

Bridging The Innovation Gap: How Creative Capacity Transforms Perceptions Into Practice In Vietnamese Universities

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Abstract: *In the context of higher education undergoing fundamental transformations to meet the demands of the knowledge society and digital economy, instructional innovation has become imperative for sustainable educational development. This study examines the dynamic relationships among three key factors: university lecturers' perceptions of instructional innovation, their creative capacity, and the implementation of innovative teaching practices. Employing a mixed-methods research design that integrates quantitative survey data from 120 university lecturers in Vietnam and qualitative interviews with 10 exemplary innovators, the study reveals several significant findings. First, positive perceptions of instructional innovation demonstrate a strong positive correlation with lecturers' creative capacity ($r = 0.69$, $p < 0.01$). Second, creative capacity functions as a critical mediating factor that significantly predicts the frequency of implementing innovative teaching methods in practice ($\beta = 0.40$, $p < 0.015$). Third, despite high levels of awareness (75% reported positive perceptions), a substantial implementation gap exists, with only 38% of lecturers engaging frequently in innovative practices. Qualitative findings identify multiple barriers including low creative self-efficacy, limited professional development opportunities, unsupportive organizational cultures, and workload pressures. The study contributes to educational change theory by elucidating creativity's mediating role in translating perceptions into innovative behaviors. The findings provide an evidence - based foundation for designing professional development programs and institutional policies that enhance lecturers' creative self-efficacy, establish supportive organizational cultures, and promote sustainable instructional innovation in higher education systems.*

Keywords: *Higher education; instructional innovation; creative capacity; lecturers' perceptions; pedagogical change; creative self-efficacy; mixed-methods research.*

Date Of Submission: 02-09-2026

Date Of Acceptance: 12-09-2026

I. INTRODUCTION

In the context of accelerating globalization and digital transformation, higher education systems worldwide are facing unprecedented challenges (Bokova, 2015). The emergence of the knowledge society and the digital economy necessitates that higher education institutions undertake fundamental reforms, not only in curricular content but also in pedagogical approaches. Within this transformation, instructional innovation has evolved from a discretionary trend into a strategic imperative for sustainable educational development. Universities are increasingly called upon to prepare graduates who can navigate complexity, adapt to rapid technological change, and contribute meaningfully to society. In this process, the role of university lecturers is indispensable. Beyond serving as transmitters of knowledge, lecturers increasingly function as learning facilitators who foster critical thinking, stimulate creative potential, and promote learners' capacity for self-directed learning (Tan, 2007).

Understanding the factors that enable or constrain lecturers' engagement with instructional innovation has thus become a priority for educational researchers and policymakers alike. Recent empirical studies have demonstrated the existence of a complex interactive relationship among three core factors: (1) lecturers' perceptions of the importance of instructional innovation, (2) their creative capacity in designing teaching and learning activities, and (3) the extent to which innovative teaching methods are implemented in practice (Li et al., 2025; Liu & Wang, 2019; Ovbiagbonhia et al., 2020). In the field of educational change research, Fullan emphasized that the success of educational reforms depends critically on transformations in teachers' beliefs and behaviors, identifying these factors as decisive for the sustainability of any educational innovation initiative (Fullan, 2007). This perspective underscores the need to examine not only what lecturers do in the classroom but also how they think about and conceptualize their pedagogical roles (Schön, 2016).

Creativity, defined as the ability to generate novel ideas or apply existing knowledge in new ways (Runco & Jaeger, 2012), serves as a key catalyst for instructional innovation. Research by Runco and Acar

highlighted that creativity in academic contexts is not solely an individual attribute but is also shaped by the cultural and organizational environments in which lecturers operate (Runco & Acar, 2012). Moreover, creative self-efficacy - the belief in one's ability to produce creative outcomes - has been identified as a significant predictor of innovative teaching behaviors (Chen, 2024; Tierney & Farmer, 2002). This suggests that fostering instructional innovation requires attention to both individual-level capacities and institutional-level conditions that either support or hinder creative pedagogical practices.

