Research on the Development Path and Mechanism of “Double-Qualified” Teachers in Private Universities Under the Background of Digital Transformation

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Abstract: This article explores the development path and mechanism of “double-qualified” teachers in private universities under digital transformation. Through literature review, theoretical analysis, and other research methods, this study conducts an in-depth analysis of the impact of digital technology on the development of “double-qualified” teachers in private colleges and universities and puts forward corresponding strategies and suggestions. Research shows that digital transformation provides new opportunities and challenges for developing “double-qualified” teachers in private colleges and universities. To adapt to this trend, teachers must continuously improve their digital skills, and schools should establish a complete incentive mechanism and evaluation system, strengthen school-enterprise cooperation and the integration of industry and education to promote the comprehensive development of “double-qualified” teachers, and provide a useful guideline for private universities to promote the development of “double-qualified” teachers in digital transformation.

Keywords: Digitalization; Private universities; “Double-qualified”; Development path

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1. Preface
The report of the 20th National Congress of the Communist Party of China pointed out that it is necessary to accelerate the construction of Digital China, and the key to realizing Digital China lies in developing the digital economy, with the core of building an innovative country. The primary element of an innovative country is innovative talent. However, building an innovative teaching team is the key to cultivating innovative talents. Digital transformation is a new trend in the development of colleges and universities in the new era, and the construction of a “double-qualified” teacher team is a key factor in realizing digital transformation and cultivating innovative talents. The “China Higher Education Quality Report (2020)” shows that “double-qualified” teachers account for less than 50% of undergraduate college teachers. As an important part of China’s higher education system, private colleges and universities must build a “double-qualified” teacher team. It also faces the opportunities
and challenges of digital transformation [2]. With the development of education informatization in the new era, private colleges and universities face new requirements in digital transformation and cultivating innovative talents. Constructing a “double-qualified” teacher team is an important step for private colleges and universities to cultivate innovative talents, improve management quality, and realize their sustainability, which is the key to sustainable development [3]. Developing “double-qualified” teachers in private colleges and universities face many difficulties in digital transformation. Building a development mechanism for “double-qualified” teachers in private colleges and universities is necessary under digital transformation. The management system and other measures are needed to promote the construction of “double-qualified” teaching teams in private universities by optimizing the policy environment, improving the training mechanism, and building a training community.

2. Status quo of the development capabilities of “double-qualified” teachers in private universities under the background of digital transformation

2.1. Existing problems
At present, private colleges and universities still face certain problems in cultivating “double-qualified” teachers. Firstly, talent recruitment channels are limited, making it difficult to attract and retain excellent “double-qualified” teachers; secondly, the training system is imperfect and lacks pertinence and effectiveness; lastly, the assessment and evaluation mechanism is unscientific, making it difficult to evaluate teachers’ comprehensive abilities comprehensively.

2.2. Opportunities
Digital transformation has brought many opportunities for developing “double-qualified” teachers in private universities. First of all, the development of information technology has made teaching methods more diverse. Teachers can use network platforms, virtual simulation, and other technical means to innovate teaching methods and improve teaching effects. Secondly, digital technology can integrate high-quality teaching resources to provide teachers with more learning and development opportunities; lastly, digital technology can promote communication and cooperation among teachers and improve the overall teaching level.

2.3. Challenges
However, digital transformation also challenges “double-qualified” teachers in private universities. First of all, teachers need to constantly update their knowledge system and technical capabilities to adapt to the development of digital technology; secondly, the application of digital technology requires a lot of time and energy invested in learning and practice; lastly, digital technology hurts teachers’ instructional design capabilities and information technology application capabilities have put forward higher requirements.

3. Positive impacts of digitalization on the development of “double-qualified” teachers in private universities
Domestic colleges and universities generally agree on the development trend and the positive role of education in the digital era. Shen and Fan believe that smart education brings unlimited vitality to educational reform and challenges the development of “double-qualified” teachers [4]. Hou believes big data strongly supports educational development in the information age. Still, there are problems with the professional development of “double-qualified” teachers in environments such as low development space for teachers’ professional standards and a relative shortage of high-quality education professionals [5]; Dou believes that “indexation of education” is needed
to deepen the integration of digital industry and education and promote the in-depth growth of education \[^6\].

### 3.1. Improving teaching efficiency and quality

Digital technology provides “double-qualified” teachers with a wealth of teaching resources and tools, such as online course platforms, virtual laboratories, intelligent teaching assistance software, etc. These tools allow teachers to prepare, teach, and manage classes more efficiently, improving teaching quality.

### 3.2. Promoting interdisciplinary teaching and cooperation

Digital technology breaks the boundaries of traditional disciplines, making it easier for “double-qualified” teachers to carry out interdisciplinary teaching and cooperation. Teachers can integrate knowledge and resources from different disciplines through digital platforms, cultivate compound talents, and improve students’ comprehensive quality.

