

Managing Students' Self-Study Activities in Credit-Based Training: an Approach from the Perspective of Ensuring Quality in Higher Education

Tran Thi Nga

Vinh Medical University, Nghe An, Vietnam

ABSTRACT

In the context of credit-based higher education, students' self-directed learning has become a central determinant of training quality and learning effectiveness. However, the transition from traditional teacher-centered models to learner-centered credit-based systems poses significant challenges for universities, particularly in managing students' self-study activities in a systematic and sustainable manner. This paper examines the management of students' self-directed learning from a quality assurance perspective in higher education. Using theoretical analysis and institutional practice review, the study clarifies the conceptual foundations, managerial content, organizational mechanisms, and operational practices of self-directed learning management within credit-based training systems. The findings reveal that while higher education institutions have made notable progress in establishing regulatory frameworks, academic advising systems, learning resources, and assessment mechanisms, persistent limitations remain in institutional coordination, pedagogical innovation, and student adaptability. Based on these findings, the paper proposes a comprehensive set of management solutions focusing on transforming stakeholder awareness, strengthening academic advising, innovating teaching and assessment practices, enhancing learning resources, and ensuring integrated institutional governance. The study contributes practical implications for universities seeking to improve the effectiveness of self-directed learning management and enhance educational quality in credit-based higher education.

KEYWORDS: self-directed learning, credit-based education, academic management, quality assurance, higher education.

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1. INTRODUCTION

The shift toward credit-based training systems has become a dominant trend in contemporary higher education worldwide. This model emphasizes learner autonomy, flexibility in learning pathways, and outcome-based education, thereby redefining the roles and responsibilities of both students and institutions. Within this paradigm, students' self-directed learning is no longer a supplementary activity but a core component of the educational process that directly influences learning outcomes and institutional training quality.

Self-directed learning refers to learners' ability to take initiative, set learning goals, select appropriate strategies, manage learning resources, and evaluate learning outcomes independently or with limited guidance. Abeyrathne and Ekanayake (2021) emphasize that self-directed learning involves learners' active control over goals, strategies, and evaluation processes.

Numerous studies have highlighted that strong self-directed learning competence enhances academic performance, lifelong learning capacity, and adaptability in rapidly changing professional environments. Nguyen et al. (2025) report a significant positive relationship between students' self-directed learning capacity and academic achievement. According to Mentz et al. (2019), self-directed learning is a foundational competence for lifelong learning in contemporary higher education. However, the effectiveness of self-directed learning does not depend solely on individual learner characteristics; it is also shaped by institutional management practices, teaching methods, assessment systems, and the availability of learning resources. Finn et al. (2025) demonstrate that institutional design and pedagogical practices significantly shape students' self-directed learning experiences.

In credit-based education, students are granted greater freedom in course selection, learning pace, and academic planning. While this autonomy creates favorable conditions for personalized learning, it simultaneously places higher demands on universities in

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managing learning processes that are increasingly diverse and decentralized. Without effective management mechanisms, students may experience confusion, reduced motivation, ineffective learning strategies, and prolonged study duration, ultimately undermining training quality.

Despite the growing importance of self-directed learning, many higher education institutions continue to face difficulties in organizing, guiding, and evaluating students' self-study activities in a coherent and systematic manner. Existing practices often reveal inconsistencies between institutional regulations and actual implementation, limited integration between teaching and assessment, and insufficient support structures for students and lecturers during the transition to credit-based education.

Against this backdrop, this study aims to analyze the management of students' self-directed learning activities in credit-based higher education from a quality assurance perspective. Specifically, the paper seeks to (i) clarify the theoretical and managerial foundations of self-directed learning management, (ii) examine current organizational structures, mechanisms, and practices, and (iii) propose integrated solutions to enhance the effectiveness and sustainability of self-directed learning management in higher education institutions. The findings are expected to provide practical insights for policymakers, university leaders, and educators engaged in academic management reform.

