

## **Strategies Research on Information Literacy Promotion of University Library Readers under the Background of MOOC**

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**Abstract:** MOOC brings new opportunities for the reform of information literacy education of university libraries. Information literacy education in university libraries based on MOOC can not only make up for the shortages of traditional information literacy education, but also meet the new characteristics of reader's learning needs, which is necessary and feasible. This paper gives the strategies information literacy promotion of university library readers under the background of MOOC, including launching MOOC of information literacy, implementing information literacy education embedded in MOOC and adopting MOOC form in training lecture to provide some references for the relevant researchers.

### **1. Introduction**

Information literacy is the ability of people to fully recognize when they need information, and to acquire, evaluate and effectively use the information they need [1]. At present, information literacy has become a basic skill that every citizen must master and the ability of lifelong learning. Information literacy education in China began in the late 1980s with the opening of literature retrieval courses in university libraries [2]. In recent years, with the rapid development of network technology, in the internet and big data environment, the literature retrieval course cannot meet the needs of the development of the times in terms of form and content, nor can it meet the needs of college students for the acquisition and utilization of information resources and the improvement of information literacy. With the rapid development of information technology, information literacy education of college students is facing many challenges. Information resources are unprecedentedly rich, and student's access to information is more diversified. New information resources, content and tools need to be added to information literacy education. Students are more and more interested in interactive, fragmented and cooperative learning. In traditional classroom teaching, large segments of online information literacy education videos and courseware are losing their attraction. Online information literacy teaching process is one-way, isolated and closed, lacking real-time classroom interaction, lacking of learning tracking monitoring and examination evaluation. MOOC, a massive online open course, is a platform for learners to learn independently by applying information technology to the field of education, realizing the opening and sharing of higher education resources. It brings new opportunities and challenges for the development of information literacy education. How to make full use of modern information technology to improve the information literacy of university student is an important issue in front of university libraries.

### **2. Current Situation of Information Literacy Education of University Library in China**

Information literacy education in domestic universities is mainly completed by libraries, which is inseparable from the advantages of information resources of university libraries [3]. At present, major universities mainly carry out information literacy education for college students through three ways. The first is that libraries offer relevant information literacy courses independently, which mainly teach various retrieval tools, reference books and related database retrieval of libraries. Such courses are generally non-professional general education courses. The second is to conduct user lectures,

generally about how to use library resources training, to help students grasp the basic methods and techniques of information retrieval and utilization. The most common form is freshman admission education and various lecture series. The first two models are traditional information literacy education models. In recent years, more and more university libraries are exploring the third way to carry out information literacy education, that is, to cooperate with departments, to embed information literacy education into professional courses, so that students can solve the problem of information acquisition in the process of completing professional learning to achieve the purpose of information literacy education [4]. It requires librarians to cooperate closely with professional teachers, to intervene in professional teaching activities according to actual needs, or to integrate the information resources and tools needed according to the curriculum content; or to teach the information resources distribution and information acquisition skills required by the curriculum; or to participate in the evaluation of homework. This kind of teaching mode, which does not combine with student's actual information needs, makes students not have the enthusiasm to learn and the teaching effect is not ideal. University students are weak in information awareness and information acquisition ability. In the face of professional projects, university students cannot obtain information quickly and comprehensively, and they cannot obtain the latest information in the field of disciplines to carry out research work independent.

### **3. Necessity and Feasibility of Information Literacy Education Based on MOOC**

#### **3.1 Necessity.**

In the era of MOOC, the information environment is more complex. Readers face the hyperlink pages and complex Internet sites. A large number of network communication communities, digital media. Learners need to master the ability of information analysis and synthesis, extract useful information from complex Internet environment, and filter secondary and useless information. Many students just lack the knowledge and skills in this field. Therefore, how to help students grasp the ability of information acquisition, analysis, screening and management in complex information environment has become an important duty of librarians. Information literacy education in university libraries has a history of more than thirty years. After years of accumulation, precipitation and development, the information literacy education in university libraries has made some achievements in the aspects of content theme, organization form and scale system. It has formed a relatively complete information literacy education system consisting of freshmen entering library training, database public training, subject topic training, compulsory course of document retrieval, optional course of document retrieval, etc. Nurturing education is almost a traditional teaching method based on face-to-face knowledge imparting in entity classroom. There are many shortcomings, such as too small audience, limited coverage of teaching content, insufficient teaching hours, lack of teaching teachers, insufficient communication between handsome students after class, and so on. With the prevalence of multi-campus running and the increase of enrollment, these shortcomings of traditional information literacy education in university libraries have become increasingly prominent. As a new mode of knowledge dissemination and learning, MOOC can effectively remedy the shortcomings of traditional information literacy education in University libraries, and provide new ideas and practices for the innovation of information literacy education in University libraries, so as to improve and enrich the current information literacy education system in university libraries.

#### **3.2 Feasibility.**

Under the current open network environment, with the acceleration of learning and life rhythm and the popularization of mobile devices and social media, the learning needs of reader's information literacy education gradually show the characteristics of online, fragmented, social and mobile. The traditional information literacy education mode of university library cannot meet the new characteristics of readers' learning needs. MOOC is a massive open online course, which has the characteristics of large-scale, open, interactive and modular. These characteristics coincide with the

new features of online, fragmented and socialized learning needs of readers under the open network environment. Students can learn MOOC courses from mobile devices anytime and anywhere by downloading and logging on the client of the MOOC platform. From the process of information literacy education in Colleges and universities, it can be seen that students take information literacy courses in a wide range of grades, and students of different grades have different needs for information. Teacher's general teaching ultimately results in that the content of teaching is not what students need in the current situation of learning and scientific research, and does not conform to the original law of learning. Traditional information literacy training in universities has limited coverage and unsatisfactory teaching effect. On the contrary, MOOC teaching generally takes less than thirty minutes, which is not suitable for basic education and professional curriculum education in higher education, but its characteristics are very suitable for the teaching of information literacy. Using this feature can even change the boring and single teaching mode of traditional information literacy education, in which teachers make syllabus, students choose courses and teach according to the traditional curriculum structure. Students can first master basic knowledge through MOOC teaching in a short time, and then carry out practical operation and application exercises under the guidance of teachers. This not only realizes the reversal of classroom teaching, but also conforms to the student's learning rules and improves the teaching effect.