### 3.3. Enhancing practical teaching capabilities

Digital technology provides “double-qualified” teachers with teaching resources such as virtual simulation experiments and online courses, allowing teachers to conduct practical teaching without relying on physical objects. This reduces teaching costs and improves the safety of experiments and reliability.

### 3.4. Promoting teachers’ professional growth

Digital technology provides “double-qualified” teachers with a platform for online learning, communication, and discussion. Teachers can use these platforms to update and expand their professional knowledge, communicate and share with other teachers, and promote their professional growth.

### 3.5. Improving student participation and satisfaction

Digital technology makes teaching methods more diverse and personalized, attracting students’ interest and improving participation. At the same time, through data analysis, teachers can better understand students’ learning needs and feedback, optimize the teaching process, and improve students’ learning effects and satisfaction.

### 3.6. Optimizing school management

Digital technology can help private universities realize informatization and intelligence in management and improve efficiency and quality \[^7\]. For example, big data analysis, cloud computing, and other technologies can achieve intelligent allocation of school resources, teaching quality monitoring, student management, and other aspects, providing strong support for the sustainable development of schools.

### 4. Development path and mechanism of “double-qualified” teachers in private universities

#### 4.1. Optimizing the policy environment and creating a good development environment for “double-qualified” teachers

The key to achieving high-quality development in digital transformation is to have a high-level “double-qualified” teaching team. The construction of “double-qualified” teaching teams in private colleges and universities is a long-term systematic project that requires the joint efforts of the government, society, and private colleges and universities to create a good development environment and stimulate the endogenous
motivation for constructing “double-qualified” teaching teams. The government can support constructing “double-qualified” teaching teams in private universities by formulating relevant policies \[^8\]. For example, the state has issued relevant policies to support private colleges and universities in establishing a high-level “double-qualified” teaching team. It has included the construction of a “double-qualified” teaching team in private colleges and universities into the scope of assessment of universities. This is not only an indicator of the quality of private colleges and universities but also incentivizes the level and quality of managing private colleges and universities.

4.2. Improving the training mechanism and the “double-qualified” teacher development and training system

As professional and technical personnel, “double-qualified” teachers should have practical and innovative abilities. They should not only have teaching and scientific research skills but also practical guidance ability and innovative service abilities. In digital transformation, training “double-qualified” teachers in private universities faces the dilemma of cultivating teaching and innovation abilities. To this end, it is necessary to improve the development and training system of “double-qualified” teachers in private universities and provide diversified and personalized development paths for “double-qualified” teachers in private universities \[^9\]. In the “double-qualified” teacher development and training system of private colleges and universities, the Teacher Development Center is the core department for constructing the “double-qualified” teacher team by developing “double-qualified” teachers in private colleges and universities. In the context of digital transformation, the development of “double-qualified” teachers in private colleges and universities needs to be based on schools as the main body, relying on industry enterprises and digital platforms, and supporting lifelong learning, forming a “double-qualified” teacher development and training system for private universities in the context of digital transformation with its characteristics. Specifically, the government-led mechanism should be first improved. The government should incorporate the construction of “double-qualified” teaching teams in private colleges and universities into its overall planning and work system and provide macro guidance and management on constructing “double-qualified” teaching teams in private colleges and universities at the policy level. Secondly, the leadership mechanism requires improvement. Private colleges and universities should formulate a suitable development and training plan for “double-qualified” teachers and clarify the training goals and directions for “double-qualified” teachers of different ages and professional categories. On this basis, the private colleges and universities must also actively improve the funding guarantee mechanism and management mechanism, increase investment in and ensure financial support for constructing a “double-qualified” teacher team, to establish and improve the training mechanism.

4.3. Building a training community and forming a joint force in “double-qualified” teacher training

The “14th Five-Year Plan for Digital Economy Development” points out that digital reform should be the driving force, and innovation and development should be the guide to promote the deep integration of the digital economy and the real economy and to accelerate the digital transformation and intelligent upgrading of the manufacturing industry. Private colleges and universities must comply with the development trend of education in the new era, be driven by digital transformation aimed at cultivating innovative talents, and accelerate the construction of “double-qualified” teaching teams in private colleges and universities. In digital transformation, private colleges and universities must break the “working alone” situation and build a “double-qualified” teacher training community to form a joint training force involving the government, schools, enterprises, and teachers. At the government level, the “double-qualified” teacher training mechanism and standards should
be improved and a scientific and reasonable “double-qualified” teacher assessment and evaluation system should be established [10]; at the school level, private colleges and universities should actively cooperate with industry enterprises to carry out teaching practice and skills training to promote the improvement of teachers’ abilities; at the enterprise level, private colleges and universities should establish cooperative relationships with industry enterprises and provide a practice platform for “double-qualified” teachers by co-building laboratories and training bases. At the same time, private universities should take the initiative to carry out exchanges and cooperation activities with industry enterprises and actively participate in formulating industry standards, industry technology research and development and application, etc.

