

## Research on the Cultivation Path of the Core Competencies of College Students of the Undergraduates in Colleges of Traditional Chinese Medicine in the New Era

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**Abstract:** Based on the Core Competencies framework for the development of Chinese students, combined with the training target positioning of technical and application-oriented talents in Colleges of Traditional Chinese Medicine in the new era, the Core Competencies of college students in Colleges of Traditional Chinese Medicine in the new era is decomposed into the spirit of medical ethics, cultural foundation, independent development and society participation. It is further refined into the six qualities of noble moral sentiment, solid knowledge of Chinese medicine, scientific research spirit of uprightness and innovation, good communication skills, dialectical thinking ability and healthy physical and mental qualities. Taking the all-round development of College students of Chinese medicine as the core and basing on concept of the Core Competencies as the foundation, we will build a “four-in-one” College students of Chinese medicine education and cultivation path with Colleges of Traditional Chinese Medicine, ideological and political teams, society, and College students of Chinese medicine as the core goals so as to promote to cultivate comprehensive Colleges of Traditional Chinese Medicine talents with both medical ethics and medical skills, and provide a theoretical basis for further exploring the Core Competencies training strategies and educational reforms of College students of Chinese medicine.

### 1. Introduction

Academia generally believes that Core Competencies stems from the study of the Core Competencies framework initiated by the Organization for Economic Co-operation and Development (OECD) in 1997 (Ananiadou & Claro, 2009). The OECD's formative research report in 2003 emphasized that in the development of economic globalization, education should not only focus on knowledge and skills, but should also focus on the cultivation of students' Core Competencies, so that students can better adapt to rapid development of society. In the No.4 Document issued by the Ministry of Education in 2014 (“Opinions on Comprehensively Deepening Curriculum Reform and Implementing the Fundamental Task of Lide-Cultivating People”), it is necessary to conduct research on the Core Competencies of students in each school stage, and clarify what students should do in each school stage and the character and ability they need to adapt to their own lifelong development and social development. Practicing the concept of Core Competencies is the foundation for promoting the all-round development of contemporary students, and the core of cultivating students' essential qualities and key abilities (Arnold, 2000).

### 2. The Core Competencies Connotation of College Students

Key Competence, also known as 21st Century Competence or Key Competence, originated from

the reform and development of education all over the world, and refers to the key abilities, knowledge skills, attitudes and emotions that individuals should possess in the present and future society. The Core Competencies of college students mainly refers to the key abilities and necessary qualities that college students should master and possess(Coombs, 2010), which can adapt to their own life-long development, and the needs of social development.

The team of psychologist Professor Lin Chongde and the research team conducted a systematic and scientific research on the Core Competencies of Chinese students' development. The research lasted for three years, and the research results were released on September 13, 2016. This research result and related concepts have provided standards and paradigms for the education of Chinese medicine colleges and universities, and will surely become a powerful starting point for the cultivation of Chinese medicine colleges and universities in the new era. Research has shown that the Core Competencies of Chinese students' development takes "all-round development of people" as the training goal, which is mainly composed of three aspects: cultural foundation, independent development, and social participation; cultural foundation includes humanistic background and scientific spirit, and independent development includes learning to learn and healthy Life and social participation includes responsibility and practical innovation; Each literacy can be specifically refined into eighteen basic points such as humanistic accumulation. They are interconnected, complementary, and integrated and play a role in different situations. (see Figure 1 ).

