

Training Path for 'Dual Teacher' Teachers in Rehabilitation Therapy Technology

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Abstract: With the continuous progress of society and the flourishing development of medical and health undertakings, we can easily observe a significant change: although the mortality rate is constantly decreasing, the disability rate is showing an upward trend. In this context, the importance of rehabilitation therapy technology is becoming increasingly prominent. In order to meet the demand for rehabilitation services in society, improving the professional level and teaching quality of rehabilitation treatment technology has become an urgent task. In this process, as a key force in the development of vocational education, the construction of the cultivation mechanism for "dual teacher" teachers is particularly important. "Dual teacher" teachers not only possess solid professional theoretical knowledge and educational teaching abilities, but also have rich practical experience, which can provide students with more comprehensive and practical guidance and assistance. This article aims to explore the path of cultivating "dual teacher" teachers in the field of rehabilitation therapy technology in depth. By analyzing and summarizing existing experiences and problems, practical and feasible solutions are proposed, in order to provide useful reference and inspiration for the education and teaching reform of rehabilitation therapy technology in China and the construction of "dual teacher" teaching teams.

1. Introduction

Rehabilitation medical education, as a rising star in the field of education in China in recent years, has relatively lagged behind other medical branches in its development [1]. This lag is not only reflected in the depth and breadth of disciplinary construction, but also in the public's understanding of rehabilitation therapy [2]. For a long time, due to limited understanding of rehabilitation therapy and the influence of traditional medical concepts, the development of rehabilitation therapy technology has been greatly restricted [3]. Especially in higher traditional Chinese medicine colleges, there is a shortage of talents engaged in the education and teaching of rehabilitation therapy, which undoubtedly poses great challenges for the further promotion and development of rehabilitation medical education [4]. From the current situation of rehabilitation medical education in China, an issue that cannot be ignored is that many medical schools currently have young teachers from non rehabilitation majors serving as the foundation and clinical courses of rehabilitation [5]. Although these teachers have a high enthusiasm for teaching, due to the lack of systematic theoretical knowledge in rehabilitation, it is often difficult to explain the course content in depth and thoroughly, and it is even more difficult to combine theoretical knowledge with clinical practice.

Meanwhile, due to the widespread lack of teaching experience among these teachers, the quality of teaching is difficult to guarantee, and the learning outcomes of students are greatly reduced [6]. In addition, we must also face another problem in the field of rehabilitation medicine education, which is the scarcity of teacher resources. Specifically, it refers to a small number of teachers, low educational qualifications, and low professional competence. These issues not only affect the teaching quality of rehabilitation medicine education, but also constrain the long-term development of rehabilitation medicine profession [7]. In today's increasingly popular higher education, people's demands for educational quality and teacher professional competence are also increasing. However,

the teacher resources in the field of rehabilitation medicine education are far from meeting this demand, which undoubtedly brings great difficulties to the development of rehabilitation medicine education [8]. For the rehabilitation therapy technology profession, the construction of a "dual teacher" teaching team is even more crucial. Rehabilitation therapy technology is a highly practical profession that requires students to master a wealth of practical skills and operational experience.

If teachers lack practical experience, it will be difficult for them to combine theoretical knowledge with clinical practice, and they will not be able to provide effective guidance for students. Therefore, building a "dual teacher" teacher training mechanism for rehabilitation therapy technology is of great significance for improving the teaching quality of rehabilitation therapy technology and cultivating more outstanding talents with practical abilities. However, there are still many problems and challenges in the construction of the "dual teacher" teacher training mechanism in the field of rehabilitation therapy technology. On the one hand, due to the relatively lagging development of rehabilitation medical education, the training system for rehabilitation treatment technology teachers is not yet perfect, lacking a systematic training plan and curriculum system; On the other hand, due to the low awareness of rehabilitation therapy in society, the enrollment and employment of this profession face certain difficulties, which also affects the enthusiasm and motivation of teachers to engage in this profession. In response to these issues and challenges, this article aims to explore in depth the path of cultivating "dual teacher" teachers in the field of rehabilitation therapy technology.

2. The Connotation and Problems of the "Dual Teacher" Teacher Training Mechanism

2.1. Connotation

In the field of rehabilitation therapy technology, the "dual teacher" teacher training mechanism has always been regarded as the key to improving teaching quality and promoting the improvement of students' practical abilities [9]. The core of this mechanism lies in the "dual teacher and dual ability" of teachers, which means that teachers not only need to have profound professional theoretical knowledge, but also rich practical experience, and be able to combine theory with practice in the teaching process, achieving the dual goals of knowledge transmission and skill development [10]. The "dual teacher" teachers first need to have solid professional theoretical knowledge. This is the foundation for teachers to conduct theoretical teaching and the key to guiding students to deeply understand professional knowledge.

