

Teacher Preparation in China: An Examination of Shaoxing University's Program

Frank Agyei¹, Frank Agyei², Patrick Ocran³, Isaac Gyan Ayeh⁴, Yelley Edward⁵, Rebecca Oteng Amoabeng⁶, Maxwell Peprah Amonsem⁷, Kingsley Oppong⁸

DOI: 10.29322/IJSRP.14.03.2024.p14721

<https://dx.doi.org/10.29322/IJSRP.14.03.2024.p14721>

Paper Received Date: 5th February 2024

Paper Acceptance Date: 5th March 2024

Paper Publication Date: 15th March 2024

Abstract- This study offers a comprehensive examination of the Elementary Teacher Preparation Program at Shaoxing University, China, aiming to shed light on its unique attributes and effectiveness. The research delves into various aspects of the program through a mixed-method approach. It combines quantitative surveys with qualitative interviews, including curriculum design, practicum opportunities, and educational technology integration.

Data was collected from faculty members and undergraduate students, ensuring a holistic understanding of the program's dynamics. The instruments underwent rigorous reliability and validity checks to ensure the accuracy and credibility of the findings. Using SPSS software, data analysis unveiled key aspects of the program, such as its four-year duration, structured semesters (20 weeks per semester), and 160 credit requirements to complete the program. Its emphasis on on-campus and off-campus practical teaching experiences is central to the program's effectiveness. These experiences provide students with invaluable exposure to real classroom settings, fostering the development of essential pedagogical skills and classroom management techniques.

Additionally, the study highlights the structured grading system utilized for evaluating student performance, ensuring consistency and fairness in assessment practices. The findings of this research contribute significantly to the understanding of teacher preparation programs and educational quality. This study offers valuable insights for educators, policymakers, and stakeholders in education globally. The research aims to inform and enhance teacher preparation practices, benefiting the education system.

Index Terms- Teacher Preparation, Shaoxing University, Teacher Preparation Curriculum, Practicum

I. INTRODUCTION

In the ever-evolving landscape of global education, the role of adequate teacher preparation cannot be overstated (Darling-Hammond, 2017). As nations strive to enhance their educational systems to meet the 21st-century demand for professional teachers, a critical focus lies on the quality of teachers entering the profession. In this context, China, with its rapidly growing

economy and expanding educational aspirations, stands as a significant player (Zhao, 2016). Teachers are the cornerstone of every educational framework, profoundly influencing its quality. The changing nature of the teaching profession in the 21st century makes the teachers critical, and their training should be given much attention (Agyei et al., 2023). The significance of quality teacher preparation in China has become increasingly paramount amidst the nation's ambitious educational reforms and rapid socio-economic development. With a population exceeding 1.4 billion and a focus on innovation and global competitiveness, China recognizes the pivotal role of teachers in shaping the future generation (OECD, 2016).

Shaoxing University, situated in the eastern province of Zhejiang, emerges as a notable institution dedicated to the training and development of teachers. Established in 1911, Shaoxing University has evolved into a comprehensive higher education institution with a solid commitment to educational excellence and societal advancement (Shaoxing University, n.d.). Recognizing the changing needs of China's academic landscape, the university has continually adapted its teacher preparation program to align with contemporary pedagogical theories, technological advancements, and societal demands. Against the backdrop of China's educational reforms, characterized by a shift towards student-centered learning, critical thinking, and interdisciplinary approaches, the role of teacher preparation programs in fostering these competencies has assumed heightened importance (Peng & Li, 2019). Shaoxing University's program, therefore, stands as a microcosm of the broader efforts within China's educational sphere to enhance teacher quality and effectiveness. In light of the global discourse on educational quality and equity, understanding the features of teacher preparation in China, mainly through Shaoxing University's program lens, holds relevance beyond national boundaries. Darling Hammond (2000a) noted that the caliber of teaching manifesting in these classrooms is unequivocally linked to the efficacy of teacher preparation programs. It becomes evident that teacher quality is a paramount concern within the teaching community. Teacher preparation programs are crafted to furnish student teachers with the requisite

knowledge and skills essential for their roles as proficient educators within the classroom setting.

II. REVIEW OF RELATED LITERATURE

2.1. Pre-Service Teacher Education in China

The Communist Party, founded in 1949, governs the People's Republic of China, and its educational policies are structured in line with the party's principles. The teacher preparation program is designed to adhere to the party's goals. In 1985, a law granted local governments in China the right to oversee basic education and training. In 1999, the Chinese Central Committee and the State Council declared they would wholeheartedly support educational quality and intensify reform initiatives within the education sector (Sezgin, 2008). Pre-service teacher education in China has undergone significant transformations in recent years, reflecting the nation's commitment to educational reform and development.

