DOI https://doi.org/10.63944/whe1.NHE
Vol.2 No.4

Practical Dilemma and Optimization Path of Digital Teaching of Applied University Teachers

Kangjun Xiong

Hezhou University, China | 592028469@qq.com

Abstract: As the direct practitioner of talent training, applied university teachers play a vital role in implementing the national education digital transformation policy and effectively promoting the implementation of digital teaching. However, applied university teachers are faced with many dilemmas in the current digital teaching practice, which are mainly reflected in the lagging teaching presentation, inefficient use of technology and the alienation of teaching function. The emergence of these dilemmas is objectively linked to structural constraints imposed by the external institutional environment and resource conditions, while subjectively it stems from the intrinsic limitations of teachers' subjectivity and competence. Therefore, beyond these dilemmas, applied university teachers need to improve their own digital literacy level, and at the same time, the school should create an educational governance guidance ecology to promote the digital development of teachers, and provide all-round support and guarantee for teachers' digital teaching.

Key words: applied university; teachers; digital teaching

Funding Project: This work was spported by Hezhou University Doctoral Research Start-up Fund Project(2025BSQD17).

1. Introduction

Since the beginning of the 21st century, the new round of scientific and technological revolution and the industrial revolution caused by the continuous innovation of science and technology have swept the world, and then put forward new challenges and requirements to the development of the education system. In this context, facing the demand for high-quality innovative talents in the optimization and upgrading of China's economic development and industrial structure, it has become an inevitable requirement for China's current educational development to improve the quality and efficiency of education service driven by digital technology, promote the digital transformation of education, and realize the comprehensive upgrading of the talent training system. In July 2021, six Chinese government agencies including the Ministry of Education jointly released the "Guidelines on Promoting the Construction of New Infrastructure for Education and High-Quality Educational Support Systems", the document emphasized that "strengthen new growth drivers, create new supply, and serve new demands through new infrastructure for education, promote the integrated development of online and offline education, advance digital transformation, intelligent upgrading, and innovative

integration in education, and support high-quality development of education"[1]. In February 2022, the "Key Tasks of the Ministry of Education in 2022" explicitly proposed "implementing the digital education strategy"[2]. In October 2022, the report of the 20th National Congress of the Communist Party of China reiterated the commitment to "promote digital education and build a learning society and a learning nation for lifelong learning for all"[3]. In April 2025, the Ministry of Education and eight other government agencies outlined in their joint guidelines on accelerating educational digitalization that they further called for "deeply implementing the national education digitalization strategy and promoting AI-assisted educational transformation"[4]. The introduction of these policies from the macro level for the reform and development of China's education industry pointed out the implementation direction and action program.

The effectiveness of national education policies hinges on their implementation. From the practical perspective of advancing educational digital transformation, for applied universities, teachers as the direct practitioners of talent cultivation need to practice and test whether the new teaching mode, talent cultivation mechanism, curriculum and teaching content system built by the digital transformation of education can be effectively implemented in teaching practice, and whether they can truly cultivate students' digital literacy and digital application ability. This reality shifts the decisive factor for successful digital transformation implementation squarely to the teachers' level. In other words, only when teachers effectively implement digital teaching can the concept of digital transformation in education be translated into concrete practices, thereby better serving the overall goals of talent cultivation and the high-quality development of higher education institutions. Based on this, this paper will investigate the the current applied university teachers in digital teaching of the easy to be ignored predicament and its deep-rooted causes, and then explore the possible countermeasures.

2. Three Dilemmas of Digital Teaching for Applied University Teachers

How to apply digital technology to teaching, so as to achieve high quality teaching results, is the teacher in the digital teaching must think and solve the problem, is the key to implement digital teaching. From the actual situation of applied university teachers to implement digital teaching, there are mainly three dilemmas in the digital teaching of applied university teachers.

