Quality Management System of Online Teaching in Sino-Foreign Joint Training Courses in the Digital Age

Zou Mingmin

Jiangxi University of Technology,Nuuuuu University, China

Abstract

The rapid growth of online education platforms has made online education platforms an integral part of modern education.In the last ten years, joint educational initiatives between China and other countries have surfaced, providing students with diverse and adaptable study opportunities. However quality control and management of Sino-foreign joint training programs is challenging due to cross-cultural and cross-regional collaborations. In this paper, quality control and management of Sino-foreign joint training programs in the digital age, including curriculum design, teaching method and learning evaluation, are investigated, and qualitative control framework to ensure educational excellence. It is highlighted that quality control must be implemented to maintain high teaching standards in online Sino-foreign joint training courses by using digital technology to improve learning outcomes and student engagement. Future work could use artificial intelligence for intelligently monitoring teaching quality and cross-cultural faculty teams to improve overall quality of Sino-foreign educational initiatives.

1.Introduction

The traditional model of education has been greatly influenced by the new educational format with Internet as a new method of teaching which enables students to utilize resources and knowledge all over the world and gives the learners a modern learning mindset, while the difficulty still exists in whether the teaching quality can be guaranteed at all levels (Akhmatova, 2022). In order to enhance the quality of teaching and teaching ability of learning for Sino-foreign joint training courses, the quality monitoring and management system of Internet teaching should be formulated according to the actual feedback from students learning outcomes and quality of school, so as to effectively enhance the reputation and brand of university(Lu & Jiang, 2024). The research aims to discuss the Internet teaching of curriculum construction, teaching strategies and

learning assessment of Sino-foreign joint training programs .

2.Literature Review

Research on online Sino-foreign joint education highlights key challenges in quality assurance, digital delivery, and cross-cultural pedagogy. Akhmatova et al. (2022) stressed the role of intelligent quality management systems in improving teaching consistency through real-time monitoring. Josué et al. (2023) also confirmed the benefits of data-driven educational platforms for enhancing instructional effectiveness.

The pandemic accelerated online education, with Luo et al. (2024) showing that electronic resources significantly supported learning outcomes. Lu and Jiang (2024) linked sustainable development of joint universities to robust quality assurance mechanisms. Goodbody (2023) and Liao (2024) addressed linguistic and communication barriers, advocating for dual-teacher models and digital tools to support pedagogy.

Catacutan et al. (2023) proposed a competence-based, outcome-oriented curriculum model aligned with industry needs. Data analytics and AI are increasingly vital, with Shu (2022) and Yu (2023) emphasizing their role in learning evaluation and feedback. Si and Rayner (2025) discussed governance structures needed for effective joint program management.

Zheng et al. (2024) provided practical guidelines for quality assurance in Sino-foreign collaborations, supporting the system model proposed in this study. Together, these works lay the groundwork for a comprehensive, adaptive quality management framework for joint online education.

3.Methodology and Procedures

The study adopts a qualitative approach using literature review and case studies of effective Sino-foreign joint training projects. The focus is on curriculum planning, teaching modes and student evaluation to build teaching quality management and monitor information system models. Then, the research compares and contrasts with the latest international literature on effective teaching and learning models and advanced practical cases (Josué et al., 2023; Shu, 2022).

3.1 Monitoring the Teaching Quality of Chinese-Foreign Joint Training Courses on Online Education Platforms

3.1.1 Curriculum Design: Ensuring that the curriculum is designed based on learning outcomes, integrating international standards with local learning requirements, and avoiding knowledge fragmentation.quality assurance based on learning outcomes.

Curriculum design is necessary for Sino-foreign joint training course to be qualitative. Quality control is necessary to guarantee the high quality. Design of curriculum should consider schools differences so as to avoid knowledges fragment for mutual cohesion and scientific consistency(Catacutan et al., 2023). Emphasize on the expected learning outcomes: the expected knowledge, skills, abilities of the students after completing the program(Lu & Jiang, 2024). This is why the content and test design framework of curriculum. Students should cultivate critical thinking, innovation, communication skills of cross culture. Clear, quantifiable, teaching goal and fit with teaching sybil to make sure that curricula are suitable to our depth and scope. Assessment and quality supervision should be necessary for the later teaching quality and quality follow-up of curricula. Curriculum design lays the foundations for later quality of teaching (Zheng et al., 2024).

