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Technical Report

Exploring curriculum-industry misalignment via a Change Laboratory in higher vocational health management education: Report on a pilot project

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Abstract: This report elaborates on a pilot study that lays the groundwork for a broader doctoral-level research project. The doctoral research investigates the collaborative development of curriculum frameworks for a higher vocational education-based Health Management programme to adapt to the complex and dynamically changing needs of the healthcare industry. Centered on four *Change Laboratory* workshops held in 2026, this pilot study explores how teachers and students of a higher vocational Health Management programme identify core challenges in the programme, analyse their root causes, and co-create innovative solutions. All participants were recruited from the Health Management programme at a vocational university in Chongqing, China, comprising 11 students, two teachers, and the department's vice director, with the researcher acting as interventionist. The core aim of this pilot study is to adopt the *Change Laboratory* methodology to evaluate the design and delivery of workshops for curriculum reform within the Health Management programme. It seeks to generate actionable insights to inform the research methodology to be adopted in the subsequent doctoral research. This pilot study yields two distinct contributions. First, it produces practical insights concerning curriculum design derived from workshop practices and participant feedback, reinforcing the necessity and practical feasibility of a *Change Laboratory*-based reform process within this pilot institutional context. Second, it generates hands-on experiential knowledge of implementing

the *Change Laboratory* methodology, which offers critical guidance for the main doctoral project from the future researcher-interventionist.

Keywords: Change Laboratory; Health Management; Higher Vocational Education; Curriculum Design; Project Report.

1. Introduction

Higher Vocational Education (HVE) is post-secondary vocational and technical education targeting senior high and secondary vocational school graduates (Stewart, 2015). In China, it sits within higher education, with talent cultivation differing from academic universities (OECD, 2014; Pilz & Li, 2020). Unlike general undergraduate education's focus on theory and academic knowledge, HVE prioritizes occupational competence, practical skills, and workplace readiness (Stewart, 2015; UNESCO, 2015), with curricula aligned to job requirements, combining classroom learning, on-campus training, and enterprise internships (Stewart, 2015).

HVE plays a vital role in equipping students with targeted knowledge and practical abilities, while supplying the labour market with specialised skilled professionals (UNESCO, 2015). Nevertheless, the persistent misalignment between curriculum design and industry needs remains a global challenge (Guo & Lamb, 2010; Mourshed et al., 2013; OECD, 2010). This disconnect means that classroom instruction is often seen as lagging behind or deviating from the skills and competencies employers genuinely require (Cappelli, 2015; Mourshed et al., 2013). The consequences are reflected in perceptions of graduates' insufficient workplace readiness and industries' struggles to recruit qualified skilled talent, which together hinder economic and social development (Cappelli, 2015). Bridging this gap has therefore become a central concern for educators, policymakers, and industry stakeholders (Tomlinson, 2017). Current curriculum reform efforts face critical shortcomings: the traditional top-down approach lacks a sustainable, systematic framework capable of effectively incorporating input from educators, students, alumni, and industry practitioners. Furthermore, without a collaborative mechanism among these stakeholders, curriculum reforms struggle to adequately respond to the complex and evolving needs of the industry (Pilz & Li, 2020).

To address these identified gaps, this doctoral study explores the feasibility of stakeholder-collaborative change through a *Change Laboratory* (CL) intervention on the theme of *Aligning Curriculum Design with Employability,* which engages stakeholders in a structured, collaborative, and open change process. The doctoral study therefore investigates how the CL can function as a formative intervention to facilitate multi-stakeholder collaborative transformation, thereby bridging the curriculum-employability gap in a Health Management programme of HVE.

CL is a structured intervention approach grounded in *Cultural-Historical Activity Theory* (CHAT) (Engeström, 1987/2015), *Expansive Learning* (Engeström et al., 2014), and *Double Stimulation* (Sannino, 2015), and has shown promising initial applications in higher education research (Bligh & Flood, 2015). Unlike conventional top-down curriculum reform, which is often criticised for lacking systematic theoretical grounding and failing to expose systemic contradictions in existing curricula, CL offers several distinctive strengths for collaborative curriculum design. It can foster genuine co-creation among stakeholders rather than traditional top-down design, while also building long-term agentic capacity among participants to support sustained curriculum improvement. These features make CL particularly valuable for HVE research aimed at aligning curriculum reform with employability needs.

The researcher serves as a teacher in a Health Management programme at a higher vocational university in China (see section 2.2 for more information) and, when commencing the doctoral project, lacked experience in conducting CL workshops. This made it difficult to anticipate the various situations that might arise during participant recruitment, task assignment, or on-site coordination meetings (Virkkunen & Newnham, 2013). Therefore, this pilot study was undertaken as a preparatory step for the larger doctoral project.

This pilot project aimed to develop an initial understanding of the prevailing challenges within the Health Management curriculum framework, establish whether the setting is suitable for formal large-scale curriculum reform research, evaluate the feasibility of curriculum redesign for the Health Management programme and of delivering a CL at this pilot institution, identify practical implementation barriers, gather stakeholder feedback, and generate empirical insights and supporting materials for the main study.

Through this pilot project, the researcher also aimed to accumulate practical experience and build confidence in applying and implementing the CL intervention. The report presents basic information, implementation details, outcomes, and reflections from this pilot study.

2. Pilot project research design

2.1 Research site

This pilot project was carried out at the Smart Health School of a higher vocational university in Chongqing, China. As a municipality directly under the Central Government in southwest China, Chongqing receives national attention and support for its educational and economic development. Founded in 2018, the Smart Health School aims to implement the "Healthy China 2030" strategy and the "Great Health" concept (CPC Central Committee & State Council of the People's Republic of China, 2016) and to cultivate talents for the healthcare industry. The pilot project focuses on the Health Management programme to bridge the gap between curriculum design and employability.

The Health Management department, which grew out of the Tourism Management department, shifted its focus to Health Management during the COVID-19 pandemic and enrolled its first cohort in 2020. Its faculty includes senior teachers with a Tourism Management background and junior teachers recently recruited from healthcare disciplines. Its curriculum and talent development plan, heavily adapted from the original Tourism Management programme and developed top-down without effective input from frontline teachers and student representatives, focus strongly on management content. This design has led to a key challenge noted by local stakeholders: weak alignment between course content and the real demands of the local healthcare industry. Many modules carried over from Tourism Management fail to meet the practical job competencies required by local healthcare service institutions. Frontline teachers struggle to update teaching content to keep pace with evolving industry practices, while students lack exposure to authentic workplace scenarios relevant to regional Health Management positions. Guided by national policies, the health management programme is transferring from a 3-year associate diploma to a 4-year vocational bachelor (undergraduate-level HVE). Its development and reform have also received some attention and support from university leaders. These factors create favourable conditions for implementing the CL intervention.

2.2 Researcher

Since the establishment of the Smart Health School, the researcher has consistently served as a frontline faculty member, participated in the establishment of the Health Management programme, and continuously undertaken teaching responsibilities within the programme. This long-term embedded positioning as an insider-researcher within the university affords distinctive advantages: the researcher has a thorough understanding of the institution's management systems, teaching practices, and the employability of recent graduates. Through years of engagement with faculty, staff, and students, along with a comprehensive analysis of various feedback, the researcher has gained valuable insight into the persistent tensions and developmental priorities facing the Health Management programme that may remain inaccessible to external researchers.

Nevertheless, this dual positioning as academic and insider-researcher creates significant methodological and practical challenges. As an interventionist researcher working from within the activity system, their role follows the logic of formative intervention (Engeström, Sannino, & Virkkunen, 2014): to nurture agentic change and support the reconstruction of the activity system, rather than impose predefined outcomes. While the aim is to provoke *Expansive Learning* among participants and position them as primary agents of transformation, the researcher's insider status also requires active participation in dialogue, implementation of strategic interventions, and monitoring of emergent processes. Which demands constant reflexive vigilance to avoid over-directing the change process or inadvertently shaping collective deliberation.

2.3 Participants

Two important criteria for selecting participants for a CL project are, firstly, ensuring an appropriate range of voices. Secondly, despite differences in their occupation, tasks, or hierarchical positions, these participants share the same object (Bligh, 2023).

In this pilot study, the objective shared by those participants is to upgrade the current curriculum of the Health Management programme. As to the range of voices, frontline teachers, students, and alumni of the Health Management programme, as well as representatives from the healthcare industry and administrative personnel, are the target participants.

The researcher sent invitations through QQ, a communication application commonly used in Chinese universities, to teachers and student groups. Participation was entirely voluntary: declining carried no consequences for grades or any other aspect of the students' standing in any course. Two teachers and the vice director of the Health Management department indicated their availability, and 11 female students from the 2024-entry cohort (second year) volunteered to participate. As a result, this pilot project involved a total of 15 participants.

Except for the vice director, who arrived late to the final meeting due to a scheduling conflict, and one student who missed Workshop 4 due to illness, most participants attended all four workshops. Table 1 presents the participants, their identities, and workshop attendance.

Table 1. Project participants, identities, and workshop attendance.

Participants		Workshops				Totals
No.	Identity	CL1	CL2	CL3	CL4	
S1	Student Class 2 Year 2	✓	✓	✓	✓	4
S2	Student Class 2 Year 2	✓	✓	✓	✓	4
S3	Student Class 1 Year 2	✓	✓	✓	✓	4
S4	Student Class 1 Year 2	✓	✓	✓	Sick	3
S5	Student Class 1 Year 2	✓	✓	✓	✓	4
S6	Student Class 1 Year 2	✓	✓	✓	✓	4
S7	Student Class 1 Year 2	✓	✓	✓	✓	4
S8	Student Class 1 Year 2	✓	✓	✓	✓	4
S9	Student Class 1 Year 2	✓	✓	✓	✓	4
S10	Student Class 1 Year 2	✓	✓	✓	✓	4
S11	Student Class 2 Year 2	✓	✓	✓	✓	4
T1	Teacher	✓	✓	✓	✓	4
T2	Teacher	✓	✓	✓	✓	4
T3	The vice director of department	✓	✓	✓	✓ (late)	4
R	Teacher (the Researcher)	✓	✓	✓	✓	4

✓ Refers to attendance in a workshop. Total refers to attendance at Workshops 1–4.
S refers to Student, T refers to Teacher, R refers to Researcher.
Year 2 (the 2024-entry cohort) Students in this programme have been divided into three classes randomly. They share the same talent development plan and curriculum. Most of the time, they face the same teachers, except in individual cases

2.4 Timeline

Distinct from the main study, the pilot study was not designed to cover all sessions of the Expansive Learning Cycle (Engeström, Y. 1987/2015). Instead, four specific actions were selected: *Questioning, Analysis, Modelling, and Process Reflection.* Including the introduction, the workshop series consisted of four consecutive sessions. Each workshop (1.5 hours) was

scheduled 3–4 weeks apart, allowing the researcher time to consolidate data after the previous meeting and to prepare for the next meeting. This arrangement also helped ensure that participants would not forget the content discussed at the previous meeting due to the long time interval between meetings.

The pilot project, comprising four workshops, lasted approximately four months; the first workshop (Workshop 1) took place in March 2026, while the final one (Workshop 4) was held in June (see Table 2). The interval between workshops was roughly one month, but the last two were arranged closer together—only one week apart—mainly to accommodate the university's end-of-term schedule. All workshops were scheduled on Thursday afternoons; since this time slot was typically reserved for staff conferences, lectures were generally not scheduled during this period. The meetings were arranged before staff conferences to facilitate attendance by faculty members, and the participating students were also available at this time.

Table 2. Timeline of the pilot project.

Timeline	Workshop	Task Number	Expansive Learning Cycle	Task Action
19th March	Workshop 1	CL 1.1	-	Opening and Introduction
		CL 1.2	*Questioning* 1	Participants identify pressing problems in the Health Management programme.
23rd April	Workshop 2	CL 2.1	*Questioning* 2	Group discussion on the urgency and priority of the problems
		CL 2.2	*Analysis* 1 Actual empirical analysis	Participants analyse the main mismatches or conflicts in the current activity system
28th May	Workshop 3	CL 3.1	*Analysis* 2 Historical analysis	Trace the historical evolution of the department and curriculum origins
		CL 3.2	*Analysis* 3	Synthesize tensions across historical and empirical evidence
4th June	Workshop 4	CL 4.1	*Modelling* 1	Successful cases study on addressing the above conflicts
		CL 4.2	*Modelling* 2	Find possibilities for solutions
		CL 4.3	*Process Reflection*	Reflect on workshop process and preliminary outcomes

2.5 Workshop design

The tasks in Workshop 1 were specifically designed to encourage participants to question existing practices, gain a preliminary understanding of the challenges within the Health Management curriculum framework, and determine whether the situation is suitable for conducting formal, large-scale curriculum reform research.

Then, the participants were assisted to analyse the root causes in Workshop 2-3 to gain some insights into how the CL could work in this institution. The tasks in Workshop 4 focused on proposing new solutions and reflecting on the work of the four workshops, which would enable the researcher to reflect on the workshop organization process.

All tasks in these workshops were designed according to the Double Stimulation principle, as a way of enabling participants to pursue difficult goals (Sannino, 2015). This involved providing a *First-Stimulus* that set out the goal of the problem. For instance, participants were asked to answer, “What is the main conflict of the current active system?” This *First-Stimulus* directly

pointed to the problem all participants could recognise, and invited their analysis of the existing curriculum arrangement. The *Second-Stimulus* aimed to help participants pursue that goal. One example was sketching a diagram of the *Activity System*. This was chosen as the *Second-Stimulus* in an attempt to enable participants to accomplish the empirical analysis. *Mirror Material*, which provides examples and illustrations of the problems being addressed (Bligh, 2023), was used alongside both stimuli to ground discussions in empirical evidence. These materials included historical curriculum documents inherited from the former Tourism Management programme and records of department curriculum meetings. They were thought appropriate for this CL intervention because they document frustrations into shared, visible evidence, ensuring participants' collaborative analysis is rooted in real local conditions rather than abstract conjecture.