2.1. The Lag of Presentation Mode: The Effect of Traditional Teaching Mode on Skill Transmission Is Limited

In teaching, whether the teaching content can be effectively conveyed to students is closely related to the teaching presentation mode adopted by teachers. In the field of applied higher education, the educational philosophy of cultivating applied talents emphasizes stimulating students' operational experience and practical application. However, at present, many teachers still focus on subject knowledge and professional theoretical knowledge in their teaching content, the main teaching method is still teacher lecturing and students passively accepting, the teaching methods are less influenced by digital technology, multimedia production, playing courseware and watching video are still the most used technologies in teaching, the teaching methods are seriously lagging behind the progress of current digital technology. So, for the vocational skills to be put into practice, such traditional teaching mode is obviously unfavorable to the students' perception and experience of the application value of knowledge and the cultivation of application ability.

2.2. Low Efficiency of Technology Utilization: Formal Embedding Can't Deep Into The Pain Point of Applied Education

Digital teaching is the application of digital technology to teaching, so as to realize the visualization, information and digitalization of teaching resources and content. The digitization of teaching is not simply the application of digital technology, but the integration of traditional classroom teaching with information equipment and digital technology, and the reconstruction of teaching knowledge system and teaching field in the network space, highlighting the integration and application of knowledge and technology interaction, so as to optimize teaching activities and improve teaching quality. Currently, while some teachers proactively integrate digital technologies into teaching spaces and activities, their excessive focus on superficial integration of technology and teaching. For instance, some teachers merely use multimedia to display course materials and videos in class, employ online attendance tools for student check-in, yet fail to leverage digital technology to design interactive inquiry-based and personalized in-depth teaching activities. The use of technology only creates a sense of "high-tech" space for students, but fails to reflect the deeper value of technology integration and application, demonstrating a formalism problem where form is detached from function and "used for use". Consequently, knowledge and skill transmission becomes superficial and shallow, and teaching activities fail to achieve the expected outcomes of applied education.

2.3. Alienation of Teaching Function: Students' Learning Subjectivity Is Not Given Due Attention

Teachers impart knowledge to students through teaching activities, in this process, the teacher's knowledge impart to the students is not the teacher's unilateral behavior, but the students' active participation and the teacher-student interaction, so that the teacher's external input can be transformed into the students' internal generation, and the role of teaching activities in talent cultivation can be played and demonstrated. In the current classroom teaching supported by digital technology, many teachers use technical equipment to show students rich and vivid teaching contents, but they pay little attention to the observation and feedback of students' classroom learning reaction, so we can see that students are only busy to "eat" knowledge in class, but there is not enough time and space to deeply digest, absorb and apply the knowledge learned; Some teachers are happy to use software such as Superstar Learning Platform, Rain Classroom and Tencent Meeting, etc. On the surface, increase the students' learning fun and interaction, but do not realize that students are often obsessed with the software itself and do not really devote themselves to the study. In such a teaching environment, classroom teaching appears to have fulfilled the assigned teaching tasks, but in reality, it is the technology overstepping the teaching, and ignoring the subjectivity of students, which leads to the students' failure to get the necessary training and development in learning, and will inevitably bring some negative effects to the cultivation of students' higher abilities such as innovation ability and problem-solving skills, as well as the comprehensive, individualized and sustainable development to meet the complexity and diversity of the practical work world.

3. Deep Analysis of Dilemmas in Digital Teaching for Applied University Teachers

The dilemmas of digital teaching of applied universities teachers actually reflect the deep-rooted

problems in teachers' digital teaching that need to be clarified. Specifically, it involves issues related to both objective and subjectiv e aspects.

3.1. Objective Level: Structural Constraints of External Institutional Environment and Resource Conditions

From an objective perspective, the dilemmas faced by teachers in applied university in digital teaching stem from structural constraints imposed by the external institutional environment and resource allocation.

3.1.1. Training System and Evaluation Mechanism Are Inadequately Matched, Digital Teaching Implementation Lacks Effective Guidance

Current training on digital teaching in applied university predominantly focus on technical operational aspects, lacking integrated, scenario-based training aligned with the objectives of cultivating applied talents. As a result, teachers fail to master effective methods for deeply integrating digital technologies with specialized courses, practical teaching, and job skill development. Furthermore, teaching evaluations in applied university still prioritizes classroom presentation effectiveness, overemphasizing the formal application of technology while neglecting core indicators such as the deeper value of technological integration and the enhancement of students' practical competencies. This inadvertently fosters the problem of formalism.

