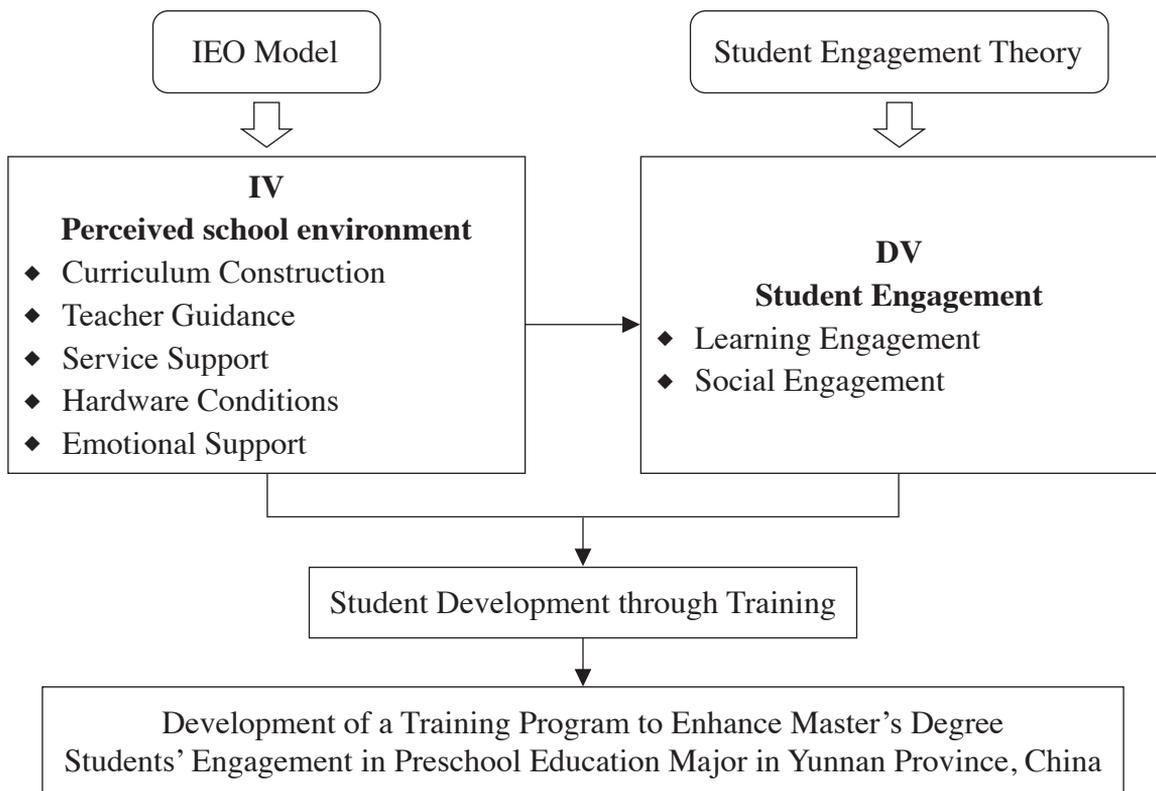


Figure 1 Conceptual framework

Literature review

The primary purpose of this reviews is to introduce the preschool educational context to review training significant theories. The previous studies are related to the major and sub-variables of this study.

Student engagement has been a hot topic among governments, higher education institutions, and their researchers and teachers (Kahu, 2013). It plays a representative role in educational quality development and positively correlates with students' continuous improvement, learning satisfaction, learning harvest, and degree acquisition (kuh, 2001; 2009a; 2009b). Since the 1930s, the concept of student engagement has entered the field of vision of researchers, who have systematically sorted out and done a lot of empirical studies. These include Time on task (Tyler, 1930s), Quality of effort (Pace, 1960-1970s), and Student involvement (Astin, 1960-1970s). 1984), Social and academic integration (Tinto, 1987, 1993), Good practices in undergraduate education (Chickering & Gamson, 1987), and Student engagement (Kuh et al., 1991; Kuh et al., 2005), et al. The term Engagement was first used in management and organizational behavior. Individual participation should include cognitive and emotional participation, entering collective activities, and the way and degree of interaction with others in the group under this state. In the development, engagement has also appeared in the study of educational psychology. The researchers is placed on students' involvement in learning and other learning-related activities, especially the interaction with teachers and the acquisition of teacher-student relationships.

Student engagement is the product of the development of modern education and teaching. In recent years, student engagement has become the focus of higher education quality evaluation and quality improvement. What deserves our attention is that participation in higher education activities emphasizes creating an educational environment and the better participation of students in the educational environment to obtain better learning results and individual development.