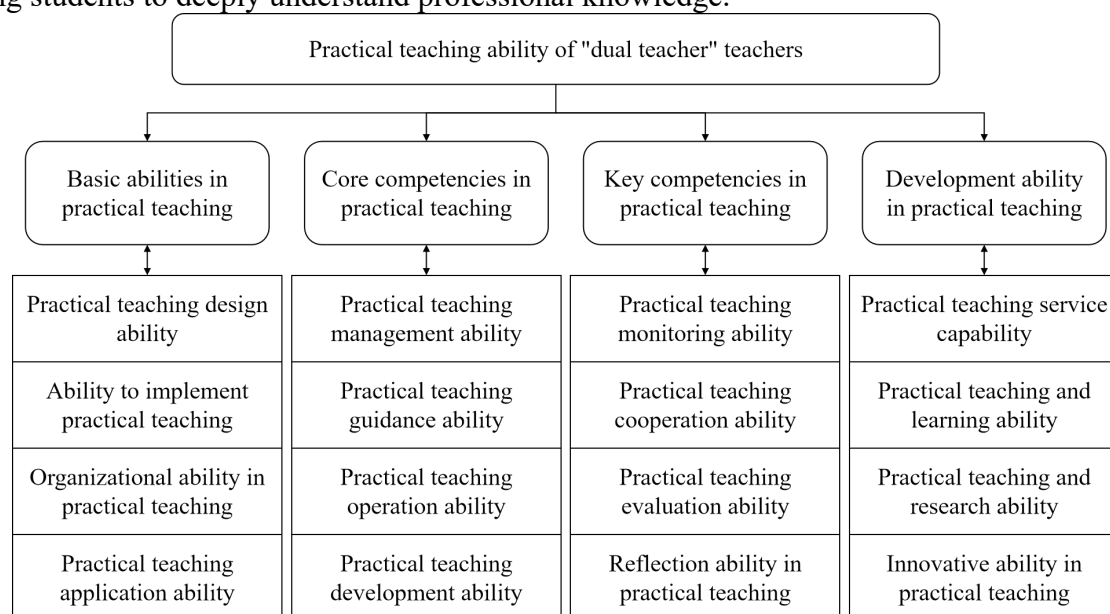


Figure 1 Basic architecture of practical teaching ability for "dual teacher" teachers

In the field of rehabilitation therapy technology, teachers need to master a series of basic theoretical knowledge such as human anatomy, physiology, pathology, rehabilitation assessment,

rehabilitation therapy, etc., in order to build a complete and systematic knowledge system for students. In addition to professional theoretical knowledge, "dual teacher" teachers also need to possess industry recognized professional skills. This includes abilities in rehabilitation treatment techniques, rehabilitation equipment operation, and rehabilitation plan formulation. These skills are important support for teachers in practical teaching and also key to cultivating students' practical abilities. Through their own practical experience and skills, teachers can better guide students in practical operations and improve their skill levels. Figure 1 shows the basic architecture of the practical teaching ability of "dual teacher" teachers.

2.2. The Problems

In the current university environment, the "dual teacher" teacher training mechanism is facing some significant problems, which to some extent affect the teaching quality of rehabilitation therapy. At present, most teachers in universities are selected through traditional teacher appointment models, which tend to favor research-oriented teachers from university to university. This selection method lacks consideration for practical ability and industry experience, resulting in many teachers having profound theoretical knowledge but lacking practical application and clinical teaching abilities. Teachers engaged in the teaching of rehabilitation therapeutics are often not graduates of rehabilitation therapeutics, but transferred from TCM, acupuncture and moxibustion and massage and other related majors. This leads to their insufficient mastery of basic theoretical knowledge and modern technology in rehabilitation, making it difficult to comprehensively and deeply impart professional knowledge in rehabilitation therapy.