The curriculum design and structure of pre-service teacher education programs in China have been a focus of research and discussion among scholars. According to Li and Wang (2018), many programs have shifted towards a more comprehensive and integrated approach, encompassing both theoretical coursework and practical experiences. This shift reflects a broader recognition of the importance of balancing pedagogical theory with hands-on teaching practice to prepare future educators effectively. A study by Wu and Chen (2019) found that pre-service teacher education programs in China typically consist of foundational courses in education, subject-specific training, pedagogical coursework, and field experiences. These components are designed to provide students with a well-rounded education that prepares them for the challenges of the teaching profession. However, there is variability in program structures across institutions, with some programs offering more flexibility for students to tailor their coursework to their interests and career goals (Wang & Zhou, 2019). Pedagogical approaches employed in pre-service teacher education programs in China have also been a subject of inquiry. Zhang and Zhang (2019) highlight the importance of constructivist approaches to teaching and learning, which emphasize active engagement, inquiry-based learning, and collaborative problem-solving. These approaches foster critical thinking skills, creativity, and metacognitive awareness among future educators. Additionally, differentiated instruction has emerged as a key pedagogical strategy in pre-service teacher education in China (Zheng & Zhang, 2021). Differentiated instruction seeks to meet the diverse needs of learners by adapting instruction, materials, and assessments to accommodate varying learning styles, abilities, and interests.

Field experiences are essential to pre-service teacher education in China, offering students valuable chances to utilize their knowledge and skills in real classroom environments. According to Huang and Zhang (2019), field experiences typically include

classroom observations, practicum placements, and student teaching assignments. These experiences allow students to gain practical experience working with diverse student populations, collaborating with colleagues, and reflecting on their teaching practices. A qualitative study by Liu and Zhang (2022) found that pre-service teachers in China highly value field experiences, as they provide opportunities for hands-on learning and professional growth. However, challenges such as short duration, limited opportunities for collaboration with mentor teachers, and inadequate supervisor feedback were also identified. These findings underscore the importance of strengthening practicum components in teacher preparation programs to ensure students receive meaningful and supportive learning experiences. Professional development initiatives are an integral component of pre-service teacher education in China, aimed at supporting future educators' continuous learning and growth. Mentorship programs, in particular, have been highlighted as effective mechanisms for providing personalized support and guidance to pre-service teachers (Xie & Chen, 2021). Mentors serve as role models and mentors, offering insights into effective teaching practices, classroom management strategies, and professional ethics.

Furthermore, workshops, seminars, and conferences are commonly used to provide pre-service teachers with opportunities for ongoing learning and professional growth (Wang & Li, 2019). These professional development activities include instructional technology, assessment and evaluation, culturally responsive teaching, and classroom management. By participating in these activities, pre-service teachers can deepen their understanding of critical educational issues and learn from experts in the field.

2.2 An Overview of Shaoxing University's Teacher Preparation Program

Shaoxing University's teacher preparation program is designed to equip prospective educators with the knowledge, skills, and dispositions necessary to excel in the complex and dynamic field of education. Grounded in theoretical foundations and practical experiences, the program encompasses diverse courses, fieldwork opportunities, and professional development initiatives to foster holistic teacher development.

2.2.1 Curriculum Structure and Content

At the heart of Shaoxing University's teacher preparation program lies a curriculum that reflects the institution's commitment to educational excellence and innovation. The curriculum is structured to provide students with a comprehensive understanding of educational theory, pedagogical practices, subject-specific content knowledge, and practical teaching skills.

The program is typically divided into several key components to cover four years, including foundational courses in education, subject-specific coursework, pedagogical training, field experiences, and opportunities for specialized study or research. Foundational courses cover a range of topics, such as educational

psychology, curriculum development, assessment and evaluation, classroom management, and educational technology (Wang & Zhang, 2020). These courses lay the groundwork for students to develop a deep understanding of the principles and theories that underpin effective teaching and learning. In addition to foundational coursework, students engage in subject-specific training tailored to their chosen teaching fields. Whether specializing in mathematics, science, language arts, social studies, or other disciplines, students acquire in-depth content knowledge and pedagogical strategies relevant to their future teaching contexts. This subject-specific training is essential for ensuring that future educators possess the expertise to effectively teach their chosen subjects and facilitate meaningful learning experiences for their students (Chu & Wan, 2018). Through a combination of coursework, seminars, and practical experiences, students learn various instructional strategies, assessment techniques, and classroom management skills. Emphasis is placed on fostering student-centered approaches to teaching and learning, promoting critical thinking, problem-solving, collaboration, and creativity (Guo & Zheng, 2017). Students are encouraged to reflect on their teaching practices, explore innovative teaching methods, and adapt their instruction to meet the diverse needs of learners.

Field experiences are crucial in Shaoxing University's teacher preparation program, allowing students to apply their knowledge and skills in real-world educational settings. Through internships, practicum experiences, and student teaching placements, students gain hands-on experience working with diverse student populations, collaborating with colleagues, and engaging with parents and community stakeholders. These field experiences reinforce theoretical concepts learned in the classroom and allow students to develop their professional identities as teachers (Wu & Chen, 2019).

2.2.2 Pedagogical Approaches and Instructional Strategies

Central to Shaoxing University's teacher preparation program are the pedagogical approaches and instructional strategies employed to foster effective teaching and learning. Drawing on research-based practices and innovative methodologies, the program emphasizes student-centered approaches that prioritize active engagement, collaboration, inquiry, and critical reflection. One of the primary pedagogical approaches utilized in Shaoxing University's teacher preparation program is the constructivist approach to teaching and learning. Rooted in the belief that learners construct their understanding of the world through active engagement with their environment, constructivism emphasizes hands-on, experiential learning experiences that promote inquiry, exploration, and discovery (Zhang & Zhang, 2019). Teacher trainers at Shaoxing University employ various constructivist teaching strategies, such as 'problem-based learning,' 'project-based learning,' and 'collaborative group work,' to actively engage students in learning (Chen & Li, 2020).

