

FROM OBSTACLES TO SOLUTIONS: TEACHERS' PERSPECTIVES ON INSTRUCTIONAL COMPETENCY DEVELOPMENT AND POLICY SUPPORT IN PRIVATE HIGHER EDUCATION

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ABSTRACT

This study investigates teachers' perspectives on instructional competency development obstacles and solutions in private higher education, focusing on Guangxi Engineering Vocational College, China. The research objective was to investigate the obstacles and solutions of teachers' perspectives on instructional competency development and policy support in private higher education. Using a mixed-method design, data were collected from 243 full-time teachers via questionnaires with open-ended questions. Stratified random sampling ensured representativeness across faculties, academic ranks, and teaching experiences. The instrument achieved perfect content validity (IOC = 1.00). Content analysis identified recurring themes regarding obstacles, and solutions on instructional competency development and policy support in private higher education.

The findings reveal that the most significant obstacle is Technology Integration Abilities (51.4% combined), primarily due to teaching resources and environmental constraints (26.3%). This indicates a critical lack of technological infrastructure, which acts as a barrier to developing Technological Pedagogical Content Knowledge. The second most affected domain is Pedagogical Knowledge (22.8%), followed by Classroom Management Skills (17.3%), and finally Assessment Strategies (4.1%).

In terms of solutions, Technology Integration Abilities was also the most frequently identified area of need, cited by 67.1% of teachers. Teachers prioritized optimizing resource allocation to provide institutional guarantee and infrastructure, directly addressing the primary obstacle. Other key solutions include reconstructing pedagogical development goals (46.9%) and alleviating professional burnout (45.3%). The study also validates the role of intrinsic motivation (Self-Determination Theory) in driving teaching excellence despite external challenges. These insights provide crucial guidance for policymakers and administrators in private higher education to strategically invest in tangible resources and teacher well-being, fostering a sustainable environment for instructional growth.

Keywords: Instructional Competency; Teacher Development; Private Higher Education; Professional Development

1. Introduction

The quality of higher education is fundamentally dependent on the instructional competencies of its teaching faculty. Instructional competency encompasses a multifaceted set of knowledge, skills, attitudes, and practices that enable teachers to facilitate effective learning experiences, including pedagogical knowledge, content expertise, technological proficiency, classroom management abilities, and the capacity for continuous professional growth (Zhao, 2020). In China, educational reform has placed significant emphasis on enhancing the professional development of teachers, particularly at the higher education level. However, private universities, which have been growing rapidly in number and influence over the past few decades, face unique challenges in terms of resources, teaching quality, and faculty development compared to public institutions. Besides, the professional attractiveness of private university teachers is seriously inadequate in China and the overall level of teachers directly determines the quality level of private universities (Duan, et al. 2023)

Private universities in Guangxi Province have experienced rapid growth and face unique challenges related to faculty development, resource allocation, and instructional quality. Teachers in this region face not only the general challenges of higher education reform but also those unique to the local socio-economic environment, including diverse student populations, limited teaching resources, and the need to cater to

both local and regional educational needs (Chen, 2019). Moreover, private universities in Guangxi often rely on government funding and policies that can influence both teaching practices and professional development opportunities (Yang, 2018). Understanding teachers' perspectives on the barriers they face and the support mechanisms they require is crucial for developing effective policies and institutional practices.

Despite the growing global and national interest in teacher professional development, there remains no consensus regarding the obstacles and solutions of teachers' perspectives on instructional competency development in private universities. Some studies emphasize the role of institutional support, such as funding, training programs, and administrative assistance (Zhao, 2020; Duan, et al., 2023, Zhong & Jing, 2021), while others suggest that intrinsic motivation plays a more dominant role (Chen, 2019). Additionally, some scholars argue that the relationship between institutional support and teaching competency development is not straightforward, as teachers may resist or underutilize institutional support due to personal attitudes, workload pressures, or misalignment between institutional offerings and individual needs (Huang, 2019; Xu, 2021). Furthermore, the influence of local socio-economic factors, such as those documented in Guangxi, on both teachers' willingness to improve and the availability of professional development programs is an area that requires specific investigation (Hao, 2023). Therefore, a study that systematically investigates the perceived obstacles and proposed solutions across multiple competency domains from the teachers' viewpoint in this specific, under-resourced private university context is necessary to provide comprehensive and practical guidance for stakeholders. Recent research further emphasizes the ongoing challenges in digital competence enhancement and the scarcity of empirical studies on practical applications of teacher development in Chinese universities, reinforcing the timeliness of this investigation.

