Reform of "Course of Vocational and Technical Education Measurement and Evaluation" Guided by Cultivating the Teaching Ability of Secondary Vocational School Teachers

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Abstract: There are the main problems of insufficient connection between teaching content and teaching objectives in the teaching process of "Course Vocational and Technical Education Measurement and Evaluation". Guided by the cultivation of secondary vocational school teachers' teaching ability, the four course elements of "Secondary vocational school students' academic learning measurement", "Secondary vocational school students' academic development measurement", "Secondary vocational school students' academic learning evaluation" and "Secondary vocational school students' academic development evaluation" are extracted through deconstruction. Integrates theory, practice and ability cultivation, it forms a teaching content system consisting of four teaching projects: "Vocational and technical education test", "Vocational and technical education measurement tools and quantitative methods", "Vocational and technical education performance evaluation" and "Vocational and technical education formative evaluation". Following the teaching method of "one core, two drivers, seven steps", strive to achieve a seamless connection with the training of secondary vocational school teachers.

Keywords: Course of Vocational and Technical Education Measurement and Evaluation; Secondary Vocational School Teachers; Teaching Ability; Course Reform

1. Introduction

The Guiding Opinions of the Ministry of Education on the Development and Implementation of Professional Talent Training Plans for Vocational Colleges (Department of Vocational and Adult Education, Ministry of Education, [2019]13) propose that the course of professional (skills) courses should be adapted to the training objectives, and the course content should be closely related to the actual production and social practice, highlighting applicability and practicality, and focusing on the cultivation of students' vocational abilities and professional spirit. According to document ([2015]07) issued by Teaching Guidance Committee for Higher Education Institutions of the Ministry of Education, "Course of Vocational and Technical Education Measurement and Evaluation" is offered as a compulsory course for professional master's degrees (including full-time and part-time) in the field of vocational and technical education. The course systematically elaborates on the main theories and methods of vocational and technical education measurement and evaluation, cultivates students to establish scientific and advanced concepts of vocational and technical education measurement and evaluation, improves their ability to measure and evaluate vocational and technical education, develops their scientific research ability and critical thinking, and enables them to apply the principles learned to solve problems in vocational and technical education measurement and evaluation. Through research on multiple universities such as Beijing Union University, Hebei Normal University of Science and Technology, and Guangdong Normal University of Technology, it is found that the "Course of Vocational and Technical Education Measurement and Evaluation" has certain shortcomings in cultivating vocational education master's degree as a teaching ability for vocational school teachers, and there is a certain gap between it and the "granular" course construction concept of "teaching

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ability demand analysis → teaching ability decomposition → course knowledge elements → course knowledge points".

2. Current Research Status at Home and Abroad

In the late 1950s, Vocational and technical education developed rapidly, forming a huge discipline system, mainly including Vocational and technical education, Vocational and technical education measurement, Vocational and technical education evaluation, Vocational and technical education management, Vocational and technical education sociology, etc. In terms of course design and discipline construction, "Course of Vocational and Technical Education Measurement and Evaluation" can be seen as a comprehensive vocational and technical education course that integrates vocational and technical education measurement and evaluation, as well as a discipline group that is compatible with vocational and technical education statistics, measurement, rating, evaluation, and vocational and technical psychological measurement.

2.1 Current Research Status Abroad

In the research of educational measurement, from the early 20th century to the 1930s, psychological testing and intelligence research had gradually emerged abroad. The main research results include the world's first standardized intelligence test, the famous 11 year old children's examination system and the standardized tests in the United States. In the research of educational evaluation, in the 1930s and 1940s, in addition to traditional educational tests, measurement and non measurement methods such as questionnaires, observations, conversations, anecdotal records, work analysis, performances, operations and writing were also used to evaluate the effectiveness of courses and changes in student behavior. This is the famous "Eight Year Study" in the history of American education [1]. Reforms and practical activities for vocational education measurement and evaluation have been carried out early abroad, represented by the United States, the United Kingdom, Germany, and Japan [2]. The US government fully plays its role in guiding and supervising, with active participation from various parties such as enterprises, industry organizations, and associations, forming a diverse and fair external evaluation mechanism. Its main characteristics are solid legal basis, clear inspection direction, diverse subjects and rigorous indicators. The UK has established a vocational education measurement and evaluation mechanism that combines internal and external measurement and evaluation. Internally, it is independently implemented by schools, while externally, it focuses on checking the operational efficiency of the school's internal quality assurance mechanism. The main characteristics are uniformity of standards, independence of institutions and transparency of processes. Germany guarantees high-level vocational education and teaching quality through professional third-party evaluations, characterized by comprehensive standards, scientific methods and professional reporting. Japan has formed three forms of vocational and technical education measurement and evaluation: accreditation, internal evaluation, and external evaluation. The main characteristics are rigorous standards, strong operability, detailed and clear processes, and a market-oriented diversified measurement and evaluation system.

