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An Empirical Study on the Hierarchical Reform of General Education for Private Application-oriented Undergraduate Education Oriented to Qualification Assessment—Based on the Pilot Analysis of Zhengzhou University of Economics and Business

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Abstract: The undergraduate teaching qualification evaluation lists the effectiveness of general education as the core observation index of applied talent training. This study takes Zhengzhou University of Economics and Business as a sample. Based on 492 baseline questionnaires, in-depth interviews with teachers of three colleges and benchmarking data from three similar colleges in the province, it is diagnosed that there are five-dimensional dilemmas in the general education of private application-oriented undergraduate education, such as instrumentalization of course selection motivation, mismatch of course supply and demand, one-way infusion of teaching mode, separation of general and specialized content, and single quality evaluation. Based on this, the three major curriculum modules of "humanistic literacy, scientific spirit and social responsibility" are constructed, and the "basic layer + promotion layer " double-layer graded teaching, "online + offline + practice" three-in-one mixed teaching and "student 40 % + supervision 30 % + peer 30 %" three-dimensional evaluation mechanism are matched. Through a two-month single-group pre-test and post-test points (N = 151, covering six courses in two academies), the results showed that the satisfaction rate of general education courses increased from 80.69 % to 87.75 %, the mathematical difficulty mismatch rate decreased from 28.05 % to 8.16 %, and the four core literacy scores of students' self-evaluation were higher than the average of the whole school. Limited by the fact that the sample is focused on freshmen in economics and management and engineering majors, and there is no control group design, the above-mentioned effect is regarded as a periodic pilot feedback rather than a causal conclusion. This study provides a replicable operational framework and empirical reference for the docking qualification assessment of similar colleges and universities.

Keywords: Undergraduate teaching qualification assessment; General education; Hierarchical mixed teaching; General-special integration; Multivariate evaluation; Applied talents

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1. Introduction

1.1. Research background

Higher education has entered the stage of connotation construction, and the undergraduate teaching qualification evaluation puts forward standardized requirements for the whole process of private undergraduate talent training. As the core carrier of "five-education simultaneously" and balancing professional skills and comprehensive literacy, general education's curriculum structure, classroom implementation, educational effectiveness, and quality control are all rigid observation points of the evaluation system. The national policy clearly promotes the integration of general education and specialty development, but most private colleges and universities have a long-term tendency of "emphasizing specialty and neglecting general knowledge," and there are obvious shortcomings in the cultivation of students' comprehensive thinking and humanistic innovation ability.

Zhengzhou University of Economics and Business is a private application-oriented undergraduate college. There are two provincial-level and three school-level general education demonstration courses in the general education college. General education covers humanities, mathematics, aesthetic education, psychology and other fields. However, the results of 492 questionnaires and interviews with teachers of business schools, big data and artificial intelligence schools show that there are systematic shortcomings in general education in schools: 73.78 % of students do not understand the training objectives of general education, 77.64 % of courses still adopt a one-way teaching mode, and 67.55 % of students think that general education cases are out of touch with majors. Compared with Huanghuai University, Xuchang University, and Zhengzhou University of Science and Technology, there is a significant gap in the standardization of the general education curriculum system, which needs systematic reform.

1.2. Research significance

Evaluation support level. Qualification assessment requires universities to establish a normalized curriculum diagnosis and dynamic optimization mechanism. In this study, a complete general education construction ledger and a pilot rectification ledger were formed through questionnaires, lectures, and peer review, so as to realize the quantification and traceability of the whole process of general education, which can directly supplement the internal evaluation supporting materials.

Talent training level. The utilitarian characteristics of private college students' course selection are prominent, and 63.41 % of students study general education only to complete credits. This paper adopts the hierarchical teaching and industry case embedding model, opens up the professional scenes of general knowledge and finance, network engineering, etc., takes into account the credit requirements and students' comprehensive literacy growth needs, and tries to crack the pain points of 'general and special two skins'.

Regional practice level. The three benchmarking universities in the province adopt three general education models: lightweight balance, local research, and OBE general and professional integration, but there is a lack of hierarchical hybrid schemes adapted to private colleges and universities based on economics and management and engineering. The closed-loop reform path formed in this study can provide a replicable practical model for similar colleges and universities.