Room 407 of the Smart Health School was selected as the venue for these workshops. Equipped with flexible seating arrangements and multimedia equipment suitable for presenting PowerPoint slides, made it ideal for the Health Management department to hold meetings, discussions, or organize training sessions. As a practical training facility for the Health Management programme, this room was available on an ongoing basis during scheduled meeting times (Figure 1).

The workshop utilized recording equipment, projection screens, question cards, posters, and other printed materials-including previous editions of the talent development plans, and a Lab Notebook for each participant to record their instant ideas and feedback. In this way, materials would be generated for use in later workshops of the main project.



Figure 1. Site for the workshops—Room 407 of the Smart Health School

2.6 The gathering and production of *mirror material*

Mirror Material plays a pivotal role in CL intervention studies, providing participants with illustration and evidence that facilitates their reflection on practical challenges and systemic contradictions (Bligh, 2023).

The first category of *Mirror Material* consisted of employment status data for past graduates of this programme, sourced from university employment platforms. Chinese universities have established dedicated graduate employment platforms that record each student's post-graduation destination and conduct regular follow-up visits after graduation to verify their employment status. University employment data serves as a crucial metric for institutional evaluation. Chinese university student affairs counselors provide employment guidance and track the employment status of graduating students and compare these against "ideal" data outcomes.

Selected excerpts were extracted from the documents for use in the workshops, which focused on the current employability of this programme.

The second category of *Mirror Material* was obtained from online interviews with graduates. Four alumni were interviewed via QQ or WeChat (two widely used communication tools in China) about their current employment status and their suggestions regarding the programme. Two graduates from the 2021 cohort both reported gaining valuable insights from their project-based learning experience and expressed relative satisfaction with their current work in Health Management. Two graduates from the cohort of 2022 also worked in related fields, and one of them had even received a promotion. However, when asked for suggestions regarding the programme, this graduate expressed a negative view about the prospects in the local job market, arguing that the programme did not align with the demands of the local employment landscape. Selected excerpts from the online interviews were extracted for use in the workshops, which focused on the skills developed through the courses and the career prospects associated with this programme.

The third category of *Mirror Material* was derived from semi-structured interviews conducted with one student and one faculty member in the Health Management programme. The interviews, carried out in March 2026, primarily aimed to gather perspectives on the challenges faced by the programme from both students and faculty. The topics in the interviews covered various difficulties, conflicts, and contradictions encountered in daily teaching, and the entire interview process was audio- and video-recorded for subsequent analysis. Selected excerpts from the interviews were extracted for use in the workshops, with particular attention to aspects of the curriculum and instructional design that could be improved, along with possible enhancement measures.

Some Mirror Material was also produced after the workshops had commenced. After each workshop, the researcher systematically reviewed the discussion outcomes of that session, including real-time feedback from participants recorded in their Lab Notebooks (described in more detail below), and compiled these insights into structured materials that captured key issues for the subsequent sessions. Additionally, historical talent development plans, curriculum design documents, and textual resources such as textbooks, lesson plans, and student assignments were carefully screened and presented in later workshops as *Mirror Material*.

When presenting Mirror Material in the workshops, the researcher integrated multiple data sources (Figure 2), including the college's employment statistics, online feedback from graduates currently engaged in professional work related to the programme, and face-to-face interviews with current faculty and students, along with the conclusions and feedback from previous sessions. Thus, it presented a richer and more comprehensive overview of the diverse systemic challenges faced by the Health Management programme, thereby fostering resonance and prompting reflection among the participants.



Figure 2. Mirror Material: interviews, official employment statistics, and online feedback

2.7 Methods for generating research data

In a CL project, data are generated in various forms to support the implementation of interventions and subsequent research analysis. In this case, the project generated multiple types of data (see Figure 3).

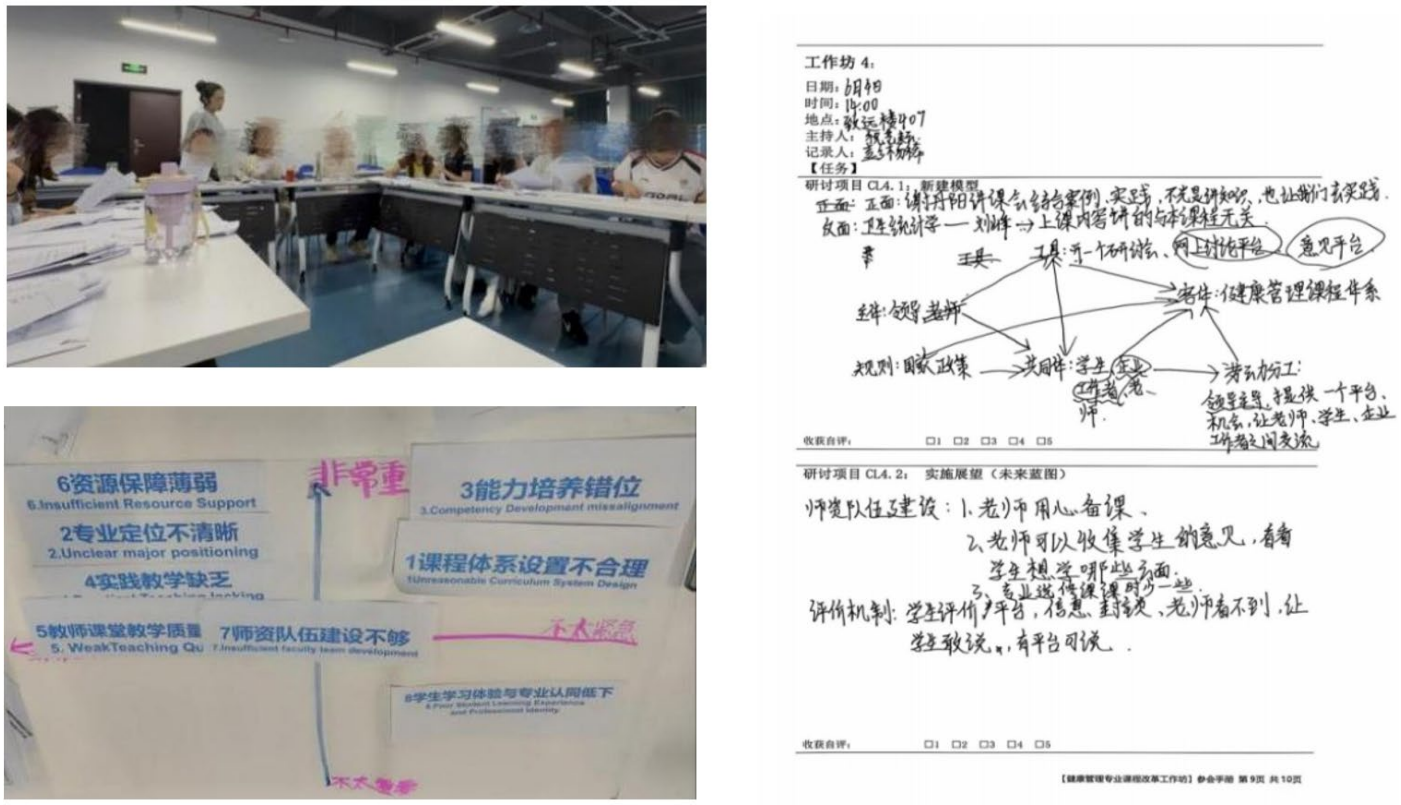


Figure 3. Sample of dataset showing examples of workshop video footage, poster materials, and the Lab Notebook

- **Video and audio recordings were made of all four meetings** (Figure 4). Two mobile cameras were used, with positions carefully arranged to capture each participant's speech, facial expressions, and gestures, as well as the reactions of others. The recorded meetings lasted 324 minutes, with approximately 648 minutes of video footage from the two cameras. In addition, about 214 minutes of audio recordings, mainly covering group discussions and turn-taking speech, were captured during the meetings by mobile phones.
- **Lab Notebook**s (Figure 5). In each workshop, every participant was given a dedicated page to record their reflections during the meeting as well as their feedback at the conclusion of the meeting. After each meeting, these records were collected and organized by the researcher, then a summary was distributed to all participants before the next meeting, along with other materials.
- **Posters and whiteboard notes**. The outputs generated during the workshop were collected and photographed at each session.
- **Meeting notes for each workshop**. A reflection on the day's proceedings was produced to serve as a reference document. Written by the researcher immediately after each workshop, it was subsequently used for research analysis.

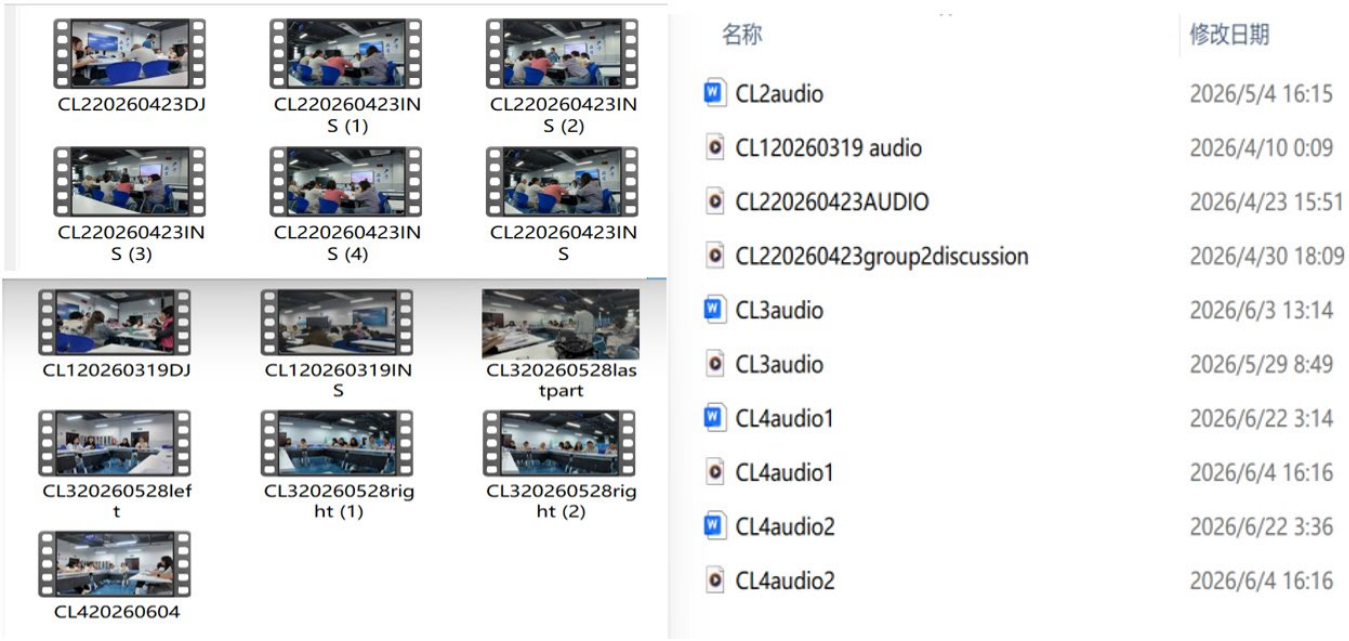


Figure 4. Video and audio recordings of all four meetings

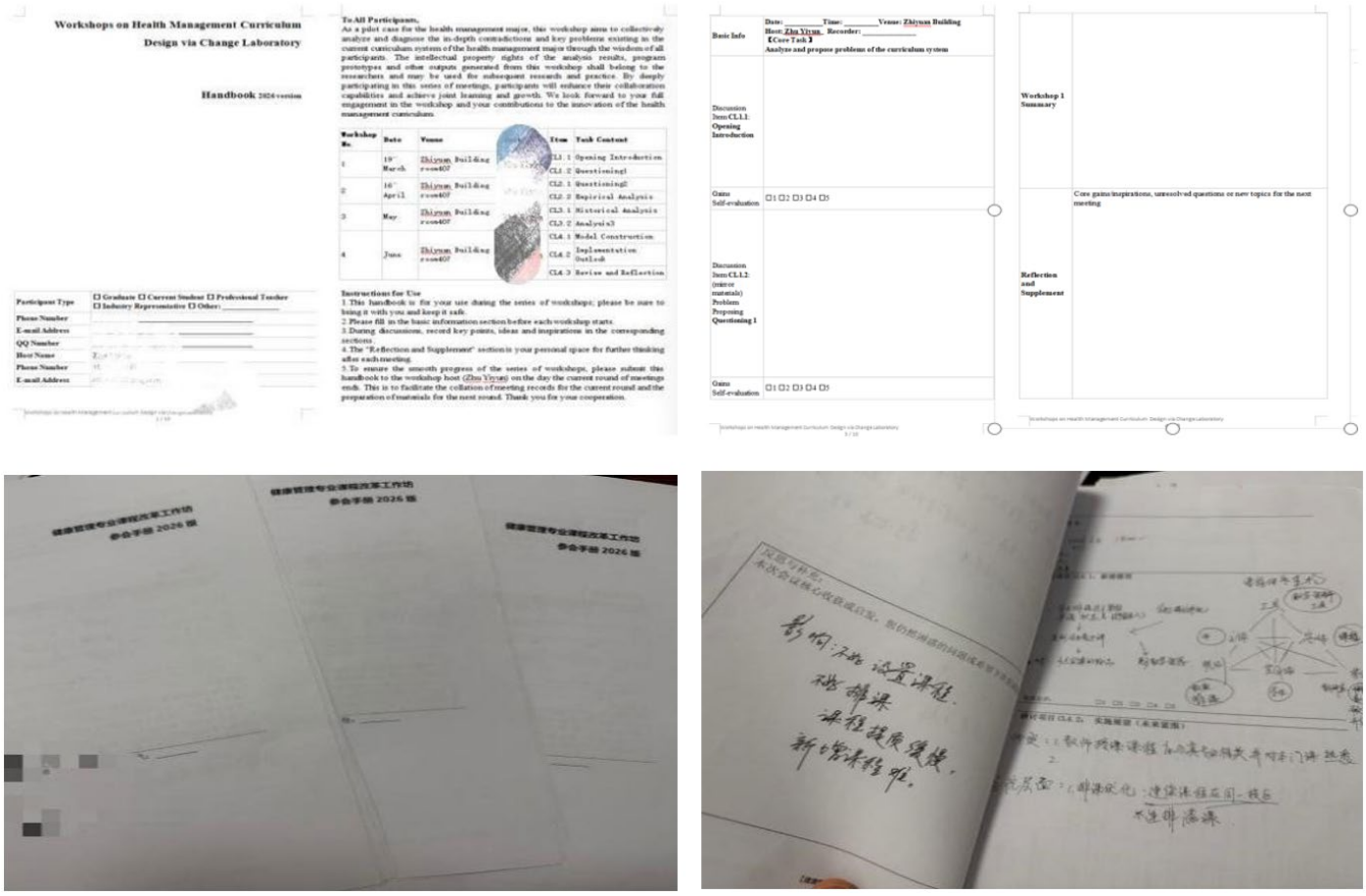


Figure 5. Lab Notebooks: the cover and guide page, the workshop pages, and the used ones

2.8 Ethics

In terms of institutional approval, this study was approved by the Education Research Ethics Committee of Lancaster University (Ed Res REC Reference: EdRes-2026-6066-EdAp-2), date of approval: 29 January 2026.