In the 1930s, Ralph Tyler proposed Time on Task. As a pioneer of educational evaluation, Tyler was the first to integrate students' engagement into relevant course evaluations. He believed that the more time students spend on learning tasks, the more knowledge they will learn and the better the learning effect will be. This hypothesis lays the foundation of student engagement theory and is the prototype of the concept of student engagement. In the 1970s, Pace researched and promoted the College Student Experiences Questionnaire, CSEQ, based on the Quality of effort. Pace points out that the more time and effort students invest in practical educational activities such as learning, interacting with peers or teachers, and applying what they have learned to concrete practices, the more they gain. Astin (1984) proposed the theory of Student involvement, which enriched and promoted the concept of Pace. According to Astin, Student involvement refers to students' physical and psychological involvement in the Academic experience. On the one hand, students can actively participate in the whole experience process. Whether it is learning, campus social interaction, or student organization, communication between teachers and students can form a positive interaction.

On the other hand, teachers also pay more attention to student engagement. Students' behavior, the amount of time and effort they put into learning, and whether they are motivated are more likely to contribute to their development than the course content, the instruction method, or other laboratory resources. In his view, students' involvement takes students' time investment in the learning process as a critical variable, and he believes that students' harvest and development are positively correlated with the time students invest in learning activities. In his theory of social and academic Integration, Tinto (1987) pointed out that integration is the interaction process between students and peers or teachers, the integration of experiences, and the process of sharing knowledge and learning experiences. He believes that students' degree of participation and satisfaction in both academic and social systems is positively related to the degree of integration of experience. According to Tinto's theory, the key for students to achieve good learning development is to look at the effects of integration. He believes that the integration between students and the school and the integration between students and classmates will directly affect the growth and harvest of students. Therefore, schools should create learning places conducive to integrating knowledge and experience for students. In this learning environment, students should be encouraged to participate in the integration and obtain better development actively.

In the 1980s, another major initiative in American higher education was the introduction of Seven Principles of Good Practices in Undergraduate Education. To this end, the American Association for Higher Education established the "Excellence in American Higher Education Study Group" to study how to improve the quality of American higher education. In 1986, Gamson and Chickering jointly invited many educational scholars, officials, and student representatives to discuss "how to improve the

quality of undergraduate education” and “what are the main characteristics of colleges and universities with excellent undergraduate teaching.” In March of the following year, the “Seven Principles of Good Practice in Undergraduate Education” was published in the journal of the American Higher Education Association, which caused a strong response in the American higher education community. The “Seven Principles of Good Practice in Undergraduate Education” are divided into encouraging teacher-student interaction, encouraging cooperation among students, encouraging students to take the initiative to learn, encouraging students to give timely feedback, encouraging the time planning of learning tasks, encouraging students to have high expectations, Respect students’ intellectual differences and different learning styles.

Based on the Good Practices in Undergraduate Education, Kuh and others at Indiana University in the United States formally proposed the concept of Student Engagement. Kuh sees student engagement as a two-track. On the one hand, from the perspective of students themselves, participation refers to the degree to which students devote time and energy to learning and other educational activities during the school period. On the other hand, from the perspective of schools, how universities allocate and utilize educational resources, how to provide students with better services and hardware, and how to organize courses to enrich the learning experience all belong to the promotion conditions of student engagement, ensure the output of education, and are closely related to the quality of education. This concept emphasizes that the evaluation of participation is a two-way street. Whether students can participate in learning and develop better needs to be obtained based on a good perception of an educational environment. Whether students are motivated or concerned is the premise of their participation efforts. Taking students’ engagement as the critical variable of quality evaluation has solid theoretical significance. In addition to the above studies, many scholars have also given definitions of student engagement-related concepts. Research on student engagement is often conducted under different terms and definitions, resulting in many student engagement concepts. Appleton et al. (2008) summarized the “concept” of student engagement in studying student engagement. This research summarized as shown in Table 1.

Table 1: Students Engagement in the Definition of Each Period and Form

Scholars	Concept Definition
Natriello (1984)	It refers to the participation of students in the teaching activities provided by the school
Mosher and Mac Gowan (1985)	It refers to a secondary school students’ attitudes and participation in programs (including state of mind and behavior)
Finn (1989, 1993) ; Finn and Rock (1997)	It is defined through four levels of the participation-cognitive program: (1) school attendance, concentration, and appropriate response to teacher guidance; (2) asking questions, demonstrating learning enthusiasm and participating in learning-related activities; (3) participating in extracurricular activities; (4) participate in the management of the school

Table 1: Cont.

