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# Exploration of Teaching Reform Innovation under the Background of Education Informatization—Taking the Teaching of Leadership Science in Universities as an Example

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Abstract: With the continuous development of teaching informatization and the development and improvement of various online teaching apps, many traditional classroom teaching methods and teaching methods in universities have also undergone significant changes. Online and offline blended teaching has become the main direction for many universities to explore teaching reform in traditional courses. This article explores various problems that arise in the teaching process of leadership science, one of the traditional courses in full-time undergraduate administrative management majors in higher education institutions, and explores how to strengthen teaching quality, improve classroom teaching efficiency, and better help students master relevant knowledge points through online and offline blended teaching reform.

With the continuous deepening of the information society and the popularization of information technology, the proportion of information technology application in the teaching of leadership science in universities is also constantly expanding. Education informatization has become an inevitable trend in teaching reform in universities, and the ability of administrative management teachers to master teaching information technology has also become one of the indicators for teacher teaching assessment. In order to accelerate the orderly development of educational informatization, the country has also introduced a series of policies and invested a large amount of resources to improve the information construction system in the domestic education field. In the face of the wave of educational informatization, how traditional majors such as administrative management in universities can meet the challenges of educational informatization, improve the information digital literacy of professional teachers, and continuously increase the proportion of information technology applications in teaching has become an urgent problem that many majors need to solve in the future development.

Leadership Science is one of the professional courses for full-time undergraduate majors in public utility management and administrative management. This course is a discipline that studies the laws of leadership activities and their effective application. With the development of reform and opening up and socialist modernization construction, leadership activities have shown characteristics such as specialization, modernization, and internationalization. The purpose of studying leadership activities is to improve the efficiency and energy of leaders in various organizations, and to make leadership

activities more scientific, standardized, democratic, and legal. This course has strong theoretical and practical guidance significance. Through the study of this course, students should have a clear understanding of the theoretical and practical aspects of leadership activities, including foundations, subjects, behaviors, norms, and development.

This course is mainly divided into the following three aspects in cultivating students' professional skills: in terms of professional methods, it enables students to understand the basic theories and development laws of leadership science. In terms of professional abilities, students should have the ability to scientifically judge situations, master language art, and respond to various issues in talent recruitment. In terms of professional abilities, the study of this course enables students to develop a comprehensive quality of combining words and actions, being good at communication, and acting cautiously.

#### 1. Relevant theories of educational informatization

Education informatization has two meanings: one is to bring the improvement of students' information literacy into the teaching objectives, and cultivate talents to meet the needs of the information society; The second is to effectively apply information technology methods to various aspects of teaching management and scientific research, emphasizing the development and utilization of educational information resources.

The core content of educational informatization is teaching informatization. Teaching is the central task in the field of education, and teaching informatization refers to the modernization of teaching methods, educational dissemination, and teaching methods. Education informatization requires the comprehensive application of modern information technology based on computers, multimedia, Big data, artificial intelligence and network communication in the education process to promote education reform, so as to meet the new requirements of the coming information society. It is of great significance for deepening education reform and implementing quality education. On April 13, 2018, the Ministry of Education of China officially released the "Education Informatization 2.0 Action Plan". [1]

The basic characteristics of educational informatization are openness, sharing, interactivity, and collaboration. The openness of educational informatization has broken the education system centered around school education, enabling education to achieve socialization, termination, and autonomy; Sharing is the essential feature of informatization, which enables a large amount of rich educational resources to be shared by all learners, and is inexhaustible; Interactive performance enables bidirectional communication between humans and machines, as well as long-distance interactive learning between humans, promoting multi-directional communication between teachers and students, students and students, and students and others; Collaboration provides educators with more opportunities for human machine collaboration to complete tasks. It can be said that teaching informatization has fundamentally changed the traditional teaching mode.

