Research on the Application of “Contrast” Evaluation and Reform Teaching Mode Based on Information Technology

Luo Guoshi
Hubei Three Gorges Polytechnic, Yichang, Hubei, 443000, China

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Abstract: Aiming at the problem of “learning by doing” with or without improvement, this paper explores the teaching mode of “comparative” evaluation in Higher Vocational education, aiming at guiding students to use superstar learning to self-study and self-test their theoretical knowledge before class. On this basis, it tries to “do” in order to warm up. Then we will carry out “doing” training and comparison and correction activities in the class. On-line and off-line hybrid learning should give full play to the advantages of information technology, push students to the dominant position, learn from each other in positive and negative comparison, and deeply understand in front and back comparison. In this way, we can realize the three-in-one in-depth study of classroom teaching and “doing evaluation and correction” of theoretical knowledge. It is of great practical significance to improve the level of information-based teaching and to cultivate students' autonomous learning, cooperative learning and communication ability.

1. Introduction

At present, with the in-depth development of information-based teaching, flip class and hybrid teaching have become one of the hot topics in teaching research. In the practice of higher vocational teaching, teachers who are in the front line often encounter some confusion. What is suitable for flipping? How to implement the flip classroom? How to carry out hybrid learning combined with online and offline? How to encourage students to gain a sense of learning in the main position? and many more. These are all realistic issues that need to be solved in the new era of teaching reform.

2. The Application Background of “Contrast” Evaluation and Reform Teaching Mode

The rapid development of information technology and its wide application in massive open online course have opened up a new perspective and infinite time and space for curriculum construction and classroom teaching. The use of information technology to achieve reform and innovation in teaching mode is an important topic in the teaching reform of the new era.

In recent years, the Ministry of Education has issued several documents, such as “Opinions of the Ministry of Education on Strengthening the Construction, Application and Management of Online Open Courses in Colleges and Universities”, “Guidance Opinions on Deepening the Reform of Education and Teaching in Universities Affiliated to Central Departments”, “Opinions on Promoting the Recognition and Transfer of Credits in Higher Education”, and so on. We strongly advocate and promote the construction of large-scale online open courses, and propose that students should be carefully organized to study online open courses and be included in credit management. With the promotion of policies, the construction of massive open online course in our country is in the ascendant and developing rapidly. Since the construction began in 2013, after a short period of five or six years of development, it has achieved very gratifying results. The Ministry of Education has approved 490 “National Excellent Online Open Courses” in the first batch and 801 in the second batch. According to the spirit of the Notice on the Implementation of the 2019 National Top Quality Online Open Courses Accreditation, the Ministry of Education will accredit another 800 or so courses this year. According to Wu Yan, director of the Higher Education Department of the Ministry of Education, by 2020, the number of classes introduced in the name of the country will reach 3,000. It can be seen that the construction and application prospects of the motto based on
information technology will be very broad.

At the same time, the Ministry of Education attaches great importance to the information-based teaching of vocational colleges, not only encourages teachers to innovate teaching models, but also puts forward clear requirements. Emphasis on “to rely on information technology to create an information-based teaching environment” [1], using information technology to transform traditional teaching from the perspective of teaching concepts, models and content. Promote the comprehensive interaction of teaching and the quality of teaching and the quality of personnel training. This has pointed out the direction for the teaching reform of the new era. With the continuous deepening of curriculum reform and the full promotion and implementation of information-based teaching, information technology will subvert the outdated traditional teaching mode on the one hand, and on the other hand, it will give birth to a new teaching mode conducive to personnel training. In order to adapt to the integration of network class and entity class and to highlight the needs of students' dominant position.

At present, the construction of digital campus in higher vocational colleges is in full swing around the goal of “high quality colleges” and “double high characteristics”, and the research of intelligent classroom is in the ascendant. From the development of our institute, following the success of the establishment of high-quality colleges and universities, we are striving toward the goal of “double-high characteristics”. In terms of curriculum construction and teaching, although the construction of Mu Course started late, private broadcasting lessons have been widely used in teaching practice. So far, in addition to 4 national-level excellent courses, 7 provincial-level excellent courses and sharing of excellent resources, 33 school-level project courses are available on the college's digital teaching platform. More than 80% of professional leaders and key teachers went out to participate in training in massive open online course. Full-time teachers to participate in the school information teaching training reached 100%. Full-time teachers generally use mobile phone APP to build their own courses and carry out information-based teaching activities, successfully completing the role change from the speaker to the designer, the leader and the evaluator. In the Hubei Province Teacher Teaching Ability Competition, our representative team fought hard and made the best effort. In 2017 and 2018, it ranked first for two consecutive years. It has produced a great demonstration effect and radiation effect on teaching activities. The informatization teaching ability of full-time teachers has been greatly enhanced.