In the recruitment phase, I ensured that all potential participants were informed of their rights and responsibilities, and everyone signed the informed consent sheet before the first session.

3. Implementation

3.1 Workshop 1: Introduction and raising problems

3.1.1 Workshop 1 design

As the opening session of the workshop series, Workshop 1 was designed with two tasks: to introduce the project to all participants and to initiate critical reflective inquiry into the current Health Management programme and the department's operational challenges, aiming to lay a grounded, evidence-based foundation for subsequent collaborative problem-solving and programme optimization.

The first task of Workshop 1 was aligned with the CL 1.1 introduction, providing all participants with the workshop's standardized background knowledge and operational norms for conducting effective discussions. By establishing this foundation, the task aimed to eliminate information asymmetry and procedural confusion that could hinder subsequent questioning and discussion activities. To support this task, structured explanatory resources were fully implemented, including systematic introductions to the pilot project's core objectives, complete agenda arrangements, and a clear guide for using the Lab Notebook. By equipping every participant with consistent and comprehensive project context and tool usage skills, this task aimed to ensure that all follow-up questioning and problem-exploring behaviours were grounded in a unified understanding framework, nurturing the validity, pertinence, and efficiency of the subsequent expansive learning practice of questioning.

The second task of Workshop 1 covered the CL 1.2 *Questioning* 1, which directly advanced the workshop's core expansive learning goal of targeted questioning and systematic problem identification. A set of video clips and text resources compiled from real interview transcripts and first-hand data collected from faculty and alumni would be presented in this session as the *Mirror Material*. These materials aimed to reflect the current status of teaching practices in the Health Management programme and actual graduate employability, providing authentic evidence for critical inquiry. Guided by the *First-Stimulus*, the core discussion question "What are the primary challenges facing our programme?", participants were asked to conduct paired review, in-depth interactive discussion, and group brainstorming to formulate a list of problems the Health Management department was facing (*Second-Stimulus*). The *Mirror Material* delivered authentic and rich empirical information to avoid empty speculation, while the *First-Stimulus* clarified the direction of participatory questioning, and the *Second-Stimulus* helped participants strive in this direction (See Table 3).

Table 3. Outline and design of Workshop 1.

Work-shop	Session Number	Expansive Learning Action	*First -Stimuli*	*Second -Stimuli*	*Mirror Material*
Work-shop1	CL1.1	Introduction	Explanation of the Pilot Project and the Agenda; Guide to the Lab Notebook	Authorize Research Informed Consent Forms	1. Introduction PPT 2. Agenda of the workshops 3. Lab Notebook
	CL1.2	*Questioning1*	Identify the problem: What are the key problems we are facing in the Health Management Programme?	Formulate a Problem List	Employment Data and Interview (videos and transcripts)

3.1.2 Workshop 1 report

The Workshop 1 proceedings ran remarkably smoothly, with all 15 participants (including the researcher) demonstrating high engagement and cooperation. The task requirements were clearly defined and communicated to all participants, enabling everyone to understand the objectives and engage with the activities in a focused manner.

At the beginning of the introduction (CL 1.1), the researcher provided all participants with a detailed explanation of the informed consent form, asking them to respect and protect the privacy of others. All four participating teachers had previously taught the student attendees, so the self-introduction section was omitted. Given the department's small size, this situation was inevitable. These prior teacher-student relationships may have shaped participation and contributions, relevant to later hierarchy findings. After the researcher's introduction, all participants confirmed their understanding of the project's purpose and schedule.

The discussions throughout CL 1.2 were quite lively, with every participant paying close attention to the review of the *Mirror Material*. Except for three students who declined to express more ideas and simply agreed with others, eight students showed a strong willingness to share their insights. As shown in the quotation below, most students mentioned the diversity of their courses and their uncertainty regarding future career prospects.

> *"As they just mentioned, from the videos, it seems that many students, whether they are upperclassmen or lowerclassmen, share a similar concern: they feel that while they take many courses, but don't truly master any single one... when I initially chose the Health Management major, my goal was to pursue a career in this field. However, since starting my freshman year, I've taken countless courses, yet the actual learning has not translated into a clear direction for my career. When it comes to job hunting, I often feel uncertain about which specific position to pursue; the lack of clear guidance is quite pronounced... I genuinely don't know what to do in the future. Although I've acquired some knowledge across various aspects of this major, if I actually want to work in this field, I suspect there will be many more demanding requirements."* (Student 3)

In addition to the students' perspectives, teachers supplemented them with additional viewpoints. Participants inevitably drew upon their personal experiences and perspectives, while the only administrative participant (the vice director) focused more on responding to questions through explanation and clarification rather than merely following the meeting task (*Questioning*). A range of problems within the current Health Management department was successfully identified. However, due to insufficient time, the problem list was not fully completed.

After the meeting, the researcher reviewed the meeting notes, audio, and video recordings, and compiled the Problem List of the current Health Management department into eight categories as below (detailed in Table 4):

- Problem 1. Unreasonable Curriculum System Design
- Problem 2. Unclear Major Positioning
- Problem 3. Competency Development Misalignment
- Problem 4. Practical Teaching Lacking
- Problem 5. Weak Teaching Quality
- Problem 6. Insufficient Resource Support
- Problem 7. Insufficient Faculty Team Development
- Problem 8. Poor Student Learning Experience & Professional Identity

Table 4. Problems identified in CL 1.2.

Participant Identified Problems	1. Unreasonable Curriculum System Design	2. Unclear major positioning	3. Competency Development Misalignment	4. Practical Teaching lacking	5. Weak Teaching Quality	6. Insufficient Resource Support	7. Insufficient faculty team development		8. Poor Student Learning Experience and Professional Identity
PRVM';KF 8 Problem Categories	Unreasonable Curriculum System Design	Unclear Major Positioning	Competency Development Problem	Lack of Practicality	Teaching Problem	Resource Support Problem	Communication Problem among Teachers	Teachers' Limited Industry Training	Students' Problem
S1	Lack of systematic design Too many non-core courses; low relevance to the major				Teachers' performance disparities across different courses Slow delivery of key knowledge Too much irrelevant talking; loose class rhythm Superficial lecture without insights Low classroom efficiency Overloaded and fatigued teachers				
S2	Overly broad coverage of learning content	Unclear major positioning Overlap with Elderly Care major	Weak employment competitiveness	The course theory is dry. Lacks practical application					

Participant Identified Problems	1. Unreasonable Curriculum System Design	2. Unclear major positioning	3. Competency Development Misalignment	4. Practical Teaching lacking	5. Weak Teaching Quality	6. Insufficient Resource Support	7. Insufficient faculty team development		8. Poor Student Learning Experience and Professional Identity
PRVM';KF 8 Problem Categories	Unreasonable Curriculum System Design	Unclear Major Positioning	Competency Development Problem	Lack of Practicality	Teaching Problem	Resource Support Problem	Communication Problem among Teachers	Teachers' Limited Industry Training	Students' Problem
S3	Overly broad coverage Low-value / ineffective courses	Unclear alignment between employment directions and job positions	Low value Weak certificates Employment competitiveness	Too much theoretical content Very few practical opportunities					
S4	The learning content is diverse but lacks depth.			Disconnect between theory and practice	Teaching only from textbooks Outdated textbooks (2019–2020 data) Inconsistency between PPT and practice	Insufficient support for Equipment and consumables			Confused professional identity
S5	Unreasonable class hour allocation				Too much irrelevant talking				
S6	Unreasonable Curriculum System Design Low relevance to the major			Too much theoretical content	Inconsistency between teaching content and course				
S7	Insufficient foundational knowledge preparation, followed immediately by specialized terminology.	Overlap with Elderly Care major; ambiguous major boundaries		Major-irrelevant visiting arrangements	The teaching lacks updates on industry trends.				

Participant Identified Problems	1. Unreasonable Curriculum System Design	2. Unclear major positioning	3. Competency Development Misalignment	4. Practical Teaching lacking	5. Weak Teaching Quality	6. Insufficient Resource Support	7. Insufficient faculty team development		8. Poor Student Learning Experience and Professional Identity
PRVM';KF 8 Problem Categories	Unreasonable Curriculum System Design	Unclear Major Positioning	Competency Development Problem	Lack of Practicality	Teaching Problem	Resource Support Problem	Communication Problem among Teachers	Teachers' Limited Industry Training	Students' Problem
S8	Learning content is too broad; low sense of gain	Lack of real industry experience		Too much theoretical content	Teachers' performance disparities across different courses				
T1	Unreasonable Curriculum System Design	Unclear career direction Vague training objectives		Lack of corporate collaboration among colleges and industry, which hinders the implementation of practical training	Graduates have little impression of the courses (based on their feedback).		Teachers unable to change curriculum or textbooks Restricted teaching autonomy Insufficient communication among teachers Inconsistent teaching standards	Teachers' limited industry training	
T2	Unreasonable Curriculum System Design	Mismatch between academic advancement and career orientation	Weak employment competitiveness	lacks practical application		Outdated / incomplete / unsafe equipment			

Participant Identified Problems	1. Unreasonable Curriculum System Design	2. Unclear major positioning	3. Competency Development Misalignment	4. Practical Teaching lacking	5. Weak Teaching Quality	6. Insufficient Resource Support	7. Insufficient faculty team development		8. Poor Student Learning Experience and Professional Identity
PRVM';KF 8 Problem Categories	Unreasonable Curriculum System Design	Unclear Major Positioning	Competency Development Problem	Lack of Practicality	Teaching Problem	Resource Support Problem	Communication Problem among Teachers	Teachers' Limited Industry Training	Students' Problem
T3	Unreasonable Curriculum System Design (Major Cluster Transformation and long-standing problems.)	Unclear professional orientation and training objectives		Limited off-campus practice; Practical training tours are difficult to implement (safety and cost barriers)	Teachers require professional transformation	Unused and unfamiliar equipment	Difficulties in managing part-time instructors		
R	Feedback from graduates: courses are too broad, covering everything but not in depth; one or two courses helped with job hunting or work . Feedback from teachers: The curriculum design is unreasonable and lacks systematic coherence.						Feedback from graduates: Insufficient communication among teachers	Feedback from graduates: Teachers' limited industry training	

S refers to Student, T refers to Teacher, R refers to the researcher

3.1.3 Workshop 1 reflections

Overall, Workshop 1 effectively encouraged participants to question the current Health Management programme. The structured and interactive tasks prompted participants to reveal practical problems, reflect on current curriculum practice, and raise related questions. Rather than remaining passive listeners, participants actively challenged the existing programme, shared individual experiences, and voiced doubts and needs for improvement. Although individual differences in participation levels existed, Workshop 1 generally achieved its intended purpose of fostering critical questioning and reflective engagement among participants.

Based on the experiences of conducting this workshop, and to ensure the smooth and effective implementation of the main project and optimize the overall quality of workshop discussions, a series of strategies will be adopted. First, the on-site explanation of the informed consent form and project introduction will be consistently applied in the main project. By walking participants through the consent form and project materials face to face, clarifying key points, and answering questions on the spot, we turn a routine procedural step into an engaging exchange that helps the participants to understand the significance and value of their opinions, thus to create a lively and energetic discussion atmosphere. In addition, sufficient and rigorous preparation will be completed in the workshop design phase, with carefully selected *Mirror Material* and elaborately designed tasks to improve meeting efficiency. Furthermore, to enrich the diversity of group discussions and innovative perspectives, unexpected and flexible expressions from participants will be encouraged, provided that the content does not deviate too far from the intended goal. Finally, targeted adjustments will be made to time allocation and note-taking management. Dedicated time will be reserved in each workshop for summary, and all participant groups will be arranged to record their key notes to guarantee the completeness of data.

Table 5. Reflection on Workshop 1.

	Expected	Unexpected
Went Well	On-site Explanation Lively Discussion Suitable Material Clear Task Identified Problems	Response from the Vice Director
Not Well		Time Management Note-Taker Arrangement

3.2 Workshop 2: Problems, combing, and empirical analysis

3.2.1 Workshop 2 design

Building on the problem list generated in the previous workshop (the Mirror Material of CL 2.1), Workshop 2 was planned to include two tasks: *Questioning* 2 and *Analysis* 1 (Actual Empirical Analysis).

