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A Multidimensional Examination of the Role of Vocational Education Teachers from the Perspective of New Quality Productive Forces

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A Multidimensional Examination of the Role of Vocational Education Teachers from the Perspective of New Quality Productive Forces

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Abstract: Under the wave of technological advancement and industrial upgrading, new productivity is deeply influencing the field of vocational education and promoting fundamental changes in teachers' roles. Modern teachers must not only keep pace with technological development but also master innovative teaching modes and guide students to form correct values. They are gradually evolving from mere knowledge transmitters to guides for learning, stimulators of interest, explorers of in-depth research and promoters of comprehensive growth. Through interdisciplinary knowledge structures and innovative abilities, combined with advanced tools such as information technology and artificial intelligence, teachers innovate teaching methods to meet students' diverse learning needs and focus on cultivating students' professional skills, comprehensive qualities, and innovative spirits. This multi-dimensional reshaping of roles is not only an inevitable choice for the development of vocational education but also provides important insights for educational reform.

Keywords: new quality productivity forces; vocational education; teacher roles; multi-dimensional examination; teaching philosophy

1. Introduction

Driven by the global wave of informationization and intelligence, the emergence of New Quality Productive Forces poses severe challenges and urgent requirements for constructing a new type of production relationship that adapts to the needs of the new era [1]. The concept of "New Quality Productive Forces," explicitly proposed by Chinese President Xi Jinping in the context of the new era, centers on innovation and aims to break free from the constraints of traditional economic growth models, demonstrating distinct characteristics of high technology, high efficiency, and high quality. Specifically, New Quality Productive Forces are rooted in revolutionary technological breakthroughs, rely on innovative allocation of production factors, and promote deep transformation and upgrading of the industrial structure. Their essence lies in the comprehensive enhancement of laborers, labor materials, labor objects, and their optimized combinations, with a significant increase in total factor productivity as the most notable hallmark.

These traits of New Quality Productive Forces not only significantly enhance production efficiency and lead to profound changes in the industrial structure, but also have a far-reaching and extensive impact on the field of vocational education. With the continuous emergence of digital, networked, and intelligent educational technologies, vocational education is facing unprecedented development opportunities and severe challenges. As a vital bridge connecting education and industry, vocational education plays an indispensable role in cultivating high-quality skilled talents. However, confronted with the rapid development of New Quality Productive Forces, traditional vocational education models have shown obvious inadequacies and urgently need profound reforms in key aspects such as talent cultivation philosophy, teaching content system, and industry-education integration innovation models [2], in order to enhance the overall quality and efficiency of vocational education, better serve the development needs of industry and society, and deliver more talents with high professional skills and literacy.

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In this context, vocational education teachers, as the backbone for shaping high-quality skilled talents, are undergoing profound transformations and reshaping in their role definitions and functional roles. This change is not only reflected in the continuous improvement of teachers' own knowledge structure and skill levels, but also deeply manifested in the innovation of their educational philosophy, teaching methods, and the reconstruction of their interaction modes with students and society [3]. For instance, teachers need to actively explore and practice Challenge-Based Learning (CBL) strategies [4] to promote students' transformation from passive knowledge reception to active exploration and problem-solving learning experiences. The vigorous development of New Quality Productive Forces is driven internally by continuous technological iterations, active promotion by top talents, and optimized cultivation of the policy environment. Therefore, deeply examining the multidimensional changes in the role of vocational education teachers under the background of New Quality Productive Forces not only helps us comprehensively understand the essence and path of teacher role transformation but also provides valuable insights and references for the reform and development of vocational education.

2. Impact of New Quality Productive Forces on the Role of Vocational Education Teachers

2.1. The Impact of New Quality Productive Forces on the Field of Vocational Education

The advent of New Quality Productive Forces has ushered in profound transformations and challenges within the vocational education sector, with its impact widely manifested across multiple dimensions, including educational philosophy, teaching content, teaching mode, and the role of teachers.

Firstly, a reshaping of educational philosophy has become an inevitable trend. The New Quality Productive Forces emphasize technological innovation, industrial transformation, and high-quality development, necessitating a fundamental update in vocational education's philosophical underpinnings. The traditional mode of skill transmission has gradually shifted towards the cultivation of comprehensive qualities and innovative abilities, in order to align with the talent demands of the New Quality Productive Forces [5]. Vocational education no longer solely aims to cultivate workers with singular skills but is now committed to nurturing compound talents equipped with interdisciplinary knowledge, innovative thinking, and lifelong learning abilities. This philosophical transformation is an inherent requirement for vocational education to adapt to the evolution of the New Quality Productive Forces.