This study seeks to investigate the obstacles and solutions of teachers' perspectives on instructional competency development and policy support in private higher education, providing valuable, contextualized insights for policymakers and educational administrators in similar settings worldwide.

2. Research objective

To investigate the obstacles and solutions of teachers' perspectives on instructional competency development and policy support in private higher education.

3. Theoretical framework

The theoretical framework for this study is grounded in several well-established theories that provide a comprehensive understanding of the teachers' instructional competency development in private universities. This framework integrates instructional competency theories combined with pedagogical knowledge frameworks, contribute to the enhancement of teachers' instructional capabilities.

The primary theories underpinning this research include Self-Determination Theory (Deci & Ryan, 1985), Shulman's Pedagogical Content Knowledge framework (Shulman, 1987), and the Technological Pedagogical Content Knowledge (TPACK) framework (Mishra & Koehler, 2006).

Self-Determination Theory serves as the primary theoretical foundation, emphasizing the role of intrinsic motivation through three basic psychological needs: autonomy, competence, and relatedness. According to SDT, teachers who experience high levels of these three needs are more likely to be intrinsically motivated to enhance their instructional competencies. Autonomy refers to teachers' sense of control over their teaching methods and professional decisions; competence relates to their confidence in their teaching abilities; and relatedness involves their connections with students, colleagues, and the institutional community.

Pedagogical Content Knowledge (PCK) represents a foundational framework developed by Shulman (1987) for understanding instructional competencies. PCK is defined as the integration of subject-

matter expertise with pedagogical understanding, representing the unique form of knowledge that distinguishes effective teachers from mere content experts. This framework encompasses subject matter knowledge, pedagogical knowledge, and the intersection of content and pedagogy. Research suggests that teachers with strong PCK can foster deeper student engagement and critical thinking (Ball et al., 2008).

TPACK Framework extends Shulman's PCK by incorporating technology as an essential component of modern instructional competencies. Introduced by Mishra & Koehler (2006), this framework recognizes that effective teaching in the digital age requires the seamless integration of four knowledge domains: Pedagogical Knowledge, Classroom management skills, Assessment strategies and Technology Knowledge. The power of the TPACK framework lies in the intersections of these domains, representing the complex integration needed to effectively integrate technology into teaching specific content using appropriate pedagogical approaches. From the study of the above related theories, it leads to the research conceptual framework as follows:

