

Exploring the Process Evaluation of Public English in Higher Vocational College based on Intelligent Platform

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Abstract: *As a public basic course in higher vocational colleges, public English plays an important role in implementing the task of moral education and cultivating high-quality technical and skilled talents who can communicate effectively in English. Educational evaluation is the baton of educational development, and the process evaluation should be strengthened in the educational evaluation reform, and the process evaluation model framework and index system should be improved. Based on the process evaluation model and index system developed by us, this paper takes two faculties of a college as the experimental objects of educational evaluation reform and studies how to implement the process evaluation of higher vocational public English courses scientifically and efficiently by using the "Study Pass" intelligent platform, and proposes preliminary countermeasures through feedback and problems.*

Keywords: Public English, higher vocational college, process evaluation, intelligent platform, evaluation model.

1. INTRODUCTION

"Centering on student development" is a common concept in education around the world. In June 2020, the 14th meeting of the Central Committee for Comprehensively Deepening Reform passed the Overall Plan for Deepening Education Evaluation Reform in the New Era (hereinafter referred to as the "Plan") [1], proposing to systematically promote education evaluation reform, strengthen process evaluation, improve outcome evaluation, and make full use of information technology platforms to improve scientific, professional and objective evaluation. evaluation, and make full use of the information technology platform to improve the scientific, professional and objective nature of evaluation. Process evaluation is a typical evaluation method that examines and monitors the learning process in an all-round way, and it is one of the important means to improve the evaluation level and guarantee the quality of evaluation. The concept of process evaluation was first mentioned by Stufflebeam in 1967: "The so-called process evaluation is the evaluation of the process of implementing a specific program, and providing feedback information for its program for modification." [2]

Public English courses in higher vocational education are public basic courses that are compulsory or limited electives for students of various majors. Before the launch of the "Plan", the public English courses in higher vocational colleges were dominated by outcome-based evaluation, with the final examination accounting for a relatively high percentage of the score, neglecting the process evaluation assessment of students. After the launch of the "Plan" in 2020, institutions began to grasp the pilot teaching evaluation reform, and the percentage of the process evaluation score was raised. The pilot class of public English reform in which the author works has raised the proportion of students' processual usual grades from the previous 30% to 70%, while the final exam of result-based evaluation has been reduced from 70% to 30%. However, the refinement of process evaluation standards is difficult in practice, and teachers need to spend a lot of time and energy to use this evaluation method, so it is necessary to realize scientific and efficient process evaluation with the help of modern information technology. Moreover, the current research on process evaluation is relatively one-sided and theoretical, and lacks the research on the systematic and practical application in the curriculum of higher vocational colleges and universities. In this thesis, we will study how to utilize the intelligent platform of "Study Pass" to scientifically and efficiently implement the process evaluation of higher vocational public English courses, research and develop a scientific and reasonable process evaluation model and index system of higher vocational public English, and promote the dynamic gain cycle of "teaching-evaluation-feedback-adjustment-teaching".

2. RESEARCH REVIEW

Domestic scholars have found that process evaluation is conducive to improving students' learning and teachers' teaching. Opinions are summarized as follows: first, process evaluation enhances students' commitment to learning

and ensures students' learning effectiveness. [3] Second, process evaluation provides conditions for the cultivation of innovative talents. Third, process evaluation facilitates the improvement of teachers' teaching methods and improves their professional development ability. Overseas research can be generally summarized as the view that process evaluation enhances students' motivation to learn, improves students' engagement in learning, ensures a steady increase in performance, and at the same time has an improved effect on teachers' teaching methods.

