# Dual-track Training Mode of Information Management Specialty Training in the New Era

# Jianjun Wang \*

School of Economics and Management, North China Electric Power University, Beijing, 102206, China \* Corresponding author: Jianjun Wang

Abstract: The new era puts forward new development requirements for practical education in colleges and universities. Practical education is an important part of talent cultivation in colleges and universities, an important part of higher education, and an educational form that integrates collegial education, social education and self-education. It is also an important way to strengthen and improve the ideological and political education of college students. Under the new educational situation, in order to adapt to the new demands of the information management professionals in the rapid development of the information society, based on the educational practice of undergraduate majors for many years, this paper determines to the goal of cultivation information management talents with solid foundation, broad knowledge, strong ability, high quality, and certain innovation ability, entrepreneurial ability and strong practical ability is determined, and the theoretical and practical platform on campus, and builds a dual-track system of on-campus theory and practice platform and off-campus practice cultivation. The research of this paper is in line with the current higher education reform is deepening in an all-round way, and colleges and universities have changed from the original extensional development to the connotative development, which has certain value both in theory and in reality. The research of this paper is in line with the current higher education reform is deepening in an all-round way, and colleges and universities have changed from the original extensional development to the connotative development, which has certain value both in theory and in reality.

**Keywords:** Information management; Dual-track; Cultivation

#### 1. Introduction

In the context of comprehensively deepening the reform of higher education, educating people with practice is an important part of talent cultivation in colleges and universities, an important part of higher education, an educational form that integrates school education, social education and self-education, and it is also an important way to strengthen and improve the ideological and political education of college students [1-3]. Comprehensively deepening the reform is a major

strategic measure proposed in China, and the comprehensive reform of higher education is also an important part of it [4]. The most direct and clear requirements and tasks in the comprehensive reform of higher education are to adhere to the principle of educating people, change the educational concept, innovate the talent cultivation mechanism, and fundamentally solve the real social problem. Among them, make a comprehensive person is the purpose and foundation, and how to cultivate people is the way and carrier. Strengthening ideological and political education research, in essence, its value pursuit lies in cultivating and practicing socialist core values, adhering to morality and cultivating people, enhancing students' sense of social responsibility, innovative spirit, and practical ability, cultivating builders and successors socialism with Chinese characteristics [5].

In the process of cultivating people, knowledge is the foundation for the formation of values; practice is the link that transforms knowledge into action. Only by combining theoretical knowledge with productive labor and social practice can the unity of knowledge and action be achieved [6]. Colleges and universities should not only insist on teaching and educating people, but also insist on educating people by practice, and should effectively change the concept of emphasizing theory and ignoring practice, emphasizing knowledge transfer and ignoring ability cultivation, focusing on the combination of learning and thinking, focusing on the unity of knowledge and practice, and focusing on teaching students in accordance with their aptitude. It can be seen that the practical education mechanism is not only an important part of the talent cultivation mechanism in colleges and universities, but its development will also promote the reform and improvement of the talent cultivation model. Practical education is a systematic project and a joint project. How to stimulate the endogenous power of the main body of practice, actively mobilize, coordinate and integrate external resources, explore and construct a practical education mechanism in colleges and universities, and form a practice education collaboration system with common goals, co-construction of mechanisms, resource sharing, and win-win for all parties, let young students truly learn in learning and practice, and then constantly enhancing political, institutional and cultural identity, and constantly strengthening selfconfidence in the road, theory, system, and culture. It is the most important mission and responsibility of ideological and political educators in colleges and universities.

## 2. Thinking of Improving Students' Quality Ability by Combining Professional Practical Ability with Information Management Major

How to cultivate high-quality innovative, high-level and compound information management and information system application talents for the country has been the goal that information management has consistently adhered to and explored in China's educational circles since the information management major began to recruit students. Due to the disciplinary characteristics of the management major. the information information management major has always implemented the professional cultivation goals of "thick foundation, wide caliber, emphasis on practice, and strong ability" in the talent cultivation plan. Therefore, domestic colleges and universities have basically constructed a curriculum system combining "management + IT technology" in practice and a practical teaching system based on the framework of "computer basic operation experimental module, information system analysis and design experimental module". It has effectively promoted the improvement of students' comprehensive quality and personality development, and strengthened the cultivation of computer operation ability and application ability.