Empirical evidence supports the effectiveness of innovative, active learning approaches in enhancing student outcomes across diverse educational contexts (C. S. Wallace et al., 2021; Freeman et al., 2014; Hake, 1998; Koretsky et al., 2018). Studies have shown that students taught using active learning strategies demonstrate significantly better performance compared to those taught through traditional lecture-based methods (Freeman et al., 2014; M. Lagubeau et al., 2019). The integration of technology and learner-centered pedagogies has been found to promote deeper engagement and improved learning outcomes (Garrison & Kanuka, 2004; Hwang et al., 2018). However, the successful implementation of such approaches depends heavily on teachers' pedagogical readiness, beliefs about innovation, and institutional support (N Yulin & Danso, 2025).

In Vietnam, pedagogical innovation in higher education has been strongly promoted through the adoption of competency-based approaches, aiming to shift from traditional lecture-centered models toward active, student-centered learning paradigms. National policy initiatives, including Resolution 29-NQ/TW (2013) on comprehensive educational reform and Decision 89/QĐ-TTg (2019) on enhancing the capacity of university faculty, have explicitly called for greater emphasis on learner autonomy, experiential learning, and the integration of technology in teaching (Communist Party of Vietnam, 2013; Vietnam, 2019). However, despite these policy directives, the degree of adoption and effectiveness of innovative teaching practices remains uneven among lecturers (Luong et al., 2025; T. T. M., 2022). This variability is influenced by multiple factors, including cognitive readiness, institutional culture, policy mechanisms, access to technology, teachers' perceptions of culturally responsive teaching, and attitudes toward change (Luong et al., 2025; N Yulin & Danso, 2025; T. T. M., 2022). Moreover, there remains limited empirical evidence on how these factors interact to shape lecturers' innovative behaviors in the Vietnamese higher education context.

Therefore, a systematic investigation of the dynamic relationships among lecturers' perceptions, creative capacity, and instructional innovation behaviors is not only theoretically significant for advancing educational research but also of high practical value. Drawing on Ajzen's Theory of Planned Behavior (Ajzen, 1991) and Bandura's self-efficacy theory (Bandura, 1997), such research can provide evidence-based insights to inform policy development and enhance professional development strategies for university lecturers in the current reform context. Specifically, understanding these relationships can help educational leaders design targeted interventions that address both individual and organizational barriers to innovation, ultimately contributing to the quality and relevance of higher education in Vietnam.

II. RESEARCH METHODOLOGY

This study adopted a mixed-methods approach, integrating quantitative and qualitative analyses to enhance data richness and ensure methodological rigor (Creswell & Clark, 2018). The convergent parallel design employed in this study enabled the simultaneous collection and analysis of both quantitative and qualitative data, allowing for a comprehensive examination of the relationships among the studied variables and providing deeper insights into the complex phenomenon of instructional innovation.

2.1. Quantitative Survey

1.4.1. Participants and Sampling

The quantitative component involved a purposive sample of 120 university lecturers in Vietnam from diverse disciplinary backgrounds, including engineering, education, and economics. Participants were recruited from both public and private universities across different regions to ensure diversity in institutional contexts and teaching experiences. The sample size was determined based on the minimum requirement for multiple regression analysis, following the guideline of at least 10-15 participants per predictor variable.

2.4.1. Instruments and Measures

The primary variables examined were:

Lecturers' perceptions of instructional innovation: Measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) consisting of items adapted from previous research on teachers' beliefs about innovative pedagogy (N Yulin & Danso, 2025; Ovbiagbonhia et al., 2020);

Individual teaching creativity: Assessed using a self-perceived creative capacity scale based on the Creative Self-Efficacy framework (Tierney & Farmer, 2002). This scale measured lecturers' confidence in their ability to generate novel teaching ideas and implement creative pedagogical solutions;

Frequency of implementing innovative teaching methods: Operationalized through self-reported measures of the extent to which lecturers employed active learning strategies, technology-enhanced instruction, and student-centered approaches in their teaching practice.

3.4.1. Data Collection and Analysis

Data were collected through an online survey administered over a period of two months. Prior to distribution, the survey instrument was pilot-tested with a small group of lecturers ($n = 15$) to ensure clarity and validity of the items. Internal consistency reliability was assessed using Cronbach's alpha coefficient.

Data analysis was conducted using SPSS version 26.0. Descriptive statistics were computed to summarize the demographic characteristics of participants and the distribution of key variables. Pearson correlation analysis was employed to examine linear relationships among the variables, while multiple linear regression analysis was used to assess the independent effects of lecturers' perceptions and creative capacity on their instructional innovation behaviors. Assumptions of normality, linearity, and homoscedasticity were tested prior to conducting regression analysis.

