

Research of Information Literacy of Chinese Public Security Management Students

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Abstract. According to the unified evaluation criteria of information literacy lack of Chinese police college and the normalization of evaluation mechanism, this paper puts forward an information literacy evaluation index system that meets a suitable target and demand of the development of Chinese police college with the construction of function evaluation and learning evaluation of the online platform, and the design of information literacy evaluation scheme lets the teachers and students of police college to pay more attention to the information literacy.

Introduction

With the advent of the information age, information literacy has become the basic literacy of college students [1][2][3]. It is the basis of learning and scientific research for the contemporary college students to understand the information resources and master the methods and skills of searching, acquiring, managing and using information resources. With the gradual development of the digital learning environment, mobile, learning oriented teaching methods to students as the center gradually increased, the information literacy education in Colleges and universities need more and more information literacy level and the needs for students to carry out individualized teaching [4][5].

For the information literacy evaluation criteria and the specific content of the evaluation, the information literacy education is more developed countries and regions have established a relatively common standards and frameworks, and there are many research results in China[6][7][8]. Tsinghua University in 2005 issued a "University Information Literacy Index System" in Beijing that learned from the existing standards and established the index system in 7 dimensions by Delphi. In 2008, the Education Ministry of Chinese put forward an "Index System of College Students' Information Literacy"[9][10].

Therefore, this paper studies the information literacy evaluation index system which is suitable for the development needs of China's public security colleges and universities, and constructs the information literacy evaluation mechanism to improve the information literacy of teachers and students [11].

Evaluation of Information Literacy

The evaluation of information literacy mainly includes questionnaire investigation, examination paper examination, behavior evaluation and student evaluation, etc., and

their advantages and disadvantages are compared in Table 1. Some colleges and universities also try to use a variety of evaluation forms to improve the effectiveness of the evaluation. For example, the information literacy education in Australian universities to carry out all kinds of evaluation activities, including project evaluation, curriculum evaluation and student evaluation, evaluation content, many aspects of the curriculum evaluation methods mainly include the student evaluation, teaching evaluation, curriculum cooperation colleague teacher feedback evaluation method; student evaluation system including online evaluation, traditional test and questionnaire survey portfolio assessment, with the students, self evaluation, interest group evaluation, the evaluation focus on both results and process [12][13][14].

Table 1. Comparison of advantages and disadvantages of information literacy evaluation

Type of Evaluation	Advantages	Disadvantages
Questionnaire investigation	Most used; Simple and easy to design; Result is intuitive;	There are many subjective factors; Lack of ability to measure
Paper-test	Easier to achieve the ability to evaluate; To solve practical problems for the design of the form; Be able to demonstrate practical use;	Test paper is single, not achieve continuous evaluation; Results only the total score, the lack of fine analysis;
Behavior evaluation	Evaluation form more humane; Evaluation results are not based on a single result, but multi face combination, effectively improve the stability and reliability of the results; Evaluation of sustainability, easy tracking and comparison	Too many subjective factors; Evaluation criteria are difficult to unify;

Construction of Information Literacy Model

This research design and restructure the index according to the needs of the development of Chinese students and the feasibility of the evaluation, and then establish an evaluation index system of information literacy for Chinese police college, as shown in Table 2. The evaluation index system not only covers the information literacy ability of all aspects, but also considers the students' knowledge and skills in the study and research [15][16].

Table 2. Information literacy evaluation index

	First Level index	Weight	Second Level Index
Information Literacy Evaluation Index	Information Requirement	0.21	Could describe their information needs
			Could find Sources of information in various types and formats
			Ability to balance the costs and benefits of obtaining information
	Information Obtain	0.28	Be able to choose the appropriate retrieval and information retrieval system
			To build and effectively adjust the search strategy
			Use a variety of methods to get information online or in person
	Information Evaluation	0.14	Ability to extract, record and manage information and its sources
			Ability to use preliminary criteria to evaluate information and its sources
			Ability to use in a variety of ways to verify the accurate interpretation of information
	Information Analysis	0.35	Summarize the main points from the collected information
			Ability to synthesize the main idea to construct the new viewpoint
			By comparing the old and new knowledge to determine whether the value of information and whether there is a contradiction
	Information Law	0.12	To eliminate the differences between access to information and existing knowledge
			Be able to use information tools
			Understand the ethical, legal and socio-economic issues related to information and information technology
			Ability to comply with laws and regulations relating to the acquisition and use of information resources

Information Literacy Evaluation Data Analysis

In the aspect of content design, in addition to part of the information literacy related common problems, most of the problems through solving practical problems to evaluate the level of information literacy, focusing on testing students information consciousness and practical ability, at the same time each question according to the number of standard test contents and refers to the system of two level indexes, and ensure that each indicator has multiple evaluation subject corresponding to reduce the repetition rate of random test paper; in the title form, is easy to realize automatic real-time score test, using multiple-choice questions. On this basis, the use of random test paper evaluation index weight function, according to the difficulty of test selection and index system, a test paper from the corresponding difficulty and test index in the title were randomly sampled in proportion to the questions in the title [17][18].

