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ENHANCING THE EFFECTIVENESS OF ACTIVE, LEARNER-CENTERED TEACHING METHODS IN HIGHER EDUCATION: A CASE STUDY IN VIETNAM

APRIMORANDO A EFICÁCIA DE MÉTODOS DE ENSINO ATIVOS E CENTRADOS NO ALUNO NO ENSINO SUPERIOR: UM ESTUDO DE CASO NO VIETNÃ

MEJORAR LA EFICACIA DE LOS MÉTODOS DE ENSEÑANZA ACTIVOS Y CENTRADOS EN EL ESTUDIANTE EN LA EDUCACIÓN SUPERIOR: UN ESTUDIO DE CASO EN VIETNAM

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ABSTRACT: Study examines the integration of innovative assessment methods, culturally responsive teaching, and technological tools—including digital platforms and artificial intelligence—in Vietnam’s higher education. Using a mixed-method design, it combines a systematic literature review with qualitative thematic analysis of practical experiences and expert insights. The findings show that active, learner-centered approaches enhance engagement, autonomy, creativity, and critical thinking, aligning with the goals of the credit-based system. However, challenges persist, such as limited lecturer preparation, inadequate technological infrastructure, large class sizes, and traditional teaching practices. The study emphasizes the need for comprehensive strategies, including sustained professional development for lecturers, improved infrastructure, culturally responsive pedagogy, and technology-enhanced learning solutions. Addressing these areas can strengthen teaching effectiveness and improve student outcomes, better preparing graduates for complex professional and societal demands.

KEYWORDS: Active teaching methods. Learner-centered approach. Higher education.

RESUMO: Este estudo examina a integração de métodos inovadores de avaliação, ensino culturalmente responsivo e ferramentas tecnológicas — incluindo plataformas digitais e inteligência artificial — no ensino superior do Vietnã. Utilizando uma metodologia mista, combina uma revisão sistemática da literatura com análise temática qualitativa de experiências práticas e percepções de especialistas. Os resultados mostram que abordagens ativas e centradas no aluno aprimoram o engajamento, a autonomia, a criatividade e o pensamento crítico, alinhando-se aos objetivos do sistema de créditos acadêmicos. No entanto, desafios persistem, como a preparação limitada dos docentes, a infraestrutura tecnológica inadequada, turmas numerosas e práticas de ensino tradicionais. O estudo enfatiza a necessidade de estratégias abrangentes, incluindo o desenvolvimento profissional contínuo dos docentes, a melhoria da infraestrutura, a pedagogia culturalmente responsiva e soluções de aprendizagem aprimoradas pela tecnologia. Abordar essas áreas pode fortalecer a eficácia do ensino e melhorar os resultados dos alunos, preparando melhor os graduados para as complexas demandas profissionais e sociais.

PALAVRAS-CHAVE: Métodos de ensino ativos. Abordagem centrada no aluno. Ensino superior.

RESUMEN: Este estudio examina la integración de métodos innovadores de evaluación, enseñanza culturalmente receptiva y herramientas tecnológicas —incluidas plataformas digitales e inteligencia artificial— en la educación superior de Vietnam. Utilizando una metodología mixta, combina una revisión sistemática de la literatura con un análisis temático cualitativo de experiencias prácticas y percepciones de especialistas. Los resultados muestran que las estrategias activas y centradas en el estudiante mejoran el compromiso, la autonomía, la creatividad y el pensamiento crítico, alineándose con los objetivos del sistema de créditos académicos. No obstante, persisten desafíos como la preparación limitada del profesorado, la infraestructura tecnológica insuficiente, los grupos numerosos y las prácticas tradicionales de enseñanza. El estudio destaca la necesidad de estrategias integrales, incluido el desarrollo profesional continuo del profesorado, la mejora de la infraestructura, la pedagogía culturalmente receptiva y soluciones de aprendizaje potenciadas por la tecnología. Abordar estas áreas puede fortalecer la eficacia de la enseñanza y mejorar los resultados del estudiantado, preparando mejor a los graduados para las complejas demandas profesionales y sociales.

PALABRAS CLAVE: Métodos de enseñanza activos. Enfoque centrado en el estudiante. Educación superior.