3.1.2. Technology and Resource Are Insufficient Support, Digital Teaching Implementation Has Weak Infrastructure

Although applied university has established digital infrastructure, current operational conditions reveal poor stability in campus network environments, limited functionality of teaching platforms, and outdated terminal devices, all of which fail to provide the necessary hardware support for the deep integration of technology and teaching. Meanwhile, There is an insufficient supply of supporting resources for digital teaching. High-quality digital teaching resources are mostly general-purpose, lacking distinctive resources tailored to applied majors. This makes it difficult to meet the in-depth teaching requirements of applied majors, such as simulation training, hands-on practice and job matching. The lack of basic conditions for teachers to implement digital teaching forces them to merely carry out superficial integration.

3.2. Subjective Level: Intrinsic Limitations of Teachers' Subjectivity and Competence

From a subjective perspective, the insufficient demonstration of teachers' Subjectivity and their competency gaps constitute the core internal factors contributing to the digital teaching dilemma.

3.2.1. Insufficient Demonstration of Teachers' Subjectivity

Whether teachers can give full play to their subjectivity will greatly affect the effectiveness of teachers' digital teaching. The realization of teachers' subjectivity requires them to actively explore teaching concepts and practical applications tailored to digital education, based on the teaching

objectives of the digital transformation of education[5]. Current observations indicate that teachers' subjectivity in digital teaching practices remains underutilized. Some teachers still cling to traditional knowledge-transmission-oriented teaching concepts, treating digital technology merely as a teaching aid and lacking an application-oriented teaching mindset that emphasizes "technology serving teaching and fostering practical competencies". Their excessive focus on technical formalities leads to neglecting students' central role in teaching, resulting in the distortion of teaching functions. Moreover, some teachers lack a mindset for change, remaining entrenched in traditional teaching paradigms. Their exploration of digital teaching remains confined to task completion, with little initiative to integrate digital technologies with practical teaching and job requirements. The lack of reflection on teaching effectiveness and optimization of technology application ultimately prevents digital teaching from transcending its formalistic dilemma.

3.2.2. Insufficient Capability in Implementing Digital Teaching

The key point of digital teaching implementation is to promote the deep integration of digital technology and teaching, and to form a new teaching ecology in which digital technology fully supports the high-quality achievement of teaching objectives. This new teaching ecology is not merely a simple refinement of existing traditional teaching models; rather, it aims to fundamentally transform the conventional classroom teaching structure and harness the inherent power of digital technology to revolutionize both the classroom framework and all its constituent elements. In this process, it is necessary to deeply understand the characteristics and functions of digital technology, as well as its intrinsic relevance and adaptability to teaching knowledge. It should explore the organic integration mechanisms and pathways between the two, thereby enabling digital technology to be appropriately and effectively incorporated into the subject teaching process. Ultimately, this will lead to a new teaching and learning model that not only fully promotes teachers '"education" but also highlights students' "learning." Currently, while most teachers in applied university possess basic technical operational skills, they lack the teaching design capabilities to deeply integrate digital technologies, curriculum content, and the objectives of applied talent cultivation, and make it difficult to create inquiry-based, task-based, or project-based teaching environments through technology. Therefore, it is not hard to understand the problem of formalization and inefficiency in the application of technology in teaching.

4. Solutions to the Dilemmas of Digital Teaching for Applied University Teachers

The deepening of digital transformation in applied higher education urgently needs to solve the dilemmas in teachers' digital teaching. Considering comprehensively, we can propose corresponding solutions from the two aspects of teachers and schools.

4.1. Teachers should Enhance Their Digital Literacy

Teachers are the core driving force of digital teaching, and improving the level of teachers' digital literacy is the fundamental way to solve the dilemma of digital teaching for applied university teachers. The educational industry standard of "Digital Literacy for Teachers" issued by the Ministry of Education in 2023 put forward requirements for teachers' digital literacy development from five dimensions: digital awareness, digital technology knowledge and skills, digital social responsibility,

and professional development[6]. Based on the problems and the root causes in digital teaching of applied university teachers, we can consider from the following aspects.