CL 2.1 continued the *Questioning* action of the *Expansive Learning* cycle as a supplement to CL 1.2, aiming to encourage participants to determine the priority of identified problems and their causal associations (*First-Stimuli*). The specific task (*Second-Stimuli*) was to classify problems using the *Eisenhower Matrix* (priority) and to draw a *Problem Tree* (causal association). Participants were divided into two large groups. To ensure that each group represented diverse perspectives, two faculty members were randomly matched with each group to discuss together

with 5–6 students. The *Eisenhower Matrix*, a widely used prioritization method in management disciplines, which participants would be familiar with, asks participants to categorise these primary problem types into four quadrants based on importance and urgency. The *Problem Tree*, on the other hand, facilitates participants in exploring the causal associations between problems, providing a reference for seeking solutions (see Figure 6). The results from both groups would then be compared and discussed.

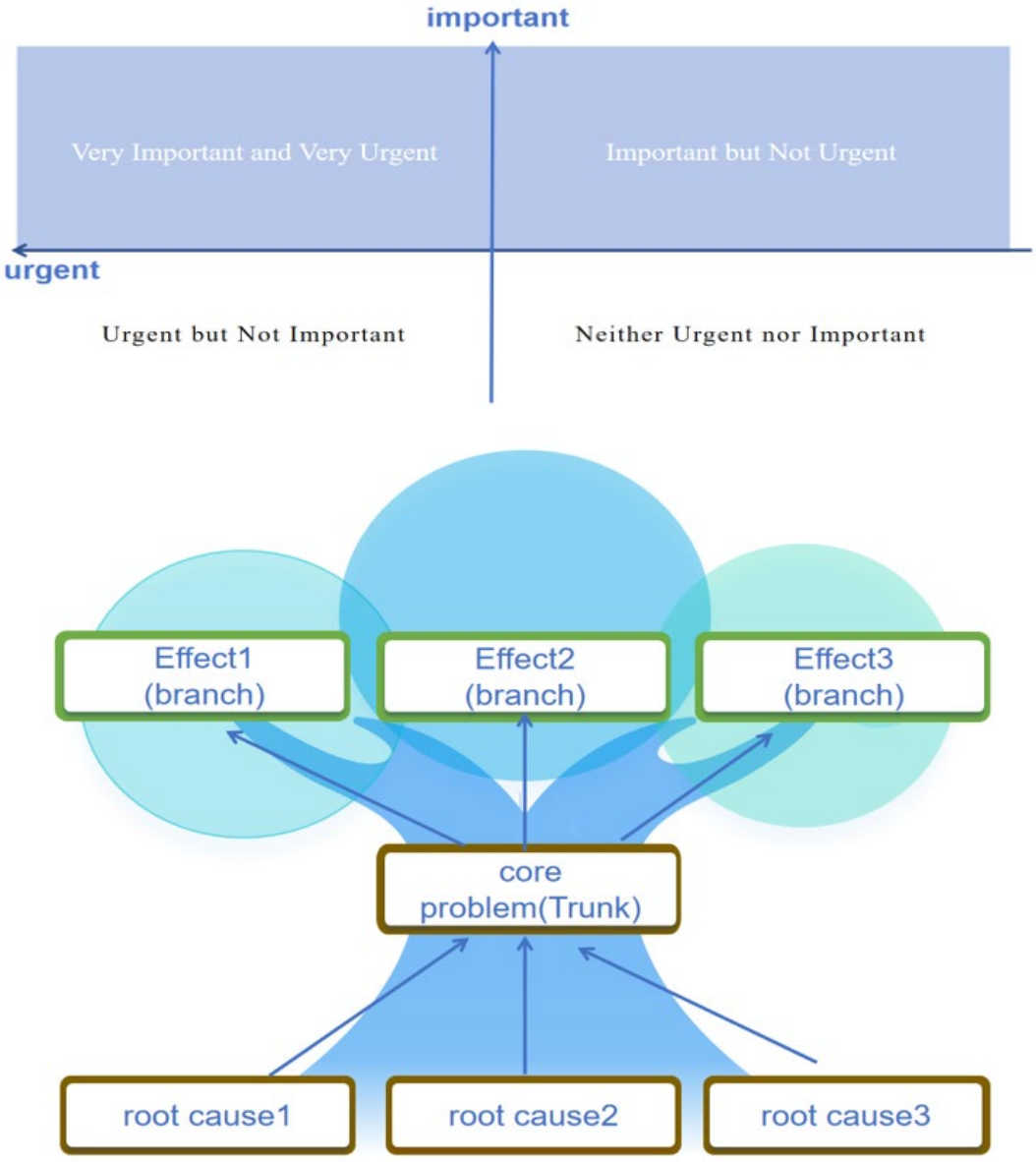


Figure 6. The Eisenhower Matrix and the Problem Tree

Upon reaching a working agreement, the process would proceed to the second action of the *Expansive Learning* cycle—*Analysis*. This action was further subdivided into three tasks to be conducted during Workshop 2 and Workshop 3, respectively. In the present workshop, CL 2.2 focused on the actual empirical analysis, treating the curriculum design of the Health Management programme as an *Activity System* and identifying the primary conflicts within this system (*First-Stimuli*) by sketching a schematic diagram of the curriculum design system (*Second-*

Stimulus). Along with the filled-in *Eisenhower Matrix* and *Problem Tree* developed in the previous task, the existing document on the talent development plan and curriculum, as well as an example of an *Activity System diagram,* constituted the *Mirror Material*. This process aimed to take advantage of using *CHAT* as a foundational framework, enabling participants to deconstruct various issues and conduct empirical analyses (Table 6).

Table 6. Outline and design of Workshop 2.

Workshop	Session Number	Expansive Learning Action	*First -Stimuli*	*Second -Stimuli*	*Mirror Material*
Workshop 2	CL 2.1	*Questioning* 2	Identify the problem: Which problems are most important and urgent in the current situation? And the causal relations among problems.	*Eisenhower Matrix* Sketch the *Problem Tree*	List of Problems (Table 4)
	CL 2.2	*Analysis* 1 Actual Empirical Analysis	The problems we paid much attention to were caused by the mismatch between which system elements? What is the main conflict of the current active system?	Sketch the *Activity System* diagram 1.0	Eisenhower Matrix Problem Tree Existing curriculum document Example of an *Activity System* diagram

3.2.2 Workshop 2 report

All 15 members from the previous meeting attended this session on time. The meeting began with a review of the previous meeting's proceedings, during which PowerPoint slides were used to display a list of eight major problem categories (Table 4) that had been compiled and summarized by the researcher following the previous meeting. A printed version of this problem list was also provided to each participant to facilitate clearer use of the *Mirror Material*. Apart from the vice director, who raised a doubt regarding ***Problem 4*** within the classification framework, no other participants questioned this particular category.

The researcher promptly addressed the queries raised by the vice director. When the vice director pointed out that "***Problem 4. Practical Teaching Lacking*** *is undoubtedly a problem stemming from an unreasonable curriculum system design (****Problem 1****)*," the researcher explained:

*"On one hand, this issue may be caused by an unreasonable curriculum system design; on the other hand, it may also be caused by insufficient resource support (****Problem 6****). In some cases, even after the curriculum framework has been established and resource support has been properly secured, a lack of practical training still occurs—namely, a quality issue in classroom teaching (****Problem 5****)—which is why it is listed separately as (****Problem 4****)"(Researcher)*

The vice director responded with silence and raised no further questions. All participants agreed with the researcher's suggestion to "*use this classification as a starting point for subsequent meeting tasks; any specific details could be discussed when challenges arise.*"

Thus, the session proceeded to CL 2.1. Based on the *Eisenhower Matrix*, these eight categories of problems were classified into four quadrants. Each group independently determined the priority of their respective problems (Figure 7). Subsequently, through comparative discussions between the two groups, two pairs of key and urgent problems were identified: first, ***Problem 1. Unreasonable Curriculum System Design***, followed by ***Problem 2. Unclear Major Positioning***; and second, ***Problem 5. Weak Teaching Quality, together*** with Problem ***4. Practical Teaching Lacking***. Through *Problem Tree* analysis, the participants clarified the underlying connections among the eight categories of problems and unanimously agreed that ***Problem 1. Unreasonable Curriculum System Design*** constituted the core challenge currently facing them (Figure 8a,b). During the *Problem Tree* analysis, the original plan was for each group to conduct separate discussions, followed by a cross-comparison. However, the vice director proposed that all participants work together on this task, resulting in a relatively rushed process.

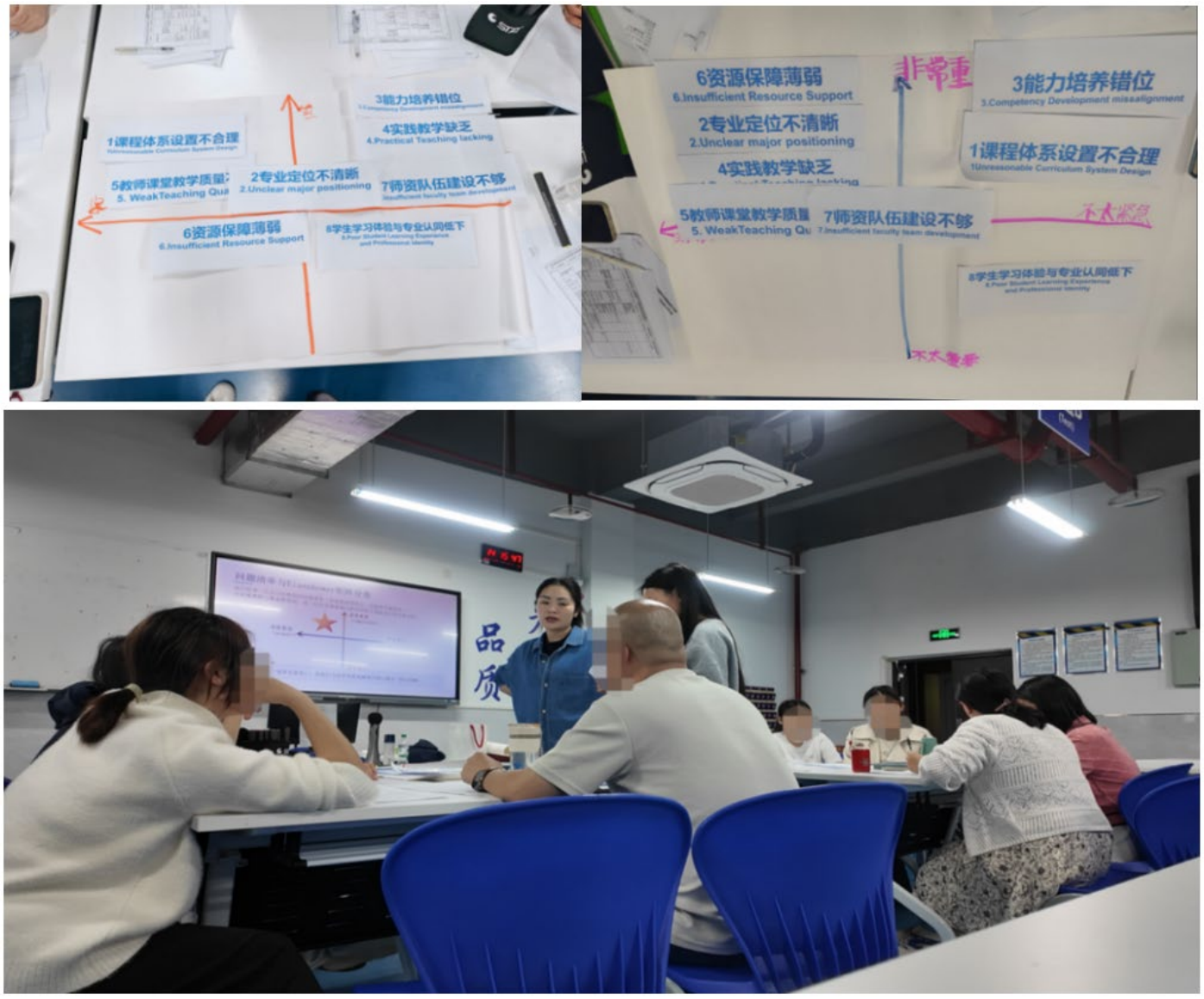


Figure 7. The Eisenhower Matrix posters and discussion by two groups in CL 2.1

Similarly, in CL2.2, the task was completed collectively by all participants, with less individual independent reflection than had been intended. The researcher provided an introduction to the CHAT, but on reflection, this contained redundant information which may have made it difficult for participants (especially students) to understand the concept of the Activity System diagram. Based on the students' facial expressions, the researcher concluded that not all participants had fully grasped the meaning of this task. Thus, the conversation deviated from the main topic to complaints about some previous problems. The researcher noticed this shift and actively guided the participants back to the task. Thus, the participants conducted only a relatively simple analysis of the various elements within the curriculum design framework. When reviewing the Lab Notebooks afterwards, the researcher identified apparent flaws in the diagrams drawn by some participants, indicating that they had not yet fully mastered the concept of the Activity System diagram. By organizing the photographs, audio recordings, and video materials captured during the meeting, the researcher obtained the overall summary presented in Figure 9.