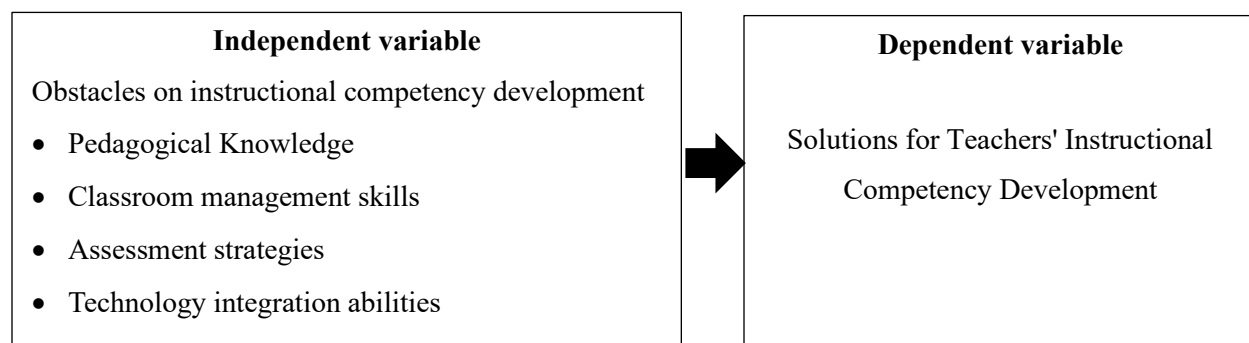


Figure 1 Conceptual Framework

4. Research methodology

4.1 Research Design

This study employed a mixed method research design, mixing qualitative and quantitative methods of collecting and analyzing data, using questionnaire survey methods to systematically collect and analyze data from a large participant group.

4.2 Research Location

This study focuses on Guangxi Engineering Vocational College, a private university in Guangxi Province, China. The private universities in this region face unique challenges related to faculty development, resource allocation, and instructional quality, which can affect the overall competitiveness and sustainability of the institutions (Zhao, 2020).

4.3 Population and Sample Size

Population size: this study focuses on 415 full-time teachers of Guangxi Engineering Vocational College, a private vocational institution located in Guangxi Province, China, in academic year 2024-2025.

Sample Size: 243 full-time teachers of Guangxi Engineering Vocational College, a private vocational institution located in Guangxi Province, China, in academic year 2024-2025. Stratified random sampling ensured representativeness across faculties, academic ranks, and teaching experiences. This study applied Slovin's formula (Slovin, 1960) as a baseline for calculation. Using a margin of error of 0.05 (corresponding to a 95% confidence level), the minimum sample size computed was approximately 204 respondents. However, to increase statistical precision, to allow for subgroup analyses by faculty, and to

accommodate potential non-responses and incomplete questionnaires, the study opted for a larger formal sample of 243 participants for the main data analysis.

4.5 Research Tools

This study employs a structured questionnaire as the primary data collection tool, that divided into 2 parts. Part 1-demographic data of respondents with multiple-choice questions and part 2- 2 Open-ended questions. (Q1- What is the greatest obstacle on instructional competency development and policy support in private higher education?, Q2- What is the solutions on instructional competency development and policy support in private higher education?). The IOC score was 1.00, indicating that meets the threshold requirement for content validity.

4.6 Data Collection

Data collection followed systematic steps to ensure ethical and systematic procedures. First, the researcher contacted the administrative department of the selected university to request permission and support for conducting the study. The questionnaire was distributed to participants. Participants were informed of the study's purpose, their rights, and confidentiality assurances. They were asked to complete the questionnaire voluntarily and return it within two weeks. After the collection period, the researcher retrieved the completed questionnaires and screened them for completeness.

4.7 Data Analysis

Descriptive statistics were employed to summarize demographic data of respondents, including frequency and percentages for categorical variables. For the qualitative open-ended responses, content analysis was conducted to identify recurring themes, patterns, and categories related to obstacles, policy support needs, intrinsic motivations, and suggestions for teacher development.

5. Research findings

5.1 Demographic data of respondents

The demographic profile reveals a diverse sample with female teachers comprising 58.4% of respondents. The majority of participants (46.9%) were in the 25-34 age range, followed by 35-44 years (36.6%). Regarding teaching experience, most teachers had 11-15 years of experience (34.2%), followed by 6-10 years (31.7%). In terms of academic titles, Associate Professors represented the largest group (30.0%), followed by Lecturers (29.2%). Educational qualifications showed that most teachers held Master's degrees (44.9%), followed by Bachelor's degrees (41.6%), with Doctorate holders comprising 13.6% of the sample.

5.2 Obstacles and solutions on instructional competency development and policy support in private higher education.

Table 1 Summary of obstacles on instructional competency development in private higher education.