Secondly, the urgency of updating teaching content is paramount. With the rapid development of the New Quality Productive Forces, emerging industries and novel technologies are constantly arising, posing new and elevated requirements on the teaching content of vocational education. To remain abreast of market demands, vocational education must closely track industrial development trends and promptly update its teaching content. For instance, courses pertaining to emerging technologies such as artificial intelligence, big data, and cloud computing should be incorporated to fortify the cultivation of students' digital literacy and innovative abilities, ensuring that the knowledge and skills acquired by students can meet the demands of the future workplace.

Furthermore, the innovation of teaching modes has become pivotal. The advancement of the New Quality Productive Forces has led to innovations in educational technology, presenting valuable opportunities for the innovation of teaching modes in vocational education. Emerging teaching modes such as online education, remote teaching, and blended teaching are gradually emerging, introducing more flexible and diverse teaching methods to vocational education [6]. Additionally, the application of advanced technologies such as artificial intelligence and virtual reality has also brought more intelligent and personalized teaching experiences to vocational education. These innovative teaching modes help stimulate students' interest and motivation in learning, further enhancing teaching effectiveness and quality [7].

Moreover, the transformation of teachers' roles is of utmost importance. Under the influence of the New Quality Productive Forces, the roles of vocational education teachers have undergone significant changes. Teachers are no longer merely transmitters of knowledge but also guides and promoters of students' learning. To adapt to this change, teachers must continually enhance their

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professional qualities and teaching abilities, flexibly utilizing various teaching means and methods to stimulate students' interest and creativity in learning [8]. Simultaneously, teachers must also maintain a continuous learning attitude, constantly updating their knowledge and skills to adapt to the needs of industrial development and teaching reform.

Lastly, the deepening of industry-education integration has become a crucial pathway. The development of the New Quality Productive Forces requires vocational education to strengthen its deep integration with the industry and achieve coordinated development between education and industry. To this end, vocational colleges must establish close cooperative relationships with enterprises, jointly formulating talent cultivation programs, developing courses and teaching materials, and building training bases. Through industry-education integration, vocational colleges can better understand market demands and industrial development trends, ensuring the pertinence and effectiveness of talent cultivation. Concurrently, enterprises can also leverage the resource advantages of vocational colleges to enhance the skill levels and innovative abilities of their employees, thereby promoting the transformation, upgrading, and high-quality development of enterprises.

2.2. Impact of New Quality Productive Forces on the Role of Vocational Education Teachers

Firstly, the advent of New Quality Productive Forces has facilitated a transformation in the role of teachers. This shift has liberated teachers from the confines of traditional knowledge transmission, enabling them to embrace new roles as "partners of students" and "guides in learning" [9]. To cater to the diverse learning needs of students, teachers must now equip themselves with interdisciplinary knowledge structures and foster innovative capabilities.

Secondly, the New Quality Productive Forces have provided robust support for innovation in teaching methods within vocational education. The ubiquitous application of modern educational information technology and new media platforms has become the new norm [10]. Teachers should actively harness these advanced technologies to revolutionize traditional teaching models and adopt diversified teaching methods. This approach aims to enhance teaching effectiveness and stimulate students' interest in learning. Simultaneously, teachers must prioritize the learning process of students, emphasizing the cultivation of their practical abilities and innovative spirit, to align with the new requirements of the New Quality Productive Forces for talent.

Furthermore, the evolution of New Quality Productive Forces has heightened the demands on the professional qualities of vocational education teachers. Teachers must exhibit a high level of responsibility and professionalism, attend to the growth and development of students, and provide personalized guidance and assistance. Additionally, teachers must possess a lifelong learning mindset, constantly updating their knowledge and skills to adapt to the evolving needs of the New Quality Productive Forces. Moreover, teachers must remain abreast of industry development trends and enterprise staffing needs, promptly adjusting teaching content and methods to enhance students' employability. As the New Quality Productive Forces reshape global production methods and industrial structures, becoming a pivotal force driving social progress and economic growth [11], teachers must continually refine their professional qualities to adapt to this change.

Moreover, the progression of New Quality Productive Forces has fostered deeper industry-university-research collaboration. Vocational education teachers should actively engage in such collaboration and maintain close ties with enterprises, industries, and society. Through this partnership, teachers can gain insights into enterprise staffing needs and industry development trends, introduce cutting-edge technologies, processes, and methods from enterprises into the classroom, and enhance the pertinence and practicality of teaching. Simultaneously, teachers can transform students' practical achievements and innovative outcomes into actual productive forces for enterprises, thereby promoting technological innovation and industrial upgrading.

