

Integration Mechanism of Information Literacy Education and Professional Course Teaching in Higher Vocational Education

Lingxia Chen, Xifeng Liao

Hunan College of Information, Changsha Hunan 410200, China

ABSTRACT. *Information literacy, as a necessary condition for lifelong learning and knowledge innovation, has become the focus of attention in the educational circles. This paper explores the design, implementation, assessment and analysis of information literacy and professional curriculum integration, and puts forward suggestions for improvement and future research directions.*

KEYWORDS: *Higher vocational education; Information literacy education; Professional course teaching; Integration mechanism*

1. Introduction

In 1989, the Presidential Committee on Information Literacy of the United States defined information literacy as follows: "To be information literate, one must be able to recognize when information is needed and to be able to effectively discover, evaluate and utilize the information required." The new round of education reform in our country pays attention to cultivating people with critical thinking ability and innovative ability. It is necessary to actively incorporate the cultivation of information literacy into the education system. Integrating information literacy education into the teaching of professional courses can cultivate students' professional information literacy ability. Especially in Colleges and universities, it is necessary for students to understand the characteristics of the major information sources and related information sources, to select appropriate information sources according to their needs, to grasp the retrieval methods and skills of professional information sources, to be good at evaluating and screening professional information, to analyze and utilize professional information, so as to solve the professional problems of disciplines and improve their academic research and innovation ability in the future. Higher vocational colleges train high-level skilled application talents who are oriented to production, construction, management and service, can engage in technology development and application, and have strong practical ability, innovative consciousness and innovative ability. Therefore, in order to train higher vocational students to meet the requirements of the information age, we must innovate the teaching mode and promote the integration of information

literacy education and professional curriculum teaching content (hereinafter referred to as “integration of the two”).

2. “Integration of the Two” is the Requirement of the Information Age

At present, most foreign scholars believe that information literacy education should be combined with professional courses in order to achieve the desired results. According to the definition of the American Association of University and Research Libraries (ACRL), the integrated teaching of professional courses refers to the use of libraries and their resources as an integral part of the professional curriculum objectives. Its basic requirement is to teach professional content and to cultivate the ability to accomplish library-related tasks, and to test the learning results of both aspects. Information literacy education combined with professional curriculum arrangement can not only use information skills to help students better grasp professional knowledge and improve self-learning ability, but also enable students to subtly grasp information retrieval, processing, utilization and communication skills, so this is a “win-win” activity. In the cultivation of vocational students' information ability, we should integrate information literacy with the teaching content of professional courses. They are intertwined and integrated. We should implement the goal of information literacy education in professional teaching, make full use of modern information technology, and cultivate students' ability to use information to solve practical problems and innovative spirit.

Since the day of its emergence, libraries have been shouldering the functions of safeguarding social information fairness and guaranteeing readers' freedom of access to information. Serving readers is the main line throughout the development of libraries. It is the requirement of the public for information sharing, an important condition for guaranteeing the spread of human civilization and the core values of libraries. In February 2002, the Ministry of Education promulgated Article 3 of the General Provisions for Library Regulations of Universities and Colleges (Amendment). It clearly stipulates that one of the five main tasks of University Libraries at present is to “carry out information literacy education, cultivate readers' information awareness and ability to acquire and utilize literature and information”. This is the first time that our country has made clear regulations on Information Literacy Education for college students in government documents. Therefore, librarians must undertake the educational task of cultivating students' information literacy, and formulate training and education strategies according to the growing dependence of society on information literacy skills. As the document information center and academic institution serving teaching and scientific research, the duty of the library of higher vocational colleges can not be limited to the passive and single form of providing information service only for other departments. It must realize active expansion and extend its scope of work to the field of teaching and scientific research[1].

3. Feasibility Analysis of “Integration of the Two”

3.1 Higher Vocational College Library Provides Conditions for Integration

Higher vocational college libraries are information acquisition centers for college students. They have the advantages of information resources, information professionals and technology and equipment to acquire and utilize information. These unique conditions determine the uniqueness, diversity and richness of information literacy education in libraries, and determine that higher vocational college libraries are the best place to cultivate information literacy of Higher Vocational students. It is the basic requirement for higher vocational students in the information age to cultivate and improve their information literacy so as to enable them to have the ability of digital learning and the survival ability of the information society, to cultivate their autonomy and initiative in obtaining information, and to make them fully understand the service mode, content and purpose of the library. On the one hand, the library of higher vocational colleges is an important place for college students to study and study, and also an important window for the construction of spiritual civilization. The library provides readers with a good learning environment. Through reading guidance, reader consultation and other forms, it can imperceptibly guide students to grow up healthily. College students can not only learn professional knowledge, but also understand current affairs, news and other subjects. On the other hand, libraries of higher vocational colleges can educate college students in the use of information resources, including literature retrieval course teaching and various forms of literature (such as database) use lectures. As an information provider, libraries can study effective solutions to the specific needs of readers, create a personalized information environment for readers, make full use of the service capabilities provided by various information resources institutions, design personalized information service modules and system functions for specific readers, and constantly provide brand-new information content according to the changing needs of readers. At the same time, libraries can use network technology to screen, integrate information resources and provide useful information to readers, provide teachers and students with network information navigation services, digital information consulting services and so on, thus forming a new service form of “information finding people”.