2.2 Current Research Status at Home

Searching for keywords such as "Course of Vocational and Technical Education Measurement ", "Course of Vocational and Technical Education Evaluation" or "Course of Vocational Education Measurement" and "Course of Vocational Education Evaluation" through CNKI, there are very few relevant literature. Domestic research mainly focuses on the construction of vocational education evaluation index system, comparison of evaluation systems, third-party evaluation and other aspects. There is relatively little research on vocational education measurement courses, and the focus is on the application research of vocational education measurement tools and methods.

At present, there are many studies on course reform and construction guided by the cultivation of teaching ability. Peng et al. (2012) took hotel English courses as an example and pointed out that Vocational English Teaching should introduce Industry English according to the development needs of students' majors, use industry work scenarios

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as carriers and job tasks as drivers, implement project-based teaching, and complete English language skills related to actual employment positions (groups) [3]. Xia (2013) proposed to pay attention to the effective integration of professional courses and information technology education courses, and to improve the teaching ability of undergraduate students majoring in educational technology by strengthening vocational skills training [4]. Song et al. (2018) proposed a systematic strategy for the reform of business courses in vocational colleges under the comprehensive vocational competence standard, which mainly includes, course content should be based on job vocational competence standards, by transforming typical work tasks into learning domain tasks, and strengthening the cultivation of practical comprehensive skills. Building a diversified evaluation system that involves multiple stakeholders both inside and outside the school, including teacher evaluation, student self-evaluation and peer evaluation, which combines process evaluation with outcome evaluation, and individual evaluation with comprehensive evaluation [5]. Liang (2018) studied the content of music teaching method course reform aimed at enhancing the teaching ability of vocational music teachers from three aspects: reasonably arranging teaching content based on employment needs, creating diversified teaching modes, and changing classroom evaluation methods [6]. Ning et al. (2019) analyzed the relevant courses that need to be offered from three levels: knowledge factors (ability to learn, impart and apply knowledge), humanistic factors (cultural factors and psychological qualities) and scientific research factors, and pointed out that these courses are powerful support for improving the teaching ability of Chinese international education teachers [7]. On the basis of fully considering students' basic abilities, professional abilities, sustainable development abilities and comprehensive qualities, Yu (2019) constructed a vocational humanities course system guided by core vocational abilities [8]. Zhu (2020) pointed out the main problems that need to be improved in the teaching ability of primary school physical education teachers in China, and proposed to focus on the innovation of physical education textbooks and lesson plans, teaching modes and methods, and evaluation systems in the context of the new course reform [9]. Wang (2021) analyzed the difficulties faced by vocational college English teachers and the situation of English education based on the Implementation Plan for National Vocational Education Reform. She proposed effective ways to improve the teaching ability of vocational college English teachers from the aspects of changing traditional teaching modes, on-the-job training, adopting a close combination of professional and industry teaching methods, and achieving practical teaching that effectively combines English language training and vocational skills training [10]. Geng (2021) proposed multiple development paths for the teaching ability of vocational college teachers, including conducting school-based characteristic teaching training, improving the long-term mechanism for developing teaching ability, formulating fair and just teacher teaching ability evaluation standards, and strengthening school enterprise cooperation [11]. Chen (2023) conducted research and analysis on the improvement of coaching ability of amateur track and field coaches in middle schools, and suggested that college track and field courses should increase on campus simulation training and off campus practice [12]. Duan (2024) analyzed the influencing factors of vocational English teachers' teaching ability from the perspective of course ideology and politics, starting from professional ethics, teaching design, teaching methods, etc. He pointed out that improving teaching design and enriching teaching methods are the core of enhancing teaching ability [13]. Cai conducted statistical analysis by constructing a scale and pointed out that the exploration of educational elements, teaching design management, scientific research innovation, and teacher-student communication are key factors affecting the ideological and political teaching ability of English teachers in the course [14].

2.3 Literature Review

Relative research mainly focuses on the basic theories, evaluation models, and practical research of measurement and evaluation abroad, while at home relative research focuses on the three aspects of application of vocational education measurement tools and methods, the construction of vocational education evaluation index systems, and

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course reform based on teaching ability cultivation. In the paper, starting from the cultivation of the teaching ability of vocational school teachers (focusing on the academic measurement and evaluation ability of vocational school students), "Course of Vocational and Technical Education Measurement and Evaluation" is reformed to enhance the measurement and evaluation ability of vocational education master's degree teachers as vocational school teachers for students' academic learning and development in the future.

