



Proposing Solutions for Developing Innovation Capacity of Lecturers at Thai Binh University

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Abstract: This study focuses on analyzing the innovation capacity of university lecturers in the context of increasing demands for improving the quality of teaching and research in Vietnamese higher education institutions. Based on a clarified theoretical framework, the paper evaluates the current situation at Thai Binh University and identifies key factors influencing lecturers' innovation capacity, including individual competencies, academic environment, governance mechanisms, and the level of collaboration with enterprises and international partners. From the analytical results, the study proposes six main groups of solutions: (i) enhancing lecturers' professional, digital, and research competencies; (ii) developing and improving the research and innovation ecosystem; (iii) fostering an academic culture that encourages creativity; (iv) accelerating digital transformation in teaching, research, and governance; (v) improving policies and mechanisms to stimulate innovation; and (vi) strengthening collaboration with enterprises and expanding international integration. These solutions are designed in a systemic approach, integrating individual capacity development with organizational environment improvement, aiming to enhance the effectiveness of innovation in teaching and research activities. The findings provide both theoretical and practical foundations for improving the quality of academic staff, thereby promoting the academic development of Thai Binh University in the context of international integration.

Keywords: Innovation Capacity, University Lecturers, Higher Education, Digital Transformation, Thai Binh University.

INTRODUCTION

In the context of globalization, digital transformation, and the Fourth Industrial Revolution (Industry 4.0), higher education is shifting from a traditional model to an innovation-driven university model, where teaching, scientific research, and technology transfer are considered the three core pillars of development. Higher education institutions are no longer solely responsible for providing high-quality human resources but also serve as central hubs for knowledge creation, fostering innovation, and promoting knowledge-based economic development [1][2]. In this transformation process, academic staff play a decisive role in determining the quality of education, research performance, and the innovation capacity of universities. Beyond teaching activities, lecturers are expected to develop independent research capabilities, apply digital technologies, explore new research directions, and strengthen

collaboration with enterprises to transfer research outcomes into practice. According to OECD (2019) [3], lecturers' innovation capacity is one of the core factors enhancing the competitiveness of higher education institutions in the context of digital transformation and international integration. In Vietnam, science, technology, and innovation have been identified as key drivers of economic growth and national productivity improvement, as stated in Resolution No. 52-NQ/TW of the Politburo, the Strategy for Science, Technology and Innovation Development to 2030, and the Education Development Strategy to 2030. These policies emphasize the need to improve the quality of academic staff, strengthen research and technology transfer capacity, and accelerate digital transformation in higher education.

For Thai Binh University (TBU), enhancing lecturers' innovation capacity is crucial for improving the quality of education, scientific research, and socio-economic development of the local region. Although the university has achieved positive results in staff development and research activities, lecturers' innovation capacity still faces limitations related to research resources, incentive mechanisms, international integration, and digital application capability.

Based on these requirements, this paper analyzes the theoretical foundations of lecturers' innovation capacity development, assesses the current situation at Thai Binh University, and proposes solutions to enhance lecturers' innovation capacity in the context of digital transformation and international integration.

THEORETICAL FOUNDATIONS FOR DEVELOPING UNIVERSITY LECTURERS' INNOVATION CAPACITY

Concept of Innovation Capacity

According to the OECD (2018) [4], innovation refers to the process of creating or significantly improving products, services, processes, or organizational methods in order to generate new value for organizations and society. In higher education, innovation is not limited to scientific research activities but also includes the renewal of teaching methods, application of digital technologies, curriculum development, and strengthened links between universities, enterprises, and communities. Based on this perspective, lecturers' innovation capacity can be understood as the ability to mobilize and integrate knowledge, skills, experience, and professional attitudes to identify problems, generate new ideas, conduct research, apply research outcomes into practice, and adapt to changes in the educational environment [2][5]. This capacity is formed through processes of education, research engagement, professional practice, and academic interaction, while also being shaped by institutional conditions and higher education policies.

Components of Innovation Capacity

Drawing on OECD (2019), UNESCO (2021), and the World Bank (2020) [6], lecturers' innovation capacity is a multidimensional construct consisting of five interrelated components.

First, professional expertise and research competence enable lecturers to develop research ideas, mobilize resources, publish scientific outputs, and transfer technologies.

Second, pedagogical innovation reflects the ability to design active learning environments, apply modern teaching approaches, and assess learners based on learning outcomes.