The educational level of the teaching staff is generally low, with a focus on vocational education and a lack of talents with undergraduate and graduate degrees. This to some extent limits the overall quality and teaching level of the teaching staff, and affects the teaching quality of rehabilitation therapy. The teaching staff is relatively young, and many teachers have a short time engaged in clinical and teaching, with low professional and technical titles, and serious lack of clinical and teaching experience. This makes it difficult for them to explain professional knowledge in a clear and concise manner in teaching, and it is also difficult to effectively guide students in practical operations. Many teachers come from medical schools, and although they have a medical background, they have not received systematic and scientific training in education, psychology, and other fields related to teaching professional theory and skill knowledge. Especially lacking specialized teacher skill training, this leads to insufficient teaching skills, single teaching methods, and a lack of innovative teaching methods, seriously affecting the teaching effectiveness and quality.

3. The Path of the "Dual Teacher" Teacher Training Mechanism

3.1. Policies and Mechanisms for Improving the Construction of a "Dual Teacher" Teaching Team

To improve the policies and mechanisms for the construction of a "dual teacher and dual ability" teaching team, the government needs to take a series of comprehensive measures to promote its development (as shown in Figure 2). Firstly, the government should introduce relevant laws and regulations to clarify the definition, responsibilities, training standards, and evaluation mechanism of "dual teacher and dual ability" teachers. The regulations should specify the responsibilities and obligations of applied technology universities in the construction of a "dual teacher and dual ability" teaching team. Secondly, the government should establish special funds to support applied technology universities in cultivating, introducing, and rewarding "dual teachers and dual abilities" teachers. Educational institutions should provide economic incentive measures, such as increasing salaries, allowances, bonuses, etc., to improve the treatment of "dual skilled" teachers. They should widely promote the advanced deeds and successful experiences of "dual teacher and dual ability" teachers through media and online platforms. Additionally, educational institutions can organize special seminars, experience exchange meetings, and other activities to enhance the social

recognition and influence of "dual teacher and dual ability" teachers.