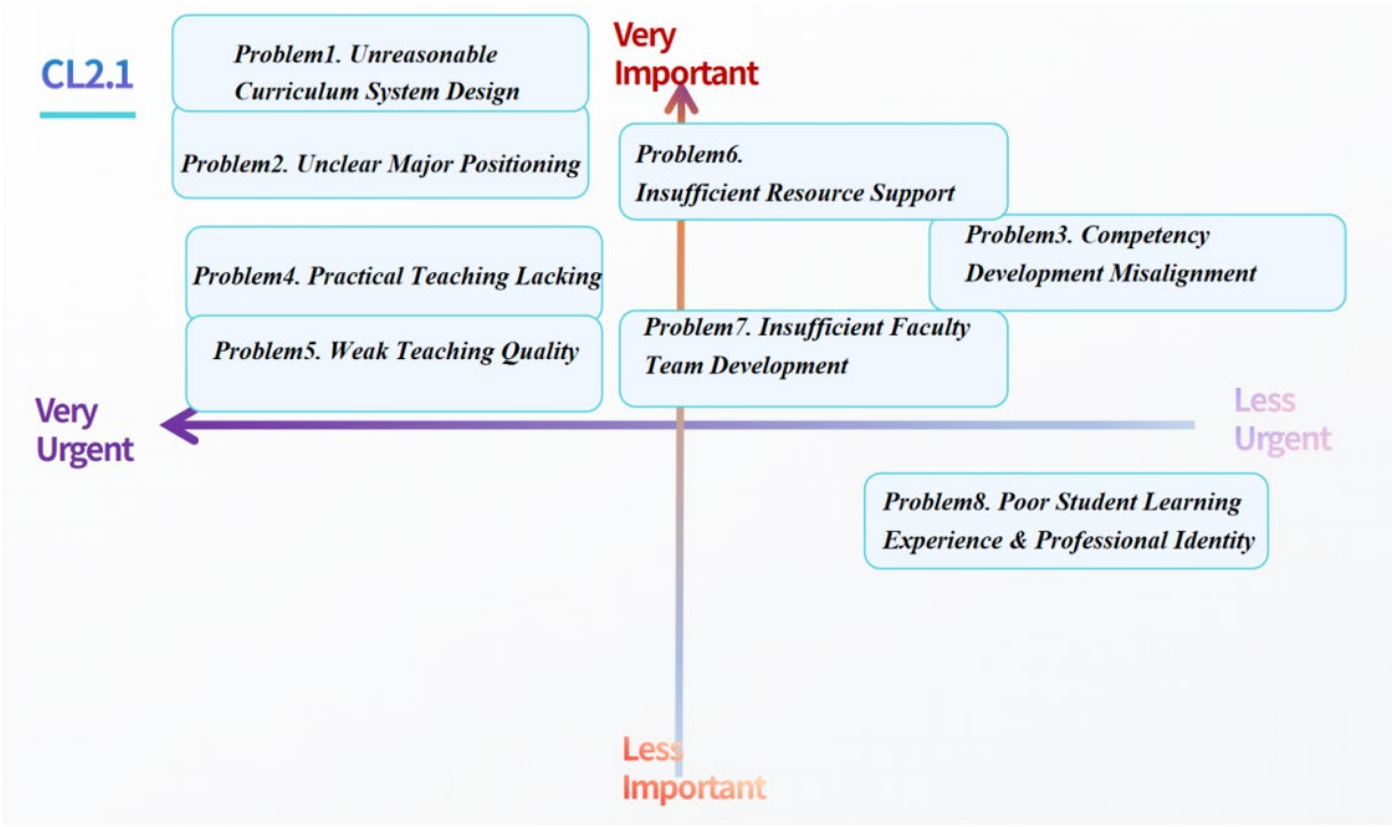


Figure 8a. The Final *Eisenhower Matrix* and *Problem Tree* agreed upon by participants

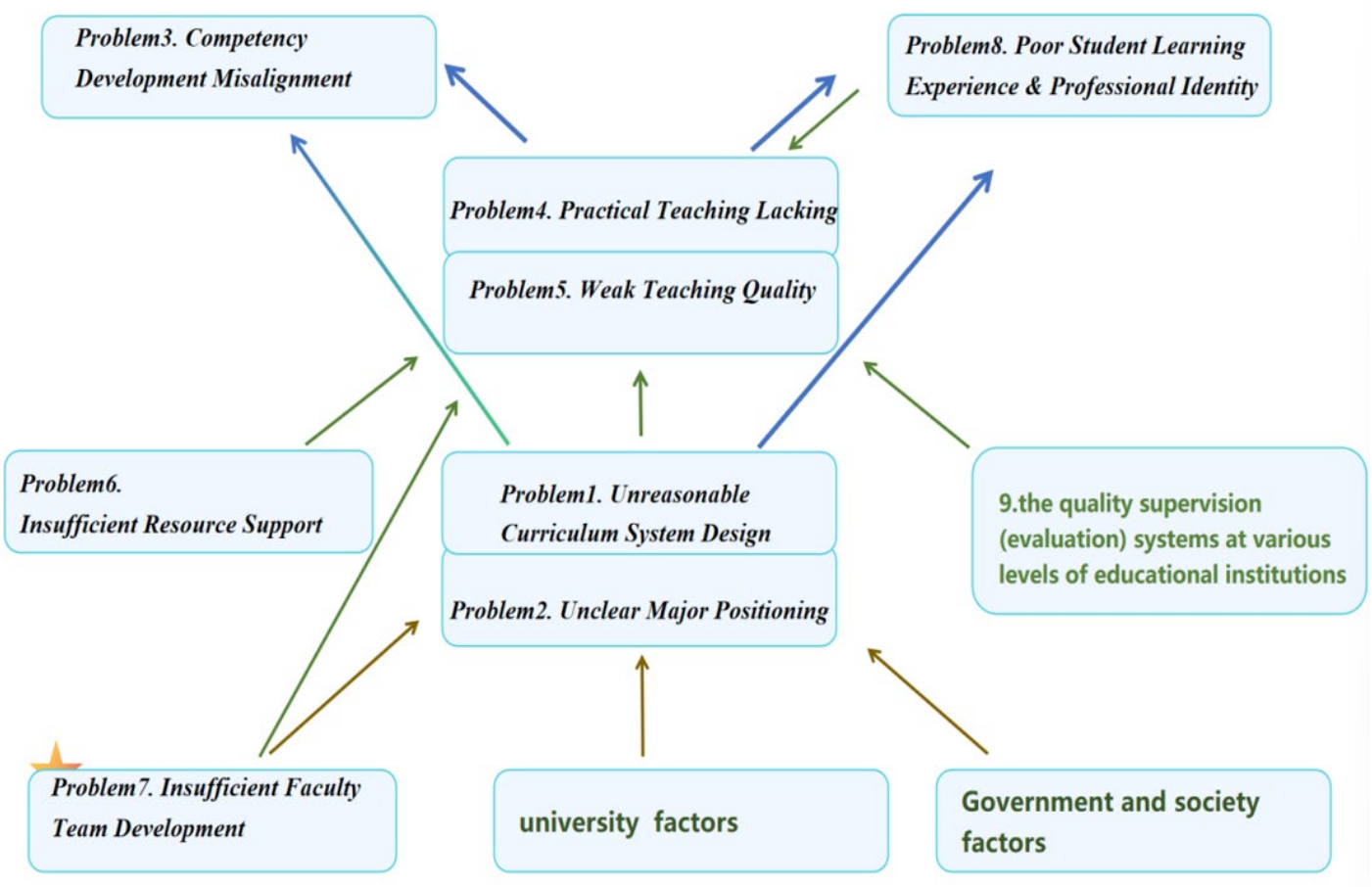


Figure 8b. The Final *Eisenhower Matrix* and *Problem Tree* agreed upon by participants

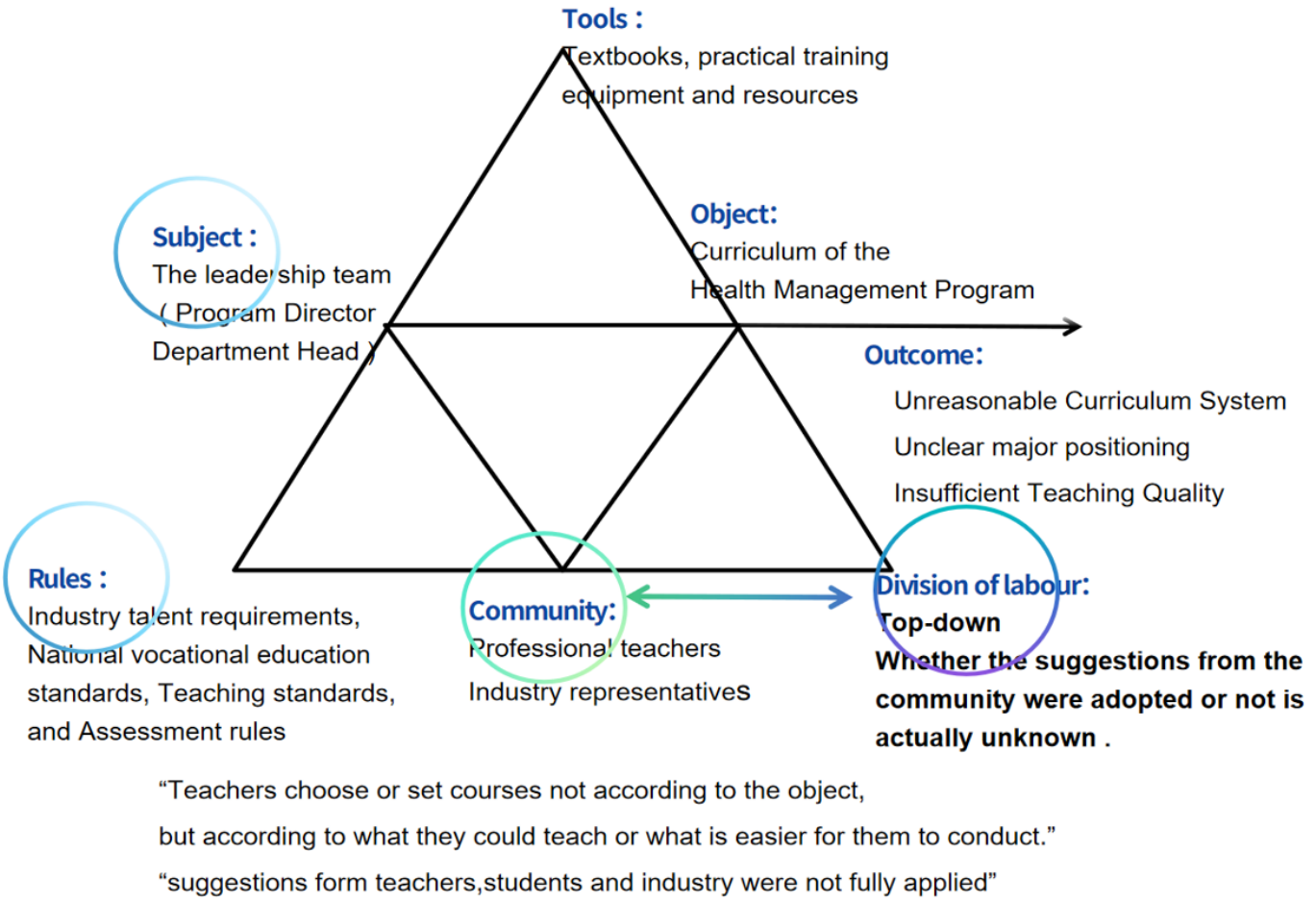


Figure 9. Activity System of the Curriculum Design for the Health Management Programme

3.2.3 Workshop 2 reflections

Overall, Questioning 2 (CL 2.1) was successfully completed. However, the subsequent empirical analysis (CL 2.2) did not meet the expected outcomes, although participants actively immersed themselves. Meanwhile, the doubts raised by the vice director enriched the collective thinking. Such proactive involvement provided valid empirical data and practical insights for the subsequent main project, demonstrating the feasibility of the CL adopted in this study. Several practical limitations and reflective observations emerged during the implementation of Workshop 2, which require targeted adjustments and systematic improvement in the formal main project (Table 7).

In terms of implementation, the researcher recognised that concise and task-oriented activity guidance contributes more substantially to efficient meeting progression than exhaustive elaboration of theoretical frameworks, suggesting that subsequent arrangements in the main study should prioritise clear operational instructions to facilitate participant engagement.

In addition, hierarchical influence was observed within group discussions. Given the mixed composition of teaching staff, administrative personnel (the vice director of the department), and student participants, student contributions tended to align with the viewpoints of teachers and the administrator, with limited critical questioning and dissenting voices. Accordingly, organisational and hierarchical factors should be fully considered in the main project. Grouping

participants with no clear hierarchical differences into one group might encourage more independent and diverse contributions.

Table 7. Reflection on workshop 2

	Expected	Unexpected
Went Well	Lively Discussion Consensus on the priority and causal association	Doubt from the vice director
Not Well	*Activity System* diagram	Hierarchy impact Device malfunction Shooting angles

Furthermore, an unanticipated technical issue occurred during on-site data collection, as one recording device experienced a battery failure. Although alternative recording equipment fully captured the workshop content and ensured data integrity, this incident highlights the necessity of comprehensive preparation. The subsequent main project will adopt multi-device synchronous recording to avoid data loss and ensure the completeness and reliability of research records.

Finally, deficiencies in seating arrangement and shooting planning were identified. The side-by-side double-round-table seating arrangement restricted recording angles, resulting in incomplete capture of some participants' facial expressions and non-verbal behaviours. To optimise data collection, the orientation and shooting angle of recording devices will be flexibly adjusted according to different venue layouts in the main project. Meanwhile, greater importance will be attached to fully preserving whiteboard notes and on-site written records, given their significant reference value for subsequent data analysis.

3.3 Workshop 3: Historical analysis and overall analysis

3.3.1 Workshop 3 design

To encourage participants to explore the historical roots of current issues, including key turning points in the discipline's evolution within the contemporary context, and the underlying causes of the specific challenges the department faced, the aims for Workshop 3 continued to align with the second action of the *Expansive Learning* cycle—*Analysis*, and still planned to carry out two tasks.

