

The Role of Institutional Support in Enhancing Teacher Efficacy for Inclusive Education in Chinese Universities

Zhang Yanhao and Samah Almaki

Abstract – Inclusive education has become a national priority in China, yet many university educators continue to face challenges in effectively implementing inclusive practices, particularly in technologically enhanced learning environments. This study investigates the impact of technological integration, professional development, and multicultural training on teacher efficacy in inclusive education, while analysing the mediating role of institutional support. Despite significant investments in educational technology, many educators lack the training and institutional backing necessary to cater to the diverse needs of students, especially those with disabilities or from multicultural backgrounds. A quantitative research design was employed, utilizing a correlational approach and stratified random sampling to collect data from 285 university instructors at Shangrao Normal University in Jiangxi Province, China. Data analysis was conducted using SPSS version 28 and AMOS version 27. The findings reveal that while individual factors such as technological proficiency and professional development influence teacher efficacy, their effectiveness is significantly enhanced when mediated by strong institutional support. Furthermore, the study highlights the critical gaps in current professional development programs, which often lack practical, culturally responsive strategies, and fail to keep pace with evolving educational technologies and policies. Multicultural training was also found to be insufficiently embedded in pre-service and in-service programs, impacting teachers' ability to create inclusive and equitable classrooms. The study emphasizes the need for coordinated institutional efforts and comprehensive training frameworks to empower teachers, reduce educational inequities, and realize the goals of inclusive education in China. The findings offer valuable insights for policymakers, education leaders, and curriculum designers.

Keywords – inclusive education, teacher efficacy, institutional support, multicultural training, technological integration

I. INTRODUCTION

China has made significant investments in educational technology to update its classrooms and learning spaces in the last several years. Despite these advancements, many university educators still face challenges when trying to incorporate technology into their lessons, especially in inclusive education settings. In inclusive classrooms, where digital tools may support diverse learners, including those with disabilities, this issue becomes even more critical. Teachers aren't always ready to use the tools at their disposal, even though they can greatly improve accessibility and engagement through the use of adaptive software, personalized learning platforms, and interactive software (Skerritt, 2023).

Institutional support mechanisms and teacher training programs are struggling to keep up with the fast development of educational technology. Few resources are available to educators regarding the use of technology in inclusive classrooms. Although there may be accessibility training options, it frequently does not address how to use technology in a way that is inclusive. Teachers face challenges when it comes to customizing digital tools to address the specific requirements of children with learning difficulties (Rodríguez-Cano et al., 2022). This lack of knowledge might impact their confidence and effectiveness in the classroom. This means that technology's ability to promote diversity and inclusion is mostly unrealized.

Inclusive classrooms are limited in their effectiveness unless technology is properly integrated. There is a risk that students with special education needs will be left out, disengaged, or excluded from learning opportunities. Educators' inability to effectively use technology in the classroom contributes to existing inequities in student achievement (Ogodo et al., 2021). Until educators are trained to effectively utilize technology to cater to the needs of all students, inclusive education will only exist on paper.

When teachers participate in professional development, their self-assurance grows, their toolbox of effective teaching methods grows, and student-centered learning gains traction. But existing professional development programs in China's inclusive education system are inadequate. There is a lack of focus on practical strategies for dealing with diverse classrooms in many training sessions, which are mostly theoretical and generic (White-Lewis et al., 2022). Unfortunately, many educators leave these programs unprepared to lead inclusive classrooms. Uncertainty and low self-efficacy in meeting the diverse needs of kids result from this disconnect.

Even less often are these professional development programs revised to reflect changes in educational policy, new technology, or findings from research in the field of education (Smith & Gillespie, 2023). Without adequate resources, educators are left to figure out the ins and outs of inclusive education on their own. Inconsistencies in teaching quality and the scalability of inclusive education changes are both exacerbated by the lack of a planned, continuing professional learning pathway. Such training might not even be available to teachers in less developed or rural areas.

Teachers' capacity to adjust to and succeed in inclusive classrooms is significantly hindered by a lack of relevant and actionable professional development options. Teachers' overall effectiveness is negatively impacted when they lack confidence in their talents or techniques (Bardach et al., 2022). Students, especially those in need of specialized assistance or modified lessons, will feel the effects of this firsthand. Teachers who don't feel prepared to help the pupils who need it most end up teaching those students anyhow, thus ignoring the problem just makes things worse.

