

Research on Improvement Mode of Vocational College Students' Information Literacy

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Abstract. Improving vocational college students' information literacy and letting students have the ability to survive and learn in information-based society have become important talent training goals of vocational colleges. This paper firstly explains the concept of information literacy, and then analyzes the problems existing in current training of vocational college students' information literacy, and finally proposes the mode of vocational college students' information literacy and explains specific means used to implement the mode.

Introduction

The current society is full of various kinds of information; according to relevant statistics, the amount of information given in New York Times in one day is equal to the sum of amount of information which one person could obtain in his or her lifetime in the 17th century. Under this environment, people can master the information they need only after they have high information literacy. The vocational college students will certainly step into the society and exert their own value, thus their information literacy will cause an important influence on the development of Chinese society. Therefore, it is required to analyze the problems occurred in current training of vocational college students' information literacy, and construct effective mode to improve students' information literacy.

Concept of information literacy

In Final Report to National Forum on Information Literacy throughout the United States of the last century, relevant experts have discussed the concept of information literacy in details: a person with high information literacy must be able to know that he or she can only depend on complete and accurate information to make correct decisions; he or she shall be able to specify information demand, determine potential information source, have the aid of computer and other information sources to obtain information, process information and evaluate information, make blending with new knowledge under original knowledge system, and then make use of information to think about and solve problems. As for vocational college students, to cultivate information literacy is to help students to establish correct concept of information, and learn how to make use of computer network to obtain information, and make use of information to serve for their life and study.

Problems existing in vocational college students' information literacy education

Firstly, the vocational college students show low learning interest in information literacy education, and many students don't listen to the teachers carefully in the classroom and have low learning desire. Therefore, to improve students' learning interest is the key to improve this problem. Currently, most of students make use of computer network only for chatting, entertainment, publishing some contents, online games or shopping, etc.; only few students can make use of network resources to carry out autonomous learning. After contacting information literacy education, most of students are aware that they can make use of internet to make learning, which shows that most of vocational college students have poor awareness of information, lack of the awareness of obtaining and utilizing information, and have weak longing for information and can't timely

discover information.

Secondly, the vocational college students have weak internalization ability of information literacy; the internalization ability of information literacy is mainly reflected at the fact that the students can digest, absorb, and convert the obtained information into their own knowledge and ability, but the vocational college students show obvious deficiencies in this aspect. For example, in the professional learning process of Basics of Computer Applications, the teachers have pointed out various kinds of channels for finding information for students, including making use of database in library, online special data, government websites, and search engine, etc.; however, in the practice of information search, when students meet some problems, the channel they firstly think of is still various kinds of search engines, and they can only make use of Baidu to search information; once they can't obtain information via this means, the students can't adopt other means to obtain information. This phenomenon also shows that the vocational college students lack of the ability to flexibly apply and search information, and they can't internalize information search skill as their own ability.

Thirdly, the vocational college students' information morality remains to be further improved. Compared with information ability and information consciousness, the students' information morality education belongs to weak link. In actual teaching, both teachers and students only pay attention to information skill and information technology, but lack of teaching activities related to information morality and information emotion, which results in a situation that Chinese vocational college students have a low level of information morality and low consciousness of information security. There exists great problems in information privacy, intellectual property, and cooperative standard for students, and some students even spread bad information. Especially under the condition of continuously developed we media, the students pay no attention to protection of personal information; they forward the microblog content at will and use pirate tool, etc.

Design for improvement mode of vocational college students' information literacy

In the end of last century, American scholars proposed a kind of systematic model aiming at improving students' information literacy, and such model was called Big6 model. This model includes 6 steps, that is, task definition, information seeking strategies, location and access, use of information, synthesis, and evaluation; this process can fully cover all ability factors involved in students' information literacy. In the author's opinion, corresponding to 6 steps in Big6, the vocational college students' information demand includes 6 ability elements, that is, ability of determination and expression of information demand, ability of information retrieval, ability of access to information, ability of use and exchange of information, ability of recombining and creating information, and ability of evaluating and processing information, as shown in Figure 1.

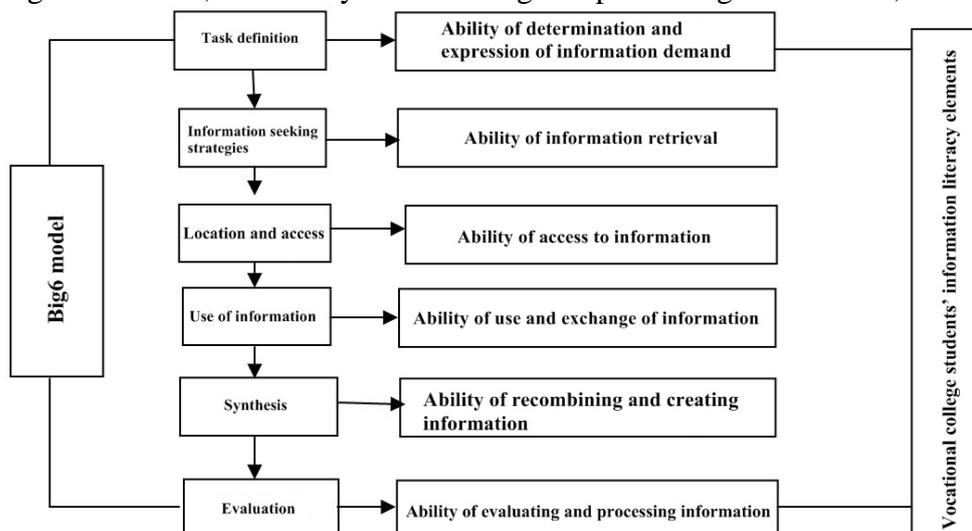


Figure 1. Correspondence between Big6 model and vocational college students' information literacy training requirements

