

# Research on the Current Situation and Promotion Strategies of Normal Students' Informatization Teaching Ability Training

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## Abstract

With the advent of the information age, teachers are the organizers and guides of education, and teaching has also become the backbone of promoting education information. As the outstanding successors in China's future education field, the typical school students' information teaching ability will directly affect China's future education development trend. This paper analyzes the current situation of the informatization teaching level of normal school students and gives relevant strategies to improve the informatization literacy of normal school students.

## Keywords

Normal school students; Information teaching; Information literacy; Teaching ability.

## 1. Introduction

With the advent of the information age, the door to the treasure house of resources and knowledge at home and abroad has been opened. With the source of the wave of information and big data, tremendous changes have taken place in all fields, including education. The convenience and advancement of network and information technology create conditions and possibilities for the development of educational informatization, and teachers, as the organizers and guides of education and teaching in the new era, have become the backbone of promoting educational informatization. As the outstanding successors and strong reserve forces in the field of education in the future, the students of normal universities are directly related to the development and trend of China's future education with their information teaching ability, information literacy, and application ability of modern educational technology and software.

China has paid sufficient attention to the informatization education of normal school students and the informatization development of teachers. The informatization teaching ability is regarded as one of the core skills that teachers must master. The Outline of The National Medium and Long-term Education Reform and Development Program (2010-2020) has emphasized the need to strengthen the application of information technology in education and teaching and improve teachers' ability and level of using information technology and teaching [1]; In The 13th Five-Year Plan for the development of National Education, it is clear that educational informatization and modernization complement each other. We should use educational informatization to promote educational modernization and actively encourage and integrate modern information technology with education and teaching [2]. Teachers are encouraged to implement the concept of lifelong learning, make full use of new technologies to improve their teaching level, and dare to update and innovate the teaching model. China's development has been in a high speed and high level the development stage, the demand for talent has put forward higher standards and requirements. Normal school students, as an essential teaching group and teacher preparation force to cultivate high-level and innovative skills for the motherland, their information teaching ability and application level of modern

information technology will directly affect the quality of education in the future. Therefore, it is imperative to cultivate and improve the informatization teaching ability of normal school students in Our country. Higher standards and requirements have been set for their pre-employment training and application ability of modern science and technology.

## **2. Analysis of the Current Situation of the Information Teaching Ability of Normal School Students**

As the normal school students in the national universities, their comprehensive ability to apply modern information technology can be reflected in a variety of aspects, such as computer rank examination, teacher qualification certificates, and other corresponding level exams, as well as the majority of normal school students at all levels of all kinds of the teaching skills competition, Normal school students for PPT, Word documents and other software simple application and operation of fluency and proficiency. However, at present, the number of normal school students who can master all kinds of teaching software is still in the minority, and the degree of their deep application and practical operation of the computer is not high, and the number of normal school students who can use relevant software to program and solve practical problems is even less. Therefore, the informatization teaching ability of normal school students is greatly improved. Cultivating the information literacy of normal school students plays a vital role in improving the educational quality of our country.

### **2.1. Analysis of Paper Publication Status of Normal School Students**

To better understand the modern information literacy of normal school students in different regions of the country and all kinds of normal universities, this paper adopts the literature analysis method to analyze the papers published in CNKI and Wan Fang Platform in the past decade. Normal school students, education of normal school students, information literacy, and informatization were retrieved as keywords. The retrieved articles were arranged and counted according to the author's institution. High-level double-first-class universities were selected as samples by region.

Through the statistical analysis, it is found that normal colleges and universities pay more attention to the education of normal students than other comprehensive universities, and the information education ability and accomplishment of normal students in these colleges and universities are also at a higher level than other schools. However, it is not difficult to find that the comprehensive educational ability of normal school students in western regions and more remote regions is relatively behind that of universities in developed regions and central regions. Therefore, regional and economic development levels and other factors are also factors affecting whether normal school students can have access to more advanced education and flexible use of modern information technology.