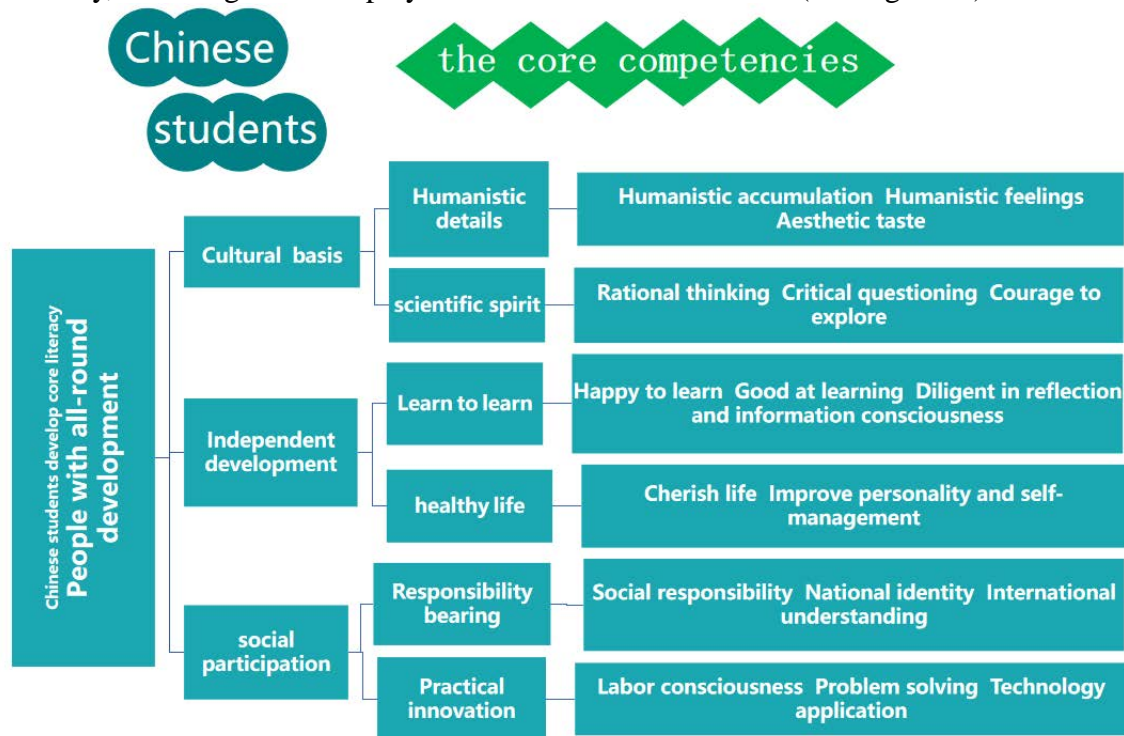


Fig.1 Core Competencies and Values for Chinese Students' Development

### 3. The Core Competencies Framework of College Students in Chinese Medicine Colleges in the New Era

Inspired by the framework of the Core Competencies framework for the development of Chinese students, combined with the training target positioning of technical and application-oriented talents in TCM colleges and universities in the new era, it is not difficult to find that the Core Competencies of college students in TCM colleges and universities in the new era covers cultural foundation, independent development and The three dimensions of social participation.

It is the fundamental task of socialist education with Chinese characteristics to lead morality and cultivation of people. To cultivate people with all-round development, we must first clarify the specific connotation of all-round development of people. In the "Opinions on the Collaboration of Medical Education to Deepen the Reform of Cultivation of Clinical Medical Talents" issued by the

Health and Family Planning Commission in 2014, it was emphasized that medical ethics education should be run through the entire process of talent training, and to educate and guide medical students to establish a correct world outlook, outlook on life, and values; Pay attention to the cultivation of humanistic care and interpersonal communication skills, so that medical students have noble professional ethics and good professional qualities. The preface of “Western Internal Medicine” says: “Medicine is a science and an art.” In the education and training of college students in TCM colleges and universities, the fundamental task should be to cultivate talents, and to cultivate medical talents with superb professional skills and noble professional qualities as the fundamental goal(Schmitt et al., 2011).

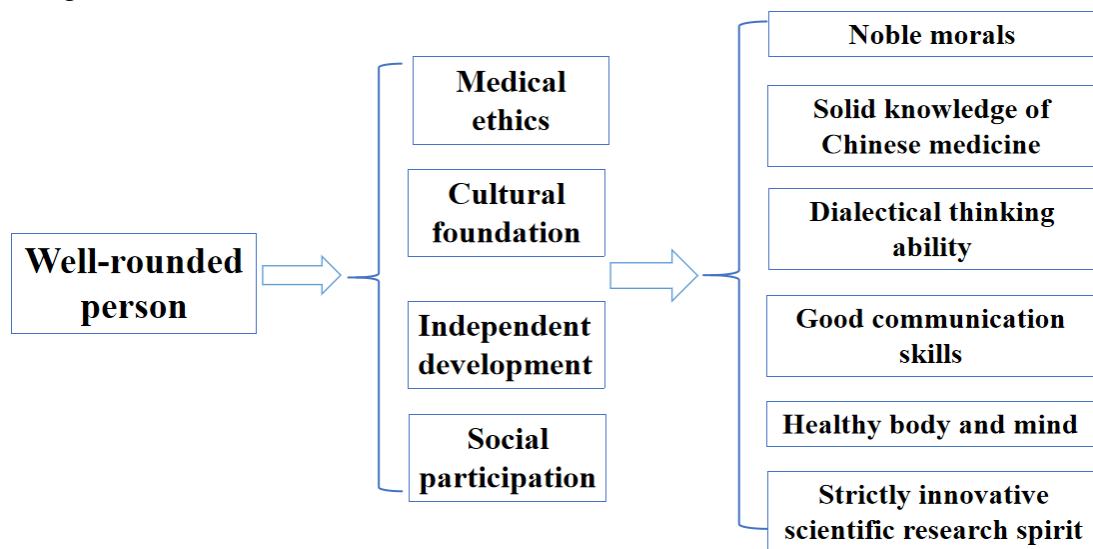


Fig.2 The Core Competencies Framework of College Students in Chinese Medicine Colleges in the New Era

