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Construction and Practice of an SPOC + BOPPPS Blended Teaching Model in Management Courses

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Abstract: With the progress of educational digitalisation, management courses in private undergraduate institutions still face the same problems: students are unmotivated in class, the teaching form is monotonous, there is a lack of practice based on theory, and the evaluation system is outdated. This paper investigates how to integrate SPOC, which supports autonomous pre-class guided learning, with BOPPPS, which structures face-to-face teaching, to solve the problems mentioned above in resource-constrained environments. Based on a review of related practice, this paper analyzes the internal logic of the SPOC + BOPPPS integration and builds a "dual-drive, three-phase integration" blended teaching model that includes pre-class SPOC guided learning, in-class BOPPPS structured teaching, and post-class feedback and improvement, along with its implementation path. The model was piloted in the Service Pricing Strategy unit of the Service Marketing course in one intact class (N = 43) during Semester 1 of the 2025–2026 academic year. Based on the preliminary observations, the model can promote classroom engagement, shift the focus of the classroom from teacher-led instruction to student-centered creation, and operate without high-end smart teaching facilities; however, problems have also been identified in learner autonomy, teacher workload, digital infrastructure, and process-oriented evaluation. Corresponding Optimisation Strategies Are Proposed. The study provides a low-threshold, replicable reference for blended teaching reform in management courses at resource-constrained private universities.

Keywords: SPOC; BOPPPS; Blended Teaching; Management Courses; Private Undergraduate Institutions

1. Introduction

Educational digitalisation has been promoted as a national strategy, and policy guidance calls for the deep integration of information technology in classroom teaching and the effective implementation of online-offline blended teaching reform. Management courses in private undergraduate institutions are responsible for cultivating application-oriented management talents. However, in many of these institutions, classroom teaching is still dominated by teacher-centered lecturing; students receive knowledge passively, classroom interaction is limited, the practical component is relatively weak, and process-based assessment is not effectively implemented. Generally speaking, the design of a course should have a single goal: to achieve the intended learning outcomes through teaching activities and assessments. If the stated goals are application-oriented, but the activities and evaluations still focus on knowledge recall, then there is a disconnect, and the competencies the course aims to foster will not be achieved. Management education is also a type of area where professional ability is demonstrated through situated decision-making rather than by learning and memorising knowledge.

Blended learning has been proposed as a remedy for the above deficiencies. Blended teaching is generally regarded as a redesign of the learning experience rather than the addition of online materials to an existing course; in this redesign, the online and face-to-face parts are intentionally arranged around the learning goals. The appeal of this redistribution for management courses is that the knowledge students can learn independently is moved online, and class time is used for application, discussion and practice. Most of the reported cases are in institutions with well-developed online platforms and smart teaching equipment. Private undergraduate institutions make up a large proportion of

Chinese higher education and generally have relatively weak digital infrastructure; despite the seriousness of the teaching problems they face, they have received relatively little attention. Therefore, teaching models that require large-scale capital investment or special technical support are not feasible in such places.

In light of the problems mentioned above, the two relatively simple-to-implement methods of SPOC (Small Private Online Course) and the BOPPPS teaching model will be combined in this study. The two methods have different purposes; SPOC is used for guided learning before class and is self-paced but has a limited scope, and BOPPPS helps teachers organise face-to-face teaching in an organised way. Recently, scholars in China have started to explore the application of this combination in business courses. For example, Guan [1] put has proposed a blended teaching design for the Fundamentals of Accounting course that combines Rain Classroom with the BOPPPS model, and Yue et al. [2] have also introduced the SPOC+BOPPPS model in an online store operation and promotion course.

Most of these practices are based on smart teaching platforms [1], and in other subjects, some reported cases have gone much further along this path, as shown in Section 2.2. On the other hand, there is a lack of research on practical models that can be applied to private undergraduate colleges with limited hardware resources. To address this problem, based on the actual teaching conditions of management courses in private universities, this paper will take the following four steps. First, it explores the internal logic of combining SPOC with BOPPPS; then, it builds a "dual-drive, three-phase integration" blended teaching model and outlines the path for its implementation; next, it reports on the results of an initial pilot in a whole-class setting; finally, it identifies the practical difficulties encountered and puts forward corresponding optimisation strategies. The following are the other parts of this paper: Section 2 introduces the basic ideas and the reasons for combining them; Section 3 constructs the model; Section 4 presents the design of implementation and an initial pilot; Section 5 discusses the problems and optimisation measures; Section 6 concludes the study.

