Construction of the Training Model for Practical Abilities of Vocational Secondary School Students Majoring in Rehabilitation

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Abstract: Against the backdrop of the deeply advancing "Healthy China" strategy and the high-quality development of vocational education, the social demand for rehabilitation therapy technology talents continues to grow, placing higher demands on the quality of talent cultivation, especially practical skills. However, the current rehabilitation therapy technology programs in secondary vocational schools still face systemic challenges in practical teaching. This study focuses on the systematic cultivation of practical skills of secondary vocational rehabilitation students, and deeply analyzes the current situation and bottlenecks of its practical teaching. On this basis, a "three-stage progressive, four-dimensional integrated" practical ability training model is constructed. This study aims to provide a systematic and operable solution to solve the current fragmented dilemma of practical ability training in secondary vocational rehabilitation education. It is of great theoretical value and practical guiding significance for improving the pertinence and adaptability of talent training, deepening the integration of industry and education, and promoting the connotative development of the rehabilitation therapy technology profession.

Keywords: Secondary vocational education; Rehabilitation therapy technology; Practical competence cultivation; Training model; Three progressive stages; Four-dimensional integration

1. Introduction

With the full implementation of the "Healthy China 2030" Planning Outline and the accelerated aging of China's population, the demand for rehabilitation medical services has shown a rapid growth trend, and the society's need for high-quality, skilled rehabilitation therapy professionals has become increasingly urgent [1]. As the primary front for cultivating grassroots rehabilitation technical and skilled personnel, secondary vocational education shoulders the important mission of delivering qualified practitioners to community rehabilitation, elderly care institutions, and primary medical institutions. However, there is an undeniable gap between the current quality of talent training in rehabilitation therapy programs at secondary vocational schools, particularly in the cultivation of students' practical abilities, and the rapidly evolving demands of the industry. This contradiction is particularly prominent against the backdrop of the new era of deepening the integration of industry and education and promoting the high-quality development of vocational education, and it urgently needs to be addressed through systematic educational and teaching reforms. In recent years, the state

has issued a series of important policy documents to promote vocational education reform, all emphasizing the adherence to the positioning of type education, deepening the integration of industry and education, school-enterprise cooperation, and innovating talent training models [2]. In particular, the proposal of the "Integration of Posts, Courses, Competitions, and Certifications" comprehensive education philosophy has provided important policy guidance and a methodological basis for addressing the dilemmas in practical teaching. Against this background, how to construct a new model for cultivating practical abilities that aligns with the laws of secondary vocational education, meets the needs of the rehabilitation industry, and runs through the entire process of talent training has become a key issue in improving the quality of secondary vocational rehabilitation education [3,4].

This study takes the rehabilitation therapy program in secondary vocational schools as the specific object, focusing on the core link of cultivating students' practical abilities. It aims to construct a scientifically feasible and distinctive training model through systematic theoretical analysis and practical exploration. The research will conduct an in-depth analysis of the practical problems and their underlying causes in current secondary vocational rehabilitation practical teaching, draw on advanced concepts of vocational competence cultivation at home and abroad, combine the particularities of the rehabilitation profession, propose a framework for the "Three Progressive Stages and Four-Dimensional Integration" practical ability training model, and explore its operational guarantee mechanism.

2. Definition of Core Concepts

2.1 Connotation and Constituent Dimensions of Practical Ability of Secondary Vocational Rehabilitation Students

As the core goal of cultivating rehabilitation therapy professionals, rehabilitation practice ability has a specific connotation and extension in the context of secondary vocational education. The "practical ability of secondary vocational rehabilitation students" as defined in this study refers to the comprehensive vocational ability system of students majoring in rehabilitation therapy technology at the secondary vocational education level. This system involves effectively performing rehabilitation assessments, developing intervention plans, implementing treatment techniques, monitoring rehabilitation progress, and conducting professional communication in simulated or real clinical work scenarios through the integration of professional knowledge, operational skills, and professional qualities. This concept transcends the narrow understanding of "skill mastery" in the traditional sense and is a complex structure that includes cognitive, operational, emotional, and ethical multi-dimensional elements [5].