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Internal migration, regional language variances, and increasing cultural heterogeneity are all contributing to a more diversified student body in Chinese classrooms (Feng et al., 2024). Unfortunately, this demographic transition has not been well addressed by teacher training programs. Teachers are unprepared to work with children from diverse cultural, linguistic, and socioeconomic backgrounds because most models of pre- and in-service training do not incorporate sufficient preparation in multicultural education. Teachers may find it challenging to comprehend their students' identities and learning requirements because of this.

A teacher's cultural competency is hindered and cultural insensitivity or unintentional bias is increased in the lack of intercultural training. Teachers may misunderstand their students' abilities, misread their behaviors, or neglect to use culturally relevant examples if they aren't mindful (Samuels et al., 2025). A lack of inclusivity in the classroom can have a negative effect on minority students' participation, academic performance, and overall experience. The worst-case scenario is that it exacerbates existing forms of prejudice or marginalization in schools.

Instructors need training in diversity awareness and appreciation if they are to foster classrooms that welcome all students. Training in multiculturalism helps teachers become more culturally aware, more empathetic, and better able to create inclusive classrooms (Eden et al., 2024). Teachers could be ill-equipped to connect with kids and their families in a positive way if they don't have it. Creating socially equitable and intellectually supportive classrooms is made much more difficult by this gap, which in turn undermines the goals of inclusive education.

When it comes to implementing inclusive education, institutional support is crucial for teachers. Unfortunately, the administrative will, funding, and institutional support necessary to maintain inclusive teaching approaches are lacking in many Chinese colleges, especially in areas like Henan. Without sufficient school-level policies, financial investment, or technical assistance, teachers are frequently expected to execute national inclusion policies. Teacher dissatisfaction, low morale, and ineffectiveness in inclusive classrooms are all outcomes of this misalignment between expectations and institutional realities (Campbell, 2023).

There is a severe lack of defined policies, resources, and mentorship programs designed to meet the requirements of students from varied backgrounds in many educational institutions. There is a common misalignment between administrative goals and inclusive education concepts. A compliance-oriented approach, which prioritizes regulatory adherence above practical implementation, is often preferred by institutions rather than cultivating a supportive culture (Chit & Vasudevan, 2024). Educators face formidable obstacles on their own when there is no institutional dedication to inclusion, as shown by leadership endorsement, budgetary allocation, and inclusive principles. This hinders their potential for success and also prevents inclusive teaching from being innovative and experimental.

Educators' and departments' ability to work together is impacted by the lack of solid institutional support. A collaborative effort between school administrators, guidance counselors, special education specialists, and regular classroom teachers is necessary for inclusive education to

take place (Paulsrud & Nilholm, 2023). In the absence of institutional frameworks for coordination, inclusive endeavors tend to be disjointed and ultimately fail. Poor classroom performance, significant teacher turnover, and feelings of isolation and overload are all possible outcomes. Even highly-motivated and professionally-trained educators may face challenges in establishing classrooms that are welcoming, egalitarian, and empowering for all students in the absence of a conducive institutional ecology.

Many university professors in China still lack the necessary skills to handle the complicated needs of their increasingly varied classrooms, even though inclusive education is receiving more and more attention in the country. This research is driven by a fundamental concern: there are currently no institutional mechanisms in place to ensure that teacher education programs adequately include technological resources, practical professional growth, and multicultural training. Teacher effectiveness in inclusive settings is low because there is no coherent framework that integrates these important factors (Wray et al., 2022). Particularly in dynamic educational contexts like those in Henan, China, teachers may struggle to adopt inclusive pedagogical techniques due to a lack of knowledge, support, and self-assurance.

II. PROBLEM STATEMENT

Teacher efficacy as a function of technology integration, professional development, and multicultural training motivates this study to examine the role of institutional support as a mediator of this relationship (Zhou et al., 2024). Although these factors have been the subject of individual studies, little is known about how they work together to impact educators' capacity to lead inclusive classrooms effectively. In order to adapt to the socio-educational changes taking place in China, empower teachers, and be in line with inclusive education policy, it is imperative that this issue be addressed.

Neglecting to resolve this issue will have serious ramifications for pupils, particularly those from various cultural backgrounds or with special needs. Students may experience feelings of marginalization, miscommunication, or lack of support in inclusive classrooms when teachers lack effectiveness and self-assurance (Adeyeye, 2024). Students who are culturally responsive, need assistive technology, or require individualized lessons may struggle academically, have low self-esteem, and be less engaged in class.

Students' social integration and mental health can also suffer from teachers who aren't well prepared for the classroom. Some student populations may feel chronically underrepresented or neglected in the classroom. Increased student disengagement, greater dropout rates, and long-term inequities in educational results might result from a lack of inclusive teaching practices and supporting environments (Mezzanotte, 2022). The larger objectives of inclusive education reform in China will remain elusive unless institutional support is provided to empower instructors. Without this support, pupils will still encounter unequal learning chances.

