

Promoting the integration of internet and seminar teaching

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Abstract

With the advent of the Internet era, colleges and universities have more favorable conditions for the implementation of seminar teaching. Internet helps to enhance the attractiveness of seminar teaching, expand the resources of seminar teaching, and improve the practicality of seminar teaching. Internet technology can be applied throughout the whole process of seminar teaching, including teachers' lecturing in class, arranging the topic of seminar, students' research and discussion in group, and evaluating the effect of the seminar. However, when Internet technology is applied to seminar teaching, teachers need to avoid over-reliance on digital tools, over-catering to students' ideas, and maintaining traditional teaching thinking.

Key words: Seminar teaching; Internet; Educational informatization; Developing countries

Introduction

Seminar teaching originated from Germany in the 18th century. Gersner, a very famous scholar, first adopted seminar teaching in University of Gottingen and got good

feedback. Seminar teaching, taking students as the main body and teachers as the leading role, accomplishes the integration of research and discussion in the class (Pihlgren, 2020). The concept and characteristics of the seminar teaching mode are in line with the training requirements of

higher education, which helps students lay a solid foundation, master appropriate methods and improve their critical thinking ability. With the continuous development of economy and society, more and more attention has been paid to seminar teaching. However, there are some difficulties for the promotion of seminar teaching, such as the baldness of pure theoretical discussion which reduces the enthusiasm of students to participate in discussion, and the students' lack of knowledge which leads to ineffective discussion. With the popularization and application of the Internet, seminar teaching obtains a great opportunity for development. University teachers should change their teaching ideas according to the trend and respond to the trend in their education mode (Mamula et al., 2016), promote the high-level integration of seminar teaching and Internet technology, and rationally use the Internet to enhance the affinity and pertinence of seminar teaching. However, there is few study on promoting the integration of Internet and seminar teaching in developing countries, and the relevant concepts and understandings have not been systematized. This paper expounds the connectivity logic, the process view and the erroneous zone of promoting the integration of Internet and seminar teaching. It not only has important practical significance to promote the effective promotion of seminar teaching, achieve the high-level match of the Internet and seminar teaching and promote the transformation and upgrading of seminar teaching, but also enriches the research in the field of seminar teaching.

The connectivity logic of promoting the integration of Internet and seminar teaching

Internet helps to enhance the attractiveness of seminar teaching

It has always been an important direction of teaching reform that how to arouse students' enthusiasm and initiative in class. The mobile Internet breaks the space-time limit and enables people to interact, share and communicate in time (Goldfarb, 2006). Integrating the Internet into seminar teaching can solve the disadvantages of the traditional teaching mode and inject new vitality into the seminar teaching. In particular, the diversified and flexible forms greatly enhance the entertainment and attraction of the seminar teaching. The use of modern information technology can organically combine the professional seminar class with the social class, which enhances the sense of contemporaneity, frontier, diversity and scene of the seminar content. If the medium that contemporary college students more familiar with is actively applied to the teaching with discussion, teachers and students will interaction more convenient and efficient. This not only helps to strengthen the relationship between teachers and students, but also provides the output of the teaching content with more interesting and lively path. Meanwhile, this way stays close to students' life, thus stimulating the students' interests. In addition, with the support of Internet technology, students can retrieve a large number of

professional contents, which provides a convenient channel for students to participate in the seminar class and gives students more rights and space to choose. Students can choose the knowledge points that they are interested in as the research object, so that learning and individual development can be more matched.

Internet helps expand the resources of seminar teaching

The Internet has expanded the way for human to obtain the latest knowledge, broken the physical barriers of high-quality education resources, and promoted the dissemination of high-quality education resources (Sokół et al., 2015). Teachers with rich knowledge, as the initiator of knowledge, can fully prepare for teaching in the traditional classroom teaching. But students, limited by their knowledge, need to refer to a lot of books, magazines and other paper-printing medium. In this process, students need to spend a long time in acquiring knowledge and it takes a lot of efforts to prepare for a seminar teaching course. With the advent of the Internet era, all the professional cutting-edge knowledge becomes readily available, which not only improves the efficiency of students' search for knowledge, but also increases the total amount of information they can obtain (Tawil et al., 2013). From another perspective, the use of internet technology in the seminar class is necessary because college education quality is uneven. It is an unlikely thing to make the development of the colleges balanced in a short period of time. Fortunately, the application of the internet provides students in inferior colleges opportunities to access to high quality resources in the seminar teaching.