Instructional competencies	Obstacles issues	n	%
1. Pedagogical Knowledge	1.1 Disconnect between educational concepts and practice <ul style="list-style-type: none"> • Disconnect between educational concepts and practice • Theory-practice implementation gaps • Difficulty translating theoretical knowledge into classroom practice • Gap between what teachers know and what they can implement 	25	10.3
	1.2 Other Specific Issues <ul style="list-style-type: none"> • curriculum gaps • Institutional issues affecting pedagogical decisions • Personal development needs in teaching methodologies 	28	11.5
2. Classroom management skills	2.1 Student Individual Differences <ul style="list-style-type: none"> • Difficulty addressing diverse student needs 	11	4.5

Instructional competencies	Obstacles issues	n	%
	<ul style="list-style-type: none"> • Uneven student levels and abilities 		
	2.2 Professional Burnout and Innovation Motivation Deficit <ul style="list-style-type: none"> • Professional burnout and insufficient innovation motivation • Decreased enthusiasm, lack of work motivation • Fatigue and lack of drive for innovation 	31	12.8
3. Assessment strategies	3.1 Teaching Evaluation Limitations <ul style="list-style-type: none"> • Inadequate feedback mechanisms • Over-reliance on standardized testing • Limited capacity for formative assessment • Insufficient tools for authentic assessment 	10	4.1
4. Technology integration abilities	4.1 Teaching Resources and Environmental Constraints <ul style="list-style-type: none"> • Resource limitations, hardware/technical insufficiency, limited platforms • Hardware/technical insufficiency • Limited digital platforms and tools • Inadequate technological infrastructure • Lack of modern teaching equipment 	64	26.3
	4.2 Technology Integration and Digital Competency Barriers <ul style="list-style-type: none"> • Technology integration and digital capability bottlenecks • Unfamiliarity with intelligent tools, educational technology gaps • Educational technology gaps • Limited digital pedagogical skills • Difficulty in effectively using educational technology 	33	13.6
	4.3 Time and Energy Scarcity <ul style="list-style-type: none"> • Scarcity of time and energy to learn new technologies • Heavy workload preventing technology training • Time constraints preventing development of digital competencies • Insufficient time for experimenting with educational technology 	28	11.5
	No Obstacles	13	5.3
Total		243	100.0

From table 1, there are several obstacles impact instructional competency development in private higher education as follows: the most affected domain was technology integration abilities (51.4% combined): teaching resources and environmental constraints, technology integration and digital competency barriers and time and energy scarcity. Second most affected was pedagogical knowledge (22.8% combined): Disconnect between educational concepts and practice and other specific issues (curriculum gaps, institutional issues, personal development). Third most affected was classroom management skills (17.3% combined): student individual differences and professional burnout and innovation motivation deficit. And fourth most affected was assessment strategies (4.1% direct): teaching evaluation limitations.

Table 2 Summary of solutions' teachers on instructional competency development and policy support in private higher education. (n=243)

Instructional competencies	Solutions issues	n	%
1. Pedagogical Knowledge	<ul style="list-style-type: none"> • Reconstruct goal orientation Reconstruct Teacher Development Goals • Focus on professional development and training • Create safe environments for innovation • Recognition of subject matter passion as pedagogical driver • Need for safe spaces to experiment with new teaching methods • Importance of interdisciplinary and innovative approaches • Intrinsic motivation for teaching excellence and self-improvement needs • Systematic support for pedagogical skill development 	114	46.9
2. Classroom Management Skills	<ul style="list-style-type: none"> • Alleviate burnout and activate intrinsic drive by teacher wellbeing as foundation for effective management • Student Support Services- Library resources, Campus facilities, Mental health support • Importance of infrastructure and facilities - teaching venues and tools, physical learning environments • Recognition that student motivation drives classroom dynamics- professional mission, improve learning experiences, student success orientation • Family and community factors affecting classroom behavior 	110	45.3
3. Assessment Strategies	<ul style="list-style-type: none"> • Primary focus on reducing examination-oriented constraints • Need for reformed evaluation systems recognizing diverse assessments • Recognition that institutional incentives shape assessment practices • Desire for freedom to implement varied assessment approaches • Connection between authentic assessment and teaching quality recognition 	57	23.5
4. Technology Integration Abilities	<ul style="list-style-type: none"> • Optimize resource allocation to provide institutional guarantee, infrastructure and facilities • Professional development for digital competency-training resources, technology skill development, digital competency building • Innovation and Problem-Solving, using technology as solution tool, discover better methods • Suggests need to connect technology to pedagogical purpose 	163	67.1