In a word, the rise of massive open online course, the promotion of policies, the extensive use of SPOC and the in-depth development of information-based teaching provide excellent opportunities for innovative teaching modes.

3. The Connotation and Characteristics of “Contrast” Evaluation and Reform Teaching Mode

The “contrast” evaluation is based on the innovative practice of information technology on the teaching model. It is quite different from the traditional comparison of the teaching conditions, the location, the single tool, the thin content, and the limited time and space. It reflects the “Internet +” “The comprehensive use of.” Teachers in the teaching place (network classroom + entity classroom), teaching tools (multimedia + learning), teaching content (knowledge + model paper + disease review + exercise review), teaching methods (online + offline), teacher role (designer + leader + evaluator), learning style (autonomous Learning + cooperative learning), learning time( In addition, we should give full play to the advantages of information technology. To guide students to make positive and negative comparison, before and after comparison of the results of “learning by doing”, and to carry out online and offline self-evaluation, mutual evaluation and teacher evaluation and other evaluation activities, so that the three aspects of evaluation are closely combined and deepened step by step. Students can continuously optimize the results of “learning by doing” and improve the overall level of “doing” in deep learning.

Based on the information technology, the multi-level comparison between students and teachers and the extensive communication that breaks through the limitation of time and space make the “comparison” evaluation teaching mode have the following three basic connotations:
3.1 Learning methods focus on the combination of online and offline

The extensive application of information technology in teaching has changed the learning method of single paper homework presentation and face-to-face question answering. At present, Super Star Learning has become a necessary tool in our school's curriculum teaching. It expands the learning time and space for learners and provides a “group chat” platform. Under the guidance of the teacher, students can carry out online self-learning activities, complete self-study of theoretical knowledge, and lay the foundation for evaluation activities. On the other hand, it is possible to carry out training and evaluation activities such as offline design and practice, and use the “group chat” platform to conduct knowledge question and answer and evaluate exchanges. Make offline offline communication and online interaction complement each other, thus achieving a combination of online and offline learning.

3.2 Focus on doing and communicating with learning

Take “learning by doing” and communication as the focus of curriculum learning, promote in-depth learning through evaluation, and enhance the effectiveness of doing. This is totally different from the previous implementation of “learning by doing” which focuses on the knowledge construction of students' subject status. The “contrast” evaluation should be evaluated, evaluated, and revised and revised. Let students actively seek knowledge in the vast world of comparison, expand the space of thinking to discover, identify and learn from each other. In this way, students' understanding of “doing” is enhanced, and professional skills and communication skills are implemented.

3.3 Learning evaluation emphasizes the combination of learning and assessment

Strengthen the process learning process to promote the organic integration of learning and assessment. Students use the learning pass, according to the teacher's study assignment book, in the online classroom to learn the “contrast” evaluation curriculum resources, and complete the self-test. The whole process of learning is recorded and scored automatically. Attendance, answering questions or selecting candidates, design of works and operation appraisal and other practical situations in the class are all included in the comprehensive achievement of learning and recorded in real time. So as to realize the unity of study and examination.

4. An Application Case of “Contrast” Teaching Model

Taking the teaching of Practical Writing as an example, the teaching mode of “comparative” assessment and correction is mainly used to guide students to learn relevant knowledge of the relevant languages by comparing the model texts in the assessment and correction of sick texts before class. In the class, situational writing and exercise revision are carried out against model texts to cultivate practical writing ability of relevant texts. Through the comparison between the correction of ill articles and the correction of exercises, find out the error-prone points, or find out new problems for correction or solution; Through the comparison of group comments and teachers' comments, it can promote in-depth learning and enable students to identify and learn from each other in comparison. In the process of “evaluating middle school”, “writing middle school” and “correcting middle school in evaluation”, we will get the dual training of practical writing ability and oral expression ability, and enhance the comprehensive quality to meet the needs of practical writing talents in the information age.

Judging from the actual situation of course study, different students often show different personality characteristics in their study. Different groups often have different learning situations. These will be shown in the right and wrong understanding, the depth of understanding, and the merits and demerits of the works. Then, during the implementation of the project task, the teacher evaluates the resources through the conscious design “contrast” and guides the students to carry out the teaching activities of the trinity of evaluation and reform, so that students can understand the essential characteristics of things in deep learning and extensive communication, and correctly
grasp. The law of things, this point is particularly important in the context of informational teaching.

In the course practice of Practical Writing, three links must be grasped in the application of the “contrast” evaluation teaching mode.