3. The Technical Route for the Reform of the "Course of Vocational and Technical Education Measurement and Evaluation"

Teaching ability refers to the ability of teachers to effectively carry out teaching activities through scientific and reasonable teaching methods under the guidance of correct educational concepts and ideas. Teacher's teaching ability is a comprehensive concept that involves multiple aspects, such as understanding educational concepts, effective implementation of teaching activities, innovation of teaching methods and in-depth teaching research. It mainly includes four parts: teaching cognitive ability, teaching implementation ability, classroom teaching ability and teaching research ability. The improvement of these abilities requires teachers to continuously self learn and practice to meet the needs of educational development. The reform of the “Course of Vocational and Technical Education Measurement and Evaluation”, which focuses on cultivating the teaching ability of vocational school teachers, is closely related to the vocational education teaching principle of "Employment-oriented and Ability-based". Based on the educational concept of Outcome-Based Education, starting from the analysis of the demand for vocational school teachers' teaching ability→deconstruction of vocational school teachers' teaching ability→reform of the teaching objectives of the course→reform of the teaching ideas of the course→reform of the teaching system of the course→reform of the teaching content of the course→reform of the teaching methods of the course→operation practice and talent output of vocational school teachers' teaching ability cultivation, a technical route is constructed for the reform of the course, which is guided by the cultivation of vocational school teachers' teaching abilities and operates in a circular manner. As shown in Figure 1, a cultivation mechanism integrating basic theory, scenario simulation and practical teaching is formed, to enhance the teaching ability of vocational school teachers in measuring and evaluating students' academic performance in a targeted manner, and to achieve vocational adaptability and job matching for the output of vocational education master's degree talents.

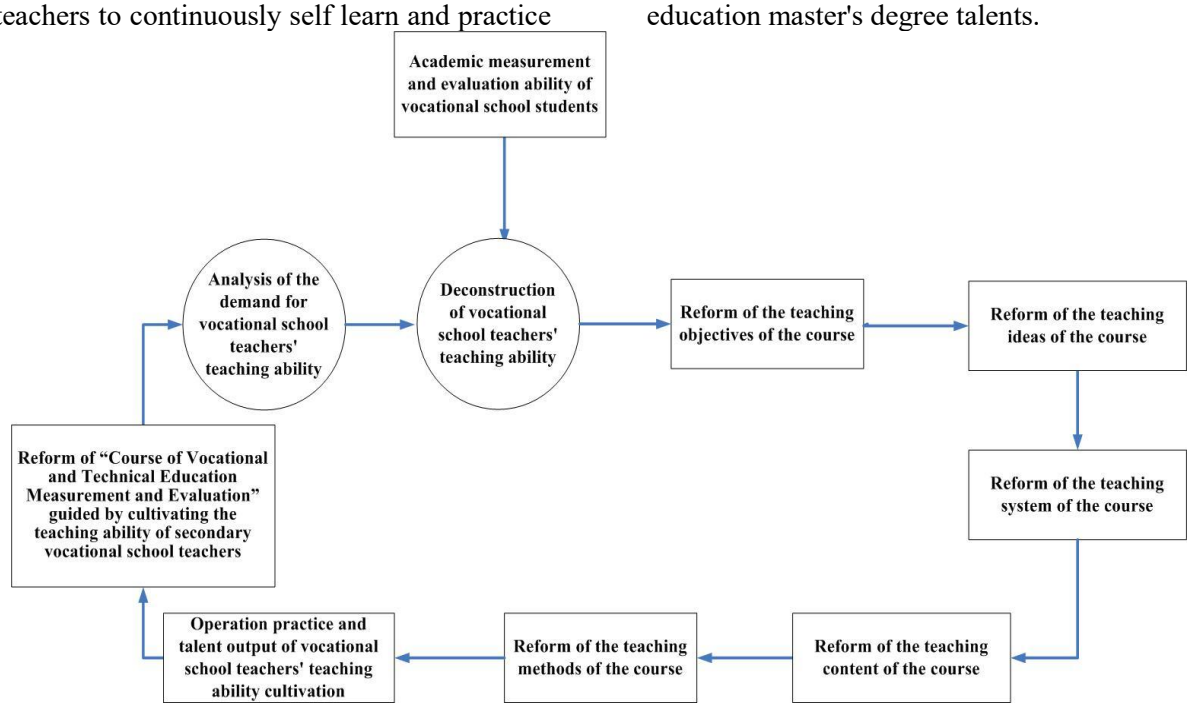

Figure 1. Technical Route of Course Reform

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4. The Objectives and Ideas of the Reform of the "Course of Vocational and Technical Education Measurement and Evaluation"

4.1 Reform Objectives

4.1.1. Overall objective

Develop the "Course of Vocational and Technical Education Measurement and Evaluation" into a distinctive course that meets the needs of vocational and technical education course reform and vocational teacher training, and effectively improves the teaching ability of vocational teachers (with the core being students' academic measurement and evaluation ability).

