# **Evaluation and Analysis of College Students' Information Literacy in the New Media Age**

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**Keywords:** Information literacy, Information education, Evaluation

**Abstract:** In the new media era, new demands are placed on the information literacy of college students. In order to meet the requirements of the times and improve the information literacy of college students in China, this paper analyzes the current situation of college students' information courses and proposes suggestions.

## 1. Introduction

With the continuous development of society, big data affects all aspects of people. In the new media era, learning to apply new media technologies to improve students' learning ability is a basic responsibility of colleges and universities. Information literacy is a new requirement for researchers in scientific research in the context of big data. However, because there is no need for regional colleges and universities to pay different attention to information literacy, the education model is also very different, which leads to the poor information literacy of colleges and universities in China. As a social and cultural heritage institution, it is especially important to conduct reasonable and effective data literacy education in the big data environment. In terms of information literacy, researchers are required to have higher information literacy and data literacy and strengthen information literacy education. In terms of specific strategies, we must improve data awareness, data capabilities and training capabilities from students, researchers, and library information managers.

## 2. Information literacy overview

## 2.1 Concept and connotation

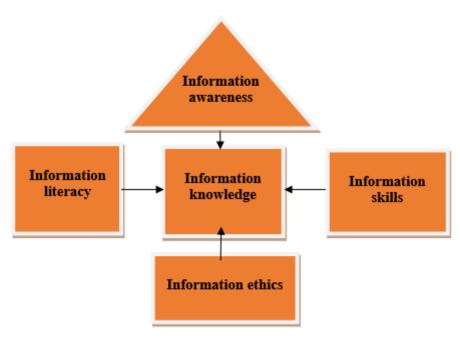


Figure 1. Information literacy and relationship diagram

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Information literacy is a new concept that summarizes the ability of people to survive and develop in the information society after entering the information society. It is a comprehensive product of social, cultural, technological and scientific development. Although different studies have different understandings of information literacy, they basically include the ability to acquire, analyze, process, utilize, and criticize and understand information content, as well as the attitude and ability to integrate into the information society. The basic elements of evaluating information literacy include information consciousness, information knowledge, information skills, and information ethics. The relationship between the four shows that information consciousness is the forerunner, information skills and information knowledge are the core of information literacy. Information ethics is the moral cultivation demonstrated by information behavior and the ideological guarantee of information literacy.

# 2.2 Development and status quo

Since 2005, there have been academic articles in China that have begun research on information literacy, and it has been more than 20 years old. At an international conference in Changchun in 2013, many scholars mentioned the need to create a new model of information literacy education in the new environment. On the whole, the research on domestic information literacy education is basically the deepening of the course of "Information Retrieval and Utilization" in colleges and universities, and the continuous development of Internet popularization and computer development.

At present, the methods of improving information literacy mainly include data management navigation and information literacy education courses. The information literacy courses are divided into four types: classroom teaching, lectures, group discussions and online courses (including MOOC, micro-class, etc.). A variety of information literacy education courses provide sufficient protection for readers' learning.

Characteristic **Information literacy Data literacy** Scientific data Position, organize, understand, and create Collect, process, Required skills Find, retrieve, information, using manage data, and and skills analyze information digital technology to scientifically evaluate data process data Processing object Information Information Data

Table 1. Comparison of concepts

Table 2. Lecture topics and data statistics

Theme		Session
Resources and services	Collection resources or service promotion	23
	Unified search and resource development	8
	Dissertation specification	14
Information resources and retrieval	Electronic data resources	24
	Journal full-text resources	23
	Comprehensive academic resources	21
Subject research and writing	Literature research	12
	Essay writing	35
	Subject hotspot	12

Some studies have studied the situation of information literacy education in colleges and universities with 985 colleges as the research object. According to statistics, 39 985 university

libraries have carried out information literacy education services. These educations are mainly composed of course teaching, regular lectures, special lectures, freshman training, online training, courseware display and other special training programs. The first-level directory of the website column navigation is generally "service" or "reader service", and some universities directly name the "information literacy education" column or platform. According to the survey, many university libraries offer information literacy courses in both public compulsory and public electives. According to the survey, the rate of course teaching was 84.6%, the rate of lecture service was 92.3%, the rate of special training lectures was 66.7%, the rate of new training services was 56.4%, and the training courseware and videos were 64.1%.