3.2 The Contents of Professional Courses in Higher Vocational Colleges Have Information Literacy Components

At present, although most higher vocational colleges set up compulsory courses such as “Computer Basis” and “Information Technology” in the first grade of university, they pay more attention to the basic ability of information technology, including the use of network tools and other software, such as E-mail, web browser, search engine, etc. They do not offer professional information literacy courses, that is, to cultivate the specialized information literacy ability of Higher Vocational Students Based on disciplines. Strength, including understanding the scope, type and

common sources of information in this subject, and making effective evaluation and judgment, can complete academic papers, graduation design and graduation thesis writing. However, through the analysis of the current curriculum standards in China, we can see that there are some contents closely related to information literacy, including students' education in knowledge, skills, emotions, morality and consciousness[2].

4. Information Literacy Training Model of Professional Courses in Higher Vocational Colleges

4.1 Creating Situations

Teachers use multimedia technology and network technology to collect some materials related to food storage and processing, such as “investigating a local way of storing large quantities of fruits, consulting information online to analyze the impact of this way on the nutritional value of fruits”, in order to design learning situations, using problem situations to stimulate students to understand and learn the enthusiasm of food storage and processing, and can be in librarians. Under the guidance of the network to achieve the goal of autonomous learning[3].

4.2 Task Driven

After arousing students' interest in learning through the situation, put forward the task of learning to the students. Teacher-student cooperation (student-centered) raises the central question of the topic, such as what is food nutrition? How does food storage and processing affect the nutritional value of food? Can you list the problems in food storage and processing[4]?

4.3 Independent Exploration and Online Collaboration

After defining the learning goal, the students go to the library with questions and search independently through the network. While exploring independently through human-computer cooperation, students can carry out various forms of collaborative learning through the network, such as the collaboration between students and students, the collaboration between students and teachers, exert their intelligence and imagination, adopt their own solutions, communicate through e-mail, real-time chat and so on, and discuss its feasibility. At this stage, librarians teach students to master some information search strategies, such as using Web browsers and retrieval tools (such as Google, Baidu, etc.), online library catalogues, magazines, newspapers and periodicals index, etc., to retrieve and obtain information from a variety of information sources. Because of the huge amount of information in the network environment, good and bad are uneven, so at this stage, teachers, students and librarians must undergo full evaluation, exchange and cooperation in order to obtain useful information. This stage emphasizes the effectiveness and efficiency of

information acquisition[5].

4.4 Using Information to Summarize Knowledge

Students are required to complete the summary of this topic by using the information collected about food storage and processing. This part depends on how the students use the information creatively and summarize the main points of knowledge in their own language. Teachers can give appropriate help when necessary[6].

4.5 Evaluation of Practical Courses

In evaluating students'information literacy, we should not only take the summary of students' topics as a reference, but also pay attention to the degree of students'active participation and their information literacy ability in the whole process. Librarians and teachers can collect materials for evaluating students'effective learning from different perspectives, such as the speed of acquiring information, the amount of information obtained, the ability of screening information, etc., which can be used as the main basis for evaluation. Students use topic summaries to demonstrate their information skills and evaluate the effectiveness of their learning outcomes and the efficiency of the learning process[7].

4.6 Topic Extension

Teachers set up some social realistic topics, such as requiring students to write a small paper on the social problems such as “Sanlu Milk Event” or ecological environment protection, which appeared in China in the past few years. In fact, it is a further in-depth study of the topic. This link is completed by students after class, which is an extension of after class. This stage goes beyond the traditional framework of single subject learning. According to the different cognitive level of students, it completes the curriculum objectives in the form of thematic activities, which are interesting to students in social life. It highlights the subjectivity of students and the process of participation. Through the process of solving problems with subjectivity, exploratory and creativity, students combine knowledge of multiple disciplines, knowledge of learning and experiential knowledge, in and out of class, school and society organically, so as to maximize the cultivation of students'information literacy[8].

Teaching mode is a theory of designing and organizing teaching. There is no difference between good and bad, only suitable and inappropriate. There is no stereotype in the teaching mode, which is relative and open. Different teaching modes can be adopted in different disciplines and different teaching stages, and different teaching modes can be applied in combination and carried out cross-cutting. In the information age, students become the main body of learning, but the role of

teachers can not be ignored. Teachers are instructors, helpers and participants in students' learning. Teachers' guidance and help are the key to students' efficient and autonomous learning. Only teachers with high information quality can cultivate students with high information literacy. In order to meet the needs of education in the information age, teachers should constantly learn and innovate teaching ideas and methods.

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