1.3. Research methods

Firstly, the literature analysis method is used to distinguish the differences in general education construction between comprehensive universities and application-oriented universities, and to sort out the relevant theories

of integration of general education and professional education, hierarchical teaching, and multiple evaluation. The second is the multi-dimensional survey method, which integrates the four types of first-hand data: the baseline questionnaire of the whole school, the pilot special questionnaire, the interviews with professional teachers, and the benchmarking of colleges and universities in the province. The third is the pilot method, which selects six courses from the two academies to carry out a two-month iterative pilot and establishes a monthly feedback rectification mechanism. The fourth is the quantitative statistical method, using descriptive statistics to compare the changes in satisfaction and literacy scores before and after the reform. In this study, a single-group pre-test and post-test quasi-experimental design was used without a parallel control group. The sample size limited the generalizability of the conclusions.

2. Literature review and analytical framework

2.1. Three practical modes of applied undergraduate general education

In this study, three demonstration application-oriented undergraduate colleges in Henan Province, Huanghuai University, Xuchang University and Zhengzhou University of Science and Technology, were selected to carry out horizontal benchmarking. The information comes from the official talent training documents of the Dean's Office and the School of General Education.

Huanghuai University: lightweight equilibrium model. The school adopts a three-level structure of 'general compulsory course + general limited elective course + general optional course'. The minimum general elective course requires only 8 credits, which is the lowest requirement among the three schools. Elective courses are set up into four balanced curriculum groups: humanistic literacy I, humanistic literacy II, scientific and technological literacy I, and scientific and technological literacy II, and it is mandatory to select at least one course for each category. The mode has simple course selection rules, low credit pressure, and adapts to the learning rhythm of agriculture, culture and tourism majors, but the professional position orientation is weak.

Xuchang University: the characteristic mode of local research. The school has built a 'five-education integration general education system', with a minimum of 10 credits for elective courses. Innovative introduction of 0.5- to 2-credit short-class fragmentation general education classes, and flexible adaptation of long-term off-campus internship arrangements. Set up an independent local research practice general section, extend the classroom to the ancient city of Caowei, Jun porcelain museum and other local cultural tourism scenes, and create a national general education class ' project-based writing '. The practical attributes of the model are prominent, but the depth of integration is limited.

Zhengzhou University of Science and Technology: OBE integration mode. As a typical private application-oriented reform, the school adopts the global integration architecture of "ideological and political guidance + general integration + practical empowerment + personality development," and embeds the OBE output-oriented concept. General electives need to complete 12 credits, which is the highest in the three schools; five elective course groups are set up, and an interdisciplinary integration group is added. The course of "General Education + Introduction to Specialty" is specially set up for the majors of engineering and economic management. It is clearly required that the general elective courses should be set up for no less than 30 % of the practice class hours; each general course corresponds to graduation indicators such as professional quality and innovation ability. This mode is the most in-depth integration of general and special education, but the requirements for credits are higher, which puts pressure on students with weak learning foundations.

2.2. Research gap and the positioning of this study

The above three school models have their own advantages, but there is a common blind spot: there is no hierarchical hybrid general education program specifically for private application-oriented universities with economics and management and engineering as the main body, and the system is embedded in the qualified evaluation index system. Most of the existing research focuses on comprehensive universities or public colleges and universities and has paid insufficient attention to how to systematically promote general education reform in private colleges under resource constraints. This study is based on the school‘s economics and management, engineering-based discipline ecology, trying to fill this gap.

3. Research design and method

3.1. Research context and sample

This study takes Zhengzhou University of Economics and Business as a single-case field. In January 2026, a questionnaire on the status quo of general education was distributed to the whole school, and 492 valid samples were collected. The sample composition is as follows: 473 freshmen (96.14 %), 9 sophomores, 9 juniors, and 1 senior; there were 187 males (38.01 %) and 305 females (61.99 %). There were 272 students (55.28 %) in science, engineering, agriculture, and medicine, 148 students (30.08 %) in economics and management law, and 72 students (14.89 %) in arts and sports, literature, history, philosophy, and other specialties. More than 75 % of the students have taken four or more general courses.