4.1 Integration and Optimization of “Contrast” Evaluation and Reform Teaching Resources

“Contrastive” evaluation of teaching resources is an important prerequisite for the study of Practical Writing, and a set of resources should be constructed based on the course website to guide the study. Including pre-class learning notice, learning task list, courseware, micro-class, self-test questions, disease cases, situational writing, self-evaluation and mutual evaluation forms, etc. Among them, the main resources are composed of two parts: the medical record and the writing situation. The former is mainly the cases collected by teachers in online search and real-life surveys. It can also be adapted from Fan Wen. The latter is a practical writing context designed by teachers for specific writing training. Both should be integrated and optimized according to the needs of the “Practical Writing” process of learning, assessment and deep learning. There are three aspects to specific requirements.

1). Sorting out cases of illness according to the classification of genres
   Illness case should be sorted out in different languages, and the corresponding language knowledge, model text, teaching courseware, micro-lessons, self-test questions and other resources should be complete. Ensure that students have self-taught and self-tested curriculum resources when they evaluate their medical papers. Otherwise, it is difficult for students to complete the task of reviewing the disease before the class, which will inevitably affect the “contrast” evaluation and teaching activities. At the same time, it is necessary to take into account the professional characteristics, so that it reflects the professional teaching needs and career development needs.

2). Combine professional design and practical writing situation
   “Practical Writing” is an online course for the humanities quality of the school. Its curriculum orientation is to serve the professional teaching and the quality development of students. In order to highlight this feature, situational writing must be designed based on industry research and analysis of the situation. The resulting student work and the evaluation activities carried out have an industry background and professional background. For example, when our auto repair major carries out “comparative” correction teaching activities, it actually uses the writing context design to link up the learning and future professional activities and development of the auto repair major students, the speeches of the class cadres, the documents and online news used to carry out auto repair work, the application letters and personal resumes used to choose jobs, and the practical writing scripts such as contracts and activity plans used to start businesses, so that the students can write and correct in the auto repair work environment. The creation of resources reflects the needs of professional learning and career development.

3). Correctly grasp the difficulty of disease cases
   Higher vocational students have a poor foundation and are not self-conscious. If the full text of the disease case is “extremely ill” and the students do not have the ability to perform major surgery, they will be intimidated and affect their autonomous learning before class. Therefore, the difficulty should be appropriately reduced when designing disease cases. The “disease” can lie in format, content or language (including idioms). In a word, the disease cases of a certain species are generally designed with certain problems. The fruit on the tree can be picked, which is helpful to arouse the enthusiasm of learning. However, when the problems of different languages are concentrated, a series of medical literature reviews such as “irregular format, incomplete content, unclear hierarchy and inappropriate language” can be formed, so that students can fully understand the types of “illness” and pay attention to writing norms. In this way, from simple to comprehensive, from single to complex, step by step, in line with the law of learning.

4.2 The design of “comparative” evaluation process

The process of “comparative” evaluation activities is the key link of instructional design and an important guide for curriculum learning. Like content design, it embodies the role requirements of teacher designers. Teachers should start from the cultivation of students' autonomous learning
ability and cooperative learning ability, make full use of information technology, and design procedures that are highly operational and conducive to in-depth learning to carry out interactive assessment activities in online and real classes.

1) Warm up before class
In the online class, students learn courseware, micro-class and other resources independently according to the practical writing language learning notice and task list issued by the teacher and the learning contents, methods, steps and requirements prompted by the teacher. Initially use the literary knowledge to complete the self-test task before class, compare the essays with the disease text, and get the initial experience of the writing skills of the text.

2) In-class inspection and training
In the multimedia classroom, students first combine the teachers' examination and comments on pre-test self-test and disease evaluation, and review and consolidate the knowledge of the literature. Then, under the guidance of the teacher, focus on the practical writing situation design of specific languages, conduct cooperative learning in groups, complete the situation writing task against the model, and submit the work to the learning group “group chat” for self-assessment and mutual evaluation. Then compare the assessment and correction of exercises with the assessment and correction of diseased articles, and combine with the summary of teachers' assessment, the experience of format and language from independent initial assessment will rise to the experience of format, language, practicality and humanity.