Scholars	Concept Definition
Skinner, Wellborn and Connell (1990)	It refers to the motivation, effort, and persistence of students in their studies and the emotional state of students in their learning activities
Connell and Wellborn (1991)	Participation occurs when students' psychological needs (such as autonomy, belonging, competence, etc.) are met in the home, school, and work environments and are manifested in emotional, behavioral, and cognitive forms (otherwise, dissatisfaction occurs)
Newmann, Wehlage and Lamborn (1992)	Students' engagement in learning activities is defined as students' psychological input and effort in the process of learning, understanding, and mastering knowledge, skills, or skills
Skinner and Belmont (1993)	It refers to the sustained behavioral engagement in learning activities accompanied by positive emotional states (as opposed to dissatisfaction)
Marks (2000)	Students' attention, interest, investment, effort, and other psychological processes in learning activities
Audas and Willms (2001)	It refers to the degree to which students participate in learning and non-learning activities, as well as the student's identification and evaluation of the educational goals of the school
Christenson and Anderson (2002)	It refers to the psychological engagement (e.g., belonging), behavioral engagement (e.g., participating in specific activities), cognitive engagement (e.g., autonomously regulated learning processes), and learning engagement (e.g., timeliness of tasks)
Jimerson, Campos and Greif (2003)	There are three sub-types: Emotional participation refers to the feeling of teachers, and peers; Behavioral participation refers to students' observable behavior; Cognitive engagement refers to students' perceptions and beliefs
Furlong (2003)	Student engagement is also divided into three sub-types, similar to the classification of Jimerson et al. (2003)
Chapman (2003)	Student's willingness to participate in school routine activities can be divided into cognitive, behavioral, and emotional participation in specific learning tasks

Table 1: Cont.

Scholars	Concept Definition
National Research Council/ Institute of Medicine (2004)	It refers to the behavior and emotional engagement mediated by perceptions of power and control (I can), values and goals (I want), and social connections (I belong)
Libby (2004)	The degree to which students are motivated to learn and do well during their time at school
Fredericks, Blumenfeld, and Paris (2004)	Participation can be divided into three sub-types: behavioral participation refers to students' involvement in learning and social and extracurricular activities; Emotional engagement can be understood as a positive or negative reaction to teachers, classmates, studies, and the school environment. Cognitive engagement draws on the concept of investment, which refers to the idea and willingness of students to put effort into understanding complex concepts and mastering difficult skills
Klem and Connell (2004)	It refers to the continuous engagement (including behavioral, emotional, and cognitive components); Response to challenge
Russell, Ainley and Frydenberg (2005)	It refers to the energy in action, the connection between the person and the activity, consists of three forms: behavioral, emotional, and cognitive
Yazzie-Mintz (2007)	It refers to the cognitive, intellectual, academic (refers to student effort, engagement, and learning strategies), social, behavioral, participatory (social, extracurricular, and non-academic activities and interactions with peers) and emotional (sense of belonging to the school, the school atmosphere, and relationships with others)

At the same time, after more than ten years, student participation has developed and is more correlated with the decision-making of the school environment. For example, formal student union groups (Cross et al., 2014; Mayes et al., 2019), Social cooperation groups on campus (Mitra & Serriere, 2012; Mitra et al., 2013), and a series of corresponding initiatives on student participation in school management (Bourke & MacDonald, 2018). Research on the impact of students' participation in collective decision-making also shows that students have a specific impact on the school's series of actions (Mager & Nowak, 2012).

Voice-inclusive practices are a new conceptual framework for student participation. It shows the critical forms of student participation in various activities carried out in the school. These include four key participation patterns: daily participation, authentic

participation, holistic participation, and matched participation (Sargeant & Gillett-Swan, 2019). Their views was the concept of the student voice pyramid, which divides student participation into leadership, cooperation, and listening (Mitra, 2018). There are also examples of students' participation by field, which can be divided into four fields: 1) classroom teaching (i.e., participation in the teaching process or teaching evaluation); 2) practical training courses (i.e., participation in practical courses, practical training courses, associations, competitions.); 3) decision-making aspects (i.e., formal, such as student unions, or informal, such as groups dedicated to discussing school decisions.); and 4) Social connection (Mannion et al., 2020).

These studies have discussed the essence and connotation of student participation from different angles, which is the conceptual basis of this research's relevant research on student participation. It is not difficult to see that with the progress and development of The Times, the form of participation has evolved from students' participation in promoting learning to a close connection with the improvement of the overall quality of the school, which also provides a theoretical foundation for the quality and effect of postgraduate students in the learning process.

Research methodology

Based on fully drawing on previous studies, it also meets the requirement of at least three items for each facet of the structural equation program (Hair, Black, Babin & Anderson, 2014). In this study, there are three or more items for each facet, and all questions are measured on a seven-scale scale, with 1 strongly disagreeing, 2 was disagree, 3 slightly disagrees, 4 was neutral, 5 was slightly agreed, 6 was agreed, 7 strongly agrees (Dawes, 2008).

This research focuses on the relationship between the perception of school environment, learning engagement, social engagement, and student development of pre-primary education master degree students. It provides data support for improving the training quality of pre-primary education master degree students. According to the Questionnaire on College Student Engagement, Student Development and its Influencing Factors compiled by Methot (2015). According to the descriptive statistical data, this study upgraded its five-scale scale to a seven-scale scale and added the variable of "emotional support" in the school environment to further explore the learning gains of pre-primary education master's to verify the status quo of their training quality and explore ways to improve the quality.

