

ISSN electrónico: 2172-9077


DOI: 10.48047/fjc.28.02.08

CULTIVATION OF PROFESSIONAL ETHICS AND PROFESSIONAL QUALITY IN TEACHER EDUCATION – AN EMERGENCE ON THE FIT BETWEEN SOCIAL NEEDS AND TRAINING OF NORMAL STUDENTS

WeiWei

Kirk University International College Educational Administration

E-mail: 2320763526@qq.com

 <https://orcid.org/my-orcid?orcid=0000-0001-6514-3035>

Fecha de recepción de la reseña: 11 June 2024

Fecha de aceptación definitiva: 15 July 2024

Abstract

Experiential learning is an educational approach that emphasizes the practical application of knowledge and skills in real-world contexts. It has gained attention as an effective teaching method that promotes student engagement, active learning, and the development of essential skills. Additionally, the social needs of students, such as belonging and connections, play a crucial role in their overall well-being and academic success. This study examined experiential learning, teaching methodologies, students' social needs, teaching effectiveness, professional ethics, professional competency, and student achievement in the Chinese education system. The study examined how experiential learning, teaching approaches, and students' social needs affect professional ethics, competence, and achievement. Teaching efficacy and teacher motivation mediated and moderated these correlations, respectively. 435 Chinese students and teachers were sampled for a quantitative study. AMOS was used to analyze data from self-administered questionnaires. Experiential learning, educational approaches, and students' social requirements positively correlated with professional ethics, competence, and achievement. Teaching efficacy was identified as a mediator in these relationships, indicating its role in translating experiential learning, teaching methods, and students' social needs into favorable educational outcomes. Moreover, teacher motivation was found to moderate the relationship between teaching efficacy and professional ethics, professional competence, and

student achievement. This research enriched the existing literature by presenting empirical evidence of the connections among experiential learning, teaching methods, students' social needs, teaching efficacy, professional ethics, professional competence, and student achievement within the Chinese education system. The findings enhanced our comprehension of the factors that influence educational outcomes and emphasize the significance of incorporating experiential learning, effective teaching methods, and addressing students' social needs. The practical implications of this study benefit educational practitioners, policymakers, and researchers in promoting ethical conduct, improving professional competence, and fostering academic achievement.

Keywords: Experiential Learning, Teaching Methods, Social Needs of Students, Teaching Efficacy, Professional Ethics, Professional Quality, Student Achievement, Teacher Motivation

1. INTRODUCTION

Educational institutions globally prioritize professional ethics, teaching excellence, and student achievement in an ever-changing field. Educators strive to create ideal learning environments that promote ethics, professionalism, and academic success. Understanding the complex educational landscape is essential to achieving these goals (Pratsri et al., 2021). Experiential learning, teaching methods, students' social needs, teaching efficacy, and teacher motivation affect professional ethics, instructional quality, and student accomplishment. It also examines the mediating and moderating effects of teacher efficacy and motivation. With its rich historical background and vast student population, the Chinese education system presents a captivating context for examining these educational factors (Zhang et al., 2022). Over the past few decades, China's education system has undergone significant transformations, transitioning from a traditional rote-learning approach to a more diverse and comprehensive framework. The system places significant emphasis on academic performance, driven by rigorous standards and intense competition. Students face immense pressure to excel academically, as the outcomes of high-stakes examinations often determine their future educational and career prospects (Wang et al., 2016). While academic excellence is highly esteemed, it is crucial to comprehend the broader impact of educational factors on students' holistic development within the Chinese context.

The structure and emphasis on academic excellence within the Chinese education system provide a unique context for examining the intricate relationships among experiential learning, teaching methods, students' social needs, teaching efficacy, professional ethics, professional quality, and student achievement (Belda-Medina, 2022). Exploring these dynamics within the Chinese education system offers valuable insights into how these factors interact and influence students' ethical behavior, professional development, and academic success. Previous studies have contributed significant findings, focusing on the individual impacts of these educational factors. For instance, a study by (Kirkpatrick, 2020) conducted with university students demonstrated a positive correlation between experiential

learning and the development of professional ethics. The authors highlighted the value of practical experiences in fostering ethical principles, responsibility, and integrity among students. Similarly, (Duan et al., 2022) examined the influence of teaching methods on professional quality and student achievement in primary schools. Their research revealed that effective teaching methods, such as active learning strategies and differentiated instruction, positively affected both professional quality and student achievement. These findings underscore the importance of implementing innovative and student-centered approaches to enhance the overall quality of education. Student achievement depends on recognizing and meeting their social needs. (Pan et al., 2021) examined how pupils' social needs affect their performance in Chinese schools. Social needs like belonging and healthy peer interactions were found to improve academic success. These findings emphasize the importance of inclusive and supportive learning settings that support students social and emotional well-being.

The motivation behind undertaking this study stems from the significance of comprehending the elements that influence professional ethics, professional quality, and student achievement within the educational sphere. Although prior research has examined the individual impacts of experiential learning, teaching methods, students' social needs, teaching efficacy, professional ethics, professional quality, and student achievement, there exists a gap in understanding their intricate interconnections. This study bridges that gap by studying these interactions inside the Chinese education system, adding to the current body of knowledge and providing vital insights into the specific dynamics and factors at play in this setting. The purpose of this research is to analyze how the Chinese education system's professional ethics, professional quality, and student accomplishment are affected by teachers' motivation, teaching efficacy, and students' social needs.

This study provided significant contributions to the field of education in multiple ways. Firstly, it enhanced our understanding of the intricate relationships among experiential learning, teaching methods, students' social needs, teaching efficacy, professional ethics, professional quality, and student achievement within the Chinese education system. The study provided a holistic view of the complex dynamics that determined students' ethical conduct, professional progress, and academic success by simultaneously analyzing these elements. Second, the study examined the mediating and moderating roles of instructional efficacy and teacher motivation, which had received little research, particularly in the Chinese education system. This study examined how teaching efficacy mediated educational factors and outcomes and how teacher motivation moderated this relationship. Finally, this study had practical consequences for educators, politicians, and researchers. Understanding professional ethics, quality, and student accomplishment could help establish evidence-based educational techniques and interventions. Educators could develop ethical behavior, professional competence, and academic performance by using experiential learning and instructional methodologies and meeting students' social needs.

2. LITERATURE REVIEW

2.1 Professional Ethics

Professional ethics encompasses the moral principles and standards that guide the behavior and decision-making of individuals within a specific profession (Chih et al., 2019). It involves upholding

values, integrity, and responsibilities when interacting with clients, colleagues, and the broader community. Research on professional ethics has focused on exploring ethical dilemmas faced by professionals, developing ethical decision-making skills, and examining the impact of ethical conduct on organizational success and public trust. According to studies, a strong ethical foundation and adherence to professional rules of conduct help professionals build stronger client relationships and experience long-term career advancement (Yuan, Kao, & Lee, 2020). Additionally, ethical behavior is intimately linked to psychological health and personal pleasure since ethically-behaving professionals frequently feel fulfilled and deserving of respect (Lok et al., 2023).

2.2 Professional Quality

Professional quality encompasses the standards, competencies, and characteristics that define excellence within a specific profession (Tehranineshat et al., 2020). It encompasses qualities like professionalism, knowledge, competence, and a dedication to lifelong learning. In order to generate high-quality professionals, various criteria, including mentorship, effective education and training programs, and chances for ongoing professional development, have been identified through research on professional quality. According to studies, professionals who adhere to high standards are more likely to provide great services, make educated judgments, adjust to changing conditions, and contribute to successful outcomes in their respective industries. Furthermore, organizations that prioritize professional quality often experience increased productivity, enhanced customer satisfaction, and a competitive advantage in the marketplace (Cao et al., 2021).

2.3 Student Achievement

Student achievement refers to the measurable outcomes and accomplishments of students throughout their educational journey (Katz et al., 2019). It encompasses academic performance, knowledge acquisition, skill development, and overall growth. Educational techniques, learning settings, student engagement, and social and emotional aspects have all been studied as potential influences on student outcomes in research on student accomplishment (Aukerman & Chambers Schuldtt, 2021). According to studies, effective teaching strategies including active learning, individualized instruction, and formative evaluation boost student accomplishment by encouraging greater comprehension, critical thinking, and problem-solving abilities (Shen et al., 2021). Improved student achievement is also influenced by elements including a welcoming and inclusive classroom environment, strong teacher-student bonds, and the availability of resources and support services. Increased graduation rates, higher educational attainment, and better employment prospects are all related with high levels of student accomplishment (Kusuma & Hamidah, 2021).

2.4 Experiential Learning and Professional Ethics

Experiential learning, which draws from the theories of Dewey, Piaget, and Kolb, emphasizes the significance of hands-on experiences and active engagement in the learning process (Rahn et al., 2023). It has been widely acknowledged as an effective approach for fostering professional ethics among students. Experiential learning exposes students to ethical challenges and develops their ethical decision-making skills (Miller & Nambiar-Greenwood, 2022). (Pratsri et al., 2021) proposes that experiential learning fosters responsibility and accountability, making students consider the ethical

implications of their activities. Experiential learning improves students' ethical understanding, sensitivity, and commitment to ethical behavior (Terry et al., 2019).

2.5 Experiential Learning and Professional Quality

Experiential learning approaches have a significant impact on the development of professional quality among students. Experiential learning enables students to learn and apply the skills required for professional success by involving them in practical experiences, problem-solving activities, and real-world difficulties (DeVold et al., 2022). Critical thinking, communication, teamwork, and adaptability are fostered through this active learning approach and are crucial elements of professional quality (Fondo & Gómez-Rey, 2021). Experiential learning improves professional competence, confidence, and work readiness. Experiential learning in professional education programs improves job performance, customer happiness, and career advancement, according to (Nuffer et al., 2021).

2.6 Experiential Learning and Student Achievement

Meaningful and practical learning experiences improve student progress. Students learn more and improve academically by actively engaging in real-world environments (J. Xu & Luo, 2022). Experiential learning improves critical thinking, problem-solving, and decision-making across academic subjects. Experiential learning increases academic success, engagement, and retention. Experiential learning improves test scores, motivation, and emotional and academic fulfillment (Bringle & Clayton, 2023). These outcomes help students succeed academically and professionally.

2.7 Teaching Methods and Professional Ethics

Teaching methods play a significant role in shaping professional ethics among students. Students' grasp of ethical ideas, their capacity to apply ethical reasoning, and their dedication to ethical action can all be impacted by teachers' pedagogical choices. Casey (2018) explains that students can learn to acquire a moral compass and engage in ethical discourse through the use of interactive and discussion-based teaching approaches. Research has shown that incorporating case studies, ethical dilemmas, and role-playing activities into teaching methods enhances students' ethical decision-making skills and ethical awareness (O'Byrne et al., 2018). Moreover, teaching methods that emphasize collaboration, reflection, and active learning create a supportive environment that fosters ethical values, empathy, and social responsibility (Kucukkelepce et al., 2021).