4.1.1. Shift Mindset and Enhance Digital Awareness

During the fifth collective study session of the Political Bureau of the CPC Central Committee, General Secretary Xi Jinping emphasized: "The digitalization of education is a crucial breakthrough for China to pioneer new development paths and shape new competitive advantages in education"[7]. Regarding higher education, Zhang Xiaoping, Director of the Information Office at Tsinghua University, asserted that digitalization serves as a new productive force to empower universities' high-quality development. He further noted that over the next three years, this new productive force will be concretely manifested in the digital transformation of higher education[8]. In academic research, numerous scholars have demonstrated that integrating advanced digital technologies into education significantly enhances instructional design, enriches student learning experiences, and elevates teaching quality. They are also actively exploring the application scenarios of artificial intelligence, virtual simulation technologies, and the metaverse in the field of education[8][10][11][12]. This shows that digital technology is subverting the traditional education and teaching mode in all aspects, and the digital transformation and reform of education has become the inevitable trend of the current education development in China. In this context, teachers must recognize the profound impact of technological advancements on education and the value of digital technologies in driving high-quality educational development, they should acknowledge the necessity and urgency of transformation, move beyond traditional mindsets and path dependence, proactively embrace challenges and reforms, consciously utilize digital tools, and actively implement digital teaching practice and reform and innovation. When encountering difficulties and obstacles in digital teaching, teachers can confront difficulties head-on and demonstrate strong digital execution capabilities. Only when teachers' mindset transforms can they effectively apply advanced digital technologies to teaching practices, which is the primary prerequisite for improving teachers' digital literacy.

4.1.2. Enhance Professional Development and Acquire Digital Technology Knowledge and Skills

In addition to the willingness of teachers to carry out digital teaching, teachers also need to master certain digital technology knowledge and ability, which is the necessary condition to improve the level of teachers' digital literacy. According to a survey conducted in the European Union, teachers with strong digital skills could significantly enhance students' learning outcomes[13]. Meanwhile, scholars including Wang Shuaijie further emphasized that teachers' strong digital skills and literacy can help students develop the digital knowledge required for a digital society, while enabling them to harness digital technologies to acquire the competencies needed for digital economic growth, thereby ensuring the stable development of society[14]. These demonstrate that only when teachers have certain knowledge and ability of digital technology, can they effectively realize the deep integration of digital technology and teaching, and achieve high quality classroom teaching effect. To this end, teachets must enhance their professional development in the digital domain. Through self-directed learning and professional development programs, they should acquire knowledge of commonly used digital technologies (such as multimedia, internet, artificial intelligence, knowledge graphs, big data, and virtual simulation), digital tools, and platforms (such as smart wristbands, smart educational platforms,

online teaching platforms and social platforms). Additionally, they need to master the operational principles and practical applications of these technologies, as well as the criteria and methodologies for selecting digital resources in educational settings. On this basis, it lays a solid technical foundation for teachers to make appropriate teaching decisions based on advanced digital technology and to achieve precise teaching and learning.

