Research on the Cultivation of Students' Information Literacy under the Background of Educational Informatization

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Abstract: the innovation and progress of information technology marks the pace of the development of human society, in the context of modern information technology, education on the quality of students constantly improve, information literacy has become one of the essential qualities of students in the new era. This paper intends to discuss how to cultivate students' information literacy from the background of education informatization. Therefore, based on the connotation of education informatization and information literacy, this paper analyzes the current situation and problems of students' information literacy cultivation, and proposes the cultivation strategies of students' information literacy under the background of education informatization.

1. Introduction
1.1 Educational Informatization

“Informationization” refers to the development process of human society from a society dominated by traditional material production to one dominated by information technology. As shown in table 1, it can be seen from the development of educational informatization. From the definition of informatization itself, it can be seen that educational informatization relies on the development of informatization. Educational informatization refers to the development of school teaching from traditional blackboard writing and books to modern information education means of Internet and multimedia. Educational informationization is the inevitable outcome of the development of science and technology as well as the value pursuit of educational and teaching reform. As shown in figure 1, the content analysis of educational informatization can be roughly divided into two aspects. One is the full application of information technology in teaching methods, and the other is that education aims at cultivating talents with information quality. Faced with the rapid development of big data technology, informatization has gradually penetrated into people's real life and students' activities. Informatization has realized the convenience brought by big data statistics, and the Internet has benefited the people through statistical sorting and analysis of data. With the rapid development of science and technology in China, computer technology, optical fiber and information superhighway have exerted a great influence on people's life, work and study, and the era of big data has come. [1] therefore, education has been asking and trying to solve how to adapt to the information age to improve its own information literacy.

Fig.1 Classification of Educational Informatization
Table 1 Educational Informatization Development

<table>
<thead>
<tr>
<th>particular year</th>
<th>Authority</th>
<th>Policy themes</th>
</tr>
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<tbody>
<tr>
<td>May 2007</td>
<td>ministry of education</td>
<td>The Eleventh Five-Year Plan for the Development of National Education</td>
</tr>
<tr>
<td>July 2010</td>
<td>executive meetings of the State Council</td>
<td>Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010-2020)</td>
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<tr>
<td>March 2012</td>
<td>ministry of education</td>
<td>Education Information Decade Development Plan (2012-2020)</td>
</tr>
<tr>
<td>June 2012</td>
<td>ministry of education</td>
<td>The 12th Five-Year Plan for the Development of National Education</td>
</tr>
<tr>
<td>April 2015</td>
<td>ministry of education</td>
<td>On Strengthening the Application and Management of Online Open Courses in Colleges and Universities</td>
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<tr>
<td>July 2016</td>
<td>ministry of education</td>
<td>The 13th Five-Year Plan for Education Informatization</td>
</tr>
<tr>
<td>January 2017</td>
<td>the State Council</td>
<td>Circular on Printing and Distributing the 13th Five-Year Plan for the Development of National Education</td>
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</tbody>
</table>

1.2 Information Literacy

The concept of information literacy is developed, the information is the first information literacy\(^1\)\(^-\)\(^4\), the earliest can be traced back to the information industry association President, Paul car, he said the earliest information literacy for the people to the use of information technology and skills in dealing with problems “, after the American society for library and information literacy is defined as “to determine when to need information” “know how to get information” and “know how to evaluate and effective use of the information needed to” three aspects. In fact, the term information literacy has been endowed with various meanings since it was proposed, but the core meaning is people's comprehensive ability to obtain, evaluate, select, process, process and utilize information from various information resources in the information society. The refinement of information literacy can be divided into three aspects: information consciousness, information ethics and information ability. In a word, the concept of information literacy has no qualitative answer, but its significance lies in the ability of information acquisition, selection, analysis and processing, which is the comprehensive quality of people's information acquisition and utilization.

![Fig.2 Information Literacy Composition](image)
2. Analysis on the Current Situation of the Cultivation of Students' Information Literacy

2.1 Cultivate Weak Consciousness

In order to cope with the strategy of cultivating innovative talents, China began to vigorously promote quality-oriented education. Students under exam-oriented education still have access to knowledge mainly from books and teachers. The habit of passively receiving information has been rooted in the consciousness. In today's society with information explosion, students' receptive learning seems to be at a loss. In this case, students can not take the initiative to obtain information and information, the core of the information can not be effectively extracted, students' weak ideology, is not conducive to the formation of good information literacy. Based on the Internet technology development platform, educators can quickly obtain results and information. Throughout the current situation of school education, the cultivation of students' information literacy only stays in the classroom of information technology education, and the shaping of teachers' literacy is also simple classroom teaching and demonstration. It is the most fundamental problem that teachers' awareness of training is weak. Educators, as the leader of the implementation of education, should cultivate students' awareness of information literacy and take the initiative to assume the responsibility of education in classroom teaching. To sum up, the relation diagram of students' receiving information is shown in figure 3.