Combined with target framework of Chinese curriculum standards, this paper proposes “three-level integration” model to improve students’ information literacy under the condition of fully considering Big6 model. This model totally includes 3 levels, at each of which there is different emphasis for students’ information literacy training; however, these 3 levels are an organic whole and make efforts towards same direction. 1st level: to cultivate students’ attitude, emotion, and view of value. It is thought in psychology that the attitude reflects people’s stable psychological disposition on some phenomenon, the emotion is people’s negative or positive psychological reaction made on existing stimulation, and the view of value is the individual’s evaluation or overall view on surrounding people or affairs. Currently, the students commonly show low learning interest in information literary education; through the training of 1st level of content, it is able to let students get correct knowledge of information literacy education, and cultivate good learning interest, as well as let students establish correct view of value and then let them have good information moral quality. 2nd level: to cultivate students’ information literacy of common knowledge, including ability of determination and expression of information demand, ability of information retrieval, ability of access to information, computer and network knowledge. As for the 2nd level, the training purpose is to solve the problem of students’ weal internalization ability, let students get hold of information acquisition method and internalize the method to form their own skill and improve their ability through training at this stage. 3rd level: to cultivate students’ professional information literacy. The training at the 3rd level takes the training at the 2nd level as basis to cultivate students’ ability of use and exchange of information, ability of recombining and creating information, and ability of evaluating and processing information. The reason why we put attitude, emotion, and view of value at the 1st level is because they are guiding factors of information behavior and have important influence on students’ input, experience, and effect, and they exists in whole process of solving information problem. For example, in the 1st level, we cultivate students’ learning interest in information literary, motivate students’ learning enthusiasm, and letting students actively participate in study, and the learning at latter 2 levels will happen without extra efforts, and the learning effect will become more obvious. Meanwhile, the information literary is the foundation for training of professional information literacy, and the whole mode show a dynamic and open feature. The structure chart of improvement mode of information literacy is shown as below:

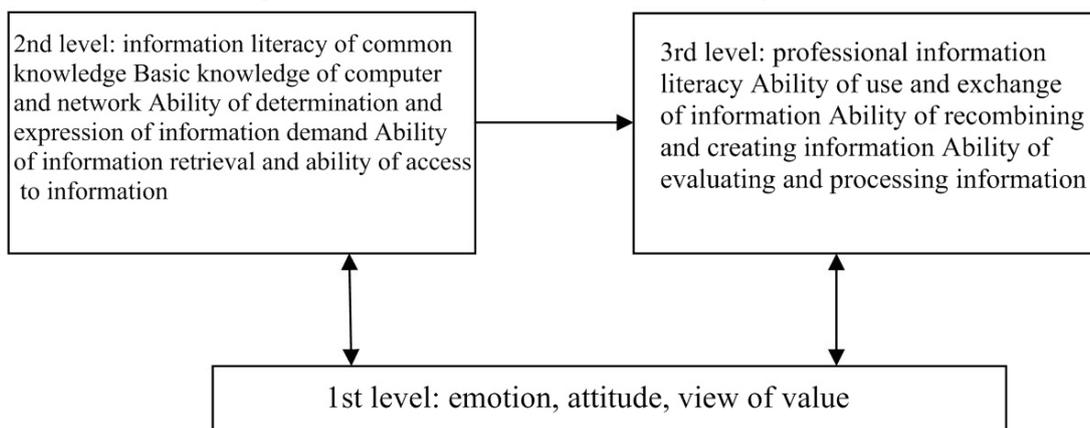


Diagram of improvement mode of information literacy

Implementation paths for improvement mode of vocational college students’ information literacy

1. To set information practice course to improve students’ information literacy of common knowledge

The information literary training for vocational college students is mainly carried out in the first year of admission for the purpose of letting student know working principle of computer, compositions of computer system, network topology, IP address, domain name and other concepts, master basic operation of computer, and obtain information retrieval ability so as to make

preparations for training of later professional information literacy. In order to improve students' information literacy of common knowledge, the vocational colleges shall set information theory course and practice course to let students know compositions of computer and operation of relevant software; through learning, the students shall be able to make use of common software, make decompression, kill virus, and make use of PDF reader, etc. The learning ways include special lecture and other forms. The content of practice course includes: operation of Windows system, Word processor, Excel software, PowerPoint software, as well as "multimedia technology", "information retrieval technology", and "network basis". The teaching mode can be project teaching method, case teaching method, and task-driven teaching method. Besides, due to continuous development of network teaching at present, the teachers also have tried network teaching method, and they make use of QQ, Wechat and other software to assist the teaching.