Lastly, in the context of globalization, vocational education teachers must possess international perspectives and cross-cultural communication abilities. The development and reform of vocational education serve as a solid foundation and profound motivation for advancing social modernization [12]. Therefore, teachers must remain attentive to international trends and advanced experiences in

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vocational education, learn from international advanced teaching concepts and methods, and elevate their own internationalization level. Additionally, teachers must possess cross-cultural communication abilities, enabling them to engage in exchanges and cooperation with international peers and promoting the internationalization and openness of vocational.

3. Multi-Dimensional Examination of the Role of Vocational Education Teachers from the Perspective of New Quality Productive Forces

3.1. Learner: A Learner Led by New Technologies

Under the strong impetus of New Quality Productive Forces, the role of vocational education teachers as learners, particularly those led by new technologies, has become increasingly prominent. The rapid development of science and technology, accompanied by the continuous emergence of new technologies, has opened up unprecedented opportunities and challenges for the field of vocational education. The core driving force of New Quality Productive Forces lies in continuous technological innovation [13], which not only requires teachers to keep pace with technological advancements but also necessitates their continuous learning of new technologies to ensure their own development remains synchronized with these forces.

Firstly, it is essential for vocational education teachers to establish a firm belief in lifelong learning. A distinctive hallmark of New Quality Productive Forces is the rapid iteration and updating of technologies, which demands that teachers not only possess a solid foundation of professional knowledge but also maintain an inexhaustible learning motivation and determination. They should be committed to continuously updating their knowledge systems, closely following the pulse of technological development, so as to effectively integrate emerging technologies into teaching practices and thereby enhance teaching quality and effectiveness.

Secondly, teachers should actively and proactively learn and master new technologies. The application of new technologies in the field of education has greatly enriched teaching methods, effectively stimulated students' interest and enthusiasm for learning, and thus promoted a significant improvement in teaching effectiveness. Given the digital, networked, and intelligent characteristics of New Quality Productive Forces, teachers need to actively embrace frontier technologies such as artificial intelligence, big data, and cloud computing. They should deeply understand their internal mechanisms and application methods and be courageous in exploring and experimenting with them in teaching practices.

In the process of learning new technologies, teachers should focus on several key aspects. One is to clarify learning objectives and select appropriate new technologies for deep exploration based on actual teaching needs and personal interests. Another is to strengthen practical application, deepen understanding of new technologies through personal operation, and actively explore effective application strategies in teaching practices. Additionally, strengthening communication and cooperation among peers is also crucial. By sharing learning experiences and insights, they can jointly promote the popularization and deep application of new technologies.

At the same time, teachers also need to closely pay attention to the development trends and challenges faced by educational technology. Taking the COVID-19 pandemic as an example, the health crisis forced university teachers to quickly adapt to new technology-mediated learning environments. This process not only accumulated valuable digital technology knowledge but also stimulated teachers' strong interest and learning motivation in supporting innovative teaching methods [14]. However, the accompanying challenges cannot be neglected. Issues such as the lack of online teaching literacy and increased workload all require teachers to actively address and overcome.

3.2. Organizers: Organizers Supported by New Models

Driven by the emergence of New Quality Productive Forces, the transformation of vocational education teaching modes necessitates not only innovations in teaching content and methods but also assigns new expectations and missions to the role of teachers. As the core organizers of teaching

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activities, teachers' importance and multidimensionality in their roles have become increasingly prominent under the impetus of these New Quality Productive Forces. The introduction of the concept of New Quality Productive Forces enriches and extends Marxist productivity theory [15], necessitating teachers to continuously adapt to novel teaching modes to meet the pressing needs of education in the new era.

The impact of the New Quality Productive Forces on vocational education teaching modes is primarily manifested in two aspects. Firstly, it facilitates the digital and intelligent transformation of teaching modes. With the rapid advancement of information technology, digitization and intelligence have been extensively applied in vocational education, significantly enhancing teaching mode innovation [16]. Secondly, it emphasizes the personalization and differentiation of teaching modes. The New Quality Productive Forces prioritize innovation and individuality, urging vocational education to focus more on fostering students' innovative spirit and personality development. This requires teaching modes to be more aligned with students' individual differences and learning needs.

In this context, the role of teachers as organizers of teaching activities has undergone substantial changes. Firstly, teachers must become leaders in teaching mode innovation. They must actively learn and master new technological tools, boldly experiment with novel teaching methods and strategies, and promote the continuous innovation and upgrading of teaching modes. Simultaneously, teachers must design personalized teaching programs tailored to students' learning characteristics and needs, ensuring that each student receives adequate attention and development in the classroom.

Secondly, teachers should become proficient integrators of teaching resources. Driven by the New Quality Productive Forces, teaching resources are increasingly abundant and diverse, but they also present challenges of information overload and dispersion. Therefore, teachers must possess keen insight and judgment to effectively screen and integrate teaching resources, providing students with high-quality and precise learning materials to enhance teaching effectiveness and efficiency.