2.8 Teaching Methods and Professional Quality

Different teaching methods directly impact the development of students' professional quality. By employing various instructional strategies, educators can facilitate the acquisition of knowledge, skills, and competencies crucial for professional success (Huang et al., 2022). For instance, problem-based learning and experiential learning approaches offer students opportunities to tackle authentic challenges, fostering critical thinking, problem-solving, and communication skills (Pei & Suwanthep, 2020). Research indicates that active learning methods like flipped classrooms, simulations, and project-based learning enhance students' professional competence, confidence, and readiness for the workplace (Butz & Hancock, 2019). Moreover, teaching methods emphasizing practical application, hands-on experiences, and technology integration equip students with the necessary skills to thrive in their chosen fields (Bower, 2019).

2.9 Teaching Methods and Student Achievement

Teaching approaches affect student involvement, motivation, and learning outcomes. Effective instructional tactics improve students' knowledge, retention, and application, boosting academic success (Allen & Morere, 2020). Cooperative learning, problem-solving, and inquiry-based approaches improve knowledge, critical thinking, and information processing (Irgin & Erten, 2020). Differentiated education and personalized learning boost student engagement and achievement. Formative evaluation, feedback, and metacognitive processes improve self-regulation, goal setting, and academic improvement (Tong et al., 2022).

2.10 Social Needs of Students and Professional Ethics

Students' social needs, like belonging, inclusion, and connectedness, shape professional ethics. Supportive social environments can improve pupils' ethical behavior and decision-making (Humphries et al., 2019). Students who feel supported by their peers, teachers, and school community are more likely to show prosocial behavior, empathy, and ethical conduct (Gomes & Fler, 2020). Social-emotional learning programs that address kids' social needs and teach empathy, cooperation, and conflict resolution also build ethical beliefs and attitudes. An inclusive, respectful, and positive classroom and school atmosphere can help build ethical professionals.

2.11 Social Needs of Students and Professional Quality

Student social needs affect professional excellence. Professional qualities including interpersonal skills, cooperation, and communication can be developed in a supportive social setting. Socially supported students are more likely to collaborate, lead, and be professional (Sadiq, 2022). Students thrive once they have a feeling of belonging and properly being within a supportive social environment. This environment, characterized by means of acceptance as true, recognize, and inclusivity, fosters their motivation, self-efficacy, and capability for professional growth (Wentzel, 2019). Socially connected students are more likely to cultivate professional networks, find mentors, and engage in valuable learning experiences.

2.12 Social Needs of Students and Student Achievement

Social needs affect academic performance. A supportive and inclusive social environment boosts student achievement by increasing engagement, enthusiasm, and a positive learning attitude. Students who feel socially connected and have favorable relationships with peers and teachers are more likely to participate actively in classroom activities, seek help when required, and persevere when faced with problems. Collaborative learning, peer support, and a sense of belonging boost academic performance, grades, and retention. Students feel protected, supported, and driven to reach their full potential in a favorable social climate that encourages respect, inclusion, and community (Murry et al., 2023).

2.13 Teaching Efficacy and Professional Ethics

Professional ethics are significantly influenced by teaching efficacy, which is defined as teachers' views in their ability to favorably effect student learning outcomes. High effectiveness teachers are more likely to act morally and respect norms for the profession. According to research, instructors

who have a high sense of effectiveness are more dedicated to fostering students' moral growth, making ethical choices, and setting an example of ethical behavior. Furthermore, according to Noble & Dubljević, (2022), teachers with high teaching efficacy prefer to promote open dialogues, stimulate critical thinking, and confront ethical conundrums in order to foster ethical behavior in their students. Additionally, teachers who have confidence in their capacity to impact student learning outcomes are more likely to participate in ongoing professional development and ethically competent reflective practices (Qiu & Luo, 2022).

2.14 Teaching Efficacy and Professional Quality

Teaching effectiveness affects instructors' knowledge, abilities, and dedication to excellence in their field, which has a direct impact on professional quality. High efficacy teachers are more likely to use innovative teaching techniques, engage in effective instructional practices, and foster a positive learning environment. According to research, teachers who have a high sense of efficacy are more likely to seek feedback, participate in ongoing professional development, and reflect on their teaching methods, all of which help them become better professionals (Zhou & Rose, 2021). Additionally, teachers that have high teaching efficacy show a greater dedication to addressing the various learning requirements of their students, creating a happy learning environment, and encouraging student success (Magill et al., 2020). Teachers are motivated to consistently improve their professional skills, adapt to shifting educational circumstances, and improve education generally by their faith in their abilities to impact students' lives.

2.15 Teaching Efficacy and Student Achievement

Student achievement outcomes are substantially influenced by teaching effectiveness. The learning and motivation of students are more affected by teachers who are very effective. According to research, instructors' efficacy views are positively correlated with increases in student success. High expectations are set for students by teachers who have a strong feeling of efficacy. They also deliver good education and provide assistance and direction to help students achieve (Nikolopoulou et al., 2019). A good classroom environment that encourages student involvement is also more likely to be fostered by teachers with high teaching efficacy. These teachers are also more likely to employ instructional tactics that engage and challenge students. Teachers are more effective in their instructional techniques, which improves student accomplishment, since they are confident and believe they can have a beneficial impact on student learning outcomes (Zhou & Thompson, 2023).

2.16 Teaching Efficacy as a Mediator

Effective teaching can serve as a bridge between students' development of professional ethics and experience learning. Experiential learning gives students the chance to participate in authentic situations, deal with moral challenges, and hone their ethical decision-making abilities. As a mediator, teaching efficacy affects how well teachers use experiential learning strategies and build a welcoming learning environment that promotes professional ethics. High teaching efficacy teachers are more likely to plan and carry out experiential learning activities successfully, lead students in ethical debates, and offer suitable feedback and support (Sidhu & Gage, 2021). Students' commitment to ethical behavior and ethical development are thereby strengthened.

Teaching efficacy also acts as a mediator between experiential learning and the development of professional quality among students. Experiential learning allows students to acquire and apply the skills necessary for professional success. Teaching efficacy influences the extent to which teachers effectively implement experiential learning strategies, provide guidance and support, and create a conducive learning environment that promotes professional quality. Teachers with high teaching efficacy are more likely to facilitate experiential learning experiences that engage students, promote critical thinking, and foster the development of professional competencies (Doğan & Şendir, 2022). Teaching efficacy mediates experiential learning and student accomplishment. Experience-based learning improves student engagement, critical thinking, and problem-solving (Barbour & Schuessler, 2019). Teaching efficacy affects how well teachers use experiential learning, develop meaningful learning events, and provide assistance and feedback. High-efficacy teachers provide engaging, supportive learning environments that boost student accomplishment. Student performance, academic growth, and achievement improve (Luo & Song, 2022).

Teaching efficacy can help students acquire professional ethics. Case studies, role-playing, and ethical dilemmas allow students to explore and make ethical decisions. Teaching efficacy mediates how well teachers use these strategies, establish a supportive learning environment, and teach ethical reasoning. High-efficacy teachers design and implement instructional techniques that encourage ethical discourse, model ethical behavior, and support students. This raises students' ethical awareness and professional ethics (Pan et al., 2021). Teaching efficacy also influences student professional development. Different teaching approaches allow students to learn and practice professional skills. Teaching efficacy determines how well teachers use these strategies, provide direction and support, and establish a professional learning environment. High teaching efficacy helps teachers apply approaches that engage students, foster critical thinking, and improve professional competences. This improves students' professionalism, confidence, and workplace preparation (Caldwell, 2020).

The relationship between teaching methods and student achievement results is mediated by teaching efficacy. Teaching strategies affect student involvement, motivation, and learning. Teaching efficacy affects how well teachers use these strategies, provide support, and create an interesting learning environment (Irgin & Erten, 2020). High-efficacy teachers plan and implement active learning, student participation, and critical thinking strategies (Belda-Medina, 2022). Student performance, academic growth, and achievement improve.

Teaching efficacy can bridge student social needs with professional ethics. Students require a sense of belonging, connection, and support to develop ethical behavior (Tsang & Lo, 2020). Teaching efficacy mediates how well teachers meet students' social needs and establish a supportive classroom. Teaching efficacy is associated with positive relationships, inclusive methods, and student guidance and support (T. S. Xu et al., 2023).

Teaching efficacy also acts as a mediator between the social needs of students and the development of professional quality. Professional quality requires meeting students' social needs, such as creating a healthy classroom climate, supporting courteous relationships, and offering emotional support (Wentzel, 2019). Teaching efficacy affects how well teachers meet students' social needs and establish a supportive learning environment that promotes professional quality. High-efficacy teachers are more likely to create a pleasant classroom environment, encourage collaboration, and assist and

guide students (Humphries et al., 2019). This improves students' professionalism, competency, and readiness for the future.

Teaching efficacy mediates student achievement and social needs. Social needs including belonging, support, and connectedness boost student engagement, motivation, and academic accomplishment. Teaching efficacy affects how well teachers meet students' social needs and establish a supportive learning environment that boosts student accomplishment. High-efficacy teachers are more likely to foster excellent teacher-student interactions, a supportive classroom atmosphere, and intellectual and emotional support (Ducker, 2022).

2.17 Teacher Motivation as a Moderator

Teacher motivation can moderate the relationship between teaching efficacy and professional ethics. Teaching efficacy refers to teachers' beliefs in their ability to positively impact student learning outcomes, while teacher motivation encompasses their drive, enthusiasm, and commitment to teaching (Savage & Pace, 2019). When teachers are highly motivated, their sense of efficacy is more likely to align with their commitment to ethical behavior and professional standards. Motivated teachers are more inclined to engage in ethical decision-making, model ethical conduct, and create a classroom environment that promotes ethical behavior (Lee et al., 2022). On the other hand, teachers with low motivation may exhibit lower levels of ethical behavior, regardless of their level of teaching efficacy. Therefore, teacher motivation moderates the relationship between teaching efficacy and professional ethics, determining the extent to which teachers effectively translate their efficacy beliefs into ethical practices (Zhou & Rose, 2021).

Teaching efficacy and professional quality are moderated by teacher motivation. Motivated, efficacious instructors are more likely to devote time, energy, and resources in professional development (Thommen et al., 2021). Continuous learning, feedback, and reflection improve their teaching quality. Low-motivated instructors may not fully use their efficacy beliefs, limiting professional progress and quality. Thus, teacher motivation moderates the link between teaching efficacy and professional quality, affecting how much teacher efficacy improves professional competence and performance (Teig & Nilsen, 2022).