Internet helps to improve the practicability of seminar teaching

Internet also helps to enhance the practicality of seminar courses and promote the close combination of theory and practice. In the traditional seminar class, teachers and students discuss, research, share and exchange theories related to professional course content. The discussion only stays in the theoretical level, which enriches students' theoretical basis, but can't cultivate students' practical application ability. Nowadays, the traditional seminar teaching mode has gone away from the track of ages and is not suitable for contemporary needs in developing countries. Therefore, higher education must gradually change from the traditional seminar teaching mode to the seminar learning which emphasizes both theory and practice. The Internet provides platform support for the reform of the seminar teaching mode. For some practical subjects, universities can use 3D network teaching, virtual reality, 5G and IoT, and other methods to improve the effect of seminar teaching (Bai & Zhang, 2020). Some colleges and universities have added the use of professional practical simulation software into the seminar courses of e-commerce and logistics majors. In the virtual network, students could simulate real practice and

application and get practical experience, which helps students to develop the method and ability to solve practical problems. More and more colleges and universities actively introduce Internet tools and construct virtual simulation laboratory to improve the overall education level, which is an irreversible trend.

The process view of promoting the integration of Internet and seminar teaching

Teachers' lecturing in class

Review of last lesson: The review is the consolidation of last discussion, because students are different and they have varying degrees of self-digestion ability. Therefore, it is an indispensable task for teachers to lead students to review before the seminar. The teacher can also guide the students through the Internet to make the content of the last discussion into a mind map, PPT and so on, so as to consolidate knowledge that they have learnt.

Introduction of new lessons: Before the professional seminar course, the teacher should impart the theoretical knowledge of the new chapter to the students, so as to make sufficient knowledge reserve for the following seminar. With the support of Internet technology, teachers can explain the relevant knowledge to students through PPT presentation, video play, software simulation, remote docking and other diversified ways. Diversified teaching methods not only broaden students' horizon, but also increase the entertaining of the class. Related research conducted at the University of Thailand has shown that internet-based applications make teaching more convenient for teachers (Kalra, 2017).

Learning textbook: In view of the large individual differences among students, teachers cannot take care of every student in a short class, and it is difficult to fully meet the needs of all students. Therefore, students can supplement and further think about the knowledge content taught by teachers through MOOC and other knowledge platforms. Students can explore the direction they want to further explore and research, which will serve as the perspective for sharing and discussion in the following seminars.

Arranging the topic of seminar

The topic has a vital role in the seminar. A high-level and meaningful topic will help students master the content, help teachers achieve their teaching objectives, and contribute to the overall effectiveness of the workshop. The setting of the research topic should adhere to the basic principle and methodology of problem orientation. What is a problem? Problem is the contradiction of things. The seminar topic starts from a certain problem, and guides students to think and discuss why contradictions arise and how to solve them. The general direction of the topic is released to the students by the teacher, and the students can choose the specific

perspective according to their own interests. In general, the thesis should reflect the teaching content of the class and be closely related to the theory of the teaching materials. It can be a hot issue in the current field of the major, or it can be a question that students encounter in the process of learning. In addition, the topic should be chosen as the following principles. First, the principle of theory. In higher education, professional seminar teaching is different from the teaching mode of cramming in which the teacher inculcates the theoretical knowledge in the middle school. Any subject needs theoretical tools, and students should learn to use theories to solve related problems in the field. Therefore, when setting the topic, we should follow the principle of theory and closely relate to the textbook theory. Second, the principle of openness. The thesis should be controversial and can be discussed and analyzed in different ways. An uncontroversial thesis is obviously meaningless. Open topics help students to think outside the classroom and explore freely. The purpose of the seminar is to encourage students to express their own ideas and opinions as long as they are reasonable and logical. If the topic has a fairly mature theoretical explanation, then students' thinking will be bound by the existing views, thus it is unable to reflect the effect and original intention of seminar teaching. Third, the principle of slope. Topics should be made up of progressive problems from easy to difficult. On the one hand, when students first enter the university campus, they cannot adapt to the new seminar teaching at once, so they need to adapt to simple topics slowly. On the other hand, students vary greatly and teachers should take students with different foundation and ability levels into account.

Students' research and discussion in groups

Task assignment: Students form their own groups of 4 to 6 members, or teachers divide the seminar groups. Teams should be formed according to the characteristics and abilities of different students, so as to help students take advantages in the group and make the overall the group complementary. After each group receives the topic of seminar, the group leader organizes the division of tasks, and the group members should cooperate to complete the task. In the past, the team leader needed to choose a suitable time and place to convene the team members to discuss the assignment of tasks. Nowadays, the Internet makes it easy to get everyone together and assign tasks. The Internet breaks the limitation of time and space and facilitates the assignment of tasks and communication among team members anytime and anywhere, which not only improves the efficiency of the assignment of research tasks, but also ensures the fairness of the assignment process. For example, well-known messaging software such as Wechat and QQ have developed small programs similar to lottery to randomly assign serial numbers to ensure fairness and justice and avoid friction and conflict caused by artificial task assignment.