Lastly, teachers must become guides and facilitators of students' learning activities. Under the influence of the New Quality Productive Forces, students' learning methods have undergone profound changes, with greater emphasis on autonomous and cooperative learning. As the New Quality Productive Forces are both innovative and optimizing forces, teachers must discard traditional indoctrination teaching methods. Instead, they should actively guide students in engaging in autonomous, cooperative, and exploratory learning, stimulate their interest and motivation in learning, cultivate their innovation and practical abilities, and promote their overall development.

3.3. Creator: Led by New Ideas

The New Quality Productive Forces hold profound guiding significance for promoting the high-quality development of higher vocational education [17]. Under the impetus of this productive force, the role of teachers in vocational education is undergoing a profound transformation, shifting from traditional knowledge transmitters to creators. This transformation necessitates not only innovation in teaching content and methods but also the exhibition of a creative spirit in educational philosophy and goals, to align with the pace of development in the current era and the urgent needs of society.

Firstly, vocational education teachers must possess a strong sense of innovation and demonstrate innovative capabilities. At the level of teaching content, they should closely follow the latest industry developments and promptly integrate the newest technologies, knowledge, and ideas into their teaching, ensuring that what students learn remains closely aligned with market demands. At the level of teaching methods, teachers should break free from the constraints of traditional teaching models and introduce advanced teaching means, such as information technology and intelligence, to enhance teaching efficiency and optimize students' learning experiences.

New ideas play a pivotal role in the creative process of teachers. They serve as the motivation and source of innovation, enabling teachers to continuously explore new teaching methods and content to meet the individualized needs of students. The connotative qualities of New Quality Productive Forces, which include "adapting to the new era, aggregating new knowledge, possessing new technologies, and developing new products," [18] emphasize the forward-looking perspective and innovativeness that teachers must embody in the process of innovation. At the same time, new

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ideas stimulate teachers' creative spirit, enabling them to challenge traditions and break through self-limitations, thereby forming unique teaching styles and philosophies.

Specifically, the innovative leading role of new ideas in the creative process of teachers is manifested in the following aspects [19]: Firstly, it guides teachers to pay attention to industry dynamics and technological developments, prompting them to constantly update teaching content and methods. Secondly, it stimulates teachers' innovative spirit and creative potential, enabling them to bravely explore and experiment in teaching practice. Thirdly, it promotes communication and cooperation among teachers, fostering a positive academic atmosphere and team spirit to jointly advance the development of vocational education.

Under the influence of New Quality Productive Forces, the role of creators among vocational education teachers is increasingly prominent. As creators, teachers must possess not only solid professional knowledge and teaching skills but also keen insight and a forward-looking vision to accurately grasp industry development trends and changes in market demand, providing students with forward-thinking and practical teaching content. Additionally, teachers should attend to the individualized development needs of students, stimulate students' interest and potential through innovative teaching methods and means, and cultivate students' innovative spirit and practical abilities.

3.4. Transmitters: Transmitters Leveraging New Technologies

Driven by the New Quality Productive Forces, the role of vocational education teachers is undergoing a profound transformation, particularly in leveraging new technologies to optimize knowledge transmission. As transmitters of knowledge, teachers play an increasingly crucial role in the context of emerging technologies, and the innovation of their teaching methods is directly related to the quality and effectiveness of vocational education.

Firstly, teachers should actively adopt new technologies as core tools to enhance teaching effectiveness. By incorporating frontier teaching technologies such as digitalization and intelligence, teachers can create a more vivid and intuitive teaching environment, enabling students to more effectively grasp professional knowledge through immersive learning experiences. For instance, Virtual Reality (VR) and Augmented Reality (AR) technologies can simulate real working environments, helping students enhance their operational skills through simulated practice; while online learning platforms transcend the constraints of time and space, enabling personalized and autonomous learning experiences [20].

When utilizing new technologies for teaching, teachers should fully leverage their advantages. These technologies not only provide abundant teaching resources but also assist teachers in more precisely grasping students' learning status and needs through data analysis and feedback mechanisms, thereby offering more targeted teaching guidance [21]. Furthermore, new technologies can effectively stimulate students' interest and initiative in learning, enhancing their participation and ultimately improving learning outcomes. From the macro perspective of digital transformation, "the digital transformation of vocational education needs to deepen value guidance and focus on the cultivation of high-quality technical and skilled talents with digital capabilities," emphasizing the central role of digital transformation in vocational education and its key function in nurturing high-quality technical and skilled talents.

However, the application of new technologies in vocational education also presents challenges. Firstly, the introduction of new technologies requires corresponding equipment and financial support, which may pose obstacles for schools with limited resources. Additionally, "technology risk is the main risk in the digital transformation of vocational education," necessitating that teachers not only possess the requisite technological literacy but also have the teaching capabilities to adapt to these new technologies. Moreover, there is a need to be cautious about students potentially becoming overly reliant on technology and neglecting the development of practical operational skills.