4.1.2. Specific objectives

(1) Knowledge objectives: Familiarize oneself with the types, functions and quality characteristics of vocational and technical education measurement and evaluation, master the principles and methods of compiling vocational and technical education tests, the methods and steps of developing vocational and technical education evaluation forms, and the methods of establishing "standards" for vocational and technical education tests. (2) Ability objectives: Establish advanced concepts for vocational and technical education measurement and evaluation, improve the ability to measure and evaluate vocational and technical education, and solve practical problems in measuring and evaluating students' academic performance in the process of vocational education teaching. (3) Quality objectives (including ideological and political education objectives): Possess good humanistic and social science literacy, healthy mentality and physique, and correct values, understand the social responsibility and professional ethics that vocational and technical education should undertake in cultivating vocational school teachers.

4.2 Reform Ideas

Starting from the analysis of the professional characteristics and teaching abilities of secondary vocational school teachers, in the paper, deconstructing the core teaching abilities required for vocational school teachers, decomposing them into "Student academic measurement abilities" and "Student academic evaluation abilities", and extracting the course elements of "Secondary vocational school students' academic learning measurement", "Secondary vocational school students' academic development measurement", "Secondary vocational school students' academic learning evaluation" and "Secondary vocational school students' academic development evaluation", and finally reconstructing the teaching content of the course, which covers four items: "Vocational and Technical Education Test", "Vocational and Technical Education Measurement Tools and Quantitative Methods", "Vocational and Technical Education Performance Evaluation", and "Vocational and Technical Education Formative Evaluation", as shown in Figure 2.

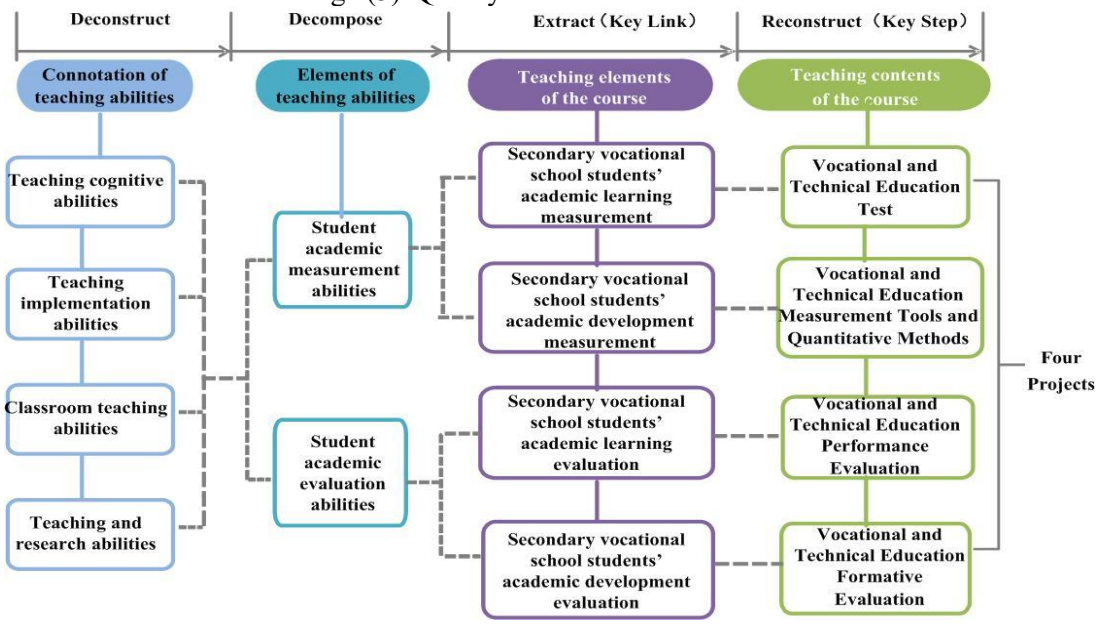

Figure 2. Ideas of Course Reform

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(1) Extracting the elements of the "Course of Vocational and Technical Education Measurement and Evaluation" is a key step. By decomposing the core teaching abilities of secondary vocational school teachers into teaching cognitive ability, teaching implementation ability, classroom teaching ability and teaching research ability, the four major abilities are specifically reflected in the course as students' academic measurement ability and academic evaluation ability. Then, teaching elements corresponding to the abilities are extracted, namely: Students' academic measurement ability corresponds to secondary vocational school students' academic learning measurement and academic development measurement. Students' academic evaluation ability corresponds to the evaluation of secondary vocational school students' academic learning and development.