Limited by the convenience of sampling, the samples of this survey are concentrated in freshmen majoring in economics and management and engineering. The samples of seniors and majors in literature, history, art, and sports are seriously insufficient, and the external validity of the research conclusions is constrained by this.

At the same time, the research team conducted semi-structured in-depth interviews with teachers and representatives from business schools, foreign language colleges, and big data and artificial intelligence colleges. Each session lasted about 90-120 minutes. Qualitative materials were collected from four dimensions: curriculum matching, teaching pain points, difficulties in integration of general and specialized courses, and needs of characteristic courses.

3.2. Research tools and variable measurement

Questionnaire tool. The self-compiled ‘General Education Curriculum Status Questionnaire’ contains four dimensions: curriculum cognition (5 questions), curriculum evaluation (8 questions), teaching evaluation (6 questions), and literacy self-evaluation (4 questions). A five-point Likert scale (1 = strongly disagree, 5 = strongly agree) was used. The questionnaire was reviewed and revised by three senior education experts, and the content validity was good. The Cronbach’s α coefficient was 0.87, and the reliability was acceptable.

Self-assessment dimension of literacy. According to the general goal framework of general education, four indicators of knowledge vision expansion, humanistic aesthetic literacy, logical thinking ability, and innovative practical ability are set up, and students score five levels based on their own feelings. It should be noted that the measurement is a subjective self-assessment, non-standardized ability test, and the results reflect the students’ subjective sense of acquisition rather than the objective ability level.

Pilot post-test tool. On the basis of the baseline questionnaire, the questionnaire on the satisfaction and optimization needs of the pilot operation of general education courses was added, including course

satisfaction (overall and sub-items), teaching mode evaluation, difficulty adaptation evaluation, three-dimensional evaluation recognition, and other items, also using the five-level scale.

3.3. Pilot implementation and data collection

Pilot range. From May to June 2026, the freshman classes of Zhizhi Academy (network engineering major) and Zhixing Academy (financial engineering major) were selected, involving 'Calculus II' linear algebra 'university sports II' music appreciation and chorus II 'college students' mental health education II', a total of 6 courses, covering three modules. A single-group pre-test and post-test design was adopted. The pre-test used the corresponding professional sub-samples in 492 baseline data, and the post-test was a special questionnaire distributed to 151 students in the pilot class after the end of the pilot.

Pilot early transformation. Joint general education and professional teachers to jointly write layered courseware and industry case base; enlarge psychological and aesthetic education practice class hours; build a hierarchical online resource library; carry out mixed teaching, three-dimensional evaluation, interdisciplinary teaching and research special teacher workshops.

Monthly dynamic iteration closed loop. Each class is equipped with 2 student information clerks to collect opinions every week. The key points of the first round of adjustment in May are as follows: splitting the exercise gradient of the promotion layer, fixing online live Q & A twice a week, increasing the proportion of practical class hours, and improving the weight of process assessment. The focus of the second round of adjustment in June is to update the case base of general-specialty integration (joint professional teachers revise the calculation examples that fit the business scene), standardize the task list of group discussion and display evaluation criteria, and incorporate online learning participation into the rigid assessment.

4. Diagnostic results: The five-dimensional dilemma before the reform

4.1. Cognitive level: Course selection motivation instrumentalization

The questionnaire of the whole school shows that only 26.22 % of the students can clearly know the general education curriculum system and training objectives, and 73.78 % of the students only know the rules of course selection or only know that they need to complete the general education credits. 63.41 % of the students'primary motivation for general education is to complete the graduation hard credits, 15.65 % of them give priority to courses with low difficulty and easy to get points, and 9.35 % of them have the behavior of selecting courses from the crowd.