Data retrieval: After the task assignment is completed, each team member focuses on the content of their task. They can log on the professional website to search for relevant cutting-edge materials. They can also log on the digital library to find digital materials purchased by the school and watch teaching videos recorded by teachers of other schools. In the pre-Internet era, students had limited access to information and had to rely on printed books and magazines already available in the library. This way of relying on paper media to retrieve data not only takes a long time, but also limits the access of acquiring knowledge. More importantly, the paper media data cannot be updated in real time as the network media data. The Internet improves the efficiency of data inquiry (Rolando et al., 2013). After the data search is completed, the team members can continue to carry out real-time communication with each other through the communication software mentioned above, and carry out discussion and integration to form complete findings and conclusions.

Oral presentation: The formal initiation of the seminar is usually carried out in the form of a presentation. Each group may elect one or more panelists to share on stage. PPT can be used to show the group results, so that students could more easily understand the content and focus of the presentation. Relying on video playback for the auxiliary verification of the research results reduces the dullness of sharing of pure text and increases the interest of the research process. With the help of the Internet, the seminar results can be live broadcast and video recording, sharing links to students' parents and the public and collecting messages, comments and suggestions. Meanwhile, students can interact with parents and other viewers for real-time interaction, so that parents and other viewers can timely understand the students' learning reality, and even invite them to participate in the seminar. The Internet is a powerful power to reform the traditional seminal teaching model. It is not only an effective tool for the presentation of seminar teaching results, but also an important driving force to break regional restrictions and promote the realization of diversified development of seminar teaching results.

Evaluating the effect of the seminar

The traditional evaluation method is that the students who report the results of the group present the results on the platform, and the students listen to the results and mark the results on the test sheet. There is a defect in this method that students always do not score too low due to their affection, which leads to the loss of fairness in the evaluation results and fails to correctly reflect the levels of each group. In small class seminar, students should not only evaluate the mastery of content knowledge, but also evaluate the effectiveness of students' use of knowledge. More process evaluation and performance evaluation should be used to improve teaching and learning. In the Internet era, information technology can be introduced into the traditional assessment mode to evaluate the effect of research, such

as making online assessment web pages for students to enter anonymous rating and evaluation through links. In this way, there is no restriction on time and site for students to score and make comments (Cui & Wang, 2017). Thus, the evaluation in a very private way can fully reflect the feelings of students and the level of the presentation. In order to ensure the objectivity and fairness of the evaluation, we should choose diversified evaluation methods. One is mutual evaluation among members of the group. Each seminar presentation is a collaborative effort among team members, but the effort and contribution that each student puts into the preparation process varies. To reveal the work done by each member, there needs to be mutual evaluation among team members to show the differentiated contributions of team members. The second is the comments of the students outside the group. The group presents their research results to the students outside the group and shares their discussion with the students outside the group. This is a two-way communication process, breaking the traditional one-way knowledge indoctrination. The evaluation by the students outside the group is not only a measure of the performance of the group, but also the performance of their own participation and thinking. The third is the teachers' comments. Students' discussion around a topic is a kind of divergent thinking, and the teacher plays the role of "helmsman" in this process. When students' thinking yaw occurs, the teacher will pull them back to the correct channel in time. Teacher's assessment is essential and authoritative. The information method helps to store all the review results for teachers and students to consult and use at any time.

The erroneous zone of promoting the integration of Internet and seminar teaching

Avoid over-reliance on digital tools

Teaching tools serve teaching content. Before the seminar course is carried out, teachers should focus on the teaching content. On the basis of grasping the syllabus accurately, teachers should try to explain texts vividly and effectively under the condition of mastering the professional characteristics and students' differences, so as to lay a solid theoretical foundation for students. In the process of seminar, teachers should fully play the role of "helmsman", including strengthening the practicability and application of seminar teaching, stabilizing the general direction of the seminar topic, and promoting students to conduct in-depth discussion on the content of professional knowledge and to explore the frontier issues in the professional field. When the content of the seminar is obscure and boring, the Internet can be used as an auxiliary tool to adjust the atmosphere of the seminar, expand the cutting-edge knowledge, and help the seminar class to proceed smoothly and achieve significant results. The emergence of the Internet makes communication faster, more efficient and more convenient, and plays an irreplaceable role in teachers' teaching and students' learning. However, some universities put the cart