2.2. Quantitative Analysis

1.4.1. Participant Selection

The qualitative component consisted of semi-structured interviews with 10 lecturers who had demonstrated outstanding achievements in instructional innovation at their respective universities over the past three years. These participants were purposively selected based on recommendations from department heads and documented evidence of innovative teaching practices, such as teaching awards, peer recognition, or participation in pedagogical development initiatives. The selection aimed to capture diverse perspectives across different disciplines and institutional types.

2.4.1. Interview Protocol and Data Collection

The interview protocol was designed to explore four main themes: Motivations and perceptions regarding instructional innovation; Challenges and facilitating factors in the adoption of innovative teaching methods; The influence of organizational environment and institutional support policies; Perceived impacts of innovation on teaching effectiveness and student learning outcomes.

Each interview lasted approximately 60-90 minutes and was conducted either in person or via video conferencing, depending on participants' preferences and geographical locations. All interviews were audio-recorded with participants' informed consent and transcribed verbatim for analysis.

3.4.1. Data Analysis

Interview data were analyzed using thematic content analysis, following the procedures outlined by Creswell and Plano Clark (Creswell & Clark, 2018). The analysis involved three phases: (1) open coding to identify initial concepts and categories emerging from the data; (2) axial coding to establish relationships among categories and identify key themes; and (3) selective coding to integrate themes into a coherent framework. Two researchers independently coded a subset of transcripts to ensure inter-coder reliability, with discrepancies resolved through discussion and consensus.

2.3. Theoretical and Methodological Rationale

The mixed-methods approach employed in this study aligns with the convergent parallel design commonly recommended in educational research, as outlined by Creswell and Plano Clark (Creswell & Clark, 2018). This design enables the integration of quantitative findings on the relationships among perceptions, creativity, and innovation behaviors with qualitative insights into the contextual factors and underlying mechanisms that shape these relationships. By triangulating data from multiple sources, the study achieves a more comprehensive and nuanced understanding of the phenomenon under investigation.

Furthermore, within the context of higher education, particularly in engineering education and STEM disciplines, lecturers' capacity for instructional innovation is influenced by multiple interrelated factors, including technological competence, organizational context, pedagogical beliefs, and individual motivation (N Yulin & Danso, 2025; Ovbiagbonhia et al., 2020). Previous research has demonstrated that teachers' beliefs and self-efficacy play critical roles in shaping their adoption of innovative practices (Ajzen, 1991; Chen, 2024; Li et al., 2025; Liu & Wang, 2019). A mixed-methods approach is therefore particularly suitable for capturing these multidimensional influences in a holistic manner, allowing for both statistical examination of relationships and in-depth exploration of lived experiences and contextual nuances.

This study adhered to ethical guidelines for research involving human participants. Ethical approval

was obtained from the institutional review board prior to data collection. All participants provided informed consent and were assured of confidentiality and anonymity. Participants were informed of their right to withdraw from the study at any time without penalty.

III. RESEARCH CONTENT AND FINDINGS

3.1. Theoretical Foundations

Lecturers' perceptions are widely recognized as a foundational factor in the successful implementation of instructional innovation. According to Ajzen's Theory of Planned Behavior, perceptions influence individuals' attitudes, intentions, and behaviors during the decision-making process (Ajzen, 1991). This theoretical framework suggests that when lecturers perceive instructional innovation as important and beneficial, they are more likely to demonstrate readiness for change and actively adopt new pedagogical approaches.

Moreover, perception extends beyond mere awareness to include evaluations of the relevance, feasibility, and effectiveness of innovative teaching methods within specific instructional contexts. Previous studies have consistently shown that positive lecturer perceptions constitute a prerequisite for the adoption and sustained implementation of pedagogical innovations (Chen, 2024; Li et al., 2025; Włodkowski, 2010). These perceptions are shaped by multiple factors, including prior experiences with innovation, institutional culture, professional development opportunities, and exposure to successful models of innovative practice.

