



# Analysis of the Strategies of Improving Students' Information Literacy in the Course of "Computer Application Basics" in Medical Colleges

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**Abstract:** The arrival of the information age has brought technological innovation to all walks of life, and computer technology has become an indispensable part of people's work and life. For medical colleges, improving students' information literacy is a very important teaching content. Cultivating the information literacy of medical students is helpful for students to improve their medical professional level based on the application of computer technology. Based on the current status of the "Computer Application Foundation" course in medical colleges, this article analyzes in depth the strategies for improving students' information literacy in the "Computer Application Foundation" course in medical colleges.

Keywords: Medical College; Computer Application Foundation; Information Literacy; Strategy

The "Computer Application Basics" course is a basic course and an important course for medical college students. Its teaching quality directly affects the cultivation of medical students' information literacy. However, according to the current status of the "Basics of Computer Application" courses in medical schools, the situation is not optimistic, which is not conducive to the improvement of teaching quality and hinders the cultivation of medical students' information literacy. The strategy of improving students' information literacy in the course "Basics of Computer Application" in colleges and universities has far-reaching significance.

#### 1. The current status of the course "Basic Computer Application" in medical colleges

According to the current development of the "Basic Computer Application" course in medical colleges, the goal is to improve the medical application ability of medical students and cultivate the information literacy level of medical students. However, in actual teaching, the teaching of the "Basic Computer Application" course encounters certain problems. For example, medical students' weak information awareness, insufficient information ability, and imperfect teaching resources and equipment in colleges and universities will affect the teaching quality of the "Computer Application Basics" course.

#### 1.1 The information awareness of medical students is weak

At present, medical college students do not pay much attention to the "Computer Application Basics" course. Most students believe that their learning focus is on medical knowledge and medical professional courses. The "Computer Application Basics" course has no effect on their future professional development. Therefore, students are reluctant to devote limited time to the study of "Basic Computer Application" course. During the course of "Basic Computer Application", students' enthusiasm for learning is not high, which affects the quality of course teaching.

### 1.2 Weak information ability of medical students

At present, although medical college students have certain ability to use information technology, their information ability is weak, coupled with the lack of knowledge of the value of information, most students use computers to play online games or watch

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doi: 10.18686/ahe.v4i5.2204

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dramas, etc. Students in medical majors do completely unrelated activities in class that they have not fully utilized online resources to learn computer-related courses. Although some students will try some ways to learn the knowledge of related courses, but they are insufficient in the ability to identify the accuracy and professionalism of knowledge, and the learning effect is not good. In addition, in the teaching of "Basics of Computer Application", the traditional teaching mode in which the teacher verbally explains the content of the textbook and students passively listens to the lecture is not conducive to improving the student's information literacy level and cannot achieve the ideal teaching effect.

#### 1.3 Imperfect teaching equipment resources in medical colleges

The "Computer Application Basics" course of medical colleges and universities needs related equipment resources to support teaching, but the teaching equipment resources of some medical colleges are imperfect and cannot meet the teaching requirements. The "Computer Application Basics" course is a very practical subject. Students need to carry out a lot of computer operations to master theoretical knowledge in the book. Due to the imperfection of computer teaching equipment resources, students are unable to carry out corresponding operations and there is no opportunity for full operation practice, so that it is not ideal for students to absorb the knowledge of computer courses. In addition, in the teaching of "Computer Application Basics" courses, sometimes teachers cannot use related equipment to assist teaching. They only use traditional teaching methods, so students also have some difficulties in understanding professional knowledge.