Therefore, when using new technologies for teaching, teachers should maintain a prudent and rational attitude. They should fully leverage the advantages of new technologies to inject new vitality into teaching while also remaining vigilant about potential issues to ensure that teaching

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effectiveness is not compromised. Simultaneously, teachers should continuously explore and experiment with new teaching methods and approaches to better adapt to the evolving times and the needs of society.

3.5. Reformers: Reformers Based on New Concepts

In the current landscape of vocational education, the role of teachers is undergoing a profound transformation, gradually evolving from traditional knowledge transmitters to leaders and practitioners of reform. In the context of the emergence of New Quality Productive Forces, vocational education faces unprecedented challenges and opportunities, making the role of teachers as reformers particularly significant.

Firstly, as the driving force of reform, vocational education teachers must grasp the pivotal role they play in this transformation. The advent of New Quality Productive Forces necessitates vocational education to keep abreast of the times, constantly updating teaching content, refining teaching methods, and enriching instructional means. As the primary agents of teaching practice, teachers' ideological awareness and teaching behavior directly dictate the depth and breadth of reform. Therefore, teachers must actively embrace change with an open mind, dare to experiment with novel teaching concepts and methods, and provide a continuous impetus for the innovative development of vocational education. The proposition of New Quality Productive Forces is not merely a development proposition but also a profound reform proposition [22], further emphasizing the crucial role of teachers in advancing educational reform.

Secondly, teachers should actively implement emerging concepts in reform practices. These concepts serve as precursors to reform, indicating the future trajectory of educational development. Universities, as the cradle of talent cultivation and the source of innovation, bear significant missions in nurturing new quality laborers, providing new quality labor materials, expanding new quality labor objects, and constructing novel labor relations. Consequently, teachers should deeply study emerging concepts and integrate their essence into daily teaching during the reform process. For instance, they should fully leverage information-based teaching methods to enhance teaching effectiveness, attend to students' individualized needs, and implement differentiated teaching to ensure that every student can achieve their full potential.

The implementation of emerging concepts not only enhances the scientificity and efficiency of teaching but also provides students with richer and more diversified learning experiences. Moreover, in the process of implementing these concepts, teachers will also continuously reflect, summarize, and enhance their own teaching abilities, achieving professional growth and development.

Lastly, teachers should be acutely aware of the profound impact of emerging concepts on reform practices. The introduction and application of these concepts have not only transformed teaching methods and approaches but also reshaped students' learning methods and habits. They have further propelled the comprehensive reform of the vocational education system and charted the course for the innovative development of vocational education. As reformers, teachers should closely monitor the impact of emerging concepts on reform practices, flexibly adjust teaching strategies and methods, and adapt to the new demands of vocational education development.

3.6. Leaders: Leaders Aiming at Values Shaping

In the vocational education system, teachers' responsibilities extend beyond mere knowledge transmission; they also play a pivotal role in guiding students towards the formation of a correct value system. Existing research underscores the multifaceted roles teachers assume in students' moral development, including serving as moral models, mentors, and caregivers [23]. With the rapid advancement of New Quality Productive Forces, society's demand for talent has broadened, transcending the realm of professional skills to emphasize personal moral qualities, social responsibility, and civic awareness. In this context, the role of teachers as shapers and leaders of values becomes particularly significant.

Firstly, it is imperative to acknowledge the central role teachers play in shaping students' values. The formation of these values is a long-term and complex process, with teachers' influence

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permeating throughout and occupying a pivotal position. Teachers' behavior, teaching attitude, and personal values all exert a subtle yet profound impact on students. Therefore, teachers should embrace the lofty educational mission, lead by example, and establish themselves as correct value models for students. The fact that high-skilled talents constitute the most active and valuable segment of productivity elements further accentuates the need for teachers to prioritize the shaping of values while cultivating students' professional skills [24].

In the era of New Quality Productive Forces, how can teachers effectively guide students in establishing correct values? On one hand, teachers should be adept at capturing social hotspots and trends, guiding students to engage with national events and social well-being, thereby nurturing their patriotic feelings and social responsibility. On the other hand, teachers should focus on cultivating students' professional ethics and professionalism, ensuring they understand the responsibilities and obligations inherent in their chosen professions. Additionally, teachers should closely monitor students' mental health and personality development, assisting them in establishing a positive, healthy, and progressive life attitude and value system.