2. Related Concepts and Integration Logic

2.1 SPOC

SPOC (Small Private Online Course) is a small online course with a limited number of students, designed for a particular group of students. It is not the same as a MOOC (Massive Open Online Course); MOOCs are generally available to the public. Because there are fewer students, teachers can adjust the speed and content of the class, as well as the tests, according to the actual needs of this group; they can also communicate with the students more directly and promptly than in a large open course. The above features are very conducive to the cultivation of management skills and need to be nurtured carefully. The three main functions of SPOC in teaching are: First, it centrally distributes learning resources, such as micro-lessons, courseware, exercises and discussion prompts; second, it assigns pre-class preview tasks and monitors the completion rate of these tasks; third, based on basic engagement data, it can inform teachers whether the class has been adequately prepared for prior to the start of the class. In practice, SPOC is often used in conjunction with the flipped classroom model to have students learn the basic knowledge in a pre-class session through outcome-oriented design [3].

It should be pointed out that these functions do not need an advanced smart teaching platform. Most Chinese institutions have already obtained some simple tools, such as WeChat groups, QQ groups and Tencent Docs, that can be used to distribute learning materials, assign tasks and record whether students have completed them. Therefore, in this paper, SPOC is treated as a form of organising teaching rather than a technical requirement; what is truly important is that students can obtain the basic knowledge in an organised pre-class area, and the level of advancement of the hosting platform does not matter.

2.2 BOPPPS

The BOPPPS teaching model is made up of six phases, namely Bridge-in, Objective, Pre-assessment, Participatory Learning, Post-assessment, and Summary [1,4]. They are all for different reasons. Bridge-in connects the topic with what students already know to arouse their interest; in the Objective phase, students are informed about what they need to learn and achieve, and these goals are best expressed in measurable terms; Participatory Learning forms

the main part of the lesson, and students actively and cooperatively engage in learning; Post-assessment shows the results of what has been achieved in class, and summary helps students organise their learned knowledge and sets forward follow-up tasks. The strength of the model is in the connections among these links, not in any single link; goals are set before activities are designed, the two assessment periods cover the participatory period, and the whole cycle is closed by consolidation. Many different objects and teaching situations [1,4] have been used in the model. Some more technology-dependent versions have been further improved by knowledge graphs and AI teaching assistants [4]; however, such an arrangement requires a large amount of infrastructure that most private undergraduate colleges cannot afford to build. However, all of them require a relatively large amount of design work for the model. All the stages need to be planned in advance, allocated reasonable time and materials, etc., and these are all the teacher's responsibilities.

2.3 The Internal Logic of the SPOC + BOPPPS Integration

The two models address different parts of the teaching plan and work together in cooperation rather than in competition. SPOC addresses the pre-class stage by moving the acquisition of basic conceptual knowledge online, thus enabling students to enter the classroom with a certain level of cognitive preparation; BOPPPS addresses the in-class stage by using the limited face-to-face time for higher-order activities, such as case analysis, group debate, scenario simulation and scheme design, which are difficult to achieve online. Combinations of the two have been explored in business-related courses [2], and SPOC-based pre-class learning has been integrated with flipped classroom designs under an outcome-oriented framework [3]. The first link in the two models is an initial test. SPOC provides the data and preparatory work needed for the pre-assessment, and based on this, the diagnosis helps teachers set an appropriate difficulty level and focus for the participatory learning. The tasks and feedback after class drive the cycle of transfer further, so the pre-class, in-class, and post-class stages are not independent but form a closed loop without any connection among them.

It is not the accumulation of technologies, but rather a redistribution of cognitive tasks in time and space. Lower-order learning tasks are for learning basic knowledge; they do not require much interaction and can be done online, and higher-order tasks, such as application and evaluation, need interaction and quick feedback and should be conducted in the classroom. Management courses are especially suitable for this arrangement because they have the characteristics of application orientation, strong dependence on real situations, and collaborative decision-making; all of these belong to the higher-order end of this distribution. Integration also meets the alignment requirement in Section 1, and the goals set in the Objective stage can be connected to SPOC preview tasks, classroom activities, post-class assessments, etc.