CL 3.1, Historical Analysis, would invite participants to reflect on the questions: "How long has the conflict we analysed in the last meeting existed? Has it always been this way, or has it become more acute due to external changes?" (*First-Stimuli*) by creating a *History Wall* (*Second-Stimuli*) that would illustrate the evolution of the Health Management department, particularly the development of its curriculum. The *Mirror Material* would be an overview compiled by the researcher, depicting the broader contextual background of the development of the Health Management discipline across the country, together with the talent development plans, curriculum designs, and several textbooks used by this Health Management department and its predecessor, the Tourism Management department, over the past seven years.

CL 3.2 was designed to leverage the *Mirror Material* developed during the previous meetings, such as the *Eisenhower Matrix* and the *Problem Tree* (Figure 8), the *Activity System* diagram (Figure 9), and the aforementioned *History Wall* in CL 3.1 to facilitate a small-group discussion

on the topic: “If this conflict is not resolved, what impact will it have on our teaching in the long run? Is this what we actually want?” (*First-Stimuli*); followed by a plenary discussion (*Second-Stimuli*) in which participants could exchange their perspectives in an attempt to reach a consensus on the direction of change (Table 8).

Table 8. Outline and design of Workshop 3.

Workshop	Session Number	Expansive Learning Action	*First -Stimuli*	*Second -Stimuli*	*Mirror* Material
Workshop 3	CL 3.1	*Analysis* 2 Historical analysis	How long has the conflict we analyzed in the last meeting existed? Has it always been so, or has it become sharp because of some external changes ?	Map a *History Wall*	Textbooks, Existing curriculum document (Previous course content , teaching scheme, cultivation plans, and curriculum)
	CL 3.2	*Analysis* 3	If this conflict is not resolved, what impact will it have on our teaching in the long run? Is this what we actually want?	Sharing ideas (in Lab Notebook)	*Eisenhower Matrix* and *Problem Tree* *Activity System* diagram *History Wall*

3.3.2 Workshop 3 report

All 15 participants attended the meeting, with the vice director arriving a few minutes late due to a scheduling conflict. At the beginning of the meeting, the participants collectively reviewed the conclusions of the previous two meetings, the eight major categories of problems identified in Workshop 1, and the *Eisenhower Matrix*, the *Problem Tree*, and the *Activity System* diagram produced during Workshop 2.

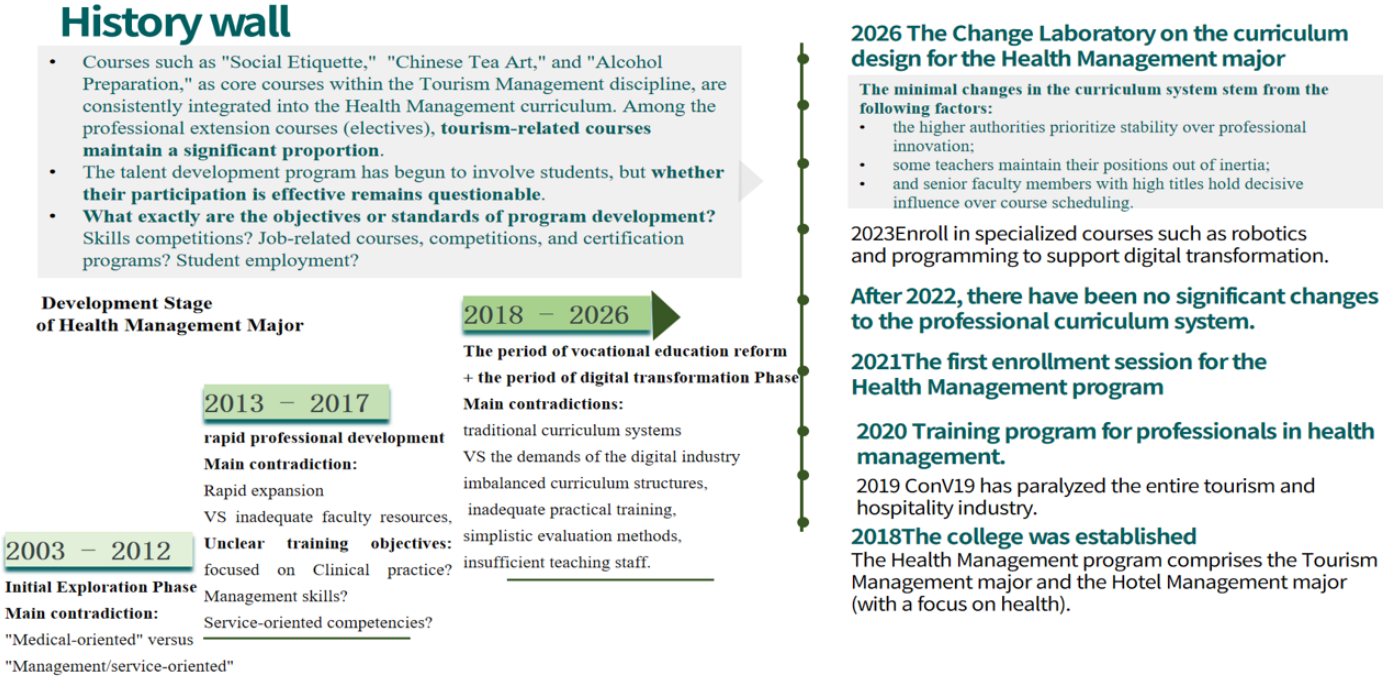


Figure 10. History wall in CL 3.1

During CL 3.1, participants worked in pairs to compare the curriculum designs in the *Professional Talent Development Plan* for the period from 2019 to 2025 (the programme transitioned from Tourism Management to Health Management around 2020). In the course of this review and comparison, the participants offered several insightful comments, but no one took the initiative to label the *History Wall*. Subsequently, the researcher supplemented the History Wall based on the meeting record (Figure 10).

In CL 3.2, due to time constraints, participants were not arranged to speak in turn. Instead, they wrote down their contributions in the Lab Notebook, which was collected by the researcher for subsequent compilation (Table 9). Participants' comments suggested that these factors have led to *"low motivation among faculty members toward teaching"* (Teacher 2), as well as *"low student satisfaction, and numerous limitations regarding employment opportunities and the pursuit of advanced academic degrees"* (Teacher 1). These issues can be interpreted as *"a vicious cycle that hinders the long-term development of the programme"* (Student 4) and *"undermined the reputation of both the programme and the university"* (Student 1). Based on an analysis of the participants' contributions in their Lab Notebooks, the department faces numerous legacy conflicts:

- Conflict 1. Ambiguous boundaries between the Health Management and Tourism Management programmes in terms of curricula
- Conflict 2. Discordant relationship among faculty of the two programmes, due to departmental restructuring and faculty turnover
- Conflict 3. Inadequate faculty development
- Conflict 4. Rigid teaching approaches
- Conflict 5. Deep information gap between faculty and students
- Conflict 6. Excessive workload on both teachers and students.

Table 9. Lab notes of participants in CL 3.2

	Meeting Notes (CL3.2)
Participants	If this conflict is not resolved, what impact will it have on our teaching in the long run? Is this what we actually want?
S1	If the issue remains unresolved, it will damage the reputation of both the academic program and the university as a whole, ultimately undermining its long-term viability.
S2	The lack of proper program development leaves little hope for the future; students invest money but fail to obtain the expected benefits.
S3	The boundaries between the Health Management and Tourism Management programs are increasingly blurred, leading to a narrowing of professional definitions; the shift from "Health Management" to "Senior Care Management" has impacted graduates' employment prospects.
S4	Both teachers and students lack initiative, resulting in low classroom teaching efficiency and poor quality—a vicious cycle.
S5	Teachers' teaching approaches remain rigid and show no improvement; there is a disconnect between specialized teaching content and graduates' employability.

	Meeting Notes (CL3.2)
Participants	If this conflict is not resolved, what impact will it have on our teaching in the long run? Is this what we actually want?
S6	Problems with faculty quality lead to flawed curriculum design, resulting in poor student learning outcomes and negatively impacting employment prospects and college admission opportunities.
S7	It adversely affects teaching quality, students' learning interest, graduates' employment challenges, and hinders the professional development and advancement of the field.
S8	If the issue remains unresolved, it will affect teaching quality and prevent students from acquiring knowledge.
S9	Problems exist in faculty development and the course structure is inadequate, which negatively impacts students' professional learning experience; moreover, there has been no innovation or progress in the program.
S10	The course lacks sufficient innovation, leading to delayed learning progress and negatively impacting learning outcomes.
S11	The courses are lengthy, involve a heavy workload of class hours, incur high fees, yet yield limited benefits; teachers are unable to fully utilize their expertise.
T1	Students experience inadequate learning satisfaction, which adversely affects their employment prospects and exacerbates conflicts, thereby hindering the development of academic programs.
T2	It is difficult to create courses, schedule classes, or conduct teaching.
T3	Through reverse selection, young teachers end up imitating experienced educators' superficial or careless teaching practices where educators fail to deliver substantive instruction.
R	The historical contradictions can be traced back to the establishment of the academy, or even its predecessor programs.

3.3.3 Workshop 3 reflections

As summarised in Table 10, Workshop 3 delivered the expected outcomes. Participants maintained lively discussion throughout the meeting, and the Lab Notebooks recorded valuable participant feedback, providing rich first-hand insights into practitioners' perceptions and supporting the analytical work. Despite these promising gains, several unanticipated challenges and implementation issues emerged, which require careful refinement for the subsequent main project.

The observed reluctance among participants to annotate content on the History Wall may be attributed to multiple interrelated factors. One contributing factor was the ambiguity in the instructions for the *History Wall* task, along with the established behavioural norms developed during the two prior workshops, which focused mainly on seated discussion and presentation. This prior experience fostered a cognitive tendency for participants to regard verbal contribution as sufficient engagement. Insufficient pre-planning for the *History Wall* task itself further limited participants' ability to add annotations freely, and targeted adjustments to this activity will therefore be implemented in the main project.

The participant composition of this pilot workshop also presented limitations. All participating teachers were early-career academics paired with the 2024-entry cohort of students, resulting in limited collective familiarity with the department's historical development. This highlights the need to recruit participants with varied levels of professional experience in the main project so as to capture a wider spectrum of viewpoints. Furthermore, the vice director observed that institutional leaders prioritised maintaining overall departmental stability over pursuing reform, reinforcing the rationale for securing leadership participation within the formal main project.

The Lab Notebook also functioned unevenly across the participant group: some contributors enthusiastically documented and shared reflective thoughts with the researcher, while others produced only brief, minimal notes. Revisions to the design of the Lab Notebook will be undertaken in the main project to encourage more extensive feedback sharing.

Finally, constraints in time management arose during workshop 3. CL 3.1 consumed a disproportionate amount of time, as the large volume of *Mirror Material* required participants to invest excessive effort in reading and cross-referencing curriculum documentation, which compressed the time allocated for CL 3.2. For future tasks involving extensive *Mirror Material*, pre-organisation of resources will be adopted in the main project to minimise time wastage.

Table 10. Reflection on workshop 3.

	Expected	Unexpected
Went Well	Lively Discussion Feedback from Lab Notebook	
Not Well		Reluctance to draw the History Wall Time Management Lack of opinion from senior staff and leaders

3.4 Workshop 4: Modelling and process reflection

3.4.1 Workshop 4 design

The fourth meeting served as the closing review session of this pilot project, aiming to propose new solutions for the third action of the *Expansive Learning* cycle—*Modelling*—and to provide an opportunity for reflection on all four workshops. Three tasks were designed for this workshop (Table 11).

CL 4.1: After reviewing the conclusions from previous meetings and some positive examples (*Mirror Material*), participants would be invited to freely share their personal experiences (*Second-Stimuli*) in response to the question, "Are there any individual cases in which these conflicts have been addressed successfully?" (*First-Stimuli*).

CL 4.2: Based on consideration of the *Activity System* diagram 1.0 (Mirror Material), participants would then be invited to re-sketch the *Activity System* diagram 2.0 (*Second-Stimuli*), engage in pairwise discussions, and propose reform suggestions by responding to the question "Is there any possibility for these solutions in the future?" (*First-Stimuli*).

Table 11. Outline and design of Workshop 4.

Workshop	Session Number	Expansive Learning Action	*First -Stimuli*	*Second -Stimuli*	*Mirror Material*
Workshop4	CL 4.1	Modelling 1	Whether there are individual cases in which these conflicts have been addressed successfully?	Case Sharing	Conclusion from Workshop 3 Positive examples
	CL 4.2	Modelling 2	Is there any possibility for solutions in the future?	Sketch the *Activity System diagram 2.0*	*Activity System* diagram 1.0 (Figure 9)
	CL 4.3	Process Reflection	Project Summary	Compare the two diagrams of the *Activity System* Reflect on the feasibility of the suggestions	Suggestions Feedback from the participants *History Wall*

CL 4.3: The *Second-Stimuli* would support participants in comparing the two versions of the *Activity System* diagram from Workshop 2 and Workshop 4 to reflect on feasible reform suggestions, thereby completing an overall project summary (*First-Stimuli*). The *Mirror Material* for this task would include participants' suggestions and feedback along with a representation of the *History Wall* from Workshop 3.

3.4.2 Workshop 4 report

The organisation of the final session was somewhat rushed, as both faculty members and students often had other commitments at the end of the semester. One student was absent due to illness, while the vice director arrived one hour late because of a scheduling conflict.

During CL 4.1, participants showed considerable engagement, sharing not only positive personal experiences in overcoming obstacles but also some negative ones (Figure 11). Interestingly, the vice director's absence encouraged one student to offer negative feedback regarding his previous course teaching. When the researcher asked this student, *"Would you still share this case if the vice director were present?"*, the response was *"Of course not,"* followed by laughter from other participants. In addition, when one student mentioned that a teacher had made offensive remarks toward students on topics unrelated to the course content, this resonated strongly with attendees, leading to considerable time spent on the unexpected discussion. However, this discussion provided valuable insights for proposing corresponding solutions, such as *"setting up an anonymous complaints channel"* (Student 1 & Student 2).