before the cart when it comes to seminar teaching, that is, teachers rely too much on digital tools (Hobson et al., 2011), believing that the frequent use of these technologies in seminar process is the key to the quality of seminar class. In fact, this is not the case. No matter what the subject is, the field of expertise is the most fundamental. It is the topic and content of the seminar that should be the core measure of the seminar course. It is a deviation that emphasizing the use of digital tools in the course of the seminar too much and put little attention to the professional content. It is the basic methodology the seminar must adhere to that teachers should place the primary focus on the professional content. Seminar teaching in higher education must guide students through the charm of professional knowledge and theory. Research and discussion without theoretical foundation is ineffective. Even though the seminar process is liveliness and bustle, and students' participation is high, it cannot bring more knowledge to students, which is contrary to the original intention of carrying out a good seminar course. Therefore, colleges and universities should always keep in mind that the course forms and teaching methods are auxiliary tools for teaching and teachers ought to grasp the frontier development of the professional field and avoid over-reliance on digital tools in the process of developing the seminar teaching course.

Avoid over-catering to students' ideas

As for the integration of Internet and seminar teaching, we insist on taking students as the main body, encourage two-way interaction between teachers and students, and advocate teachers to follow individual differences and teach students according to their abilities. These concepts all pay attention to students' reaction and role in the seminar. But we should realize that the teacher is the leader of the whole process, grasp the general direction of the seminar topic. And students should become a powerful driver of the seminar. The roles of teachers and students are different and indispensable. The dominant position of teachers should be guaranteed, the subjectivity of students should be brought into play, and the whole seminar class should strike out on the right course. Being student-centered is not the same as letting the student take over, letting the student decide and control. In the process of seminar teaching, teachers should selectively affirm students' opinions and objectively comment on their opinions. They should not blindly cater to students' ideas. Otherwise, it would be impossible to distinguish the wrong statements in the seminar and would cause great interference to the progress of seminar class resulting in weakening the overall teaching effect of seminar course. In fact, the main line and direction of class content occupy a very important position. If teachers blindly cater to students, it is easy to fall into the low-level trap. On the one hand, teachers should have a high level of professional knowledge. On the other hand, teachers should grasp the general direction of the topic and content under the premise of ensuring students' free discussion. In the seminar class, the communication between students and

teachers is two-way feedback. Students can convey their understanding and thinking to teachers. The addition of Internet tools enhances the openness and freedom of the seminar class. However, due to the limited level of students, their opinions are always not comprehensive and proper. Therefore, the teacher, as the leader of the seminar class, needs to pay attention to avoiding over-catering to the students' ideas.

Avoid maintaining traditional teaching thinking

Introducing the Internet into the seminar teaching class in universities means that the way of thinking of the seminar teaching needs to be reformed accordingly. Teachers must reshape a new thinking rather than partially adjusting their way of thinking. Teachers should well understand the core and essence of the Integration of Internet and Seminar Teaching, and constantly upgrade the thinking of seminar teaching. Although the Internet has entered the seminar class in some universities, the teaching staff has not fully adapted to the changes in the teaching environment. Their traditional thinking of seminar teaching is solidified and cannot match the seminar class in the Internet era. As a result, the Internet does not bring new breakthroughs to the seminar classroom, but also causes some problems to the teaching process. Finally, the application of information tools in the seminar course is only formalism; it is difficult to achieve the desired effect. The old ideas and thinking patterns often define the behavioral boundaries of teachers in a subtle way. In order to better promote the reform of teaching thinking, colleges and universities should take the concept of ecosystem as the guide, strengthen the construction of teaching information culture, promote the coordination of information technology culture and teaching culture, and promote the process of deep integration of seminar teaching thinking and Internet.

Conclusion

In terms of teaching and personnel training, developing countries still lag behind developed countries. With the continuous improvement of information infrastructure in developing countries, information communication technology represented by the Internet will play an important positive role in the development of teaching in developing countries. This paper focuses on why and how to promote the integration of the Internet and seminar teaching in developing countries. It is obvious that Internet helps to enhance the attractiveness of seminar teaching, expand the resources of seminar teaching, and improve the practicality of seminar teaching. Besides, Internet technology can be applied throughout the whole process of seminar teaching, including teachers' lecturing in class, arranging the topic of seminar, students' research and discussion in group, and evaluating the effect of the seminar. However, when Internet technology is applied to seminar teaching, teachers need to avoid over-reliance on digital tools, over-catering to students' ideas, and maintaining traditional teaching thinking.

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