However, in implementing values education, teachers also encounter numerous challenges. The rapid development of information technology and the widespread accessibility of the internet have diversified students' information channels. Yet, issues of information complexity and the difficulty in distinguishing truth from falsehood have become more prominent. This necessitates teachers to possess not only solid professional knowledge but also good information literacy and media literacy, enabling them to guide students correctly in identifying and screening information. Simultaneously, teachers must fully consider students' individual differences and diversity, teaching students according to their aptitudes and ensuring that each student receives tailored values education.

Beyond traditional oral education and theoretical teaching, teachers should also positively influence students through behavioral demonstrations. Teachers' behavior, work attitude, and personal charm all have a profound impact on students. Therefore, teachers should consistently maintain high levels of self-discipline and moral standards, setting exemplary examples for students. Education, as the essential pathway for cultivating top-notch innovative talents, plays a vital role in shaping the talent pool of New Quality Productive Forces [25]. This fact further underscores the crucial role of teachers in shaping students' social responsibility and professional ethics through values education.

4. Transformation and Reshaping of Vocational Education Teachers' Roles in the Context of New Quality Productive Forces

4.1. From Traditional Classroom Dominators to Teaching Guides

Driven by the New Quality Productive Forces, vocational education is undergoing profound transformations, with the reshaping of teachers' roles becoming a central focus of reform. Traditionally, teachers, as authoritative dominators in the classroom, held comprehensive control over the teaching process. However, the emergence of the New Quality Productive Forces necessitates a re-examination and redefinition of teachers' roles, prompting a shift from traditional classroom dominators to teaching guides. This transition aims to more effectively stimulate students' autonomous learning abilities and exploratory spirit.

4.1.1. Reflection on the Limitations of Teachers' Roles in Traditional Classrooms

In traditional classroom practices, teachers fulfilled dual roles as knowledge transmitters and classroom managers. They carefully designed teaching plans, organized teaching activities, and strictly controlled the teaching progress, while students were mostly in a passive receptive state, lacking opportunities for active thinking and exploration. This teaching model limited students' subjective initiative and innovative spirit, making it difficult to meet the new requirements of the New Quality Productive Forces for talent development.

Furthermore, the limitations of teachers' roles in traditional classrooms are also evident in the neglect of students' individualized needs. Each student is a unique individual, differing in learning

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ability, interests, and personality. However, the traditional "one-size-fits-all" teaching approach did not fully consider this diversity, resulting in uneven teaching effects and an inability to meet the actual needs of all students.

4.1.2. Necessary Transformation of Teachers' Roles in the Context of New Quality Productive Forces

Driven by the New Quality Productive Forces, vocational education needs to place greater emphasis on cultivating students' innovation abilities, practical skills, and critical thinking [4]. Therefore, teachers must shift from traditional classroom dominators to teaching guides, providing students with more opportunities for autonomous learning and deep exploration.

This transformation requires teachers to shift from a "teaching-centered" to a "learning-centered" teaching philosophy. In the teaching process, teachers should stimulate students' interest in learning and exploration, guiding them to engage in active thinking and practical activities. Additionally, teachers must pay attention to individual differences among students, using diversified teaching methods and means to meet the growth needs of different students.

Moreover, the role of teachers also needs to shift from mere knowledge transmitters to learning promoters. In today's era of rapidly accelerating knowledge updates, students have increasingly diverse ways to acquire knowledge. Teachers are no longer the only source of knowledge for students but become assistants in their learning, helping them construct knowledge systems, grasp learning methods, and develop autonomous learning abilities.

Lastly, teachers must also complete the transformation from classroom managers to learning environment creators. Facing the challenges of the New Quality Productive Forces, the teaching environment is also undergoing changes. Teachers should actively create an open, interactive, and collaborative learning atmosphere for students, providing opportunities and spaces for practical exploration. Simultaneously, teachers must closely monitor students' learning status and psychological needs, flexibly adjusting teaching strategies and methods to ensure the effectiveness and pertinence of teaching.

4.2. From Knowledge Transmitters to Learning Interest Stimulators

In the wave of vocational education transformation driven by New Quality Productive Forces, the reshaping of teachers' roles is particularly crucial. Traditionally, teachers have primarily focused on one-way knowledge instillation. However, in today's era of exploding knowledge and information overflow, this role orientation has become inadequate to meet the needs of students' personalized growth and social development. Therefore, teachers must shift from being mere knowledge transmitters to learning interest stimulators, with the aim of igniting students' inner passion for learning and cultivating their autonomous learning ability and innovative spirit.

4.2.1. Beyond Knowledge Transmission: Shaping Learning Motivation

The advancement of New Quality Productive Forces has accelerated the pace of knowledge updating, revealing the limitations of traditional knowledge transmission modes. Teachers are no longer the sole source of knowledge, as students can access information through various channels such as the internet and social media. Therefore, teachers' responsibilities extend beyond simple knowledge transmission and require a greater emphasis on stimulating students' learning motivation and interest, guiding them to explore and learn autonomously.