4.1.3. Focus on Student-centered Teaching Concept and Scientifically Advance Digital Application

Teaching concep serves as the precursor to instructional practice. In the digital era, teaching concept particularly emphasizes cultivating students' abilities in proactive and deep learning, as well as their adaptability and foundational competencies for future society. It also highlights the importance of fostering students' innovative spirit, knowledge transfer ability, and their capacity to interact with and solve real-world problems[15]. This demonstrates that students' learning and development remain central to digital teaching, with the digital era demanding higher requirements for the cultivation of students' abilities. To this end, in advancing digital applications, teachers must properly position technology in teaching, fully recognize that technology should serve educational objectives rather than dominate instruction, establish students as the central subjects in teaching, and avoid excessive reliance on digital technology. Specifically: Firstly, teachers should redesign digital teaching design based on students' developmental needs. By leveraging digital platforms such as Superstar Learning Platform and Rain Classroom, they can collect students' learning process data, construct student learning profiles, accurately identify each student's knowledge weaknesses, learning pace variations, and competency development directions, and thereby design differentiated and personalized digital teaching plans and action strategies to meet students' diverse and individualized learning needs. Secondly, teachers should focus on the talent cultivation objectives of applied universities and create in-depth digital teaching application scenarios. By utilizing digital tools such as virtual simulation software and online training platforms, they can create an intelligent virtual simulation practice space to deliver situational and inquiry-based teaching that closely aligns with teaching objectives and content, which enables students to acquire knowledge and develop skills within immersive, task-driven digital environments. Thirdly, teachers should enhance interactive engagement between teachers and students and optimize digital teaching process. They can leverage digital tools such as live streaming interactions, online seminars, and group collaboration platforms to implement blended interactive teaching that combines online and offline approaches. In the teaching arrangement, teachers can guide students in self-directed learning through pre-class preview tasks and online questionnaires; during class, engage students' participation enthusiasm via real-time voting, quick-response activities, and group competitions; after class, extend teaching interaction through online answer questions sessions and community discussions, ensuring students' full involvement throughout the teaching process. Fourthly, teachers should focus on enhancing students' abilities and continuously improve teaching quality. Teachers can leverage digital platforms to incorporate students' classroom interactions, online assignments, project-based practices, and group collaboration data into formative assessment. Through the data analysis capabilities of the digital platform, teachers can promptly monitor students' learning progress and competency development, then use evaluation data to refine teaching design, establishing a closed-loop system of "teaching-evaluation-feedback-optimization".

4.2. Schools Should Build an Guidance Ecology of Educational Governance to Promote Teachers' Digital Development

To solve the dilemma of teachers' digital teaching, it is essential not only for teachers to enhance their digital teaching competencies, as organizers and administrators of educational activities, schools should empower teachers with strong motivation and capabilities to embrace this transformation. They must strive to build a systematic guidance ecology of educational governance, providing comprehensive support and guarantees for promoting the effective and in-depth implementation of teachers' digital teaching in terms of development concept, resource construction, training system, cultural atmosphere, and evaluation and incentive mechanism.

4.2.1. Adhere to the Development Concept Centered on Teachers

As the core executor and key promoter in the process of the digital transformation of applied university education, the degree of teachers' participation in digital teaching is directly related to the quality of applied university talent training and the embodiment of the school's characteristics. This determines that the applied higher university must consistently adhere to the development concept ofteacher-centered, placing teachers at the center of digital teaching reform[16], which is the fundamental premise to solve the dilemma of teachers' digital teaching practice and to construct the guidance ecology of high-quality educational governance. This development concept emphasizes not merely the central role of teachers, but requires schools to holistically address teachers' professional growth needs, practical challenges, and career aspirations during digital teaching reforms. By providing tailored support and humanized services, schools can strategically guide teachers to change from "passive participants" to "active leaders" in digital education, so to ultimately achieve the collaborative goal of empowering teachers, developing students, and improving schools. Specifically speaking: Firstly, the top-level design of digital teaching reform should be based on the teaching practice needs of teachers, and the digital development strategy should be formulated to fit the characteristics of applied universities. For applied university, the core responsibility of teachers is to cultivate technical and skilled talents with both theoretical knowledge and practical abilities, their digital teaching practice emphasizes the integration of theory and practice, as well as the combination of industry and education, rather than merely technical accumulation. Therefore, the institutional regulation of digital technology application should not be blindly applied to avoid the application of technology becoming a mere formality. Secondly, when formulating the digital teaching reform plan, the school should abandon the "top-down" one-way decision-making mode and establish a multi-participant collaborative governance mechanism. The committee of digital teaching reform, composed of frontline teachers, professional leaders, enterprise mentors and information technology personnel, jointly makes decisions and formulates relevant policy documents such as "Teacher's Digital Teaching Ability Improvement Plan" and "Digital Resources Construction Standard" to ensure the democratic and scientific decision-making. Thirdly, the school should regularly organize faculty symposiums and needs assessment meetings to accurately identify practical pain points teachers face in digital teaching, such as difficulties in integrating technology with teaching, disconnect between digital resources and professional practice, and increased workload from digital teaching. The school should also listen to teachers' feedback on various problems and career demands in digital teaching practice, and solve them in a timely and effective manner.