4.4. Improving the management system and strengthening the management of the “double-qualified” teacher team

Managing “double-qualified” teaching staff is a systematic project that requires private universities to formulate corresponding management systems based on their own characteristics and development needs and strictly implement them. When private colleges and universities build a “double-qualified” teaching team, they must start from many aspects and improve the management system. First of all, private colleges and universities must formulate scientific and reasonable training plans based on their actual management, combined with the development plan, professional settings, and other actual conditions; secondly, private colleges and universities must further strengthen the construction of teaching staff and combine their own development needs, develop teacher training programs based on different teachers’ abilities, job requirements, interests, and hobbies; thirdly, private colleges and universities should strengthen the training and guidance of practical teachers based on teacher training programs and teaching needs and optimize the practical teaching curriculum system and practical teaching model; lastly, private colleges and universities must establish scientific and effective incentive mechanisms, evaluation mechanisms, assessment mechanisms, and other related management systems to stimulate the development enthusiasm and innovative vitality of “double-qualified” teachers. At the same time, they must be fair and just in the assessment and evaluation mechanism and constantly improve it.

4.5. Strengthening ideological guidance and establishing correct professional ideals and beliefs

In the context of digital transformation, “double-qualified” teachers in private universities face the pressure and challenges brought by digital transformation. Facing the needs of industries and enterprises, private universities must strengthen ideological leadership and establish correct professional ideals and beliefs. Firstly, we must strengthen the education of ideals and beliefs, allow “double-qualified” teachers to study national education policies in various forms, the Vocational Education Law, and other laws and regulations, and convey the state’s support policies for private universities and requirements for teachers to everyone, thereby enhancing teachers’ sense of professional identity and mission; secondly, it is necessary to strengthen the education of teachers’ ethics and ideals, publicize advanced models of teachers’ ethics and ideals through various forms, and guide “double-qualified” teachers to firmly establish the values of love, dedication, and commitment to their work. The ideology of teaching and educating people and leading by example should be strengthened; thirdly, it is necessary to strengthen humanistic care and psychological counseling. Given the widespread psychological problems such as stress and anxiety among “double-qualified” teachers in private universities, mental health education activities must be organized regularly. It is necessary to offer psychological counseling and career planning training to help “double-qualified” teachers relieve work pressure and improve their psychological quality.
5. Conclusion

Through comprehensive analysis, the following conclusions are drawn:

(1) Digital transformation provides new opportunities and challenges for developing “double-qualified” teachers in private colleges and universities. The application of digital technology makes teaching methods more diversified and personalized and puts higher requirements on teachers’ technology application capabilities.

(2) “Double-qualified” teachers must continuously improve their digital skills during digital transformation, including data analysis, online course design, virtual simulation experiments, etc. In addition, teachers also need to actively adapt to the role change, from traditional knowledge imparters to guides and facilitators in the student learning process.

(3) Private colleges and universities should establish a complete incentive mechanism and evaluation system to promote the digital transformation of “double-qualified” teachers. Specific measures include providing regular digital skills training, establishing digital teaching achievement awards, and providing salary incentives. At the same time, private colleges and universities should strengthen school-enterprise cooperation and integrate industry and education to improve teachers’ practical teaching capabilities.

(4) Private colleges and universities should create a good organizational culture and encourage teachers to participate actively in digital teaching reform and innovation activities. By strengthening interdisciplinary cooperation and exchanges, we promote knowledge sharing and experience learning among teachers and improve the digital teaching level of the entire college or university.

At the same time, we must also recognize that the development of “double-qualified” teachers in private colleges and universities still faces many problems, such as the inconsistent identification standards of “double-qualified” teachers in private colleges and universities and insufficient training of “double-qualified” teachers. In the context of digital transformation, it is necessary to promote the construction of a “double-qualified” teaching team in private colleges and universities through measures such as unifying identification standards and strengthening and promoting school-enterprise cooperation, thereby improving the quality of talent training in private colleges and universities. At the same time, private colleges and universities must further improve their understanding of digital transformation, seize opportunities, meet challenges, and continuously improve school management and talent training quality.

To sum up, the development of “double-qualified” teachers in private universities under the background of digital transformation needs to start from many aspects, including improving teachers’ digital skills, establishing a complete incentive mechanism and evaluation system, strengthening school-enterprise cooperation and the integration of industry and education, as well as creating a good organizational culture atmosphere, etc. Through the comprehensive implementation of these measures, “double-qualified” teachers can better adapt to the educational changes in the digital era, improve teaching quality, and cultivate more high-quality talents that meet social needs.

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