In summary, the spirit of medical ethics is another dimension of the Core Competencies of college students in TCM colleges and universities in the new era. In further detail, the Core Competencies of college students of Chinese medicine colleges should include noble moral sentiment, solid Chinese medicine knowledge, upright and innovative scientific research spirit, good communication skills, dialectical thinking skills, and healthy physical and mental qualities, as shown in Figure 2.

#### 4. Cultivation Path of Core Competencies of College Students in TCM Colleges and Universities in the New Era

With the all-round development of TCM college students as the core and the Core Competencies concept as the basis, the TCM colleges, ideological and political teams (counselors, class teachers, instructors, ideological and political teachers, political cadres), society (hospitals or pharmaceutical companies) and “four-in-one” education and training system for college students of Chinese medicine as the core goal will be constructed, as shown in Figure 3. Through the entry point of education model, education concept and comprehensive quality, the six dimensions of noble moral sentiment, solid Chinese medicine knowledge, upright and innovative scientific research spirit, good communication ability, dialectical thinking ability and healthy physical and mental quality are taken as the entry point. The training goal is to use the “four-in-one” education and training system to cultivate comprehensive Chinese medicine talents with both medical ethics and skills in Chinese medicine schools in the new era.

##### 4.1 The School Establishes the Cultural Spirit of Traditional Chinese Medicine on Campus, and Practices the Educational Concept of Equal Emphasis on Medical Ethics and Medical Skills

Colleges and universities of Chinese medicine should establish the cultural spirit of Chinese

medicine on campus. The cultural spirit of campus Chinese medicine has a subtle influence on the ideology and behavior of college students of Chinese medicine. The construction of campus Chinese medicine culture should integrate medical ethics education. It can combine moral education and intellectual education in the cultivation method through activities such as advanced cases of Chinese medicine, school motto and school history learning, Chinese medicine knowledge lectures, and campus cultural festivals to create a campus cultural atmosphere with good school spirit, teaching style and style of study for TCM college students.

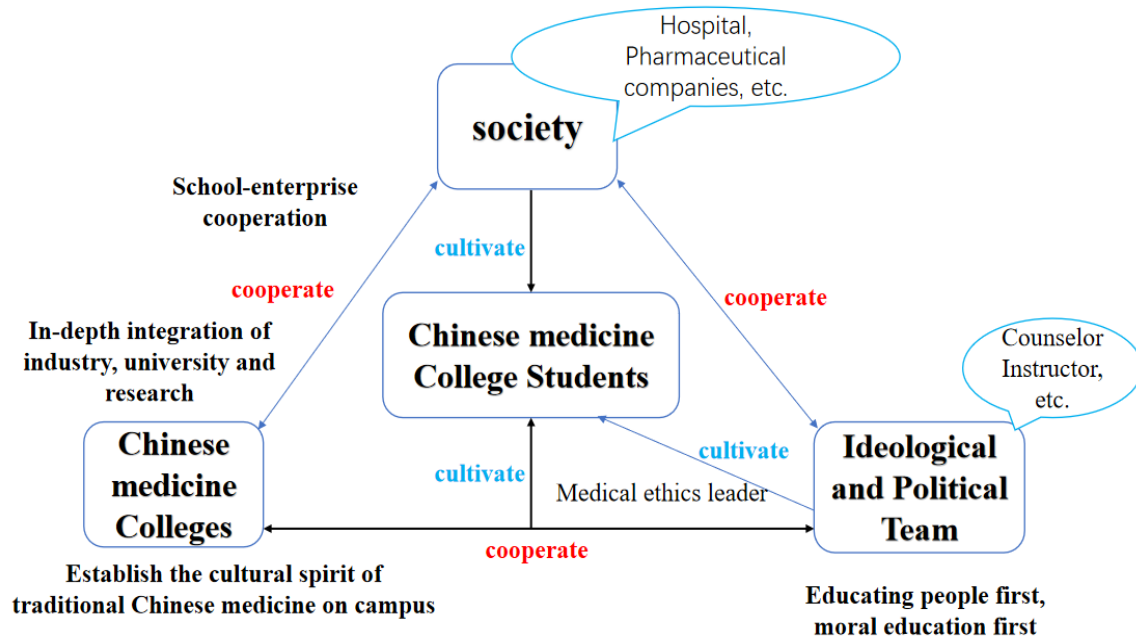


Fig.3 Cultivation Path of Core Competencies of College Students in TCM Colleges and Universities in the New Era