Interviews with faculty further confirm this question. Business school teacher representatives pointed out: ' Students generally regard general education as a 'credit task', and only when the course can directly serve the examination and internship will they actively invest. The teachers of the Foreign Languages Institute reflect that the general knowledge of science and engineering is obscure, weakly related to the language major, with low classroom participation, more skipping classes, and perfunctory homework. The teachers of the College of Big Data and Artificial Intelligence said: ' Students have great pressure on professional courses, limited time to invest in general education courses, and there is resistance. '

4.2. Curriculum level: Supply mismatch and lack of stratification

The imbalance of supply and demand structure. 32.52 % of the students reflected that the types of courses were limited and the space for personalized selection was limited, which was the most prominent problem

in the questionnaire. The top three students' needs are mental health and career planning (49.80 %), cutting-edge artificial intelligence and digital technology (47.15 %), and art and aesthetic education practice (45.53 %). However, the opening quota of such courses is scarce, and 16.87 % of students often encounter insufficient elective quota. In contrast, natural science and ideological and political comprehensive courses are less attractive.

The content difficulty is one-size-fits-all. 28.05 % of the students think that the course content is simple, lacks depth, or the difficulty is too great, and 21.75 % of the feedback content is old and out of step with the times. Interviews with departments show that mathematical general education is too simple for science and engineering students and too difficult for humanities majors. Most of the course cases are general templates, lacking industry scenarios that are suitable for foreign languages, business, and artificial intelligence majors. 16.46 % of the students think that general education is out of touch with professional learning and is not practical.

Layering mechanism blank. For the fragmented hierarchical design of Xuchang University and the OBE-graded course of Zhengzhou University of Science and Technology, the difficulty of general education courses and the teaching content of the whole school are unified standards, and the basic layer and the promotion layer are not distinguished, and the differentiated modules are not set for engineering, economic management and humanities.

4.3. Teaching level: One-way infusion and lack of practice

77.64 % of the general education courses are still based on traditional offline theoretical teaching. Group discussion (55.69 %), case simulation (51.63 %), practical training (30.49 %) and flipped classroom (28.86 %) account for less than 60 %. 13.61 % of the students reflected that the classroom was dominated by teacher indoctrination and interaction was scarce. The scale of a single class is generally more than 120 people, and it is impossible to carry out stratified discussion and personalized guidance.

The interviews of each department are highly consistent in reflecting the limitations of the teaching mode. The College of Foreign Languages emphasizes 'the lack of interactive links such as group debate and bilingual study'; the business school pointed out 'lack of business case study and table practice'; and the College of Big Data reflects that 'AI and mathematical general knowledge lack computer training hours'. In terms of online resources, foreign language classes lack foreign language adaptation materials, science and engineering AI classes lack cutting-edge practical cases, and online autonomous learning is a mere formality.

4.4. Evaluation level: Single assessment and weak quality assurance

11.79 % of the courses were only evaluated by final examination papers or final papers, and the weight of process assessment was low. Only a simple student evaluation of teaching was carried out at the end of the period, and monthly supervision and peer evaluation were not covered. The school's unified assessment standards do not distinguish between the basic level, the promotion level, and students of different majors.

In the interview, business school teachers pointed out that it is difficult to exercise business analysis and teamwork ability because of the heavy final scores, low weight of homework and classroom display. The teachers of the Institute of Foreign Languages reflect that 'the process evaluation accounts for only 40 %, and the assessment form is single'; the teachers of the big data college think that there is a lack of process assessment such as project practice and scientific paper writing.

4.5. Resource level: Hardware and long-term mechanism short board

In terms of teachers, compound teachers with humanities, science and technology, and industry practice backgrounds are scarce. Most of the general education teachers are full-time teachers of basic courses and lack business, artificial intelligence, foreign language, and other industry knowledge, and their case explanations are out of the professional scene. The cross-department collaborative lesson preparation mechanism has not yet been established.

In terms of hardware, the supply of aesthetic education classrooms, psychological group counseling rooms, and sports training equipment is insufficient; online course resources are updated slowly, and there is no full-time teaching assistant maintenance platform.

In terms of research mechanisms, the research samples over the years are highly concentrated in freshmen's economics and management, engineering, literature, history and philosophy, art and sports, and senior students' long-term lack of opinions; the follow-up research mechanism of normalized general education courses per semester has not been established.