With the gradual maturity and popularization of newgeneration information technologies such as cloud computing, big data, the Internet of Things, and "Internet +", and the current educational concept changes that keep pace with the times, how to combine the characteristics of information management practice work, integrate into the requirements of talent quality construction in the new era, conduct research on the practical education mechanism of information management majors, and Realize the characteristics of the integration of discipline and value. theory and application, comprehensiveness and creativity in the cultivation of information management professionals. In order to adapt to the new demands of information management professionals from the rapid development of the information society, based on years of undergraduate education practice, we propose a talent cultivation goal featuring the combination of information management knowledge system theory and practical resources, and highlighting the "three abilities", that is, "cultivating high-level specialized talents with solid foundation, broad knowledge, strong ability, high quality, certain innovation ability, entrepreneurial ability and strong practical ability", it is clear that the two platforms of on-campus theory and practice platform and offcampus practice platform are the effective carriers of the three major ability cultivation, form the "two platforms and three capabilities" practice education innovation and entrepreneurship mechanism for information management majors, rely on the current teaching system of "two platforms and three capabilities" for information management majors, to construct and formulate corresponding practice and innovation and entrepreneurship cultivation links. The framework of the specific practice teaching platform is shown in Figure 1.

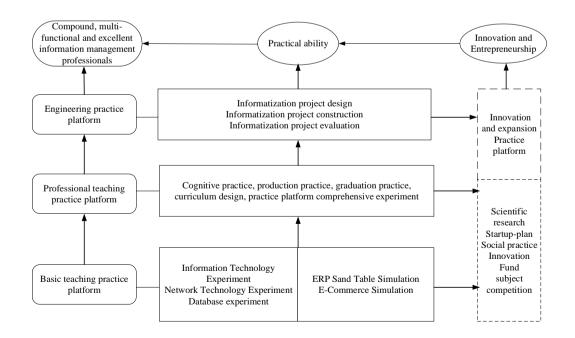


Figure 1. The double-track framework of the theoretical and practical resources of the information management professional knowledge platform

The platform will be able to complete the management of test scores with the platform's database. The teaching and the test here refer to the online in the platform.

With the platform, colleges can be stimulated to contact relevant innovation and the project's entrepreneurship information, and after using the information platform to connect to widely participate in practical activities, colleges will choose the direction related to innovation and entrepreneurship based on their own interests and abilities, combined with the knowledge they have learned. After determining the direction, indepth understanding of the theoretical knowledge in the relevant direction and study of the practical activities in the relevant direction can complement the professional knowledge learning and entrepreneurial innovation practice. For example, colleges who are interested in programming can participate in multiple software programming project groups, take advantage of the opportunity to participate in the MIS project, and use the project to complete the project while consolidating the programming knowledge to achieve twice the result with half the effort. Searching for information through the platform can reasonably arrange on-campus learning and after-school time to study, learn in projects, and progress in learning. It will help the colleges to enhance their ability all aspects.

The platform can also provide relevant opportunities for students to carry out teamwork. The fastest way to improve the quality of college students is to learn from each other, and currently, teamwork is required in college students' innovation and entrepreneurship competitions. necessary for innovation Teamwork is and entrepreneurship for colleges. Using the platform to participate in a number of innovative and entrepreneurial practices allows college students to form their own teams, pay attention to themselves, and find their own roles in the team according to their own strengths across majors or disciplines. In addition, the team leader can also cultivate the relevant qualities of responsibility and patience, and also needs leadership willpower, which can stimulate the energy and fighting spirit of the team's role models. The ordinary team members perform their own duties and can ensure the normal progress of the project.

## **3.** The Main Points of the Implementation of the Dual-Track Cultivation Model

Combined with the above-mentioned framework and thinking diagram, the implementation points of the dualtrack cultivation model combining on-campus theory and off-campus practice for information management majors are put forward as follows:

(1) Innovatively change the horizontal mode in which the traditional professional experimental course setting is attached to the theoretical course system, and form a practice-based course group construction system. In the setting of cultivation programs, attach importance to the connection between practice and disciplines, and go beyond the scope of a single course to establish a systematic connection between experimental courses. On the basis of the original experimental courses, relatively independent courses with vertical links are established to form a networked professional experimental course curriculum system that intersects vertically and horizontally, so as to realize the vertical connection and connection between professional experimental courses.