The program emphasizes using technology-enhanced instruction to enhance teaching and learning outcomes. With the integration of educational technologies such as interactive whiteboards, multimedia presentations, and online learning platforms, instructors can create dynamic and engaging learning environments that cater to diverse learning styles and preferences (Yang & Wang, 2018). Recognizing that students come to the classroom with diverse backgrounds, abilities, and learning styles, instructors strive to differentiate their instruction to meet the individual needs of each learner (Zheng & Zhang, 2021). This may involve adapting instructional materials, providing alternative learning pathways, or offering personalized support and feedback to students (Wang & Li, 2019). The program strongly emphasizes fostering collaborative learning communities among students. Through collaborative group projects, peer teaching opportunities, and community-based learning experiences, students learn to work effectively with others, communicate ideas, and build supportive relationships (Liu & Wu, 2017). Collaboration enhances students' academic achievement and fosters the development of essential interpersonal skills such as teamwork, communication, and leadership.

2.2.3 Field Experiences and Practicum Placements

Field experiences and practicum placements are integral components of Shaoxing University's teacher preparation program, providing students with opportunities to bridge the gap between theory and practice. These experiences allow students to gain valuable first-hand experience working with diverse students, collaborating among themselves, and applying theoretical concepts in a real classroom. The program incorporates field experiences throughout the curriculum, beginning with early field observations and gradually increasing complexity and duration as students progress through the program (Huang & Zhang, 2019). In the early stages of their studies, students engage in classroom observations, shadowing experienced teachers and assisting with classroom activities. These experiences allow students to familiarize themselves with the day-to-day realities of teaching and gain insights into effective instructional practices.

As students advance in their studies, they have the opportunity to participate in more immersive field experiences, such as internships, practicum placements, and student teaching assignments (Xu & Wang, 2020). During these placements, students work under the supervision of mentor teachers, assuming increasing levels of responsibility for planning, delivering, and assessing instruction. This hands-on experience allows students to refine their teaching skills, build confidence in their abilities, and develop a deeper understanding of the complexities of teaching and learning. The program emphasizes the importance of diversity and inclusion in field experiences, ensuring students can work with students from diverse cultural, linguistic, and socioeconomic backgrounds (Cheng & Liu, 2021). Students develop cultural competence, empathy, and an appreciation for each learner's

unique strengths and challenges by engaging with diverse student populations. The teacher preparation program offers students opportunities for community-based learning experiences (Li & Wang, 2018). Faculty mentors, supervising teachers, and program advisors work collaboratively to ensure that students receive constructive feedback, reflect on their experiences, and address any challenges or concerns that may arise. This personalized support helps students navigate the complexities of field placements and maximize their learning opportunities.

2.3 The Concept of Teaching Practice/Practicum and Its Relevance

According to Kiggundu & Nayimuli (2009), "Teaching practice is a form of work-integrated learning that is described as a period when students work in the relevant industry to receive specific in-service training to apply theory in practice" (p.349). In teacher training, engaging in teaching practice is a crucial element. To attain the necessary standards for qualified teacher status, a student teacher must undergo teaching practice to be equipped with hands-on teaching experience under the mentorship of an experienced educator. Perry (2004), as cited in (Kiggundu & Nayimuli, 2009), states that teaching practice can take various forms based on the institution. Certain institutions arrange for student teachers to engage in teaching practice every week, some throughout a semester and others in concentrated blocks lasting two to six weeks for school experience. It is important to note that, regardless of the approach employed, the purpose of teaching practice is to integrate student teachers more thoroughly into the professional responsibilities of educators (Kiggundu & Nayimuli, 2009).

III. METHODOLOGY

3.1 Purpose Statement

This study thoroughly explores the Elementary Teacher Preparation Program at Shaoxing University, China, explicitly emphasizing its distinctive features. By closely examining the program's unique attributes, such as its curriculum structure, practicum opportunities, and educational technology integration, the research aims to provide a comprehensive understanding of its design and implementation. Through this investigation, the study seeks to uncover the program's strengths, challenges, and potential areas for enhancement, thereby contributing valuable insights to teacher preparation and educational quality.

3.2 Research Question:

What are the key features of Shaoxing University's Elementary Teacher Preparation Program, and how do these features contribute to the program's effectiveness in preparing future educators for the diverse challenges of modern classrooms?

3.3 Research Design

The research employed a mixed-method design to explore the features of Shaoxing University's Elementary Teacher Preparation Program. Creswell (2008) notes that in both qualitative and quantitative research, descriptive surveys are administered to participants to collect data regarding perceptions, attitudes, opinions, behaviors, or characteristics, with these data considered primary. The choice of a survey design for this study is grounded

in its efficiency and cost-effectiveness as a data collection method. To mitigate the study's limitations, probing and open-ended questions were employed to clarify.

3.4 Population

The population consisted of all staff members at the School of Teacher Education of Shaoxing University and students in the 2022/2023 academic year. Therefore, the population included forty-three staff members and seven hundred and forty-eight undergraduate students.