2. MANAGEMENT OF STUDENTS' SELF-DIRECTED LEARNING ACTIVITIES

The management of self-directed learning refers to the purposeful and systematic process through which educational administrators organize, coordinate, and regulate students' active learning activities, as well as ensure the necessary conditions that enable effective self-directed learning. The core objective of managing self-directed learning is to enhance students' learning outcomes and improve the overall quality of institutional training. Within the school management system, the management of students' self-directed learning constitutes a critical component, particularly in higher education institutions offering discipline-intensive and practice-oriented programs, such as maritime education. Effective management of self-directed learning contributes to the development of high-quality human resources equipped with solid knowledge, professional skills, organizational discipline, and lifelong learning capacity. Conversely, ineffective management may weaken learners' motivation, reduce learning effectiveness, and ultimately undermine institutional training quality.

In terms of objectives, the management of students' self-directed learning aims to ensure that the training process operates in a coordinated and effective manner across three key dimensions. Nguyen and Trinh (2025) conceptualize self-directed learning competence across cognitive, attitudinal, and behavioral dimensions. First, at the cognitive level, management seeks to foster students' accurate understanding of the purposes and significance of learning, thereby cultivating self-awareness, self-learning motivation, and self-discipline. Second, at the attitudinal level, it supports students in developing appropriate learning plans and methods, complying with learning regulations, proactively overcoming learning difficulties, and maintaining a responsible learning attitude. Third, at the behavioral level, management focuses on nurturing perseverance, autonomy, self-regulation, and independent thinking, thereby enhancing students' capacities for self-directed learning and independent research.

The content of managing students' self-directed learning encompasses several fundamental components. First, it involves raising awareness and promoting positive perceptions of self-directed learning. Through institutional traditions, academic orientation activities, and educational guidance, students are provided with a clear understanding of training objectives and academic requirements. This process helps students establish appropriate and sustainable learning motivation. Learning motivation may evolve from basic needs such as self-affirmation, task completion, and career orientation to higher-level intellectual aspirations, including curiosity and the pursuit of knowledge. Effective management creates favorable conditions that transform these motivations into individualized interests, beliefs, and positive learning attitudes.

Second, the management of self-directed learning plans plays a central role. Learning plans serve as essential tools for ensuring that self-directed learning is conducted in a scientific and efficient manner. Management activities focus on guiding students to clearly define learning objectives and tasks, develop short-term and long-term learning plans aligned with curricular requirements and personal circumstances, identify learning priorities, and organize learning content and time effectively. Proper supervision of both the development and implementation of self-directed learning plans enhances students' autonomy and learning efficiency.

Third, the management of self-directed learning content ensures alignment between students' learning activities and program objectives and learning outcomes. Self-directed learning content includes both compulsory knowledge components stipulated by the curriculum and supplementary learning activities based on students' interests, abilities, and research orientations. Management efforts emphasize guiding students toward mandatory learning tasks while providing academic counseling and orientation for in-depth and extended learning. In this regard, instructors play a pivotal role in ensuring that self-directed learning content remains consistent with institutional training goals.

Fourth, the management of self-directed learning methods significantly influences learning effectiveness. Hutasuht et al. (2023) show that guided learning approaches play a crucial role in fostering students' self-directed learning. Effective self-directed learning requires the selection and application of appropriate learning strategies. Management in this area is implemented through the

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promotion of student-centered and active teaching approaches, guidance on general learning strategies such as analysis, synthesis, generalization, and critical thinking, as well as subject-specific methods, particularly for skill-based and practice-oriented courses. The overarching goal is to help students develop flexible and effective self-directed learning methods suited to learning content, individual capabilities, and contextual conditions.

Fifth, the management of assessment and evaluation of self-directed learning outcomes represents a crucial stage in the management process. Assessment and evaluation serve to measure the extent to which learning objectives are achieved and to identify deviations that require timely adjustment. Beyond formal assessment, management emphasizes the development of students' self-assessment skills, enabling them to reflect on their learning progress, identify strengths and weaknesses, and regulate their learning behaviors accordingly. Management activities include monitoring the formulation and execution of self-directed learning plans and organizing evaluations of learning outcomes in accordance with institutional regulations.