The questionnaire employed in this research was meticulously crafted by the researcher, drawing insights from a thorough systematic literature review of previous studies. Recognizing that the target respondents are Chinese, the researcher took the extra step of not only developing an English version of the questionnaire but also translating it into Chinese. This translation was crucial to ensure that the respondents could readily grasp the nuanced meaning of each item, thereby enhancing the accuracy and reliability of the research findings.

Validity

The researcher developed a draft questionnaire based on a systematic literature review and subsequently sought to validate its content by enlisting the expertise of six professionals in the field of educational administration. These experts, chosen for their

minimum of ten years' experience in educational administration, research methodology, and questionnaire design.

The six experts, all distinguished professors or scholars from China and Korea with rich research backgrounds in student training, were invited to assess the draft questionnaire's validity using the Item Objective Congruence (IOC) approach.

Reliability

Before proceeding with a discriminant validity analysis on the pre-test data, it is imperative to ascertain the suitability of data for factor analysis by utilizing the Kaiser-Meyer Olkin (KMO) measure and Bartlett's Test of Sphericity. The KMO measure evaluates the appropriateness of the data, with factor analysis being feasible when there is a substantial level of both partial and overall correlation among the variables. Typically, the KMO value ranges from 0 to 1, adhering to the following criteria: 0.90 or higher is considered excellent, 0.80-0.89 is good, 0.70-0.79 is medium, 0.60-0.69 is average, 0.50-0.59 is poor, and a value below 0.50 suggests the data is unsuitable for factor analysis (Kaiser, 1974). Bartlett's test of sphericity assesses whether the covariance matrix of the data is an identity matrix and whether the variables are interrelated. A significant test result, usually at a significance level of <0.05, indicates the data's suitability for factor analysis (Bartlett, 1954). Consequently, the maximum variance orthogonal rotation method will be employed to conduct the discriminant validity test on the questionnaire items, with the primary factors being extracted based on an eigenvalue exceeding 1. Items with a factor loading below 0.5 will be excluded (Churchill, 1979; Hair, 2009).

This study first examines the discriminative validity of school environment perception (PE). The KMO value was 0.917, and the significance in Bartlett sphericity test was 0.000. The factor load is all higher than 0.5, so the measured items do not need to be deleted, and each item can be well distributed on the 7 potential factors, and this variable has good discriminative validity. See Tables 2 and 3 for details.

Table 2: Perception of School Environment KMO and Bartlett Test

KMO		0.917
Bartlett Test	Approx. Chi-Square	2870.418
	df	171.000
	Significant Difference	0.000

Table 3: Perception of School Factor Analysis

	Factor1	Factor2	Factor3	Factor4
CC1	0.566			
CC2	0.592			
CC3	0.562			
CC4	0.581			
CC5	0.529			
SS1		0.522		
SS3		0.601		
SS4		0.659		
SS5		0.562		

Table 3: Cont.

	Factor1	Factor2	Factor3	Factor4
HC1			0.625	
HC2			0.603	
HC3			0.543	
HC4			0.586	
HC5			0.587	
ES1				0.557
ES2				0.637
ES3				0.592
ES4				0.655
ES5				0.704

According to Table 5 and Table 6, the KMO value of student engagement (SET) is 0.840 and the significance of Bartlett sphericity test is 0.000, both of which meet the relevant standards. In the factor analysis table, their factor loads are all higher than 0.5, and items below are deleted. In addition, each item can be well distributed on the 7 potential factors. In summary, the analysis results can show that all variables in the questionnaire have good discriminative validity.

Table 4: Student Engagement KMO and Bartlett Test

KMO		0.840
Bartlett Test	Approx. Chi-Square	684.021
	df	15.000
	Significant Difference	0.000

Table 5: Student Engagement Factor Analysis

	Factor1	Factor2
LE1	0.693	
LE3	0.749	
LE5	0.593	
SE2		0.623
SE3		0.585
SE4		0.652

According to Table 6 and Table 7, the KMO value of student development (SD) is 0.882 and the significance of Bartlett sphericity test is 0.000, both of which meet the relevant standards. In the factor analysis table, their factor loads are all higher than 0.5, and items below are deleted. In addition, each item can be well distributed on the 7 potential factors. In summary, the analysis results can show that all variables in the questionnaire have good discriminative validity.