![Diagram showing the relationship of students' receiving information.](image.png)

**Fig.3 Student Acceptance Information Chart**

2.2 Inadequate Teachers

The purpose of offering computer courses in schools is to improve students' information literacy and knowledge ability, but in practical teaching, teachers often pay too much attention to students' book knowledge and ignore their comprehensive practical ability. As shown in figure 4, the future social development needs talents with combined knowledge, ability and quality. Insufficient processing ability and innovative development ability of network information will limit students' learning effect, thus limiting their long-term development in the future. Teachers' lag in teaching will directly affect the cultivation and improvement of students' information literacy, so teachers need to improve their own comprehensive quality to cultivate higher quality students. In addition, the moral level of students' information literacy needs to be improved. In recent years, plagiarism of college papers emerges one after another, which to some extent reflects the low concept of information and information use ethics of college students. According to the survey, some students do not have a comprehensive understanding of personal privacy, network behavior and intellectual property rights involved in the Internet. To a large extent, the free expression of one's own opinions in the network environment, and even the Posting and forwarding of false information, have affected social stability. [10]
3. The Cultivation Strategy of Students' Information Literacy under the Background of Education Informatization

3.1 Create an Information Environment to Cultivate Students' Information Awareness

Ideological consciousness is the forerunner of action, so information consciousness is the primary factor for students to adapt to the information age. Therefore, in practical teaching, teachers first make students feel the importance of information literacy and cultivate their strong information awareness. For example, teachers can give students present since the way of information transmission, let them enjoy from ancient beacon tower, eight hundred, flying pigeon that publisheth book, to the modern telegraph, telephone, and then to the modern mobile phone, computer, Internet, and QQ, weibo, WeChat mobile client, to show the importance of information in the human development history. [4] let students feel the importance of information transmission, and develop a strong sense of information literacy in a subtle way. Secondly, in classroom teaching, teachers should use modern technology to teach students and create an information education environment for students. The process is shown in figure 5. For example, teachers often use multimedia to teach in class, and students can communicate with each other through mobile network learning platform under class, so that students can share learning resources on the network platform. In this way, school teaching activities can use the media of information network to help students solve learning problems, make them feel that life and learning depend on the use of information, and information technology can also improve their learning ability and level, so as to develop their strong information awareness.

3.2 Improve Students' Information Ability through Information Teaching

Firstly, teachers should create an information education environment for learners, including teaching means and teaching media. Teachers can use multimedia classrooms, computer equipment, network mobile devices and other carriers to create an information education environment. As shown in figure 6, for example, in classroom teaching, teachers can use the teaching mode of
micro-class to teach, the use of video can enrich educational resources, and the sophisticated production and use of PPT is one of the informationized teaching methods. The ministry of education and other administrative departments of education should issue relevant regulations to regulate informationization teaching, and install complete informationization equipment in all kinds of middle schools and colleges. Secondly, the school teaching also needs the high quality of teachers, teachers' information level represents the comprehensive quality of students. In traditional classroom teaching, teachers evaluate students' learning results only by grades and test criteria. Under the background of information education, teachers are not only the students' "preaching, teaching and solving problems", but also need to update the educational concept with The Times, take “promoting students' lifelong development” as their responsibility, and take “cultivating and improving students' information literacy” as the focus and connotation of teaching. In addition, teachers should pay attention to the improvement of their own comprehensive quality on the basis of updating concepts, learn to operate modern teaching equipment skillfully, and be able to choose teaching methods and information equipment appropriately according to different teaching contents and objectives. Environment is the best way to infect and influence students to seek knowledge actively. Teachers' teaching guidance can effectively guide students to comply with the education under the background of information, and gradually enhance their information ability in this process.

Fig.6 Flow Chart of Information Teaching

4. Conclusion

With the development of information technology, human society has entered the information age, quality education has also entered the information background. The concept of education has shifted from traditional book knowledge to focus on developing students' individuality, and the teaching method has also changed from imparting to modern information technology. Modern information technology supported by computer and Internet is widely used in all subjects. Students' comprehensive quality is the core competence for entering the society in the future, and personal information literacy can meet the needs of innovative talents. Whether students can become talents with the ability to solve complex problems in modern society depends on their own comprehensive information literacy. In a word, under the background of educational informatization, schools, parents and students themselves should make full use of the advantages of modern information technology to improve information literacy, so as to improve their own comprehensive quality. It is the key period for students to form personality and quality in the education stage, so it is of great significance to cultivate information literacy in school education for their future development.

References


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