World Journal of Educational Studies
Print ISSN: 2959-9989
Online ISSN: 2959-9997
DOI: https://doi.org/10.61784/wjes3054

FROM PASSIVE LISTENING TO ACTIVE LEARNING: REFORMING MANAGEMENT INNOVATION EDUCATION TO BOOST STUDENT ENGAGEMENT

Fan Yang[1], Ying Wang[2*], GuoMin Chen[1]
[1]School of Management, Guilin University of Aerospace Technology, Guangxi 541000, Guilin, China.
[2]Library, Guilin University of Aerospace Technology, Guangxi 541000, Guilin, China.
Corresponding Author: Ying Wang, Email: 2022018@guat.edu.cn

Abstract: Low student engagement has long been a key issue in management education, especially in courses requiring creativity and critical thinking, such as the course of Management Innovation. This study investigated how effectively active learning strategies improved student engagement under these circumstances. The research took place at Guilin University of Aerospace Technology in China from March to June 2025. It used a quasi-experimental design which involved undergraduate students from three business-related majors: Marketing, Human Resource Management, and Logistics Management. One class from each major received teaching reforms focused on student-centered and participatory methods. The remaining classes used the traditional lecture format. Data came from classroom observations, teacher reflections, student assignments, and informal feedback. The findings showed that students in the classes with immediate teaching reforms demonstrated higher levels of behavioral, emotional, and cognitive engagement. They participated more actively, collaborated more effectively, and displayed deeper critical thinking in their coursework. The discussion explained these results through constructivist learning theory and emphasized the alignment between course objectives, assessments, and learning strategies. This study concluded that active learning provides a sustainable and practical solution for improving engagement in management courses focused on innovation. It contributed to the literature on teaching reform in higher education, offering actionable insights for educators and institutions aiming to create student-centered learning environments.
Keywords: Active learning; Student engagement; Management Innovation; Pedagogical reform; Higher education; China

1 INTRODUCTION

In recent years, developing innovation ability has become a central goal of management education, especially in courses like management innovation [1]. These courses strengthen students' grasp of organizational change, strategic renewal, and creative problem-solving skills [2-3]. However, although the importance of innovation keeps growing in both academic and business settings, the course “management innovation” still relies heavily on traditional lecture-style teaching in China. This passive learning approach often fails to spark students' curiosity, motivation, and deep involvement with the subject [4-6].

Low student engagement remains a persistent problem in teaching “management innovation” around the authors teaching experience. While the course content is naturally forward-looking and dynamic, its delivery often involves unidirectional instruction, limited interaction, and insufficiently applying concepts to practical contexts [7]. As a result, students may find the course abstract, too theoretical, or disconnected from actual management challenges. Previous research indicates student engagement strongly predicts learning outcomes, knowledge retention, and cultivating higher-order thinking skills [8-9]. Therefore, exploring teaching strategies that turn students from passive listeners into active participants is essential.

Active learning, recognized as a student-centered teaching method, is widely known to promote deeper thinking, collaborative learning, and better critical thinking [10]. Approaches such as project-based learning, group discussions, flipped classrooms, and case studies are becoming more common in management education, boosting student engagement [11-13]. However, within the specific context of management innovation course, how well these methods work is still not fully explored, especially in non-Western university settings where lecture-based teaching remains dominant [14].

This study aims to address this gap by designing and evaluating a teaching reform project for a management innovation course from a Chinese university. It focuses particularly on improving student engagement through active learning. Based on theoretical insights and practical strategies, the research introduces a mixed teaching model. This model combines flipped classrooms, collaborative group projects, and discussions of real cases. This approach's effectiveness is evaluated through student feedback, classroom observations, and engagement measures [15-16].

Documenting this pedagogical redesign's design, execution, and outcomes, the study contributes to expanding research on management education innovation. It provides real-world evidence for the benefits of active learning in complex, concept-driven courses. It also offers educators seeking to foster deeper student engagement a practical framework they

can use. Finally, this study supports a change from passive listening to active learning. This shift aligns educational practice with the dynamic and engaging nature of managing innovation.

2 LITERATURE REVIEW

2.1 Active Learning

Active learning was widely considered a teaching method that placed students at the heart of the learning process. It encouraged them to engage in meaningful tasks, which promoted analysis, synthesis, and evaluation [17]. Unlike traditional lecture-based teaching where students passively absorbed information, active learning expects students to construct knowledge via discussion, problem-solving, and reflection [18]. This approach agreed with Constructivist Learning Theory, which stressed the importance of the learner's active role in creating understanding [18-19].

