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Article

Research on Improving English Teachers' Digital Teaching Ability

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Abstract: Information technology is developing deeply in the field of education. Digital teaching has become an important direction for the reform of English education. The digital teaching ability of English teachers affects classroom efficiency. It concerns students' learning experience. It also involves educational quality and teachers' professional development. Refer to relevant research at home and abroad. This article systematically analyzes the connotation, current situation, influencing factors and improvement paths of digital teaching ability of English teachers. The research found that. The digital capabilities of English teachers mainly include technical knowledge, teaching integration ability, digital literacy, and innovative application awareness. Most studies show that. Teachers generally possess certain technical operation capabilities. However, there are still deficiencies in teaching design and innovative application. The key to enhancing the digital teaching ability of English teachers: systematic training, continuous support, and reflective practice. Finally. This article puts forward suggestions. Build a diversified training system. Optimize the school support environment. Strengthen teachers' awareness of self-growth. These provide references for the digital transformation of English education.

Keywords: English teacher; digital teaching ability; digital literacy; teacher professional development

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1. Introduction

The rapid development of artificial intelligence and digital technology is profoundly changing the educational ecosystem. The classroom has shifted from being teacher-centered to learner-centered, and information technology has become a core tool for promoting learning. Against this background, the digital teaching ability of English teachers has become an important force promoting educational innovation (European Commission, 2017). The so-called digital teaching ability is not only the ability to use digital tools, but also includes the comprehensive quality of achieving teaching goals and promoting learners' development through technology (Ghomi & Redecker, 2019).

In recent years, scholars have explored the digital capabilities of English teachers from various perspectives, such as digital literacy, knowledge of technical teaching content, and educational digital competence. Su (2023) pointed out from the perspective of TPACK that digital teaching ability is the cross-integration of technology, teaching and subject knowledge. Wysocka-Narewska (2024) found that in the post-pandemic era, the frequency of English teachers' use of digital tools in the classroom has significantly increased, but there are still deficiencies in teaching innovation and reflective application.

In China and other non-English speaking countries, the cultivation of digital capabilities for English teachers faces dual challenges: on the one hand, teachers need to update their knowledge of using digital tools; on the other hand, they need to organically integrate technology with language teaching goals in teaching contexts (Dai, 2023). Therefore, systematically sorting out the relevant research results, analyzing the influencing factors and improvement paths is of great significance for deepening the digital transformation of English education.

2. Method

This study is based on a systematic literature analysis method, aiming to comprehensively sort out the research context and core findings in the field of digital teaching ability of English teachers in the past five years, and provide a solid

literature foundation for subsequent research and practice. The design of the research method follows the process of "retrieval - screening - analysis - induction". During the literature retrieval stage, the core concepts and domain terms of the research topic are comprehensively considered. During the literature analysis stage, this study took content analysis as the core idea, constructed a standardized analysis framework and coding system, and ensured the objectivity and systematicness of the research process.

The specific analysis dimensions are as follows: First, the definition and framework of digital teaching ability for English teachers, with a focus on sorting out the differences in the definition of core concepts among different scholars, comparing the constituent elements and application scenarios of mainstream theoretical frameworks such as the TPACK framework and the three-dimensional model of digital literacy, and clarifying the core consensus and controversial points within the field; Secondly, the overall current situation in the current research, summarize the research trends from aspects such as the distribution of research areas, the characteristics of research objects, and research methods, and analyze the advantages and gaps of existing research; Thirdly, the main factors influencing digital teaching ability should be classified into internal and external factors, and the mechanism of action and influence path of each factor should be systematically sorted out. Fourth, enhance the paths and practical strategies. Classify and summarize the targeted solutions proposed by existing research, including the integrated training model based on TPACK, school-based research and peer assistance mechanisms, the development and application of digital teaching resources, and the optimization of the evaluation system, etc.