In the field of vocational education, the research on process evaluation mainly focuses on one or several aspects of process evaluation from the perspective of specialty or course type. For example, Jiang Mengqi and Shi Weiping sorted out a series of problems in the secondary project teaching curriculum from the process evaluation system and suggested that the process evaluation should give full play to the role of the students as the main body of the evaluation, and that the evaluation tool should play the role of collecting evaluation information. [4] Lu Wangjing and Yang Kai take the teaching of higher mathematics in higher vocational education as the research object, integrate the process evaluation into the online homework system of higher mathematics, utilize the form of combining traditional and modern evaluation means, and make up for the deficiency of the summative examination with the stage online evaluation. [5] Cui Tianlan took the Department of Architectural Engineering of X school in Liaoning Province as an example, conducted a case study on the process evaluation of professional core courses in higher vocational colleges from the perspective of learning outcomes, and put forward suggestions for improvement in terms of the concept of evaluation, the operability of evaluation, the evaluation method and the subject of evaluation. [6] Fewer papers have studied the efficient implementation of process evaluation using modern intelligent platforms, not to mention the development of a scientific and reasonable process evaluation model framework system and index system for public basic courses.

3. PROCESS EVALUATION MODEL FOR HIGHER VOCATIONAL PUBLIC ENGLISH

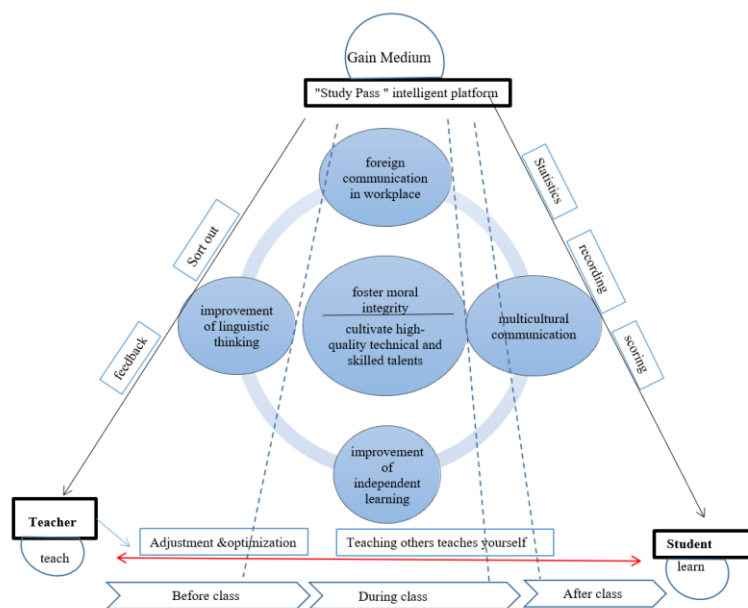


Figure 1: A Process Evaluation Model for Higher Vocational Public English

The 2021 version of the *English Curriculum Standard for Specialized Higher Vocational Education* (hereinafter referred to as the New Standard) requires academic level evaluation based on the core literacy of the discipline and the establishment of a scientific teaching evaluation system to implement the fundamental task of cultivating moral integrity, and to cultivate high-quality technical and skilled talents. [7] In order to guarantee the scientific and developmental nature of evaluation, this paper proposes a process evaluation model for the higher vocational public English course. The framework system of evaluation model is based on the fundamental task and goal of moral education and cultivating high-quality technical and skilled talents, and the evaluation content includes the four core qualities of the English discipline, namely, foreign communication in the workplace, multicultural communication, improvement of linguistic thinking, and improvement of independent learning. Teachers and students teach each other, and the introduction of the "Study Pass" intelligent platform as an enrichment medium improves the efficiency of process evaluation and facilitates the all-round examination and monitoring of the

students' learning process. The evaluation model is shown in Figure 1.

In this model, the evaluation subject and evaluation process are diversified, with teacher evaluation, students' mutual evaluation, self-evaluation, evaluation outside the school, etc., and the evaluation process stage includes evaluation before, during and after class. Teachers release chapter courseware, topic discussions, tests and so on through the intelligent platform, and students complete a series of tasks such as chapter learning, topic discussions, tests and so on in the intelligent platform. The "Study Pass" intelligent platform penetrates into the learning stage before, during and after class, and the platform carries out statistics, records, scores, and sorts out the process of teaching and learning activities, and provides timely feedback to teachers and students, so that teachers can understand the acceptance level of students' knowledge of the course and their learning difficulties in a timely manner, and adjust and optimize teaching strategies according to feedback. For students, they can understand their own learning status, weaknesses and blind spots through the feedback, so as to effectively improve the learning effect. The benign interaction of the three core factors of teachers, students and the intelligent platform constitutes a dynamic gain cycle of "teaching - evaluation - feedback - adjustment - teaching". In the future, the intelligent platform of "Study Pass" can be upgraded into a more advanced high-tech platform, and the main body of evaluation can also include relevant industries, enterprises and social organizations, which is an evaluation model with both scientific and developmental characteristics.