5. Reform scheme design

5.1. Top-level design logic: Embedding qualified evaluation indicators

The observation points directly related to general education in the evaluation of the qualification of the reform plan have formed the following corresponding relationship.

Table 1. The qualification evaluation index system

Qualification Evaluation Observation Points	Identified Weaknesses	Reform Measures
Observation Point 4.1 Curriculum System	Lack of hierarchical design; separation between general education and specialized education	Construct a curriculum system of three modules with two-level classification
Observation Point 4.2 Teaching Methods	Lecture-based teaching accounts for 77.64%; teaching forms are monotonous	Implement the three-in-one blended teaching model
Observation Point 5.2 Quality Assurance	Single evaluation method, only end-of-semester teaching evaluation	Establish a three-dimensional evaluation plus an AI dynamic monitoring mechanism
Observation Point 6.3 Education Outcomes	Student satisfaction rate: 80.69%	Carry out reform pilot, with a target satisfaction rate ≥85%

5.2. Three curriculum modules and double classification

Three-module course list. The humanistic literacy module set includes "literary writing" Chinese traditional culture "music appreciation" "art appreciation" and other courses; the scientific spirit module includes "calculus" (stratification), "linear algebra" (stratification), "artificial intelligence general knowledge "big data foundation" and other courses; the social responsibility module sets up courses such as "college students' mental health education," "career planning," "rule of law," and "college sports. Each module is open to the whole school, but professional teachers provide course selection guidance to assist students in reasonably matching modules according to the training objectives of this major.

Layered operation rules. Taking 'Calculus II' as an example: the basic layer focuses on core concept understanding and basic calculation training of limits, derivatives, and integrals, supporting an online basic micro-course and a hierarchical question bank; on the basis of the above content, the lifting layer adds financial risk calculation model (economic management case), network traffic analysis algorithm (engineering

case), and docking mathematical modeling competition training. Other mathematics, writing, and aesthetic education courses are analogized according to this standard.

5.3. Mixed teaching process and three-dimensional evaluation rules

Standardized teaching process. Each general education course is operated according to the structure of '2 hours/week online + 2 hours/week offline + 1 practice/month'. Online includes micro-course learning, pre-test, discussion, and interaction; offline includes theoretical lectures (no more than 50 % of the total class hours), group discussions, and case simulations; practice includes small projects, social research, performance competitions, and so on.

Three-dimensional evaluation weights and tools. Student evaluation (40 %): Collect classroom feedback through questionnaire stars every month, including three dimensions: teaching attitude, content relevance and interactive experience; supervision and evaluation (30 %): full coverage of lectures once a month, using the 'general curriculum evaluation criteria' to score; peer evaluation (30 %): The same course or the same category of teachers evaluate each other twice per semester. The general education curriculum evaluation standard includes 7 first-level indicators and 16 second-level indicators, with a total score of 100 points. The grades are divided into excellent (≥ 90), good (80-89), qualified (60-79), and unqualified (< 60).

5.4. Pilot implementation and monthly iteration

From May to June 2026, six courses of Zhizhi Academy (Network Engineering) and Zhixing Academy (Financial Engineering) were put into pilot operation.

First round of adjustment (end of May). Exposed problems: the difficulty of the exercises in the promotion layer is too large, the online answering is lagging behind, and the practical class hours are insufficient. Rectification measures: split the task gradient of the promotion layer, fix live Q & A twice a week, and increase group counseling and performance time.

Second round of adjustment (mid-June). Exposed problems: the lack of fit of some general and special cases, the low efficiency of group discussion, and the low degree of online independent participation. Rectification measures: joint professional teachers to revise the case base, unified design seminar task list and display evaluation criteria, and incorporate online learning into process assessment.

6. Analysis of pilot effectiveness

6.1. Descriptive statistical results

After the end of the pilot, a special questionnaire was distributed to 151 students in the pilot class, and 151 valid questionnaires were collected (effective rate 100 %). The main results are as follows:

Overall satisfaction increased significantly. The comprehensive satisfaction of the pilot courses ('very satisfied' and 'relatively satisfied' total) was 87.75 %, which was 7.06 percentage points higher than the baseline data of the whole school (80.69 %). Layered teaching and practical classroom have gained the highest recognition.