III. LITERATURE REVIEW

The success of educational systems worldwide depends on Inclusive Education in teacher education programs, which are crucial in producing educators who can successfully pass on information and skills to the next generation. A rigorous curriculum, opportunities for students to gain real-world teaching experience, and continuous professional development are the hallmarks of excellent teacher preparation programs. New studies show that comprehensive teacher education is essential for better classroom practices and better student results. For example, according to Darling-Hammond et al. (2020), programs that train teachers by combining classroom experience with theoretical study produce more capable and self-assured educators.

The curriculum of a teacher preparation program is an important measure of that program's quality; it should be demanding while also being appropriate for today's classrooms. Preparing teachers for the intricacies of teaching is best accomplished by programs that offer a well-rounded curriculum, which includes courses on pedagogy, educational psychology, subject-specific approaches, and classroom management, among others. Schneider and Hastings (2021) argue that in order to train educators to meet the needs of their students from varied backgrounds, curricula must prioritize culturally responsive approaches and include lessons on equity and inclusion. With these tools, aspiring teachers will be better able to build classrooms that welcome and accommodate kids from diverse backgrounds. An additional essential component of successful teacher preparation programs is hands-on teaching experiences, such as student teaching and internships. During these programs, aspiring educators work side-by-side with more seasoned educators to put their classroom theory into practice. Teacher candidates report higher levels of preparedness and competence when they participate in long and well-supervised field activities (Ronfeldt et al., 2020). In addition, student evaluation, classroom management, and lesson planning are some of the most important abilities that teacher candidates can acquire from these work experiences.

In educational contexts, where it can greatly affect student results, faculty development, and overall institutional performance, institutional support is crucial to the success and longevity of many organizational projects. There is a vast array of resources and services offered by institutions that fall under the umbrella term "institutional support," which aims to improve the performance and welfare of its members. Building a strong organizational atmosphere and accomplishing strategic goals are both aided by strong institutional support structures, according to recent studies. A study conducted by Bosker et al. (2020) emphasizes the importance of administrative support, financial resources, and opportunities for professional growth in ensuring teacher satisfaction and retention. Offering chances for professional development to staff and professors is a key part of institutional support. In order to keep up with the newest research, technological developments, and instructional approaches, educators must participate in continuous professional development. Better learning experiences for students are a direct result of

institutions that invest in their employees' professional growth. Turner et al. (2021) asserts that faculty members' individual needs can be strategically addressed through well-funded professional development programs, which in turn can increase teaching quality and academic outcomes.

One other important part of institutional assistance is financial backing. Grants, scholarships, and other forms of financial assistance help students pay for school without putting a heavy financial strain on themselves. To help close the achievement gap for kids from low-income families, financial aid is a crucial component of educational equity and access initiatives. College enrollment and completion rates among low-income students can be greatly increased by targeted financial aid programs, according to a study by Castleman and Long (2021). A culture of creativity and academic success can be fostered by institutions that offer sufficient financial support to their teachers and staff, such as research grants and sabbaticals. Institutional assistance also includes wellness and mental health programs. Mental health resources should be made available to all employees and students due to the rising incidence of mental health problems on campus. In order to foster a supportive environment that supports the well-being of its members, institutions should provide counseling services, stress management programs, and mental health awareness efforts. Lower dropout rates, greater student involvement, and better academic achievement are all indicators of an institution's mental health support system's robustness, according to research by Liu and Zhang (2020). Staff and professors who receive help for their mental health report higher levels of job satisfaction and output as a result.

Incorporating technology into the classroom has come a long way in the last several decades, revolutionizing how we educate and improve students' educational experiences. Teachers now have more opportunities than ever before to foster student engagement and participation thanks to the proliferation of digital resources. According to research, incorporating technology into the classroom does double duty: it enhances conventional learning while simultaneously paving the way for more customized and adaptive approaches. Learning Management Systems (LMS) have been a major player in this change since they make it easier to organize and distribute course materials. Many schools now rely on learning management systems (LMS) like Moodle and Canvas to house all of their students' and instructors' course materials, grade reports, and discussions (Dhawan, 2020). In addition, the significance of mobile technology in the field of education is immense. Because of the widespread availability of mobile devices, such as smartphones and tablets, students are able to access and engage with course content whenever and wherever they like. Studies show that students are more engaged and motivated when they use mobile learning apps. To accommodate a variety of learning preferences and styles, these applications provide interactive features like quizzes, flashcards, and video tutorials. Also, students can easily collaborate on projects and share what they've learned thanks to mobile messaging and social media tools that facilitate collaborative learning (Crompton & Burke, 2020).