The course module design should be reviewed many times. Curriculum teams should set goals,

consult educational partners, using the goals as basis for course content. All curriculum modules should account differences between Chinese and foreign education systems, integrating international standards with local learning requirements. Course team will review course material considering complexity, breadth of knowledge and teaching resources. Course content should be organized according to order, hierarchy and practicality, to avoid redundantness or superficiality. Curriculum design will be reviewed by College Curriculum Committee. All videos and interactive platforms should be developed according to large scale online learning. International students should have equal opportunity for engaging and monitor design to improve quality of curriculum content, teaching and technical support to a high level.

3.1.2 Teaching Process: Implementing data-driven dynamic monitoring and intervention to maintain teaching effectiveness and address quality issues in real-time.data-driven dynamic monitoring and intervention.

Teaching process monitoring & evaluation for keep teaching effectiveness and correct teaching quality issues on time Real time data analysis to discovery early teaching problems and adjust early(Josué et al., 2023) . Teaching process monitoring, teaching way and student participation Teaching interaction, student participation and course completing may be important indicators. We can track teaching weak points early and use early interventions. Poor student participation will induce teacher add more interaction session or more interest teaching contents Teaching may be suit cross cultural learning and teaching maintaining teaching quality .

Once students have entered the learning module, they are tracked by the platform that records information such as time spent on course materials, assignments, discussions, etc. This information is sent to the teaching team.Using big data, the platform analyzes each student's progress and finds students slow or less engaged (Goodbody, 2023; Liao, 2024). Automatically reminding students to complete tasks and studying suggestions based on their learning profile, teachers can keep track of progress of each student and provide guidance. Monitoring and feedback ensures quality of the curriculum and smooth teaching activities, and also significantly improve student learning results(Shu, 2022). The platform also uses this data to improve course content and instruction.

3.1.3 Learning Evaluation: Using multi-dimensional and personalized evaluation methods to assess students' knowledge mastery, learning ability, cross-cultural adaptability, and self-directed learning ability.multi-dimensional, personalized evaluation and feedback.

Evaluation of teaching effectiveness is important for high quality instruction especially in Sino-foreign collaboration programs.Using various and detailed evaluation methods such as thorough assessments, homework feedback, online discussions, group projects etc., can help to make the evaluation objective and fair (Li, 2021). Evaluations should not only consider students knowledge mastery but also their learning ability, cross-cultural adaptability and self-directed learning ability (Yu, 2023).This way teachers can know students' progress and modify teaching content and methods quickly.Personalized feedback can guide and support students according to learning profile and needs.Personalized feedback helps students in overcoming learning problems and attain personal development goals.

Evaluation of student learning in the platform includes various evaluation methods. In addition to final examinations, students learn from homework, online quizzes, courses, groups, group projects, and peer interactions. Through feedback, students get learning results and homework qualities. It also receives feedback from peers. Feedback also provides feedback on student strengths and weaknesses. The automated grading of homework and score and error analysis of homework enables students to make out learning defects. Besides the quantitative evaluation, the platform evaluates students adaptability and cross cultural communications through online

surveys, teacher evaluations and peer feedbacks (Piromtam, 2024). Through these evaluations, the platform can capture students learning results and adjust the course content and teaching methods to continuously enhance the learning quality (Josué et al., 2023).

3.2 Developing the Teaching Management System for Joint Chinese and Foreign Training Curricula on Online Platforms

3.2.1 Goal setting: matching industry demand and future development trend.

Goal setting is the most essential steps of managing Sino-foreign joint education train programs. Goals should be students-related and current world education environment-related. Education should be aimed at cultivating international outlook and communication skills among cross-cultural students, so that they can make a good fit and bring their own advantage in global career employment competition, to make it conform to the competitiveness of the global job market. Goals should be students-cultural-related so that the teaching process can be carried out in an easy and effective way and conform to different geographical cultural backgrounds (Handoko et al., 2019). Goals should be quantified so that we can assess and track the teaching result efficiently. Goal setting will make it feasible to execute the curriculum teaching and instruction can be optimized for student development.