### **2.2. Rationality Analysis of Courses Offered By Colleges and Universities**

At present, more and more comprehensive colleges and normal colleges have set up a variety of normal majors. However, there are still some problems that need to be paid attention to and improved in the rationality of the setting of relevant courses and the adequacy of the school's own educational resources. On the students' curriculum, many colleges and universities are too theoretical knowledge and ignore the question of social practice; although this has caused many students to education teaching theory foundation is very solid, but when teaching on the platform, there will always be PPT making enough for interpretation of the content focus is not prominent, language logic does not stand up to scrutiny. These problems are largely derived from the theory course in colleges and universities that have systems in the proportion is overweight, and despise the micro-standard teaching, etc. This type of solid exercise class gives the students more practice opportunities, leading to the students that have no too much

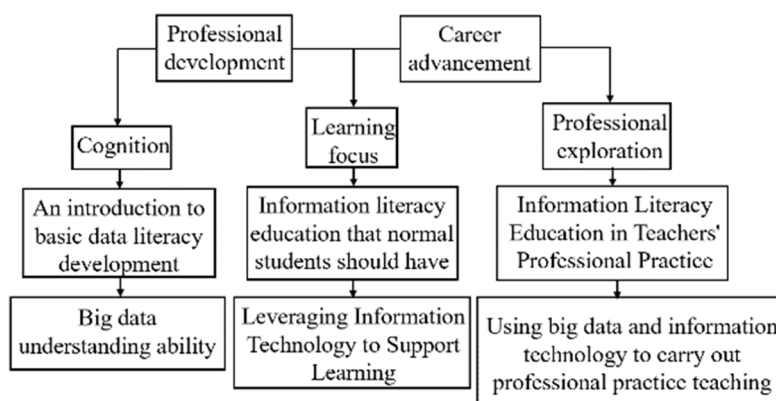
practice to promote opportunities for some complex recording equipment, teaching software, and so on will not be able to achieve the skilled operating standards and requirements. In addition, due to the influence of the traditional educational concept of Our country, which attaches importance to the teaching of teachers' theoretical knowledge and neglects practical operation, students' functional ability and practical ability have not been well exercised and developed in the process of learning.

The problem of insufficient high-quality educational resources in colleges and universities is also one of the factors that affect the information technology application ability of normal school students [3]. At present, the teaching equipment is relatively complete, generally equipped with a micro classroom, computer room, modern multimedia whiteboard, and other experimental facilities, but there is still some experimental equipment in colleges and universities old and insufficient problems. These, to some extent, become a stumbling block for normal school students to further improve their comprehensive information literacy and information technology application ability. Therefore, there is still a long way to go in reforming and improving teaching equipment and faculty.

### 3. Strategies for Improving Normal School Students' Informatization Teaching Ability

#### 3.1. Establish A Teaching System for Normal School Students That Is Conducive to the Integration of Professional Development and Career Promotion

Promoting students' informatization teaching ability is a continuous and challenging task; Besides learning the fundamental theories that should be known in this major, normal students should also have the opportunity to conduct various professional practices and professional practice outside the classroom and the school. Comprehensive development of students' professional knowledge and professional ability, and improve students' information literacy. This paper intends to start from three aspects of cognition, learning focus, and professional exploratio[4]. To help normal school students integrate information education into the whole process from the initial entry into the normal major to the development of professional teachers, cultivate the data literacy of normal school students, and thus help them improve their information teaching ability. The specific process is shown in the figure below:



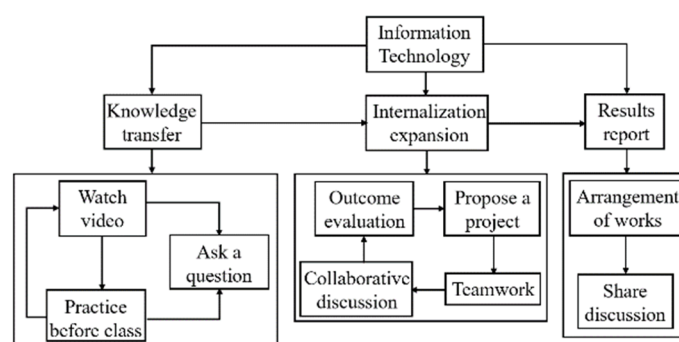
**Figure 1.** Teaching system of professional development and career promotion for normal school students