Figure 11. Experience sharing during CL4.1 and the summary of those voices

The vice director's arrival coincided precisely with CL 4.2, in which participants sketched the *Activity System* diagram 2.0 (organised by the researcher in Figure 12) to provoke solutions for the future. Some participants asked the researcher to re-explain the *Activity System* diagram, which confirmed that some participants in Workshop 2 had not fully grasped the concept of the *Activity System* (see Section 3.2.2). Participants spontaneously formed small groups of 2–3 people for discussion. After the group discussions, participants shared their views and offered highly specific suggestions for improving the curriculum design system of this Health Management programme (detailed in Section 4):

> *"Regarding the triangular framework, we believe that... em... the subject—previously referred to leadership —is inappropriate. The proportion of teachers to students should also be given significant weight. If it were solely about leadership, and the leader did not actually teach the course, how could they know the teachers' or students' needs? Thus... would lack first-hand teaching experience and practical insights. As for the tools, in addition to seminars,*

we also consider using a suggestion box, as well as course selection mechanisms—where courses are listed for students to vote on." (Student 2)

CL 4.3 concluded somewhat hastily due to time constraints, and the researcher reminded everyone to promptly record their reflections on this pilot project in the Lab Notebook for post-meeting summary and organization (Figure 13).

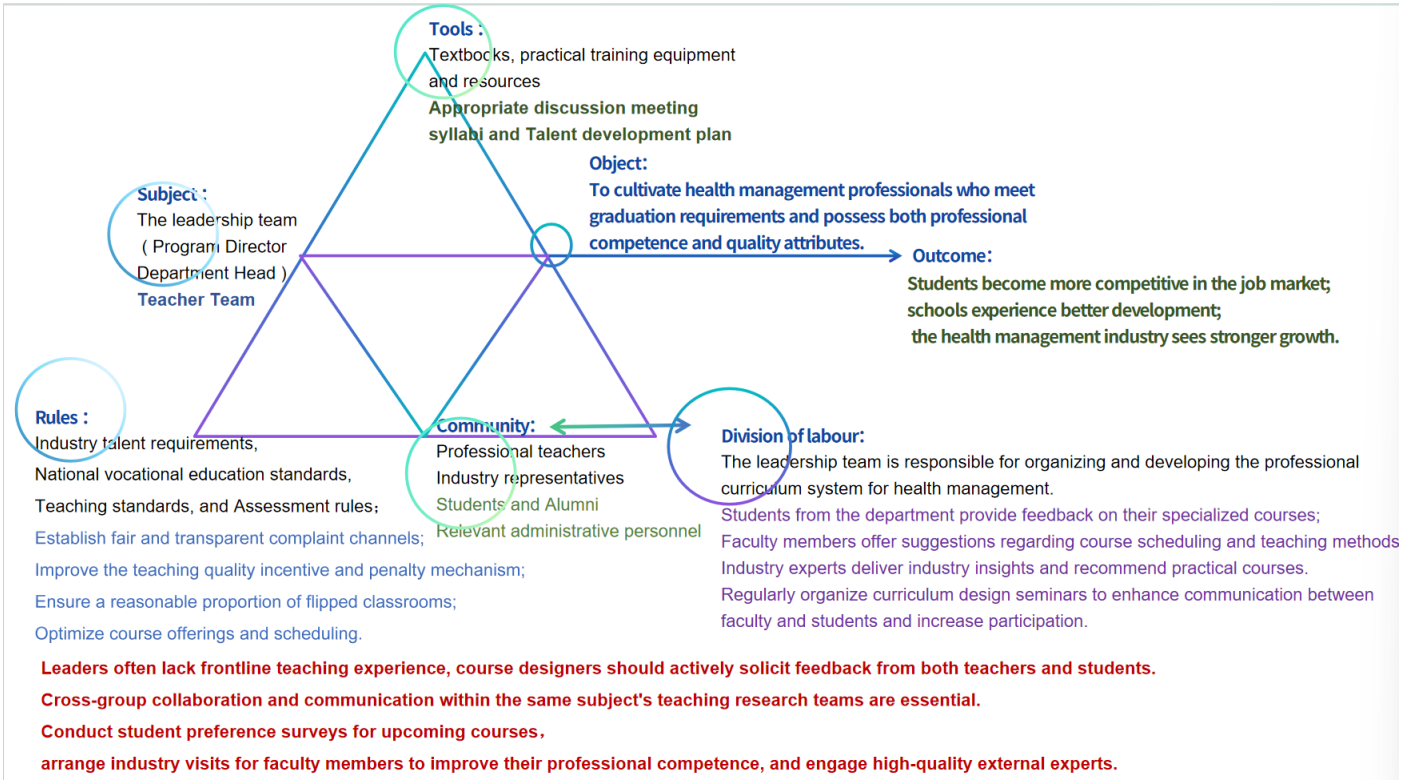


Figure 12. ***Activity System*** **diagram 2.0 in CL 4.2**

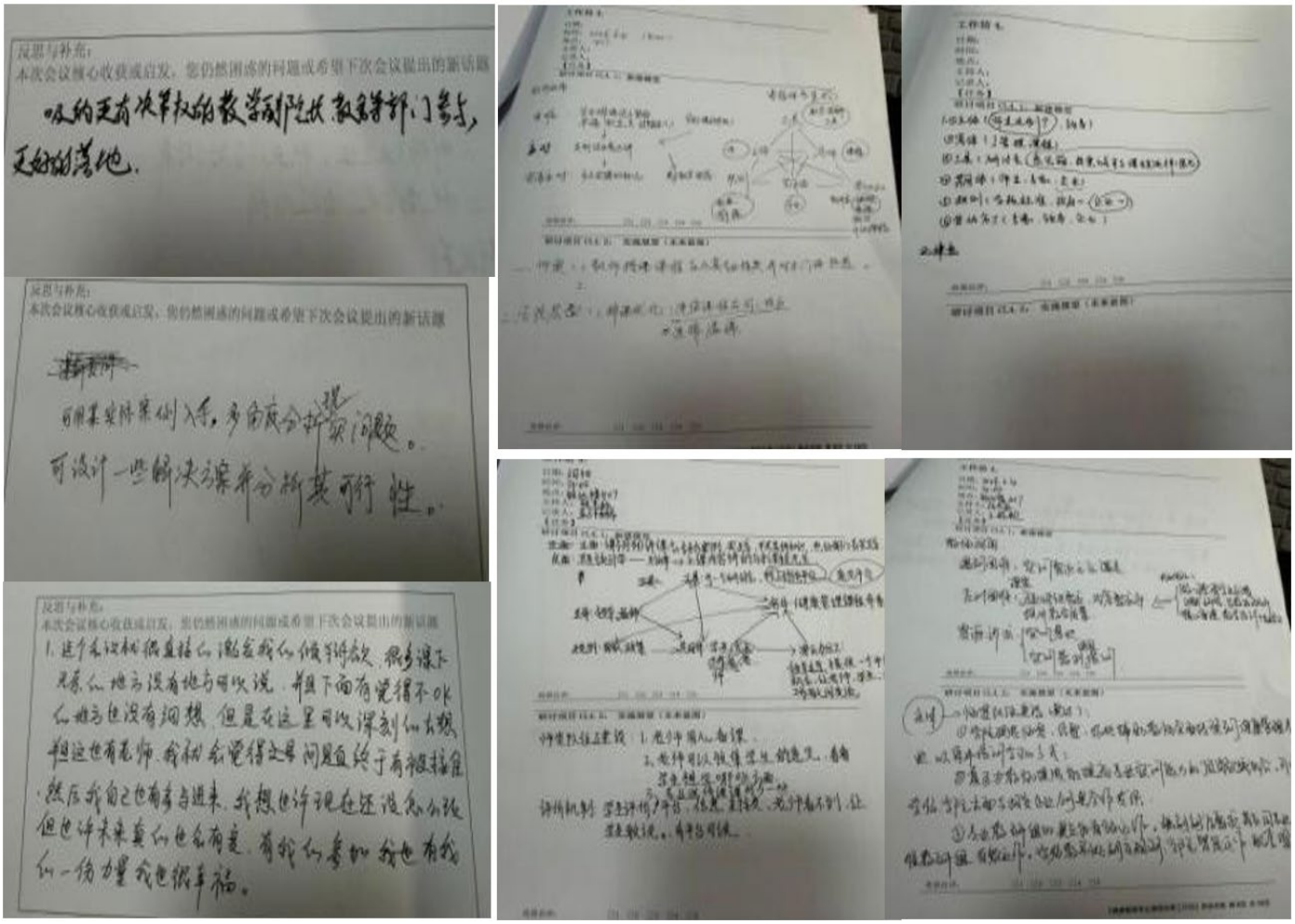


Figure 13. Reflection from participants in their Lab Notebook

3.4.3 Workshop 4 reflections

Workshop 4 provided participants with valuable opportunities to engage in depth with the systematic Expansive Learning activities. As shown in Table 12, participants maintained active and continuous discussion throughout the session, and the Lab Notebooks collected abundant reflective feedback. In addition to these positive outcomes, the workshop also revealed unanticipated phenomena and practical difficulties in implementation that require targeted attention in the activity design of the subsequent main project.

A student's negative response to the question of whether she would raise teaching-related concerns in front of the vice director provided further evidence of how institutional hierarchies shape participants' readiness to voice their perspectives, with critical implications for the design of group discussion activities in the subsequent main project.

Furthermore, persistent time-management challenges were identified. Workshop conversations tended to consume substantial time when exploring topics that resonated strongly with participants. Accordingly, planning for the main project must anticipate such emergent conversational dynamics and allocate adequate time reserves to ensure the completion of subsequent designed tasks.

Table 12. Reflection on Workshop 4.

	Expected	Unexpected
Went Well	Lively Discussion Feedback from Lab Notebook	Negative case sharing about the Absent Teacher (A Counter Example of Hierarchy Impact)
Not Well		Time Management

4. Outcomes of the pilot project

The approach taken by the pilot project featured group collaboration, co-creation, model presentations, and peer evaluation, effectively enhancing participants' teamwork skills, communication abilities, and adaptability under pressure. Through four systematic and progressive CL workshops, many individual participants demonstrated improvements in professional understanding, critical thinking skills, practical competencies, and teamwork abilities. This was a valuable outcome in itself, for the individual participants but also as an indication of what could be achieved in the local setting with an approach like this.

Through the workshops, teachers and students identified several specific measures (generated in CL4.2) to address the problems (CL1.2). Table 13 also presents corresponding improvements, along with contradictions (CL2.2) and legacy conflicts (CL3.2):

The following improvements shall be made to the ***rules***:

- Optimize course structures and class hour allocations
- Limit the proportion of time dedicated to the “flipped classroom” model
- Refine the teacher performance evaluation system with incentives and penalties
- Establish an anonymous feedback channel.
- High-quality external experts must undergo rigorous screening before being hired.

As to the ***division of labour***, suggestions are as follows:

- Cross-group collaboration and communication within the same subject’s teaching research teams are essential.
- Student preference surveys on upcoming courses shall be considered.
- Faculty members require industry visits to improve their professional competence.

On an interim basis, the aforementioned recommendations have been compiled by the researcher and submitted to the departmental leadership. Additionally, the researcher conducted an informal inquiry about course preferences among students of the Health Management programme on upcoming courses according to suggestions raised through the workshops, finding that most students expressed a desire for courses that cultivate practical social skills. Requirements for course improvement mainly focused on reducing the perceived dryness of theoretical content, enhancing teaching appeal, incorporating more hands-on practical training, and optimizing the practicality and relevance of the courses. The results of this informal inquiry will certainly be used as *Mirror Material* for the later main study.

Based on the aforementioned consensus suggestions, the researcher will classify and screen the proposed measures according to implementation difficulty and expected outcomes, thereby

progressively advancing the optimization and refinement of the curriculum system, and providing reference and insights for the next phase of the main research project.

Table 13. Proposed Improvements for system problems , contradictions, and conflicts.

Proposed Improvements (CL4.2)	Legacy conflicts (CL3.2)	Contradictions (CL2.2)	Problems (CL1.2)
Optimize the overall course structures and rationalize class hour allocations	*Conflict 1. Ambiguous boundaries between the two programmes in terms of curricula* *Conflict 6. Excessive workload on both teachers and students.*	**Rules:** "The quality supervision (evaluation) systems at various levels were unreasonable." "Teachers choose or set courses not according to the object, but according to what they can teach or what is easier for them to conduct."	*Problem 1. Unreasonable Curriculum System Design*
Reasonably limit the proportion of teaching time adopted for the flipped classroom model	*Conflict 3. Inadequate faculty development* *Conflict 4. Rigid teaching approaches*		*Problem 5. Weak Teaching Quality*
Refine the teacher performance evaluation system by establishing complete incentive and penalty rules	*Conflict 3. Inadequate faculty development* *Conflict 4. Rigid teaching approaches*		*Problem 5. Weak teaching quality* *Problem 7. Insufficient Faculty Team Development*
Set up an anonymous feedback channel to collect teaching and curriculum optimization suggestions	*Conflict 5. Deep information gap between faculty and students*		*Problem 5. Weak Teaching Quality*
Implement rigorous screening procedures for the recruitment of high-quality external experts	*Conflict 4. Rigid teaching approaches*		*Problem 5. Weak Teaching Quality*
Strengthen and normalize cross-group collaboration and communication among intra-subject teaching research teams	*Conflict 2. Discordant relationships among faculties* *Conflict 3. Inadequate faculty development*	**Division of labour:** "suggestions from teachers, students, and industry were not fully applied"	*Problem 7. Insufficient Faculty Team Development*
Take students' preference survey results on upcoming courses into account in curriculum design	*Conflict 6. Excessive workload on both teachers and students.* *Conflict 5. Deep information gap between faculty and students*		*Problem 8. Poor Student Learning Experience & Professional Identity*
Organize faculty members to conduct regular industry visits to improve their professional practical competence	*Conflict 3. Inadequate faculty development*		*Problem 3. Competency Development Misalignment* *Problem 6. Insufficient Resource Support*

5. Reflection on the Change Laboratory

The pilot series provided preliminary evidence of the approach's effectiveness in facilitating in-depth, solution-oriented dialogues among participants. Prior to the implementation of the intervention, routine departmental meetings generally failed to achieve expected outputs (based on the author's own observation as a staff member and participants' comments during the meetings): participants tended to attribute institutional and curriculum dilemmas to superficial factors, and the meetings rarely yielded conclusive results or triggered in-depth reflections. In comparison, the CL reshaped complaint-centered discussions into constructive deliberation, with the focus shifting to the development of implementable and actionable improvement strategies.