Research demonstrates active learning enhances students' cognitive engagement, knowledge retention, and critical thinking across disciplines, particularly within management education [6, 20-21]. Common approaches included collaborative projects, classroom debates, simulations, case analysis, and flipped classroom models [22-25]. These techniques not only enhanced understanding of the content but also developed interpersonal and decision-making skills essential for future managers [26-27].

Although active learning was proven beneficial, it remained underused in many higher education settings, especially in courses covering abstract or conceptual subjects like management innovation. Integrating active learning into these contexts needed careful design and adaptation to specific course goals and student characteristics.

2.2 Student Engagement

Student engagement was widely regarded as a critical determinant of effective learning outcomes and academic success in higher education. It referred to the degree of attention, curiosity, and investment students showed in the learning process. This concept included behavioral, emotional, and cognitive dimensions [28-30]. High levels of engagement were associated with improved academic performance, deeper learning, and stronger motivation for lifelong learning [29, 31-32].

In management education, student engagement played a crucial role in helping learners connect abstract theories to real-world practices [11, 22]. However, engagement was often hindered by passive instructional strategies, the perceived irrelevance of content, or a lack of interactive opportunities in the classroom [6, 18]. Scholars emphasized that teaching approaches significantly shaped students' engagement levels. For example, active learning methods were shown to foster greater participation, attention, and intellectual involvement [31-33].

Moreover, the nature of the course itself influenced engagement. Courses like Management Innovation, which involved complex and often abstract concepts, could appear disconnected from students' personal experiences or career aspirations without careful design. Therefore, fostering engagement in such courses demanded intentional teaching strategies that made learning more participatory, relevant, and reflective [11, 34-35].

2.3 The Teaching Reform Trend in Management Courses

Over the past twenty years, management education underwent significant teaching reforms. This initiative sought to connect teaching methods with the evolving business landscape and developing 21st-century skills [36]. The traditional lecture-driven model was increasingly replaced or supplemented by student-centered methods [7]. These comprised experiential learning, case-based teaching, action learning, and flipped classrooms. Researchers prioritized cultivating critical thinking, creativity, collaboration, and solving practical challenges. These abilities were essential core competencies in modern management practice [37].

Business schools and universities around the world adopted various innovative teaching designs. They integrated technology-enhanced learning platforms, interdisciplinary projects, and simulations to encourage deeper student involvement [38-39]. Courses became more interactive. Faculty required students to assume more ownership of learning by engaging in inquiry, reflection, and peer collaboration [40-41].

In emerging economies like China, teaching reforms in management programs made progress. However, challenges remained due to deep-rooted exam-focused traditions and limited resources [42]. Still, a growing number of institutions experimented with blended teaching models. They aimed to stimulate student engagement and foster innovation.

2.4 The Teaching Pain Points of Management Innovation Course

Management innovation course focuses on novel management practices, organizational change, and strategic renewal. Compared to other management subjects, this course presents unique teaching challenges. Its content was often abstract, conceptual, and drew knowledge from many fields, including innovation theory, organizational behavior, and strategic management. As a result, students frequently feel the course lacks concrete application, which lowers their learning motivation and participation.

A key problem seens to be the gap between the theoretical content and students' real-world experiences. This is especially true for undergraduate students who had limited contact with actual organizational environments [43]. Furthermore, the course often do not have enough teaching materials to effectively translate management innovation theory into accessible and interactive forms. Due to time limits or a lack of training in hands-on teaching methods, teachers sometimes depend too much on lectures.

In the Chinese higher education setting, these problems become more serious because of a traditional culture of passive learning and the limited use of real-world cases or collaborative learning platforms [44]. Therefore, student participation remains low, and learning outcomes often show superficial.

2.5 The Research Gap

Past research widely recognized the benefits of active learning and its positive effect on student engagement across different subjects [6, 18]. However, a noticeable gap would exist regarding the application of active learning strategies in management innovation course. Unlike the other courses such as marketing or logistics, this course often involves abstract theorization, cross-disciplinary perspectives, and forward-looking strategic thinking, which makes traditional lecture-based methods particularly inadequate. Current research indicated that abstract and cross-disciplinary characteristics often result in lower student engagement [45]. Moreover，most existing studies on teaching innovations in management education focused on broader topics like leadership, entrepreneurship, or operations management. Less attention was paid to conceptually abstract and cross-disciplinary topics [46].

Furthermore, while some research within the Chinese context highlighted common challenges like passive learning and rigid curricula, few studies explored specific teaching reform strategies designed to improve engagement in innovation management courses [47]. Case-based, project-driven, or flipped-classroom models tailored to innovation topics remain insufficiently evaluated in real teaching contexts. Prior research neglected empirical and applied studies measuring how redesigned methods affect student engagement, interest, and outcomes.