2. To integrate information literacy education and professional course to improve students' professional information literacy

The students' professional information literacy is mainly cultivated on the basis of information literacy of common knowledge for the purpose of letting students get hold of professional basic knowledge and improve the ability of use and exchange of information, ability of recombining and creating information, and ability of evaluating and processing information. The integration of professional subject curriculum and information literacy education is the most effective method to cultivate students' professional information literacy. The "so-called" integration is not easy addition of content of many courses, but a dynamic and organic integration; such integration takes professional course education as basis to reflect the integration of features of information literacy education. The integration can be made through following means: firstly, according to curriculum standard, it is required to reasonably confirm teaching objectives; secondly, the analysis is made on students from perspective of status of information literacy, cognitive structure, and age; thirdly, it is required to find out the joint point of information literacy education and professional courses, analyze Chinese current curriculum standard, and find out the elements related to information literacy existing in current professional courses. For example, the teachers can arrange some retrieval tasks for students in curriculum, and let students complete retrieval task through network retrieval, or make use of network platform to assign tasks, and then the students complete the tasks through network platform and submit the task; the teachers will correct the completion situation of tasks in classroom, thus the students can timely know their task performance. This way improves the effect of information literacy education.

3. To cultivate students' attitude, emotion, and view of value through multiple channels

It is required to penetrate the cultivation of emotion, attitude, and view of value in the whole process of cultivating students' information literacy to let students experience the cultural connotation contained in information technology in learning process so as to provide continuous power for students learning of information technology, promote students to actively learn knowledge and make use of information foundation to participate in various kinds of information activities, let students correctly know the influence of information technology on social progress, technological development, and people's life and study, let students understand and abide by various kinds of laws and regulations related to information activities, and also let students correct their behaviors and use information technology in a healthy, safe, and responsible way. In essence, the education of attitude, view of value, and emotion belongs to affection education; if we carry out affection education only via text display and language expression, the education effect is always not optimistic, thus a better education effect must be obtained via practice and experience. Therefore, in the process of cultivating students' information literacy of common knowledge and professional information literacy, it is required to pay attention to cultivating of emotion, attitude, and view of value. In the teaching process, the teachers can consciously create significant context to guide students to carry out scientific exploration and cultivate students' awareness of using information technology to solve problems. In classroom, the teachers shall create a democratic and harmonious classroom atmosphere and let all students join the information activities so as to improve students' psychological experience in classroom learning. The vocational colleges can hold various kinds of

cultural activities, such as speech about low-carbon life, pioneering competition and debate competition; in the activities, the students are required to collect data, make video and PPT through network. Through holding those activities, it is able to improve students' information literacy unconsciously.

4. To improve information literacy through holding lectures about retrieval knowledge in library

As China pays more and more attention to vocational education, the scale of books (including paper books and electronic books) collected in libraries of vocational colleges is continuously expanded, and the borrowing condition is also continuously improved. The libraries of many vocational colleges have purchased CNKI China Journal Full-Text Database, Wanfang Data, and other large-scale literature data systems, which creates convenient conditions for teachers and students' study and work, and also creates advantageous conditions for students' literature retrieval education. While the freshmen enter the school, they will be organized based on unit of class to visit the library, the lectures related to retrieval knowledge and operation will be held, and the library teachers will introduce distribution of books collected, and basic method of information retrieval and acquisition; however, due to limited time, the students can't get deep knowledge. Generally speaking, the literature retrieval course is not set in vocational colleges; therefore, it will be better that the libraries are responsible for separately setting practice course of literature retrieval in the first semester to let freshmen get hold of retrieval methods of book information and literature through practice. If the condition doesn't permit setting of practice course of literature retrieval, it is required to publicize basic knowledge of literature retrieval through lectures and sending user's guide, etc. at least.

Conclusion

In a word, in information era, one of the main purposes of talent training of vocational colleges is to cultivate talents with information literacy. The training of vocational college students' information literacy is also a complicated and systematic project and needs many aspects of efforts and coordination. The vocational colleges can build "three-level integration" improvement mode of information literacy, carry out various kinds of theory and practice courses, integrate professional disciplines and information literacy education, and pay attention to cultivating students' emotion, attitude and view of value in the cultivating process of information literacy of common knowledge and professional information literacy to realize three-level integration. In this way, the students' information literacy can be improved as a whole.

References

- [1] Gu Xiaochun: Redesign of Information Literacy Education Mechanism of Colleges and Universities [J], Business China, 2011 (7).
- [2] Shi Xianhong, Hao Xiafei: Survey and Analysis on College Students' Information Literary Status in Central Henan [J], China Modern Education Equipment, 2012 (7): 165-168.
- [3] Sheng Weizui: Primary Investigation on Training of Vocational College Students' Information Literary [J], Chinese Vocational and Technical Education, 2013 (24).
- [4] Xu Yunhua, Zhang Hongxing: Analysis on Training of Vocational College Students' Information Literacy [J], Education and Vocation, 2011 (535).