Finally, the management of supporting conditions for self-directed learning constitutes a foundational element of effective implementation. Higher education institutions must ensure adequate management of facilities, learning environments, instructional materials, technological resources, and time allocation dedicated to self-directed learning. The coordinated provision of these conditions forms a critical basis for sustaining effective and continuous self-directed learning among students.

3. MANAGEMENT OF STUDENTS' SELF-DIRECTED LEARNING IN THE CREDIT-BASED TRAINING SYSTEM

Compared with the traditional year-based training model, in which students' learning plans are centrally designed and implemented by the institution, the credit-based training system grants learners greater autonomy in selecting courses, constructing individualized study plans, and allocating learning time. This fundamental shift redefines students from passive recipients to active agents in the educational process, thereby imposing new requirements on the management of self-directed learning. Consequently, managing students' self-directed learning in a credit-based system requires a more comprehensive, flexible, and coordinated management approach than that applied in conventional training models.

First, transforming lecturers' and students' perceptions of teaching and learning under the credit-based system is a prerequisite for effective implementation. The success of educational activities largely depends on the awareness, goals, and learning motivation of those involved. In credit-based education, students must be supported in developing appropriate and sustainable self-directed learning motivation, corresponding to different levels of needs, from basic academic requirements to self-actualization. At the same time, both lecturers and students are required to adapt to a new learning environment characterized by autonomy, personal responsibility, and self-regulation. In this context, adaptation refers to the process of adjusting cognition, attitudes, and behaviors to meet the demands of the credit-based system, thereby ensuring continuous personal development in a modern higher education environment.

Second, establishing and effectively operating a qualified academic advising system constitutes a core component of managing self-directed learning in credit-based education. As students are responsible for selecting courses and designing individualized learning pathways, many encounter difficulties in accurately assessing their academic capacity, personal circumstances, and career orientations. Academic advisors serve as an essential link between the institution and students by providing guidance based on a thorough understanding of credit-based training regulations and students' academic profiles. Effective management of academic advising enables students to select appropriate courses, formulate feasible study plans, and maintain academic progress, thereby directly enhancing the effectiveness of self-directed learning.

Third, managing lecturers' teaching activities to promote students' self-directed learning plays a decisive role in the credit-based training system. Teaching management encompasses curriculum planning, course syllabi, instructional content, and teaching methods, as well as the supervision of pedagogical innovation aimed at fostering learner autonomy. Department heads and academic units are responsible for monitoring teaching quality in accordance with approved course syllabi and organizing regular professional meetings to discuss instructional strategies, academic advising skills, learning materials development, and assessment practices. Lecturers are expected to prepare lessons rigorously, deliver instruction aligned with course syllabi, apply learner-centered and active teaching methods, provide learning resources, guide students in self-directed study and research, and design appropriate assessment methods consistent with the objectives of credit-based education.

Fourth, improving facilities and learning resources is an essential condition for effective self-directed learning management. In a credit-based training context, the quality of students' self-directed learning is strongly influenced by the availability and adequacy of learning environments and resources. Higher education institutions must invest in and manage learning infrastructure effectively, including academic advising spaces, libraries and digital learning resources, information technology systems, laboratories, and modern instructional equipment. The coordinated provision of these resources creates a supportive environment that enables students to engage in self-directed learning in a systematic and efficient manner.

Finally, ensuring coordinated collaboration among institutional units is a determining factor in the success of managing self-directed learning in credit-based education. Although the credit-based system offers significant advantages, such as enhancing student

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autonomy and fostering a modern academic culture, its implementation often involves challenges arising from the transition from traditional training models. Therefore, strong and consistent leadership from institutional management, particularly university executives, is required, along with close cooperation among functional units, responsible engagement from lecturers, and proactive participation from students. Only through such coordinated efforts can the management of students' self-directed learning in the credit-based training system achieve sustainable effectiveness.