The overall scores of teachers and students to participate in the evaluation of 56 ~ 60 as the center of normal distribution, as shown in Figure 1, the average total score is 58.26 points, the total score was 60 points, showing the level of information literacy of teachers and students to participate in the evaluation of the overall basic standards, but there is still great room for improvement. The proportion of the number of participants in the total number of teachers and students in the school is less than 5%, indicating that the overall attention of teachers and students for information literacy and evaluation is still low.

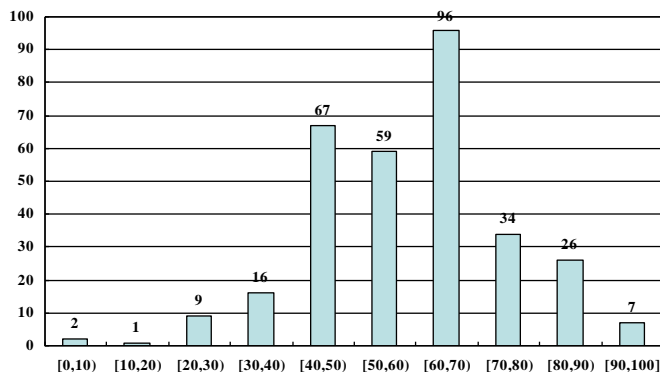


Figure 1. Evaluation of the total score of teachers and students

Each student evaluation will be re randomly generated test paper, so as to avoid the loss of effectiveness in the evaluation of single test was repeated after the problem, let the students learn the knowledge and skills of information after a period of time, can understand information literacy level of their own ascension through the letter test again, but also conducive to change the level of information literacy school students through multiple evaluation monitoring from entrance to graduation period, evaluate the effect of their information literacy education, and to develop targeted programs to improve[19][20].

Participants in the information literacy evaluation of the 5 indicators of the average score were: 54.20%, 48.85%, 61.20%, 74.92%, 59.46. The results show that: in the past, because of lack of information in the evaluation of information literacy education in Colleges and universities in China and the information moral and legal aspects, leading to the ability of students in these two areas is relatively weak and no actual ability of information consciousness and information, in contrast to curriculum resources abundant acquisition shows there is still a lack of students.

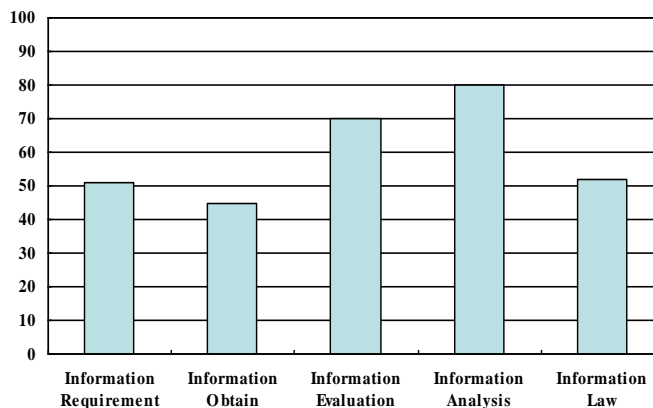


Figure 2. Total score of evaluation index

The results show that, there are still a considerable number of students are still unable to accurately understand their information retrieval and access ability; on the other hand also reflects the impact of existing information literacy education in Colleges and universities on the information literacy level of students is still limited.

The scores of different participants identity can be seen, as shown in Figure 2, in the analysis of information consciousness, information and the scores of participants is close; the information acquisition, information evaluation, information morality and law are more obvious differences. Therefore, in the organization of information literacy training for different objects, according to their information literacy scores for more targeted content design.

In addition, the platform can be built the integration of a large number of online tutorials, lectures, video courseware resources information literacy learning materials and Internet access is free open course resources, evaluation platform will be able to further refine the analysis of the scores of students, identify problems in the information literacy, and push the corresponding learning materials and courseware, online curriculum resources, learning resources and tools needed to quickly find to facilitate students after the completion of the test, the realization of information literacy evaluation service.

Discussion and Future Work

The existing information literacy evaluation designed a detailed index and weight that could comprehensively evaluate the level of information literacy of public security college students, but the results are mostly a total score. For teachers and students, the score can help them understand whether their information literacy level is qualified or location. However, it is to help them effectively enhance and complement their own information literacy capabilities of the key that lets students to understand their specific strengths and weaknesses and these need to further refine the evaluation. Thus, this paper provides the course content and learning resources for different departments and different grades of students, and to provide a reliable reference for the school is more reasonable and effective planning and formulation of relevant information literacy education development strategy. This paper provides the course content and learning resources for different departments and different grades of students, and to provide a reliable reference for the school is more

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