Teaching efficacy and student achievement are moderated by teacher motivation. Motivated teachers with a strong sense of teaching efficacy are more likely to use successful instructional strategies, encourage students, and create a positive learning environment. They work hard toward student success. Low-motivated instructors, regardless of efficacy views, may work less and yield lower student outcomes. Thus, teacher motivation moderates the link between teaching efficacy and student accomplishment, affecting how much student learning outcomes improve (Cabrera et al., 2023).

3. HYPOTHESIS AND CONCEPTUAL FRAMEWORK

On the basis of above literature review, we developed following hypotheses and conceptual framework which is shown in Fig. 1.

H1. Experiential Learning has a significant and positive impact on Professional Ethics

H2. Experiential Learning has a significant and positive impact on Professional Quality

H3. Experiential Learning has a significant and positive impact on Student Achievement

- H4.** Teaching Methods have a significant and positive impact on Professional Ethics
- H5.** Teaching Methods have a significant and positive impact on Professional Quality
- H6.** Teaching Methods Have a significant and positive impact on Student Achievement
- H7.** Social Needs of Students have a significant and positive impact on Professional Ethics
- H8.** Social Needs of Students have a significant and positive impact on Professional Quality
- H9.** Social Needs of Students Have a significant and positive impact on Student Achievement
- H10.** Teaching Efficacy has a significant and positive impact on Professional Ethics
- H11.** Teaching Efficacy has a significant and positive impact on Professional Quality
- H12.** Teaching Efficacy has a significant and positive impact on Student Achievement
- H13a.** Teaching Efficacy mediates the relationship between Experiential Learning and Professional Ethics
- H13b.** Teaching Efficacy mediates the relationship between Experiential Learning and Professional Quality
- H13c.** Teaching Efficacy mediates the relationship between Experiential Learning and Student Achievement
- H13d.** Teaching Efficacy mediates the relationship between Teaching Methods and Professional Ethics
- H13e.** Teaching Efficacy mediates the relationship between Teaching Methods and Professional Quality
- H13f.** Teaching Efficacy mediates the relationship between Teaching Methods and Student Achievement
- H13g.** Teaching Efficacy mediates the relationship between Social Needs of Students and Professional Ethics
- H13h.** Teaching Efficacy mediates the relationship between Social Needs of Students and Professional Quality
- H13i.** Teaching Efficacy mediates the relationship between Social Needs of Students and Student Achievement

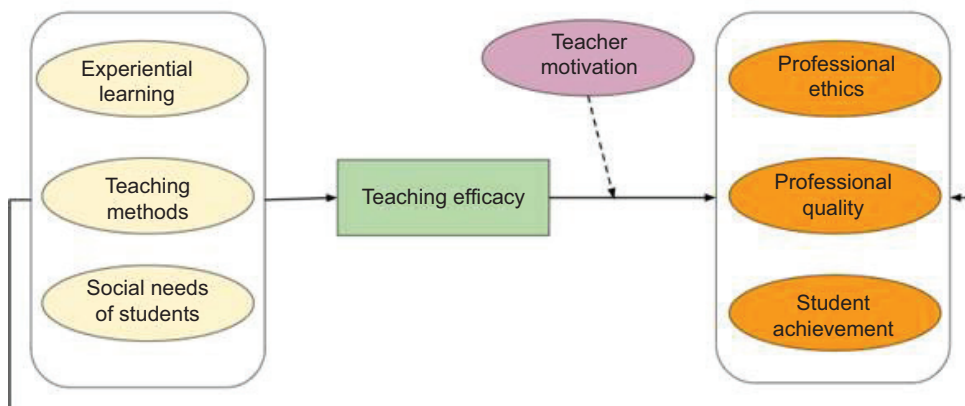


Fig. 1 Conceptual Framework.

H14a. Teacher Motivation moderates the relationship between Teaching Efficacy and Professional Ethics

H14b. Teacher Motivation moderates the relationship between Teaching Efficacy and Professional Quality

H14c. Teacher Motivation moderates the relationship between Teaching Efficacy and Student Achievement

4. METHODOLOGY

This quantitative cross-sectional study examined the relationships between experiential learning, teaching methods, student social needs, teaching effectiveness, professional ethics, professional standards, and student academic performance in Chinese education. This study examined how these variables interact and affect educational outcomes. Students and teachers from different Chinese educational institutions were studied. There are 435 participants provided enough statistical power. Multi-stage cluster sampling selected the sample. To represent China's urban and rural areas, schools were randomly selected. Then, randomly selected classes in the specified schools were invited to participate in the study. Surveys were self-administered. Experiential learning, teaching methodologies, student social needs, teaching efficacy, professional ethics, quality, and achievement of students were measured. To facilitate participation, the questionnaires were distributed during class. Clear instructions ensured questionnaire accuracy. The study used AMOS to analyze data. SEM analysis with AMOS is powerful. SEM helps explain complex variable relationships and the theoretical framework. SEM examined the hypothesized model of variable relationships. The model's goodness-of-fit was examined using chi-square, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR) (Nawaz et al., 2023).

4.1 Measures

There are five items were used to measure the Experiential Learning adopted from (Logan et al., 2021). Five items adapted from (Hashim et al., 2023) were utilized to assess teaching methods. The social needs of students were assessed with five adapted items (Jaksic et al., 2020). Teaching efficacy was measured with five adapted items from (Sikder & Fleer, 2018). Four modified items were used to measure the professional ethics adopted from (Marques-Sulé et al., 2021). Four items adapted from (Tehranineshat et al., 2020) were utilized to assess professional quality. The student achievements were assessed with four adapted items (Buerger et al., 2023). Teacher motivation was measured with five adapted items from (Daumiller et al., 2022).

4.2 Data Analysis

Data analysis is performed using the Statistical Package for the Social Sciences (SPSS 25) and AMOS 24 software packages. The reliability analysis in Table 1 is shown. In this research, experiential learning, teaching methods and social needs of students are independent variables, while professional ethics, professional quality and student achievement are dependent variables. Teaching efficacy is

mediating variable while teacher motivation is moderating variable. Each variable has a satisfactory reliability alpha value.

The values in Table 2 show that Experiential Learning, Teaching Methods, Social Need of Students, Professional Ethics, Professional Quality, Student Achievement, Teaching Efficacy, Teacher Motivation measures have a mean value of 4.06, 4.38, 3.93, 4.18, 3.99, 3.89, 4.07 respectively.

Table 1 Reliability Analysis.

Variables	Items	Cronbach's Alpha Value
Experiential Learning	5	0.891
Teaching Methods	3	0.798
Social Need of Students	5	0.811
Professional Ethics	3	0.815
Professional Quality	3	0.761
Student Achievement	3	0.755
Teaching Efficacy	4	0.829
Teacher Motivation	3	0.829

Table 2 Descriptive Statistics.

Variables	Mean	Std. deviation	N
Experiential Learning	4.06	0.646	435
Teaching Methods	4.38	0.529	435
Social Need of Students	3.93	0.740	435
Professional Ethics	4.18	0.766	435
Professional Quality	3.99	0.782	435
Student Achievement	3.93	0.793	435
Teaching Efficacy	3.89	0.824	435
Teacher Motivation	4.07	0.757	435

Table 3 Pooled CFA Model Fitness Tests.

Name of Category	Name of index	Index full name	Value in analysis	Acceptable value	Literature
Absolute Fit	RMSEA	Root Mean Square of Error Approximation	0.138	<0.80	(Breyton et al., 2021)
Incremental Fit	CFI	Comparative fit index	0.974	>0.90	(Gundogan, 2022)
Parsimonious Fit	Chisq/df	Chi Square/Degrees of freedom	1.237	<3	(Duffy et al., 2017)

Scale	Items	Factor Loadings	Scale Reliability
Experiential Learning	I have opportunities to engage in hands-on activities and experiments as part of my learning.	0.741	0.891
	My learning experiences involve real-world applications and practical situations.	0.686	
	I am encouraged to reflect on my experiences and draw meaningful conclusions from them.	0.877	
	I learn best when I am actively involved in the learning process rather than just listening to lectures.	0.854	
	My learning experiences often involve group projects and collaboration with peers.	0.745	
Teaching Methods	The teacher uses a variety of teaching methods such as lectures, discussions, and hands-on activities.	0.84	0.798
	The teacher provides clear explanations and examples to help me understand the concepts.	0.846	
	The teacher encourages active participation and engagement in the classroom.	0.725	
	I feel a sense of belonging and acceptance among my peers at school.	0.625	
	I have opportunities to interact and collaborate with classmates on academic tasks.	0.739	
Social Need of Students	My school environment promotes inclusivity and respect for diversity.	0.65	0.811
	I have access to support services and resources to meet my social and emotional needs.	0.674	
	The school fosters a positive and supportive atmosphere that encourages students' well-being.	0.698	
	I understand the importance of ethical behavior in my chosen profession.	0.809	
	I adhere to professional codes of conduct and ethical guidelines in my academic and professional pursuits.	0.812	
Professional Ethics	I recognize the significance of integrity, honesty, and accountability in maintaining professional ethics.	0.739	0.815
	I strive for excellence in my academic and professional endeavors.	0.731	
	I am committed to continuous improvement and lifelong learning in my chosen field.	0.733	
	I value the acquisition of knowledge and skills that are relevant and applicable to my profession.	0.743	
	I set clear academic goals and work towards achieving them.	0.706	
Professional Quality	I regularly assess my progress and make necessary adjustments to improve my performance.	0.71	0.761
	I feel a sense of accomplishment when I achieve academic milestones and objectives.	0.797	
	I believe that I have the skills and knowledge necessary to effectively teach my students.	0.715	
	I am confident in my ability to engage and motivate students in the learning process.	0.883	
	I feel competent in adapting my teaching methods to meet the diverse needs of students.	0.79	
Student Achievement	I believe that I can create a positive and supportive learning environment for my students.	0.754	0.755
	I am intrinsically motivated to teach and make a positive impact on students' lives.	0.713	
	I find joy and fulfillment in the teaching profession.	0.702	
	I am motivated by the success and achievements of my students.	0.741	
	I am motivated by the success and achievements of my students.	0.741	
Teacher Motivation	I believe that I have the skills and knowledge necessary to effectively teach my students.	0.715	0.829
	I am confident in my ability to engage and motivate students in the learning process.	0.883	
	I feel competent in adapting my teaching methods to meet the diverse needs of students.	0.79	
	I believe that I can create a positive and supportive learning environment for my students.	0.754	
	I am intrinsically motivated to teach and make a positive impact on students' lives.	0.713	

Table 5 HTMT Analysis.