From a structural analysis of the ability composition, the practical ability of secondary vocational rehabilitation students can be deconstructed into five interconnected and progressively advanced sub-ability systems:

(1) Basic Technical Operation Competence

This serves as the foundational layer of rehabilitation practical competence. It refers to the student's ability to accurately, safely, and proficiently execute various basic rehabilitation operational techniques in accordance with standard operating procedures. Specifically, it includes: The ability to apply rehabilitation assessment techniques in a standardized manner, such as range of motion measurement, muscle strength assessment, balance function testing, and activities of daily living (ADL) assessment; The ability to perform basic therapeutic techniques in a standardized manner,

including parameter setting and application of various physical agent modalities, standardized operation of traditional rehabilitation manual techniques, and correct implementation of movement therapy techniques; The ability to operate and maintain common rehabilitation equipment, including the correct use and daily maintenance of physiotherapy instruments, training devices, and assistive appliances. The characteristic of competence at this level is an emphasis on standardization, normalization, and repeatability. It requires students to demonstrate an understanding of treatment principles and a commitment to patient safety during operations [6].

(2) Clinical Integration Thinking Competence

This acts as a crucial bridge connecting theoretical knowledge with clinical practice. It refers to the student's ability to analyze, synthesize, and judge patient information within specific case scenarios to form clinical decisions. Specifically, it manifests as: Information integration ability, i.e., the ability to identify key problems and establish logical connections from multi-source information such as medical history collection, functional assessment, and observational findings; Problem analysis ability, the capacity to conduct hierarchical and systematic analysis of patients' functional impairments using clinical reasoning methods; Plan formulation ability, the ability to design personalized and phased rehabilitation intervention plans based on assessment results and rehabilitation goals; Dynamic adjustment ability, the capacity to timely adjust treatment plans according to patient responses and progress during therapy. Competence at this level goes beyond mere technical operation, requiring students to demonstrate preliminary clinical thinking qualities based on an understanding of disease mechanisms and rehabilitation principles.

(3) Situational Communication and Collaboration Competence

This is the core soft power in rehabilitation practice. It refers to the student's ability to establish effective communication and conduct professional collaboration with patients, their families, team members, and other healthcare professionals in diverse rehabilitation settings. Specifically, it includes: Therapeutic communication ability, i.e., the ability to use appropriate verbal and non-verbal methods to establish a therapeutic alliance with patients, explain the treatment process, and obtain feedback; Health education ability, the capacity to provide personalized rehabilitation guidance and health education to patients and their families with different cultural backgrounds and levels of understanding; Team collaboration ability, the ability to clarify one's own role positioning within a rehabilitation team, and to cooperate effectively with physical therapists, occupational therapists, rehabilitation physicians, nurses, etc., to jointly advance the rehabilitation process; Interprofessional communication ability, the capacity to accurately record and report cases using professional terminology, and to participate in case discussions and multidisciplinary consultations. Competence at this level elevates rehabilitation practice from the technical operation level to the interpersonal interaction level, reflecting the social nature of rehabilitation work.

(4) Lifelong Learning and Professional Development Competence

This is the guarantee for the sustainable development of rehabilitation practical competence. It refers to the meta-competence that enables students to continuously update their knowledge, enhance their skills, and adapt to industry developments throughout their professional careers. Specifically, it includes: Reflective practice ability, the capacity to conduct systematic reflection on one's own clinical practice to identify strengths and weaknesses; Evidence-based practice ability, the ability to search, evaluate, and apply research evidence to guide clinical decision-making; Self-directed learning ability, the capacity to formulate personal learning plans and utilize various resources for continuous learning; Adaptability to change, the ability to anticipate and adapt to technological innovations,

policy changes, and model transformations in the rehabilitation field. Competence at this level ensures that students' practical abilities do not stagnate upon graduation but instead possess the motivation and mechanisms for continuous growth.

2.2 Theoretical Connotation and Construction Framework of the Training Model

In educational research, the "training model" is a complex and multi-dimensional conceptual system. Within the context of this study, the rehabilitation practical competence training model specifically refers to the structured design and institutionalized arrangement of various elements of the educational process and their interrelationships, aimed at systematically and efficiently cultivating students' rehabilitation practical competence during the secondary vocational education phase. It is not merely a form of teaching organization, but a complete educational ecosystem encompassing the conceptual, operational, and supportive layers.