4. PROCESS EVALUATION INDEX SYSTEM FOR HIGHER VOCATIONAL PUBLIC ENGLISH

In order to quantify the process evaluation from a micro perspective, this study combined the core literacy requirements of the New Standard and the process evaluation model of higher vocational public English to develop a process evaluation index system, as shown in Tab. 1. Teachers can moderately adjust the specific evaluation items according to the content of specific lectures.

Table 1: Process evaluation index system for higher vocational public English

Primary Indicators	Secondary Indicators	Specific Evaluation Items
foreign communication in the workplace	Basic Knowledge and Skills of English Language	Pre-study task results
		Performance in classroom practice
		Post-class assignments
		Chapter tests and final exam
	Oral communication in the workplace	Discussion and presentation
		Conversation or negotiation
		Group Assignments
	Written Communication in the Workplace	Posting news in English
	Applied Writing	
multicultural communication	Understanding Multiculturalism in the World	Comparing Typical Cases
	Intercultural Communication	Workplace Situation Tasks
improvement of linguistic thinking	English Thinking Styles and Characteristics	English Thematic Debate
	Self-thinking Logic, Criticality and Creativity	Question and Answer in English
improvement of independent learning	Self-management and Learning Attitude	Sign-in, Voting and Quizzing
		Audio and Video Viewing
		Chapter Study
	Self-learning habits	Reflective learning
	Multi-channel access to learning resources	Resource access
	Language Learning Strategies	Metacognitive Strategies, Cognitive Strategies, Communicative Strategies, Affective Strategies

5. PROCESS EVALUATION OF PUBLIC ENGLISH IN HIGHER VOCATIONAL COLLEGE BASED ON “STUDY PASS”

Process evaluation has an important value and role in enhancing students' subjective initiative, but teachers need to spend a lot of time and energy to use this evaluation method, and it is difficult to refine the process evaluation standard in practice, so it is necessary to use information technology to realize scientific and effective process evaluation. The intelligent platform "Study Pass" is fully functional, which can not only upload various forms of teaching materials, but also carry out a variety of rich learning activities and statistics in the process of teaching activities, organize and provide timely feedback to the students, and facilitate the integration of online testing, independent learning, collaborative learning, teacher evaluation, student self-assessment, student-student mutual evaluation and multiple dynamic evaluation methods. All these help to promote the development of students' core literacy in the English subject in the New Standard.

5.1 Object and content

We follow the laws of vocational education and design teaching activities as a whole in accordance with the relevant national documents, and change the previous single outcome evaluation of the higher vocational public English course into an evaluation method that focuses on process evaluation. The main experimental subjects of this study are 1548 students of thirty-one classes enrolled in the year of 2020 in higher vocational college. This study carries out process evaluation and finally analyzes the data according to the learning situation. The content of the study is how to utilize the "Study Pass" intelligent platform to scientifically and efficiently implement the process evaluation of higher vocational public English courses, combine the developed process evaluation model and index system of higher vocational public English, carry out a reasonable design of process evaluation of higher vocational public English courses, and promote the "teaching-evaluation-feedback-adjustment-teaching" process.