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INTRODUCTION

In contemporary higher education, active teaching methods that emphasize learner-centered approaches are becoming increasingly vital for developing learners' competencies, autonomy, and creativity (Do, 2022; Tran et al., 2024). The shift from traditional teaching methods—typically characterized by passive knowledge reception—to active and learner-centered approaches marks a significant evolution in pedagogical practices, aligning closely with global trends toward educational innovation and digital transformation (Tran et al., 2021). These modern methodologies not only aim at transferring knowledge but also prioritize enhancing critical thinking, problem-solving skills, and practical application abilities among learners, thereby preparing them effectively for professional and societal challenges (Nguyen, 2022).

The implementation of active teaching methods within a credit-based education system, which emphasizes learner autonomy and flexible modular learning, further necessitates significant adjustments in both educator roles and institutional frameworks (Tran et al., 2021; Vuong, 2014). According to Vuong (2014), the adoption of learner-centered teaching within credit-based systems does not diminish the educator's role; rather, it intensifies educators' responsibilities, positioning them as facilitators and mentors who guide learners in independent knowledge exploration and application.

However, despite the acknowledged benefits of active teaching methods, numerous challenges impede their widespread and effective implementation. Lecturers frequently face obstacles such as inadequate preparation, insufficient technological skills, limited classroom resources, and large class sizes, all of which constrain interactive and individualized teaching methods (Nguyen, 2024; Tran et al., 2024; Tran & Ngo, 2024). Additionally, lecturers' intrinsic attributes, including their thinking styles and emotional intelligence, significantly influence their propensity to adopt these methods, suggesting the need for targeted professional development and support systems (Nghiem et al., 2022).

Furthermore, successful implementation of active, learner-centered teaching methods requires comprehensive changes in assessment practices and feedback mechanisms. Innovative assessment methods, such as rubric-based evaluation, demonstrate enhanced transparency, fairness, and learner engagement compared to traditional assessment techniques (Nguyen et al., 2025). Effective feedback that is immediate, specific, and actionable also plays a crucial role in facilitating learners' cognitive and non-cognitive skill development, thereby reinforcing active learning processes (Charalampous & Darra, 2025).

Considering the diverse cultural influences on educational practices, it is also essential for higher education institutions to adopt culturally responsive pedagogies that align teaching methods with learners' cultural contexts and preferences (Ali, 2025). Moreover, technological integration, including Artificial Intelligence and digital learning platforms, can substantially

enhance educational quality and ease lecturers' burdens by automating administrative tasks and personalizing learning experiences (Beirat, 2025).

To address these multifaceted challenges, this research aims to propose effective measures for enhancing active, learner-centered teaching methods within the credit-based education framework. Specifically, the paper will explore strategies addressing lecturer professional development and pedagogical preparation (Hoang et al., 2025), curricular innovation and alignment with industry demands (Yen & Vinh, 2024), technological integration in teaching methodologies (Khac, 2024), and strategies to overcome existing challenges in classroom implementation (Phan, 2024; Bui et al., 2025).

By systematically addressing these aspects, the study aims to significantly contribute to the ongoing discourse on educational innovation, providing actionable insights for improving teaching quality, learner satisfaction, and the overall effectiveness of higher education institutions. Ultimately, enhancing the implementation of active, learner-centered teaching methods will equip graduates with the essential skills to navigate and thrive in increasingly complex professional and societal landscapes.

STUDY RESULTS

Active, learner-centered teaching and learning methods in higher education

Teaching methods play a crucial role in improving educational quality. In the context of rapid scientific and technological advancements, which profoundly impact all aspects of life, integrating scientific achievements into education, particularly innovating teaching methods, has become an urgent requirement. Currently, the process of innovating teaching methods is oriented towards pedagogical integration, with the core principle of developing learner capabilities.

Accordingly, teaching methods not only encourage active and creative thinking but also emphasize developing problem-solving skills applicable to real-life and professional situations. Simultaneously, the learning process closely integrates theory with practice, enabling learners to effectively apply their knowledge practically. This educational perspective is learner-centered, aimed at maximizing individual potential and capabilities.

According to Vu (2020, n.p.), "active teaching methods are an abbreviated term used in many countries referring to educational approaches that promote learners' activity, initiative, and creativity, thereby enhancing their learning capabilities."

Kharlamop (1978) states: Activity is a component of character; active learning implies proactively and consciously completing tasks with determination, clear goals, initiative, and enthusiasm—both intellectually and physically—to enhance knowledge, skills, techniques,

and their practical application. Thus, activity is essential to all cognitive processes and is a significant factor influencing teaching effectiveness. There is a reciprocal and close relationship between the teacher's teaching methods and students' learning methods.