4.2.2. Improve the Construction of Digital Teaching Resources

The implementation of digital teaching activities requires teachers to possess sufficient digital resources. Therefore, the school should improve the construction of digital resources, providing teachers with high-quality and suitable digital teaching resources, ensuring that advanced digital technologies and equipment are truly accessible and user-friendly. For this reason，Firstly, the school should strengthen the construction of digital infrastructure, invest in the construction of powerful information technology infrastructure, including high-speed network connection, safe data storage equipment and efficient teaching management system, so as to provide necessary technical equipment guarantee for digital teaching. Secondly, it is essential to establish a technological environment that supports teaching reform. To meet the needs of applied university in cultivating skilled talents, the school should leverage virtual simulation technology, big data, and artificial intelligence to enhance the development and application of immersive virtual simulation training bases, virtual reality classrooms, and laboratories, which will provide teachers with authentic and ample practical spaces for digital teaching. Furthermore, besides promoting the use of the national smart education platform, the school should also actively cooperate with enterprises and industry organizations to jointly build digital platforms, realize the sharing and continuous application of high-quality resources of enterprises, so that teachers can timely grasp the development trends of enterprises and industries, obtain first-hand digital teaching resources, and then optimize the teaching design. Thirdly, by coordinating resources from prestigious universities, sister institutions, and enterprises, the digital resource library of applied university should be established, which integrates high-quality teaching materials, courses of famous teachers and teaching examples, so that teachers can search flexibly and apply them effectively in teaching. Fourthly, the school should enhance digital resource development capabilities and develop digital teaching materials by integrating various digital technologies and educational resources, thereby efficiently achieving "easy teaching and effective learning" and better matching the needs of teachers in implementing digital teaching.

4.2.3. Establish a Research and Training System to Promote Teachers' Professional Development in the Digital Field

Teachers' professional development in the digital field is the essential pathway to enhance their digital teaching ability, and it is also the key to ensure their effective implementation of digital teaching. Therefore, the school should establish the corresponding research and training system to provide strong support and help for promoting the professional development of teachers in the digital field. The implementation can be approached through the following measures: Firstly, the school should carry out training on the popularization of digital technology to overcome the limitations of IT teacher participation, thereby expanding the reach of technical training and ensuring every teacher can engage in technical training. Meanwhile, a series of specialized lectures and courses covering digital technologies such as artificial intelligence, big data, 5G, and virtual simulation should be offered, so as to help teachers systematically understand the current state of digital technology development, operational principles, and practical applications, thereby enhancing their digital literacy and skills to ensure they remain up-to-date with the times. Secondly, the school should conduct training on digital teaching application. On the one hand, the school can invite experienced experts and teachers to demonstrate digital teaching applications, use these demonstrations to guide deeper implementation, help teachers better grasp the organic integration of digital technology with professional instruction

and clarify practical pathways for digital teaching. On the other hand, the school can organize teachers to conduct practical training, enable them to utilize digital technologies for experimental scenario simulation, interactive teaching, and the provision of generative learning resources, thereby enhancing their ability to design and implement digital teaching. Additionally, the school also can provide practical application scenarios through case studies and technical workshops, enabling teachers to learn and practice new technologies in real-world settings[17]. Thirdly, the school should carry out research on digital teaching, encourage and support teachers to participate in digital teaching research through project research and teaching experiments, and explore digital teaching mode that is suitable for teachers' teaching and students' learning in accordance with the characteristics and requirements of applied university talent training, promote the innovation and application of teaching methods, improve teaching design and teaching level.