3. Results

3.1. The Concept and Framework of Digital Teaching Competence

According to existing research, the digital teaching ability of English teachers is not merely the ability to use technology, but rather a comprehensive teaching quality. Most researchers take the "DigCompEdu" model proposed by the European Commission as the theoretical basis (European Commission, 2017). It is clearly pointed out that teachers' digital capabilities consist of six dimensions: professional participation, digital resources, teaching and learning, assessment, learner

empowerment, and promoting learners' digital capabilities. These six aspects cover all the links from a teacher's personal career development to classroom teaching practice, and they are currently the most widely used digital teaching framework internationally.

Ghomi and Redecker (2019) developed a self-assessment tool for digital competence based on this model, which helps teachers understand their digital teaching level and also provides a standardized reference for subsequent research.

In the field of language teaching, the TPACK framework is widely used to explain how teachers can integrate technology into their teaching. In simple terms, TPACK is a concept that integrates technical knowledge, pedagogical knowledge and disciplinary knowledge. Pehlevan and Unal (2024) found that the digital literacy level of English education students is positively correlated with their TPACK ability. That is to say, the higher the digital literacy, the stronger the teacher's ability to integrate technology in the classroom.

Furthermore, digital teaching ability is not only about "whether one can use technology or not", but also related to the psychological state of teachers during the usage process. Muslimin et al. (2023) pointed out that if teachers feel the pressure brought by technology is too great, they tend to reduce the use of digital tools in teaching, which directly affects teaching quality and learning experience. Therefore, the cultivation of digital teaching ability requires simultaneous attention to teachers' psychological support and professional identity, so as to form a stable teaching motivation.

3.2. The Current Situation of Digital Teaching Ability of English Teachers

According to the results of multiple studies, the digital teaching ability of current English teachers is generally in a state of "good foundation but insufficient advanced level". Most teachers are proficient in using common teaching tools such as PPT, video playback, and interactive software.

Bayrak Karsli's (2023) research found that teachers have a strong ability in creating and using multimedia courseware, but they have obvious shortcomings in using technology to conduct learning analysis or teaching assessment. In other words, teachers can use it, but they won't "use it deeply". This kind of superficial application

often remains at the level of classroom presentation and lacks a deep connection with students' learning goals.

There are also many similar studies that have pointed out that many English teachers use digital tools in teaching mainly to make the classroom more intuitive or interesting, such as playing videos and showing vocabulary pictures, but they seldom use technology to promote students' critical thinking or autonomous learning. This indicates that teachers have shifted from "technology" to "teaching". More guidance and reflection are still needed. From a regional perspective. Wysocka-Narewska (2024) discovered. Teachers' digital confidence has significantly increased after the epidemic. However, regional differences still exist. Teachers in cities have better equipment conditions. There are more training opportunities. Digital literacy is generally higher. Rural teachers are limited by online resources and technical support. The development of digital teaching capabilities has been relatively slow. This urban-rural gap exists all over the world. This indicates. The advancement of digitalization in education. It is not only dependent on the individual efforts of teachers. It still relies on policy and environmental support.

Some teachers believe that. Digital technology has increased the workload. They need extra time to prepare lessons. Learn the new system. Some teachers are still worried. Technology will replace the role of teachers. These psychological factors. It has a significant impact on teachers' attitudes towards digital teaching. It also affects the depth of their practice.

3.3. Factors Affecting English Teachers' Digital Teaching Ability

Based on the comprehensive literature, the factors influencing the digital teaching ability of English teachers are multi-dimensional. It can be roughly divided into four categories: personal factors, training factors, school environment factors, and policy and cultural factors.