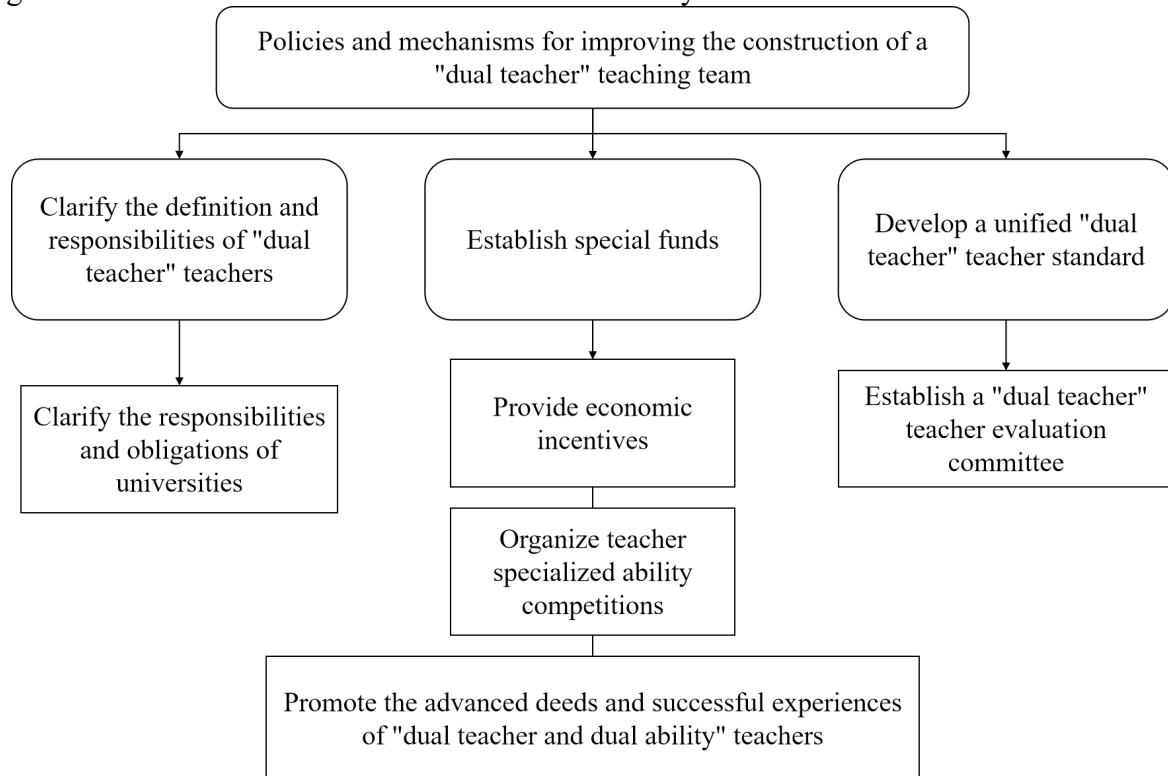


Figure 2 Government measures

Educational institutions should establish a special award for "dual teacher and dual ability" teachers to recognize those who have made outstanding contributions in education and teaching, scientific research and innovation, and social services. They should organize a "dual teacher and dual ability" teacher special ability competition to stimulate teachers' competitive awareness and learning enthusiasm. Furthermore, educational institutions should select and promote typical cases of excellent "dual teacher and dual ability" teachers, highlighting their exemplary and leading role. They should encourage the formation of a good atmosphere within applied technology universities, where teachers strive to become "dual teacher and dual ability" teachers, and establish a positive competition and cooperation mechanism. In addition, the country should establish a unified "dual teacher and dual ability" teacher standard, clarifying the requirements for teachers' educational and teaching abilities, industry practice abilities, scientific research and innovation abilities, and other aspects. The educational authorities should establish a "dual teacher and dual ability" teacher evaluation committee, responsible for evaluating and certifying the qualifications of teachers. The evaluation committee should be composed of industry experts, education experts, school administrators, and other parties to ensure the fairness and authority of the evaluation.

3.2. Promote School Enterprise Cooperation

Promoting school enterprise cooperation to cultivate "dual teacher" teachers is an important and challenging task, especially in the field of medical rehabilitation. To ensure the effectiveness and results of this cooperation, universities and enterprises (such as hospitals and rehabilitation centers of the Disabled Persons' Federation) need to work together, fully utilize their respective advantageous resources, and form complementary effects. Firstly, universities and hospitals should jointly identify common research directions and objectives, such as the development, application, and promotion of new clinical rehabilitation technologies, as well as the collection and analysis of rehabilitation data. They should develop a detailed cooperation plan and schedule around these goals to ensure that both parties can proceed in an orderly manner according to the plan. Universities should fully utilize their teaching and research advantages, providing theoretical support, research method guidance, and organizing and coordinating research teams.

Hospitals and rehabilitation centers of the Disabled Persons' Federation should leverage their advantages in clinical rehabilitation technology and advanced equipment to provide practical platforms, clinical data, and patient resources. Both parties should share research results and technological progress through academic exchanges, seminars, and other forms to enhance the visibility and influence of new technologies in the industry. Universities should be encouraged to establish long-term cooperative relationships with hospitals and rehabilitation centers of the Disabled Persons' Federation, jointly carrying out new technology application demonstration projects and promoting the widespread application of new technologies in clinical practice. Both parties should strengthen the construction and management of research teams, improving the professional competence and innovation ability of researchers. They should also strengthen the integration of clinical practice and teaching, timely transforming scientific research achievements into teaching content and resources, and improving teaching quality and practical abilities. A sound scientific research evaluation and incentive mechanism should be established to encourage researchers to actively participate in school-enterprise cooperation projects and contribute their wisdom and strength to the development of clinical rehabilitation.

4. Conclusions

The cultivation and structural adjustment of "dual teacher" teachers is undoubtedly an inevitable trend for the development of universities in the new era, and it is also a fundamental requirement put forward by the education department and various sectors of society for universities. The promotion and implementation of this model not only reflects the educational philosophy of emphasizing practicality and professionalism in vocational education, but also strongly promotes the high-quality development of vocational education. As the primary resource for higher education and teaching reform, "dual teacher" teachers not only possess solid professional theoretical knowledge but also rich practical experience. This dual identity of teacher can better integrate theoretical knowledge with practical operations, providing students with more comprehensive and in-depth teaching guidance. This advantage is particularly evident in the cultivation of rehabilitation technology talents. The rehabilitation technology major requires a high degree of practicality and professionalism. Only an educational model that combines theory and practice can cultivate qualified talents that truly meet clinical needs. In response to the problems existing in the traditional rehabilitation talent cultivation model, we must actively explore new mechanisms for talent cultivation, deeply cultivate market demand, and use practice to test the quality of talent. This means that we need to collaborate more closely with actual employers such as enterprises and hospitals, understand their real needs, and make market demand an important guide for talent cultivation. At the same time, we also need to strengthen the practical teaching process, allowing students to learn and grow in practice, ensuring that they can quickly adapt to the work environment and be competent in their job positions after graduation.

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