Furthermore, participants' proactive involvement exceeded initial expectations. Early-career faculty intended to optimise teaching and curriculum but lacked structured approaches for improvement. The CL addressed this gap by building an efficient, focused interactive communication platform for multi-stakeholders. Most participants reported that the workshops broadened professional perspectives, introduced innovative ideas, and enhanced core professional competencies such as problem analysis, reasoning, and collaborative communication. Several participants proposed institutionalising regular curriculum design workshops to sustain long-term teacher-student communication and iterative curriculum optimisation (Table 14).

Beyond positive participant outcomes, this pilot also produced substantial empirical gains for the research. As a novice *Change Laboratory* researcher, the author gained valuable practical experience and collected empirical data, laying a solid foundation for the subsequent main project. Having shown promise in scaffolding *Expansive Learning*, promoting collective reflective practice, and driving context-specific curriculum innovation in the Health Management programme, the core methodological principles of the CL will be consistently applied in the main research phase.

Table 14. Feedback from participants in the series of workshops.

Participant	Workshop 1 feedback	Workshop 2 feedback	Workshop 3 feedback	Workshop 4 feedback
S1	Understood the gap between ideals and reality	Some teachers lack clarity regarding the teaching content and objectives, and there is an excessive reliance on the flipped classroom approach.	If the issue remains unresolved, it will damage the reputation of both the academic program and the university as a whole, ultimately undermining its long-term viability.	As a student, I was motivated to express opinions clearly and participate in program development.
S2	There is a significant gap between reality and ideals, making it difficult to change the current situation.	I've developed a new perspective on my profession, but making changes is difficult.	The lack of proper program development leaves little hope for the future; students invest money but fail to obtain the expected benefits.	The students' concerns and ideas were duly taken into account, and their difficulties as teachers were understood. recommend the seminar be continued and expanded in scope to incorporate feedback from various stakeholders.
S3	The curriculum is poorly designed, with a disconnect between theory and practice, and unclear career prospects.	We have identified many existing issues; some can be resolved, while others cannot.	The boundaries between the Health Management and Tourism Management programs are increasingly blurred, leading to a narrowing of professional definitions; the shift from “Health Management” to “Senior Care Management” has impacted graduates’ employment prospects.	The doubts have been resolved, and I now have a clear direction for future planning.
S4	I hope this workshop will be helpful to both current participants and future students, and that the issues addressed can be gradually resolved.	It was later discovered that the issues were interconnected and interacted with each other, rather than being solvable individually.	Both teachers and students lack initiative, resulting in low classroom teaching efficiency and poor quality—a vicious cycle.	

Participant	Workshop 1 feedback	Workshop 2 feedback	Workshop 3 feedback	Workshop 4 feedback
S5	Through this meeting, teachers and students have exchanged ideas and fostered mutual understanding. It is recommended to increase practical class hours, reduce courses unrelated to the major, and ensure that instructors focus their lectures on key knowledge points without wasting time.	With a basic understanding of how the college designs and structures its curriculum, it is advisable to allocate appropriate teaching staff based on each course's specific requirements.	Teachers' teaching approaches remain rigid and show no improvement; there is a disconnect between specialized teaching content and graduates' employability.	The workshop addressed certain information gaps by recommending that teachers and students actively gather student feedback during class sessions, with student representatives attending the seminar striving to convey as many suggestions from both teachers and students as possible.
S6		How can the issue of unreasonable course design be addressed?	Problems with faculty quality lead to flawed curriculum design, resulting in poor student learning outcomes and negatively impacting employment prospects and college admission opportunities.	The seminar was highly rewarding and absolutely essential.
S7	The foundational knowledge required for certain specialized courses is insufficient; students are immediately confronted with a wealth of technical terminology.		It adversely affects teaching quality, students' learning interest, graduates' employment challenges, and hinders the professional development and advancement of the field.	The current limitation of the workshop is that there are too few representatives from both teachers and students.
S8			If the issue remains unresolved, it will affect teaching quality and prevent students from acquiring knowledge.	It is recommended to continue holding seminars and build upon this foundation.
S9	The professional course structure is unreasonable, wasting valuable class time.	Most problems are interconnected, involving multiple factors behind them, which is quite frustrating.	Problems exist in faculty development and the course structure is inadequate, which negatively impacts students' professional learning experience; moreover, there has been no innovation or progress in the program.	I hope this will solve the problem.
S10	hope that more practical class hours will be allocated; and some teachers are unreasonably bringing competition-related activities directly into the classroom.	The curriculum design and program orientation have a significant impact on teaching quality.	The course lacks sufficient innovation, leading to delayed learning progress and negatively impacting learning outcomes.	The curriculum design and program orientation have a significant impact on teaching quality.

Participant	Workshop 1 feedback	Workshop 2 feedback	Workshop 3 feedback	Workshop 4 feedback
S11		Top-level leadership decisions are critical, and student suggestions are invaluable; someone needs to proactively propose them.	The courses are lengthy, involve a heavy workload of class hours, incur high fees, yet yield limited benefits; teachers are unable to fully utilize their expertise.	The workshop can continue to be implemented, addressing issues from both teachers' and students' perspectives to foster positive change.
T1	How can curriculum design be implemented more scientifically and rationally? The issues raised by student feedback are genuine; therefore, it is essential to guide students in broadening their perspectives and avoiding one-sided or immature ideas.		Students experience inadequate learning satisfaction, which adversely affects their employment prospects and exacerbates conflicts, thereby hindering the development of academic programs.	Face-to-face interaction opportunities with students are rare; I recommend that more teachers participate to strengthen faculty development and provide them with genuine, ongoing opportunities for professional growth.
T2	Students place high importance on both the theoretical knowledge and practical applicability of the course content; therefore, teachers should provide timely feedback during lectures.	The fundamental issues lie in unclear professional orientation and unreasonable curriculum design, with insufficient faculty development being a significant contributing factor; therefore, curriculum development should fully take into account students' employment prospects.	It is difficult to create courses, schedule classes, or conduct teaching.	Start with real-world cases, analyze them from multiple perspectives, design solutions, and evaluate their feasibility.
T3	The curriculum design and talent development require genuine student participation.	The next meeting will focus more on the root causes of the core issues in educational reform; these reforms can be implemented by students reporting their concerns to administrators.	Through reverse selection, young teachers end up imitating experienced educators in superficial or careless teaching practices where educators fail to deliver substantive instruction.	The process can incorporate teaching leaders with greater decision-making authority and heads of relevant departments, facilitating better implementation of reforms.
R	The questions raised regarding professionalism effectively reflect and encompass the current challenges encountered.	The discussion on problem priorities and the problem tree was quite lively, but some participants didn't fully understand the activity system.	The historical contradictions can be traced back to the establishment of the academy, or even its predecessor programs.	

For the further main project, the researcher will draw on the experience gained to make improvements in the following areas:

- **Meeting Preparation**:

Schedule meetings further in advance to allow sufficient time, and promptly steer any off-topic discussions back to the core agenda.

Thoroughly organise all materials and provide appropriate *Mirror Material* for each *Expansive Learning* session.

Meeting task designs should be more comprehensive, and task instructions should be clearer and more concise to ensure participants fully understand the goals.

- **Participants:**

Due to the imbalanced participant composition, adjustments will be made: student numbers will be reduced to 6 – 8, teacher numbers increased to 5 – 6, and 1 – 2 administrative leaders and 1 – 2 industry representatives recruited if possible.

When designing group discussion sessions, participants without significant identity-based disparities should be placed together in one group to partially account for the speaking anxiety that may arise from hierarchical structures.

To collect discussion data as comprehensively and clearly as possible, a designated note-taker might be assigned to each discussion group to focus on recording the discussions and prioritise the documentation of key points.

- **Equipment Provision:**

To avoid unexpected issues, ensure all audio and video recording equipment is functioning properly before the meeting begins, and arrange camera angles according to the meeting layout.

The Lab Notebook is highly practical, especially for participants who are not comfortable speaking in public—they can use it to record their thoughts and immediate feedback.

6. Brief outline of the main study

Against the limitations of conventional top-down curriculum reform, which lacks systematic theoretical grounding and fails to expose systemic contradictions in existing curricula, like the pilot project, this doctoral main study will adopt CHAT as its theoretical foundation and CL as its formative intervention methodology. Building on implementation experience, stakeholder feedback, and procedural refinements from the four pilot workshops, this main project will consolidate and expand these preliminary outcomes. The main project intends to resolve the structural misalignment between existing curricula and industry employability and to establish a refined, industry-aligned curriculum system with sustainable potential in higher vocational Health Management education. Additionally, it aims to develop a replicable theoretical paradigm and practical operational pathway for future curriculum reform in HVE.

This research will follow the workflow of the CHAT, *Expansive Learning*, and CL Standard Workshop. It will comprise eight workshops (CL 0 – CL 7), each lasting two hours, with each workshop corresponding to an action in the *Expansive Learning* cycle. CL 0 will be an introductory meeting held one week before the main workshops. The entire research will span 12 months and will be divided into four actions:

Months 1 – 3 will constitute the pre-CL preparation stage, focusing on literature review, field interviews, and construction of the research framework. Months 4 – 7 will cover CL 0 to

CL 3, during which a series of Change Laboratory workshops will be delivered to analyze structural contradictions in the original curriculum design system, formulate a targeted curriculum reform scheme, and establish a renewed curriculum design system. Months 7 – 10 will correspond to CL 4 – CL 6, during which the redesigned curriculum will be piloted within one or two modules in authentic teaching practice, subject to the department's annual curriculum approval cycle, and relevant data will be collected, and a comparative effectiveness analysis will be conducted. Finally, Months 10 – 12 (CL7) will be dedicated to synthesizing research findings, optimizing the reform plan, and completing the final research manuscript.

Table 15. Outline of workshops for the main study.

Workshop	*Expansive Learning* cycle	Core Issue
CL 0	Introduction	Explanation of the project and the agenda
CL 1	*Questioning*	Find surfacing problems and disturbances in the curriculum design system.
CL 2	*Analysis*	Analyse historical changes in the curriculum reform and causes of contradictions
CL 3	*Modelling*	Propose ideas and strategies to address identified contradictions. Discuss and give feedback
CL 4	*Examining*	Evaluate selected strategies through pilot activities
CL 5	*Implementing*	Apply selected strategies
CL 6	*Reflecting*	Reflect on the process
CL 7	*Consolidating*	Summarize and formulate an action plan for further implementation

Table 16. Schedule of Research Progress.

Stage	Time	Corresponding CL Links	Core Tasks
Phase 1	Months 1–3	Preparation before the CL	Literature review, field research, and interviews, establishment of the research framework
Phase 2	Months 4–7	CL 0–CL 3	Conducting CL to complete the curriculum conflict analysis report, designing a curriculum reform plan, and developing a new curriculum system

Stage	Time	Corresponding CL Links	Core Tasks
Phase 3	Months 7–10	CL 4–CL 6	Implementing teaching practices, collecting data, conducting comparative analysis
Phase 4	Months 10–12	CL 7	Summarizing findings, iterative optimization, finalizing the draft

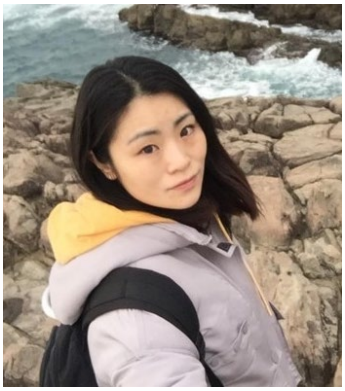
7. Summary

Through the implementation of the pilot project, the researcher has clearly identified the positive role of the Change Laboratory in facilitating cross-role communication and problem exploration within a research context. At the same time, the researcher has reflected on the challenges encountered in terms of participant composition, on-site organization, time management, hierarchy impact, and process implementation, and has identified areas that require consideration and optimization for the main research project. The outcomes of the pilot project and the feedback received from participants have generated a substantial amount of data. A portion of this data will be compiled and used as *Mirror Material* in the subsequent main project. Building on this foundation, the researcher will draw upon the practical experience accumulated during this pilot study to steadily advance the main project in accordance with the adjusted plan, while further exploring the core research questions to yield more valuable research findings.

Use of Generative AI

I acknowledge the use of AI tools in this pilot report. WPS was used for the initial transcription of sessions, which I manually reviewed, corrected and translated. I used Doubao (independently developed by ByteDance based on the Seed large model) to assist with language refinement. All writing, analysis, and final decisions remain my own.

About the author



Yiyun Zhu is a health management teacher at a vocational university in China. Her current research focuses on the collaborative design of higher vocational curricula with the intervention of the Change Laboratory. Yiyun is passionate about interdisciplinary teaching collaboration, particularly regarding higher vocational education reform in health-related fields. She places particular emphasis on the potential application of Cultural-Historical Activity Theory and Change Laboratory in higher vocational education to solve practical problems through collective wisdom.

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