

Practical Exploration of AI-enabled “Writing and Communication” Course Construction under the OBE Concept

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Abstract: *The deep integration of artificial intelligence technology and higher education teaching is an urgent proposition of the times to be solved in higher education classrooms. In this context, higher education needs to shift from the traditional knowledge transfer model to a capacity building orientation. At present, there are still systemic problems in liberal arts classrooms, such as outdated teaching methods and insufficient application of technology. It is urgent to achieve an overall improvement in teaching quality through the construction of course groups. The “Writing and Communication” course group of Yibin University is guided by the OBE concept and combined with its own school-running goals. It empowers course reconstruction through AI technology and creates an industry-university-research-education community, aiming to enhance students’ employment competitiveness and form a replicable teaching reform plan, which provides strong support for the construction of an innovative application talent training system.*

Keywords: OBE concept, AI, Course group construction.

1. INTRODUCTION

Artificial intelligence has brought unprecedented opportunities and challenges to the education industry. The deep integration of artificial intelligence technology with higher education teaching is an urgent proposition of the times to be solved in higher education classrooms. In this context, higher education needs to shift from the traditional knowledge transfer model to the ability construction orientation. Domestic and foreign universities have actively explored this field. In the 21st century, European and American universities generally regard “Writing and Communication” courses as core courses in general education, adopting small-class teaching, workshops, peer review and other models, emphasizing the cultivation of critical thinking, logical expression and cross-cultural communication skills. In recent years, domestic universities represented by Tsinghua University have gradually attached importance to the construction of “Writing and Communication” course groups. Some universities have incorporated it into the general education curriculum system, tried to combine writing and communication courses with professional courses, and carried out project-based learning, case teaching and other models, and achieved certain results in improving the writing and communication skills of contemporary college students. However, there are still systemic problems in the current liberal arts classroom, such as outdated teaching methods and insufficient application of technology. It is urgent to achieve an overall improvement in teaching quality through the construction of course groups.

The construction of course clusters is the key link between subject knowledge and social needs. It not only solves the problem of fragmentation of traditional courses, but also promotes the transformation of higher education from knowledge imparting to ability building. In the context of digital transformation, the construction of course clusters has become the core grasp of the high-quality development of talent training in higher education. Although domestic and foreign universities have achieved certain results in the construction of “Writing and Communication” courses, they still face challenges such as disconnection between teaching content and professional needs, shallow application of technology, and low student participation. Yibin University has made useful attempts in this regard in the construction of the “Writing and Communication” course cluster. The course cluster includes six courses: “Writing”, “Government Affairs and Business Writing”, “Creative Thinking and Speech Eloquence”, “Radio and Television Writing”, “Advertising Creativity”, and “Public Relations”. Offline course students cover the whole school, and online students radiate across the country, with the characteristics of wide benefits and great social impact. Guided by the OBE concept and combining its own school-running goals, the course cluster teaching team empowers course reconstruction through AI technology to create an industry-university-research-education community, aiming to enhance students’ employment competitiveness and form a replicable teaching reform plan, providing strong support for the construction of an innovative application talent training system.

2. ANALYSIS OF TEACHING STATUS AND PROBLEMS

2.1 Contemporary College Students Lack Writing and Communication Skills.

Writing and communication are indispensable skills in career development and social interaction, and are crucial to personal development. When writing, contemporary college students generally have problems such as unclear logical chains, inaccurate expressions, and inability to accurately convey ideas. When communicating, they often ignore non-verbal communication methods such as body language and facial expressions, and their thoughts are confused when expressing verbally, and they cannot convey their views concisely and clearly; there is a lack of effective communication in the team, which affects the efficiency of cooperation.

2.2 The Organizational Method of Liberal Arts Classroom Teaching is Outdated.

In traditional liberal arts classrooms, most teachers dominate the classroom as “knowledge authorities” and teach through a single mode of “explaining theories + analyzing model essays”. Students passively accept and lack the opportunity to actively think and practice; the homework form is rigid, lacking contextual and project-based design, making it difficult to stimulate students’ interest; the teaching content is not designed for different majors and career needs, and lacks deep integration with specific scenarios.

2.3 The Integration of Modern Information Technology into the Teaching of Liberal Arts Courses is Insufficient.

Many liberal arts courses only use information technology at the basic level, such as PPT presentations and video playback, and do not use digital tools (such as collaborative writing platforms and virtual simulation scenes) to improve interactivity; liberal arts courses lack high-quality digital resources, which limits the in-depth application of information technology; the application of information technology in classroom teaching has not effectively improved student participation, and some students are still in a passive acceptance state, lacking active learning and interaction.