	EL	TM	SNS	PE	PQ	SA	TE	TM
Experiential Learning	x							
Teaching Methods	0.246	x						
Social Need of Students	0.256	0.371	x					
Professional Ethics	0.476	0.234	0.293	x				
Professional quality	0.356	0.195	0.187	0.127	x			
Student Achievement	0.215	0.362	0.345	0.198	0.058	x		
Teaching Efficacy	0.165	0.487	0.265	0.287	0.356		x	
Teacher Motivation	0.298	0.532	0.453	0.687	0.145	0.522	0.313	x

4.3 Confirmatory Factor Analysis

Pooled CFA is a latest and more reliable technique. In this methodology the AMOS 24 runs all latent variables simultaneously. It is shown in Figure 2.

Table 4 shows the reliability value or factor loading of every item separately. It also shows the composite reliability of a complete scale of any variable. The reliability of the measurement scales was measured with composite reliability, which is preferred to report a scale's reliability, a widely used indicator.

4.4 Assessment of Discriminant Validity

A subtype of construct validity called convergent validity is defined as follows: The concept of "construct validity" describes the degree to which a test designed to measure a certain construct, such as IQ, actually measures that particular trait. The capacity to show that two measurements that are intended to evaluate the same notion are actually evaluating the same phenomenon is known as convergent validity. On the other side, discriminant validity shows that two metrics that are not intended to be connected are in fact not associated. Both types of validity must exist for a construct to have excellent validity. The cutoff level for severe discriminant validity was 0.850, and the cutoff threshold for liberal discriminant validity was 0.900. The HTMT analysis was performed to establish discriminant validity (Sandra Marcelline et al., 2022). The values in Table 4 demonstrated that the items meet the requirements for discriminant validity.

4.5 Path Analysis in Structural equation modelling

Structural equation modeling (SEM) is used in this study to evaluate the hypothesized correlations. Exogenous variables are used in this analysis to make it easier to examine endogenous variables using AMOS 24. You can see that the independent and dependent variables are related to one another linearly in this situation. Observed facts served as the foundation around which the fundamental design was built. For analysis, all observations were tabulated and associated with data on their mean values. The model fit indices for the structural model are shown in Table 6 and demonstrate that they satisfy the requirements for approval. The table 6 explains the model fitness and table 7 depicts the results of direct effects.

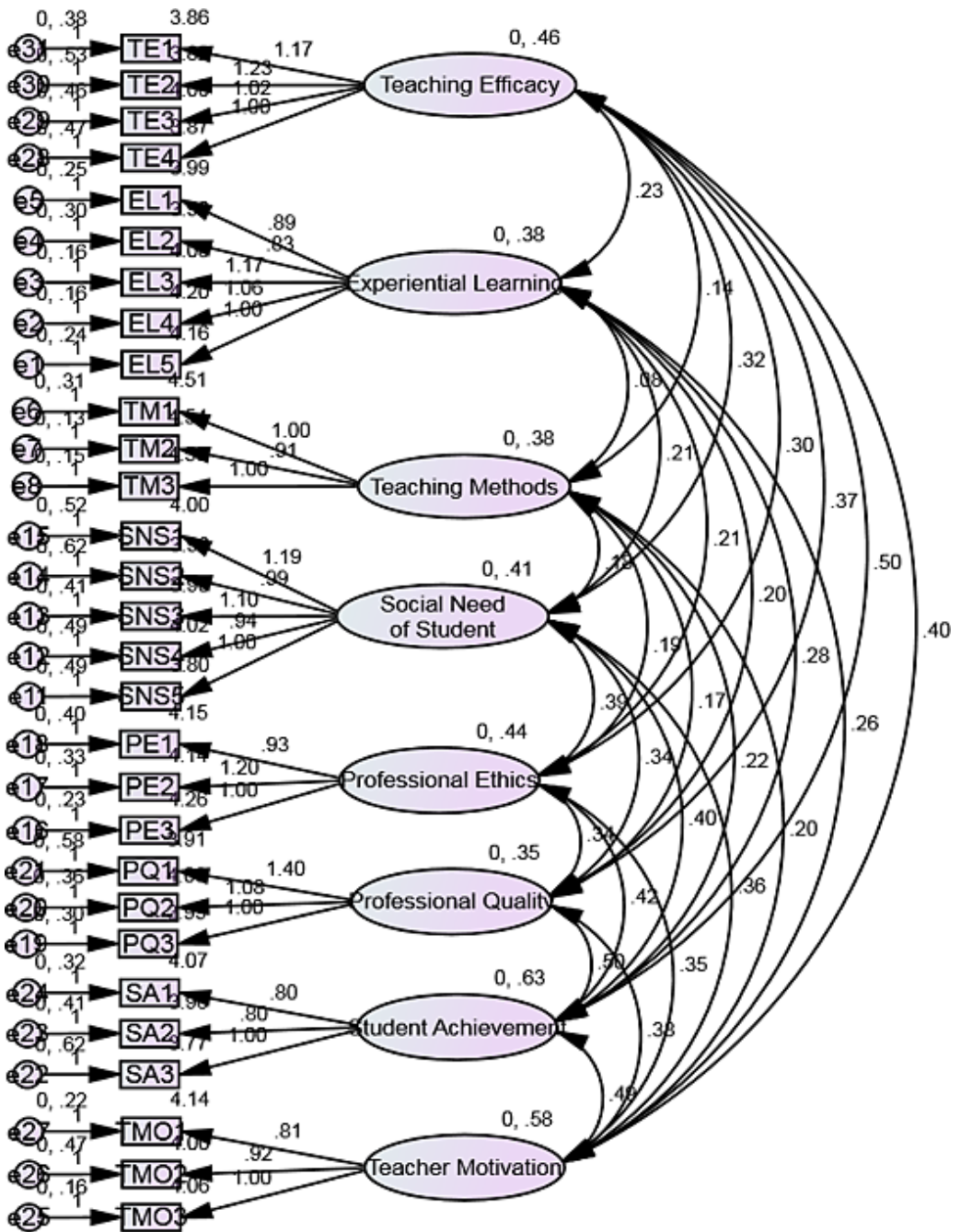


Fig. 2 Pooled Confirmatory Factor Analysis.

Table 6 SEM, Model Fitness Tests.

Name of Category	Name of index	Index full name	Value in analysis	Acceptable value	Literature
Absolute Fit	RMSEA	Root Mean Square of Error Approximation	0.473	< 0.80	(Breyton et al., 2021)
Incremental Fit	CFI	Comparative fit index	0.921	> 0.90	(Gundogan, 2022)
Parsimonious Fit	Chisq/df	Chi Square/Degrees of freedom	2.246	< 3	(Duffy et al., 2017)

Table 7 Results of Direct Effects.

Hypothesis	Causal Path	Lower Bound	Upper Bound	P-Value	Standardized Estimated
H ¹	Experiential Learning → Professional Ethics	0.125	0.064	0.035	0.036
H ²	Experiential Learning → Professional Quality	0.176	0.025	0.043	0.025
H ³	Experiential Learning → Student Achievement	0.124	0.062	0.031	0.066
H ⁴	Teaching Methods → Professional Ethics	0.164	0.073	0.001	0.142
H ⁵	Teaching Methods → Professional Quality	0.056	0.336	0.001	0.157
H ⁶	Teaching Methods → Student Achievement	0.267	0.457	0.002	0.137
H ⁷	Social Needs of Students → Professional Ethics	0.175	0.336	0.001	0.628
H ⁸	Social Needs of Students → Professional Quality	0.136	0.267	0.001	0.387
H ⁹	Social Needs of Students → Student Achievement	0.022	0.245	0.001	0.247
H ¹⁰	Teaching Efficacy → Professional Ethics	0.154	0.164	0.003	0.114
H ¹¹	Teaching Efficacy → Professional Quality	0.135	0.246	0.001	0.426
H ¹²	Teaching Efficacy → Student Achievement	0.154	0.312	0.001	0.507

All of the hypotheses have P-values lower than 0.05, indicating a 95% confidence interval (see Table 7). Fig. 3 depicts a structural equation modeling path analysis.

All hypotheses are statistically significant, and Table 8 classifies the observed mediation for these hypotheses as partial mediation. Full mediation suggests that the mediating variable explains the entire relationship between the independent and dependent variables, whereas partial mediation suggests that the mediating variable only partially explains the relationship.

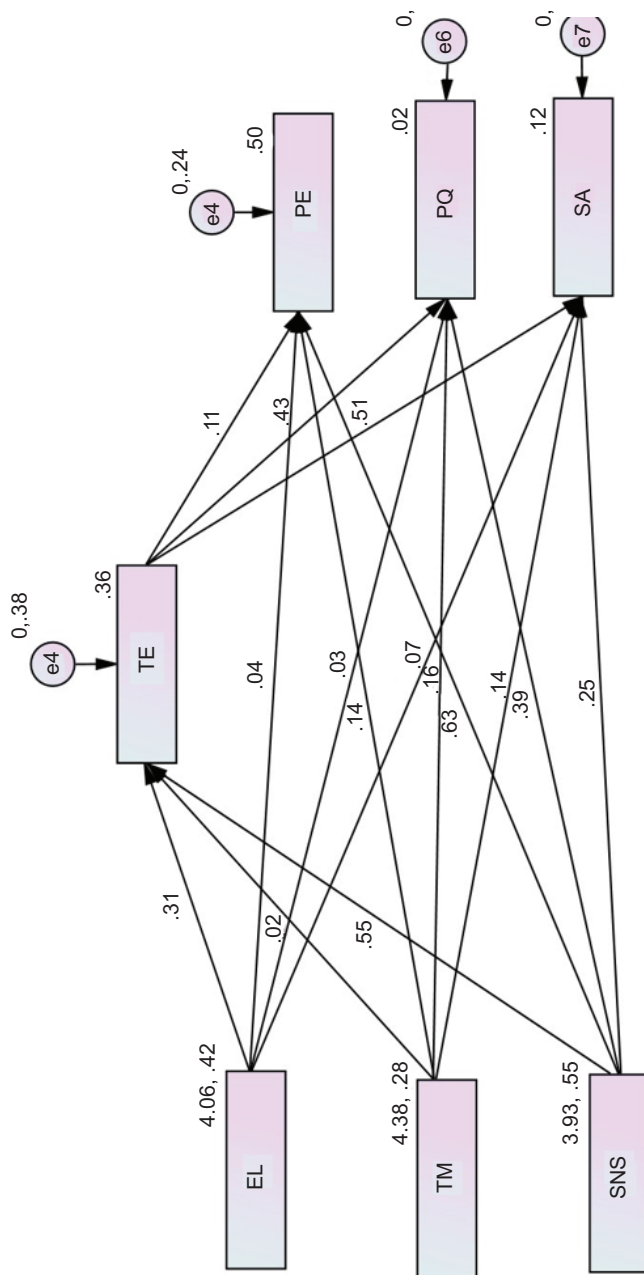


Fig 3 SEM Path Analysis.