4.2.4. Cultivate a School Culture Embracing Digitalization

According to the viewpoint of organizational behavior, the organizational culture, as a soft constraint different from the system command, can weaken the psychological impact of the hard constraint, alleviate the conflict between the autonomous psychology and the reality of being governed, weaken the psychological reaction caused by this, and make the behavior of the organization members tend to be harmonious and consistent, and meet the needs of the organizational goal[18]. Therefore, shaping the school organizational culture that is compatible with the development of education digitalization to influence the teachers' teaching behavior and concept in a subtle way, which is particularly necessary to solve the dilemma of teachers' digital teaching practice and build a high-quality guidance ecology of educational governance. In the face of the vigorous advancement of China's education digitalization strategy, the applied university should break tthe former cultural atmosphere, actively cultivate the digital teaching culture of innovation, sharing and practice, and guide teachers to realize the fundamental change from "I have to use" to "I want to use"[19]. To achieve this, the school can take the following steps: Firstly, enhance the promotion and guidance of digital teaching concept. Though multiple channels including the university's official website, WeChat public account, and specialized lectures to promote the significance and frontier trends of digital teaching, the school helps teachers shift their traditional teaching mindset, recognizing that digital teaching is not a replacement but a supplement and optimization for conventional teaching. By updating their understanding of digital teaching, teachers can overcome psychological barriers and build confidence of digital teaching. Secondly, the school should organize digital teaching achievement exhibitions, including observation of exemplary digital courses and sharing sessions of digital teaching cases, to help teachers intuitively experience the appeal of digital teaching, truly appreciate the enhanced teaching efficiency and professional fulfillment brought by digitalization, and stimulate their enthusiasm and initiative in participating in digital teaching reform. Thirdly, build a platform for digital teaching exchange and cooperation. The school should regularly organize seminars on digital teaching reform and teaching innovation competitions to provide teachers with opportunities for exchange and demonstration; encourage teachers to cooperate with each other in different disciplines and different universities, and jointly apply for digital teaching reform projects and develop high-quality digital resources; strengthen cooperation with industry enterprises, invite enterprise technical personnel to participate in digital teaching reform, integrate enterprise advanced technology and practical experience into the teaching process, improve the practicality and pertinence of digital

teaching, and stimulate the internal driving force of teachers' continuous innovation in digital teaching.

4.2.5. Improve Evaluation and Incentive Mechanisms

The improvement of evaluation and incentive mechanism can comprehensively and accurately evaluate teachers' teaching work, effectively stimulate the endogenous motivation of teachers to participate in the digital teaching reform, and is an important institutional guarantee in the guidance ecology of educational governance. Specifically, On the construction of evaluation system: Firstly, it is necessary to highlight the diversification of evaluation subjects, and organize stakeholders including students, peers, supervisors, enterprise personnel, and social people to evaluate teachers' digital teaching practice from different perspectives. Secondly, the evaluation content should comprehensively cover multiple dimensions such as digital teaching design, digital resource application, teaching interaction effects, and students' learning outcomes. It should not only focus on teachers' technical application abilities but also emphasize the role of digital teaching in enhancing students' practical application skills and innovative thinking, avoiding the formalistic use of technology. Thirdly, the school should implement developmental evaluation, abandon the utilitarian and immediate evaluation that emphasizes "standard" and "excellence", and incorporate the improvement of teachers' digital teaching ability into the professional development files of teachers, and pay attention to the continuous growth and progress of teachers in the digital teaching reform. On the design of incentive mechanism: Firstly, the salary distribution should consider the teachers' new labor time input in the digital teaching reform, ensure that the teachers' labor income is proportional to their efforts, and reflect the fairness and rationality of the salary distribution system. Secondly, the digital teaching achievements should be incorporated into the teacher performance evaluation system, with a higher weight given to digital teaching in performance evaluation, so that teachers can get the increased economic benefits from participating in the digital teaching reform. Thirdly, the school should pay attention to the role of spiritual motivation by setting up honorary titles such as "Digital Teaching Innovation Pacesetter" and "Excellent Digital Course Builder", and promoting the teaching cases and demonstration classes of outstanding teachers in the campus to enhance teachers' professional sense of achievement. Fourth, the school also should increase the investment in the reform of digital teaching, and provide special funds and rewards to teachers who participate in the construction of digital courses and the development of digital technology application projects, so as to provide long-term sustainability for teachers' digital professional growth.