For instance, students might demand active teaching methods that teachers are not yet able to satisfy, or teachers enthusiastically apply active methods unsuccessfully due to students' passive learning habits. Therefore, teachers must persistently implement activities that gradually develop students' active learning abilities in a manageable progression from basic to advanced. Successful innovation in teaching methods requires cooperation between teachers and students and harmonious coordination between teaching and learning activities (Kharlamop, 1978, p. 22).

Sharma (1998) stated,

In learner-centered teaching methods, the entire teaching process focuses on learners' needs, abilities, and interests. The goal is to develop students' independent learning skills and problem-solving capabilities ... The teacher's role is to create situations to develop problems, assist students in recognizing problems, formulating hypotheses, clarifying and testing these hypotheses, and drawing conclusions. (n.p.)

Learner-centered learning is an approach where learners choose not only what to learn but also how and why they learn. At the core of this learning environment are the responsibility and initiative of the learner, contrasting traditional teaching methods where teachers control more aspects and focus on content delivery.

Learner-centered learning is simply defined as an approach where learners choose not only what to learn but also how and why a subject is important. In other words, the learning environment emphasizes learner responsibility and initiative, rather than teacher control and content, as in traditional teaching methods. Additionally, the learning process becomes more meaningful when the content relates directly to the learner's life, needs, and interests, encouraging them to create, understand, and connect knowledge.

According to Le (2006), teaching methods are considered active if they clearly express the role of available information sources and resources, explicitly demonstrate learners' motivation at the beginning of the course, illustrate the nature and level of required knowledge mobilization, highlight the roles of learners, teachers, and their interactions throughout the learning process, and clearly outline the expected learning outcomes (Le, 2006, p. 7)

Currently, learner-centered teaching often involves superficial changes rather than addressing core issues. Because classroom time is limited, lecturers usually attempt to deliver as much content as possible, expecting learners to further study independently outside class

rather than fully engaging during class. Practical activities remain limited, and support for students' self-study has not been adequately ensured.

Most students are passive, less creative, and do not expand their knowledge beyond classroom lessons. Additionally, class sizes are large, and lecturers find it challenging to support all students adequately. Sometimes, innovations in teaching methods are difficult to implement due to classroom arrangements and a lack of equipment, unintentionally widening the gap between teachers and students. However, modern teaching methods have begun to be adopted, and learner roles have gradually become more significant.

Based on the above concepts, we can define active, learner-centered teaching methods as follows: These methods involve organizing the entire teaching process around the learners' needs, abilities, and interests, aiming to develop learners' independent thinking skills and problem-solving capabilities.

In contrast, traditional teacher-centered teaching methods position the instructor as the central figure and the main subject of the teaching process, rendering learners as passive recipients of knowledge. However, innovating active, learner-centered teaching methods does not contradict traditional methods; rather, it can be integrated with traditional approaches, maximizing their advantages. According to Ciobanu, not all aspects of traditional teaching methods are outdated, and not all new methods are suitable. Active learning and teaching can successfully integrate both traditional and modern approaches. Active teaching methods encourage learners to understand, retain, and personally apply knowledge, conducting research and rediscovering truths instead of merely copying material provided by the instructor. This teaching approach aims to develop learners' abilities to solve unexpected problems, sustain focus on activities over extended periods, and fully realize learners' potential (Ciobanu, 2018)

To effectively implement these teaching methods, lecturers should transition from knowledge transmission to developing students' qualities and capabilities, helping learners maximize their potential. Instead of merely providing knowledge, lecturers should adopt an integrated approach, closely connecting theory and practice and training students in teamwork skills. This will equip learners with abilities for self-directed research, analysis, problem-solving, and effective information processing. Additionally, utilizing information technology and mastering digital tools significantly enhances teaching quality and optimizes students' learning experiences (Tran, 2013, p. 67)

Thus, active, learner-centered teaching methods focus on developing competencies that equip learners with the ability to act effectively and responsibly. This approach requires learners to perform tasks and resolve issues across various situations based on their knowledge, skills, experience, and readiness for action. Lecturers need to adopt learner-centered methods to ignite learners' passion for learning, especially facilitating the integration of theory and practice, enabling students to apply their learning to real-world problems (Tran, 2020).