Third, in the context of digital transformation, digital competence has become essential, encompassing the ability to exploit data, apply artificial intelligence tools, utilize learning management systems, and use data analytics to support teaching and research.

Fourth, collaboration and international integration competence allows lecturers to participate in research networks and expand cooperation with enterprises, research institutes, and international partners. Finally, entrepreneurship and knowledge transfer competence enables the transformation of research results into practical products, solutions, or services, thereby strengthening the role of universities within the innovation ecosystem.

Factors Influencing Innovation Capacity

Research generally agrees that lecturers' innovation capacity is shaped by both individual and institutional factors. At the individual level, academic qualifications, research experience, digital skills, professional motivation, and lifelong learning ability are key determinants of innovation performance. At the institutional level, academic environment, governance mechanisms, research policies, financial resources, research infrastructure, and the degree of university autonomy directly affect lecturers' research productivity and innovative performance [7]. The OECD (2019) [3] further emphasizes that investment in research and development (R&D), strengthened university–industry collaboration, and internationalization of higher education are three major drivers of innovation capacity development among academic staff. Therefore, developing innovation capacity should be approached systematically, integrating individual capacity building with the improvement of institutional environments, governance mechanisms, and the overall innovation ecosystem of higher education institutions.

RESEARCH METHODOLOGY

This study adopts a qualitative research approach combined with descriptive statistics and a case study design to analyze the current situation and propose solutions for developing lecturers' innovation capacity at Thai Binh University. The methods of document analysis and synthesis are used to establish the theoretical framework of university lecturers' innovation capacity [8]. The data sources include both domestic and international research publications, reports from OECD, UNESCO and the World Bank, as well as legal documents and strategic policies on education, science, technology, and innovation development in Vietnam. The synthesized findings are used to develop the analytical framework and guide the assessment of the current situation.

Descriptive statistical methods are applied to analyze secondary data related to the university's academic staff, research activities, research groups, funded projects, and scientific publications. The data are collected from annual reports, scientific summaries, and institutional statistical documents of Thai Binh University for the period 2021–2025 (or the relevant research period). The processing and synthesis of these data help reflect the current status of lecturers' innovation capacity development. In addition, a case study approach is employed to examine Thai Binh University as a regional public university undergoing digital transformation and developing towards an applied-oriented model. This approach enables a deeper understanding of the relationship between organizational conditions, research resources, governance mechanisms, and lecturers' innovation capacity.

Based on the comparison between analytical findings, theoretical perspectives, and international experience, the study proposes a system-based set of solutions that integrate individual capacity development with improvements in governance mechanisms, academic environment, and the university's innovation ecosystem. This approach ensures the scientific rigor, practical relevance, and applicability of the proposed solutions.

SOLUTIONS FOR DEVELOPING LECTURERS' INNOVATION CAPACITY AT THAI BINH UNIVERSITY

Enhancing Professional, Digital and Research Competencies

Developing innovation capacity should begin with strengthening lecturers' professional expertise, digital skills, and research competence. According to OECD (2019) [9], modern university lecturers are not only responsible for teaching but also for conducting research, creating knowledge, and applying technology in their professional activities. Although lecturers at Thai Binh University generally have relatively uniform academic qualifications, there remain disparities in research competence and digital technology application among different groups. Therefore, the university should design integrated capacity-building programs combining subject expertise, research methodology, scientific publication skills, and digital competencies. In particular, training in artificial intelligence (AI), data analytics, simulation technologies, and online learning platforms should be strengthened. The systematic implementation of such programs will contribute to improving research capacity, enhancing adaptability to digital transformation, and fostering innovative thinking among lecturers [2].

Developing a Research and Innovation Ecosystem

Innovation capacity can only be fully realized within a supportive research ecosystem. OECD (2019) [2] and UNESCO (2021) [10] emphasize that a strong research environment is fundamental for universities to generate new knowledge and promote technology transfer. Although Thai Binh University has established research groups and implemented various scientific projects, collaboration among research groups and alignment with local socio-economic needs remain limited. Therefore, the university should prioritize the development of interdisciplinary research groups focusing on its strategic strengths and regional development needs. At the same time, it is necessary to improve financial support mechanisms, reduce teaching loads for principal investigators, and encourage publications in reputable international journals. These measures will enhance research productivity, improve scientific output quality, and gradually form an internal innovation ecosystem [7].