3. Construction of the "Dual-Drive, Three-Phase Integration" Model

A blended teaching model with dual drive and three-phase integration is proposed in this paper (Figure 1). One driver is theory: The model is based on student-centered pedagogy and outcome-oriented course design, and it aims to cultivate competent talents. Technology is the other, and an existing online teaching platform provides resources, supports interaction, and saves basic engagement data. The Technology Driver is at a relatively low level. Some institutions are still not very digitalised, so the model does not assume that intelligent automated analysis tools will always be available; in the absence of such tools, teachers have to organise teaching and assessment manually. It is an intentional selection by the model, not a fault. What the model values most is rebuilding the logic of teaching, and the purchase of hardware is given less importance. Thus, institutions with limited resources can carry out actual reforms without large-scale capital investment, and the reform will still be feasible even if the platform conditions do not improve in the near future. Table 1 shows the organisation of the three stages in terms of teacher behaviour, student behaviour and support/evaluation.

3.1 Pre-Class Phase: SPOC Online Guided Learning

In the pre-class period, an SPOC course area for this unit will be created on the campus's online teaching platform. For each chapter, the teacher will post the course slides, a short knowledge-

point micro-lecture video, preview reflection questions and basic self-test exercises online, and release one or two online discussion topics. Students complete the online learning and chapter self-tests independently, and then attend the face-to-face class prepared with the questions from the preview.

A typical way to organise the restructuring of course content at this time is to divide it into modules, and each module can be assigned to the pre-class stage along with its own resources and self-tests [5]. Three design principles follow from this. First, the amount of task work should be reasonable; there should be few preview tasks, they should be clear and directly related to what will be learned in class, and students should not get tired of too much work and the preview effect can be maintained. Second, the resources should be in the form of modules, and each micro-lecture should cover only one piece of knowledge so that students with different levels of preparation can focus on different parts. Third, the engagement data collected by the platform serve as a diagnostic tool rather than a surveillance device; before class, the teacher can review the completion records to get an overall sense of how well the cohort has prepared and identify potential misconceptions to adjust the focus of the classroom session accordingly. The main goal of this stage is to shift the acquisition of basic knowledge online, and thus a considerable portion of class time will be freed up from teaching elementary theories and can be used for competence training.

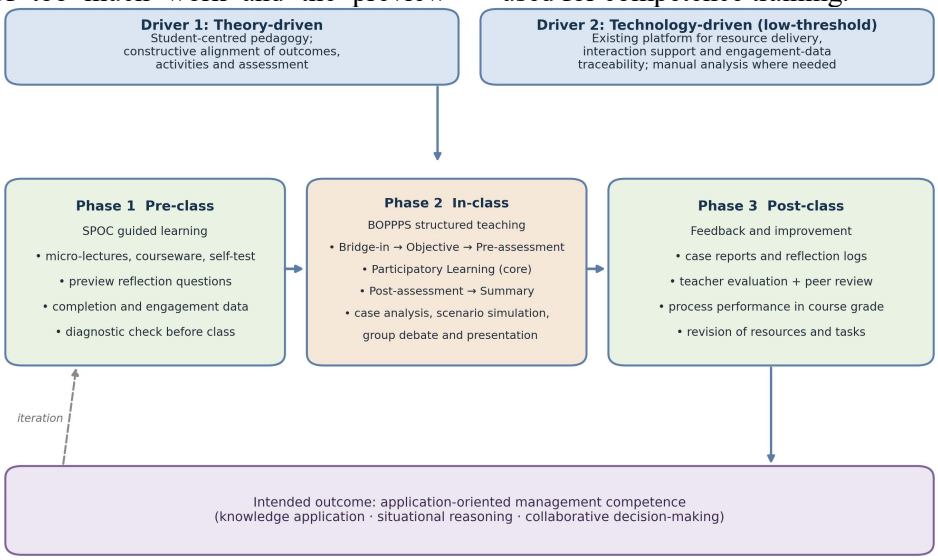


Figure 1. The "Dual-Drive, Three-Phase Integration" SPOC + BOPPPS Blended Teaching Model

Table 1. Phase-Level Design of the Model

Phase	Teacher activity	Student activity	Support and assessment
Pre-class (SPOC guided learning)	Upload micro-lectures, preview questions and self-tests; release discussion topics; review completion data before class	Complete resource learning and chapter self-tests; note questions for class	Campus online platform; completion records counted toward the process grade
In-class (BOPPPS six phases)	Bridge-in; state objectives; pre-assess; organize participatory activities; post-assess; summarize	Participate in case analysis, debate, simulation and presentation; self-and peer-assess	Classroom task sheets; participation and group performance recorded
Post-class (feedback and improvement)	Assign case reports and reflection logs; grade with rubrics; revise resources and tasks	Submit assignments; reflect on learning; conduct peer review	Platform submission records; teacher + peer formative assessment