From table 2, there are several solutions for instructional competency development in private higher education as follows: 163 teachers (67.1%) identified solutions related to technology integration abilities. 114 teachers (46.9%) identified solutions related to pedagogical knowledge development, making this the second-largest solution category. 110 teachers (45.3%) identified solutions related to classroom management skills, making this the third-largest solution category. And 57 teachers (23.5%) identified solutions related to assessment strategies, making this the smallest of the four solution categories.

6. Discussion

This discussion synthesizes the key findings within the context of established theoretical frameworks and existing literature, examining both the obstacles' teachers face and the solutions they propose.

6.1 The obstacles' teachers on instructional competency development in private higher education.

The most finding of this study is that teaching resources and environmental constraints, technology integration and digital competency barriers and time and energy scarcity emerged as the dominant obstacle to instructional competency development, identified by 10.3% and 26.3 of teachers on pedagogical knowledge and technology integration abilities obstacles. Teachers reported inadequate teaching facilities, insufficient access to educational technology, limited learning materials, and outdated equipment as persistent barriers to implementing innovative pedagogical approaches. This resource scarcity aligns with previous research on private universities in China, which has documented the significant funding gaps between private and public institutions (Duan et al., 2023; Zhao, 2020). When examined through the lens of the TPACK framework (Mishra & Koehler, 2006). While this framework identifies technology knowledge as essential for modern instructional competencies, the practical reality for teachers in private universities is that technological resources remain scarce or inaccessible. Teachers cannot develop technological pedagogical content knowledge without access to the technological infrastructure that makes such integration possible. This finding resonates with Hao's (2023) research on socio-economic factors in Guangxi, which demonstrated that regional economic conditions significantly shape both institutional capacity and student preparedness, creating compound disadvantages that individual teacher effort alone cannot overcome.

6.2 The solutions' teachers on instructional competency development and policy support in private higher education.

Technology integration is the most critical and urgent need identified by teachers, with 67.1% citing solutions in this area. However, all four competency domains are interconnected and require coordinated attention. Technology integration cannot succeed without pedagogical knowledge to use tools effectively, classroom management skills to implement digital learning, and assessment strategies to evaluate technology-enhanced learning. Similarly, pedagogical innovation, effective classroom management, and authentic assessment all benefit from appropriate technology integration.

Teachers' recommendations for policy changes and institutional solutions provide valuable insights into what would most effectively support instructional competency development. The highest priority—optimize resource allocation to provide institutional guarantee, infrastructure and facilities—directly addresses the primary obstacle and reflects teachers' understanding that meaningful improvement requires adequate material foundation. Teachers called for increased and stable funding, equitable distribution of resources across departments, investment in educational technology infrastructure, and provision of teaching materials and supplies. This recommendation aligns with Duan et al., (2023) research on institutional support in Chinese private universities, which demonstrated that tangible resource investments produce measurable improvements in teaching quality and teacher satisfaction.

One of the most encouraging findings of this study is that despite facing significant obstacles, teachers demonstrated strong intrinsic motivation for instructional innovation, teaching excellence and self-improvement needs. This finding validates Self-Determination Theory's emphasis on the power of intrinsic motivation, particularly the need for competence and the satisfaction that comes from mastery and meaningful work (Deci & Ryan, 1985). Teachers who are deeply engaged with their subject matter and excited about helping students understand complex concepts possess an internal drive that sustains them even when external conditions are challenging.

