

## **SPOC Path Research on Improving Teachers' Information Literacy in Private Colleges and Universities**

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**Abstract:** SPOC (Small Private Online Course) is an optimization and extension of MOOC as well as a hybrid teaching mode that integrates traditional classroom and Online resources. However, the improvement of information literacy of teachers in private colleges and universities is the current requirement of educational informatization. This paper expounds the connotation of information literacy of teachers in private colleges and universities under SPOC, and discusses the cultivation strategies of information literacy from five aspects, so as to provide references for the cultivation of information literacy of teachers in private colleges and universities.

### **1. The origin and connotation of SPOC.**

MOOCs (Mass Open Online courses) have created a free and fair access to quality educational resources for the public, but they also face many challenges. In this context, Armando Fox, a professor at the university of California, Berkeley, proposed the concept of SPOC, aiming to mix the advantageous resources of MOOC with traditional classroom teaching, transform the teaching mode, improve the teaching quality and enrich the teaching content.

SPOC (Small Private Online Course) is a mixture of Online resources and traditional classes, which effectively makes up for the shortcomings of MOOCs and reforms the current teaching mode that relies solely on Online courses or traditional classes. SPOC has obvious advantages. It can share high-quality resources, help teachers and students to realize smooth online communication, meet the personalized learning demands of learners<sup>[1]</sup>, effectively change the teaching mode, and meet the expectations of modern society for the modernization of education.

### **2. Information literacy connotation of teachers in private colleges and universities under SPOC.**

The connotation of teachers' information literacy basically includes information consciousness, information knowledge, information ability and information morality. With the popularity and popularity of SPOC, the connotation of information literacy of teachers in private colleges and universities has changed in the following aspects mainly:

#### **2.1 Keen information awareness.**

Information consciousness is manifested as people's information sensitivity, observation and ability to judge and analyze information around them. The emergence of SPOC shows that it is urgent to promote the reform of teaching mode by using the network platform and combining with the traditional classroom. Teachers in private colleges and universities should fully realize the importance of network information and online platform for the development of modern teaching, establish the awareness of keeping pace with the times and taking the lead in science and technology, be good at capturing the trend of college teaching and development frontier information under the condition of modern educational technology, and on this basis, make ideological preparations for the reform of teaching mode.

## **2.2 Rich information and knowledge reserve.**

Information knowledge refers to the theories, knowledge and methods that related to information, which includes both information theoretical knowledge and modern information technology knowledge. In SPOC as a platform for various types of college teaching, private college teachers are more responsible for the collection of Internet information, the design and production of multimedia courseware, and play roles as network learning regulators and evaluators. Knowledge and digestion of information technology and SPOC related knowledge is the premise for private college teachers to effectively carry out "online" and "offline" learning activities, as well as the guarantee for SPOC platform construction.

## **2.3 Strong information ability.**

Information ability refers to the ability to acquire, internalize and utilize information technology on the basis of information knowledge. Information capabilities can be subdivided into the following seven types: acquisition, evaluation, processing, management, integration, communication and research capabilities <sup>[2]</sup>. Information knowledge is the foundation of information literacy, and information ability is the core of information literacy. As a platform for information dissemination, SPOC requires teachers in private colleges and universities to make and fill materials, process and release information, and evaluate and feedback learning effects. Private college teachers should not only master the basic Office software, but also be familiar with the design and development of MOOCs, micro courses, online courses and other new teaching models.

## **2.4 Ability to combine information technology with teaching in various universities.**

In the era of "Internet plus", to deepen the reform of higher education and teaching, teachers in private colleges and universities are required to have the ability to integrate information technology and teaching. The cultivation of information consciousness, the reserve of information knowledge and the promotion of information ability serve for the teaching of colleges and universities. Run by the local college teachers should be familiar with SPOC theory and technology foundation, it's necessary for them to collect the multimedia data, according to the teaching goal, teaching requirements and teaching contents use modern education technology, and pay attention to the characteristics of the students to design teaching procedures, teaching courseware, then released in SPOC platform, organize teaching activities and implement evaluation feedback after class, realize seamless network curriculum and teaching.

## **2.5 High information ethics.**

Information ethics refers to the moral standards that teachers in private colleges and universities should follow in the process of collecting, processing, using and disseminating information. The Internet is the source of SPOC information and media. However, the quality of Internet resources is uneven. As receivers, processors and disseminators of information and teachers in private colleges and universities should establish information technology ethics and network moral consciousness, spread positive and positive information, and promote the healthy development of society and students.