Given the growing emphasis on cultivating innovation capabilities in undergraduate business education, addressing this pedagogical blind spot is both timely and necessary. This study aimed to address this gap by proposing and testing an active learning-driven reform model specifically designed for management innovation education. Its goal was to produce practical insights to guide future course design and teaching practices, especially within the Chinese higher education context.

3 METHOD

3.1 Research Design

This study used a qualitative action research design to explore and carry out teaching innovations designed to improve student participation in the Management Innovation course. Action research is especially suitable for educational reform projects because it allows teachers to make changes in real classroom settings, observe the effects, and think carefully about the results [48]. This study adopted a cyclical process of planning, action, observation, and reflection, lecturer functioning in dual capacities as educator and researcher.

3.2 Research Setting

The teaching reform took place at Guilin University of Aerospace Technology which is a regional undergraduate university in China. The study focused on the Management Innovation course which is a required module for third-year undergraduate students majoring in Marketing, Human Resource Management, and Logistics Management. There is three classes in each of these majors, labeled as Class 1, Class 2 and Class 3, with which having around 45 students.

For this study, Class 1 and Class 3 from each major (Marketing Class 1 & 3, Human Resource Management Class 1 & 3, Logistics Management Class 1 & 3) were picked as the research subjects. All Class 1 from each major served as the experimental group for the teaching reform, where the teaching intervention was used. All Class 3 from each major served as the observing control group and continued with the traditional lecture-based teaching. Therefore, this design created three experimental classes (134 students in total) and three observing control classes (137 students in total), providing a good basis for comparing the effects of the teaching reform.

The same course lecturer taught all participating classes (All Class 1 sections were taught by professor A, all Class 3 sections by professor B). This ensured consistency in teaching content, grading standards, and classroom management. The teaching intervention lasted the whole Spring 2025 semester, from March 1 to June 31, matching the university's academic calendar.

3.3 Core Teaching Intervention

The teaching intervention involved adding active learning strategies throughout the semester for the experimental group. Based on earlier needs assessments and literature reviews, the course was redesigned for the experimental group to reduce passive lectures and increase student participation through several methods, including:

1. Case-based discussions using local and international innovation examples [49].
2. Group action learning projects where students proposed solutions for real-world management innovation situations [50].
3. Role-playing and simulation exercises exploring strategic decision-making in innovation settings [51].
4. Student-led mini-presentations on new trends in innovation practices.
5. Reflection journals requiring weekly entries about learning experiences and team dynamics [52].

All lessons for the experimental group used the Chinese online learning platform Rain Classroom. This platform allowed students to access materials, respond during class, and join discussions outside class time. In contrast, the control group continued with traditional lecture-based teaching, occasionally including teacher-led questions and answers, but without structured active learning activities.

3.4 Data Collection

Because the study was exploratory and practical, no standard end-of-course surveys were used. Instead, data was collected through:

1. Classroom observations by the teaching lecturers, with notes taken during and after lessons for both experimental and control groups [53].
2. Student feedback gathered through informal class discussions and weekly open-ended reflections from the experimental group [41].
3. Review of student work, including group project reports and presentation slides, to find evidence of participation and understanding of innovation [54].
4. Reflective journals kept by the teaching lecturers, recording weekly teaching adjustments, student reactions, and teaching insights [55].

This method of using multiple qualitative sources allowed for triangulation of the data, helping to ensure the findings were trustworthy and credible [56-57].

3.5 Data Analysis

The collected qualitative data was analyzed using thematic analysis, following the steps described by Braun and Clarke [58]. First, the data was coded inductively to find patterns related to student participation, engagement behaviors, and learning attitudes. Then, these patterns (themes) were grouped into broader categories like cognitive engagement, collaboration, and emotional engagement. NVivo software helped organize and manage the coding process. Comparisons were made between the experimental and control groups to highlight differences in participation patterns resulting from the teaching intervention. The lecturers' reflections further supported the interpretation and helped explain the situational factors affecting student behavior.

3.6 Ethical Considerations

This study followed ethical guidelines for classroom research. At the start of the semester, students were informed that the course involved a teaching experiment for research purposes and gave their verbal agreement. Students were not told specific details about the teaching reform by preventing them from acting more engaged than usual on purpose of pleasing the teacher. No personally identifiable information was used in the analysis or reporting. The research process did not focus on individual students and did not affect student grades outside the normal course assessment, regardless of participation or not.

4 FINDINGS

4.1 Overview of Student Engagement Outcomes

Following the teaching reforms implemented from March to June 2025, student engagement showed a significant improvement in the experimental group compared to the control group. These reforms focused on active learning strategies, which led to more lively class participation, increased interest in project-based assignments, and gave students greater independence during collaborative activities.