(2) Refactoring the teaching content of the "Course of Vocational and Technical Education Measurement and Evaluation" is a key step, which is the foundation and prerequisite for the reform of the teaching system and teaching methods. By decomposing the cultivation of teaching ability and extracting key course elements from the course", the teaching content is reconstructed into four major teaching projects: Vocational and technical education tests, Vocational and technical education measurement tools and quantitative methods, Vocational and technical education performance evaluation, and Vocational and technical education formative evaluation.

5. Reform of Teaching Systems and Contents for the “Course of Vocational and Technical Education Measurement and Evaluation”

5.1 Teaching Systems Reform

Based on the course reform ideas mentioned above, with the goal of cultivating the teaching ability of secondary vocational school teachers, aim to create a teaching system for the "Course of Vocational and Technical Education Measurement and Evaluation" that includes multiple application scenarios, two levels and four projects.

The content of the course is broken down into multiple application scenarios based on knowledge points, including determining test objectives, analyzing reliability and validity, designing test standards, developing evaluation forms, evaluating student classroom performance, and evaluating student academic development. These scenarios are classified as student academic measurement scenarios and student academic evaluation scenarios, and are refined into two levels of vocational and technical education measurement and evaluation capabilities through ability extraction. The measurement ability of vocational and technical education is cultivated through two teaching projects: Vocational and technical education tests, Vocational and technical education measurement tools and quantitative methods. The evaluation ability of vocational and technical education is cultivated through two teaching projects: Vocational and technical education performance evaluation, Vocational and technical education formative evaluation.

The main application scenarios for student academic measurement include three scenarios: setting test standards, developing tests and analyzing the quality characteristics of tests. (1) Application scenario 1 - Establish testing standards. Firstly, based on the characteristics of secondary vocational school students and course needs, establish testing standards for standard reference tests. Secondly, based on the testing objectives and content characteristics of secondary vocational education, a model such as the Hambleton model, the American IOE model, and the British GCSE model is selected as the basis, and a qualitative standard for standard reference tests is established - the domain specification of test content. Finally, referring to the experience judgment method based on question classification, the experience evaluation method based on the double baseline index of questions, and the hierarchical evaluation method based on the "goal difficulty" of questions, a quantitative standard for standard reference tests - the passing score line - is established. (2) Application scenario 2 - Developing tests. Firstly, based on a thorough analysis of the course objectives (teaching or learning objectives), determine the testing objectives. Secondly, the key points of the test should be set, such as the attributes, nature and objects of the test. Thirdly, the design of the test blueprint includes the following main steps:

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determining the content and objectives of the test, determining the target level that the course should test, determining the weights of each test content and objective, and forming a two-way list of test questions; Finally, through the process of selecting test materials, writing test questions, testing and question analysis, generating test papers, and writing test manuals, a qualified test paper is completed. (3) Application scenario 3 - Quality characteristic analysis of tests. The reliability and validity of the test mainly focus on the entire test, while the difficulty and discrimination of the test mainly depend on the test items. Firstly, based on the educational characteristics and teaching regulations of secondary vocational schools, ensure that the test content meets the needs of secondary vocational school students. Secondly, ensure the credibility and effectiveness of the test paper (process), such as using percentage consistency indicators or k-consistency coefficient analysis standards to refer to the reliability of the test and fairly measure the academic performance of each student. Finally, implement the difficulty and discrimination of some test items in the test paper (process), such as calculating discrimination through correlation methods or high low grouping methods, to ensure the selection of outstanding students.