4. CURRENT STATUS OF MANAGING STUDENTS' SELF-DIRECTED LEARNING ACTIVITIES

4.1. Organizational Structure

Self-directed learning refers to learners' purposeful engagement in acquiring scientific knowledge, professional skills, and corresponding attitudes through autonomous, proactive, and reflective learning activities. This form of learning is initiated and regulated by learners themselves and is characterized by self-awareness, independence, and creativity in pursuing predefined learning objectives. Self-directed learning cannot achieve meaningful outcomes if learners remain passive recipients of pedagogical interventions.

Recognizing the central role of self-directed learning in credit-based education, universities have increasingly prioritized the development of institutional conditions that foster students' autonomous learning capacity. The overarching goal is to enable students to acquire lifelong learning competencies, proactively seek and process professional knowledge, and flexibly adapt to changes in academic and professional environments. Through these efforts, institutions aim to enhance overall training quality and contribute to the development of high-quality human resources for socio-economic advancement.

To strengthen guidance and assessment of learning processes, particularly students' self-directed learning tasks, universities typically define several core institutional actions. These include the development of course-specific self-study guidance materials embedded within official course syllabi, clearly articulating learning outcomes, content requirements, and recommended learning strategies for each topic or module. In addition, continuous assessment practices are restructured to align with self-directed learning objectives, moving beyond attendance-based evaluation toward systematic monitoring of students' independent learning performance.

Managing students' self-directed learning is a complex and multi-dimensional task that requires coordinated engagement across institutional levels. Universities generally establish comprehensive implementation plans and adopt decentralized management mechanisms that assign responsibilities to faculties and departments while maintaining centralized oversight. This governance model seeks to balance institutional consistency with academic autonomy by issuing detailed internal regulations that operationalize national and institutional training policies.

Accordingly, management responsibilities are commonly distributed across three interconnected levels.

- Institutional level (University leadership and central administrative units): At this level, responsibilities include developing institution-wide teaching plans, coordinating academic operations, organizing examinations, collecting feedback from faculty and students, assigning academic specializations, supervising academic advisors, and monitoring compliance with academic regulations to inform timely policy adjustments.
 - Faculty level: Faculties are responsible for developing semester- and year-based quality management plans aligned with program learning outcomes and stakeholder feedback. They assign specific responsibilities to departments and academic advisors and oversee the implementation of teaching and assessment activities.
 - Department level: Departments manage course assignments, monitor teaching progress, organize final assessments, update and approve course syllabi, and support faculty professional development, particularly for early-career lecturers and teaching assistants.
- Overall, while most academic units implement management tasks regularly and demonstrate inter-unit coordination, the transition to credit-based education has revealed delays, inconsistencies, and uncertainty in task execution across some units.

4.2. Management Mechanisms

To manage educational activities in general and students' self-directed learning in particular, universities typically adopt centralized coordination mechanisms led by academic affairs units under the supervision of senior academic leadership. These units serve as operational hubs responsible for institutional planning, implementation, and monitoring.

Several supporting mechanisms are commonly employed. Financial incentive policies are introduced to encourage faculty engagement in self-directed learning initiatives and are integrated into performance evaluation systems. Functional units provide academic tools for collecting student feedback, facilitate course consultation activities, digitize learning materials, and disseminate resources related to teaching methodologies and assessment practices.

Inspection and quality assurance units intensify monitoring of teaching activities to ensure compliance with academic priorities. Student feedback mechanisms are continuously refined to enhance responsiveness and inform decision-making processes. Student affairs units, in collaboration with student organizations, organize support activities aimed at strengthening students' self-directed learning capacity and awareness of instructional objectives.

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At the faculty and department levels, academic units manage course content through standardized syllabi, ensure consistency in assessment practices, and oversee examination procedures. Teaching quality evaluation is conducted through integrated management of curriculum content and assessment processes, reinforcing alignment with officially approved training programs.