Table 6: Student Development KMO and Bartlett Test

KMO		0.882
Bartlett Test	Approx. Chi-Square	1144.632
	df	36.000
	Significant Difference	0.000

Table 7: Student Development Factor Analysis

	Factor1	Factor2
PG1	0.537	
PG2	0.644	
PG3	0.598	
PG4	0.540	
EG1		0.607
EG2		0.565
EG3		0.574
EG4		0.549
EG5		0.579

Results/Findings

Descriptive statistical analysis

Among the 414 valid questionnaires of this research, there are 384 female respondents, accounting for 92.8% more than males, with their age mostly concentrated below 25 years old (309, accounting for 74.7%), marital status concentrated in unmarried (354, accounting for 85.7%) and monthly disposable income concentrated below 1000-1500 RMB (119, accounting for 28.9). (See Table 8 for details)

Table 8: Demographics (*N* = 414)

Demographic variables	Category	Frequency	Percentage
Gender	Male	35	7.2
	Female	384	92.8
Age	Under 25 years old	309	74.7
	26~30	61	14.8
	31~35	28	6.8
	36~40	11	2.7
	Over 41	2	1.0
	Marital status	Unmarried	354
	Married	55	13.5
	Divorcee	3	0.8

Table 8: Cont.

Demographic variables	Category	Frequency	Percentage
Monthly disposable income	Less than 1,000 yuan	35	8.6
	1001-1500	119	28.9
	1501-2000	81	19.7
	2001-3000	52	12.7
	3001-5000	50	12.1
	5001-10000	54	13.1
	Over 1,0000 yuan	20	4.9
Total		414	100

Correlation Analysis and Regression Analysis

Based on the research data of SPSS, this researcher conducted Pearson correlation analysis to test the correlation between student perceived school environment and student development.

Table 9: Correlation Between Student Perceived School Environment and Student Engagement

Correlation Coefficient	Two Dimensions of Student Engagement		Student Engagement in General
Four Factors	LE	SE	
CC	.500***	.527***	.576***
SS	.520***	.319***	.475***
HC	.462***	.614***	.601***
ES	.558***	.500***	.595***
Student Perceived School Environment	.654***	.617***	.714***

$N = 414$, * $p < .05$, ** $p < .01$, *** $p < .005$

For this objective, multiple correlation was used to test the significant relationship between student perceived school environment and student engagement, and regression analysis then was used to predict the extent that teachers' perceptions of the early childhood educator competencies of employees.

Table 9 presents the p values and Pearson correlation coefficient results between the dimensions of student perceived school environment, student engagement. Based on the analysis results of Pearson' correlation coefficient, the correlation coefficient values of the six dimension of student perceived school environment and the four factors of were all highly correlated, among them, most of the correlations belong moderate to high positive correlation.

Table 10: Regression Analysis of the Student Perceived School Environment on Student Engagement

TIL Dimensions	PE factors	R	R ²	ΔR ²	B	β	Sig
LE	CC	0.657	0.431	0.426	0.199	0.214	0.000***
	SS				0.176	0.231	0.000***
	HC				0.105	0.117	0.016***
	ES				0.228	0.269	0.000***
SE	CC	0.678	0.459	0.454	0.239	0.278	0.000***
	SS				-0.033	-0.046	0.309
	HC				0.327	0.393	0.000***
	ES				0.136	0.173	0.001***
	PE	0.714	0.510	0.509	0.670	0.714	0.000***

$N = 414$, * $p < .05$, ** $p < .01$, *** $p < .005$

This study aims to propose a comprehensive preschool teacher training program designed to elevate the provincial training standards for professional master's students in preschool education in Yunnan Province. The program is formulated on the foundation of previous research findings and pertinent theories. Its primary objective is to enhance the quality of training for master's students in preschool education within the province. Based on previous qualitative and quantitative research outcomes, the researchers have devised a pre-service teacher training program, which is outlined in the subsequent illustration.

Discussion

The first objective is analyzed, and the results supported the findings of Goran & Anna (2019) in which it is assessed that the growth of preschool master's degree students is developed by different factors comprising from academic impacts to individual and environmental elements. As these pupils pursue increased education in ECE development, they face issues and chances that add to their intellectual and professional growth. The main factors comprise of practical training, mentorship, research opportunities, academic curriculum, psychological resilience, and societal anticipations. These elements play a key role in developing their competencies, pedagogical assessment, and overall readiness to add to the domain of ECE. The most important element is based on the growth of master's degree students of preschool is the academic curriculum. A well-developed notion that balances theoretical knowledge with different practical implementation makes sure that pupils form a deeper level of assessment of ECD, educational policies, and learning theories. The exposure to different pedagogical methods and child psychology helps pupils to implement teaching methods based on evidence that cover to the holistic requirements of young learners (Goran & Anna 2019). Additionally, the interdisciplinary research that assess psychology, neuroscience, and education assist appreciate the complications of ECE learning, making them for different roles in practice and academia.

The second objective is about current student outcome of preschool master's degree programs in Yunnan Province. Yunnan is properly improving its ECE with the help

of different initiatives, notably the Yunnan ECE Innovation Project (YECEIP). This project was advocated by the World Bank to enhance the accessibility and quality of ECE in this region. Hospel and Galand, (2016) supported this objective by mentioning that a robust element of YECEIP emphasizes on the professional growth of ECE educators. The universities that are participating emphasizes on the professional growth of educators of ECE including Yunnan Normal University (YNU) have studied their prospectuses to bring into line with novel government-assessed guidelines of ECE. These types of guidelines focus on domains comprising development of language, health and physical growth, science, arts, and math, and socio-emotional growth. The updated programs position higher focus on practical learning process with the help of observations of classroom, practice of teaching volunteering, and student internships in different settings of ECE, particularly in rural areas (Akpur et al. 2016).