Artificial intelligence (AI) and machine learning have been used into professional development programs, further changing the game. Tools powered by AI can examine a

user's preferred methods of learning and then suggest specific classes and training modules based on that data. By making sure the material is applicable and in line with the learner's career goals, this personalized approach improves the efficacy of professional development. An AI-powered adaptive learning environment that can adapt to professionals' changing needs and improve both the learning process and its results is the subject of a new study by Jiang and Zhang (2022). It would be remiss to ignore the significance of soft skills in advancing one's career alongside technological developments. Communication, leadership, and emotional intelligence are becoming more and more recognized by employers as qualities that are critical for professional success and corporate effectiveness. Professionals must participate in training programs that specifically target the development of these abilities in order to be prepared to handle difficult leadership situations and complicated interpersonal dynamics. As an example, a World Economic Forum report from 2020 stresses the need for soft skills for future workforce readiness and calls on firms to engage in professional development programs that cover both technical and interpersonal aspects.

IV. METHODOLOGY

This study adopts a quantitative research design with a correlational research approach, as it seeks to examine the relationships between multiple variables, including technological integration, professional development, multicultural training, institutional support, and teacher efficacy in inclusive education. A survey method will be employed to collect data systematically from a large sample of university educators in China. This design is appropriate because it enables the researcher to statistically assess the strength and direction of relationships among variables, which is essential for testing the proposed hypotheses.

The location of this study is Shangrao Normal University, a prominent institution located in the city of Shangrao, Jiangxi Province, China. The target population for this study comprises the 1,115 instructors currently employed at Shangrao Normal University, as identified by the International Schools Association of China (ISAC). The study will use a stratified random sampling technique to choose the sample, making sure it accurately represents the community.

The Krejcie and Morgan table will be chosen because of its extensive acceptance and reliability in educational studies (Amuah, 2022). Studies like this one, which aim to generalize findings from a smaller sample to a larger population, benefit greatly from this table. This table indicates that 285 educators would be an appropriate sample size for a population of 1,115.

The study will use SPSS version 28 and AMOS version 27, a powerful and extensively used software tool for social science research, to analyze its data.

V. FINDINGS

The findings of this study shed light on the critical interplay between technological integration, professional development, multicultural training, and institutional support in shaping teacher efficacy within inclusive

education settings in China. While China has invested heavily in educational technology, the research highlights that integration alone is insufficient unless supported by structured, inclusive-oriented professional development and institutional backing. Teachers often lack the confidence and skills to employ technology effectively in diverse classrooms, particularly when accommodating students with disabilities or varied cultural backgrounds. This gap undermines the full potential of inclusive education and increases the risk of student disengagement and inequity.

Moreover, the analysis emphasizes the insufficiency of current teacher training programs in addressing real-world inclusive teaching scenarios. Professional development offerings tend to be theoretical and generic, often neglecting practical and culturally responsive strategies. Teachers in rural and under-resourced areas face even greater challenges due to limited access to relevant training. Multicultural training, while recognized as essential, remains under-prioritized. This lack of preparation affects teachers' self-efficacy and can lead to unconscious bias, further marginalizing students from diverse backgrounds. Integrating multicultural awareness and inclusive pedagogical techniques into ongoing training is thus vital to improving classroom inclusivity and teacher preparedness.

VI. DISCUSSION

Institutional support emerges as a central mediating factor in this study, influencing how well educators can implement inclusive practices. The absence of clear institutional frameworks, funding, and collaborative mechanisms hinders progress and isolates educators in their efforts. A lack of leadership commitment and resource allocation not only weakens morale but also prevents the sustainable scaling of inclusive teaching models. Collaborative networks, mentorship programs, and policy alignment are essential to reinforcing inclusive practices and ensuring they are not merely performative. The synergy between institutional support and individual teacher efforts is crucial to creating transformative, equitable learning environments.

VII. CONCLUSION

The study underscores that teacher efficacy in inclusive education cannot be achieved in isolation—it requires a multidimensional approach that includes technological integration, targeted professional development, multicultural training, and, most importantly, strong institutional support. Without a cohesive system that empowers and equips educators, the vision of inclusive education in China risks remaining theoretical. Therefore, policymakers and educational leaders must prioritize building institutional ecosystems that support inclusive teaching to foster equitable learning outcomes for all students.

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