4.3. Implemented Practices

In practice, regulatory frameworks governing credit-based education often lack specificity or fail to fully align with institutional realities. To address these gaps, universities proactively develop internal guidelines that contextualize national regulations. These include institutional credit-based training regulations, student handbooks, faculty handbooks, and academic advisor manuals, which are periodically revised based on feedback from faculty and students.

To support self-directed learning, universities prioritize the development of course-specific learning resources, including textbooks, lecture materials, and translated academic references. Academic advising systems are strengthened to assist students in understanding training regulations and navigating credit-based learning pathways.

Orientation programs introduce students to training structures, learning strategies, and digital tools. Faculty members are required to adhere to standardized teaching procedures, provide course syllabi, guide self-study activities, organize learning groups, and conduct course consultations. Teaching practices increasingly emphasize active learning, reduced lecture time, and enhanced student engagement.

Regular classroom observations and student evaluations are conducted to monitor teaching quality. Assessment frameworks incorporate continuous assessment, mid-term evaluation, and final examinations, with clearly defined weightings specified in course syllabi. To improve objectivity, selected courses apply objective testing methods where appropriate.

Organizational adjustments have been made to align administrative functions with credit-based education requirements, including the establishment of information technology units and investment in digital infrastructure. Physical learning spaces and instructional facilities are upgraded to support teaching, learning, and academic management activities.

4.4. Key Challenges and Limitations

Despite institutional efforts, several persistent challenges remain.

At the organizational level, task implementation and problem resolution are often delayed and inconsistently coordinated across institutional and faculty management levels. Course syllabus development tends to be procedural and insufficiently innovative, while quality assurance mechanisms at departmental and faculty levels remain underdeveloped.

At the faculty level, some lecturers have limited understanding of credit-based education principles and continue to apply traditional teaching and assessment approaches. Large class sizes constrain pedagogical innovation, formative assessment, and academic consultation. In some cases, self-study hours are inadequately supervised.

At the student level, adaptation to autonomous learning remains slow. Passive learning behaviors and compliance-oriented attitudes persist, particularly in course preparation, class participation, and assessment engagement. Furthermore, disparities in digital access and competence pose additional challenges, especially for students from disadvantaged backgrounds.

5. SOLUTIONS FOR MANAGING STUDENTS' SELF-DIRECTED LEARNING IN CREDIT-BASED HIGHER EDUCATION

Based on the current status and identified challenges in managing students' self-directed learning under the credit-based system, a set of integrated and feasible solutions is proposed. These solutions aim to address shortcomings in organizational coordination, pedagogical practices, academic advising, assessment mechanisms, and learning conditions, thereby enhancing the effectiveness and sustainability of self-directed learning management across universities.

5.1. Strengthening Institutional Awareness and Shared Responsibility for Self-Directed Learning

Universities should promote a unified understanding among administrators, lecturers, and students that self-directed learning is not an auxiliary activity but a core component of credit-based education. Management bodies at all levels need to explicitly incorporate self-directed learning objectives into institutional strategies, academic regulations, and quality assurance frameworks.

For lecturers, systematic professional development programs should be implemented to clarify the pedagogical implications of credit-based education and reinforce their role as facilitators of learning rather than sole transmitters of knowledge. For students, orientation and continuous communication activities should emphasize their responsibility as active agents in planning, monitoring, and evaluating their own learning processes. Establishing a shared institutional culture of learner autonomy is essential to overcoming passive learning habits identified in the findings.

5.2. Enhancing the Quality and Effectiveness of Academic Advising Systems

Academic advising plays a critical role in guiding students' learning trajectories in credit-based education. Universities should standardize advisor responsibilities, ensure advisors are well-trained in academic regulations, curriculum structures, and student support strategies, and formally recognize advising duties within faculty workload and performance evaluation systems.

Advisors should support students in developing realistic study plans, selecting appropriate courses, monitoring learning progress, and adjusting plans in response to academic difficulties. Strengthening advisor–student interaction mechanisms, both face-to-face and online, will help reduce inappropriate course registration and improve students' capacity for self-regulated learning.