Table 8 Results of Mediation.

Hypothesis	Original Sample	T Values	P Values
TE → EL → PE	0.073	2.189	0.014
TE → EL → PQ	0.161	3.320	0.000
TE → EL → SA	0.171	6.468	0.000
TE → TM → PE	0.182	4.879	0.000
TE → TM → PQ	0.192	3.907	0.000
TE → TM → SA	0.214	4.987	0.000
TE → SNS → PE	0.265	7.397	0.000
TE → SNS → PQ	0.250	3.688	0.000
TE → SNS → SA	0.229	5.700	0.000

Table 9 Results of Moderation.

Hypothesis	Original Sample	T Values	P Values
TM × TE → PE	0.087	1.674	0.046
TM × TE → PQ	0.227	4.254	0.000
TM × TE → SA	0.085	1.969	0.024

Table 9 shows partial moderation for all statistically significant hypotheses. The moderating variable either fully or partially explains the link between the independent and dependent variables.

5. DISCUSSION

Experiential Learning has a significant and positive impact on Professional Ethics. Experiential learning, a pedagogical approach backed by extensive research has emerged as a potent catalyst for nurturing professional ethics (Brewer & Devnew, 2022). By immersing students in hands-on experiences and encouraging thoughtful reflection, this method unveils a realm ripe with ethical dilemmas, fostering a profound comprehension of ethical principles and fortifying ethical decision-making skills. This dynamic interplay between real-world scenarios and the application of ethical frameworks within experiential learning culminates in a transformative process that molds students into ethical exemplars, cultivating not only their ethical behavior but also their professionalism (Lochmann & Guedj, 2021). Consequently, it comes as no surprise that experiential learning wields a formidable influence, propelling professional ethics to new heights.

Experiential Learning has a significant and positive impact on Professional Quality. The utilization of experiential learning has been identified as a technique for drastically enhancing professional

quality. Through participation in experiential learning activities, students are capable of collect practical capabilities, foster critical questioning abilities, and grow their problem-solving capacities. The practical experiences offered to students serve as a means of connecting theoretical concepts with practical applications. This method lets students apply their knowledge in real-world circumstances, helping them grasp their subjects. (Lochmann & Guedj, 2021) found that experiential learning improves student professionalism.

Experiential Learning has a significant and positive impact on Student Achievement. Extensive research provides compelling evidence for the advantageous effects of experiential learning on student accomplishments (Sadiq, 2022). Through active involvement in practical encounters, students become active participants in their own learning journey, fostering a profound comprehension of the subject matter, enhanced retention of knowledge, and the ability to apply acquired skills in real-world scenarios (Brewer & Devnew, 2022). The immersive nature of experiential learning stimulates active engagement, stimulates critical thinking skills, and cultivates effective problem-solving capabilities, ultimately resulting in elevated academic performance and student achievement (J. Xu & Luo, 2022).

Teaching Methods has a significant and positive impact on Professional Ethics. Dynamic learning methodologies, including the utilization of case studies, simulations, and role-playing, offer invaluable avenues for students to examine ethical dilemmas, partake in ethical dialogues, and refine their ethical decision-making abilities (Li et al., 2020). These interactive teaching approaches prompt students to introspect their personal values and beliefs, comprehend ethical principles, and foster the development of ethical reasoning skills, ultimately exerting a positive influence on the cultivation of professional ethics (Pehl et al., 2019).

Teaching Methods has a significant and positive impact on Professional Quality. Research has established a clear connection between the utilization of effective teaching methods and the elevation of professional excellence (Aukerman & Chambers Schuldt, 2021). Implementing instructional approaches that prioritize active learning, critical thinking, and problem-solving empowers students with the essential capabilities and qualities needed for thriving in their professional endeavors (Alhosani, 2022). By emphasizing practical applications, real-world contexts, and immersive experiences, these teaching methods foster the cultivation of professional skills and contribute to the overall enhancement of students' professional aptitude (Yeung et al., 2023). Teaching Methods has a significant and positive impact on Student Achievement. Various teaching approaches have demonstrated their influence on student academic accomplishments (Allen & Morere, 2020). Implementing effective methods, such as inquiry-based learning, cooperative learning, and problem-based learning, stimulates active participation, fosters critical thinking, and facilitates a profound comprehension of the material being studied. By encouraging students to delve into, scrutinize, and utilize knowledge, these methodologies contribute to heightened academic proficiency and student achievement.

Social Needs of Students has a significant and positive impact on Professional Ethics. Attending to the social needs of students has been correlated with the fostering of professional ethics (Gibbs et al., 2021; Lin et al., 2021). Establishing a nurturing and inclusive educational setting that nurtures students' sense of worth, dignity, and belongingness contributes to their moral growth and ethical conduct. By addressing students' social needs, including their need for belonging, autonomy, and

connection, educators facilitate positive social interactions, empathy development, and ethical decision-making, thereby exerting a positive influence on the cultivation of professional ethics (Gibbs et al., 2021). Social Needs of Students has a significant and positive impact on Professional Quality. Attending to the social needs of students has been associated with an elevation in professional excellence (Chiang et al., 2019; Yilmaz et al., 2020). Creating an environment where students feel socially supported and connected enhances their engagement in meaningful learning encounters, fosters effective collaboration, and cultivates robust interpersonal abilities (Pramila-Savukoski et al., 2023). These social competencies play a pivotal role in the development of professional attributes, teamwork proficiency, and effective communication, ultimately exerting a positive impact on the enhancement of professional quality (Yilmaz et al., 2020).

Social Needs of Students has a significant and positive impact on Student Achievement. Student achievement improves when social needs are met (Yizengaw, 2021). Students are more motivated, interested, and devoted to studying when they feel belonging, autonomy, and competence. Socially supportive environments promote healthy relationships, self-efficacy, and learning, improving academic performance and student achievement (LaForett & De Marco, 2020).

Teaching Efficacy has a significant and positive impact on Professional Ethics. The impact of teaching efficacy on the cultivation of professional ethics among students has been established (Humphries et al., 2019). Educators who possess a strong belief in their teaching abilities can effectively foster ethical values, serve as ethical role models, and establish an ethical classroom environment (Salem & Mohammadzadeh, 2018). Their confidence and competence in addressing ethical dilemmas and facilitating ethical discussions can have a positive influence on students' comprehension of professional ethics and their capacity for ethical decision-making (Sholihin et al., 2020). Teaching Efficacy has a significant and positive impact on Professional Quality. The relationship between teaching efficacy and the improvement of professional quality has been established. Educators who exhibit high levels of self-efficacy demonstrate effective instructional techniques, adept classroom management skills, and the capacity to deliver valuable feedback. Their confidence and competence in teaching contribute significantly to the development of students' professional competencies, skills, and overall professional quality (Teig & Nilsen, 2022).

Teaching Efficacy has a significant and positive impact on Student Achievement. Teaching efficacy improves student achievement (Belda-Medina, 2022). High-self-efficacy teachers use successful instructional tactics, create a supportive learning atmosphere, and motivate students. The confidence of teachers shapes students' academic self-beliefs, effort, and perseverance, which improves academic performance and student achievement (Allen & Morere, 2020). Teaching Efficacy mediates the relationship between Experiential Learning and Professional Ethics. There is a proposal suggesting that teaching efficacy plays a mediating role in the connection between experiential learning and the development of professional ethics. Experiential learning exposes students to situations where they can grapple with ethical dilemmas, contemplate ethical principles, and nurture their ethical decision-making skills. Teaching efficacy, on the other hand, shapes the manner in which educators facilitate and guide these experiences. Teachers with a high sense of teaching efficacy are more inclined to create meaningful and impactful opportunities for experiential learning that foster the growth of professional ethics among students (Pai et al., 2022).

Teaching Efficacy mediates the relationship between Experiential Learning and Professional Quality. Teaching efficacy link experiential learning to professional quality. Experiential learning gives students hands-on experience, skills, and real-world applications. High-efficacy teachers can create and conduct experiential learning activities to help students develop professional skills. Their teaching efficacy enhances experiential learning and students' professional development (Lan et al., 2021). Teaching Efficacy mediates the relationship between Experiential Learning and Student Achievement. Teaching efficacy may mediate experiential learning and student accomplishment. Active learning, critical thinking, and problem-solving improve academic success in experiential learning. High-efficacy teachers can help students learn and succeed through experiential learning (Mesa & Restrepo, 2019).

Teaching Efficacy mediates the relationship between Teaching Methods and Professional Ethics. Teaching efficacy mediates professional ethics and teaching methods. Case studies, simulations, and role-playing give students' ethical issues and ethical decision-making practice. High-efficacy teachers can adopt these strategies, foster ethical debates, and guide students' ethical development. Teaching efficacy affects student professional ethics (Carson et al., 2020; Pritchard et al., 2021). Teaching Efficacy mediates the relationship between Teaching Methods and Professional Quality. Teaching efficacy mediates the relationship between teaching methods and professional quality. Active and problem-based learning help students build professional abilities and attributes (Noguerón-Liu, 2020). High-efficacy teachers can use these strategies to give quality instruction and build students' professional skills. Their teaching efficacy mediates the association between teaching approaches and professional quality (Duan et al., 2022).

Teaching Efficacy mediates the relationship between Teaching Methods and Student Achievement. Teaching efficacy mediates the relationship between teaching methods and student achievement. Inquiry-based and cooperative learning encourage student participation, critical thinking, and deep understanding. High-efficacy teachers may use these strategies, support students, and improve learning results. Teaching efficacy affects student accomplishment (Banks & Kay, 2022).

Teaching Efficacy mediates the relationship between Social Needs of Students and Professional Ethics. Teaching efficacy may mediate student social needs and professional ethics. Addressing students' social needs, such as belonging and relatedness, offers a helpful learning environment that promotes ethics (Aukerman & Chambers Schuldt, 2021). High-efficacy teachers can address students' social needs, build meaningful relationships, and create an ethical classroom. Their instructional efficacy affects how social needs affect student professional ethics (Heywood, 2018). Teaching Efficacy mediates the relationship between Social Needs of Students and Professional Quality. Social needs like autonomy and relatedness boost student engagement, motivation, and well-being. High-efficacy teachers can fulfill these social requirements, establish a supportive learning atmosphere, and help students acquire professional skills. Their teaching efficacy mediates societal requirements and professional quality (Romijn et al., 2023).