110 teachers (45.3%) identified solutions related to classroom management skills, making this the third-largest competency domain after technology integration and pedagogical knowledge. However, Classroom management skills fundamentally depend on teacher wellbeing, adequate support systems, and favorable environmental conditions—factors that interact in complex ways to enable or constrain teachers' capacity to create effective learning environments. Besides, teachers explicitly called for alleviating professional burnout as a policy priority, reveals a critical wellbeing crisis affecting nearly one-fifth of the teaching workforce. As Duan et al., (2023) documented in their research on institutional support in Chinese

private universities, teachers facing chronic overload experience diminished capacity for the emotional labor inherent in teaching.

The teachers (23.5%) prioritized primary focus on reducing examination-oriented constraints reflects and need for reformed evaluation systems recognizing diverse assessments. This aligns with Shulman's (1987) Pedagogical Content Knowledge framework, which emphasizes assessment should measure genuine understanding, not mere test performance. However, a core need in Self-Determination Theory (Deci & Ryan, 1985). Teachers seeking "value recognition" desire for freedom to implement varied assessment approaches. As Zhao (2020) noted, exam-oriented pressure limits pedagogical innovation, preventing implementation of varied assessment approaches that could more authentically evaluate student learning and teacher effectiveness.

7. Suggestion

8.1 Suggestions from the Study

Based on the research findings, three key recommendations are proposed.

First, to mitigate the top obstacles faced by teachers, policymakers should focus on resource and support stability such as address the dominating issue of resource constraints (26.3%) by prioritizing resource allocation optimization (25.5%). This includes stabilizing funding amid economic fluctuations (9.5%) and actively working to reduce regional disparities (8.2%) in resource distribution, including combat professional burnout and invest in digital readiness and time management.

Second, to foster an environment where teachers can innovate, the policy focus should shift from high-stakes testing to meaningful development such as implement policies aimed at Reducing exam-oriented pressure (15.6%) to free up time and mental space for teachers to experiment and innovate in their teaching methods, including reform development goals and acknowledge and motivate intrinsic drive.

8.2 Suggestions for Future Research

First, assessing the long-term impact of professional development programs on teaching quality, student outcomes, and institutional performance would provide valuable evidence for policy and practice.

Second, investigating student perspectives on instructional competence to effective teaching and suggestion insightful feedback on teaching behaviors most impact their learning experiences.

8. Conclusion

This study successfully investigated the obstacles and proposed solutions for instructional competency development and policy support from the perspective of teachers in a private higher education institution in Guangxi Province, China. The mixed-method analysis of 243 full-time teachers confirmed that while the demand for high instructional quality is significant, teachers face considerable structural and systemic challenges.

The most profound finding is the dominance of resource-related barriers, with Technology Integration Abilities being the most affected domain (51.4% combined), chiefly driven by inadequate teaching resources and environmental constraints (26.3%). This resource scarcity acts as a fundamental impediment to the development of Technological Pedagogical Content Knowledge (TPACK), as teachers cannot effectively integrate technology, they do not have access to or time to master.

Consequently, the teachers' top policy recommendation was a direct solution to this problem: optimizing resource allocation and infrastructure investment (67.1% identified solutions for technology integration). The recommendations move beyond just technology to include systematic support for Pedagogical Knowledge (46.9%) and addressing teacher well-being. The explicit call to alleviate professional burnout reveals a critical human factor affecting Classroom Management Skills (17.3% obstacle) and underscores the need for policies that protect teacher agency and intrinsic motivation. Despite the constraints, the teachers demonstrated a strong intrinsic drive for excellence, validating the core tenets

of Self-Determination Theory. Finally, the request for a reformed evaluation system that reduces examination-oriented constraints (4.1% obstacle, 23.5% solution) is crucial for allowing authentic assessment, which aligns with the principles of Pedagogical Content Knowledge (PCK). In conclusion, institutional policy must transition from abstract mandates to providing tangible resource stability and proactive support for teacher well-being to cultivate a sustainable environment for instructional innovation in the challenging private higher education sector.

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