Theoretically, the rehabilitation practical competence training model exhibits the following essential characteristics: Firstly, it is a goal-oriented systematic project. The construction of the training model consistently revolves around the core objective of "what kind of rehabilitation practical competence to cultivate," with the design and combination of all elements ultimately aiming to achieve this goal. This implies that model construction must begin with an accurate analysis of post competence requirements and end with effective verification of students' competence attainment, forming a closed-loop system from needs analysis to effect evaluation. Secondly, it is a dynamic structure of element synergy. A complete training model comprises seven core elements: training objectives, curriculum system, teaching methods, practical training environment, faculty team, evaluation mechanism, and management system. These elements are not simple mechanical combinations but form an organic whole through specific logical relationships. Training objectives determine curriculum settings, curriculum content dictates teaching methods, teaching methods require corresponding practical training environments and faculty support, and the evaluation mechanism monitors and regulates the operational effectiveness of the entire system. The degree of synergy among these elements directly determines the efficiency of model operation.

Thirdly, it is an open system adaptable to contexts. An effective training model must be deeply adaptable to specific educational contexts. For secondary vocational rehabilitation education, this means fully considering the cognitive characteristics of secondary vocational students (predominantly concrete thinking, relatively weak theoretical learning ability), learning foundation (starting from junior high school graduation, zero professional knowledge), development needs (direct employment orientation, emphasis on post adaptability), and resource conditions (limited practical training equipment, special faculty structure). Simultaneously, the model must remain open and adaptable to industry technological developments, policy orientation changes, and the evolution of social needs.

3. Current problems

3.1 Structural Deficiencies in the Curriculum System

Structural deficiencies in the curriculum system are another critical factor restricting the cultivation of practical competence. Currently, the curriculum design of most secondary vocational rehabilitation programs still follows a "dual structure" that separates theoretical courses from practical courses. This temporal and spatial separation prevents effective interaction and mutual promotion between theoretical learning and practical training. Students often learn abstract

theoretical knowledge without perceptual understanding, and later perform mechanical skill drills when the theoretical knowledge has already faded from memory. The phenomenon of disconnection between knowledge and practice is very common.

In terms of curriculum content, the contradiction between outdated textbooks and the rapid development of industry technology has become increasingly prominent. New concepts, technologies, and norms in the rehabilitation field are difficult to be promptly integrated into teaching content, resulting in a significant "time lag" between the knowledge students acquire and the actual clinical needs. Meanwhile, the organization of curriculum content still primarily follows a disciplinary knowledge system, rather than being reconstructed according to real rehabilitation work processes. This leads students to acquire fragmented knowledge and skill points, making it difficult for them to form the holistic ability to solve practical problems.

Of particular concern is the severe lack of cross-curricular and interdisciplinary comprehensive practical projects. Students lack opportunities to integrate and apply multidisciplinary knowledge and skills in simulated real-world scenarios, and their clinical thinking abilities and complex problem-solving skills are not effectively exercised. The structural deficiencies in the curriculum system not only affect the efficiency of knowledge transfer but also fundamentally restrict the formation path of students' professional competence.

3.2 Ineffectiveness in Teaching Implementation

The ineffectiveness in the teaching implementation phase further exacerbates the dilemma of practical competence cultivation. In terms of teaching methods, the traditional "teacher demonstration - student imitation" model still dominates. Advanced methods such as project-based learning and case-based learning, which are based on real cases, are difficult to effectively implement due to various subjective and objective constraints. While this one-way transmission method can enable students to master standardized operating procedures in a short time, it does not help cultivate their "soft skills" for analysis, judgment, and decision-making in uncertain situations.

The limitation of practical training conditions is another prominent bottleneck: the rehabilitation training rooms in many schools have outdated equipment and limited space, which can only meet the most basic skill training needs and cannot create a highly simulated clinical work environment. In particular, the application of modern information technologies such as virtual reality (VR) and augmented reality (AR) in rehabilitation training is severely insufficient. This limits the possibility for students to conduct complex and high-risk operation training in a risk-free environment and also hinders the synchronous updating of practical training teaching with industry technological development.

Clinical practice, as a crucial link for the transformation of practical competence, has an imperfect quality assurance system. The level of practice base construction varies greatly, the school-enterprise collaborative management mechanism is not sound enough, and there are significant differences in the guidance ability and investment of clinical instructors. The phenomenon of "shepherding-style" practice (where students are left largely unsupervised) still exists in some regions and schools. The lack of systematic task design and process-oriented guidance during the practice period means that this key teaching phase fails to fully exert its due role in enhancing competence.

3.3 Structural Contradictions in the Faculty Team

Structural contradictions within the faculty team constitute one of the core factors constraining the improvement of practical teaching quality. Despite the policy-driven increase in the proportion of "double-qualified" teachers, cultivating the true essence of "dual competence" still faces numerous challenges. Many professional teachers, although holding "double-qualified" certificates, have long been detached from frontline clinical work. They lack in-depth understanding of the latest developments in rehabilitation technology and the actual demands of clinical practice, resulting in a significant deficiency in the "clinical timeliness" of their knowledge structures. This disconnection directly leads to teaching content that fails to reflect cutting-edge industry dynamics, creating a competence gap between graduates and the actual requirements of professional roles.