3.2. Creativity in Teaching Practices

Creativity in teaching does not merely involve generating novelty but reflects the flexible integration of knowledge, pedagogical strategies, and technology to adapt to specific learning contexts and optimize teaching–learning processes (Tan, 2007; Wegerif et al., 2023). Runco and Jaeger conceptualized creativity as the coexistence of novelty and usefulness in a product or behavior - here manifested through instructional practices (Runco & Jaeger, 2012). This dual-criteria definition emphasizes that creative teaching must be both original and effective in achieving educational goals.

Within higher education, creativity enables lecturers to design engaging learning experiences that incorporate diverse instructional media and methods, thereby enhancing student motivation and active participation (Freeman et al., 2014; Koretsky et al., 2018). Furthermore, creativity serves as a foundation for developing students' critical thinking and problem-solving abilities - core competencies emphasized in contemporary higher education (Bokova, 2015; Torrance, 2018). Creative teaching practices include, but are not limited to, the design of authentic learning tasks, the integration of real-world problems into curriculum, the use of open-ended assignments that encourage divergent thinking, and the creation of collaborative learning environments that foster peer interaction and knowledge construction (Carol Ann Tomlinson et al., 2003; Wegerif et al., 2023).

3.3. Innovation in University Teaching Methods

Instructional innovation represents not merely a change in knowledge delivery techniques but a fundamental paradigm shift from content-oriented education to competency-based education (Bokova, 2015; Communist Party of Vietnam, 2013). UNESCO emphasizes that higher education in the twenty-first century should prioritize learner-centered approaches that foster self-directed learning, collaboration, and creative thinking (Bokova, 2015). This shift requires lecturers to reconceptualize their roles from knowledge transmitters to learning facilitators who guide students in constructing their own understanding.

Common forms of instructional innovation include the integration of information and communication technologies in teaching (Garrison & Kanuka, 2004), experiential and project-based learning (Hwang et al., 2018; Koretsky et al., 2018), and personalized learning through differentiation of content, instructional methods, and learning pace according to students' readiness, interests, and learning profiles (Carol Ann Tomlinson et al., 2003). Blended learning approaches, which combine face-to-face and online instruction, have been shown to unlock transformative potential in higher education by providing flexibility and expanding access to learning resources (Garrison & Kanuka, 2004).

These innovations are inherently linked to the digital education context, where lecturers' technological adaptability, creative capacity, and proactive learning attitudes become essential conditions for effective implementation (N Yulin & Danso, 2025). However, the successful adoption of innovative methods requires not only individual competence but also supportive institutional infrastructures, appropriate policy frameworks, and collaborative professional cultures.

3.4. Survey Results

3.4.1. Descriptive Findings

The survey involved 120 university lecturers in Vietnam and examined key variables related to perception, creativity, and instructional innovation. Descriptive analysis revealed the following patterns:

Perceptions of Instructional Innovation: Seventy-five percent (75%) of lecturers reported positive perceptions regarding the role of instructional innovation in enhancing teaching quality. This high level of awareness aligns with current educational reform trends emphasizing competency-based and digitalized learning models (Communist Party of Vietnam, 2013; Ovbiagbonhia et al., 2020; Vietnam, 2019). However, qualitative data suggested that while lecturers acknowledge the importance of innovation in principle, many lack concrete understanding of how to translate this awareness into practice.

Creativity as a Prerequisite: Sixty-three percent (63%) of lecturers identified creativity as a prerequisite for instructional innovation. This finding indicates widespread recognition of the relationship between creative capacity and innovative teaching. However, only 38% reported frequent engagement in innovative teaching practices, revealing a notable implementation gap between theoretical awareness and actual practice. This gap suggests the presence of barriers - whether individual, organizational, or systemic - that impede the translation of perceptions and creative potential into concrete innovative behaviors.

3.4.2. Correlation Analysis

Quantitative statistical analysis revealed significant relationships among the studied variables. Pearson correlation analysis indicated a strong positive correlation between lecturers' perceptions and creative capacity ($r = 0.69, p < 0.01$), suggesting that lecturers with clearer and more positive perceptions of instructional innovation tend to exhibit higher levels of teaching creativity. This finding is consistent with social cognitive theory, which posits that beliefs and perceptions shape individuals' motivation and capability to engage in specific behaviors (Bandura, 1997).

Additionally, a moderate positive correlation was observed between perception and the frequency of instructional innovation ($r = 0.57, p < 0.01$), indicating that positive perceptions are associated with increased adoption of innovative pedagogical practices. Similarly, creative capacity showed a moderate to strong correlation with innovation frequency ($r = 0.64, p < 0.01$), suggesting that creativity serves as a bridge between awareness and action.