3. COURSE CLUSTER CONSTRUCTION INITIATIVES

In response to the common problems of weak writing and communication skills among contemporary college students, the teaching team of the “Writing and Communication” course group of Yibin University, guided by the OBE concept, focused on the core goal of improving the writing and communication skills of contemporary college students. Relying on 7 provincial undergraduate teaching quality engineering projects such as “Writing”, “Government Affairs and Business Writing”, and “Creative Thinking and Eloquence”, the team implemented the “one core, three synergies, and five linkages” teaching strategy. Through the three-dimensional collaboration of “context creation-task drive-curriculum ideological and political education”, the team designed the five-link linkage of “examination-evaluation-learning-practice-thinking”, leveraged AI to continuously adjust the teaching mode and teaching methods, reshape the teaching ecology of “Writing and Communication” courses, and continuously promote systematic changes in classroom teaching, continuously improve the writing and communication skills of contemporary college students, and enhance students’ employment competitiveness.

3.1 “One Core”

The course group has constructed a capacity training system with “writing and communication skills” as the core to solve the problem of insufficient writing and communication skills among college students.

3.1.1 Set course teaching objectives with “writing” and “speaking” as the core points

“Writing” and “speaking” are the key nodes to connect the courses in this course group. Each course has its own focus, supports each other, and works together to form a network for cultivating college students’ writing and communication skills. According to the characteristics of the course, the instructors use AI tools appropriately in the course to assist students in generating writing frameworks (ChatGPT, Wenxinyiyan, Doubao, etc.), optimize language expression, stimulate visual creativity, and form a “human-computer collaboration” ability training model. The “Writing” course aims to cultivate students’ literary creation, narrative and emotional expression. Teachers can use AI tools to generate literary texts of different styles (such as realism, magical realism), optimize language expression, and students analyze and imitate creation. The “Radio and Television Writing” course aims

to cultivate students' ability to create radio and television works. It can combine AI tools to generate news release templates, and students complete the conversion from text to video scripts. The "Government Affairs and Business Writing" course aims to improve the standardization and accuracy of students' practical writing. It uses AI tools to generate official document templates, and students modify and optimize according to the situation. The course "Public Relations" focuses on crisis communication and public persuasion. AI tools can be used to simulate crisis scenarios, and students can write public relations statements and design response strategies. The course "Advertising Creativity" focuses on creative planning and cross-media expression capabilities. AI tools can be used to generate advertising copy, stimulate visual creativity, and students can complete the entire process from creativity to implementation. The course "Creative Thinking and Eloquence" focuses on oral expression and impromptu communication. AI tools can be used to simulate speech scenes with virtual audiences, and real-time feedback on speech speed, tone, and body language. Each course uses AI tools to achieve personalized learning, solving the pain point of traditional writing and communication courses that focus on knowledge and neglect practice, making capacity improvement more targeted and measurable.

3.1.2 Constructing the three-level competency matrix of the course group

Under the guidance of the course group's teaching objectives, the course group has constructed a gradual growth path of writing and communication skills from "basics-application-innovation" to achieve hierarchical and progressive ability improvement. The basic level ("writing" and "broadcast and television writing") mainly cultivates narrative logic, language expression and stylistic norms; the application level ("government and business writing" and "public relations") mainly strengthens official document writing, crisis communication, and public persuasion; the innovation level ("advertising creativity" and "creative thinking and speech eloquence") mainly improves creative generation, impromptu speech and cross-media expression.

3.2 "Three synergies" and "five linkages"

The course group has constructed a three-dimensional collaborative integration mechanism of "context creation - task-driven - ideological and political education in courses", and constructed a closed-loop teaching process with five links of "examination - evaluation - learning - practice - thinking" in classroom teaching to solve the problem of outdated classroom teaching organization methods in writing and communication courses.