#### **4. Strategies of Information Literacy Promotion under the Background of MOOC**

##### **4.1 Launch MOOC of Information Literacy.**

Launching MOOC course of information literacy can make full use of the scale of MOOC, so that learners in a wider range can enjoy high-quality teaching resources, and cultivate and improve learner's information literacy ability. In practice, teachers or librarians can offer information literacy education courses on the existing MOOC platform. On MOOC platform, there are high-quality and abundant information literacy courses. According to the actual situation of the university, colleges and universities can choose appropriate courses and cooperate with them, directly use the high-quality resources provided by famous universities to enjoy crowdsourcing services and carry out information literacy education. In this way, students can enjoy high-quality educational resources, save teacher's manpower, improve teaching methods, and help the transformation and development of teaching. At present, many colleges and universities have cooperated with MOOC course of information literacy to make use of crowdsourcing service of information literacy education. Flip classroom refers to a new teaching mode area in which curriculum teachers provide learning resources in the form of teaching videos, students watch and learn learning resources such as teaching videos before class, and handsome students complete homework answering, collaborative inquiry and interactive communication activities together in the classroom. In recent years, the flip classroom has developed rapidly, and it has become a teaching mode of universal concern in the global educational circles. With the rise of MOOC, a large number of high-quality and abundant resources and platforms provide resources and technical support for the flipped classroom, while the flipped classroom overcomes the shortcomings of MOOC such as lack of face-to-face communication and teamwork, and realizes the organic combination of virtual teaching and classroom on-site teaching. It is also MOOC and information literacy education to carry out information literacy education by using the new teaching mode of flipped classroom. The most typical way of combining education with education. Librarians can analyze and master student's behavior of learning and using information, and give timely feedback to teachers to improve teaching content and teaching links.

##### **4.2 Implement Information Literacy Education embedded in MOOC.**

At present, MOOC resources are various, and learners come from different countries and regions around the world. The learner's information utilization ability is also uneven. MOOC is an online autonomous learning process, learners need to understand and access information and resources related to the curriculum, and they need to have the ability to search and evaluate information. The

learner's information literacy ability plays an important role in the learning process of MOOC. Embedding information literacy education into MOOC can help learners improve their ability to use information and learn better. MOOC, to a certain extent, reduces the high rate of dropout of MOOC and improves the participation of learners. Librarians have rich experience in information literacy education, and are familiar with the basic knowledge and skills of information discovery, utilization and evaluation, so they can play a role in it. University librarians should actively participate in the teaching and promotion of MOOC student's information literacy skills. Librarians can start from a small place by providing MOOC designers with existing library courses on Library webpages, providing self-evaluation tools for information literacy skills, and creating online information literacy guides. Librarians can also develop information literacy modules as plug-ins, which can be self-controlled, replicable and extensible, such as audio, reading materials or mini-videos. In this way, MOOC teachers can be embedded in their curriculum. On the other hand, librarians can browse the posts posted by students in the discussion area to find out the problems existing in the information search, utilization and evaluation of students, and leave messages on the posts to provide help and guidance, similar to an embedded service. Due to time and energy constraints, this service is more suitable for small localized MOOC.

### **4.3 Adopt MOOC Form in Training Lecture.**

At present, university libraries carry out regular or irregular training lectures for undergraduates and postgraduates, covering information retrieval and utilization, library resources and services, information awareness, information ethics and information tools, aiming at cultivating and improving information literacy ability. The reader training lectures of university libraries can also draw lessons from MOOC. Librarians try to divide the lecture topics into five-minute video modules according to their knowledge points, and insert some quizzes or questions after each module has been taught. According to the interactive feedback system. We can also use the online test system of questionnaire stars. Teachers input the test questionnaire well in advance. Students only need to scan the two-dimensional code with their mobile phones in class to carry out the test. The university integrates freshmen's library entry education, information literacy education courses, database practice courses, library lectures and graduation design guidance lectures into the teaching content of information literacy education, adopting the mode of combination of online and offline. At the same time, we should understand the needs of students, develop curriculum navigation centered on students, combine different information literacy courses with professional courses through the Internet, and make different individualized supporting courses according to student's different subject backgrounds, experience levels and knowledge reserves. The diversification of practical courses in universities will enrich the contents of the courses, facilitate student's individualized learning, and provide a broader learning space for information literacy education. With such a system, teachers can quickly collect student's feedback in class, which can not only stimulate students' interest in learning, but also diagnose student's learning effect, facilitate teachers to carry out targeted teaching, achieve real-time interaction, and improve the training effect of lectures in an all-round way. The lecture guides students to think about how to use information resources to solve learning problems, and demonstrates professional information resources acquisition methods by video. At the end of the lecture, librarians test the effect of information literacy education by evaluating assignments and tests, and apply the results to the new learning stage.

## **5. Conclusion**

As an important information resource institution, university library in China has been playing an important role in improving information literacy of students. The development of MOOC is like a double-edged sword. It may lead to the marketization of information resources, thus weakening the information center status of library. But it also provides a new perspective for the further development of university libraries and the reform of information literacy education. In this context, domestic university libraries should actively use the MOOC model to inject new vitality into the

development of information literacy education.

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