3.4.3. Regression Analysis

Multiple linear regression analysis was conducted to examine the predictive relationships among the variables. The results demonstrated that creativity was a significant predictor of instructional innovation behavior ($\beta = 0.40, p < 0.015$), even when controlling for perceptions and demographic variables. This finding suggests that creativity plays a mediating role by transforming lecturers' perceptions into concrete innovative actions. The regression model explained approximately 52% of the variance in innovation behaviors ($R^2 = 0.52$), indicating a substantial predictive power.

These results are consistent with international studies in higher education, which highlight creative self-efficacy and beliefs in one's innovative capability as critical antecedents of pedagogical change (Chen, 2024; Li et al., 2025; Tierney & Farmer, 2002). Supporting evidence from a study conducted in Taiwan using multivariate regression analysis reported a strong predictive relationship between instructional innovation behavior and teaching effectiveness ($\beta = 0.528, p < 0.001$), particularly in improving student evaluations before and during the COVID-19 pandemic (Liu & Wang, 2019). These findings further underscore the positive role of pedagogical innovation in enhancing teaching effectiveness and student engagement.

3.5. Qualitative Findings: Influencing Factors

3.5.1. Individual-Level Facilitators

Creative Self-Efficacy and Confidence: Creative self-belief and creative self-efficacy emerged as critical individual-level factors influencing instructional innovation. Lecturers who possess strong confidence in their creative abilities are more inclined to adopt innovative teaching practices and persist in the face of challenges. Empirical studies in engineering and built-environment education ($n = 94$ lecturers) indicate that creative self-efficacy significantly predicts perceptions of relevance and the quality of classroom interaction in innovative learning environments (Chen, 2024; Li et al., 2025; Ovbiagbonhia et al., 2020). When lecturers trust their creative capabilities, they are more willing to tolerate uncertainty, experiment with novel approaches, and facilitate collaborative negotiation between students and instructors (Chen, 2024). As one interviewee noted:

"I believe that creativity is not just about having new ideas, but about having the confidence to try them out in the classroom, even if they might not work perfectly the first time."

Intrinsic Motivation and Epistemic Curiosity: Intrinsic motivation - the internal drive to engage in an activity for its own sake - plays an essential role in fostering creativity and sustaining innovative practices (Li et al., 2025). Individuals with high epistemic motivation, characterized by curiosity and openness to new experiences, tend to demonstrate stronger creative capacities (Bandura, 1997). In collaborative work environments, such individuals facilitate information exploration and complex problem-solving, thereby enabling more effective innovation. Interview participants emphasized that their passion for teaching and desire

to improve student learning outcomes were primary motivators for experimenting with new methods.

Reflective Practice: Reflective professional practice emerged as a key mechanism for sustaining instructional innovation over time. According to Schön, reflective practice involves continuous critical examination of teaching experiences through evidence collection, self-evaluation, and instructional adjustment (Schön, 2016). Regular engagement in reflective practice enables lecturers to identify limitations early, learn from both successes and failures, and promotes sustained creativity and innovation in teaching. Several interviewed lecturers reported maintaining teaching journals or portfolios to document their innovations and track student responses.

3.5.2. Organizational and Institutional Factors

Organizational Culture and Institutional Policies: Organizational culture and institutional policies play a pivotal role in either facilitating or constraining instructional innovation. Academic environments that actively protect and reward innovation - through incentive mechanisms, recognition of exemplary teaching practices, provision of innovation grants, and establishment of shared teaching resource repositories - encourage lecturers to engage in pedagogical experimentation (Luong et al., 2025; T. T. M., 2022). A collaborative culture that promotes knowledge sharing, peer observation, and communities of practice further enhances collective creativity and instructional innovation. However, interview data revealed that many institutions still prioritize research productivity over teaching excellence in promotion and tenure decisions, creating disincentives for investing time in pedagogical innovation.

Technological Infrastructure and Support: Technological competence and access to appropriate digital tools represent core enabling factors in contemporary higher education reform. Although many lecturers recognize the benefits of digital technologies for teaching, studies indicate persistent gaps in advanced technological training and resistance to change among some faculty members (N Yulin & Danso, 2025). Enhancing digital pedagogical readiness requires systematic professional development programs, ongoing technical support, and clear institutional policies that provide resources and time for learning new technologies. Interviewed lecturers emphasized the importance of having dedicated instructional technology staff who can provide just-in-time assistance and customized training.