3.2.1 "Context Creation – Task Driven – Ideological and Political Courses" Collaborative Integration Mechanism

The course group breaks through the one-way indoctrination model of traditional classrooms, stimulates learning motivation through real situations, promotes in-depth learning with task-driven, and realizes value guidance through ideological and political education in courses. Diversified situation creation. In view of the course teaching objectives, combined with the real situation of party and government agencies, enterprises and institutions, the situation runs through the entire teaching content of the course through virtual simulation. The "Writing" course simulates literary scenes (such as hometown, parting, and solar terms), and students create various literary genres according to the scenes; the "Radio and Television Writing" course simulates a news live broadcast room, and students complete the writing and broadcasting of press releases; the "Government Affairs and Business Writing" course simulates the release of government documents, large-scale events or business negotiations, and students write official document reports, speeches and meeting minutes; the "Public Relations" course simulates corporate crisis public relations scenes, and students design crisis response plans; the "Creative Thinking and Eloquence" course simulates speech scenes under different cultural backgrounds, and students write speeches; the "Advertising Creativity" course combines the real needs of enterprises (such as brand promotion), and students complete advertising research, advertising planning, and advertising works. Task-driven projectization. Set teaching tasks to stimulate students' initiative. For example, the course "Writing" is designed with the theme task of "Local Narrative", and students complete their creations in combination with regional culture. The course "Radio and Television Writing" is designed with the task of "News Special Report", and students complete the whole process from interview to broadcast. The course "Government Affairs and Business Writing" is designed with the task of "Anti-epidemic Prevention and Control Notice", and students write and optimize official documents. The course "Public Relations" is designed with the task of "Rural Revitalization Brand Communication", and students complete the design of public relations plans. The course "Creative Thinking and Speech Eloquence" is designed with the task of "Impromptu Speech Competition", and students give speeches around hot topics. The course "Advertising Creativity" is designed with the task of "Promoting Domestic Brands", and students complete advertising planning and design. Ideological and political education runs through the whole course. The course group "Writing and Communication" combines ideological and political education

with writing and communication practice, thinking and expression, humanities and technology, and is committed to shaping the correct outlook on life and values of college students by passing on the “Tao” of writing and teaching the “industry” of communication. Each course explores the elements of education in combination with the characteristics of the major of the students being studied, teaches students the methods of in-depth reading, analysis, writing and effective communication, and improves the reading, oral expression and critical thinking abilities of contemporary college students.

3.2.2 Closed-loop teaching process with five links of “examination-evaluation-learning-practice-thinking”

“Inspection” means checking pre-class tasks. Teachers can use AI tools to issue tasks and let students complete them before class. At the same time, AI can be used to conduct pre-class inspections to understand students’ mastery of knowledge. “Evaluation” means evaluating the achievement of teaching objectives. Teachers can use the AI intelligent grading system to analyze common and individual problems and evaluate students’ mastery of knowledge points. “Learning” means learning new knowledge, designing corresponding scenarios based on knowledge points, and teaching new knowledge. “Practice” means timely classroom training. Teachers design practice tasks based on scenarios, and complete knowledge internalization and transfer through practice. “Thinking” means timely reflection on learning outcomes, collaboration between teachers and students, summarizing classroom teaching tasks and completion status, and evaluating whether teaching objectives are effectively achieved.

Taking the course of “Government Affairs and Business Writing” as an example, in the first step, teachers can use AI tools to push problematic official document writing cases for students to correct, and students mark errors before class to complete the task; in the second step, 5 minutes before the start of the class, teachers select problematic official documents that students have modified and marked for normative comparison. Teachers summarize common errors, conduct comments in real time, and point out the key points and difficulties in official document writing; in the third step, enter new knowledge learning and conduct teaching task scenario simulation. Teachers can use AI tools to match excellent official document cases since the 18th National Congress of the Communist Party of China, conduct literary case teaching, and closely combine theory with practice; in the fourth step, conduct classroom training in real time, such as drafting notice documents within a limited time (AI timer + collaborative documents), and conduct cross-examination among students; in the fifth step, guide students to reflect on content standardization, course ideological and political education, and peer evaluation, so as to find problems in time and make up for deficiencies. Through teaching practice, it is found that AI assistance effectively expands the classroom training time of writing courses, and the “five-link” linkage teaching strategy significantly improves the efficiency of writing classroom teaching, gradually improves students’ learning behavior, gradually develops the habit of active learning after class, and gradually improves written expression ability.

The five links of “checking, evaluating, learning, practicing and thinking” are linked together to form a spiral improvement model of “diagnosis-learning-training-reflection” for the course group. It not only maintains the warmth of humanities course teaching, but also injects the precision of intelligent education, providing a replicable solution to breaking the bottleneck of college students’ writing and communication skills.