3.5 Sample and Sampling Procedure:

The study at Shaoxing University involved selecting specific faculty members and students for research. Fifteen faculty members were purposefully sampled from forty-three in the School of Teacher Education. Sixty-five students were randomly chosen from a pool of 748.

3.6 Data collection instruments:

The study used a questionnaire, interviews, and observations to collect data. The questionnaire focused on lecturers and regular students, featuring closed and open-ended questions. Closed-ended questions were chosen for their manageability in statistical analysis. Interviews covered various aspects, including course content, assessment procedures, practicum organization, and the impact of teacher education. The Teaching practice coordinator was interviewed on the department's practicum structure.

3.7 Validity and reliability of the instrument

The research instruments underwent pilot testing at Shaoxing University's School of Teacher Education with a reliability check using the Cronbach Alpha Coefficient (resulting in a value of 0.732). Colleagues and researchers in China reviewed the questionnaire to check the relevance and clarity of the items for content validity. Experienced researchers also examined the semi-structured interview guide and classroom observation checklist for input and guidance. Interviews were scheduled with participants at their convenient times. Transcripts were re-read by participants to affirm their true reflection of what they said and meant during the interview.

3.8 Data Collection Procedures

The researchers personally administered questionnaires to respondents in China, visiting offices and classrooms. Questionnaires were handed out and collected within two weeks, but some were not retrieved due to non-completion by unavailable respondents. The researchers' limited proficiency in Chinese was addressed with the help of an interpreter for respondents with low English proficiency.

3.9 Data Analysis:

All questionnaires were checked for accuracy and completeness before analyzing. Responses were then coded by assigning frequencies to different categories for analysis. A shortlist was created from open-ended question responses, and a coding scheme was prepared. The Statistical Package for Service Solution (SPSS) software was used for data analysis and summarization. The data underwent cleansing to identify and rectify errors before being

analyzed using SPSS. Results were tabulated with percentages and means, and discussions were based on the tabulated data. Audio interviews and classroom observation notes were converted into Word documents for qualitative data analysis using open coding.

3.10 Ethical Considerations

The researchers obtained official permission from the Dean of the School of Teacher Education at Shaoxing University for research in China. Participants actively engaged in the study by expressing

their eagerness to participate in the questionnaire responses. Students were personally visited in their classrooms, where they were informed about the purpose and rationale of the study. Those who expressed interest in participating voluntarily raised their hands, indicating their willingness to be selected for inclusion in the study. Before their involvement, any concerns raised by lecturers and students were addressed and resolved.

IV. RESULTS AND FINDINGS

4.1 Results

Demographic Characteristics of Respondents

Table 1

Background Information of the Lecturers/Teacher Trainers

Variable	Category	Frequency	Percentage
Gender	Male	7	46.67
	Female	8	53.33%
Age	Below 30	-	-
	31-40	10	66.67
	41-50	5	33.33
	51-60	-	-
	60+	-	-
Status	Teaching Assistant		-
	Lecturer	12	60
	Associate Professor	2	13.33
Years of Teaching	Professor	1	26.67
	5 and Below	3	20
	6-10	3	20
	11-15	4	26.67
	16 and above	5	33.33

Source: Field Data

The data from the table above indicates that among the surveyed cohort of 15 lecturers/teacher trainers, 46.67% comprised males, while the remaining 53.33% were females. This signifies a notable predominance of female educators within Shaoxing University, reflecting a gender imbalance in its academic staff composition.

Delving deeper into the demographics, analysis of the School of Teacher Education's dataset reveals that a substantial majority of lecturers, accounting for 66.67%, fell within the age bracket of 31-40 years. Conversely, 33.33% of the lecturers belonged to the 41-50 age group. The absence of educators below 30 and those between 51-60 years and above underscores the institution's inclination toward a youthful faculty profile.

Furthermore, regarding the professional status of respondents within the university hierarchy, it is observed that 60% held the rank of 'lecturer,' while 13.33% were associate professors, and 26.67% were professors. This distribution bears a striking resemblance to another academic institution, indicating a congruence in the profiles of teacher educators across these establishments. Such consistency suggests the presence of quality educators within the School of Teacher Education, aligning with Taylor's (2001) assertion that the caliber of teacher preparation hinges significantly on the quality of its educators.

Lastly, the data unveils that 33.33% of lecturers at Shaoxing University boast 16 years or more of experience as teacher trainers. In comparison, 26.67% possess 11-15 years of expertise,

and 20% have 6-10 years of teaching experience. Additionally, 20% of respondents have accrued 5 years or less in this capacity. This robust distribution of experience underscores Shaoxing University's reservoir of seasoned educator talent, bolstering its capacity to deliver top-tier teacher education programs. Such findings resonate strongly with the observations of Cruickshank,

Jenkins, and Metcalf (2009), who posit that the quality of teacher education profoundly influences the efficacy of pedagogical practices enacted by teachers in classrooms, thereby emphasizing the pivotal role played by teacher educators in shaping the educational landscape.