3.5.3. Barriers to Innovation

Time Constraints and Workload Pressures: Motivational factors and occupational pressures constitute significant barriers to instructional innovation. Time constraints, disciplinary demands, heavy teaching loads, and administrative responsibilities often discourage lecturers from experimenting with new methods that require substantial upfront investment in design and preparation. Research demonstrates that while intrinsic motivation positively relates to creative outcomes, excessive workload pressure significantly reduces innovative behavior (C. S. Wallace et al., 2021; Li et al., 2025). As one interviewee stated:

"I have many ideas for improving my courses, but with four classes to teach, committee work, and pressure to publish, I simply don't have the time to redesign everything."

Resistance to Change and Risk Aversion: Some lecturers expressed concerns about the potential risks associated with innovation, including student resistance to unfamiliar methods, concerns about course evaluations, and uncertainty about learning outcomes. This risk aversion was particularly pronounced among early-career faculty who felt pressure to demonstrate teaching competence through traditional methods.

3.5.4. Evidence-Based Innovative Approaches

Active and collaborative learning approaches - such as group work, discussion-based learning, project-based learning (PBL), and STEAM education - have been shown to enhance interaction, critical thinking, and creativity in teaching (C. S. Wallace et al., 2021; Freeman et al., 2014; Hwang et al., 2018; Koretsky et al., 2018). A comprehensive meta-analysis of over 225 studies in STEM classrooms reported a reduction in failure rates from 32% to 21% and an average learning gain of 0.47 standard deviations when active learning methods were employed compared to traditional lecture-based instruction (Freeman et al., 2014). Another study found that students taught by a first-time instructor using active learning strategies outperformed those taught by a highly regarded traditional instructor (C. S. Wallace et al., 2021).

These approaches provide a favorable foundation for instructional innovation by shifting the locus of learning from teacher to student and promoting deeper cognitive engagement (Hake, 1998; Koretsky et al., 2018; M. Lagubeau et al., 2019). However, STEAM education and other interdisciplinary approaches require lecturers to possess interdisciplinary competence, collaborative skills, and access to flexible institutional support systems to be implemented effectively (Hwang et al., 2018). Interview participants who had successfully implemented such approaches emphasized the importance of starting small, seeking peer collaboration, and continuously refining practices based on student feedback and learning outcomes data.

IV. CONCLUSION

4.1. Summary of Key Findings

This study examined the dynamic relationships among university lecturers' perceptions of instructional innovation, their creative capacity, and the implementation of innovative teaching practices in the Vietnamese higher education context. Through a mixed-methods approach integrating quantitative survey data from 120 lecturers and qualitative interviews with 10 exemplary innovators, several key findings emerged.

First, the quantitative analysis demonstrated that positive perceptions of educational innovation constitute a fundamental driver of creative thinking among university lecturers. The strong positive correlation ($r = 0.69$, $p < 0.01$) between perceptions and creative capacity suggests that when lecturers recognize the importance and benefits of instructional innovation, they are more likely to develop and exercise their creative pedagogical abilities.

Second, creativity functions as a critical mediating mechanism that translates perception into instructional innovation behavior. The regression analysis revealed that creative capacity significantly predicted innovation implementation ($\beta = 0.40$, $p < 0.015$), indicating that creativity serves as a bridge between awareness and action. This finding aligns with theoretical frameworks emphasizing the role of self-efficacy and creative confidence in enabling behavioral change (Ajzen, 1991; Bandura, 1997; Tierney & Farmer, 2002).

Third, despite high levels of awareness regarding the importance of innovation (75%) and recognition of creativity as a prerequisite (63%), only 38% of lecturers reported frequent engagement in innovative teaching practices. This substantial implementation gap highlights the existence of multiple barriers that impede the translation of perceptions and creative potential into sustained innovative practice.

4.2. Barriers to Instructional Innovation

The qualitative findings revealed several persistent barriers to instructional innovation in Vietnamese higher education. At the individual level, low creative self-efficacy and concerns about competence in implementing unfamiliar pedagogical approaches emerged as significant constraints (Chen, 2024; Tierney & Farmer, 2002). Many lecturers expressed uncertainty about their ability to effectively design and facilitate active learning environments, reflecting insufficient preparation in innovative pedagogical methods during their own professional training.