3.2 In-Class Phase: BOPPPS Structured Participatory Teaching

The six BOPPPS stages of the face-to-face class are applied in order. In the Bridge-in stage, use popular topics in the industry, real cases of enterprises, short videos or scenario-based questions to introduce the lesson and spark students' interest by showing its relevance. In the Objective stage, the teacher explicitly and measurably states the knowledge and ability goals of the lesson so that students know what to

learn and can observe their own learning progress. In the Pre-assessment phase, a short in-class test based on the SPOC preview content examines the effectiveness of pre-class learning; its results, together with the platform data reviewed before class, inform in-the-moment adjustment of the lesson. Participatory Learning is the foundation of the classroom. Given the nature of management courses, activities such as case analysis, group discussion, scenario deduction, scheme design and group presentation are organised. In reported implementations, this stage is consistently treated as the focus of the lesson [1], and BOPPPS has also been combined with online-offline blended teaching in practice-oriented training scenarios, such as clinical internship tutoring [6], to support its application in the practical parts of professional courses. Such activities are particularly beneficial to the management course, as the cultivation of managerial ability requires experience, reflection and reapplication, not just learning from lectures. In the post-assessment stage, in-class exercises and small tasks will be used to check what students have learned in class and collect learning data. In the summary stage, the teacher and students together extract the main and difficult points, organise the knowledge structure, and assign homework.

One operating requirement is that the teacher should refrain from re-teaching the content already presented in the SPOC materials; otherwise, it would undermine the division of labour for the online and offline stages and revert to a lecture-based mode of teaching. Set a time limit for each stage of the activity in advance, or it will be difficult to reach the summary stage of the loosely organised participatory activity. Under these circumstances, the focus of the classroom shifts from teacher-led instruction to student-centered creation, and paired pre-and post-tests can be used to determine whether the participatory activities have achieved the desired learning outcomes for students.

3.3 Post-Class Phase: Feedback, Review, and Competence Transfer

The post-class period is for consolidation, transfer and improvement. The teacher has given us homework and also distributed some case studies, scheme designs, learning reflection records, etc. Diversified formative assessments are employed to consider the performance of online SPOCs, in-class group work, and post-class assignment results; teacher assessments are combined with student peer evaluations, and process performance is also incorporated into the regular course grade. Outcome-oriented Design generally advocates for various kinds of evaluations [3] instead of a single final exam, and the purpose of formative feedback in this system is to help students learn better in the future by guiding their studies; timely and criterion-referenced feedback can enable them to address the gap between their current performance and the desired outcome.

4. Practical Application and Preliminary Pilot

4.1 Implementation Design

The pilot used Service Marketing as the vehicle for delivery of this practice-oriented management course. It aimed to address the problems in that course by modifying only some parts. Service Marketing was selected because there are many real-life cases and rapidly changing industry practices to be studied, and it is also highly suitable for the participatory and scenario-based activities of the model. This way, the risk of implementation is reduced, and the model can be improved before being used on a larger scale. The Construction is in three stages.

First, a new teaching method was introduced. The instructor has revised the course syllabus, restructured the content of the target unit, created online SPOC learning materials and offline BOPPPS classroom content, and prepared micro-lectures, preview exercises, and classroom task sheets. Secondly, there is the classroom application. In the selected teaching class, the three-phase integrated process was used: SPOC learning tasks were distributed before class, the six BOPPPS stages were introduced during class, all-round practical tasks were assigned after class, and process-based evaluation was carried out throughout. At the same time, students provided feedback through informal channels during the implementation process, and minor adjustments were made to the teaching content and time allocation for group presentations based on this feedback. The Third Step is Reflection and Iteration. After the pilot, students' opinions were systematically collected to identify problems in the operation of the model, and thus, online resources, classroom activities and assessment rules were revised. The

in-process micro-adjustment of the second step was intentionally kept separate from the systematic iteration of the third; the former aimed to improve the responsiveness of the pilot, and the latter sought to make revisions applicable to subsequent units and cohorts.