In contrast, the control group, which continued with traditional lecture-based teaching, demonstrated relatively lower levels of engagement, limited peer interaction, and a less proactive approach to learning. Classroom observations by teachers, patterns of assignment completion, and informal student feedback all indicated that the revised teaching methods created a more engaging learning environment. These findings suggested that the teaching innovation effectively addressed the engagement challenges identified earlier and set the stage for deeper exploration of changes in student learning behavior.

4.2 Increased In-Class Interaction

One of the most significant improvements observed in the experimental group was the increased student participation in

classroom activities. Unlike the control group, where students mostly remained passive and hesitant when answering questions, students in the experimental group actively joined class discussions, case analyses, and brainstorming sessions. The integration of interactive teaching methods, such as think-pair-share, scenario simulations, and group-based problem-solving, encouraged students to express their own views and challenge each other's ideas.

Teachers reported a noticeable increase in voluntary participation, with more students asking questions and contributing to group discussions. Classroom observation records showed that the number of student-to-student and student-to-teacher interactions per class in the experimental group was more than double that in the control group. Furthermore, students demonstrated higher levels of focus and frequently actively connected course content to real-world business cases, especially in lessons involving innovation case studies.

These changes indicated a shift from passive listening to active involvement. This shift not only enhanced the classroom atmosphere but also cultivated critical thinking and communication skills. The success of this shift highlighted the value of active learning strategies in promoting deeper engagement and more meaningful classroom experiences within management education.

4.3 Improved Assignment and Project Participation

Besides increased classroom interaction, the experimental group also made significant progress in completing assignments and course projects. Unlike the control group students, who usually finished assignments passively or with minimal effort, the students in the experimental class showed higher levels of interest, creativity, and dedication. This difference was especially clear in the mid-term and final project tasks. These tasks required students to design innovative management solutions for actual or hypothetical business problems.

Students in the experimental group had more freedom when handling these tasks. They often went beyond the basic requirements by conducting interviews, integrating knowledge from different subjects, and using multimedia tools to present their findings. Compared to the outputs from the control group, project submissions were generally more detailed and better structured, showing deeper analytical thinking.

Furthermore, the group dynamics within the experimental group improved noticeably. Students demonstrated stronger collaboration and more effective division of responsibilities. Records from peer assessments and informal teacher evaluations confirmed higher levels of participation and cooperation. In contrast, students in the control group tended to rely on individual effort. They showed limited coordination with peers, resulting in project work that lacked cohesion and insight. These results indicated that the teaching reform not only encouraged classroom participation but also successfully extended students' active learning behaviors beyond the classroom environment.

4.4 Enhanced Peer Collaboration and Initiative

Another significant outcome of the teaching reform was a clear increase in peer collaboration and student initiative. In the experimental group, students showed a greater willingness to work with classmates, took leadership roles in group tasks, and actively contributed to shared learning goals. This change was mainly due to the use of collaborative learning strategies, such as group case competitions, peer reviews, and cross-functional team assignments. Throughout the semester, students in the experimental class often formed self-organized discussion groups after class, shared learning resources, and coordinated their preparation for presentations. Teachers noted that students spontaneously rotated roles within teams, such as discussion leader, researcher, and presenter, which promoted mutual accountability and shared leadership.

What was more noteworthy was something unexpected that happened in Marketing Class 1 during the experiment. When the teacher started a small project, the students in Marketing Class 1 independently proposed a challenge highly relevant to their professional interests: analyzing management innovation in short video advertisements on TikTok platform. In the control group, this level of initiative was largely absent, as learning remained more teacher-centered with less interaction. The growth in peer collaboration and initiative not only enriched the learning experience but also developed key soft skills highly valued in management innovation education, such as teamwork, self-direction, and entrepreneurial thinking.

4.5 Summary of Key Outcomes

In summary, the use of active learning strategies in the management innovation course clearly improved student involvement in several ways. Students in the experimental group showed higher levels of classroom interaction, participated in assignments and projects more thoughtfully and actively, and displayed greater initiative in peer collaboration. These results presented a clear difference compared with the control group, where traditional lecture-based teaching led to lower involvement and limited collaborative activities. Overall, the teaching reform effectively addressed the involvement challenges previously identified in the course. Evidence collected from teacher observations, student feedback, and performance records highlighted the value of shifting from passive to active learning methods. These findings not only supported the reform approach but also offered practical insights for wider use in management education.