According to Dao Hai, the current digital transformation context demands higher education to adapt teaching methods aligned with this transition. One key focus of current educational innovation is transforming teaching methods to encourage active learner participation under scientific organization and guidance from lecturers, developing independent and creative thinking, cultivating self-learning skills and interests, and instilling confidence and enjoyment in learning. Now more than ever, innovating teaching methods, assessments, and evaluations is crucial and necessary in the contemporary educational landscape (Dao, 2022).

Current changes in higher education require active, learner-centered teaching methods

Currently, most universities implement credit-based training systems, where students' independent study and research are highly valued, integrated into the content and duration of the curriculum. Independent study and research are not only essential parts of the academic program but also critical skills that help students proactively absorb and create knowledge. This reduces students' dependence on instructors, limits passive, one-directional knowledge transmission, and encourages independent, creative thinking among students. Due to these changes in training methods, teaching methods must also adapt to meet the requirements of credit-based education, transitioning from traditional methods to active, learner-centered approaches.

In traditional education, lecturers are central, deciding teaching content, methods of instruction, and controlling students' knowledge acquisition processes. Students often receive knowledge passively, with limited opportunities for deeper exploration of academic issues. Conversely, credit-based training shifts the focus to learners. Students actively engage in exploration, research, practice, and application of knowledge.

Curriculums are designed flexibly, allowing students to select courses aligned with their career aspirations and personal interests. Teaching methods have evolved to become more interactive, incorporating technology and supportive resources to enhance learning effectiveness. The learner-centered approach influences not only teaching methods but also the entire educational process, including curriculum design, development of instructional materials, and assessment methods. The ultimate goal is to ensure students learn not only for knowledge acquisition but also to effectively apply what they have learned, adapting to workplace requirements and meeting the increasingly high demands of the labor market.

The credit-based education system is an advanced training method, becoming a global standard in higher education. It empowers students to take initiative in their learning and facilitates exchanges and transfers among institutions and countries. The relationship between credit-based training and active, learner-centered teaching methods is inherently

interconnected. Credit-based systems intrinsically require active, learner-centered methods in teaching and learning, fostering student creativity and proactivity. This demands significant changes in the awareness of both teachers and students, with the teacher's innovation being particularly crucial. Teaching involves both instructors and learners sharing common goals and mutually influencing each other.

Changes for lecturers transitioning to credit-based education involve gradually shifting from traditional, teacher-centered methods to active, learner-centered approaches. These changes affect not only how knowledge is conveyed but also require lecturers to be more flexible and creative. In competency-based education, lecturers primarily act as facilitators and supporters, helping students acquire knowledge and focusing on developing students' problem-solving abilities.

Emphasis is placed on organizing activities where students actively participate, guiding students in self-exploration, developing differentiated lesson plans tailored to varying levels and competencies, and providing opportunities for students to express opinions and engage in critical thinking. Lecturers integrate multiple active teaching methods (problem-solving, discovery-based learning, experiential learning) with traditional teaching methods (Nguyen, 2015).

Previously, lecturers primarily transmitted knowledge, with students passively receiving it. However, in credit-based systems, lecturers act as guides, facilitators, and supporters, encouraging student autonomy in learning. Students have the freedom to choose courses and schedules, necessitating lecturers to design more flexible curriculums. Lecturers may teach diverse student groups with different proficiency levels, requiring thorough preparation and innovation in instructional content to suit each group. With technological advancements, lecturers need to employ supportive tools like Learning Management Systems (LMS), online classrooms, and digital materials. Modern teaching methods, such as E-learning and Blended Learning, have become increasingly prevalent, enabling students to learn flexibly and proactively.

In credit-based educational environments, students are encouraged to participate in discussions, group activities, and practical projects, enhancing their communication skills, critical thinking, and practical application of knowledge. Lecturers, therefore, need to innovate classroom organization methods to facilitate more active student engagement. Credit-based education demands continuous improvement in lecturers' professional skills, adoption of new teaching methods, and integration of modern technology. Lecturers must effectively guide students in research, resource acquisition, and self-directed learning, thereby elevating the overall quality of higher education.

The shift in students' learning methods from an annual-based system to a credit-based system is a significant transformation that brings numerous positive changes but

also demands greater adaptability and initiative from students. Competency-based teaching enables each learner to study and research at their own pace, facilitating their adaptation to future life changes. For some students, competency-based teaching allows accelerated completion of academic programs, saving time and effort in their studies (Dang, 2015).