4.2 Pilot Context and Procedure

Based on this Design, a small-scale trial was conducted in the Service Marketing class during the first semester of the 2025-2026 academic year. The pilot covered the main unit of Service Pricing Strategy and was held in the eighth teaching week; one complete teaching class participated (N = 43). In the pre-class period, the teacher uploaded SPOC micro-lectures, preview questions and a self-test to the campus online teaching platform, and monitored task completion; during the in-class session, the six BOPPPS stages were implemented, and case analysis and group presentations served as the main participatory activities; in the post-class period, students submitted case reports and reflection logs, and a combined teacher-peer formative assessment was conducted.

The four sources of data were the platform's task-completion records, classroom observations, the teacher's teaching log, and a short post-pilot questionnaire. How obvious and suitable the model is, and how helpful the scenario-based and cooperative activities are for students were also included in the questionnaire. Forty valid responses were collected, and the collection rate was 93.0%. The pilot was only to check the feasibility and not a controlled experiment; therefore, no formal control group or pre-test-post-test design was employed, and the observations reported below are only indicative.

4.3 Preliminary Observations

According to the platform's data, 82% of the students completed the SPOC preview tasks before class. Informal observations in the classroom showed that the participation in the participatory stage was more active than what the instructor had previously noted during traditional lectures on the same content; however, this was not systematically connected to the group presentations and scenario discussions that led to more student-initiated contributions. According to the post-pilot questionnaire, most people were satisfied with the clarity and relevance of the model; students particularly enjoyed the scenario-based and collaborative activities, and some of them mentioned that the preview tasks helped them better understand the classroom work. At the same time, the pilot also reported the implementation problems mentioned in Section 5: only a small number of students completed their SPOC tasks half-heartedly, and the instructor said that the preparation workload had increased significantly. Table 2 shows the above observations and the supporting data.

Table 2. Preliminary Observations from the Pilot and Their Limitations

Dimension	Source of evidence	Main observation	Caveat
Pre-class preparation	Platform completion records	82% of students completed the preview tasks	Completion does not equal depth of engagement
Classroom participation	Classroom observation	Higher visible participation than in previous traditional lectures	No systematic coding scheme; the observer was also the instructor
Learner perception	Post-pilot questionnaire (N = 40)	Generally positive views of clarity and relevance; scenario-based and collaborative activities most valued	Self-reported; single administration
Implementation cost	Teaching log kept by the instructor	Noticeably heavier workload for lesson preparation and grading	Full-semester sustainability not yet tested

Collectively, these observations provide some preliminary evidence from a real-world scenario that the model can be implemented and is beneficial in a resource-constrained private university; however, this evidence is still indicative rather than conclusive.

4.4 Scope and Limitations of the Pilot

Four limitations should be stated clearly. First, only one intact class of 43 students was included in the pilot, and only a single course unit from one teaching week was covered; thus, the generalizability of the observations is limited. Second, no control or comparison group was used; therefore, we cannot definitively attribute the increase in participation to the model, and novelty effects have not been ruled out. Third, participation was observed in the classroom without a system of codes, and the observer was also the teacher; thus, confirmation bias may have occurred. Fourthly, it was not known whether the increase in engagement led to

sustained improvement in ability over time. All the data are from the regular teaching activities and are reported only in aggregate; no individual information is disclosed. The above deficiencies limit the scope of the claims in this paper; a pilot study has shown that the model is feasible and acceptable to students but not yet effective.

5. Practical Dilemmas and Optimization Strategies

The model is theoretically very suitable, but both the pilot and the large-scale study have found some problems in its application at private undergraduate institutions; therefore, targeted optimisation strategies need to be developed to address these issues. The four problems are listed below in the order of enabling conditions and participants, along with the relevant countermeasures.

5.1 Limited Digital Infrastructure and the Role of Technology

The Supporting Role of Digital-Intelligence Technology in University Education is attracting increasing attention [7]. Some private universities have had limited support for digital teaching and lack intelligent teaching assistance tools. Therefore, the reform should be based on the basic functions of the existing teaching platform, replace manual evaluation and manual learning analysis with intelligent tools, focus on implementing the core of the model, and expand intelligent applications after platform upgrades. Work on digital-intelligence pedagogy also suggests that digital technology should serve the goals of education, not replace them [8]. The essential feature of the reform of blended teaching is to reconstruct the teaching process and enhance teacher-student interaction, rather than introducing high-tech equipment. The deliberately low-threshold definition of the technology driver in Section 3 is to keep the reform feasible under these conditions.