Table 2

Background Information of the Regular Students/Student Teachers

Variable	Category	Freq.	Percent (%)
Gender	Male	24	36.92
	Female	41	78.46
Age(in years)	15-20	13	20.00
	21-25	51	78.46
	26-30	1	1.54
	30+	0	0.00
Level	First-year	8	12.31
	second year	13	20.00
	Third year	25	38.46
	Fourth-year	19	29.23
School-level Train to teach	Pre-school	11	16.92
	Primary	41	63.08
	Junior High	13	20.00
	Senior High	-	-

Source: Field Data

The data above reveals a notable dominance of female students, comprising 78.46% of the total, compared to male students, who constituted 36.92%. This trend reflects a broader societal inclination in China, where females tend to show more interest in teaching professions. At the same time, males are often drawn to business pursuits, which are perceived as central to China's economic landscape.

Furthermore, most regular students, totaling 78.46%, fell within the age range of 21-25 years, with a smaller proportion (20%) in the 15-20 age group. Only a negligible fraction (1.54%) was aged between 26-30 years, with no respondents surpassing 30 years old. This demographic distribution suggests a promising outlook for the teaching profession in China, with a significant representation of youthful individuals indicating a potentially vibrant future.

On a different note, data collected from Shaoxing University reveals the distribution of student teachers across various

academic years. Specifically, 12.31% were in their first year, 20% in the second year, 38.46% in the third year, and 29.23% in the fourth and final year, undertaking their practicum in schools affiliated with Shaoxing University. This comprehensive representation across different academic stages demonstrates the study's lack of bias, ensuring that student teachers from all levels actively participated. Consequently, the study's findings are grounded in the responses provided by the entirety of the student-teacher population.

Moreover, the majority of regular students at Shaoxing University, comprising 63.08%, were undergoing training to teach at the Primary School level. A smaller percentage, 16.92%, were being prepared for preschool teaching, while 20% were focused on Junior High School education. Interestingly, there seems to be a lack of emphasis on training teachers for Senior High School level instruction within the School of Teacher Education at Shaoxing University.

Table 3.
Course Content of Lecturers/Teacher Trainers

Variable	Category	Freq.	(%)
Information for instructional design	Coursebook	14	93.33
	Website	9	60
	Online social media	7	46.67
	University Library	4	26.67
	Discussion	4	26.67
Method of teaching	Lecture	13	80
	Roleplay	4	26.67
	Question and Answer	13	72.73
Use of video during teaching and learning	Never	-	
	Occasionally	6	40
	Usually	9	60
Feedback on students' performance	Never	1	6.67
	Occasionally	2	13.33
	Usually	12	80
ICT-based innovation in course teaching	Yes	15	100
	No		
technological support for lecturers/teacher trainers	Yes	15	100
	No		

Source: Field Data

Most lecturers, 93.33%, rely on course books for instructional design, 60% utilize websites, and 46.67% engage with online social media platforms. Surprisingly, only 26.67% draw information from the Shaoxing University library, indicating a potential underutilization of this resource.

Regarding teaching methods, majority 80% indicated that they like utilizing 'lecture method', 72.73% of lecturers prefer the 'question and answer' approach, and 26.67% utilizing the 'Role Play method.' These findings contradict Eison's (2010) assertion regarding the dominance of the lecture method in teaching.

Furthermore, when it comes to integrating video into the teaching and learning process, 60% of lecturers at Shaoxing University 'usually' incorporate videos, while 40% do so occasionally. This aligns with the Corporation for Public Broadcasting's recognition

of the benefits of visual aids for enhancing comprehension, catering to various learning styles.

Regarding feedback provision, 80% of lecturers at Shaoxing University regularly offer feedback on student performance, underscoring a commitment to student progress monitoring and enhancement.

Additionally, the data underscores a unanimous adoption of ICT-based innovations in course teaching, with all lecturers (100%) affirming their utilization of technology in their instructional practices. This resonates with Leithwood et al. (2020) emphasis on integrating technological advancements into teacher education curricula to equip educators with the requisite skills and knowledge to navigate evolving educational landscapes effectively.

Table 4.5

Lecturers/Teacher Trainers Pedagogical Use of ICT

Variable	Category	Freq.	(%)
Computers available in the classrooms	Yes	15	100
	No	-	

Interactive whiteboards available in the classrooms	Yes	12	80
	No	3	20
Projecting system available in the classrooms	Yes	15	100
	No	-	-
Digital video cameras available in the classrooms	Yes	10	66.67
	No	5	33.33
Audio devices available in the classrooms	Yes	15	100
	No	-	-
Technology expertise	very uncomfortable using technology	-	-
	fairly uncomfortable using technology	-	-
	fairly comfortable using technology	2	13.33
	very comfortable using technology	13	86.67
Technological support for lecturers/teacher trainers	Yes		
	No		
Technological hands-on training/courses	Not important at all	-	-
	Little important	-	-
	Very important	15	100
Training/Courses in the pedagogical use of ICT	Not important at all		
	Little important	1	6.67
	Very important	14	93.33
Using technology to prepare, explore, and develop	Not important at all		
	Little important		

Very important 15 100

Source: Field Data

Most 80% of lecturers affirm the presence of interactive whiteboards in their classrooms, while only 20% indicate otherwise. Moreover, all 15 lecturers 100% report having a projecting system at their disposal. Similarly, regarding digital video cameras, 66.67% of lecturers possess them, with the remaining 33.33% lacking such equipment. However, audio devices are universally available, as all lecturers (100%) confirm their presence in classrooms, indicating a robust technological infrastructure within the university.