The rapid development of educational informatization has brought a huge impact on traditional majors such as administrative management, and has also put forward new requirements for the teaching objectives, teaching concepts, teaching models, teaching content, teaching methods, and teaching methods of administrative management majors.[2] How to build a complete digital teaching system in the field of administrative management, fully utilize various teaching websites, teaching apps, and teaching resource sharing platforms. This entails creating an innovative teaching model centered on students. Administrative management teachers need to actively explore the development and utilization of digital teaching resources in administrative management. This has become a problem that every administrative management teacher needs to think about and solve.

## 2. The main problems in implementing educational informatization in leadership science courses

# 2.1. The leadership science course has strong practicality, but students generally lack relevant practical experience

Leadership Science is a course that summarizes and summarizes the patterns of leadership activities in organizations, and explores how to help students cultivate and enhance leadership abilities. If the teaching object is a civil servant who has practical work experience in the government, many knowledge points can be firmly grasped by students with appropriate guidance based on their own practical experience. However, in university teaching, the target audience is college students who, due to their long-term campus life and lack of practical experience in organizational management, can only swallow many theories in textbooks. Especially for chapters with more practical connections such as leadership decision-making, leadership communication, and leadership functions, I have a relatively superficial grasp of the content, but I do not know why. Once students are required to apply the theories they have learned in combination with practical situations, many students may experience a certain degree of confusion and confusion about the specific connections between relevant theories and practice. For example, after learning the definition of leadership communication, students understand that one of the basic principles of leadership communication is to respect, understand, and trust each other. However, if asked whether student leaders and subordinates are equal in terms of personal dignity during the communication process, many students mistakenly answer and believe that they are unequal.[3]

# 2.2. The teaching mode is relatively single, and there are not many links designed for interactive and heuristic teaching in the classroom

As a directional course in the field of administrative management, leadership science is aimed at enabling junior students interested in enterprise management to systematically master the knowledge system of leadership science with Chinese characteristics, understand the main schools and classic works of leadership theory research in different eras, and become familiar with the entire process and various links of leadership activities. Therefore, in classroom teaching, the knowledge points and theories that need to be explained to students are relatively dense.[4] On the premise of ensuring the timely completion of knowledge point teaching, the interactive and heuristic teaching links in the classroom can only be carried out when there is spare time in the classroom teaching, which leads to relatively single classroom teaching mode, insufficient classroom interest, and insufficient interactive participation of students in classroom teaching and other related issues.

## 2.3. The connection between various teaching links in classroom teaching is not close enough, and teaching efficiency needs to be improved

Due to the limited use of various teaching apps in universities traditional classroom teaching, it makes the connection between various teaching stages in classroom teaching not close enough. For example, after explaining a knowledge point, it is necessary to examine the students' mastery of the knowledge point. The traditional teaching method is to select a few students to answer questions, or assign after-school exercises to understand through the grading of the exercises. Both of these methods take up more time and the speed of information feedback is also relatively slow, which affects the efficiency of classroom teaching.

#### 2.4. The construction of online teaching resource library needs to be improved

In the traditional teaching of leadership science, the construction of the resource database is an offline resource database. For example, the teaching database of courses, including the curriculum outline, teaching plan, curriculum Knowledge graph, courseware, handouts, test question sets, etc., is delivered to the school for safekeeping and storage after the completion of the construction of the teachers. Students can only ask the teachers after class to obtain these teaching resources. Students studying leadership science courses can obtain teaching materials, including electronic teaching syllabuses sent to them before the start of each semester, and after each class, students can use a USB flash drive to download the courseware for that class. The lack of online resource library construction has led to two prominent problems in teaching. Firstly, for teachers, when they allow students to download courseware from a USB flash drive after class, even if they are warned in advance that they can only share it within the class and cannot upload it to the internet at will, there is also a very small number of students who lack awareness of protecting the teacher's intellectual property after obtaining the teaching courseware produced by the teacher, Unauthorized uploading of courseware to the internet, and even students selling courseware with clear codes and prices in Baidu Wenku for personal gain. Even if the teachers involved discover such infringement behavior by students when searching for online materials, online rights protection is quite troublesome, seriously affecting the mutual trust between teachers and students. Secondly, for students, without an online resource library, it is not very convenient to use fragmented time for learning.