Traditional Chinese medicine colleges and universities need to incorporate the Core Competencies concept of comprehensive development into the formulation of rules and regulations. First of all, the education system of “education-oriented and moral education-first” should be embodied in the school-running philosophy(Esther et al., 2009). Then it is necessary to set up special Core Competencies courses to improve the application of theory to clinical practice by TCM college students. Secondly, it is necessary to carry out standardized training for school staff, put “medical ethics education” in the first place in the teaching work of college students of Chinese medicine, and establish a moral education evaluation mechanism to improve students' medical ethics. Finally, TCM colleges and universities should integrate the four-in-one Core Competencies system of medical ethics, cultural foundation, independent development, and social participation into the school learning and work platform to achieve the integration of teaching, management, learning and service, and Improve the management, education and incentive system, practice the educational philosophy of equal emphasis on medical ethics and medical skills, and cultivate four good Chinese medicine practitioners who have ideals and beliefs, professional ethics, solid knowledge, and a benevolent heart.

#### 4.2 The Ideological and Political Team Implements the Educational Philosophy “Moral Education First”, and Implements the Fundamental Task of Lide and Cultivating People

The ideological and political team of Chinese medicine schools shoulders the important task of moral education. First of all, counselors are the backbone of the ideological and political education of Chinese medicine college students. Therefore, it is necessary to strengthen the professionalization and professionalization of the counselor team of Chinese medicine colleges and universities, and strive to build and cultivate a strong political, professional, disciplined, and upright work style. In order to better implement the fundamental task of nurturing people with virtue. Counselors should strive to become instructors and good friends of healthy living in universities of

Chinese medicine.

Secondly, the instructor is an academic guide for college students of Chinese medicine, a disseminator of Chinese medicine culture, and a guide for students to become talents. They need to have superb medical skills and good academic attainments, and they need to strengthen their own teacher's ethics and style. A leader in medical ethics of medical college students and they should practice the work philosophy of “respect for life and medical ethics first” in their work, and pay attention to the way of communication with patients and their families in the process of practical teaching, so as to dedicate themselves to the establishment of Chinese medicine college students. A good professional ethics must adhere to the scientific research spirit of integrity and innovation in academic research, and be an example force in the scientific research literacy of Chinese medicine college students.

#### **4.3 Improve the in-Depth Integration of “Production, Study and Research” and Strengthen School-Enterprise Cooperation**

At the symposium of scientists, General Secretary Xi Jinping pointed out that it is prerequisite to improve the concentration of innovative elements in enterprises and improve the in-depth integration of “production, study and research”. Pharmaceutical companies should innovate the form of cooperation with TCM colleges, strengthen cooperation and connection with TCM colleges, and bring forth new ideas in talent recruitment and training, brand promotion, etc., to provide a platform for TCM college students to grow and become talents, and provide for the development of enterprises Talent support. Pharmaceutical companies and traditional Chinese medicine colleges and universities are connected to each other to promote the continuous integration and complementarity of the traditional Chinese medicine industry chain, innovation chain and talent chain. Create a joint training base for college students of traditional Chinese medicine with the integration of production and education, promote the full participation of pharmaceutical companies in talent training, improve the quality evaluation mechanism of joint training of production and education, strengthen the connection between the training of Chinese medicine talents and the needs of pharmaceutical companies, and enhance the ability of Chinese medicine college students to practice innovation. Make full use of the support of pharmaceutical companies and hospitals, integrate the needs and practice into the talent training of Chinese medicine college students, and continuously promote the education and practice of the Core Competencies of college students in Chinese medicine colleges(Tokkeli & Tuominen, 2002).