The main application scenarios for student academic evaluation include three scenarios: developing educational evaluation forms, classroom performance and evaluating student academic and intellectual development. (1) Application scenario 1 - Developing an educational evaluation form. Firstly, determine the basic principles for compiling the education evaluation form, such as the principles of educational regularity and guidance, scientificity and operability, etc. Secondly, the main steps in preparing an education evaluation form include: determining the objects and objectives of education evaluation, selecting evaluation indexes, screening evaluation indexes through empirical or survey methods, determining the weights of evaluation indexes (commonly used methods include key feature survey method, pairwise comparison method, expert method, etc.), designing education evaluation standards, and preparing an education evaluation form. The evaluation form for secondary vocational school students' education is the basic scale for measuring and evaluating the quality of vocational education. (2) Application scenario 2 - Classroom performance. Firstly, simulate student classroom performance evaluation and diversity testing through scenarios, such as classroom quizzes, achievement presentations, group discussions, and free speech to stimulate students' desire to perform in class and enhance their sense of participation. Secondly, evaluating the classroom learning process of secondary vocational school students through various classroom performance aspects, such as classroom speeches, discussions and defenses, which is an important part of teaching performance evaluation. (3) Application scenario 3 - Evaluation of students' academic and intellectual development. Firstly, clarify the main objectives of evaluating the academic, intellectual, personality, psychological and moral development of secondary vocational school students. Secondly, determine the main contents of the development evaluation of secondary vocational school students' academic performance, intelligence, personality psychology and moral character. Finally, selecting appropriate methods (such as educational goal reference method, educational norm reference method, Wechsler Intelligence Scale, Raven's Standard Reasoning Test, etc.) to evaluate the development of secondary vocational school students' academic performance, intelligence, personality psychology and moral character, which is an important part of formative evaluation in teaching.

Through teaching in multiple application scenarios, truly enter the frontline teaching classrooms of secondary vocational school, understand and master the theoretical and knowledge points as well as practical skills required by secondary vocational school teachers in student measurement and evaluation courses, and enhance the teaching ability of vocational education master's degree holders as secondary vocational teachers in the future.

5.2 Teaching Contents Reform

5.2.1. Principles for reforming course content

(1) Project based course content

According to the actual needs of cultivating the teaching ability of secondary vocational school teachers and the practical application of course

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teaching, the teaching content plan of "Course of Vocational and Technical Education Measurement and Evaluation" is divided into four teaching projects, focusing on the measurement and evaluation of the students' academic learning ability and development ability, and carrying out theoretical learning and practical operation of the project.

(2) Task based teaching projects

Based on the law of cognition → practice, the teaching project is decomposed into specific teaching tasks, from classroom scenarios to practical scenarios (secondary vocational education teaching), to stimulate the enthusiasm and initiative of vocational education master's degree learning, and highlight the cultivation of secondary vocational education teachers' teaching abilities.

(3) Integrated ability development

Following the principle of "project-based course content and task-based teaching projects", secondary vocational school teachers are introduced into the teaching classroom or guided to enter secondary vocational schools for vocational education master, achieving the integration of vocational education master's degree programs in measuring and evaluating the academic abilities of the students, and enhancing the teaching ability of vocational education master's degree programs for future secondary vocational school teachers.

5.2.2. Reform of course content

Based on the above principles, classify and summarize the knowledge elements and points of “Course of Vocational and Technical Education Measurement and Evaluation”, design four teaching projects, and refine and decompose the projects into specific teaching tasks.

(1) Project 1 - Vocational and Technical Education Test. The project can be divided into two main task modules: Task I mainly covers tasks modules, such as determining test objectives, determining test content objectives and forming a bidirectional detailed list of propositions. Among them, the bidirectional detailed list of propositions is based on the goal hierarchy of the “Course of Vocational and Technical Education Measurement and Evaluation” (such as understanding, comprehension, mastery, flexible application, etc.), and determines the weight formation of each test content objective. Task II mainly covers task modules, such as selecting test materials, writing test questions, synthesizing tests and writing test manuals. When writing test questions (propositions), attention should be paid to the quantity and difficulty of the questions, as well as the diversity of question types. The test manual (test instructions) should include information on the purpose, implementation methods, standard answers, reliability and validity of the test. The vocational and technical education test project is a key content of the course, which aims to cultivate vocational education master's degree holders as secondary vocational school teachers to scientifically master the methods, processes and procedures of various test preparation, and proficiently use various tests to assess students' learning situation.

(2) Project 2 - Vocational and Technical Education Measurement Tools and Quantitative Methods. The project can be divided into three main task modules: Task I uses tools, such as SPSS and Stata to analyze the reliability and validity of vocational and technical education measurement. The reliability is usually represented by the Cronbach's alpha coefficient a, and the validity is measured by KMO sampling appropriateness test and Bartlett's sphericity test. Task II uses quantitative methods, such as correlation method and high-low grouping method to calculate the difficulty and discrimination of vocational and technical education measurement items (projects). The difficulty is generally represented by the difficulty value P (difficulty coefficient), and the discrimination can be calculated using correlation method, high-low grouping method and other methods. Task III uses quantitative methods, such as tomographic evaluation and statistical analysis to calculate the passing score line for standard reference tests, such as mastery tests and domain reference tests. Through the study of this project, aim to cultivate vocational education master to scientifically analyze the academic test results of secondary vocational school students, in order to objectively understand the academic situation of each student.