At the organizational level, limited access to targeted professional development opportunities, particularly in areas such as technology-enhanced learning, active learning strategies, and assessment for learning, constrained lecturers' capacity to develop innovative practices (N Yulin & Danso, 2025). Furthermore, organizational cultures that do not sufficiently encourage pedagogical experimentation - characterized by reward systems that prioritize research over teaching and risk-averse institutional climates - discourage lecturers from investing time and effort in instructional innovation (Luong et al., 2025; T. T. M, 2022).

Finally, increasing occupational pressures, including heavy teaching loads, administrative responsibilities, and pressure to maintain research productivity, create time constraints that hinder lecturers' ability to engage in the reflective practice and iterative design processes necessary for sustained creative engagement and consistent implementation of innovative teaching methods (Li et al., 2025; Schön, 2016). These multi-level constraints interact to create systemic barriers that must be addressed through coordinated interventions at individual, departmental, and institutional levels.

4.3. Implications for Policy and Practice

Based on the empirical findings, this study offers several implications for educational policy and institutional practice aimed at fostering a more supportive ecosystem for instructional innovation in higher education.

4.3.1. Enhancing Creative Self-Efficacy Through Professional Development

Higher education institutions should implement comprehensive professional development programs specifically designed to strengthen creative self-efficacy and innovative pedagogical competence among lecturers (Chen, 2024; N Yulin & Danso, 2025; Tierney & Farmer, 2002). These programs should move beyond one-time workshops to include sustained learning opportunities such as teaching communities of practice, peer mentoring relationships, and longitudinal faculty learning communities. Evidence-based approaches, including microteaching with feedback, observation of innovative practitioners, and guided reflection on teaching experiences, can help lecturers build confidence in their creative capacities (Schön, 2016).

Professional development initiatives should also explicitly address the integration of active learning strategies (C. S. Wallace et al., 2021; Freeman et al., 2014; Koretsky et al., 2018), technology-enhanced instruction (Garrison & Kanuka, 2004; Hwang et al., 2018), and differentiated teaching approaches (Carol Ann Tomlinson et al., 2003) that have been shown to improve student learning outcomes. Providing lecturers with opportunities to experiment with these methods in low-stakes environments and offering ongoing support during

implementation can reduce perceived risks and increase adoption rates.

4.3.2. Institutional Policies That Recognize and Reward Teaching Innovation

Universities must establish institutional policies that systematically recognize, reward, and disseminate effective teaching innovations (Luong et al., 2025; T. T. M, 2022). This includes integrating teaching innovation as a substantive criterion in promotion and tenure decisions, creating teaching excellence awards with meaningful recognition and resources, and establishing innovation grant programs that provide time and funding for pedagogical experimentation.

Furthermore, institutions should develop mechanisms for documenting and sharing innovative practices, such as teaching portfolios, video repositories of exemplary teaching, and internal conferences focused on the scholarship of teaching and learning. Making teaching practices more visible and valued within the academic community can help shift organizational culture toward greater appreciation for pedagogical innovation (Schön, 2016).

4.3.3. Building Academic Communities of Practice

Developing academic communities of practice provides critical support structures for lecturers engaging in instructional innovation (Schön, 2016; Wegerif et al., 2023). These communities facilitate the sharing of innovative teaching experiences, collaborative problem-solving around pedagogical challenges, and collective learning from both successes and failures. Structured opportunities for peer observation, collaborative course design, and interdisciplinary dialogue can enhance individual creativity while building institutional capacity for innovation.

Communities of practice also serve important functions in reducing isolation, providing emotional support for risk-taking, and creating networks through which innovations can diffuse across departments and disciplines. Institutions should provide dedicated time, space, and facilitation for these communities to flourish.

4.3.4. Integrating Reflective Practice Into Institutional Culture

Reflective professional practice should be systematically integrated into departmental activities and scholarship of teaching and learning initiatives (Schön, 2016). This includes creating expectations and structures for regular reflection on teaching, such as teaching journals, peer feedback protocols, student learning outcomes assessment, and action research projects focused on pedagogical improvement.