5 DISCUSSION

The findings of this study provided convincing evidence that active learning strategies significantly improved student engagement in the Management Innovation course. By moving beyond traditional lecture-based teaching and integrating interactive, student-centered methods, the course successfully transformed the learning environment from passive reception to active involvement.

5.1 Linking Active Learning to Constructivist Theory

The positive results observed in the experimental group were closely connected to the constructivist learning theory. This theory emphasizes that learners actively build knowledge through experiences, interaction, and reflection [59]. The increase in classroom interaction and peer collaboration aligned with Vygotsky's social constructivism[59], which highlights the importance of social context and cooperative dialogue in cognitive development. Through methods like case discussions and group problem-solving, students did not just absorb information. They worked together to build understanding and applied theory to practice, which was a key part of meaningful learning.

5.2 Redefining Engagement in Management Education

In the context of management education, engagement meant more than just paying attention; it included emotional, behavioral, and cognitive involvement in the learning process [60]. The teaching reform strengthened all three aspects. Behaviorally, students participated more in class and group activities. Emotionally, they showed greater interest and motivation, especially when working on projects related to their career goals. Cognitively, they demonstrated deeper processing by connecting theoretical knowledge to real-world innovation challenges. These changes represented a comprehensive improvement in student engagement, essential for developing future professionals who can think critically, collaborate effectively, and innovate continuously.

5.3 Implications for Course Design

The success of the reform suggested that courses like Management Innovation should prioritize experiential and inquiry-based learning methods. Traditional lectures often failed to meet the expectations of today's digitally literate and career-focused students [61]. Instead, educators should consider redesigning courses to include collaborative projects, real-world case analysis, peer assessment, and formative feedback cycles [62]. These strategies not only maintained engagement but also developed practical abilities in communication, leadership, and innovation. Furthermore, this study highlighted the importance of aligning assessment tasks with the course's experiential learning approach. Students in the experimental group were more engaged when assignments allowed for creativity, autonomy, and real-world relevance. This indicated a need for more authentic assessments that went beyond tests and essays, such as innovation proposals, group presentations, and design thinking challenges.

5.4 Limitations and Sustainability

Although the reform achieved positive results, it was not without limitations. First, this study did not include formal survey tools or long-term impact evaluations. Future research could benefit from mixed methods, combining qualitative insights with quantitative measures like engagement scales or academic performance comparisons. Second, the successful implementation of active learning depended heavily on instructor capability and student readiness. Some students might resist participation initially, especially if they were used to passive learning styles. Therefore, gradual adaptation and scaffolding strategies were necessary. To ensure sustainability, institutional support was crucial. This included teacher training, flexible classroom environments, and a culture that valued teaching innovation. Without this structural support, active learning risked becoming a temporary effort rather than a lasting reform.

6 CONCLUSION AND IMPLICATIONS

This study aimed to address the persistent challenge of low student engagement in management innovation course by introducing reforms based on active learning principles. Through a comparative intervention conducted in a Chinese undergraduate setting, the findings confirmed that shifting from passive listening to active participation significantly improved student engagement, collaborative learning, and classroom dynamics.

The integration of case-based discussions, project-driven assignments, and peer collaboration enable students to take charge of their own learning process. Compared to traditional lecture-centered classrooms, the reformed teaching methods cultivate higher levels of behavioral, emotional, and cognitive engagement. This alignes with the goals of management education for the 21st century.

The implications for educators would be both practical and strategic. At the classroom level, instructors are urged to reconfigure their instructional methods to incorporate more interactive and learner-focused activities. They also need to align learning objectives, tasks, and assessments. At the institutional level, universities should have supported such reforms through professional development, resource allocation, and evaluation systems that recognized teaching innovation.

Furthermore, this study adds support to the existing literature in related fields. These literatures argued for redefining

the issue of student engagement in business and management education, particularly within the Asian higher education context [14]. It also highlights the need for future research to explore long-term effects, include multi-dimensional engagement indicators, and investigate how different learner profiles responded to active learning environments.

In conclusion, improving student engagement in management education requires more than just content delivery. The success of this reform shows that, through thoughtful design and committed implementation, active learning could create a more dynamic, inclusive, and effective learning experience for students.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

REFERENCES

[1] S B Umar, J Ahmad, M A B Mohd Bukhori, et al. Transforming Higher-Education-Intitutes: Impact of Change Management on Sustainable Performance Through Transformational Leadership and Knowledge Management. Sustainability, 2025, 17(6): 2445. DOI: 10.3390/su17062445.

[2] M A Marlia, R Fahmy, H Lukito, et al. An Exploratory Study on Effective Leadership and Change Management in the Transformation of Indonesian Public Universities Towards World-Class University Status. Sustainability, 2025, 17(3): 1300. DOI: 10.3390/su17031300.