5.2 Process evaluation design for the higher vocational public English course

The reformed higher vocational public English course is designed by the teaching team to develop its own teaching materials, build the course system and question bank in the "Study Pass" app, carry out online and offline blended teaching, and implement an evaluation method based on process evaluation. In order to meet the learning needs of students who have the ability to learn, each unit provides a sufficient amount of learning materials for students' self-study. In the language skills learning stage, the specialized classes are broken up, and students select classes independently under the guidance of teachers according to their own English basics and learning aspirations, with the thematic classes as the learning units. The assessment standards and forms are set according to the characteristics of the thematic classes. Through various thematic classes such as basic English classes, tutorial classes for bachelor's degree and CET-4 tutorial classes, special language skills are improved, and humanistic literacy, vocational literacy and moral education are integrated.

The curriculum reform team focuses on the assessment of students' learning process, combining the developed process evaluation model and index system of higher vocational public English, increasing the proportion of the assessment of the learning process and enriching the assessment content of process evaluation. The proportion of usual grades in the process evaluation has increased from 30% to 70%, including students' online learning grades, unit test grades and offline learning grades. Students' final written test scores only account for 30% of the outcome-based assessment scores. The assessment items of students' online and offline learning performance include attendance, quiz, discussion, chapter study times, audio and video viewing, homework, group tasks and so on. The intelligent platform of "Study Pass" provides the data of students' online learning and part of their offline learning, and the teacher will evaluate these data statistically. Through relevant practice and discussion questions, students' mastery of the learning materials is understood. An online unit test is arranged for each unit. For students who have the ability to learn more, they can form study groups, and teachers set some extracurricular reading questions, such as the introduction of the deeds of a famous person in a certain country in a certain era, the evaluation of a famous person or an event, and let the students translate or rewrite an article in a new persona or read aloud skillfully and record a small video to be uploaded to the platform of "Study Pass". The students who participate in the extracurricular questions will get extra credit. When studying in the offline classroom, teachers can use "Study Pass" to record students' attendance and evaluate their classroom performance, with teachers taking the lead in evaluation, study committee members and group leaders participating in mutual evaluation, and students participating in self-assessment. Teachers encourage students to take the initiative to ask questions, and reward students who answer correctly with extra points. Teachers record the number of questions asked and answered in each lesson. According to the theme of each unit, students are allowed to carry out debates, speeches, social

investigations, simulations of workplace situations or cultural knowledge competitions, and students' offline performance is counted in their offline learning grades. The final exam is a result-based evaluation, with questions including multiple choice, judgment, fill-in-the-blank, expository and essay, and the assessment content is mainly the key points of the course learning content of the semester, so as to promote learning by examination. This diversified evaluation method, which focuses on process evaluation and is supplemented by outcome evaluation, pays attention to the students' dynamics and learning progress, and can sort out information and feedback in a timely and effective manner, which is conducive to teachers' improvement of the teaching process and adjustment and optimization of teaching strategies. The final total grade composition of this course is shown in Table 2.

Table 2: Process evaluation design for the higher vocational public English course

Final overall course grade (100%)	Process Evaluation (70%)	Online learning(30%)	Pre-reading tasks Sign-in Quiz Discussion Chapter Learning Times Audio/Video Viewing Homework
		Unit Tests(20%)	Unit Tests
		Offline learning(20%)	Discussion presentations Group Tasks Classroom Interaction Workplace Situation Tasks
	Outcome-based assessment(30%)	Written final exam(30%)	Written final exam

5.3 Construction of the "Study Pass" Intelligent platform and data

Teachers need to spend a lot of time and energy in the use of process evaluation, because not only do we need to change the teaching design based on purely teaching knowledge, but also through a series of classroom activities to realize the process evaluation, we need to do a coherent sorting-out of the teaching material system and carefully design the teaching method. Refinement of process evaluation criteria is more difficult in practice. Therefore, it is necessary to use modern information technology to realize scientific and effective process evaluation.