Teaching Efficacy mediates the relationship between Social Needs of Students and Student Achievement. Student achievement and social needs may be mediated by teacher efficacy. Students' motivation, engagement, and academic achievement improve when their social demands, like belonging and autonomy, are met (Belda-Medina, 2022). Teachers with high teaching efficacy can fulfill these social requirements, establish a friendly and inclusive learning environment, and improve students'

learning outcomes. The impact of social needs on student accomplishment depends on their instructional efficacy (Deci et al., 2019; Searle, 2021). Teacher Motivation moderates the relationship between Teaching Efficacy and Professional Ethics. Teacher motivation moderates professional ethics and teaching efficacy. Passionate teachers are more effective. Their passion can help them promote professional ethics, model ethical behavior, and engage students in ethical conversations. Teacher motivation moderates the link between instructional efficacy and professional ethics (Sholihin et al., 2020).

Teacher Motivation moderates the relationship between Teaching Efficacy and Professional Quality. Motivated teachers moderate the link between instructional efficacy and professional ethics. Highly motivated and passionate teachers are more likely to be effective teachers (Correia et al., 2020). Motivation and dedication can help them promote professional ethics, model ethical behavior, and involve students in ethical conversations. Teaching efficacy and professional ethics are strengthened by teacher motivation (Ingersoll et al., 2020; Richardson et al., 2021). Teacher Motivation moderates the relationship between Teaching Efficacy and Student Achievement. Teacher motivation moderates the correlation between teaching efficacy and student accomplishment. High-efficacy teachers are motivated and enthusiastic. Motivated teachers engage students, provide appropriate feedback, and improve student learning and academic accomplishment. Teaching efficacy and student accomplishment are strengthened by teacher motivation (Cabrera et al., 2023).

6. IMPLICATIONS

This study has major consequences for educators, legislators, and teachers. First, experiential learning is crucial. Educational institutions can improve students' professional ethics, quality, and performance by giving them real-world experiences. This implies the necessity to adapt teaching methods to experiential learning. Second, effective teaching approaches promote professional ethics, quality, and student success, according to the study. Innovative and engaging teaching methods that enable varied learning styles and ethical decision-making should be encouraged and supported. Professional development programs can help teachers master different teaching styles. This study also addresses student social needs. Providing students with a sense of belonging and autonomy in a supportive and inclusive gaining knowledge of their surroundings can help them expand professional ethics, great, and fulfillment. Positive social interactions, teamwork, and emotional nicely-being must be prioritized in faculties. Teaching efficacy affects professional ethics, quality, and student accomplishment, according to the study. Teacher training programs should encourage reflection, feedback, and professional growth to improve teaching efficacy. Teaching efficacy improves educational outcomes. The study's theoretical ramifications are extensive, and it sheds light on the interconnections between experiential education, pedagogical strategies, students' social needs, educators' effectiveness, educators' ethics, educators' quality, and students' academic outcomes. First, the research aids in expanding our theoretical knowledge of experiential learning and its effects on different academic outcomes. Kolb's experience Learning Theory (Kolb, 1984) is one such theoretical framework, and this research supports and expands it by analyzing the positive effects of experience learning on professional ethics, professional excellence, and student accomplishment. We may learn more about how experiential learning encourages ethical behavior, boosts professional competence, and boosts

academic success by encouraging students to engage in practical experiences, reflective observation, and active experimentation, as shown by the results. Second, the research contributes to theoretical understanding of the impact of instructional strategies on student achievement. The value of good teaching methods is reaffirmed by the study's findings on the positive correlations between these methods and professional ethics, professional excellence, and student learning outcomes. The results are consistent with theories like constructivism (Piaget, 1972) and socio-cultural theory (Vygotsky, 1978), which stress the significance of student-centered methods, active learning, and social interaction in encouraging moral growth, fostering expert skill, and boosting academic performance. The research also adds to our theoretical knowledge of how students' social requirements affect their academic performance. Maslow's (1943) hierarchy of needs and Deci and Ryan's (1985) self-determination theory are both bolstered by the study's findings that there are favorable correlations between addressing social needs, professional ethics, professional excellence, and student accomplishment. The findings stress the need of focusing on students' mental and emotional health as cornerstones of fostering ethical conduct, developing professional characteristics, and enhancing academic success.

7. LIMITATIONS AND FUTURE DIRECTIONS

This study has some limitations that should be addressed despite the fact that it offers insightful information about the connections between experiential learning, instructional strategies, students' social needs, teaching effectiveness, professional ethics, and student accomplishment. First off, the unique environment and involved participants may restrict the generalizability of the results. Since diverse educational environments and student groups may provide different results, extrapolating the findings is risky. Self-report measures also allow response biases to affect results. The cross-sectional study reduces causal relationships between variables, hence longitudinal or experimental research is required. Further research is necessary because additional unmeasured or uncontrolled factors can affect the correlations being explored.

These limitations lead to the development of various viable research trajectories. The long-term effects of the variables on professional ethics, professional quality, and student accomplishment might be investigated through longitudinal research, which would provide a more thorough knowledge of their dynamic interactions across time. Through prospective interventions targeted at boosting teaching effectiveness or attending to the social needs of students, experimental designs could be used to establish causal linkages between the variables. Mixed-methods approaches, which blend quantitative and qualitative methods, can reveal the complexities. Investigating further mediators and moderators would help explain how these factors affect results. Contextual aspects would be clarified by comparative research across various educational environments and the inclusion of diverse student samples, which would also help to allow a more thorough understanding of the linkages. In addition, examining the effects on students' critical thinking, problem-solving, and career-ready skills would increase the field's understanding of additional outcomes linked to professional ethics, professional quality, and student achievement.

8. CONCLUSIONS

This study looked at the connections between experiential learning, instructional strategies, student social needs, teaching effectiveness, professional ethics, professional quality, and academic accomplishment. Important new information about these connected aspects and how it may affect educational practice is revealed by the findings. The findings of this study provided evidence in support of the hypotheses that student accomplishment, professional ethics, and professional quality are significantly and favorably impacted by experiential learning, instructional approaches, social needs of students, and teaching efficacy. The results emphasize the significance of giving students hands-on experiences, using efficient teaching techniques, attending to social needs, and encouraging teachers' confidence in their ability to encourage moral behavior, boost professional competence, and raise academic performance. The study also demonstrated the mediating function of effective teaching in the links between experiential learning, instructional strategies, student social needs, and educational outcomes. As a result, it appears that effective teaching is a critical aspect in transforming these educational characteristics into fruitful outcomes and serves as a channel for their impact on student accomplishment, professional ethics, and professional quality. Additionally, the study found that teacher motivation moderates the relationship between teaching efficacy and the educational outcomes. This underscores the importance of sustaining and fostering teacher motivation to maximize the positive impact of teaching efficacy on professional ethics, professional quality, and student achievement. These findings have significant theoretical implications, contributing to our understanding of the complex dynamics within the educational context. They align with existing theories such as experiential learning theory, constructivism, self-determination theory, and social cognitive theory. The study also identifies limitations, such as the generalizability of findings, reliance on self-report measures, and the need for longitudinal or experimental designs to establish causal relationships. Moving forward, future research should address these limitations and pursue promising directions, including longitudinal studies, experimental designs, mixed-methods approaches, and comparative studies across different educational contexts. Investigating additional mediators and moderators and exploring other outcomes related to professional ethics, professional quality, and student achievement would further enrich the field's knowledge.

REFERENCES

- Alhosani, N. (2022). The Influence of Culture on Early Childhood Education Curriculum in the UAE. *ECNU Review of Education*, 5(2), 284–298. <https://doi.org/10.1177/20965311221085984>
- Allen, T. E., & Morere, D. A. (2020). Early visual language skills affect the trajectory of literacy gains over a three-year period of time for preschool aged deaf children who experience signing in the home. *PLoS ONE*, 15(2). <https://doi.org/10.1371/journal.pone.0229591>
- Aukerman, M., & Chambers Schuldt, L. (2021). What Matters Most? Toward a Robust and Socially Just Science of Reading. *Reading Research Quarterly*, 56(S1), S85–S103. <https://doi.org/10.1002/rrq.406>
- Banks, L., & Kay, R. (2022). Exploring flipped classrooms in undergraduate nursing and health science: A systematic review. *Nurse Education in Practice*, 64, 103417. <https://doi.org/10.1016/j.nepr.2022.103417>