Unlike the annual-based system, where students follow a fixed curriculum and pre-defined schedules, the credit-based system permits students to select courses and build schedules according to their abilities and study plans. This requires students to be more proactive and responsible in planning their studies, monitoring their progress, and fulfilling course requirements. Rather than passively absorbing information through lengthy lectures, students must engage in independent research before attending classes. Lecturers primarily serve as facilitators, answering questions, and highlighting key issues. This approach fosters independent thinking and the ability to analyze and synthesize information. However, without clear planning and strong self-study skills, students may encounter knowledge gaps or feel overwhelmed by the volume of required study materials.

Students perceive active, learner-centered teaching methods as highly effective for applying theoretical knowledge practically. This approach enables proactive knowledge acquisition and provides opportunities to apply learned concepts to real-world scenarios, enhancing problem-solving and analytical skills. Moreover, students recognize the value of active learning in developing independent learning skills.

Engaging actively motivates students to seek, explore, and expand knowledge beyond the classroom, fostering self-directed learning habits. Another significant benefit is the opportunity to share knowledge and experiences, gaining insights from both lecturers and peers. This interaction enriches students' personal knowledge base, encourages multi-directional exchanges, and strengthens communication, debate, and critical thinking skills.

Furthermore, active teaching methods help students develop critical thinking skills. Encouraging students to reflect, question, and address problems systematically enhances logical reasoning and decision-making capabilities. These skills are essential not only for academic success but also for professional life, where critical thinking is vital for solving practical problems. Additionally, students improve public speaking skills, confidence, and clarity in communication through presentations. The development of self-assessment skills is another advantage, enabling students to identify areas needing improvement and adapt their study strategies for better outcomes.

However, not all students feel comfortable or energized by this active learning environment. Some may experience pressure from actively participating in learning activities or struggle with self-directed learning. This highlights the necessity of appropriate guidance from lecturers to help all students adapt and fully benefit from active teaching methods.

Changes in student assessment methods within the credit-based system have significantly altered traditional evaluation practices. Transitioning from the annual system to a credit-based system emphasizes continuous, diverse, flexible assessments focused on students' practical competencies. Assessments in credit-based systems typically include various forms such as individual assignments, midterm tests, presentations, essays, and short quizzes throughout the semester.

This evaluation approach helps students maintain consistent learning rhythms, reduces end-of-term exam pressure, and more accurately assesses their progress. Grades in the credit-based system are distributed across multiple assessment components with varying weights, depending on the course, including attendance, presentations, group projects, individual assignments, midterm, and final examinations.

Through comparing traditional teaching methods with active, learner-centered methods, the necessity of innovating teaching approaches becomes clear.

Table 1
Comparing traditional teaching methods with active, learner-centered methods

Criteria	Traditional Teaching (Teacher-Centered)	Active Teaching (Learner-Centered)
Method	Dominated by methods of information transmission and dissemination, including learning objective orientation and learner assessment. Generally, this method prioritizes the efficiency of information transfer.	Involves coordinated actions between teachers and learners, including lesson planning, implementation, and evaluation.
Learners	Learners are passive with limited decision-making power.	Learners have a greater role in their learning processes and actively manage outcomes.
Teachers	Teachers present and explain content, directing and assessing learning activities.	Teachers introduce situations and provide guidance and tools for problem-solving, acting primarily as consultants rather than direct problem-solvers.
Learning Process	Learning occurs passively, following a systematic structure.	Learning is an active construction process, organized around specific themes. Outcomes depend on individual learners and particular contexts.
Teaching Process	Knowledge is transmitted from teachers to learners, following predetermined instructional patterns, which can be highly repetitive.	Teachers offer guidance, support, and consultation to students, making this approach less repetitive than traditional methods.

Assessment	Learning outcomes are forecasted using various methods. Teaching and assessment are considered separate components of the learning process. Overall, this method emphasizes accurately reproducing knowledge.	Emphasizes evaluating results based on the learning process rather than solely on examinations. Learners actively participate in assessment, with a focus on applying knowledge in specific situations.
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Note. Authors results.

Improving the quality of education and training requires innovation not only in training methods but also necessarily in teaching methodologies. Traditional teaching methods, while advantageous for transmitting extensive knowledge quickly and systematically, often lead to student passivity, monotonous lessons, and theoretical-heavy content with limited practical skills. Consequently, students' practical application skills are limited. Amidst the Fourth Industrial Revolution (Industry 4.0) and practical demands, innovating teaching methods is essential. Modern teaching approaches must focus on enhancing critical thinking, practical knowledge application, and developing hands-on skills. Students should be encouraged to actively explore, self-study, and engage proactively in their learning processes.