Concurrently, teachers' capacities for pedagogical reform and curriculum development remain relatively weak. Many educators are accustomed to teaching according to established textbooks and syllabi, lacking the proactive awareness and professional skills to transform real clinical cases into teaching resources, design integrated theory-practice courses, or develop digital teaching materials. In terms of two-way mobility between school and enterprise personnel, institutional and mechanistic barriers persist: systems for school teachers to regularly engage in clinical practice often become formalistic due to heavy teaching workloads and insufficient funding; outstanding frontline clinical technicians also face multiple constraints, such as remuneration, professional titles, and time, when taking on part-time teaching roles at schools. The failure to establish a virtuous ecological cycle in faculty development has become a deep-seated bottleneck restricting practical teaching reform.

3.4 Insufficient Scientificity of the Evaluation Mechanism

The insufficient scientificity of the evaluation mechanism results in a lack of effective guidance and incentives for practical competence cultivation. Current evaluations of practical teaching in secondary vocational rehabilitation programs generally exhibit a tendency to "prioritize skills over literacy" and "emphasize outcomes over processes." Assessment content focuses excessively on the standardization and proficiency of operational steps, while paying insufficient attention to implicit abilities such as clinical reasoning, safety judgment, communication skills, and humanistic care during the operation process. This evaluation orientation easily leads students to pursue "form over substance" in their training; although they can complete standardized operations, they lack the ability to flexibly adapt in real work scenarios.

In terms of evaluation methods, a single form of summative skill assessment dominates, with insufficient design of formative evaluations throughout the teaching process. The application of diverse evaluation methods, such as learning portfolios, practice reflection reports, case analysis presentations, and simulated scenario assessments, is inadequate, failing to comprehensively and dynamically reflect the growth trajectory of students' practical abilities. The singleness of evaluation subjects is also a prominent issue: evaluation activities are almost entirely led by school teachers, with very low participation from industry experts, clinical instructors, and even service users. This creates potential deviations between evaluation criteria and actual industry requirements, while also neglecting the unique humanistic attributes and contextual characteristics of rehabilitation services. As the "baton" of teaching activities, the existing flaws in the evaluation mechanism not only affect the reliability and validity of the evaluation itself but also exert a misleading effect on the direction and quality of the entire practical teaching system.

4. Construction of Practical Ability Training Model

Addressing the current problems in cultivating practical skills among students in secondary vocational rehabilitation programs, this paper proposes and systematically constructs a "three-stage progressive, four-dimensional integrated" practical ability training model. Grounded in modern vocational education theory, guided by industry job demands, and centered on the developmental patterns of student abilities, this model strives to overcome the fragmentation and superficiality of traditional training models through phased design, systematic integration, and comprehensive support. The aim is to achieve a fundamental shift from knowledge transmission to competency development.

4.1 Theoretical Basis and Core Concepts of Model Construction

The construction of any educational model requires solid theoretical support and clear conceptual guidance. The creation of the "three-stage progressive and four-dimensional integration" model is rooted in the deep integration of three major theoretical foundations: constructivist learning theory emphasizes the importance of learners actively constructing knowledge in real situations, providing a theoretical basis for creating clinical simulation environments and project-based learning; The theory of situational learning holds that learning is essentially a social practice, and knowledge exists in the interaction between individuals and the environment, which provides theoretical guidance for implementing process-oriented teaching and clinical practice. The competency-based education theory focuses on the systematic cultivation of vocational abilities, emphasizing that educational outcomes should be reflected in learners' ability to complete specific vocational tasks. This establishes the fundamental principles for the goal positioning and evaluation design of the entire model. Under the combined influence of these theories, the model has formed three core concepts: The first is the student-centered concept, that is, all teaching activities should revolve around the cognitive laws and growth needs of students, emphasizing the subjectivity and initiative of learners; Secondly, there is the competency-based concept, which takes the systematic cultivation of professional abilities as the starting point and ultimate goal of teaching design, and the learning of theoretical knowledge serves the improvement of practical abilities. The last one is the work process-oriented concept, which organizes teaching content based on the real process and typical tasks of rehabilitation clinical work, enabling students to build an organic whole of knowledge and ability in the complete action process.