[3] S Moyo. Learning and Organizational Change: A Case Study of Using Learning Intervention in a Strategic Management Course. Open Journal of Business and Management, 2023, 11(5): 2175–2197. DOI: 10.4236/ojbm.2023.115120.

[4] K L Boehme, T Goetz M Feuchter, F Preckel. Is Boredom the Opposite of Interest? A Longitudinal Reciprocal Effect Study. Educational Psychology Review, 2025, 37(1): 15. DOI: 10.1007/s10648-025-09991-5.

[5] L Deslauriers, L S McCarty, K Miller, et al. Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom. Proceedings of the National Academy of Sciences, 2019, 116(39): 19251–19257. DOI: 10.1073/pnas.1821936116.

[6] S Freeman. Active learning increases student performance in science, engineering, and mathematics. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111(23): 8410–8415. DOI: 10.1073/pnas.1319030111.

[7] H Dietrich, T Evans. Traditional lectures versus active learning – A false dichotomy? STEM Education, 2022, 2(4): 275–292. DOI: 10.3934/steme.2022017.

[8] R M Carini, G D Kuh, S P Klein. Student Engagement and Student Learning: Testing the Linkages. Research in Higher Education, 2006, 47(1): 1–32. DOI: 10.1007/s11162-005-8150-9.

[9] V Korhonen, M Mattsson, M Inkinen, et al. Understanding the Multidimensional Nature of Student Engagement During the First Year of Higher Education. Frontiers in Psychology, 2019, 10: 1056. DOI: 10.3389/fpsyg.2019.01056.

[10] A Kozanitis, L Nenciovici. Effect of active learning versus traditional lecturing on the learning achievement of college students in humanities and social sciences: a meta-analysis. Higher Education, 2023, 86(6): 1377–1394. DOI: 10.1007/s10734-022-00977-8.

[11] V Gkogkidis, N Dacre. Co-Creating Educational Project Management Board Games to Enhance Student Engagement. SSRN Electronic Journal, 2020. DOI: 10.2139/ssrn.3812772.

[12] T Köpeczi-Bócz. The Impact of a Combination of Flipped Classroom and Project-Based Learning on the Learning Motivation of University Students. Education Sciences, 2024, 14(3): 240. DOI: 10.3390/educsci14030240.

[13] H L Tay. Using Integrated Course Design for Flipped Classroom to Promote Active Learning of Lean Six Sigma for Supply Chains. International Journal of Management and Applied Research, 2021, 8(1): 36–50. DOI: 10.18646/2056.81.21-003.

[14] P Hallinger, J Lu. Learner centered higher education in East Asia: assessing the effects on student engagement. International Journal of Management and Applied Research, 2013, 27(6): 594–612. DOI: 10.1108/IJEM-06-2012-0072.

[15] G W Scott. Active engagement with assessment and feedback can improve group-work outcomes and boost student confidence. Higher Education Pedagogies, 2017, 2(1): 1–13. DOI: 10.1080/23752696.2017.1307692.

[16] J B Stang, I Roll. Interactions between teaching assistants and students boost engagement in physics labs. Physical Review Special Topics – Physics Education Research, 2014, 10(2): 020117. DOI: 10.1103/PhysRevSTPER.10.020117.

[17] H T Hung. Flipping the classroom for English language learners to foster active learning. Computer Assisted Language Learning, 2015, 28(1): 81–96. DOI: 10.1080/09588221.2014.967701.

[18] M Prince. Does Active Learning Work? A Review of the Research. Journal of Engineering Education, 2004, 93(3): 223–231. DOI: 10.1002/j.2168-9830.2004.tb00809.x.

[19] G Anthony. Active Learning in a Constructivist Framework. Educational Studies in Mathematics, 1996, 31(4): 349–369.