The credit-based education system represents a significant advancement in higher education, facilitating the adoption of innovative teaching and learning methods. Implementing active, learner-centered teaching approaches is an inevitable trend for developing higher education toward increased modernity, flexibility, and effectiveness.

Solutions to innovate active, learner-centered teaching methods in current higher education

Analyzing the changes in teaching and learning processes under the current credit-based education system in higher education and the benefits of active, learner-centered teaching methods, educational institutions must simultaneously implement comprehensive teaching solutions to help students proactively acquire knowledge, develop critical thinking, and practical skills. Transitioning from traditional to active teaching methods enhances educational quality and prepares students to adapt to modern work environments.

Firstly, lecturers should not only convey knowledge but also serve as facilitators supporting students' self-learning and research. Open-ended questions and encouraging students to debate and critique stimulate creative thinking. Lecturers must select appropriate teaching methods and styles. Teaching is an interactive process between lecturers and students, aiming to impart knowledge and develop learners' skills. To achieve effectiveness, lecturers should focus on:

Flexibly applying diverse teaching methods, from traditional lectures to modern techniques such as interactive lectures, group discussions combined with debates,

problem-solving methods, role-playing, and educational games. Implementing these modern methods requires lecturers to possess strong expertise and thorough preparation for each session. Besides recommending study resources, lecturers should effectively prepare thought-provoking questions for presentations and group discussions. The lecturer's attitude is crucial for facilitating student-centered sessions—lecturers should be approachable, friendly, and foster a comfortable yet serious classroom environment.

Strengthening pedagogical skills training for lecturers through professional development programs on modern teaching methods and technological applications is essential. Additionally, lecturers should engage in practical learning, advanced professional training, and scientific research. Encouraging two-way feedback and gathering student responses to improve teaching methods helps create a democratic, open learning environment. Lecturers should establish convenient and friendly communication channels with students, such as school forums, blogs, emails, Facebook, or pages, to address questions arising from self-study.

Due to the necessity for innovation in teaching methods, active teaching techniques are increasingly diverse and vibrant, emerging from actual educational practice.

Teaching techniques are specific actions by lecturers and students in small action situations aimed at executing and managing the teaching process. Teaching techniques are the smallest units within teaching methods, including both general techniques and specialized techniques for each teaching method. (Tran, 2020, n.p.)

Currently, active teaching techniques commonly applied include brainstorming, feedback, fishbowl, lightning, tablecloth, ball bearings, XYZ, jigsaw, and Kipling techniques. Flexible selection and combination of these techniques can create modern, innovative educational environments aligned with contemporary educational trends.

Secondly, for students, the credit-based system represents an advanced training approach, centering learners in teaching and learning processes. Students become less dependent on lecturers, proactively seeking knowledge. Learning extends beyond classroom instruction to self-study, research, and practical application. Effective student learning strategies include creating study plans, clearly defining course objectives, allocating time appropriately, and persistently working to meet goals. Students should proactively acquire and research knowledge through resources provided by lecturers. During self-study, students should raise questions for class discussions, with lecturers summarizing key points. To achieve this, students should independently explore various resources such as textbooks, online materials, and academic papers.

Active, learner-centered teaching methods require proactive student engagement. Students must independently seek knowledge and actively participate in group assignments, discussions, and presentations. This not only improves knowledge retention but also enhances crucial soft skills like communication, teamwork, and critical thinking.

Moreover, to enhance learning effectiveness under the credit-based system, students should adopt active learning techniques like mind mapping, gallery walks, and expert methods, effectively integrating these techniques. Utilizing these combined methods enhances organizational skills, memory retention, presentation abilities, critical thinking, advisory skills, and collaborative teamwork.

Thirdly, innovating assessment methods in the credit-based education system creates a flexible environment that promotes both student and lecturer initiative. However, traditional assessment methods are no longer suitable for this training system. Shifting towards competency-based assessment, evaluating the learning process and outcomes rather than solely focusing on numerical scores, is necessary to ensure educational quality.