(2) Integrate practical resources, realize platform-style sharing in experimental teaching and students' innovative scientific research activities, and increase the opportunities for students to exercise their innovative ability. On the basis of the content of professional experimental courses, design a series of thematic or comprehensive practice and research simulation projects, make full use of students' spare time through class adjustment and practical links of various information management categories, so that students can obtain preliminary practice and innovation capabilities on the school experimental platform.

(3) Change the organizational form of experimental teaching from a single course group and student classes to form a cross-type teaching guidance team and an interest-type student learning team.

(4) Improve the content of professional experimental courses, design experimental content that is close to engineering practice and cross-knowledge, so that the experimental teaching content reflects the systematicness and comprehensiveness of information engineering projects.

(5) Strengthen the organization and team guidance of professional practice links, build a permanent off-campus practical cultivation platform with cooperative units, collaborate to build mentoring teams to improve graduation design work, and further strengthen the combination of graduation thesis and practical engineering projects, break through the current head teacher responsibility system, adopt the "tutor" system, and use the graduation design as the carrier to improve students' innovative spirit and practical ability. By cobuilding an internship and practice platform with cooperative units, students can participate in the actual informatization projects of cooperative units, and undertake the design, implementation, management and evaluation of actual projects under the guidance of teachers and engineering technicians. Expose students to the technical core of informatization projects, so that students can master the skills of informatization project implementation and innovation through practical exercises.

(6) Strengthen the construction of student innovation and entrepreneurship platform. On the basis of the competition of related disciplines of the information management major, further combine the actual situation of the major to establish an innovation and entrepreneurship platform for the information management major. Through the professional innovation and entrepreneurship platform, students are encouraged and supported to participate in domestic and foreign informatization skills competitions and innovation and entrepreneurship competitions, and provide technical and methodological guidance for students of this major to start their own businesses.

#### 4. Conclusion

Combined with the new requirements of the current education mechanism in colleges and universities, combined with the dual-track cultivation of teaching and practical ability is an effective mechanism for the education of information management professionals in the new era. By establishing a practical platform, communicating with enterprises, establishing talents that enterprises need, and by reforming information management and information system professional education mechanism related to teaching practice, research experiment, scientific social practice, entrepreneurial innovation and other practical activities, the theory and practice are combined, truly internalize the information management knowledge requirements, values, and ethics required by social development into quality requirements, and externalize them into conscious actions. and build a practice-based innovative education system. Through the dual-track system cultivation, the students majoring in information management can finally realize the unified and comprehensive development of knowledge and action, and provide outstanding talents in the new era for socialism.

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#### References

- Nandan, M. and London, M, Interdisciplinary professional education: Training college students for collaborative social change, *Education + Training*, 2013, Volume 55, pp. 815-835.
- [2] Diane M. Harnek Hall, Shari E. Miller, Carolyn J. Tice. Understanding and Assessing Critical Thinking: A National Survey of Social Work Educators' Perceptions. *Journal of Social Work Education*. 2021, Volume 57, pp.226-238.
- [3] An Verburgh. Effectiveness of approaches to stimulate critical thinking in social work curricula. Studies in Higher Education. 2019, Volume 44, pp.880-891.
- [4] Zhang Xinghua, Wang Ling. From "Management" to "Governance": A Major Issue in Deepening the Comprehensive Reform of Higher Education. *Shandong Higher Education*, 2014, Volume 5, pp.5-11.
- [5] Duoying Zhang, Wanling Deng, Junkai Huang, Xiaoyu Ma. Study on Innovative Talent Education Model for Electrical Engineering Major. *Proceedings of the 2015 Conference* on Education and Teaching in Colleges and Universities, 2015, Volume 1. pp.1.
- [6] George S. Tsagaris, Chiquitia L. Welch-Brewer. Teaching and incorporating practice models in a human behavior in the social environment (HBSE) course, 2016, *Journal of Human Behavior in the Social Environment* Volume 26, pp. 470-487.