- Barbour, C., & Schuessler, J. B. (2019). A preliminary framework to guide implementation of The Flipped Classroom Method in nursing education. *Nurse Education in Practice, 34*, 36–42. <https://doi.org/10.1016/j.nepr.2018.11.001>
- Belda-Medina, J. (2022). Promoting inclusiveness, creativity and critical thinking through digital storytelling among EFL teacher candidates. *International Journal of Inclusive Education, 26*(2), 109–123. <https://doi.org/10.1080/13603116.2021.2011440>
- Brewer, K. L., & Devnew, L. E. (2022). Developing responsible, self-aware management: An authentic leadership development program case study. *The International Journal of Management Education, 20*(3), 100697. <https://doi.org/10.1016/j.ijme.2022.100697>
- Breyton, M., Smith, A. Ben, Rouquette, A., & Mancini, J. (2021). Cancer information overload: Association between a brief version of the CIO scale and multiple cancer risk management behaviours. *Patient Education and Counseling, 104*(5), 1246–1252. <https://doi.org/10.1016/j.pec.2020.09.016>
- Bringle, R. G., & Clayton, P. H. (2023). Higher education: service-learning as pedagogy, partnership, institutional organization, and change strategy (R. J. Tierney, F. Rizvi, & K. B. T.-I. E. of E. (Fourth E. Ercikan (eds); pp. 476–490). Elsevier. <https://doi.org/10.1016/B978-0-12-818630-5.02125-4>
- Buerger, C., Lincove, J. A., & Mata, C. (2023). How context shapes the relationship between school autonomy and test-scores. An explanatory analysis using PISA 2015. *International Journal of Educational Development, 99*, 102777. <https://doi.org/10.1016/j.ijedudev.2023.102777>
- Butz, J. V., & Hancock, S. A. (2019). Using Stories to Encourage Optimal Physical Development. In *Educating the Young Child* (Vol. 16, pp. 227–249). Springer. https://doi.org/10.1007/978-3-030-19266-2_12
- Cabrera, L., Bae, C., & DeBusk-Lane, M. (2023). A mixed methods study of middle students' science motivation and engagement profiles. *Learning and Individual Differences, 103*, 102281. <https://doi.org/10.1016/j.lindif.2023.102281>
- Caldwell, M. (2020). An investigation into the perceptions of Japanese University educators on the use of ICT in an EFL tertiary setting. *CALL-EJ, 21*(2), 1–16.
- Cao, X., Wang, L., Wei, S., Li, J., & Gong, S. (2021). Prevalence and predictors for compassion fatigue and compassion satisfaction in nursing students during clinical placement. *Nurse Education in Practice, 51*, 102999. <https://doi.org/10.1016/j.nepr.2021.102999>
- Chih, Y.-Y., Zwikael, O., & Restubog, S. L. D. (2019). Enhancing value co-creation in professional service projects: The roles of professionals, clients and their effective interactions. *International Journal of Project Management, 37*(5), 599–615. <https://doi.org/10.1016/j.ijproman.2019.04.001>
- Correia, N., Carvalho, H., Durães, J., & Aguiar, C. (2020). Teachers' ideas about children's participation within Portuguese early childhood education settings. *Children and Youth Services Review, 111*, 104845. <https://doi.org/10.1016/j.childyouth.2020.104845>
- Daumiller, M., Fasching, M. S., Steuer, G., Dresel, M., & Dickhäuser, O. (2022). From teachers' personal achievement goals to students' perceptions of classroom goal structures: Via student-oriented goals and specific instructional practices. *Teaching and Teacher Education, 111*, 103617. <https://doi.org/10.1016/j.tate.2021.103617>
- DeVoldt, T., DiPietro Mager, N., Ernst, K., Parker, K., Komandt, M., Meadows, A., & Aronson, B. D. (2022). Management, entrepreneurship, continuing professional development, and leadership education in United States doctor of pharmacy curricula: A scoping review. *Currents in Pharmacy Teaching and Learning, 14*(6), 798–808. <https://doi.org/10.1016/j.cptl.2022.06.012>
- Doğan, P., & Şendir, M. (2022). Effect of different simulation methods in nursing education on critical thinking dispositions and self-efficacy levels of students. *Thinking Skills and Creativity, 45*, 101112. <https://doi.org/10.1016/j.tsc.2022.101112>
- Duan, G., Jia, L., & Chen, H. (2022). The Role of English as a Foreign Language Teachers' Technological Pedagogical Content Knowledge on English as a Foreign Language Students' Achievement. *Frontiers in Psychology, 13*. <https://doi.org/10.3389/fpsyg.2022.946081>
- Ducker, N. T. (2022). A situated examination of the complex dynamic nature of L2 listening in EMI. *Language Teaching Research, 13*. <https://doi.org/10.1177/13621688221124439>

- Duffy, R. D., Allan, B. A., England, J. W., Blustein, D. L., Autin, K. L., Douglass, R. P., Ferreira, J., & Santos, E. J. R. (2017). The Development and Initial Validation of the Decent Work Scale. *Journal of Counseling Psychology, 64*(2), 206–221. <https://doi.org/10.1037/COU0000191>
- Fondo, M., & Gómez-Rey, P. (2021). Integrating game-based learning for intercultural skills development in higher education. In F. P. (Ed.), 15th European Conference on Game Based Learning, ECGBL 2021 (Vols. 2021-Septe, pp. 213–221). Dechema e.V. <https://doi.org/10.34190/GBL.21.084>
- Gomes, J., & Fler, M. (2020). Is Science Really Everywhere? Teachers' Perspectives on Science Learning Possibilities in the Preschool Environment. *Research in Science Education, 50*(5), 1961–1989. <https://doi.org/10.1007/s11165-018-9760-5>
- Gundogan, S. (2022). The Relationship of COVID-19 Student Stress with School Burnout, Depression and Subjective Well-Being: Adaptation of the COVID-19 Student Stress Scale into Turkish. *Asia-Pacific Education Researcher*. <https://doi.org/10.1007/S40299-021-00641-2>
- Hashim, M. J., Govender, R., Ghenimi, N., Kieu, A., & Khan, M. A. B. (2023). LecturePlus: a learner-centered teaching method to promote deep learning. *Advances in Physiology Education, 47*(2), 175–180. <https://doi.org/10.1152/advan.00237.2022>
- Heywood, J. (2018). Empowering Professional Teaching in Engineering: Sustaining the Scholarship of Teaching. In *Synthesis Lectures on Engineering* (Vol. 12, Issue 1, pp. 1–245). Morgan and Claypool Publishers. <https://doi.org/10.2200/S00830ED1V01Y201802ENG029>
- Huang, B. H., Bedore, L. M., Ramírez, R., & Wicha, N. (2022). Contributions of Oral Narrative Skills to English Reading in Spanish–English Latino/a Dual Language Learners. *Journal of Speech, Language, and Hearing Research, 65*(2), 453–471. https://doi.org/10.1044/2021_JSLHR-21-00105
- Humphries, T., Kushalnagar, P., Mathur, G., Napoli, D. J., Rathmann, C., & Smith, S. (2019). Support for parents of deaf children: Common questions and informed, evidence-based answers. *International Journal of Pediatric Otorhinolaryngology, 118*, 134–142. <https://doi.org/10.1016/j.ijporl.2018.12.036>
- Irgin, P., & Erten, I. H. (2020). Exploring the role of strategy instruction: Young learners' listening performance and strategy use. *Eurasian Journal of Applied Linguistics, 6*(3), 415–441. <https://doi.org/10.32601/ejal.834676>
- Jaksic, C., Steel, G. D., Moore, K., & Stewart, E. (2020). Person-environment fit: A cross-national and cross-temporal study of human adaptation to isolated and confined environments. *Polar Science, 26*, 100590. <https://doi.org/10.1016/j.polar.2020.100590>
- Katz, M.-L., Stump, M., Charney-Sirott, I., & Howlett, H. (2019). Traveling With Integrity: Translating Face-to-Face Teacher Professional Learning to Online and Blended Spaces. *Journal of Adolescent and Adult Literacy, 63*(2), 217–223. <https://doi.org/10.1002/jaal.976>
- Kirkpatrick, N. (2020). Reality check: Helping students recognize, evaluate, and pursue realistic entry-level jobs in business. *The International Journal of Management Education, 18*(2), 100384. <https://doi.org/10.1016/j.ijme.2020.100384>
- Kucukkelepce, G. E., Dinc, L., & Elcin, M. (2021). Views of nursing students on using standardized patient and in-class case analysis in ethics education. *Nurse Education Today, 107*, 105155. <https://doi.org/10.1016/j.nedt.2021.105155>
- Kusuma, J. W., & Hamidah, H. (2021). Online Learning: Student's Perception off Lecturer's Competence and its Influence on Achievement Motivation. *International Journal for Educational and Vocational Studies, 3*(1), 37–43. <https://doi.org/10.29103/IJEVS.V3I1.3142>
- LaForett, D. R., & De Marco, A. (2020). A logic model for educator-level intervention research to reduce racial disparities in student suspension and expulsion. *Cultural Diversity and Ethnic Minority Psychology, 26*(3), 295–305. <https://doi.org/10.1037/cdp0000303>
- Lan, J., Wong, I. A., & Guo, J. W. (2021). Service training intervention and time-variant personal growth. *International Journal of Hospitality Management, 98*, 103036. <https://doi.org/10.1016/j.ijhm.2021.103036>
- Lee, Y., Kim, T. S., Chang, M., & Kim, J. (2022). Interactive Children's Story Rewriting Through Parent-Children Interaction. In H. T.-H., R. V., K. D., C. J.J.Y., G. D., L. M., & G. K.I. (Eds.), 1st Workshop on Intelligent and Interactive Writing Assistants, In2Writing 2022 (pp. 62–71). Association for Computational Linguistics (ACL).

- Li, H., Novack, D. H., Duke, P., Gracely, E., Cestone, C., & Davis, T. (2020). Predictors of medical students' ethical decision-making: A pilot study using the Theory of Interpersonal Behavior. *Patient Education and Counseling*, *103*(12), 2508–2514. <https://doi.org/10.1016/j.pec.2020.05.026>
- Lochmann, M., & Guedj, M. (2021). Under what conditions do lay people and health professionals accept a breach of doctor-patient confidentiality regarding a patient with signs of terrorist radicalization? *European Review of Applied Psychology*, *71*(5), 100558. <https://doi.org/10.1016/j.erap.2020.100558>
- Logan, R. M., Johnson, C. E., & Worsham, J. W. (2021). Development of an e-learning module to facilitate student learning and outcomes. *Teaching and Learning in Nursing*, *16*(2), 139–142. <https://doi.org/10.1016/j.teln.2020.10.007>
- Lok, N., Uzun, G., & Selçuk Tosun, A. (2023). Determinants of nursing students' inclination to ethical values: Compassionate love and perceived social support from the family. *Nurse Education in Practice*, *67*, 103556. <https://doi.org/10.1016/j.nepr.2023.103556>
- Luo, R., & Song, L. (2022). The unique and compensatory effects of home and classroom learning activities on Migrant and Seasonal Head Start children's Spanish and English emergent literacy skills. *Frontiers in Psychology*, *13*. <https://doi.org/10.3389/fpsyg.2022.1016492>
- Magill, M., Martino, S., & Wampold, B. E. (2020). The process of skills training: A content analysis of evidence-based addiction therapies. *Journal of Substance Abuse Treatment*, *116*, 108063. <https://doi.org/10.1016/j.jsat.2020.108063>
- Marques-Sulé, E., Arnal-Gómez, A., Cortés-Amador, S., de la Torre, M. I., Hernández, D., & Aguilar-Rodríguez, M. (2021). Attitudes towards learning professional ethics in undergraduate physiotherapy students: A STROBE compliant cross-sectional study. *Nurse Education Today*, *98*, 104771. <https://doi.org/10.1016/j.nedt.2021.104771>
- Mesa, C., & Restrepo, M. A. (2019). Effects of a family literacy program for latino parents: Evidence from a single-subject design. *Language, Speech, and Hearing Services in Schools*, *50*(3), 356–372. https://doi.org/10.1044/2018_LSHSS-18-0035
- Miller, E., & Nambiar-Greenwood, G. (2022). Exploring the lived experience of student nurses perspective of racism within education and clinical practice: Utilising the flipped classroom. *Nurse Education Today*, *119*, 105581. <https://doi.org/10.1016/j.nedt.2022.105581>
- Murry, M. D., Benavidez-Walsh, S. J., Browne, R. K., & Marks, A. K. (2023). School based interventions for equitable learning (B. B. T.-E. of C. and A. H. (First E. Halpern-Felsher (ed.); pp. 679–690). Academic Press. <https://doi.org/10.1016/B978-0-12-818872-9.00028-5>
- Nawaz, A., Chen, J., & Su, X. (2023). Factors in critical management practices for construction projects waste predictors to C&DW minimization and maximization. *Journal of King Saud University - Science*, *35*(2), 102512. <https://doi.org/10.1016/j.jksus.2022.102512>
- Nikolopoulou, K., Akriotou, D., & Gialamas, V. (2019). Early Reading Skills in English as a Foreign Language Via ICT in Greece: Early Childhood Student Teachers' Perceptions. *Early Childhood Education Journal*, *47*(5), 597–606. <https://doi.org/10.1007/s10643-019-00950-8>
- Noble, S. M., & Dubljević, V. (2022). Chapter 15 - Ethics of AI in organizations (C. S. Nam, J.-Y. Jung, & S. B. T.-H.-C. A. I. Lee (eds.); pp. 221–239). Academic Press. <https://doi.org/10.1016/B978-0-323-85648-5.00019-0>
- Noguerón-Liu, S. (2020). Expanding the Knowledge Base in Literacy Instruction and Assessment: Biliteracy and Translanguaging Perspectives From Families, Communities, and Classrooms. *Reading Research Quarterly*, *55*(S1), S307–S318. <https://doi.org/10.1002/rrq.354>
- Nuffer, W., Bolan, J., Borgelt, L. M., Franson, K. L., Gilliam, E. H., Nuffer, M., & Thompson, M. E. (2021). A longitudinal quality improvement program to optimize experiential education's ability to develop trusted independent pharmacist practitioners. *Currents in Pharmacy Teaching and Learning*, *13*(9), 1244–1251. <https://doi.org/10.1016/j.cptl.2021.06.041>
- O'Byrne, W. I., Stone, R., & White, M. (2018). Digital storytelling in early childhood: Student illustrations shaping social interactions. *Frontiers in Psychology*, *9*(OCT). <https://doi.org/10.3389/fpsyg.2018.01800>
- Pai, H.-C., Hwu, L.-J., Lu, Y.-C., & Yen, W.-J. (2022). Effects of an ethical decision-making reasoning scheme in nursing students: A randomized, open-label, controlled trial. *Nurse Education Today*, *108*, 105189. <https://doi.org/10.1016/j.nedt.2021.105189>