The third objective of this study also shows significant results, and the results are aligned with the findings of Daily et al. (2019) in which it is assessed that ECE competencies in Yunnan province's kindergartens play a key role in developing foundational learning experience of children. These types of competencies include an amalgamation of knowledge of pedagogy, practical skills, and cultural awareness that help educators to offer high-quality ECE. In Yunnan, a province recognized for its different communities of ethnicity, educators must show robust skills of communication and cultural sensitivity to properly associate with children from various backgrounds. The capability to implement and design age-appropriate curricula focused on ECE development theories is important, making sure that children get holistic education that promotes social, cognitive, and emotional development (Daily et al. 2019). Moreover, educators in kindergartens of Yunnan must be well-assessed in national ECE policies of China and frameworks, bring into line their strategies of teaching with the standards of government.

The fourth objective is also analyzed, and this objective is supported from the findings of Halverson, (2017) that a robust program of training to improve the master's degree education quality in preschool education in Yunnan must emphasis on pedagogical innovation, practical skill development, and cultural integration. The program must comprise specialized coursework in curriculum design, child psychology, and inclusive education, making sure that prospective educators are developed with contemporary methodologies of teaching. Moreover, based on different ethnic communities, the program must assess training of cultural competency, helping educators to form adaptive and inclusive strategies of teaching that cover to different backgrounds of culture. Rosa, (2016) bridged the gap between practice and theory, the program must include hands-on training with collaborations with preschools, helping pupils to implement their learning in actual settings of classroom. An initiative of mentorship where experienced educators help masters will increase professional development. The assimilation of tools of digital education is also important, making sure that educators are capable in using technology to make interactive and engaging learning environments. Verification of the effectiveness of program must include periodic evaluations, comprising classroom observations, student feedback, and performance assessments in placements of teaching (Rosa, 2016). Collaboration with experts of education, domestic preschool institutions, and government agencies will assist ensure the program bring into line with national standards of education and caters the needs of preschool sector of Yunnan. The longitudinal studies and surveys

chase graduates' progressions of career and the effect on their learning outcomes of students will offer further evidence of the success of program (Haynie et al. 2017). By continuously purifying the curriculum focused on feedback and research, this program of training can robustly improve the quality of education of preschool in Yunnan, promoting well-developed educators who can advocate ECE development efficiently.

Recommendations

Recommendations for universities

Currently, the integration of theory and practice stands as a pivotal factor in enhancing teaching quality and fostering comprehensive abilities among master's students in pre-primary education programs. Universities must reinforce this notion and establish a comprehensive, multi-layered training system that ensures students grasp a robust theoretical foundation while adeptly applying this knowledge in practical teaching contexts.

To achieve this, several key strategies should be implemented. Firstly, optimizing the curriculum to strengthen the linkage between theory and practice is crucial. Universities ought to review their existing curriculum systems, ensuring each course aligns closely with the core objectives of the pre-primary education profession. The theoretical curriculum should delve deeply into the laws, guidelines, and educational concepts of preschool education, while also emphasizing the development of students' critical thinking and problem-solving skills. Practical courses, on the other hand, should prioritize experiential learning through situational simulations and real-world teaching environments. This can be facilitated through case analysis, role-playing, teaching observations, and practical experiences, enabling students to continually reinforce and deepen their theoretical knowledge through practice.

Secondly, establishing a school-enterprise cooperation mechanism is essential to broadening practice platforms. Universities should actively forge long-term partnerships with high-quality kindergartens, providing students with stable internship opportunities. Through these collaborations, universities can gain insights into the actual needs of kindergartens, promptly adjusting teaching content and methods to ensure that trained students can seamlessly adapt to the workforce. Additionally, inviting kindergarten teachers with extensive practical experience to teach or lecture can provide students with invaluable guidance, sharing their teaching experiences and insights.

Thirdly, strengthening faculty construction and improving teaching quality are paramount. Universities should prioritize the development of pre-school education faculty, recruiting teachers with high-level academic backgrounds and practical experience. Simultaneously, ongoing training and development for existing faculty should be provided to enhance their teaching proficiency and research capabilities. Encouraging faculty participation in teaching research and reform initiatives can foster the exploration of innovative teaching methods and models, addressing the evolving needs of the preschool education field.