4.2 Design of the "Three-Stage Progressive" Practical Teaching Stage

The "three-stage progression" is a phased design and serialized arrangement for the process of cultivating students' practical abilities, following the law of ability development from simple to complex, from single to comprehensive, and from simulation to reality. The first stage is the basic cognition and individual skill development stage, mainly targeting students in the first and second semesters. The goal of this stage is to establish an initial understanding of the profession and master the core individual skills of rehabilitation assessment and treatment. The teaching carrier is mainly the basic training room on campus. Through the integrated theory and practice course design, students can complete standardized training in basic skills such as joint range of motion measurement, muscle strength classification, and operation of conventional physical therapy equipment in the process of "learning by doing and doing by learning". This stage particularly emphasizes the standardization and safety of operations. Through the "Skill Pass Assessment", it ensures that each student meets the minimum ability standard, laying a solid technical foundation for subsequent

learning. The second stage is the comprehensive application and scenario simulation stage, which is for students in the third and fourth semesters. On the basis of students' basic operational skills, this stage focuses on cultivating their comprehensive application ability in the rehabilitation of common diseases and their initial clinical thinking ability. The teaching carrier has been upgraded to an on-campus comprehensive simulation training center, and a typical "teaching case database" has been introduced to carry out project-based teaching based on the complete working process. At this stage of teaching, emphasis is placed on the integrated application of multi-disciplinary knowledge and the cultivation of teamwork skills. Through forms such as role-playing, case discussions, and project presentations, students are enabled to experience the real clinical workflow in highly simulated scenarios. The third stage is the clinical practice and job adaptation stage, which is arranged during the on-the-job internship in the fifth and sixth semesters. This is a crucial transitional period for students from school to the workplace, with the goal of achieving a seamless connection between learning and employment and comprehensively enhancing professional competence. Students enter strictly selected off-campus internship bases and, under the guidance of the "dual-mentor system" (school instructors + clinical teaching instructors), participate in real clinical work. This stage particularly emphasizes reflective practice, requiring students to regularly write internship logs, complete typical case analysis reports, and participate in case discussion meetings, thereby elevating practical experience into professional wisdom. At the same time, emphasis should be placed on the cultivation of professional identity and professional spirit, enabling students to deeply understand the value connotation of rehabilitation work through interaction with real patients. These three stages progress step by step and are interlinked, forming a complete chain of ability development, ensuring that students can achieve gradual growth from novices to experts during their school years.

4.3 Support for the Cultivation Path of "Four-dimensional Integration"

If the "three-stage progression" resolves the vertical chronological issue of ability cultivation, then the "four-dimensional integration" focuses on solving the horizontal integration problem of educational resources and teaching processes. The first dimension is the integration of job and course. Its core lies in organically decomposing and integrating the job competency standards of rehabilitation therapists (assistants) and the vocational skill level requirements in the "1+X" certificate system into the professional course system and teaching projects. Specifically, it is necessary to collaborate with industry experts to jointly analyze typical work tasks, distill the core ability points of the position, and transform these ability points into specific learning goals and training programs. For instance, the requirements for rehabilitation care of disabled elderly people in the "Geriatric Care" certificate can be transformed into a series of practical training modules in the "Geriatric Rehabilitation" course, achieving a deep connection between the course content and job requirements as well as certificate standards. The second dimension is the integration of competition and teaching, giving full play to the leading and promoting role of vocational skills competitions in teaching reform. The project Settings, scoring criteria and operational norms of events such as the National Vocational College Rehabilitation Therapy Technology and Skills Competition have been transformed into teaching methods and then introduced into daily teaching. This integration not only enhances students' skill levels and competitive abilities, but more importantly, it permeates the latest technical standards and quality awareness of the industry throughout the entire teaching process. The third dimension is the integration of medical care and education, which is the key path to breaking down the barriers between schools and clinical practice. Through the joint construction of a "clinical

teaching case library" by schools and enterprises, real and desensitized typical cases are transformed into teaching resources. Jointly develop loose-leaf and work manual-style teaching materials to ensure that teaching content is updated in sync with clinical practice. Establish a mechanism for mutual employment of personnel and resource sharing, hire clinical backbones as part-time teachers, and arrange for school teachers to regularly engage in clinical practice, thus forming a mutually beneficial and interactive two-way flow. This deep integration ensures that school education does not deviate from clinical practice, and clinical experience can promptly feed back to teaching innovation. The fourth dimension is the integration of knowledge and action, aiming to address the issue of the disconnection between knowledge, skills and professional qualities. By carefully designing teaching scenarios and practical activities, the cultivation of "soft skills" such as communication skills, teamwork, humanistic care, and ethical decision-making is made explicit and curriculum-based. For instance, in each skill training, a "patient communication and notification" section is set up; in comprehensive projects, an assessment of "teamwork and division of labor" is added; and in clinical internships, "empathetic experience and reflection" are emphasized. These four dimensions support the cultivation of practical abilities from different aspects. They interpenetrate and work in synergy, jointly forming a three-dimensional training path network, ensuring that students acquire not fragmented skills but complete vocational abilities.