4.2.2. Igniting Learning Passion: Stimulating Intrinsic Motivation

To ignite students' learning passion, teachers need to deeply understand students' interests and learning needs, tailoring personalized teaching plans for them. By introducing lively and interesting cases, practical projects, etc., teachers can transform dry knowledge into an exciting exploration journey, thereby stimulating students' learning interest and inquiry desire. New Quality Productive Forces represent a breakthrough in forming a new development paradigm [26]. Through innovative

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teaching methods, teachers can stimulate students' intrinsic motivation, making them active explorers in this new paradigm.

4.2.3. Cultivating Autonomous Learning: Nurturing Innovative Spirit

Based on stimulating students' interest, teachers need to further cultivate their autonomous learning ability. Autonomous learning ability is one of the key abilities for students to adapt to future societies, enabling them to choose learning content and methods according to their interests and needs, achieving personalized growth. To cultivate students' autonomous learning ability, teachers can adopt teaching modes such as flipped classrooms and project-based learning, allowing students to exert greater initiative and creativity in practice. At the same time, teachers also need to pay attention to students' emotional needs and psychological changes, promptly providing support and encouragement, and helping them build confidence and overcome difficulties.

Innovative spirit is a crucial requirement for talents in the new era. To cultivate students' innovative spirit, teachers should encourage them to participate in scientific research, competitions, and other activities, providing them with practical opportunities and platforms to exercise their innovation and practical abilities.As a productivity form driven by technological innovation, New Quality Productive Forces are a strong driving force and support for high-quality development [27]. By cultivating students' innovative spirit, teachers can help them become important forces in promoting China's modernization.

4.3. From Behavioral Role Models to Educational Researchers

In the realm of vocational education, teachers have long been esteemed as behavioral role models, with their speech, conduct, professional demeanor, and values wielding a profound influence on students. However, with the advent of New Quality Productive Forces and the profound transformation of the vocational education system, the role of teachers is progressively evolving towards richer and deeper dimensions. Nowadays, teachers should transcend the confines of being mere behavioral role models and further evolve into educational researchers, fostering innovation and development within educational practice.

4.3.1. The Traditional Role and Value of Behavioral Role Models

Within the traditional educational paradigm, teachers, as behavioral role models, fulfill multiple pivotal roles. Firstly, they serve as guides for students' professional ethics, indicating the moral compass through their own professional conduct and behavioral norms. Secondly, they act as instructors for students' learning, guiding students to master efficient learning strategies by exemplifying effective learning methodologies and habits. Lastly, they cultivate students' emotions, assisting students in constructing a positive spiritual realm with a favorable emotional attitude and a healthy psychological state. Teachers ought to embark on a lofty mission, setting an exemplar for students through their own actions and establishing correct values for them [28].

4.3.2. Reshaping the Role of Teachers under New Quality Productive Forces

The rapid progression of New Quality Productive Forces presents novel challenges and opportunities to vocational education. In this context, the role of teachers necessitates a shift from behavioral role models to educational researchers. Specifically, teachers should possess the following core competencies:

Educational Research Capability: Teachers should possess a deep understanding of the fundamental theories and methodologies of education and cultivate the ability to conduct educational research. Through educational research, teachers can accurately discern students' learning needs and development patterns, providing scientific and effective guidance for educational practice.

Innovative Practice Capability: In the face of the impact of New Quality Productive Forces, vocational education must continually innovate to adapt to the evolving needs of society and

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enterprises. Therefore, teachers should possess innovative practice capabilities, being adept at proposing innovative solutions to practical problems and implementing them.

Collaborative Capability: Educational research frequently involves the intersection and integration of multiple disciplines and fields. Teachers should possess collaborative capabilities, establishing extensive cooperative relationships with colleagues, industry experts, enterprise representatives, etc., to collectively propel the profound development of educational research.

4.3.3. The Pivotal Role of Educational Research in Educational Practice

The role of educational research in advancing educational practice is of paramount importance, specifically manifested in the following aspects:

Innovation in Teaching Methods: Educational research assists teachers in discovering novel teaching methods and means, thereby enhancing teaching effectiveness and stimulating students' interest in learning. For instance, introducing modern teaching tools such as information technology and virtual reality technology can provide students with a more vivid and intuitive learning experience.

Updating of Course Content: With the constant evolution of society and enterprise demands, vocational education courses must remain current. Educational research can assist teachers in promptly comprehending industry development trends and enterprise staffing needs, providing robust support for updating course content.