Assessment should be continuous, with lecturers collecting evidence of student learning through various forms such as homework, tests, group activities, and presentations. Open-book tests encouraging critical thinking should be applied, alongside peer assessment, lecturer assessment, and student self-assessment. Utilizing technology in assessment, employing online platforms for transparent and objective evaluations, and integrating artificial intelligence and big data to monitor student progress are essential. Innovating assessments within the credit-based system enhances educational quality and fosters a flexible learning environment that emphasizes creativity and proactiveness for both students and lecturers.

Fourthly, applying information technology (IT) is indispensable in innovating active, learner-centered teaching methods. Online learning and the use of Learning Management Systems (LMS) effectively organize and manage classes. Virtual reality and simulations allow students practical experiences in virtual environments. Artificial intelligence and learning data analytics personalize teaching content. Interactive tools such as Kahoot and Mentimeter enhance classroom engagement. IT provides lecturers and students with access to diverse knowledge repositories, facilitating anytime, anywhere learning. Lecturers can use IT to design lectures, gather information, develop instructional materials, teach, and evaluate student outcomes. Students, following lecturer-defined requirements, can apply IT to create assignments and presentations.

CONCLUSION

The core humanistic spirit of active, learner-centered teaching methods positions learners at the heart of the teaching-learning process. Each learner, with unique qualities and capabilities, is both the subject and the agent of the educational process. This method aims to individualize learning, leveraging modern tools and resources to maximize each student's potential. This not only ensures comprehensive student development but also significantly enhances higher education quality. Integrating the credit-based education system with active, learner-centered teaching methods harmoniously improves educational outcomes.

The credit system enables learners to independently select courses, timings, and methods aligned with their capabilities and personal objectives, facilitating independent thinking and self-study skills. Simultaneously, active teaching methods encourage learner proactiveness and creativity, ensuring effective and responsible knowledge acquisition. This combination enhances educational quality and develops a competent workforce better equipped to meet contemporary societal demands.

REFERENCES

- Ali, O. H. (2025). Cultural influences on learning styles and educational practices. *European Journal of Education Science*, 1(1), 1–9. <https://doi.org/10.5281/qaf54254>
- Beirat, M. A., Tashtoush, D. M., Khasawneh, M. A. S., Az-Zo'bi, E. A., & Tashtoush, M. A. (2025). The effect of artificial intelligence on enhancing education quality and reduce the levels of future anxiety among Jordanian teachers. *Applied Mathematics & Information Sciences*, 19(2), 279–290. <https://doi.org/10.18576/amis/190205>
- Bui, H. T. T., Kaur, A., & Nguyen, T. T. T. (2025). Exploring the impact of project-based learning with scamper and trello on creative thinking of engineering students. *European Journal of Engineering Education*, 1–18. <https://doi.org/10.1080/03043797.2025.2474047>
- Charalampous, A., & Darra, M. (2025). The contribution of teacher feedback in enhancing students' cognitive skills in secondary education: A review of research, proposals, and future directions. *European Journal of Education Studies*, 12(4). <https://oapub.org/edu/index.php/ejes/article/view/5899>
- Ciobanu, N. R. (2018). Active and participatory teaching methods. *European Journal of Education*, 1(2), 69–72. <https://revistia.com/ejed/article/view/613>
- Dang, B. L. (2015). Educational program towards developing learners' capacity. *Journal of Education Management*, (4), 47–49.
- Dao, H. (2022). Access to positive teaching methods in digital transformation at university. *Journal of Science and Technology: Hoa Binh University*, (6), 84–91. <https://vjol.info.vn/index.php/hoabinh/article/view/77570/66061>
- Do, T. (2022). Progressive education: Views from John Dewey's education philosophy. *Wisdom*, 4(3), 22–31. <https://doi.org/10.24234/wisdom.v4i3.907>
- Do, T. (2023). Humboldt's philosophy of university education and implication for autonomous education in Vietnam today. *Perspectives of Science and Education*, 62(2), 549–561. <https://doi.org/10.32744/pse.2023.2.32>
- Hoang, V. L., Bui, H. T., Le, T. T., Tran, D. T., Hoang, H. T., Huynh, H. T. P., & Nguyen, T. H. H. (2025). Effectiveness of a train-the-trainer workshop series on teaching methods among nurse educators: An exemplar from Vietnam. *Frontiers in Education*, 9, 1441481. <https://doi.org/10.3389/educ.2024.1441481>
- Khac, S. P. (2024). Innovating university teaching methods in Vietnam meets digital transformation requirements. *International Journal of Advanced Multidisciplinary Research and Studies*, 4(2), 1145–1147. <https://www.multiresearchjournal.com/admin/uploads/archives/archive-1713348892.pdf>