## 2.5. Insufficient utilization of online high-quality leadership science digital resources by students

Many famous colleges and universities, such as Beijing University, People's Congress and other 985 colleges and universities, have shared massive educational digital resources on Xuetang X, B Station, Smart Tree and other platforms. For these high-quality digital resources of leadership science, even if teachers share these apps or platforms with students in the classroom and encourage them to complete the acquisition and learning utilization of corresponding online teaching resources. However, based on the feedback from students, some students still do not fully utilize these high-quality online leadership science digital resources. There are two main reasons: firstly, these students rely solely on self-awareness in accessing and learning online digital resources. In the absence of effective supervision, many students lack the motivation to learn independently. I would rather spend my spare time outside of class on mobile games or entertaining short videos than use it for learning online teaching resources; The second reason is that the number of digital resources on the internet is too large, and students do not know how to make choices when facing this massive amount of information.

#### 2.6. The second classroom of leadership science is not yet perfect

Due to the fact that leadership science is a highly practical course, relying solely on classroom teaching to help students understand the corresponding theories is quite tedious. For example, when students are learning how to use leadership personnel, their understanding of the principles and methods of leadership personnel selection is difficult to connect with the actual work of leadership personnel selection in reality. If classroom teaching alone is used to explain, students will master dry theories. If a second classroom can be opened, bringing students to enterprises or government departments to introduce the reasons for the various systems established by leaders in personnel selection and appointment on site, then students' mastery of corresponding theoretical knowledge will be more vivid and interesting, and they will also be more proficient in combining theory with practice.

## 3. Strategies proposed for better achieving educational informatization through leadership science

### 3.1. Try to make the teaching content close to students' actual lives as much as possible

For students who lack social practical experience due to their long-term campus life, it is recommended to design some links and content that are close to their actual life during teaching. For example, when explaining the knowledge point of administrative leadership personnel, let students think about whether they can be called talents now and what kind of people can be called talents. For students who answer that they are talents, further ask them what they consider the most valuable knowledge or skills they possess as talents. For students who answer that they are not talents, ask them how they plan to become talents that meet their ideal talent standards in the remaining time before graduation. Guide students in the classroom to sort out their social values and establish a rough framework for their future career plans.

## 3.2. The design of the classroom segment will be student-centered, adding interactive and heuristic teaching segments in the classroom

For some students who have expressed reasonable suggestions for classroom teaching, such as students hoping to intersperse more practical cases in the classroom, they have added a large number of examples of excellent leaders from both East and West to enrich the classroom content. Some students hope to have more interaction in the classroom, so they add interactive links such as classroom case discussions, group debates, and questionnaire surveys to the classroom teaching. During teaching, try to make the content design of the classroom as close to the actual needs of students as possible, promote the deep integration of professional practice and classroom teaching.

## 3.3. Choose a classroom teaching mode based on course adaptation, scientifically design course assessment content and methods

Universities should design the classroom teaching mode and assessment content according to the content of each class. For example, leadership communication is a practical knowledge point, and small games such as watching pictures and guessing words can be added in the classroom to liven up the classroom atmosphere and deepen students' impression. And the knowledge point of leadership power can be included in the teaching process, which allows students to introduce cases of leadership power that they are interested in in the form of groups. The content of classroom assessment is based on students' participation in group assignments and the final completion effect. This flexible teaching method that is tailored to the class can avoid students' fatigue caused by the unchanged classroom teaching mode and assessment methods; It can also better adapt the teaching mode to the classroom teaching content and improve the quality of classroom teaching.