The three stages in the figure above are progressive step by step, providing a theoretical basis for the cultivation and improvement of the information-based teaching ability of normal school students at different stages of development. The cognitive stage belongs to the entry-stage of

normal school students, which can set courses in educational statistics, educational research, modern information technology processing and application, big data processing and analysis, teachers' professional ethics and accomplishment, etc. The courses related to information technology and big data are of great help to stimulate normal school students' interest and motivation to improve their professional knowledge and improve their teaching ability. Normal school students begin to change from ignorant students to experienced teachers. Hence, the learning tasks in this stage are essential for the future career development of normal school students. Colleges and universities can set some courses to improve normal school students' data mining and processing ability, such as modern educational technology, information technology, curriculum integration, multimedia technology, software application learning, etc. The professional exploration phase mainly is to help students to complete the transition from student to experienced teachers, further carry out all kinds of practical courses to help students to master the necessary skills required to teach, constantly reflect on their information technology from the theory and practice of comprehensive application ability, sharp observation and promptly to capture the education research and development trend. It can offer practical and analytical courses such as information teaching design, teaching evaluation, and educational and scientific research methods.

### 3.2. Reform the Teaching Organization Form in Combination with Flipped Classroom

In the class teaching system in this mode, students are in a passive position to receive knowledge without personal initiative. Teachers adopt the one-way teaching method of indoctrination, which is not conducive to the internalization of teaching knowledge and the improvement of teaching skills of normal school students, nor to the cultivation of their information-based teaching ability[5]. Therefore, in the teaching reform, we can try to carry out teaching in the mode of the flipped classroom[6], readjust the time in and out of class, help students to be more focused and more active in acquiring professional knowledge, enhance the normal school students' ability of information collection, reading and acquisition, and cultivate their ability of independent time planning, group cooperation and finally forming complete works. The flow chart of flipped classroom model based on information-based teaching in this paper is as follows:



**Figure 2.** Flow chart of flipped classroom under information-based teaching

Flip the classroom teaching mode on a trial basis can also guide the students to do a good job of preparation before class, make full use of the network teaching platform, teachers can through the monitor convey a message and task requirements of mediation, assignments to students step by step, develop information technology teaching, and wang students independent innovation and research topics in the area, promote the informatization teaching practice ability.

### 3.3. Colleges and Universities Actively Introduce High-quality Education Resources to Build A Good Practice Platform for Normal School Students

Normal school students' internships and off-campus internships are two important compulsory courses to help normal school students to go out of school and go to the post. Colleges and universities should pay close attention to the development of these two tasks of normal school students and provide more internship and internship opportunities for normal school students as possible. In recent years, School-School Union, university-enterprise cooperation is a very good teaching pattern, various universities can get through to the university students and other primary and secondary schools, vocational education institutions, such as connection, will the school talent and fresh blood to the schools and institutions, on the one hand, can effectively solve the problems of the normal graduates' employment, on the other hand, Also provides a good place for the practice and novitiate activities of normal school students. Students only really took to the podium, tried to apply their knowledge in practical teaching, the practical use of information technology and equipment, such as multimedia auxiliary teaching, the feeling of experience as a teacher, to find their shortcomings, better reflect on themselves, to better improve their information literacy, and modern high-level education.

Colleges and universities should also increase investment in the education of normal school students, create a good learning platform and learning environment for normal school students, and introduce high-level teachers to help normal school students better acquire the knowledge related to education and teaching, advancing with The Times. In order to better change this situation, teachers should fully introduce and learn high-quality courses in the teaching process, optimize the information teaching environment, and explain and introduce the use method and wide application of modern teaching software for students. At the same time, schools should update old multimedia equipment in time, introduce micro-classroom, assist students in learning practical knowledge related to teaching, make full use of big data and artificial intelligence equipment to improve the learning environment of normal school students, broaden their horizons, help them obtain the latest information about education.

## 4. Summarize

To sum up, it is a complex and long way to improve the application ability of modern information technology and cultivate the information literacy and sensitivity of normal school students. Under the background of current information and digital era, grasping the intelligent education system is the trend of The Times, the comprehensive quality and teaching ability of normal students are related to the development of my country's future education and the cultivation of innovative talents, society and school should give students the informatization teaching with the support of enough attention and funding, to guarantee students' information can improve the teaching level, Keep up with the pace of The Times and better invest in front-line education.

## Acknowledgments

Fund Project: supported by The Graduate Workstation Project of Huanggang Normal University (5032021018).

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