4.4 The Operation Guarantee Mechanism of the Model

A well-developed training model requires a strong operational guarantee mechanism to ensure its effective implementation and continuous improvement. The first and foremost thing is to establish a dynamic mechanism for adjusting and updating courses. Establish a professional teaching guidance committee composed of school professional leaders, key teachers and experts from industry and enterprises. Regularly hold revision seminars on the talent cultivation plan. According to the development of industry technology, changes in job demands and adjustments in policy guidance, promptly optimize the course setting and teaching content. In particular, it is necessary to establish a fast track for the entry of new clinical technologies and norms into classroom teaching to ensure the forward-looking and adaptive nature of educational supply. Secondly, it is necessary to establish a systematic professional development mechanism for "dual-qualified" teachers. Establish and implement a regular clinical practice system for professional teachers, requiring each professional teacher to accumulate at least six months of clinical front-line work experience every three years, and take this as an important indicator for professional title promotion and performance assessment. At the same time, a long-term incentive mechanism for clinical experts to teach part-time should be established. By setting up "industry professor" positions, offering competitive remuneration, and participating in the evaluation of teaching achievements, more outstanding clinical talents can be attracted to devote themselves to teaching work. In addition, it is necessary to regularly organize specialized training sessions on teaching abilities to enhance teachers' capabilities in project-based course design, information-based teaching application, and clinical teaching transformation. The third is to promote the construction mechanism of an intelligent practical training teaching environment. On the basis of improving traditional practical training equipment, efforts should be focused on strengthening the construction of information-based and intelligent practical training conditions. Introduce a virtual reality (VR) rehabilitation training system for simulation teaching in high-difficulty and high-risk scenarios such as spatial neglect training after stroke and phobia desensitization treatment. Build a digital rehabilitation case teaching platform, integrating various

media resources such as videos, images, and 3D animations; Develop mobile learning applications to support students in learning micro-skills and self-evaluating their effectiveness anytime and anywhere. The practical training environment that combines virtual and real elements not only expands the teaching time and space but also enhances the immersion and effectiveness of the training. The last step is to improve the process-oriented quality monitoring and evaluation feedback mechanism. Establish a teaching quality monitoring system covering the entire "three-stage progressive" process, and collect data through multiple channels such as student skill growth files, internship process tracking systems, and graduate employment quality surveys. In particular, it is necessary to reform the evaluation methods, increase the proportion of formative evaluation, introduce third-party evaluation (such as employer evaluation and patient satisfaction surveys), and establish a comprehensive evaluation model centered on ability. Regularly release annual reports on the quality of talent cultivation, apply the monitoring and evaluation results to teaching improvement and model optimization, and form a closed-loop management of "design - implementation - evaluation - improvement". These guarantee mechanisms are interconnected and work in synergy, providing institutional support and resource guarantee for the smooth operation and continuous optimization of the model, ensuring that the cultivation of practical abilities can be implemented effectively and produce practical results.

5. Conclusion

This study conducts an in-depth analysis of the current state of practical ability cultivation among rehabilitation major students in vocational colleges in China. It systematically reveals core bottlenecks such as ideological deviations, curriculum fragmentation, inefficient implementation, insufficient faculty, and misaligned evaluations. To address these challenges, the study constructs a new practical ability cultivation model with "three-stage progression and four-dimensional integration" as its core. This model aims to achieve the systematic cultivation of students' abilities, from basic skills to comprehensive professional competence. With the continuous advancement of rehabilitation technology and the evolving landscape of the health industry, this cultivation model needs to maintain openness. It should further explore the deep integration of new technologies such as artificial intelligence and remote rehabilitation, and strengthen support for students' sustainable career development. This will supply the "Healthy China" strategy with more high-quality rehabilitation technology skilled personnel who are rooted in grassroots practice and possess excellent skills.

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