- Kharlamop, I. F. (1978). *How to promote students' initiative*. Education Publishing House.
- Le, V. H. (2006). *Handbook of teaching and assessment methods*. Nha Trang University Press.
- Dao Dieu Nguyen, T., Duong Thi Ngoc, L., Nguyen Thi Phuong, T., Tran Thi, N., Nguyen Thi Thanh, T., Vo Thi Diem, B., Vo Thanh, T., Nguyen Thi, M., Hoang Thi, H., Ton Nu Minh, D., & Hoang Thi Phuong, T. (2024). Comparing effectiveness between rubric and traditional methods to assess clinical practice among Vietnamese nursing students: A quasi-experimental study. *Pacific Rim International Journal of Nursing Research*, 29(1), 122–136. <https://doi.org/10.60099/prijnr.2025.269492>
- Nguyen, T. M. H. (2022). Innovating teaching methods at the university level: Necessity and problems issues for higher education. *Global Academic Journal of Humanities and Social Sciences*, 4(6), 207–212. https://www.gajrc.com/media/articles/GAJHSS_46_207-212_pf2ycq1.pdf
- Nguyen, T. M. L. (2015). Teaching to develop capacity. *Journal of Education Management*, (4), 27–28.
- Nguyen, T. T. H., Ngo, M. O., & Ho, T. N. (2024). Enhancing teaching effectiveness in science and social studies through active teaching techniques: A practical study from Vietnam. *Asian Journal of Social Science and Management Technology*, 6(6), 115–121. <https://www.ajssmt.com/Papers/66115121.pdf>
- Phan, T. M. (2024). Innovation of teaching methods of physical education for students at universities in Vietnam. *Cadernos de Educação Tecnologia e Sociedade*, 17(se2), 46–56. <https://doi.org/10.14571/brajets.v17.nse2.46-56>
- Sharma, R. C. (1988). *Population, resources, environment and quality of life: Handbook of pedagogical aspects and knowledge base of population education* (2nd ed.). O. P. Kapur; Dhanpat Rai & Sons.
- Tran, K. D. (2013). *Modern teaching theory and methods*. Education Publishing House.
- Tran, M. H. (2020). Solutions for innovating teaching methods towards developing capacity of learners at universities. *Scientific Journal of Tan Trao University*, 15(6), 42–48. <https://doi.org/10.51453/2354-1431/2020/342>
- Tran, M. K., & Keodavan, X. (2024). Unpacking the advantages and challenges of flipped classrooms in initial mathematics teacher education in Vietnam. *Eurasia Journal of Mathematics, Science and Technology Education*, 20(5), 2437. <https://doi.org/10.29333/ejmste/14449>
- Tran, T. A. L., & Nguyen, T. K. A. (2024). Active teaching methods, the trend of modern education. *Journal of Information and Science: Hue Tourism College*, (2), 49–68.

- Tran Thi Minh, T., Ta Trung, N., Hoang Thi Thuy, L., Pham Minh, C., & Hoang, T. (2021). Analysis of the difficulties when applying positive teaching methods in credit training at public universities in Vietnam. In 2021 *The 5th International Conference on Advances in Artificial Intelligence (ICAAI)* (pp. 144–151). <https://doi.org/10.1145/3505711.3505731>
- Tran, T. T. H., & Ngo, H. T. (2024). Measures taken by lecturers in teaching language skills to large EFL classes online at some universities in Vietnam. *AsiaCALL Online Journal*, 15(1), 90–104. <https://doi.org/10.54855/acoj.241516>
- Vu, H. T. (2020). *Some active teaching methods*. Pham Kinh An Secondary School. <https://pgdhunga.edu.vn/thcs-phamkinhan/tin-tuc/tin-tuc-cua-truong-thcs-pham-kinh-an/mot-so-phuong-phap-ky-thuat-day-hoc-tich-cuc.html>
- Vuong, T. B. T. (2014). Conception of learner-centered teaching and the role of teachers in credit-based training. *Journal of Science and Technology: University of Danang*, (8), 20–23.
- Yen, P. T., & Vinh, D. (2024). Measures to continuously improve training quality based on learner feedback at higher education institutions. *International Journal of Advances in Engineering and Management*, 6(6), 1068–1076. <https://doi.org/10.35629/5252-060610681076>

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