[20] I V Rossi, J D De Lima, B Sabatke, et al. Active learning tools improve the learning outcomes, scientific attitude, and critical thinking in higher education: Experiences in an online course during the COVID -19 pandemic. Biochemistry and Molecular Biology Education, 2021, 49(6): 888–903. DOI: 10.1002/bmb.21574.
[21] A H Sulaiman. The Use of Active Learning Strategies to Foster Effective Teaching in Higher Education Institutions. Zanco Journal of Humanity Sciences, 2024, 28(4). DOI: 10.21271/zjhs.28.4.18.
[22] I El-Thalji. Boosting Active Learning Through a Gamified Flipped Classroom: A Retrospective Case Study in Higher Engineering Education. Education Sciences, 2025, 15(4): 430. DOI: 10.3390/educsci15040430.
[23] R Khanal. An Investigation of The Effectiveness of Flipped Classroom Teaching in Project Management Course: a Case Study of Australian Higher Education. PUPIL: International Journal of Teaching, Education and Learning, 2020, 4(2): 348–368. DOI: 10.20319/pijtel.2020.42.348368.
[24] P Moll-Khosrawi, C Zöllner, N Cencin, et al. Flipped learning enhances non-technical skill performance in simulation-based education: a randomised controlled trial. BMC Medical Education, 2021, 21(1): 353. DOI: 10.1186/s12909-021-02766-w.
[25] L Neriz, A Núñez, V Fuentes-Caceres, et al. Simulation-based training as a teaching and learning tool for management education. Innovations in Education and Teaching International, 2020, 57(6): 701–713. DOI: 10.1080/14703297.2019.1631874.
[26] E Acevedo, A J Lazar. Active Learning and Interpersonal Skills Development among First-Generation College Students.International Studies Perspectives, 2022, 23(3): 249–270. DOI: 10.1093/isp/ekab010.
[27] D C Lopes, M C Gerolamo, M A Musetti, et al. Social skills in higher education: how to combine active learning and social skills training program. Production, 2021, 31: e20200103. DOI: 10.1590/0103-6513.20200103.
[28] J A Fredricks, P C Blumenfeld, A H Paris. School Engagement: Potential of the Concept, State of the Evidence. Review of Educational Research, 2004, 74(1): 59–109. DOI: 10.3102/00346543074001059.
[29] H Lei, Y Cui, W Zhou. Relationships between student engagement and academic achievement: A meta-analysis. Social Behavior and Personality: An International Journal, 2018, 46(3): 517–528. DOI: 10.2224/sbp.7054.
[30] N Mahmood, S M Bhatti, H Dawood, et al. Measuring Student Engagement through Behavioral and Emotional Features Using Deep-Learning Models.Algorithms, 2024, 17(10): 458. DOI: 10.3390/a17100458.
[31] Y Liu, S Ma, Y Chen. The impacts of learning motivation, emotional engagement and psychological capital on academic performance in a blended learning university course. Frontiers in Psychology, 2024, 15: 1357936. DOI: 10.3389/fpsyg.2024.1357936.
[32] X Wang, W M Wan Jaafar, R M Sulong. Building better learners: exploring positive emotions and life satisfaction as keys to academic engagement. Frontiers in Education, 2025, 10: 1535996. DOI: 10.3389/feduc.2025.1535996.
[33] H Zhang, J Yang, Z Liu. Effect of teachers' teaching strategies on students' learning engagement: moderated mediation model. Frontiers in Psychology, 2024, 15: 1475048. DOI: 0.3389/fpsyg.2024.1475048.
[34] M Alizadeh. Exploring Engagement and Perceived Learning Outcomes in an Immersive Flipped Learning Context. 2024, 6(2).
[35] B A Bhuiyan, M S Molla, M Alam. Managing Innovation in Technical Education: Revisiting the Developmental Strategies of Politeknik Brunei. SSRN Electronic Journal, 2021. DOI: 10.2139/ssrn.3956515.
[36] S Purohit, A Dutt. Pedagogical innovations in management education in the 21ST century: A review and research agenda. International Journal of Management Education, 2024, 22(2): 100976. DOI: 10.1016/j.ijme.2024.100976.
[37] T Tang, V Vezzani, V Eriksson. Developing critical thinking, collective creativity skills and problem solving through playful design jams. Thinking Skills and Creativity, 2020, 37: 100696. DOI: 10.1016/j.tsc.2020.100696.
[38] N Campos, M Nogal, C Caliz, et al. Simulation-based education involving online and on-campus models in different European universities. International Journal of Educational Technology in Higher Education, 2020, 17(1): 8. DOI: 10.1186/s41239-020-0181-y.
[39] N James, A Humez, P Laufenberg. Using Technology to Structure and Scaffold Real World Experiential Learning in Distance Education. TechTrends, 2020, 64(4): 636–645. DOI: 10.1007/s11528-020-00515-2.
[40] I C Lassen, A Arielle-Evans, L Ríos, et al. Student ownership and understanding of multi-week final projects', in 2021 Physics Education Research Conference Proceedings, 2021: 221–226. DOI: 10.1119/perc.2021.pr.Lassen.
[41] V Schürmann, D Bodemer, N Marquardt. Exploring the use of regular reflections in student collaboration: a case study in higher education. Frontiers in Education, 2025, 10: 1526487. DOI: 10.3389/feduc.2025.1526487.
[42] Z Huang, T Wang, X Li. The political dynamics of educational changes in China. Policy Futures in Education, 2015, 14(1): 24–41. DOI: 10.1177/1478210315612644.
[43] R Vidart Klafke, M Arnold, C T Picinin. The abyss between theory and practice in business education: a reflection from teaching in Brazilian and German institutions of higher education. Discovery Global Society, 2023, 1(1): 3. DOI: 10.1007/s44282-023-00003-x.
[44] W Tie, N Agarwal. The Cultural Contexts of E-Learning In Higher Education In China And Flemish: A Study Focused Student And Teacher Perspectives. Educational Administration: Theory and Practice, 2024, 30(4): 9490–9496.
[45] T H Malik, C Sun, G Y Zhang. The influence of discipline abstractness on student satisfaction in the ICT field: a study of chinese universities' inter-disciplinary construal levels. Digital Economy and Sustainable Development, 2023, 1(1): 22. DOI: 10.1007/s44265-023-00022-1.
[46] V Ratten, P Jones. Entrepreneurship and management education: Exploring trends and gaps. International Journal of Management Education, 2021, 19(1): 100431. DOI: 10.1016/j.ijme.2020.100431.