In the report of the 19th National Congress of the Communist Party of China, General Secretary Xi Jinping indicated that it is necessary to continuously develop quality education, promote vocational education, promote the vocational training system, further deepen the integration of industry and education and school-enterprise cooperation, accelerate the construction of first-class universities and first-class disciplines, and promote the connotation of higher education development. School-enterprise cooperation is a win-win model that focuses on student learning and enterprise practice, and resource sharing between schools and enterprises. It achieves a new talent training concept that meets the needs of enterprises, integrates majors with the market, and combines practice and theory. It is conducive to promote the development of vocational education in the TCM industry, and it is an effective way for TCM colleges and universities to promote the reform of the school-running model and talent training model, and to enhance the school's ability to serve local economic construction.

#### **4.4 Chinese Medicine College Students Strive to Improve Their Own Quality and Practice Learning Philosophy of All-Round Development**

Medicine is benevolence, and great doctors are sincere. College students of Chinese medicine must first strengthen their own moral cultivation, establish a correct professional outlook on medical ethics, and form noble professional ethics. Secondly, it is necessary to master solid professional knowledge of Chinese medicine, practice the learning concept of comprehensive development, strive to improve independent learning ability, apply Chinese medicine knowledge to practical operation, closely integrate Chinese medicine theory and clinical practice, and lay a solid

foundation for itself Professional foundation. In clinical practice links such as ward rounds, case discussions and patient communication during the internship, college students of Chinese medicine should actively participate, and may wish to communicate and discuss with their instructors and classmates in order to improve clinical thinking, supplement knowledge of Chinese medicine, and cultivate communication skills ability. At the same time, in clinical practice, it is necessary to uphold the clinical concept of “patient-centered”, use dialectical thinking to dialectically treat diseases, pay attention to master communication skills with patients, enhance teamwork awareness, improve humanistic quality, and cultivate healthy physical and mental quality and push on the medical spirit of saving the dead and heal the wounded. Finally, it is necessary to cultivate the scientific research spirit of honesty and innovation, possess a truth-seeking and pragmatic scientific research concept(Prado & Marzal, 2013), down-to-earth scientific research methods and innovative scientific research thinking, and continuously cultivate the thirst for knowledge in the field of Chinese medicine.

## 5. Conclusion

General Secretary Xi Jinping Emphasized that traditional Chinese medicine is a treasure of ancient Chinese science, which embodies profound philosophical wisdom and thousands of years of health and wellness concepts and practical experience of the Chinese nation. It is necessary to inherit, develop and use traditional Chinese medicine culture well. Integrating the Core Competencies concept into the education and training of college students in TCM colleges is an inevitable requirement for facilitating the integrity and innovation of TCM and the essence of inheritance. It is conducive to enhance the cultural consciousness and cultural confidence of TCM, facilitating the high-quality development of TCM, and conducive to promotion. The education and teaching reform of Chinese medicine colleges and universities promotes the development of quality education (Palsson et al., 2007), and cultivates Chinese medicine talents with superb medical skills and noble medical ethics.

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## References

- [1] Ananiadou, K., & Claro, M. 21st Century Skills and Competences for New Millennium Learners in OECD Countries. Oecd Education Working Papers, No.41, PP.e1-e34, 2009.
- [2] Arnold, U. New dimensions of outsourcing: a combination of transaction cost economics and the core competencies concept. European Journal of Purchasing & Supply Management, Vol.6, No.1, PP.23-29, 2000.
- [3] Coombs, R. Core competencies and the strategic management of R&D. R&D Management, Vol.26, No.4, PP.345-355, 2010.
- [4] Esther, Suter, Julia, Arndt, Nancy, Arthur, John, Parboosingh, Elizabeth, & Taylor. Role understanding and effective communication as core competencies for collaborative practice. Journal of Interprofessional Care, Vol.23, No.1, PP.41-51, 2009.
- [5] Palsson, R., Kellett, J., Lindgren, S., Merino, J., Semple, C., & Sereni, D. Core competencies of the European internist: A discussion paper. European Journal of Internal Medicine, Vol.18, No.2, PP.104-108, 2007.
- [6] Prado, J. C., & Marzal, M. Á. Incorporating Data Literacy into Information Literacy Programs:

Core Competencies and Contents. LIBRI, Vol.63, No.2, PP. 123-134, 2013.

[7] Schmitt, M., Blue, A., Aschenbrener, C. A., & Viggiano, T. R. Core competencies for interprofessional collaborative practice: reforming health care by transforming health professionals' education. ACADEMIC MEDICINE, Vol.186, No.11, PP. e1-e56, 2011.

[8] Tokkeli, M., & Tuominen, M. The contribution of technology selection to core competencies. INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, Vol.77, No3, PP. 271-284, 2002.