4.3 The application effect of “contrast” evaluation teaching mode
Based on information technology, “comparative” evaluation and reform teaching activities have greatly improved the utilization rate of curriculum resources and promoted teaching and research to a new level. “Practical Writing” has been running for three semesters as an online course with excellent humanistic quality. The number of students has reached more than 4,000, with more than 1.7 million hits. The micro courses produced by the curriculum teachers won one second prize at the national level, and one project was set up by the Ministry of Education's Information Technology and Instruction Committee for educational reform. It not only promotes the integration of network classroom and physical classroom, but also plays a very important role in improving teachers' information-based teaching level, optimizing teaching process, promoting interaction between teachers and students, highlighting students' principal position and teaching focus, and enhancing the effectiveness of teaching. It is mainly embodied in three aspects:

1). Realize the reversal of classroom teaching
Practical writing is stylized. The writing format and language application requirements of most languages will not change with the development of society. Suitable for flipping classroom learning. Teachers can make the knowledge of language into micro-lessons, which can be used repeatedly and for a long time. With the help of self-test questions, students can complete the task of learning language knowledge by self-study and self-test before class with the help of mobile phone APP. Statistics of Super Star Learning Intelligence Assessment on Process Learning show that more than 90% of the students can simultaneously complete online self-test according to the requirements of integrating learning with examination and the instructions of the learning task list. The remaining 10% of the students can also make up for it after they learn to pass the intelligence inspector. In this way, the phenomenon of insufficient writing training caused by traditional classroom theoretical knowledge learning occupying time has been changed. In the classroom, the teacher usually only needs 10 minutes to explain the problems arising from the online self-test. The rest of the time can be used for the evaluation of the disease review, the situation writing and the practice evaluation. Thereby, the practical writing style knowledge flipping classroom teaching is realized, which breaks through the bottleneck of insufficient class hours.

2). Highlight the focus of teaching
Relevant scholars believe that “the ability to solve practical technical problems” is the goal of higher vocational courses [2]. Combined with the information society's requirements for the composite ability of practical writing talents. Students must be good at writing and be good at
communication. Therefore, the ability to write and communicate the practical language of students to solve practical problems is the goal and focus of the curriculum. Under the “contrast” evaluation teaching mode, students conduct medical evaluation on the basis of self-study and self-test in the online classroom, conduct evaluation on the basis of situational writing, and compare the two, and their evaluation activities always highlight this Teaching focus. Students can give full play to the role of the main body, cross-talk and writing training, so that writing and communication can be integrated at the level of competence, and enhance practical writing and communication skills. It embodies the reform of the traditional summative evaluation method. In the process of “speaking” (self-evaluation and mutual evaluation), students reflect on and summarize the practical writing training, learn from each other's strengths to make up for the weaknesses. Through process evaluation, teachers have truly mastered the learning situation of students, which is convenient for students to “give more timely and accurate guidance and feedback” [3], thus achieving breakthroughs in teaching priorities and promoting the achievement of learning objectives.

3). The effectiveness of teaching has been enhanced.

The main purpose of building a class is to apply it. Through the “comparative” evaluation and reform, the network class and the entity class are linked together to create a teaching platform with dual classes, which expands the time and space for curriculum learning. With the help of information technology, teachers conduct on-line and off-line guidance and supervision before, during and after class, and give full play to the role of intelligent supervision, which reflects the learning results dynamically, so as to promote learners' individual action and interaction, and actively participate in the whole process of learning by writing middle school and reviewing, thus greatly improving the utilization rate of curriculum resources. The digital teaching platform of the college shows that the five main lecturers of practical writing are among the top 6 active teachers in information teaching. The student course has a hit rate of more than 1.7 million. In addition, the online survey data of 287 students showed that the participation of the “contrast” evaluation was over 90%. This has changed the difficult, less moving, unmoving situation and the phenomenon that the learning process is difficult to monitor, which students used to listen to, not write, write, comment, and change. It also better solves the problem that current high vocational students love to play games. At the same time, the dual-class integration platform is conducive to personalized learning. Students can not only learn synchronously according to the teaching plan, but also carry out fragmentary learning and repeated tutoring according to their personal situation until they master it. In addition, the use of language knowledge in the assessment and correction, to master writing skills. Extensive interactive communication and achievement sharing, and training of communication, coordination and cooperation capabilities are conducive to exploring the humanistic connotation in practical writing, helping students to acquire humanistic quality and improving comprehensive quality.

In short, based on information technology, the use of “comparative” evaluation and reform of the teaching mode has always highlighted students' dominant position. It has changed the traditional situation that teachers dominate the classroom, students are passively taught and the final evaluation method of “one final decision”. The teacher's role has changed from the speaker to the designer of teaching resources, the organizer, guide and evaluator of teaching activities. Teaching activities reflect the organic connection between autonomous learning before class and cooperative learning in class. Learning evaluation embodies the organic combination of formative assessment and summative assessment. At the same time, the data presentation function of Superstar Learning Automatically Feedback learning process and learning results will also enable students to be prompted and prompted at any time, and promote students to enhance their initiative, consciousness and sense of responsibility in learning in the main position. It is conducive for students to actively seek, carry out in-depth learning, cultivate skills and communication skills in the process of hands-on speaking, and promote the further improvement of comprehensive quality.

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References