Lastly, improving the evaluation system and emphasizing process evaluation is vital. Universities should establish a scientific evaluation system that not only assesses students' learning outcomes but also monitors and provides feedback on their learning processes. Regular assignments, tests, practice reports, and oral presentations should be utilized to offer students a comprehensive understanding of their learning progress and

areas for improvement. Furthermore, implementing a diversified evaluation mechanism that combines student self-evaluation, peer evaluation, and teacher evaluation can encourage student engagement in the evaluation process, cultivating self-reflection and critical thinking skills.

In addition, universities ought to emphasize the integration of scientific research and practical application in the training of master's students in preschool education. They should encourage students to actively engage in scientific research projects and practical activities, thereby fostering academic innovation and driving teaching reform.

Firstly, universities should establish scientific research projects and actively encourage student participation. These projects should be pertinent to preschool education, enabling students to gain a deeper understanding of the latest research trends and cutting-edge issues in the field. By participating in such projects, students can cultivate their scientific research abilities and foster an innovative spirit. Furthermore, universities should provide sufficient research funds and resources to facilitate smooth progression of students' research endeavors.

Secondly, universities should organize academic forums and seminars to promote academic exchange. These events should be held regularly and invite experts, scholars, and front-line teachers in the field of preschool education to share their experiences and insights. Through such exchanges, students can broaden their horizons, learn about diverse viewpoints and practices, and gain new ideas and inspirations for their academic research and teaching practice.

Lastly, universities should promote teaching reform and enhance teaching quality. Teachers should be encouraged to actively participate in teaching reform efforts and explore novel teaching methods and models. Such reforms can stimulate students' learning interest and enthusiasm, ultimately improving their learning outcomes and satisfaction. Additionally, universities should strengthen the evaluation and dissemination of teaching reform achievements, sharing successful experiences and practices with a wider audience of teachers and students, and thereby promoting the sustainable development of the entire preschool education profession.

Recommendations for kindergartens

As the primary setting for preschool education, kindergartens exert a significant influence on children's learning and growth. To enhance teaching quality and foster greater child engagement in learning, kindergartens ought to actively refine the educational environment and establish conditions that facilitate children's holistic development.

Firstly, kindergartens should enhance their hardware facilities to furnish a safe and comfortable learning environment. This necessitates increased investment in hardware, ensuring that classrooms, activity rooms, and dormitories are well-equipped, secure, and cozy. Additionally, attention should be given to the classroom's layout and decoration, fostering a warm and harmonious learning ambiance. Furthermore, kindergartens must provide an abundance of diverse teaching materials and toys to satisfy children's curiosity and exploratory desires, thereby stimulating their interest and enthusiasm for learning.

Secondly, kindergartens should emphasize teacher training and elevate teachers' professional competence. They should prioritize the professional development and training of their teachers, regularly organizing participation in various training and learning activities. Through such training, teachers can continually update their educational concepts

and enhance their teaching proficiency and professional quality. Concurrently, kindergartens should encourage teachers to actively engage in teaching research and reform, exploring teaching methods and models tailored to children's physical and mental development, ultimately improving teaching quality and effectiveness.

Lastly, kindergartens should prioritize home cooperation to forge a unified educational force. They should strengthen communication and collaboration with parents, establishing a mechanism for home co-education. Through means such as parents' meetings, home visits, and parents' Open Day, kindergartens should promptly provide feedback to parents regarding their children's learning and living conditions, while also being receptive to parents' opinions and suggestions. Moreover, kindergartens can invite parents to participate in educational activities, such as parent-child events and parent teaching assistant roles, enabling parents to better comprehend and support the kindergarten's work. This collective effort forms a cohesive educational force, jointly promoting the comprehensive development of children.

Class represents the fundamental unit of kindergarten education, and the caliber of class management exerts a direct influence on children's academic and life quality. To enhance children's social proficiency, kindergartens ought to bolster class management and foster an environment and conditions that are conducive to fostering children's social interactions.

Firstly, establishing a positive class atmosphere is imperative to encourage children's interactions. Kindergarten teachers should prioritize the cultivation of a positive class atmosphere by organizing diverse class activities and games, thereby promoting interaction and communication among children. Concurrently, teachers should also be attentive to the individual needs and characteristics of each child, offering personalized guidance and support.

Secondly, implementing effective behavior management strategies is crucial to regulating children's conduct. Kindergarten teachers should devise explicit behavior norms and establish reward and punishment systems to guide children in cultivating commendable behavioral habits and self-discipline. In instances of undesirable behavior, teachers should promptly provide correction and guidance, assisting children in recognizing their mistakes and rectifying them.

Lastly, reinforcing home communication is vital to collectively advancing children's social proficiency. Kindergarten teachers should augment communication and collaboration with parents, while also emphasizing the development of children's social skills. By utilizing methods such as home contact books, telephone communication, and home visits, teachers should promptly relay feedback to parents regarding children's social interactions in class, solicit parents' opinions and suggestions, and collaboratively create favorable conditions for children's social development.

Recommendations for other universities in Yunnan Province

Colleges and universities in Yunnan Province ought to enhance exchanges and collaboration in the education of master's students in preschool education, share high-quality resources, and elevate the overall training standard.