[47] Wang C, C Bu, K Zhang. Research on Teaching Reform and Innovation in the Project Management Course Based on "Case+". Global Research in Higher Education, 2025, 8(1): . 52–59. DOI: 10.22158/grhe.v8n1p52.
[48] K A O'Connor, H C Greene, P J Anderson. Action Research: A Tool for Improving Teacher Quality and Classroom Practice. In American Educational Research Association, San Francisco, CA, 2006: 1–29.
[49] A L Wright, G L Irving, S Pereira, J Staggs. An Instructional Innovation That Embeds Group Learning in Case Teaching: The Table Case Method. Journal of Management Education, 2024, 48(3): 526–563. DOI: 10.1177/10525629231216642.
[50] M Neumann, L Baumann. Agile Methods in Higher Education: Adapting and Using eduScrum with Real World Projects. In 2021 IEEE Frontiers in Education Conference (FIE), Lincoln, NE, USA: IEEE, 2021: 1–8. DOI: 10.1109/FIE49875.2021.9637344.
[51] N L Abdullah, M H Hanafiah, N A Hashim. Developing Creative Teaching Module: Business Simulation in Teaching Strategic Management. International Education Studies, 2013, 6(6): 95. DOI: 10.5539/ies.v6n6p95.
[52] A M Ahmed. Students' reflective journaling: an impactful strategy that informs instructional practices in an EFL writing university context in Qatar. Reflective Practice, 2019, 20(4): 483–500. DOI: 10.1080/14623943.2019.1638246.
[53] M Li. Research on the Innovative Practice of "The Flipped Classroom" in the Basic Management Course of Chinese Universities. Creative Education, 2017, 8(13): 2155–2163. DOI: 10.4236/ce.2017.813146.
[54] F Afzal, R J Tumpa. Project-based group work for enhancing students learning in project management education: an action research. International Journal of Managing Projects in Business, 2025, 18(1): 189–208. DOI: 10.1108/IJMPB-06-2024-0150.
[55] T Zulfikar, Mujiburrahman. Understanding own teaching: becoming reflective teachers through reflective journals. Reflective Practice, 2018, 19(1): 1–13. DOI: 10.1080/14623943.2017.1295933.
[56] M C Hoepfl. Choosing Qualitative Research: A Primer for Technology Education Researchers. Journal of Technology Education, 1997, 9(1). DOI: 10.21061/jte.v9i1.a.4.
[57] S Mtisi. The Qualitative Case Study Research Strategy as Applied on a Rural Enterprise Development Doctoral Research Project. International Journal of Qualitative Methods, 2022, 21: 16094069221145849. DOI: 10.1177/16094069221145849.
[58] V Braun, V Clarke. Using thematic analysis in psychology. Qualitative Research in Psychology, 2006, 3(2): 77–101. DOI: 10.1191/1478088706qp063oa.
[59] L S Vygotsky. Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press, 1978.
[60] M M Husain. To what extent emotion, cognition and behaviour enhance a student's engagement: A case study on the MAJA teaching approach. Policy Futures in Education, 2022, 20(1): 86–97. DOI: 10.1177/14782103211032076.
[61] C Seemiller, M Grace. Generation Z goes to college. Jossey-Bass, 2016.
[62] B P Solis Trujillo, D Velarde-Camaqui, C A Gonzales Nuñez, et al. The current landscape of formative assessment and feedback in graduate studies: a systematic literature review. Frontiers in Education, 2025, 10: 1509983. DOI: 10.3389/feduc.2025.1509983.