(3) Project 3 - Performance Evaluation of Vocational and Technical Education. The project can be divided into three main task modules: Task I is to develop the basic principles for evaluating the academic learning

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ability of vocational school students (educational regularity, scientificity, etc.). Among them, based on the characteristics of the students, the educational evaluation function of guidance, motivation and prediction must be used as the basis, the objective laws of vocational education activities must be followed, and scientific thinking methods and theoretical guidance must be provided. Task II mainly covers the selection of evaluation indexes for the students' academic learning ability (preliminary drafting, screening), determination of indicator weights, design of evaluation standards, formulation of evaluation forms, modification and improvement of evaluation forms, and other task modules. The evaluation form for the academic learning ability of the students is a measuring tool for evaluating and assessing the teaching behavior of vocational education. Task III selects evaluation methods to objectively assess the academic learning ability of the students and provide effective feedback. Multiple methods such as simple answer performance evaluation, independent performance evaluation and unit embedded performance evaluation can be used to evaluate the academic learning ability of the students through classroom testing, homework, group discussion presentations and other activities [15]. The performance evaluation project of vocational and technical education is a key content of the "Course of Vocational and Technical Education Measurement and Evaluation", which aims to cultivate vocational education professional master's degree teachers as vocational school teachers on how to reasonably develop indexes for the students' academic performance and structural education evaluation forms to evaluate students' academic learning abilities.

(4) Project 4 - Formative Evaluation of Vocational and Technical Education. The project can be refined into three main task modules: Task I develops basic principles for evaluating the academic development ability of secondary vocational school students, including operability and developmental aspects. Task II mainly covers the selection of evaluation indexes for the academic development ability of the students (preliminary drafting, screening), determination of index weights, design of evaluation standards, formulation of evaluation forms, modification and improvement of evaluation forms and other task modules. Task III selects an evaluation method to objectively assess the academic development ability of the students and provide effective feedback. Compared with students' academic learning, students' academic development covers a wide range of content, mainly including: students' personal general development, development of subject theoretical knowledge and subject abilities or skills, development of thinking skills and qualities, development of innovative spirit and practical ability, development of individual uniqueness, and so on. Therefore, when formulating an evaluation index system for the academic development ability of the students, attention should be paid to the diversification and rationality of the indicators. Evaluation methods such as assessment scales, portfolio evaluation and dynamic evaluation can be used to evaluate the academic development ability of the students.

6. Reform of Teaching Methods for "Course of Vocational and Technical Education Measurement and Evaluation"

The "Course of Vocational and Technical Education Measurement and Evaluation" is a highly practical course. Therefore, it is guided by cultivating the teaching ability of vocational school teachers, with "integration of teaching, learning, doing and evaluation" as the One Core, "measurement and evaluation tools and methods" and "teaching application scenarios" as the Two Drivers, and "simulated teaching, clarifying needs, familiarizing oneself with theories, mastering methods, completing tasks, achieving evaluation, and feedback improvement" as the Seven Steps. That is, the teaching method of the Vocational and Technical Education Measurement and Evaluation Course is constructed with "One Core, Two Drivers and Seven Steps", as shown in Figure 3.

6.1 One Core

With the goal of cultivating the teaching ability of vocational school teachers, the "Course of Vocational and Technical Education Measurement and Evaluation" is taught through four stages: teaching, learning, doing and evaluation. The "Course of Vocational and Technical Education Measurement and Evaluation" consists of four teaching projects,

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each with 8 class hours, totaling 32 class hours.

(1) Teaching: 2 class hours. Teachers use a teaching method that combines theory with practice to help students form a systematic, systematic and specialized framework for the "Course of Vocational and Technical Education Measurement and Evaluation". During the teaching process, clarify the teaching tasks covered by each teaching project and break them down in more detail, truly achieving the granulation of knowledge. (2) Learning: 2 class hours. Teachers provide project task books and operation manuals, and students design project plans through various learning methods, such as group cooperation, sharing and communication, and exploration and discussion. (3) Doing: 3 class hours. Complete project tasks through scene simulation, in-depth study of vocational school classrooms and other methods. (4) Evaluation: 1 class hour. Students (or groups) submit assignments and conduct self-evaluation, while adopting diversified evaluation methods, such as group evaluation, observation evaluation, project evaluation and comprehensive evaluation.