This wealth of technological resources is recognized in the literature as crucial for effectively training pre-service teachers. It underscores the importance of viewing teacher education as the linchpin of national development, as emphasized by the Organization for Economic Cooperation and Development (OECD, 2005). Technological facilities are pivotal in creating a cohesive learning and development system for educators, ensuring that pre-service experiences are interconnected and conducive to success.

Furthermore, the data reveals a high level of comfort and recognition of the importance of technology among lecturers at Shaoxing University. A vast majority 86.67% express feeling "very comfortable" using technology in their roles as teacher trainers, while only a small minority 13.33% report feeling "fairly comfortable." All lecturers unanimously agree on the vital necessity of technological hands-on training in the 21st-century teaching landscape. They emphasize the imperative nature of using technology for preparation, exploration, and development in teacher training, aligning with EDES & Winter's (2004) assertion that technology is reshaping education and necessitating new skills and strategies among educators. In line with these findings, the Ontario Ministry of Education (2000) underscores the importance of collaborative planning to integrate technology effectively into the teaching and learning process, highlighting the evolving role of educators in adapting to technological advancements. The findings also share much with Gyan Ayeh et al. (2024) who noted that, the extent to which ICT is incorporated into teaching, heavily relies on one's proficiency in utilizing it. In this perspective, the more lectures integrate ICT, the better student teachers practice utilizing it.

Table 4
Lecturers/Teacher Trainers Assessment of Students

Variable	Category	Freq.	(%)
Assessment Categories	Class assignment	15	100
	Presentation	8	53.33
	End-of-semester exams	15	100
	Mid-semester exams	8	53.33
	Class attendance	15	100
	Homework	10	66.67
University/Department General Assessment Criteria	Yes	15	100

No

Grading System (%)	90-100	A+
	80-89	A
	70-79	B
	60-69	C
	≥59	Fail

Source: Field Data

All respondents, comprising 100% of the lecturers, acknowledged using class assignments, class attendance records, and end-of-semester examinations as assessment methods. Additionally, 53.33% integrated student presentations into classroom assessments, while 66.67% included homework assignments in their assessment criteria. Furthermore, all lecturers at Shaoxing University unanimously affirmed the presence of general assessment criteria mandated for adherence by all lecturers/teacher trainers.

Shaoxing University's grading system delineates performance levels as follows: A+ for scores between 90-100%, A for 80-89%, B for 70-79%, and C for 60-69%. This grading schema signifies that scores ranging from 90-100% are considered excellent, while the minimum passing mark is 60%. Any student scoring 59% or below is deemed to have failed and must retake the examination to qualify as a professional teacher in China.

Table 5
Regular Student's Course of Study

Variables	Category	Freq.	(%)
Interest in the method of teaching by lecturers	Discussion	33	50.77
	Lecture	7	10.77
	Roleplay	27	41.54
	Question and Answer	16	24.62
	Coursebook	43	66.15
Source Course Reading Material	Website	39	60
	Ppt from lecturers	51	78.46
	Online social media	30	46.15
	University Library	26	40
Clarification of Course Content	Never	1	1.54
	Occasionally	43	66.15
	Usually	18	27.69

Source: Field Data

From the data provided, it's evident that regular students at Shaoxing University have varying preferences for teaching methods and sources of course materials. Regarding teaching methods, 50.77% of students express interest in "discussion,"

while 41.54% favor "role play." "Question and answer" method garners interest from 24.62% of students, whereas only 10.77% show interest in the traditional "lecture" method. Regarding seeking clarification on course content, 27.67% Of students usually

consult their lecturers, while 66.15% do so occasionally. Only a small fraction 1.54% claims never to seek clarification.

Regarding incorporating videos in teaching, 76.92% of students noted that lecturers usually introduce videos, with 15.38% stating it occurs occasionally and 7.69% indicating it never happens.

Concerning the source of course reading materials, 78.46% of students obtain materials from lecturers' PowerPoint presentations, 66.16% from course books, and 60% from websites globally. Online social media accounts for 46% of materials, while the university library is a source for 40% of students. For clarification of course content, the majority (66.15%) of students occasionally consult their lecturers, followed by 27.69% who usually do, and a minimal proportion (1.54%) who never do.

4.2 Qualitative Results on Practicum

The Teaching practice coordinator of the School of Teacher Education was interviewed on on-campus and off-campus teaching practice arrangements and assessment procedures.

The researchers asked the teaching practice coordinator of the School of Teacher Education of Shaoxing University to describe the department's on-campus teaching practice. He noted the following words:

Our program's on-campus teaching practice starts when students are in their third year. They do one week of classroom observation during the first semester and two weeks in school teaching practice in the second semester to understand the real classroom situation. (Teaching practice Coordinator, Field Interview).

Again, he explained the off-campus teaching practice of the university in the following:

Off-campus teaching practice happens when students are in the first semester of their final year, the fourth year where students are posted to affiliated practicing schools of Shaoxing University for twelve (12) weeks of practical teaching under the guidance of the mentors in the various placement schools (Teaching practice Coordinator, Field Interview).

He further added that

lecturer supervises eight (8) to twelve (12) final-year students at least six (6) times as the assessment of their practicum; supervision is a core component of the teaching practice assessment. We also take reports from mentors about our students. The report covers professional conduct, Extracurricular participation, mentee-student relationships, and mentee-parent relationships (Teaching practice Coordinator, Field Interview).