3.3 Reconstructing the Classroom with the Help of AI Technology

The course group uses AI to empower the industry-university-research-education community and solve the problem of insufficient integration of modern information technology into the teaching of liberal arts courses. First, it constructs a teaching closed loop of “classic cases-AI generation-critical reconstruction” for writing courses (writing, government affairs and business writing, radio and television writing, and advertising creativity), designs an advanced ability path of “AI-assisted writing-human-computer collaborative creation-personal creative writing”, and gradually improves college students’ writing ability; second, it builds virtual reality speeches, debates and other communication platforms required for communication courses (creative thinking and speech eloquence, public relations), realizes immersive simulation of communication scenes, and continuously improves students’ interpersonal communication skills through “platform construction-scene simulation-repeated training”; third, relying on off-campus practical teaching bases, jointly develop special teaching resources for writing and communication course groups with industry enterprises, collect front-line cases of industry enterprises, establish a case library, and focus on improving students’ ability to solve practical problems of industry enterprises, forming a virtuous cycle of “technical assistance-course reconstruction-ability improvement”.

4. COURSE CLUSTER CONSTRUCTION RESULTS

After 9 years of practice, 3 courses of the “Writing and Communication” course group of Yibin University have been built as provincial first-class courses (2 courses have completed the construction of knowledge graphs), and 4 courses have been built as online courses running on Zhihuishu.com. Tens of thousands of off-campus college students from more than 30 universities have taken the courses. More than 10 media such as People’s Daily and China.com have reported the results of the course construction. The team teachers have won 2 provincial teaching achievement awards, established 12 provincial and above undergraduate teaching projects, published more than 10 papers, edited 5 textbooks (2 of which were published by Higher Education Press), and published 6 collections of student literary works; guided students to publish more than 1,200 literary works in 18 public publications such as “Masterpiece Appreciation”, “China Youth Daily”, and “Xingxing” Poetry Magazine, of which 138 works were reprinted by People’s Daily, Sohu, Toutiao, etc. The course team guided students to establish 100 college student innovation and entrepreneurship projects, including 39 national projects and 61 provincial projects, and guided students to win 23 national awards and 51 provincial awards.

4.1 Theoretical Significance

Innovation of educational concepts: Guided by the OBE concept, the course group proposed a teaching strategy of “one core, three coordinations, and five linkages”, providing a systematic and innovative theoretical framework for the teaching of liberal arts courses, and promoting the transformation of higher education from knowledge transfer to ability building. In terms of interdisciplinary integration: the deep integration of AI technology and liberal arts teaching explored innovative paths for the combination of technology and humanities, and provided a practical example for the application of artificial intelligence in the field of education. Finally, the course group combined ideological and political education with writing and communication practice, promoted the organic integration of curriculum ideological and political education in liberal arts courses, and strengthened the educational goal of cultivating morality and cultivating people.

4.2 Practical Significance

Improved student capabilities: The project significantly improved students’ writing and communication skills, cultivated their critical thinking, logical expression and cross-cultural communication skills, and enhanced their core competitiveness in career development. Improved teaching efficiency: Through AI-assisted tools and virtual simulation scenarios, the classroom teaching process was optimized, students’ learning initiative and classroom participation were improved, and a closed-loop teaching model was formed. Significant social benefits: The project results were promoted in more than 30 universities, benefiting tens of thousands of students; more than a thousand student works were published in public publications and won awards in national competitions; teachers conducted training for grassroots agencies and enterprises, which increased the society’s attention to writing and communication skills.

4.3 Promotion Value

Course construction demonstration: The provincial first-class courses, online courses and textbook publishing in the project provide a replicable course construction model for other universities. Regional influence: Through academic exchanges and media reports, the project’s teaching strategies and achievements have been widely recognized in and outside Sichuan Province, laying the foundation for the formation of a regional education alliance. Market demand fit: The project cooperates with industry enterprises to develop course resources, improves the practicality and market competitiveness of the courses, and provides new ideas for the deep integration of universities and society.

The “Writing and Communication” course group of Yibin University solves the problem of fragmentation of traditional courses through the construction of course clusters, promotes the transformation of education from “knowledge transfer” to “capacity building”, and realizes high-quality development of talent training. It builds a capacity training system with “writing and communication skills” as the core, and uses AI tools to help improve students’ narrative, official document writing, crisis communication, creative expression and other abilities in a hierarchical manner; breaks through the one-way indoctrination model of traditional liberal arts classrooms, adopts the “situation creation-task drive-curriculum ideological and political” collaborative mechanism and the “inspection-evaluation-learning-practice-thinking” five-link linkage teaching process to enhance classroom interaction and practicality; uses AI technology to reconstruct courses, build virtual simulation scenes,

collaborative writing platforms, etc., to improve teaching efficiency and student participation. Ultimately, it achieves the goals of improving the ability of teachers and students, teaching innovation, and technology integration through the construction of course groups, providing a demonstrative solution for the digital transformation of higher education and the improvement of talent training quality.

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