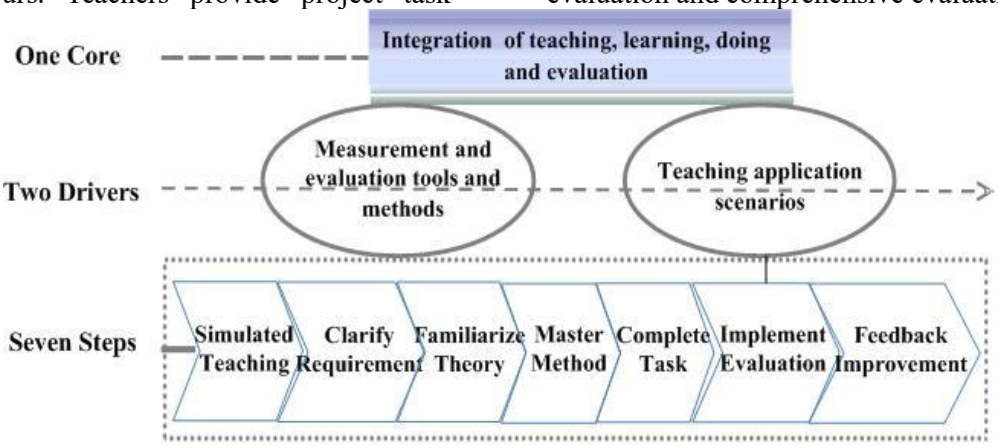

Figure 3. Reform of Teaching Methods

6.2 Two Drivers

(1) Driven by Measurement and Evaluation Tool Method: Measurement and evaluation tool methods (SPSS, Stata, etc., methods of experience evaluation, methods of hierarchical assessment, and methods of statistical analysis) as management tools for student academic measurement and evaluation data, can quickly solve the quantitative analysis problem of student academic measurement and evaluation as a technology driven approach. (2) Driven by Teaching Application Scenario: Through two major scenarios of student academic measurement and evaluation, simulate the training of vocational school teachers on student academic measurement and evaluation, make the classroom truly "alive", and help vocational education master's students quickly improve their teaching ability in academic measurement and evaluation.

6.3 Seven Steps

The "Course of Vocational and Technical Education Measurement and Evaluation" adopts a seven step closed-loop learning approach to promote the "accelerated transformation" of vocational education master's degree teachers to vocational school teachers, and improve the teaching ability of measuring and evaluating the academic performance of vocational school students.

Step 1: Simulated Teaching. Simulate vocational school teaching classrooms through multiple application scenarios, such as developing test questions, creating student academic evaluation forms, etc. Step 2: Clarify Requirement. Based on the basic principles of "project-based course content, task-based teaching projects and integrated ability development", clarify the task requirements of the four teaching projects. Step 3: Familiarize Theory. For each teaching project, clarify the corresponding knowledge points and effectively connect them with task requirements. Step 4: Master Method. Choose appropriate teaching methods (such as role-playing method, case analysis method, etc.) based on the teaching content and the characteristics of vocational school students. Step 5: Complete Task. According to the prescribed requirements, complete various teaching projects and tasks in an orderly and high-quality manner: knowledge points that

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need to be understood, familiarized, comprehended, and mastered, practical skills that can be recognized, clarified, comprehended and applied, etc. Step 6: Implement Evaluation. According to the evaluation criteria set for each project task, use reasonable methods to complete the evaluation of project tasks. Step 7: Feedback Improvement. Provide feedback on the project task assessment results, identify the main issues, and communicate with students on solutions and future efforts. Feedback can be combined in both oral and written forms, effectively implementing feedback mechanisms during the learning process is crucial for the cultivation and improvement of vocational education master's teaching abilities.

7. Conclusion

The paper adopts a "reverse" teaching design approach, based on the deconstruction of the teaching ability of vocational school teachers, to reform the "Course of Vocational and Technical Education Measurement and Evaluation". The focus is on elaborating on the course reform goals and ideas, course teaching system and content, and course teaching methods. In terms of teaching system, a "multi application scenario, two-level, four project" teaching system for the "Course of Vocational and Technical Education Measurement and Evaluation" is created; In terms of teaching content, based on the basic principles of "project-based course content, task-based teaching projects and integrated ability development", four teaching projects have been designed: Vocational and Technical Education Tests, Vocational and Technical Education Measurement Tools and Quantitative Methods, Vocational and Technical Education Performance Evaluation, and Vocational and Technical Education Formative Evaluation. In terms of teaching methods, the "Course of Vocational and Technical Education Measurement and Evaluation" teaching method of "One Core, Two Drivers and Seven Steps" has been proposed. Through the reform of the "Course of Vocational and Technical Education Measurement and Evaluation", the aim is to solve the problem of insufficient connection between teaching content, teaching objectives and requirements in the course teaching process, cultivate and improve the teaching ability of vocational education master's degree teachers as vocational school teachers in measuring and evaluating students' academic performance, and achieve effective connection between teaching and demand.

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