Chinese-foreign dual train course goal setting is based on the students' need. Course teaching objectives are determined according to market and development changes in foreign education, so that it meets the students' future working career development and can promote students' career development. Course goals are designed considering job market changes in different countries, students' international vision and cultural communication ability. Teaching goals is adapted based on the student background of students' and prepare student for different working challenges from different areas. Students learning, skill development for innovation, cooperation and problem solving skills.(Handoko et al., 2019; Lu & Jiang, 2024)

3.2.2 Standard formulation: building an all-round quality assurance framework

Setting standards is important to improve educational management systems. Establishing benchmarks is crucial for the quality and success of instruction (Zheng et al., 2024). For Sino-foreign collaborative training programs with foreign instructors, clear standards should be set for course planning, implementation and evaluation should be consistent with educational quality management principles and should ensure the quality of the curriculum. Teaching methods and assessment standards should be flexible to different student groups and teaching environment. When uniform standards are set, deviations can be reduced and the quality of the curriculum improved. Standards provide clear guidance to educators and can also serve as basis for continuous improvement of teaching practice and different teaching components(Si & Rayner, 2025).

We need specific standards and requirements for Sino-foreign joint training courses. First, platform will formulate standardized protocols for design of curricula, teaching evaluation, quality monitoring, and quality assurance standards in light of national and international educational standards and accreditation standards, including requirements for course materials and technical specifications of teaching platforms to ensure robust running of online learning systems and enhance students' learning experiences （Piromtam, 2024). Teachers will formulate teaching standards based on learning objectives and evaluations such as student participation in class, homework submission, feedback and answers, students will get timely feedback and assistance throughout their learning process, they have equal access to educational resources. Instructional techniques will be further enhanced with feedback from students, evaluations by educators and learning results, with assurance that teaching standards of curricula and instruction stand up to industrial requirements.

3.2.3 Structure and personnel: optimize configuration and cooperate

Teachers, administrators, and technical support person should be at hand to manage the teaching management system. Managers should be experienced with the history of intercultural education, and their global prospective to use various education scenarios. Technical support staff need to be strategically allocated to make the platform functional and user-friendly, especially in active teaching. Optimize the staff numbers and promote cooperative of each department learning and teaching, teaching and managing can be efficient. Training and the skill development are crucial parts of the teaching management system for teaching quality support(Liao, 2024).

The Sino-foreign joint training course teaching management organization will firstly dispatch Curriculum Designers, Teaching Managers and Online Technical Support Team with International teaching experience based on the curriculum requirements. The personnel with knowledge of International Learning Communication and Curriculum Design are necessary. Teachers and Student Leaders will be dispatched based on the content and student situation, every teacher will give personalized attention and guidance for students learning process (Goodbody, 2023; Lu & Jiang, 2024). The Online Technical Support Team with teaching team would manage online teaching service in time. All of the platform teams will have designated responsibilities in order to enhance teaching organizations.

Meanwhile, it reflects in the study of opportunities for applying artificial intelligence to intelligent teaching quality supervision and building up cross-national team of instructors in order to provide more guarantee for Sino-foreign educational courses' teaching quality(Shu, 2022).

4.Results and Discussion

In this research, the implementation process of online education quality management in Sino-foreign joint education with the technological support of online education, by setting multi-dimension and multi-level indicators and applications of data mining technology, greatly improves teaching effectiveness and students' learning effect. The training curricula set according to educational targets, advanced international criteria can meet the requirements of high-quality teaching in joint education. Thirdly, multi-dimension evaluation of students' learning effect can comprehensively measure teaching results, while knowledge mastery is not the only criterion.

The work focus on the importance of a robust system with an educational management system with clear targets, standard processes and system personnel deployment. Communication and interaction among teachers, principals and administrators and among administrators and specialists is important to smooth running of the system. This observation is in line with studies which advocate the importance of quality assurance in raising up education for competitiveness.

5.Conclusion and Suggestion

To sum up, a good quality management system of online teaching in Sino-foreign joint training courses is significant to guarantee the teaching quality. Digital technologies integration, good teaching curriculum, multi-dimension evaluation and solid teaching management system are an important guarantee to the high teaching standard and good students learning results. As a research prospect, application of artificial intelligence for intelligence monitoring teaching quality, constructing cross-culture faculty team and promoting the level of teachers quality for Sino-foreign education will greatly promote the improvement of high effective online education and international excellent talents in market competitiveness.

Acknowledgments

The author would like to acknowledge all the reviewers for your help and advice, and improvements to the paper that the latter helped shape.

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