He concluded that supervision does not mean "policing," which he argued is a practice in most counties.

The qualitative findings share much with Dickson S. O. and Owitil O. R. J. (2012), who noted that school-based teaching practice enables trainees and university lecturers to attain the intended educational goals, objectives, and values. This practice is beneficial as it enables students to become accustomed to the environments they will encounter as professionals once they complete their training. The findings further support the accretion made by students in Geoffrey and Rob's (2015) research, where

these students noted that "we would like to have more supervised lessons" (p.78). Geoffrey and Rob (2015) found that student teachers were supervised twice, which students reported as insufficient.

V. FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Key Findings

The study uncovered several key features of the Teacher Preparation Program at Shaoxing University, notably within the framework of Shaoxing University:

1. Teacher preparation at Shaoxing University spans four years, during which student teachers acquire essential content knowledge, pedagogical skills, lesson preparation proficiency, classroom management techniques, and valuable practicum experiences.
2. The teacher preparation program at Shaoxing University is structured around two semesters, each lasting five months. The first semester, spanning from September to January, and the second semester, from March to July, collectively comprise the academic year.
3. Students must complete at least one hundred and sixty (160) credits across their four-year tenure before graduating as professional teachers.
4. The curriculum at Shaoxing University is meticulously designed to integrate practical teaching experiences at various stages. On-campus teaching practice commences in the third year, with students engaging in one (1) week of field observation in the first semester and two (2) weeks of short-term in-service practice in the second semester, offering them firsthand exposure to real classroom dynamics. Subsequently, Off-Campus teaching practice occurs during the first semester of the final year (the fourth year), where students are assigned to affiliate practicing schools of Shaoxing University for twelve weeks of practical teaching under the guidance of mentors in different placement schools.
5. During their practicum, each lecturer supervises a cohort of eight (8) to twelve (12) same-final-year students at least six (6) times, complemented by an assessment conducted by mentors at the various practicing schools, culminating in the evaluation of their entire practicum.
6. The program adheres to a structured grading system: 90-100=A+, 80-89=A, 70-79=B, 60-69=C, and 0-59=D, ensuring a consistent evaluation framework for student performance.

5.2 Conclusions

A critical analysis of the study's findings leads to the following conclusions:

1. Final-year students at Shaoxing University face inadequate practicum opportunities due to the limited duration and timing of their practice sessions, which span only one semester. This deficiency could hinder the

practical experience gained by these students, consequently impacting their performance as professional teachers when they move to the world of work.

2. The curriculum needs content knowledge courses focused on identifying and educating individuals with special needs, including inclusive education, for students at USX. This gap in the curriculum may undermine future educators' preparedness to address students' diverse needs in inclusive classroom settings.
3. There needs to be more content knowledge courses on school management and administration for student teachers at Shaoxing University, particularly those training for classroom teacher roles. This deficiency in training opportunities may limit students' readiness to assume leadership positions within educational institutions upon graduation.

5.3 Recommendations

The research findings and conclusions suggest several recommendations for Shaoxing University's leadership, as well as other teacher training institutions and policymakers:

1. Implement a 3+1 model where student teachers complete content knowledge and pedagogy courses within three years, followed by a full year of off-campus practicum at cooperating schools. This structure allows for a more focused and intensive practicum experience.
2. Ensure that student teachers receive ample practice teaching hours during their practicum sessions and increase the number of practicing schools to reduce the student-teacher ratio. Exposure to diverse teaching environments, including different grade levels and student populations, should be prioritized.
3. Enhance teaching practice supervision by facilitating frequent visits from university supervisors/lecturers to practicing schools. Provide opportunities for reflective sessions and feedback discussions with student teachers before, during, and after these visits to maximize learning outcomes.
4. Integrate content knowledge courses on special and inclusive education into the pre-service teacher education curriculum. Equip student teachers with the necessary skills and competencies to effectively teach students with special education needs, aligning with global trends in education.
5. Infuse the teacher education curriculum with content knowledge courses on school management and administration. This will empower student teachers with comprehensive knowledge and skills to assume leadership roles in schools, even without head teachers or principals.
6. Emphasize the importance of exploring students' learning needs through diverse communication channels and techniques. Incorporate practical activities and projects into teacher education programs to enhance student teacher's ability to identify and address individual learning needs effectively.

7. Prioritize diversity in teacher education programs to meet international standards of the 21st century. Include modules on media literacy, technology integration, and other essential skills to prepare student teachers for global teaching opportunities and the evolving needs of the century.

References

Agyei, F. B., Ocran, P., Oppong, K., & Amoabeng, R. O. (2023). Examining the perceptions of Ghanaian Basic School (K-9) teachers towards continuous professional development. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.4634185>

Chang, H., & Chen, Y. (2018). The role of reflective practice in pre-service teacher education: A case study of a teacher preparation program in China. *Asia-Pacific Journal of Teacher Education*, 46(3), 284–300.

Chen, J., & Li, X. (2020). Exploring problem-based learning in teacher education: A case study in China. *Teaching and Teacher Education*, 91, 1-10.

Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, 40(3), 291-309.