Building an Academic Environment and Innovation Culture

The academic environment plays a crucial role in shaping research motivation and fostering creativity among lecturers. According to Tierney and Lanford (2016) [8], an organizational culture that promotes knowledge sharing, interdisciplinary collaboration, and academic freedom is essential for developing innovation capacity. At Thai Binh University, an open academic environment should be developed through regular scientific seminars, academic forums, research clubs, and collaborative activities with enterprises, research institutes, and other universities. In addition, establishing innovation spaces, open laboratories, and research support centers will create favorable conditions for both lecturers and students to engage in research, product development, and knowledge transfer. These initiatives will gradually foster a strong research culture and an innovation-driven mindset across the institution.

Promoting Digital Transformation in Teaching, Research, and University Governance

Digital transformation is an inevitable trend for improving the quality of education and university governance. UNESCO (2021) [2] highlights that the application of digital technologies not only expands access to knowledge but also enables pedagogical innovation and enhances research capacity. As Thai Binh University continues its digital transformation process, it is necessary to further develop a comprehensive Learning Management System

(LMS), build shared digital learning resources and research databases, and encourage lecturers to apply AI, digital simulation, and data analytics tools in teaching, research, and academic management. Systematic investment in digital infrastructure, combined with capacity building in digital skills for lecturers, will significantly improve training effectiveness, research productivity, and the university's overall competitiveness.

Improving Policies and Incentive Mechanisms for Innovation

Governance mechanisms and incentive policies are key drivers of lecturers' research and innovation activities. The World Bank (2020) [11] notes that higher education institutions with effective evaluation and incentive systems tend to achieve better research outputs and stronger technology transfer performance. Accordingly, Thai Binh University should refine its lecturer evaluation system by giving greater weight to scientific research outcomes, pedagogical innovation, technology transfer, and industry collaboration. In addition, the university should establish clear mechanisms to support international publication, intellectual property registration, and commercialization of research results. Linking benefits with research performance will create strong motivation for lecturers to actively engage in innovation and improve scientific productivity.

Strengthening Collaboration with Enterprises and Expanding International Integration

In the context of open innovation, collaboration among universities, enterprises, and government agencies is a key driver of science and technology development. The Triple Helix model proposed by Etzkowitz and Leydesdorff (2000) [12] emphasizes that strong linkages among these three actors contribute to a sustainable innovation ecosystem. Therefore, Thai Binh University should expand cooperation with enterprises, research institutes, and domestic and international universities to implement joint research projects, co-publish scientific works, transfer technology, and promote academic exchange. At the same time, lecturers should be encouraged and supported to participate in international research projects, academic networks, and expert exchange programs. Expanding collaboration will enhance international integration capacity, strengthen research resource mobilization, and gradually affirm the academic position of Thai Binh University within the higher education system.

CONCLUSION

Developing lecturers' innovation capacity is an inevitable requirement for higher education institutions in the context of digital transformation, international integration, and the development of a knowledge-based economy. Based on a synthesis of the theoretical framework, an analysis of the current situation at Thai Binh University, and a review of international experiences, the study shows that lecturers' innovation capacity is influenced by multiple factors, including professional competence, digital skills, academic environment, governance mechanisms, research resources, and the level of collaboration with enterprises as well as domestic and international partners. The findings indicate that Thai Binh University has made positive progress in developing its academic staff and scientific research activities. However, several limitations remain, particularly in research resources, innovation infrastructure, international integration capacity, and incentive mechanisms for lecturers' innovative activities. Accordingly, the study proposes six key groups of solutions: enhancing professional, digital, and research competencies; developing a research and innovation ecosystem; building an academic environment and innovation culture; promoting digital transformation in teaching, research, and governance; improving policies and incentive

mechanisms for innovation; and strengthening collaboration with enterprises and international partners.

The contribution of this study lies not only in systematizing the theoretical foundations of lecturers' innovation capacity development but also in proposing a system-based solution framework that integrates individual capacity building with institutional environment improvement and governance mechanisms. These solutions are aligned with current trends in modern higher education and are adapted to the practical conditions of Thai Binh University, thereby contributing to improving training quality, research capacity, and knowledge transfer in the context of digital transformation. For effective implementation, the university should develop a clear roadmap aligned with its 2026–2035 strategic development plan, while improving the evaluation system for innovation outcomes, increasing investment in research infrastructure and digital transformation, and expanding cooperation with enterprises and international partners. These efforts will serve as an important foundation for enhancing lecturers' innovation capacity and strengthening the academic position of Thai Binh University within the Vietnamese higher education system.

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