Institutions can support reflective practice by providing frameworks and tools for systematic reflection, creating protected time for this work, and recognizing reflective practice as a legitimate form of scholarly activity. When reflection becomes embedded in institutional culture rather than an individual discretionary activity, it can drive continuous improvement and sustained innovation.

4.3.5. Promoting Evidence-Based Active Learning Approaches

Given the substantial evidence supporting the effectiveness of active learning approaches in enhancing student outcomes (C.S. Wallace et al., 2021; Freeman et al., 2014; Hake, 1998; Koretsky et al., 2018; M. Lagubeau et al., 2019), institutions should actively promote these methods within curriculum development and course design processes. This includes supporting the implementation of project-based learning, collaborative learning, problem-based learning, and interdisciplinary STEAM education (Hwang et al., 2018).

However, successful adoption requires more than advocacy; it necessitates systematic support including appropriate classroom spaces designed for active learning, reasonable class sizes that enable interaction, flexibility in scheduling to accommodate longer or differently structured class sessions, and assessment systems aligned with active learning goals. Institutions must address these infrastructural and systemic factors to enable widespread implementation.

4.3.6. Fostering Collaborative Learning Environments

Finally, fostering collaborative learning environments that encourage peer learning and the diffusion of innovative pedagogical practices among lecturers is essential for creating sustainable change (Luong et al., 2025; T. T. M, 2022; Wegerif et al., 2023). This includes establishing cross-disciplinary teaching teams, creating opportunities for co-teaching and team-teaching, and building networks that connect novice innovators with experienced practitioners who can serve as models and mentors.

Collaborative environments not only facilitate knowledge transfer but also reduce the individual risks associated with innovation by distributing responsibility across multiple participants. When innovation becomes a collective rather than individual endeavor, it is more likely to be sustained and scaled.

4.4. Contributions and Limitations

This study makes several contributions to the literature on instructional innovation in higher education. Theoretically, it extends understanding of the relationships among perceptions, creativity, and innovation behaviors by demonstrating creativity's mediating role in translating awareness into action. Methodologically, the mixed-methods design provides both statistical evidence of relationships and rich contextual insights into the mechanisms and barriers shaping these relationships. Practically, the findings offer evidence-based guidance for policy development and institutional practice in the Vietnamese higher education context, with potential applicability to other educational systems facing similar reform challenges.

However, several limitations should be acknowledged. The cross-sectional design precludes causal inferences; longitudinal research is needed to examine how perceptions, creativity, and innovation behaviors evolve over time and influence one another dynamically. The sample, while diverse in disciplinary representation, was drawn from a limited number of institutions and may not fully represent the heterogeneity of Vietnamese higher education. Self-reported measures of creativity and innovation may be subject to social desirability bias. Future research employing observational methods, student outcome data, and multi-source assessments could provide more robust evidence of innovative teaching practices and their effects.

4.5. Concluding Remarks

In conclusion, transforming higher education to meet the demands of the twenty-first century requires fundamental shifts in pedagogical approaches - from content transmission to competency development, from teacher-centered to learner-centered instruction, and from isolated practice to collaborative innovation (Bokova, 2015; Communist Party of Vietnam, 2013). This transformation depends critically on lecturers' perceptions, creative capacities, and willingness to engage in sustained innovation.

The findings of this study suggest that while Vietnamese university lecturers demonstrate substantial awareness of the importance of instructional innovation, translating this awareness into consistent practice requires addressing multiple barriers at individual, organizational, and systemic levels. Enhancing lecturers' creative self-efficacy, providing comprehensive professional development, establishing supportive organizational cultures, recognizing and rewarding teaching excellence, and creating collaborative communities of practice are essential components of a comprehensive strategy for promoting instructional innovation.

Ultimately, these measures can contribute to creating a supportive ecosystem in which lecturers are empowered to engage in sustained instructional innovation, thereby enhancing teaching quality, improving student learning outcomes, and strengthening the capacity of higher education institutions to fulfill their societal mission in an era of rapid change and global interconnection. The success of educational reform initiatives depends not only on policy directives and resource allocation but fundamentally on cultivating the creative agency of lecturers and building institutional cultures that value, support, and celebrate pedagogical innovation.

Conflict of interest

There is no conflict to disclose.

ACKNOWLEDGEMENT

The authors have no acknowledgements to declare.

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