## 2. Strategies for improving students' information literacy in the course of "Computer Application Basics"

#### 2.1 Construct a reasonable curriculum system

The curriculum system is a key factor influencing the cultivation of information literacy of medical college students. In the construction of the curriculum system, it is necessary to start from the following aspects: First, the medical college should lay a good foundation for grasping students. At present, computer technology is constantly developing, and computer science is based on information principles and laws to innovate and make progress synchronously. Medical colleges and universities should set the teaching objective of the "Computer Application Basics" course as the target of training and teach relevant knowledge to improve students' thinking ability. Secondly, medical colleges should rationally set the course content based on the characteristics of this major, and combine the "Computer Application Basics" course with medical specialty courses, such as clinical medicine and medicine, to cultivate information literacy and thinking for medical students and lay a theoretical foundation for students. At the same time, it also enables medical students to realize good development in future employment.

#### 2.2 Cultivate scientific thinking of students

The "Computer Application Basics" course is closely related to the future career development of medical students. Especially for medical imaging students, the proficient application of computer technology will greatly help their future work. Therefore, in the teaching of "Basics of Computer Application", teachers should take care of the scientific thinking mode of medical students throughout the teaching process, realize the consistency between the thinking ability of medical students with the principle of computer, and fundamentally improve students' analysis and problem-solving ability.

#### 2.3 Based on the medical profession, cultivate students' information literacy

The employment direction of most medical students is clinical medical nursing. In recent years, with the continuous improvement of medical standards, medical equipment has been continuously updated, and the workflow of medical workers has become more and more informatized. It is of great significance to improve the information literacy of medical students. Course teaching can be conducted from the following four aspects:

- (1) Basic knowledge of information technology. Computers are widely used in people's lives and learning. If students in medical schools can master the computer's architecture, they can fully understand the medical information in the computer, such as the storage method and encoding method.
- (2) Data processing technology. Excel tables and databases are the main contents of data processing technology. In the process of medical research, medical students will process some research data according to the requirements, including collection, classification, analysis, etc. The processing process of these research data by medical instruments is very complicated. Therefore, medical students need to know how to analyze the data calculation to start the corresponding medical work.
- (3) The processing ability of various manuscript styles. Clinical nursing records, writing medical papers, etc. are an indispensable part of medical students' future work, and also an important reflection of the comprehensive quality of medical

students. The degree of medical students' ability to process manuscript styles is related to their future work efficiency in their jobs. It is very important for medical colleges to set up relevant teaching content to help students improve the ability of manuscript style processing technology, which is helpful for medical students to meet the needs of their posts and be competent in medical work.

(4) Basic knowledge of programming. The improvement of the current medical level also makes the application of programming technology more extensive, such as medical simulation, bioelectrical signal processing and so on. The study of the basic knowledge of programming is conducive to improving students' thinking ability and problem-solving ability. Medical colleges should set up relevant courses to help students improve their comprehensive strength and achieve employment, and enable students to fully play their roles in their jobs.

#### 2.4 Adopt diverse teaching methods

Medical college teachers should adopt diversified teaching and change the teacher-centered teaching method. Teachers need to give full play to the student's dominant position in the classroom, be problem-oriented, stimulate students' enthusiasm for learning, increase their learning interest, and enable students to exert subjective initiative to actively participate in teaching activities, thereby improving learning efficiency. For example, in the learning of powerpoint software, teachers can increase the target setting of multiple presentation effects during the course design of the course plan, and require students to carry out operation exercises in the direction of the goal, so that students can improve their initiative of learning and thus improve the quality of teaching. In the implementation of teaching, teachers should design corresponding experimental topics according to the students' medical theoretical foundation and practical ability, so that students can improve their own abilities in the process of practice, and lay the foundation for meeting the requirements of future jobs.

#### 3. Conclusion

The "Computer Application Basics" course plays an important role in the medical profession and lays an important foundation for the future professional development of medical students. Medical colleges should actively explore strategies for improving the information literacy of medical students, construct a reasonable curriculum system, cultivate students' thinking ability and information literacy based on medical majors, diversify teaching, to carry out research-based learning, and improve through the process. The information literacy level of medical college students enables students to have good information technology capabilities to cope with the challenges in future medical positions.

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