- Pan, N., Guo, Y., Ma, J., Fan, X., Yin, Z., Xu, X., Cai, L., Zhang, Y., & Li, X. (2021). The correlation between chinese written vocabulary size and cognitive, emotional and behavioral factors in primary school students. *International Journal of Environmental Research and Public Health*, 18(15). <https://doi.org/10.3390/ijerph18157797>
- Peahl, A. F., Tarr, E. E., Has, P., & Hampton, B. S. (2019). Impact of 4 Components of Instructional Design Video on Medical Student Medical Decision Making During the Inpatient Rounding Experience. *Journal of Surgical Education*, 76(5), 1286–1292. <https://doi.org/10.1016/j.jsurg.2019.04.004>
- Pei, T., & Suwanthep, J. (2020). Explore foreign language learners' experiences under a metacognitive listening website. 17th International Conference on Cognition and Exploratory Learning in Digital Age, CELDA 2020, 43–50.
- Pramila-Savukoski, S., Kärnä, R., Kuivila, H.-M., Juntunen, J., Koskenranta, M., Oikarainen, A., & Mikkonen, K. (2023). The influence of digital learning on health sciences students' competence development– A qualitative study. *Nurse Education Today*, 120, 105635. <https://doi.org/10.1016/j.nedt.2022.105635>
- Pratsri, S., Nilsook, P., & Wannapiroon, P. (2021). Augmented Intelligence Coaching System. 2021 Research, Invention, and Innovation Congress: Innovation Electricals and Electronics, RI2C 2021, 176–182. <https://doi.org/10.1109/RI2C51727.2021.9559817>
- Qiu, Y., & Luo, W. (2022). Investigation of the effect of flipped listening instruction on the listening performance and listening anxiety of Chinese EFL students. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1043004>
- Rahn, N. L., Linzmeier, K., & Winchell, B. (2023). “The world is my oyster”: impacts of an international student teaching experience on future early childhood special educators. *Journal of Early Childhood Teacher Education*. <https://doi.org/10.1080/10901027.2023.2165982>
- Romijn, B. R., Slot, P. L., & Leseman, P. P. M. (2023). Organization hybridity in the Dutch early childhood education and care system: Organization logic in relation to quality and inclusion. *International Journal of Educational Research*, 119, 102180. <https://doi.org/10.1016/j.ijer.2023.102180>
- Sadiq, A. (2022). Leading Literate Lives: Afghan Refugee Children in a First-Asylum Country. *Journal of Literacy Research*, 54(1), 28–50. <https://doi.org/10.1177/1086296X221076431>
- Salem, N., & Mohammadzadeh, B. (2018). A study on the integration of ICT by EFL teachers in Libya. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(7), 2787–2801. <https://doi.org/10.29333/ejmste/90594>
- Sandra Marcelline, T. R., Chengang, Y., Ralison Ny Avotra, A. A., Hussain, Z., Zonia, J. E., & Nawaz, A. (2022). Impact of Green Construction Procurement on Achieving Sustainable Economic Growth Influencing Green Logistic Services Management and Innovation Practices. *Frontiers in Environmental Science*, 9. <https://doi.org/10.3389/fenvs.2021.815928>
- Savage, R., & Pace, A. (2019). Linguistic and reading comprehension in simultaneous dual language instruction: Evidence against unitary constructs. *International Journal of Bilingualism*, 23(1), 118–137. <https://doi.org/10.1177/1367006917711592>
- Shen, J., Ma, X., Mansberger, N., Wu, H., Palmer, L. A. B., Poppink, S., & Reeves, P. L. (2021). The relationship between growth in principal leadership and growth in school performance: The teacher perspective. *Studies in Educational Evaluation*, 70, 101023. <https://doi.org/10.1016/j.stueduc.2021.101023>
- Sholihin, M., Sari, R. C., Yuniarti, N., & Ilyana, S. (2020). A new way of teaching business ethics: The evaluation of virtual reality-based learning media. *The International Journal of Management Education*, 18(3), 100428. <https://doi.org/10.1016/j.ijme.2020.100428>
- Sidhu, R., & Gage, W. H. (2021). Enhancing the odds of adopting e-learning or community-focused experiential learning as a teaching practice amongst university faculty. *Heliyon*, 7(4), e06704. <https://doi.org/10.1016/j.heliyon.2021.e06704>
- Sikder, S., & Flear, M. (2018). The relations between ideal and real forms of small science: conscious collaboration among parents and infants–toddlers (Cultural Studies of Science Education). *Cultural Studies of Science Education*, 13(4), 865–888. <https://doi.org/10.1007/s11422-018-9869-x>
- Tehrani-shat, B., Torabizadeh, C., & Bijani, M. (2020). A study of the relationship between professional values and ethical climate and nurses' professional quality of life in Iran. *International Journal of Nursing Sciences*, 7(3), 313–319. <https://doi.org/10.1016/j.ijnss.2020.06.001>

- Teig, N., & Nilsen, T. (2022). Profiles of instructional quality in primary and secondary education: Patterns, predictors, and relations to student achievement and motivation in science. *Studies in Educational Evaluation*, 74, 101170. <https://doi.org/10.1016/j.stueduc.2022.101170>
- Terry, J., Davies, A., Williams, C., Tait, S., & Condon, L. (2019). Improving the digital literacy competence of nursing and midwifery students: A qualitative study of the experiences of NICE student champions. *Nurse Education in Practice*, 34, 192–198. <https://doi.org/10.1016/j.nepr.2018.11.016>
- Thommen, D., Sieber, V., Grob, U., & Praetorius, A.-K. (2021). Teachers' motivational profiles and their longitudinal associations with teaching quality. *Learning and Instruction*, 76, 101514. <https://doi.org/10.1016/j.learninstruc.2021.101514>
- Tong, D. H., Uyen, B. P., & Ngan, L. K. (2022). The effectiveness of blended learning on students' academic achievement, self-study skills and learning attitudes: A quasi-experiment study in teaching the conventions for coordinates in the plane. *Heliyon*, 8(12), e12657. <https://doi.org/10.1016/j.heliyon.2022.e12657>
- Tsang, A., & Lo, F. (2020). Bilingual education through a pluri-centric approach: A case study of the effects of simultaneously learning two languages on L1 and L2 reading and writing proficiency. *Studies in Educational Evaluation*, 67, 100927. <https://doi.org/10.1016/j.stueduc.2020.100927>
- Wang, Q., Andrews, J., Liu, H. T., & Liu, C. J. (2016). Case studies of multilingual/multicultural asian deaf adults: Strategies for success. *American Annals of the Deaf*, 161(1), 67–88. <https://doi.org/10.1353/aad.2016.0012>
- Xu, J., & Luo, K. (2022). Immersing learners in English listening classroom: does self-regulated learning instruction make a difference? *Applied Linguistics Review*. <https://doi.org/10.1515/applirev-2021-0171>
- Xu, T. S., Zhang, L. J., & Gaffney, J. S. (2023). A multidimensional approach to assessing the effects of task complexity on L2 students' argumentative writing. *Assessing Writing*, 55, 100690. <https://doi.org/10.1016/j.asw.2022.100690>
- Yeung, M. M.-Y., Yuen, J. W.-M., Chen, J. M.-T., & Lam, K. K.-L. (2023). The efficacy of team-based learning in developing the generic capability of problem-solving ability and critical thinking skills in nursing education: A systematic review. *Nurse Education Today*, 122, 105704. <https://doi.org/10.1016/j.nedt.2022.105704>
- Yizengaw, S. S. (2021). Early Childhood Care and Education Scenario in Preschools. *Ethiopian Renaissance Journal of Social Sciences and Humanities*, 8(2), 1–26. <https://doi.org/10.20372/erjssh.2022.0802.01>
- Zhang, L., Yu, X., & Goh, C. C. M. (2022). Improving Performance and Metacognitive Awareness in Listening through Metacognitive Instruction for Chinese Language Learners. *RELJ Journal*. <https://doi.org/10.1177/00336882221129645>
- Zhou, S., & Rose, H. (2021). Self-regulated listening of students at transition from high school to an English medium instruction (EMI) transnational university in China. *System*, 103. <https://doi.org/10.1016/j.system.2021.102644>
- Zhou, S., & Thompson, G. (2023). Exploring role of English proficiency, self-efficacy, and motivation in listening for learners transitioning to an English-medium transnational university in China. *System*, 113. <https://doi.org/10.1016/j.system.2023.102998>