## 3. Problems in the information literacy education of college students

- 1) The awareness of university information literacy training is weak. Although China's information technology education has been carried out for more than 20 years, it is not enough to improve the students' information literacy. It does not include information literacy in the school's evaluation system. It is believed that the cultivation of information literacy is to open a literature search course. Simplify information literacy education.
- 2) Some teachers' information literacy needs to be improved. Some teachers themselves have a weak information concept and a low level of information literacy. Some schools are also indifferent to existing teachers, resulting in aging of teachers' knowledge and little knowledge of modern knowledge, especially computer network knowledge.
- 3) The school relies on insufficient infrastructure for information education. Under the large-scale promotion and the arbitrariness of elective courses, the scale of hardware equipment of some schools has gradually failed to keep up with the needs of students, resulting in a phenomenon of short supply. In addition, a small number of colleges and universities in the selection of elective courses, due to the lack of relevant courses leading to the phenomenon of "robbing the students", making the meaning of elective courses biased.
- 4) Students have different intentions to improve information literacy. Students are in a passive position, and information literacy courses are only for getting more credits. Under the influence of traditional education, many students believe that the information retrieval elective course has nothing to do with its own professional knowledge and ability. It adopts the practice of ignoring its meaning and cannot exercise the comprehensive quality of students.
- 5) Insufficient management of information retrieval courses. Many students regard information retrieval electives as entertainment time. There are blind thinking when choosing information retrieval elective courses, and unrelated entertainment behaviors such as games in the classroom make the information retrieval course lose its practical significance. This is mainly because the management of information retrieval elective courses is not standardized, and most teachers are commonplace in this situation, forming a phenomenon of connivance.
- 6) Insufficient teachers' ability to control the classroom. Teachers, as managers of the classroom, are not good at mobilizing the classroom atmosphere, and simply do a simple narrative of knowledge. This kind of practice makes the information retrieval elective course form a phenomenon that the teacher's class content is old-fashioned and the students' interest is low. It has extremely bad influence on the information retrieval elective course.

# 4. Suggestions and measures to improve college students' information literacy

1) Conduct different information literacy education based on different objects. For researchers, more attention should be paid to cultivating their awareness of data and sharing of data resources. For students, information literacy education is one of the main contents of user education in university libraries. Data literacy education should be focused on the current information literacy model education environment, especially in data awareness and data ability to improve students' data literacy. For data service librarians, data skills represented by data collation, manipulation, and transformation capabilities should be developed.

- 2) Integrate information literacy with other subject courses. Information literacy education should be widely carried out in various subjects, which can not only improve students' self-learning ability, but also enable students to master the information retrieval, processing, utilization and communication skills subtly, so as to gradually improve students' information literacy. Therefore, it is necessary to integrate information literacy education into the teaching of other disciplines, and promote the comprehensive transformation of schools in education, ideas, content, methods, evaluation and other aspects.
- 3) Improve information capabilities through research activities. Engaging students in research activities is an important way to cultivate their information literacy. Students' participation in research activities can not only deepen the theoretical knowledge of chemistry, but also cultivate students' innovative ability and research ability. Students should be able to combine the majors they have learned and obtain information. Through the research activities, students can apply the abstract theory they have learned to practice and deepen their understanding of the majors they have studied.
- 4) Improve the ability to use information through literature search courses. Although many educators have carried out many useful experiments on how to improve the information literacy of college students, comprehensive literature review is still the main means of cultivating students' information ability. Therefore, it is necessary to increase the retrieval and utilization of database and Internet resources, increase information evaluation, network ethics, etc., and continue to explore theoretical and practical, in line with the development requirements under the new form.

#### 5. Conclusion

Information literacy education is one of the basic qualities of college students. However, through investigation, it is found that the information literacy of college students in China is not optimistic. The reasons for this phenomenon are related to the lack of information infrastructure service capabilities and the attitudes of students and teachers towards information courses. Therefore, in the solution strategy, because different information literacy education objects have the same small acceptance ability, basic literacy, and learning research needs, colleges and universities should adopt a differentiated education strategy.

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