5. Conclusion

In July 2025, the General Office of the Ministry of Education issued the "Notice on Organizing and Implementing the Action of Digital Empowerment for Teacher Development", explicitly stating that "strengthening teacher team building should be regarded as the most crucial foundational work in constructing a strong education nation", and through six action tasks to "build a high-level teaching team for the new era"[20]. The document clearly demonstrates the nation's strong emphasis and vigorous promotion of teachers' digital development. To resolve the Practice dilemmas of digital teaching for teachers in applied universities, it is essential to implement various measures in teachers' practical work under the guidance of the national top-level design, through the collaborative efforts of individual teachers and applied university, we can remove obstacles and empower the digital teaching

practices of teachers, driving them to achieve a qualitative leap from "able to use" to "know how to use" and ultimately "be good at using", thereby solidifying and deepening the digital teaching reform in applied university.

References

[1] Ministry of Education of the People's Republic of China. (2021). Guiding Opinio of the Ministry Education and Five Other Departmentson on Promoting the Construction of New Infrastructure for Education and High-quality Education Support System.

[2] Ministry of Education of the People's Republic of China. (2022). Key Points oftheMinistry of Education's Work in 2022.

[3] Ministry of Education of the People's Republic of China. (2022). Key Points oftheMinistry of Education's Work in 2022.

[4] Ministry of Education of the People's Republic of China. (2025). Opinions of the Ministry of Education and Eight Other Departments on Accelerating the Digitalization of Education.

[5] Li Xiaohong, Chen Tengxin, Wang Kezhi, et al. (2024). Subjectivity of Teachers under the Background of Literacy-oriented Teaching Reform: necessity, essence and verification paths. Journal of Educational Science, Hunan Normal University, (3): 1-7.

[6] Ministry of Education of the People's Republic of China. (2023). Notice on the Release of the Education Industry Standard of "Digital Literacy for Teachers".

[7] Xi Jinping. (2023). Accelerating the Construction of an Education Powerhouse to Provide Strong Support for the Great Rejuvenation of the Chinese Nation.

[8] Zhang Xiaoping. (2024). Digitalization as a New Productive Force for Empowering High-Quality Development of Universities.

[9] Liu Bangqi, Yin Huanhuan. (2024). AI Empowering Teachers' Digital Literacy: Strategies, Scenarios and Evaluation Feedback Mechanisms. Modern Educational Technology, (7): 23-31.

[10] Li Qing, Liu Yong. (2024). Design of Virtual Digital Human Standard System and Its Path Planning in Education. Modern Educational Technology, (7): 70-80.

[11] Liu Hailong, Zhao Guoquan. (2024). Empowering History Teaching with the Metaverse: Cognitive Logic, Technical Architecture and Rational Examination. China Education Informatization, 30(4): 89-99.

[12] Wang Yawen, Yan Li, Wang Changyuan, et al. (2022). Discussion on Experimental Teaching in the Field of Educational Metaverse. Research on Higher Engineering Education, (4): 96-101.

[13] European Commission. (2020). Digital education action plan 2021-2027 resetting education and training for the digital age. Brussels: European Commission Publishing, 105.

[14] Wang Shuaijie, Yang Qiguang. (2024). International Landscape of Promoting Teachers' Professional Development in Digital Fields: Motivations, Characteristics and Reference. Teacher Education Research, 36(03): 115-121.

[15] Huang Ronghuai, Hu Ying, Liu Mengyu, Pan Jingwe， ADARKWAH Michael.(2024). Basic Theory of Teaching Reform in the Digital Age: Digital Pedagogy. Research on Electro-education, 45(6): 14-22+33.

[16] Liu Yue. (2026). How to Solve the Digitalization Dilemma of Higher Vocational Teachers under the Wave of Digitalization?

[17] Zhu Xiaoguang, Jiang Yingqi. (2024). Digital Intelligence Empowers the Collaborative Innovation and Development of Vocational Education, Higher Education and Continuing Education. Continuing Education Research, (7): 10-16.

[18] Zhang De. (2019). Organizational Behavior. Beijing: Higher Education Press, 185.

[19] Liu Yue. (2026). How to Solve the Dilemma of Digitalization for Higher Vocational Teac hers in the Wave of Digitalization?

[20] Ministry of Education of the People's Republic of China. (2025). Notice of the General Office of the Ministry of Education on Organizing and Implementing the Digital Empowerment of Teachers' Development Action.