Based on information technology, the "Study Pass" intelligent platform can design and release teaching activities, and can count and organize the results of teaching activities and provide timely feedback to students. It integrates independent learning, online discussion, teacher-student interaction, collaborative learning, mutual assessment of assignments and other diversified learning methods. According to the background analysis of the "Study Pass" intelligent platform, teachers can check the teaching effect, understand the blind spots of students, remind students to actively participate in learning activities, and also warn students with low evaluation scores. The construction of our platform focuses on two main points: first, we build course chapters according to a reasonable logical structure, upload and edit the teaching content and teaching points of each chapter, and publish lesson plans, videos, chapter test questions, etc. Second, the design of the course should pay attention to the pre-session and post-session teaching content, so as to ensure that the students can learn more effectively. Second, the course design should pay attention to before, during and after class, such as uploading video materials for students to preview and understand the background of the chapters before class, posting classroom activities during class to enhance students' participation, and posting test questions and extended learning materials after class to form a closed loop of teaching.

The "Study Pass" intelligent platform provides statistics and organizes data on the learning of students in a class, including audio and video viewing details, discussion details, chapter study times, chapter tests, homework statistics, exams, course interactions, and so on. If teachers are allowed to record these data manually, it will take a lot of time and energy. The "Study Pass" intelligent platform plays a greater role in assisting the implementation of process evaluation, making process evaluation more detailed and scientific and rigorous.

5.4 Self-designed process evaluation program

Teachers can design the program of process evaluation based on the New Standard, the process evaluation model and process evaluation index system of higher vocational public English, and the actual situation of their own lecture content. The following is an example of the design program for one of the lessons.

The teaching activities of this lesson are divided into three stages: before, during and after the lesson. And process evaluation is fully integrated in each stage. The main forms of teaching activities make full use of the functions of the "Study Pass" intelligent platform, such as signing in, selecting students, quizzing, thematic discussion, group tasks, practice in class, live broadcasting, polling, questionnaires, homework, exams and so on.

Table 3: The process evaluation program of a class in the higher vocational public English course

Stage	Teachers	Students	Evaluation method	Secondary indicators completed	Primary indicators completed
Before class	Using the "Study Pass" intelligent platform to release learning tasks such as course chapter courseware, videos and thematic discussions	Pre-learning, completing learning tasks and participating in online discussions	Automatic evaluation on the intelligent platform; Teacher evaluation; Students' mutual evaluation	Basic knowledge and skills of English language; Workplace Oral Communication; Self-management and learning attitude	workplace foreign communication; Improvement of independent learning
During class	Use of "Study Pass" to sign in on the screen, conduct follow-up exercises, check the effectiveness of students' previews, carry out group tasks and provide personalized guidance.	Participate in various classroom activities, complete accompanying exercises, search for information, complete group assignments, and participate in activities such as sign-in, quiz, and voting on "Study Pass" .	Platform Evaluation; Teacher evaluation; group mutual evaluation; self-evaluation	Self-management and attitudes to learning; Multi-channel access to learning resources; Language learning strategies; English language basics and skills; Oral communication in the workplace; Logical, critical and creative thinking.	Self-directed learning perfected; Foreign communication in the workplace; Language Thinking Enhancement
After class	Posting of section assignments and test questions, posting of extended learning materials and videos, posting of English situational performance tasks	Completion of homework and test questions, self-study of extension materials and videos, and performance tasks in English situations	Platform Evaluation; Teacher evaluation; Team leader evaluation; Evaluation by external experts	English language fundamentals and skills; Written communication in the workplace; Intercultural communication; Self-management and learning attitudes; Language Learning Strategies	Foreign communication in the workplace; Multicultural Communication; Self-directed Learning Perfection

Teachers can conduct questionnaire surveys on students at regular intervals to understand their attitudes towards process evaluation, the learning difficulty of process evaluation, the degree of satisfaction with the evaluation method, the impact of process evaluation on them, etc., and allow them to put forward their views on the improvement of the teacher and then based on the students' feedback to further adjust and improve the teaching program, to achieve the "teaching-evaluation-feedback-adjustment-teaching" of the dynamic gain cycle.