Firstly, establishing a cooperation mechanism to facilitate resource sharing is essential. Institutions of higher learning should create a cooperation framework for preschool education majors, organize regular academic exchange conferences and seminars, and

disseminate their teaching experiences and research findings. Through collaboration, universities can gain insights from one another, learn from mutual strengths, and collectively enhance the quality of preschool education training.

Secondly, implementing joint training programs to broaden students' perspectives is crucial. Universities can undertake joint training initiatives to offer students opportunities to study and practice at different institutions. By participating in joint training, students can access a wider range of teaching philosophies and methodologies, expand their horizons, and enhance their overall competence.

Lastly, constructing a practice base to provide practical opportunities is vital. Colleges and universities can collaboratively establish preschool education practice bases to offer students more practical experiences. Through the establishment and cooperation of these practice bases, institutions can jointly undertake practical teaching assignments and improve students' practical abilities and teaching proficiency.

The teaching staff constitutes a pivotal element in the cultivation of master's students in preschool education. Institutions of higher learning in Yunnan Province must bolster the development of their faculty, enhancing both the teaching proficiency and scientific research capabilities of educators.

Firstly, the introduction of high-level teachers is imperative for elevating the quality of the teaching staff. Colleges and universities ought to actively recruit educators possessing advanced academic backgrounds and practical experiences to enrich the ranks of preschool education instructors. Concurrently, it is essential to reinforce the training and professional growth of current faculty members, thereby augmenting their teaching proficiency and scientific research aptitudes.

Secondly, establishing a teacher incentive mechanism is crucial for igniting teaching enthusiasm. All institutions must formulate a scientific incentive system for educators, motivating their teaching zeal and passion through professional title evaluations and reward structures. Furthermore, it is imperative to provide a conducive working environment and adequate remuneration for teachers to ensure the stability of the teaching staff.

Lastly, encouraging teachers to engage in scientific research and fostering academic innovation is vital. Universities should urge educators to actively participate in scientific research projects and academic studies, furnishing them with research funds and resources. Through such research endeavors, teachers can gain profound insights into the latest research trends and cutting-edge issues within the realm of preschool education, thereby promoting academic innovation and teaching reforms.

Recommendations for future researchers

In the future, researchers within the domain of preschool education ought to delve deeply into practical applications, attend to the pragmatic challenges faced by preschool education, and furnish a scientific foundation for its reform and advancement.

Firstly, empirical research should be conducted to uncover the essence of educational phenomena. Researchers must immerse themselves in kindergartens and families, gathering firsthand information and data through meticulous observation, investigation, and experimentation. By engaging in empirical research, we can unveil the fundamental nature and underlying principles of preschool education phenomena, thereby providing a scientific basis for educational reform.

Secondly, attention should be focused on pertinent issues and the exploration of viable solutions. Researchers must closely monitor the pressing concerns within the field of preschool education, such as the quality of early childhood education, professional development for teachers, and collaboration between home and school. By scrutinizing these issues in depth, effective solutions and strategies can be devised to offer guidance and support for educational practice.

Lastly, interdisciplinary research should be reinforced to expand the research horizon. Researchers must foster collaboration and exchange with scholars from other disciplines to broaden their perspectives. Through interdisciplinary research, we can draw upon the theories and methodologies of other fields, thereby furnishing novel ideas and inspiration for preschool education research.

In the field of preschool education, future researchers ought to prioritize the integration of theory and practice to foster academic innovation and propel teaching reform.

Firstly, theoretical research findings should be implemented in practice. Researchers must actively apply the outcomes of theoretical research to educational practice, validating the feasibility and efficacy of the theory through practical application. Simultaneously, the theory should be refined and enhanced based on practice feedback, fostering a virtuous cycle of mutual enhancement between theory and practice.

Secondly, the exploration of novel teaching methodologies and models is crucial. Researchers should diligently explore innovative teaching approaches and models to cater to the evolving demands of preschool education. By instigating teaching reform and innovation, students' learning interest and enthusiasm can be ignited, ultimately enhancing their learning outcomes and satisfaction.

Lastly, international cooperation and exchange should be strengthened to widen global perspectives. Researchers must actively engage in collaboration and exchange activities within the realm of international preschool education, staying abreast of the development trends and cutting-edge advancements in the field. Through international cooperation and exchange, research horizons can be broadened, elevating research standards and international competitiveness. Concurrently, this enables the introduction of advanced international educational concepts and teaching methodologies into China, thereby promoting the sustainable development of preschool education in our nation.

Acknowledgement

I would like to express my sincere gratitude to my professors and Stamford International University for their invaluable guidance and academic support. My heartfelt thanks also go to my family for their unwavering encouragement and patience. Lastly, I extend my appreciation to the journal editors and reviewers for their diligent work and constructive comments, which significantly improved this manuscript.

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