5.3. Innovating Teaching Practices to Actively Support Self-Directed Learning

Effective management of self-directed learning requires corresponding innovation in teaching practices. Universities should encourage lecturers to design learning activities that explicitly integrate self-study tasks with classroom instruction. Course syllabi should clearly specify self-directed learning objectives, required learning outputs, recommended resources, and expected student engagement for each learning unit.

Teaching methods should prioritize active learning approaches, such as problem-based learning, group discussions, case analysis, and guided independent study, particularly in large classes where student passivity is prevalent. Regular pedagogical exchange within departments can support lecturers in sharing effective strategies for organizing, supervising, and assessing self-directed learning activities.

5.4. Reforming Assessment and Feedback Mechanisms

Assessment practices must be aligned with the objectives of self-directed learning. Universities should further develop formative assessment mechanisms that evaluate students' learning processes in addition to learning outcomes. Continuous assessment components, such as learning journals, assignments, presentations, and online quizzes, should be designed to monitor students' engagement in self-study and provide timely feedback.

To ensure transparency and consistency, assessment criteria and weightings must be clearly stated in course syllabi and communicated to students at the beginning of each course. The application of objective assessment methods, where appropriate, can enhance fairness and reliability, while reflective and performance-based assessments can better capture students' self-directed learning competencies.

5.5. Improving Learning Conditions and Digital Infrastructure

Adequate learning conditions are essential for the effective management of self-directed learning. Universities should continue investing in learning spaces, libraries, digital platforms, and learning management systems that facilitate access to learning resources and academic support services.

Special attention should be given to supporting students with limited digital access or technological skills through targeted training programs and institutional support mechanisms. The integration of digital tools into academic management processes can also improve coordination, monitoring, and data-informed decision-making related to students' self-directed learning.

6. DISCUSSION

The findings reveal that while universities have established foundational structures and regulations for managing students' self-directed learning under the credit-based system, implementation remains uneven and constrained by organizational, pedagogical, and learner-related factors. In particular, delayed coordination, limited pedagogical adaptation, insufficient academic advising, and students' slow transition toward learner autonomy significantly reduce the effectiveness of self-directed learning management.

The proposed solutions directly respond to these challenges by emphasizing systemic alignment between institutional policies, teaching practices, assessment mechanisms, and student support structures. Strengthening shared awareness and responsibility addresses the persistent gap between policy intentions and actual practices. Enhancing academic advising and teaching innovation responds to identified weaknesses in guiding students' learning choices and supporting active engagement. Reforming assessment practices and improving learning conditions further reinforce the institutional capacity to manage self-directed learning in a coherent and sustainable manner.

Importantly, the findings suggest that effective management of self-directed learning is not achieved through isolated interventions but requires a coordinated, multi-level approach that integrates management, pedagogy, and learner development. This reinforces the view that self-directed learning is both an educational outcome and a managed process within credit-based education systems.

7. CONCLUSION

This study examined the current status of managing students' self-directed learning in the context of credit-based education and identified key organizational, instructional, and learner-related challenges. The results indicate that although universities have made

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substantial efforts to adapt management mechanisms, teaching practices, and support systems, the effectiveness of self-directed learning management remains limited by inconsistent implementation and insufficient alignment among stakeholders.

Based on the empirical findings, the study proposed a set of practical and scalable solutions aimed at strengthening institutional awareness, improving academic advising, innovating teaching practices, reforming assessment mechanisms, and enhancing learning conditions. These solutions are applicable to a wide range of higher education institutions implementing credit-based education and emphasize the importance of systemic coordination and learner-centered management.

Future research may further explore the impact of specific management interventions on students' self-directed learning outcomes and examine comparative practices across institutions. Strengthening empirical evidence in this area will contribute to the continuous improvement of self-directed learning management and the overall quality of higher education under credit-based training systems.

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