## **3. SPOC environment of private college teachers information literacy training strategy.**

### **3.1 Renew the concept and cultivate the awareness of information literacy of teachers in private colleges and universities.**

Information literacy awareness is the premise and foundation of improving information literacy ability. The improvement of information literacy mainly depends on the conscious, purposeful and active perception and capture of peripheral information by individuals. In the information age, private college teachers should recognize the emergence of SPOC platform, which is an important embodiment of teaching reform. Teachers in private colleges and universities should have basic cognition of information sources, information itself, information transmission ways and means,

information transmission effect and teachers' role playing in information transmission, and have the awareness of collecting, processing, processing and spreading information on the basis of information ethics.

Teachers in private colleges and universities should transfer information consciousness to classroom teaching actively and consciously. SPOC requires teachers in private colleges and universities to break the traditional classroom teaching mode and introduce online courses into the classroom to realize the optimization of "double classroom". SPOC's platform design, production, use and subsequent evaluation are inseparable from the support of information technology means, private college teachers should have psychological expectations and actively make technical preparations.

Teachers in private colleges and universities should cultivate good information habits, consciously collect and sort out information resources such as MOOC, SPOC, blog, microblog and WeChat in daily life, and pay attention to the changes of network platform technical support means.

SPOC platform serves students. Teachers of private colleges and universities should actively cultivate students' information awareness, and train students' information ability with purpose and pertinence to ensure the smooth completion of platform tasks and orderly classroom teaching.

### **3.2 Optimize resources and strengthen the information technology application ability of teachers in private colleges and universities**

Under the background of "Internet +" era, the combination of network platform and contemporary education is based on information technology. The application ability of information technology has become one of the necessary professional abilities for teachers in private colleges and universities. The application ability of information technology can be divided into three aspects: computer, multimedia and Internet.

SPOC is a new hybrid teaching mode and an important embodiment of flipped classroom, which can help students effectively realize independent learning before class and review and reflection after class. The most important step to build SPOC platform is to screen and edit network resources through computers. Teachers in private colleges and universities must integrate online and offline resources according to students' personalized needs, and their ability to apply information technology plays an important role in the design and production of SPOC platform. Teachers in private colleges and universities should screen the Internet resources before classes and seek suitable texts, audio and micro video. However, network resources often cannot be uploaded to SPOC platform in one step for teachers and students to use, which requires private college teachers to reorganize the collected resources. In the process of information processing, private college teachers should not only master Office software, but also learn to operate other professional software: picture editing tools, audio processing tools, animation editing tools, web development tools and video editing tools.

### **3.3 Strengthen cooperation and create a private university teacher information network learning community.**

Online learning community based on teachers' professional development is to point to in web-based virtual network environment, an ordinary teachers, excellent teachers (or expert teacher), related education administrative personnel constitute the learning organization or group, they use the network learning platform for mutual communication, collaboration, or solve problems<sup>[3]</sup> are discussed.

The SPOC platform was created as a result of joint efforts. Members of the learning community collect all kinds of materials according to their needs, edit the materials, and make excellent multimedia courseware or micro-lessons. Publish the finished material with discussion topics and exercises on the SPOC platform to share resources. Members communicate and collaborate with each other, effectively improving the quality of SPOC platform information. The teaching ability and informatization level of the members of the learning community are strongly correlated, and the information literacy is improved in practice.

### **3.4 Effective training and establishment of a reasonable evaluation management model.**

SPOC platform requires teachers in private colleges and universities to comprehensively master and apply basic information technology means to meet the requirements of contemporary teaching reform mode. On-the-job training is an important way to improve the information literacy of teachers in private colleges and universities. Therefore, the training of teachers' information literacy should be carried out in different levels, ages, disciplines and stages. Schools can help teachers get familiar with and master basic theories and tools of information technology through information technology training classes, online continuing education and dispatched training, and gradually realize the goal of developing and maintaining SPOC platform for higher education.

Colleges and universities should establish a scientific incentive and management mechanism to encourage teachers to participate in information skills training, such as multimedia courseware competition and web page production competition. Schools should also take information literacy ability as an integral part of teacher assessment and establish an evaluation mechanism of network teaching.

### **3.5 Integrate resources and create a digital campus environment.**

The design and development of SPOC platform is inseparable from the improvement of "soft power" of teachers in private colleges and universities and the supporting "hardware" information technology environment of the school. At present, our school all kinds of online courses, quality courses and other construction in full swing. In view of the lack of technical level of teachers in private colleges and universities, the school should be equipped with professional and technical personnel to provide technical support for the problems encountered by teachers in the construction of various network platforms.

## **4. Conclusion.**

SPOC requires colleges and universities to combine "online" and "offline" teaching, online learning and traditional classroom, and the information literacy level of teachers in private colleges and universities is an important factor for the success of the combination. The teacher need to establish the awareness of information literacy, strengthen the information literacy ability and the teacher learning community construction, meanwhile, school should create digital campus environment for teachers, establish information literacy evaluation and incentive mechanism, as well as provide comprehensive services for teacher's information literacy development from all-round and multi-angle so as to realize the innovation of private colleges teaching mode.

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