The core pain points were greatly relieved. 100 % of the pilot courses achieved mixed teaching, and 82.12 % of the students thought that the classroom was more interesting. The proportion of unreasonable difficulty of mathematics and physics courses decreased from 28.05 % to 8.16 %. 86.09 % of the students recognized the supply of psychological and aesthetic education practice courses; 83.44 % of the students

thought that the three-dimensional evaluation standard was clear and the feedback was timely.

The self-assessment of literacy is better than the benchmark of the whole school. The four literacy scores of students' self-evaluation in the pilot class were: 4.32 points for knowledge vision, 4.27 points for humanistic aesthetics, 4.21 points for logical thinking, and 4.18 points for innovation and collaboration (out of 5 points). The four mean values were higher than the baseline data of the corresponding professional students in the whole school.

7. Conclusions, research limitations

7.1. Core research conclusions

First, the original general education in our school has a systematic short board of five dimensions: cognitive utilitarianism, supply imbalance, teaching solidification, separation of general and special education, and single evaluation, which restricts the qualified evaluation standards and the cultivation of comprehensive quality of applied talents.

Secondly, after two months of pilot quantitative verification, the three core indicators of satisfaction, difficulty adaptation, and literacy self-evaluation improved positively, and there is a positive correlation between the reform plan and the improvement of students' curriculum experience.

Third, compared with the three demonstration colleges in the province, the hierarchical hybrid model constructed in this study is more suitable for the discipline ecology and resource conditions of private application-oriented undergraduate colleges with economic management and engineering as the main body, and has regional promotion value.

7.2. Research limitations and future directions

This study has the following limitations. First, sample limitations: diagnostic research and pilot samples are concentrated in freshmen majoring in economics and management and engineering. The samples of literature, history and philosophy, art and sports, and senior students are seriously insufficient, and the external validity of the conclusions is limited. Second, design limitations: using a single set of pre-test and post-test designs, without setting up a control group, it is impossible to establish a strict causal relationship, and satisfaction improvement should be interpreted as 'correlation rather than 'causality'. Third, measurement limitations: literacy adopts a student self-rating scale and a non-standardized ability test, reflecting a subjective sense of acquisition rather than objective ability level. Fourth, resource limitations: online teaching assistant positions, practice site expansion and other safeguard measures rely on school establishment and funding input, and the promotion progress is restricted by objective conditions.

Future research directions. One is to continue to expand the multi-disciplinary and multi-year pilot samples, and gradually introduce the control group design ; second, the introduction of standardized general literacy assessment tools (such as the critical thinking disposition scale, cross-cultural competence scale); the third is to establish the OBE corresponding matrix of general literacy and graduation requirements, and track the long-term data of 3-5 years of education; the fourth is to introduce industry and enterprise tutors to participate in the practice of general education classrooms and deepen the construction of general education based on the integration of industry and education.

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The authors declare no conflict of interest.

References

[1] Wang S, Wang B, 2026, Exploration and Practice of "Combination of General and Special Education" Education Model in Applied Undergraduate Colleges. Journal of Lanzhou Institute of Technology, 33(02): 148–153.

[2] Feng L, Feng W, Dang L, 2026, Exploration on the Qualified Evaluation of Undergraduate Teaching in Newly-built Universities. Leading Science Forum, (01): 126–129.

[3] Song Y, Wang J, Tang Z, et al., 2026, Exploration and Practice of the Construction of Core Curriculum Group of Clothing Specialty from the Perspective of Industry-Education Integration – Taking Zhengzhou University of Economics and Business as an Example. Textile and Garment Education, 41(01): 44–49.

[4] Ke S, Wang K, 2026, To Build a New Pattern of High-Quality Education in Basic Education in the Capital with the Construction of Through-Courses. Beijing Education (General Education Edition), (03): 9–11.

[5] Lin S, Liu T, 2026, Influencing Factors and Configuration Path of Undergraduate Education 'Integration of General Education and Professional Education' – QCA Analysis Based on 129 'Double First-Class' University Cases. Education and Examination, (01): 70–76.

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