5.2 Uneven Learner Autonomy in Pre-Class Online Learning

Students' Self-discipline in online autonomous learning varies greatly. Course-level explorations of the SPOC teaching model show that its effectiveness is closely linked to students' independent completion of pre-class tasks [9]; in practice, some students complete the preview tasks perfunctorily or copy answers in self-tests, thus reducing the preview effect and weakening the foundation for the in-class session. Three Strategies are proposed here. First, integrate the completion of SPOC tasks into the regular grades to give previews explicit academic value; second, design light-weight, scaffolded preview tasks that reduce the barrier to participation and avoid the avoidance reaction caused by excessive online work; and third, have the teacher review platform data before class and prompt students who have not completed the tasks to do so, thus employing an external supervision mechanism to address uneven self-regulation [10]. Peer groups are fixed study circles that help each other study and share the responsibility of self-management.

5.3 Increased Teacher Workload

The teacher's work has increased. Producing SPOC resources, organising BOPPPS classroom activities and grading various assessments are all very time-consuming and labour-intensive; the pilot instructor has also reported that the preparation burden has increased significantly, and if this is not addressed, there will be a problem with the continuity of the reform. Three Strategies are proposed here. A course teaching team can be formed to divide the production of teaching materials and organisation of activities among its members. Reusable instructional design templates and a shared resource bank should be accumulated to reduce the marginal cost of each subsequent unit and cohort. At the institutional level, suitable policy recognition, workload credit and consideration in teaching appraisal and professional title evaluation should be given to teachers engaged in blended teaching reform, so that the reform effort is rewarded rather than penalized.

A course teaching team should be established to divide the production of resources and design of activities among its members for sharing; reusable instructional design templates and a shared resource bank should also be accumulated to reduce the marginal cost of each subsequent unit and cohort. At the institutional level, teachers who participate in the reform of blended teaching should receive corresponding policy recognition, workload credit, and favourable consideration in teaching appraisal and professional title evaluation to motivate them to engage in the reform. Through these tasks, students can apply the management knowledge they have learned in class to a simulated real-life situation and thus complete

the teaching cycle.

5.4 Complexity and Subjectivity of Process-Based Assessment

Process-oriented evaluation has increased both the difficulty and the subjectivity of grading. As shown in Section 3.3, the designs of outcome-based education require diversified assessments [3]; however, compared with a single final examination, integrating online performance, in-class group work, peer review and post-class homework increases the number of judgments teachers need to make and the volume of records to be kept. The following are some strategies. Analytic rubrics can be released in advance; students can be trained in peer review with calibration examples; assessment records can be stored in the platform where feasible; and the number of process indicators can be limited to those that are truly informative. Without such a simplification, the risk of the process-based assessment being overlooked midway would occur, and thus the original misalignment of the reform would reappear.

6. Conclusion and Prospect

The SPOC+BOPPPS blended teaching model can address several deficiencies of the traditional classroom teaching method for the management course: it constructs a teaching loop that connects the pre-class, in-class and post-class stages, places the student at the centre of attention, and increases the proportion of practical content in the management course. Reforms of management major courses are still being explored from many angles; for private undergraduate institutions with limited hardware conditions, the main advantage of this model is its low threshold: high-end smart teaching tools do not need to be blindly pursued, and by implementing the core logic of the model on existing platforms, the teaching process and quality can already be restructured.

Based on the above conditions, this paper has explored the internal logic of integrating SPOC+BOPPPS; it has constructed a "dual-drive, three-phase integration" model, outlined its implementation path, and reported on an initial pilot in the Service Marketing course. A small-scale trial has provided some initial support for the application of the model and received a positive response from students in a low-resource area; at the same time, four structural problems have been identified: weak digital facilities, irregular learner initiative, extended teacher duties, and complex process assessment, and corresponding corrective measures have been proposed. The above are the limited results of this study, which are feasible and practical but not very effective.

The three directions of the following studies are: First, increase the scope of the pilot to more classes and units, add other management courses, such as New Retail Operations Management, and then study how well the model can be applied. Second, a control group can be established by teaching parallel classes in the traditional way or using the same teacher's previous students to ensure that the increase in engagement and achievement is due to the intervention. The next step will be to organise the practice of teacher feedback and peer review systematically, accumulate rubrics, calibration examples, and assessment records across cohorts, and thus form a replicable and promotable reform path for resource-constrained institutions.

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