Improvement of Evaluation Systems: Traditional evaluation systems often excessively focus on students' knowledge mastery while neglecting their practical abilities and innovative spirit. Educational research aids teachers in establishing a more comprehensive and scientific evaluation system, emphasizing the development of students' comprehensive qualities and practical abilities, thereby more accurately assessing students' learning outcomes.

4.4. From Evaluation Facilitators to Growth Promoters

With the rapid development of New Quality Productive Forces, the expectations and requirements for teachers' roles in vocational education are undergoing profound transformations. Traditionally, teachers have often played the role of evaluators, primarily focusing on measuring students' academic performance and skill levels. However, driven by the New Quality Productive Forces, the role of teachers needs to be further deepened and expanded, realizing the transformation from evaluators to growth promoters. This shift entails paying greater attention to students' comprehensive development and individual differences, as well as providing targeted guidance and support.

4.4.1. The Role of Teachers as Evaluators in Traditional Teaching and Its Limitations

In traditional teaching modes, teachers are typically regarded as evaluators, with their role primarily reflected in assessing students' academic performance and skill levels. Through exams, assignments, practical operations, and other methods, teachers evaluate students' performance and assign scores or grades accordingly. While this evaluation method can reflect students' learning outcomes and skill levels to some extent, it also has obvious limitations:

Firstly, traditional evaluation methods focus excessively on results and neglect students' learning processes and growth trajectories. They often only pay attention to students' performance at specific time points, failing to comprehensively and systematically understand students' learning status and development trends. This may lead to teachers' misjudgment of students' abilities, further affecting the pertinence and effectiveness of education and teaching.

Secondly, traditional evaluation methods lack attention to students' individual differences. Each student is a unique individual, differing in learning speed, style, interests, and other aspects. However, traditional evaluation methods often use unified standards and scales to measure all students, neglecting their individual differences and needs. This may cause some students to feel

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frustrated and disappointed in the learning process, further affecting their learning enthusiasm and self-confidence.

4.4.2. How Teachers Should Become Growth Promoters for Students

Deepening the reform of evaluation mechanisms in universities and constructing a new quality-oriented evaluation system are necessary measures for universities to unleash productivity and effectively participate in the development of New Quality Productive Forces [13]. Under the influence of New Quality Productive Forces, teachers should transform from evaluators to growth promoters, focusing on students' comprehensive development and individual differences, and providing targeted guidance and support. Specifically, teachers should start from the following aspects:

- Transform evaluation concepts: Teachers should establish developmental evaluation concepts and focus on students' learning processes and growth trajectories. They should comprehensively understand students' learning status and development trends through observation, recording, feedback, and other methods, providing strong support for education and teaching.
- Pay attention to individual differences: Teachers should respect each student's individual differences and pay attention to their interests, strengths, and needs. They should formulate personalized teaching plans and guidance programs based on students' actual situations, providing targeted guidance and support for students.
- Provide diverse evaluations: Teachers should adopt diverse evaluation methods, including self-evaluation, peer evaluation, and teacher evaluation. They should encourage students to participate in the evaluation process and cultivate their self-awareness and self-management abilities. At the same time, teachers should also provide specific improvement suggestions and directions for students through feedback and analysis of evaluation results.
- Create a supportive environment: Teachers should create a safe, supportive, and collaborative learning environment for students. They should encourage students to actively participate in classroom discussions, practical activities, etc., cultivating their teamwork and communication skills. At the same time, teachers should also pay attention to students' mental health and social adaptation abilities, providing necessary support and help for them.

5. Conclusion

In the era of rapid development of New Quality Productive Forces, the multidimensional examination and reshaping of the role of vocational education teachers have become particularly important and urgent. Responding to society's urgent demand for high-quality technical and skilled talents, vocational education teachers must urgently transform from traditional knowledge transmitters to learning guides, interest activators, deep researchers, and growth promoters. This profound role transformation necessitates not only a comprehensive update of teachers' teaching concepts, methods, and tools, but also the enhancement of their professional quality, capabilities, and interpersonal skills, in order to adapt to the complexity and diversity of vocational education in the new era.

By implementing personalized teaching, teachers can more effectively stimulate students' learning interest and potential, cultivate their innovative spirit and practical abilities, and ultimately provide society with high-quality skilled talents. This transformation is not only a new requirement for vocational education from society, but also an inevitable trend in the professional development of teachers. Therefore, teachers must constantly update their knowledge and skills to cope with the new challenges and seize the opportunities in the field of vocational education.

Given this, we must attach great importance to the transformation and reshaping of teachers' roles, considering it a key path to enhancing the quality of vocational education and the overall quality of teachers. By strengthening cultivation and training, we can assist teachers in achieving professional and vocational growth, thereby contributing significantly to the prosperity and development of society. This is not only an investment in the personal development of teachers, but also a long-term plan for the sustainable development of society in the future.

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