# 3.4. Promote the organic integration of information technology and courses, and build a teaching model that combines online and offline

Universities need promote the organic integration of information technology and curriculum, and build a teaching model that combines online and offline. For example, classroom attendance can be conducted through rain classes and nail nails; Classroom assignments can be completed online by students scanning QR codes; The sharing of courseware can be achieved through educational apps such as Tencent Classroom; After class communication can be conducted through chat tools such as WeChat and QQ, opening up new avenues for intelligent education and forming a new form of

teaching and learning. In addition, taking advantage of the opportunity of the school to promote curriculum assessment and teaching reform projects, establish a teaching research team for leadership science, create a knowledge and quality map for leadership science, shoot online teaching videos for leadership science, and share the completed digital resources with students through teaching platforms such as the Wisdom Tree. Closely centering on the concept of "smart classroom", University of Sanya effectively improves the quality of leadership science teaching services and further deepens the digital construction of leadership science courses.

#### 3.5. Include content on cultivating students' ideological and political literacy in teaching

While teaching students the theoretical knowledge of administration, we should also pay attention to cultivating students' patriotism and Core Socialist Values. The leading scientific teaching team has made many attempts in designing teaching content and links to achieve this goal. For example, in the listing of cases, many examples of Chinese government leaders daring to take on and challenge have been added, such as the completion of the design of projects that benefit the country and the people, such as the Three Gorges Project and the South to North Water Diversion Project; After the 2008 Wenchuan earthquake, the Party and government prioritized the lives of the people and created one miracle after another in earthquake relief efforts; During the forty years of reform and opening up, the government focused on economic development and took improving people's living standards as its own responsibility, transforming China from a poor and weak agricultural country into the world's second largest economic power, and making "Made in China" popular globally. Let students experience these exciting moments in the classroom, and draw inspiration from these examples to love the Party and patriotism. In our spare time, we should understand what a successful government is and what a responsible government is. In this increasingly competitive world, as ordinary citizens, we can do something for the country and society.

## 3.6. Effectively guiding students to fully utilize high-quality online leadership science digital resources

To address the lack of motivation and external supervision for some students in learning high-quality leadership science digital resources online, universities should consider implementing the following strategies. The author believes that the solution can be achieved by establishing an educational resource sharing platform, where both students and teachers can share their discovered high-quality teaching resources on the sharing platform. During the sharing process, students can communicate and discuss with teachers and other classmates if they have any questions during the process of self-directed learning. And teachers can also supervise students' extracurricular autonomous learning based on these shared platforms. For example, students are required to watch a teaching video on leadership science every week. On the one hand, this broadens the channels for extracurricular communication between teachers and students, and on the other hand, allows teachers to have a grasp of students' extracurricular autonomous learning situation and be able to carry out corresponding supervision.

#### 3.7. Opening up a Second Classroom to Enrich Teaching Methods and Content

The research object of leadership science is the contradiction between leaders and the led in the leadership activities and its movement rules. It can actively contact with the local government agencies, enterprises and social organizations where University of Sanya is located, and open up a second classroom and student practice base. For example, you can sign an agreement with the Government Affairs Service Hall of Sanya City, and irregularly organize students to visit, exchange

and study in the Government Affairs Service Hall in groups under the guidance of teachers. To enable students to experience on-site how theoretical knowledge in textbooks is applied in the daily management of the government, universities should enrich classroom content. This approach will deepen students' understanding of textbook knowledge and improve their practical ability to apply what they have learned.

#### 4. Conclusion

In the current wave of educational informatization, if leadership science wants to keep up with the pace of the times, it can only achieve its goals by quickly adjusting teaching methods, improving teaching links, exploring more online teaching resources, and enriching teaching methods. In summary, there are still many aspects that leadership science courses want to try in the process of achieving educational informatization, such as the design of online teaching content, the inclusion of online video teaching, the construction of online question banks, and online student questioning into course teaching, making teaching methods more diverse, allowing students to learn anytime on their mobile phones in their spare time outside of class, and fully utilizing their fragmented time. There can also be more channels for communication between teachers and students. Students can express their opinions on teaching content through online messages, teaching Danmaku subtitling and other ways. After collecting students' opinions, teachers can timely adjust teaching content according to their feedback, better improve the teaching quality of leadership science.

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