Fauth, B., Decristan, J., Decker, A. T., Büttner, G., Hardy, I., Klieme, E., & Kunter, M. (2019). The effects of teacher competence on student outcomes in elementary science education: The mediating role of teaching quality. *Teaching and teacher education*, 86, 102882.

Guo, Y., & Zheng, Y. (2017). Pre-service teacher education in China: Current status, influential factors, and future directions. *Journal of Education for Teaching*, 43(5), 592–594.

Gyan Ayeh, I., Ocran, P., Yalley, E., & Agyei, F. (2024). Examining the Impact of Information and Communication Technology (ICT) Integration in Chinese Middle School Mathematics Teaching and Learning. *International Journal of Scientific and Research Publication*, Volume 14(Issue 1), 227–237. <https://doi.org/10.29322/IJSRP.14.01.2024.p14523>

Hu, g. (2005). English language education in China: Policies, Progress, and Problems. *Springer*.

Huang, X., & Zhang, Y. (2019). A review of the research on the practicum of pre-service teacher education in China: From perspectives of students, mentors, and supervisors. *Asia-Pacific Education Researcher*, 28(5-6), 393-403.

Jia Zhang, Hongbiao Yin & Tengfei Wang (2023) Exploring the effects of professional learning communities on teacher's self-efficacy and job satisfaction in Shanghai, China, *Educational Studies*, 49:1, 17-34, DOI:

Kiggundu, E. M., & Nayimuli, S. T. (2009). Teaching practice: A make or break phase for student teachers. *South African journal of education*, 29(3).

Li, S., Liu, L., & Jiang, A. L. (2021). Understanding the development of Chinese EFL student-teachers' pedagogical content knowledge. *Frontiers in Psychology*, 12, 627728.

Li, Y., & Xu, Q. (2021). A review of research on student teachers' practical knowledge development in teacher education programs: Focusing on the Chinese context. *Asia-Pacific Journal of Teacher Education*, 49(3), 297-314.

Liu, C., & Wu, M. (2017). Collaborative learning in teacher education: A case study in China. *International Journal of Educational Development*, 54, 88-95.

Liu, S., & Zhang, L. (2022). Exploring the roles of supervising teachers in the practicum of pre-service teacher education: A Chinese perspective. *Asia-Pacific Education Researcher*, 31(1), 19-31.

OECD. (2016). *Education in China: A snapshot*. OECD Publishing.

Peng, Y., & Li, L. (2019). Shifts in teacher education policy in China: 1998–2018. *Journal of Education for Teaching*, 45(1), 27-41.

Shaoxing University. (n.d.). About Shaoxing University. Retrieved from <https://www.usx.edu.cn/xxgk/ywj.htm>

Wang, Q., & Zhang, W. (2020). Exploring the impact of educational technology on pre-service teacher education: A case study in China. *Computers & Education*, 145, 103720.

Wang, S., & Zhou, Z. (2019). Professional development needs of pre-service teachers in China: A qualitative study. *Teaching and Teacher Education*, 79, 77-87.

Wu, Y., & Chen, S. (2019). Pre-service teacher education in China: A review of the literature. *Teaching and Teacher Education*, 80, 68-78.

Xie, Y., & Chen, J. (2021). Mentoring in pre-service teacher education: A case study in China. *Mentoring & Tutoring: Partnership in Learning*, 29(4), 425-437.

Xu, H., & Wang, L. (2020). Field experience in pre-service teacher education: A case study in China. *Asia-Pacific Journal of Teacher Education*, 48(5), 517-531.

Yang, Y., & Cheng, J. (2020). Promoting teacher professionalism through further education: A case study in China. *Teachers and Teaching*, 26(1), 31-47.

Zhu, H., & Liu, J. (2021). Teacher preparation for diverse learners in China: A review of literature. *Asia-Pacific Journal of Teacher Education*, 49(1), 57-72.

AUTHORS

First Author: Frank Agyei, College of Education, Zhejiang Normal University, No. 688 Yingbin Avenue, Jinhua City, Zhejiang Province-PRC, China.

Second Author: Frank Agyei, Lutrill & Pearl Payne School of Education College of Human Sciences & Education, Louisiana State University Baton Rouge, LA 70803-United States America.

Third Author – Patrick Ocran, School of Teacher Education & Leadership, Utah State University, 800 North 900 East Logan, Utah 84322-United States America.

Fourth Author – Isaac Gyan Ayeh, Lutrill & Pearl Payne School of Education College of Human Sciences & Education, Louisiana State University Baton Rouge, LA 70803-United States America.

Fifth Author – Yelley Edward, Lutrill & Pearl Payne School of Education College of Human Sciences & Education, Louisiana State University Baton Rouge, LA 70803-United States America.

Sixth Author – Rebecca Oteng Amoabeng, qualifications, Department of Nursing & Allied Health, Baton Rouge Community College, Baton Rouge, LA 70806-United States of America

Seventh Author – Maxwell Peparh Amponsem, Department of Agricultural Economic and Agribusiness, Louisiana State University Baton Rouge, LA 70803-United States America.

Eighth Author – Kingsley Oppong, Department of Computer Science and Informatics, University of Energy and Natural Resource, Post Office Box 214, Sunyani, Ghana-West Africa

Correspondence Author-Frank Agyei, fagyey1@lsu.edu
+12258882603