5.5 Problems and solutions found in process evaluation

Through the questionnaire function of "Study Pass", we know that most of the students are satisfied with the process evaluation of the course, which improves the four core qualities of the English language subject, and brings them one step closer to becoming high-quality technical talents. However, in the process of mapping out the process evaluation practice of the English course of higher vocational college in the experimental class, some problems have been found, mainly as follows:

- (1) It is difficult to avoid subjectivity in process evaluation. Process evaluation requires an objective and comprehensive understanding and assessment of students' learning, but it is difficult to avoid the subjectivity of the evaluation subject in the implementation process. For example, in the student-student mutual evaluation, students may score high because of good relations.
- (2) Students' subjective consciousness is not strong enough. The exam-oriented education before the university

has suppressed students' enthusiasm for independent learning, and the traditional teaching mode evaluation is a teacher-oriented result-oriented evaluation, which ignores the students' subjective position, resulting in students' difficulty in adapting to the new process evaluation mode in a short period of time.

(3) Objective conditions lead to insufficient implementation of process evaluation. The number of students in some lecture classes exceeds 60, and the number of teaching hours of the higher vocational public English course is only 52 to 64 per semester. Due to the number of students and learning hours, the implementation of some complex English learning tasks such as group discussions, workplace scenario tasks, English thematic debates, etc. is not sufficient.

We have also thought about some preliminary solutions to these problems.

First, the process evaluation criteria can be more scientifically detailed and systematized, and students are required to strictly follow the criteria when grading each other, so as to eliminate subjective arbitrariness and affinity scores. The "Study Pass" intelligent platform can record the scores of all students, and teachers can warn students whose scores are too casual or too high through the background, so as to avoid subjective factors affecting the credibility and validity of the evaluation as much as possible.

Secondly, for the situation of some students' weak sense of subjectivity and poor learning habits and attitudes, teachers can establish an incentive and constraint mechanism together with the student management department to establish the concept of "student subjectivity". Students can also reflect on their own learning, form a clear understanding of their own problems, and link learning with life growth and value, thus laying a good foundation for the synergistic improvement of learning effectiveness.

Thirdly, schools should pay attention to the role of process evaluation in the reform of higher vocational education, improve the teaching management system, reduce the student-teacher ratio, implement small class teaching, increase the amount of hours of public English courses, and give teachers more autonomy in evaluation. At the same time, schools should increase the investment in the required technology, teachers and information infrastructure, such as guaranteeing the normal operation of the intelligent platform and smooth network connection, increasing the training in process evaluation, reducing the non-teaching workload of teachers, so that teachers can devote more energy to process evaluation.

Fourthly, teachers need to conduct in-depth study and research on the process evaluation system and its upper level theory, pay deeper attention to the actual demands of students, make fuller use of the "Study Pass" intelligent platform, reasonably set the weights of the evaluation items, scientifically optimize the evaluation methods, and reasonably plan the process evaluation scheme.

Fifthly, teachers should teach students according to their abilities, flexibly adjust the evaluation method according to the actual situation of the students, and avoid overly cumbersome assessment content. Teachers should be aware of the differences in students' motivation, attitude, emotion, receptivity, concepts and so on, and avoid letting the process evaluation become formalized; they should focus on really improving students' ability and knowledge internalization, and cultivating real English skills and the four core literacies.

Sixthly, when using the intelligent platform for process evaluation, teachers should allocate a good proportion of time between teaching and evaluation and be prepared to deal with unforeseen events, such as network interruptions, disorganized group activities or students' refusal to participate in the evaluation. Teachers should make contingency plans to avoid "a strong start but weak finish" situation in process evaluation.

6. SUMMARY

Process evaluation is a new type of evaluation to meet the requirements of the teaching mode in the new era. Educational evaluation is related to the direction of educational development, we should deepen the reform of educational evaluation in the new era and innovate evaluation tools. Although this study is based on the example of higher vocational public English course, the research results can be applied to other disciplines and majors. If the education evaluation reform is implemented in the whole university, it will change the current result-oriented evaluation method with fixed mode, single evaluation purpose and backward feedback, and will further promote the changes of teaching organization, teaching content and teaching method, improve the mechanism of moral education and cultivate high-quality technical and skilled talents for the society.

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