The first category is personal factors. Dai (2023) pointed out. The teacher's age, technical experience, learning attitude, etc. All of these will affect the ability of digital teaching. In addition, Teachers' learning motivation is also very crucial. Those teachers who regard technology as a tool for teaching innovation. It is easier to cultivate integration ability. The second category is training and support. The systematic review by Zhang (2024) shows that. Systematic training has a remarkable effect on enhancing teachers' capabilities. Effective training should focus on

"contextualizing teaching". Enable teachers to understand the teaching value of technology in real scenarios. The third category is the school environment. Rahmawati et al. (2025) hold that. Whether the technical equipment of the school is sufficient. The leadership's supportive attitude towards digitalization. The collaborative atmosphere among teachers. All of these directly affect the development of teachers' digital abilities. The fourth category is policy and culture. Joya (2025) pointed out. Educational policies can help build teachers' digital capabilities. Provide direction and resource support.

3.4. Enhancement Paths and Strategies

In response to the above situation, researchers have proposed a variety of strategies and methods to enhance the digital teaching capabilities of English teachers.

The first type is systematic training. Muslimin et al. (2023) holds that. Modular training based on TPACK or DigCompEdu is the most effective. This type of training not only teaches the use of tools but also helps teachers understand the position of technology in instructional design.

The second approach is to build a learning community. Bayrak Karsli (2023) emphasizes that collaboration among teachers is an important way to enhance capabilities. A learning community can be an online community or a school-based study group. Through experience exchange and demonstration sharing, teachers can quickly absorb others' experiences and reduce the pressure of "going it alone". The third type is reflective practice. Su (2023) holds that after teachers apply technology, they should conduct systematic reflection, considering which methods are effective and which need improvement. Through action research and teaching logs, teachers can form a cycle of self-improvement. This reflective practice. Help teachers truly integrate technology into teaching innovation. The last one is the school support system. Rahmawati et al. (2025) pointed out that when schools promote digital teaching, they should provide both technical resources and psychological support simultaneously. Meanwhile, the school authorities should encourage teachers to learn from failures and foster an open and inclusive digital cultural atmosphere.

A teacher's personal willingness to learn is the internal driving force, training and institutional support are the external guarantees. Only when these three aspects work together can digitally teaching ability be truly internalized as a teacher's

professional quality, thereby promoting the overall improvement of English teaching quality.

4. Discussion

From the analysis of these literatures, it can be seen that the digital teaching ability of English teachers has actually undergone a distinct process of change. At first, teachers mainly focused on "how to use technology", such as whether they could play videos, make PPTS, and assign homework through platforms. Nowadays, more research is beginning to discuss "how to truly integrate technology and teaching". The role of teachers has also shifted from being "technical operators" in the past to "designers of digital learning".

Many studies have emphasized that the core of digital competence is not mastering various software or tools, but being able to truly promote learning through technology. Su (2023) pointed out that teachers' digital teaching capabilities should reflect the integration of "technology, teaching and content". That is to say, whether one can flexibly select, combine and innovatively use digital resources based on the course objectives, student characteristics and learning tasks is the true manifestation of digital ability.

Systematic support is of great significance in the process of enhancing teachers' digital capabilities. Many studies have found that a single training session often has limited effects. Teachers may master some operational skills in the short term, but after a while, they tend to return to their original teaching methods. In contrast, those models that combine school-based training, peer learning and continuous reflection have more stable effects (Bayrak Karsli, 2023). This model enables teachers to constantly practice, reflect and improve in a real teaching environment, rather than a one-time "skill indoctrination".

Another point worth noting is that there are significant differences in the cultivation of digital teaching abilities among different regions. Wysocka-Narewska (2024) pointed out that in some European countries, teachers' digital capabilities have been incorporated into the teacher qualification standard system and have become a necessary condition for teachers' professional development. In Asia, including China, the focus is still more on the training level of "technology application", such as learning how to use teaching platforms and create multimedia courseware. This

difference reflects the priority directions of different education systems and also reminds us that China's teacher education needs to further incorporate digital teaching capabilities into the teacher training and evaluation system to form a sustainable growth path.

From the perspective of research methods: Currently, most of the literature still mainly relies on teachers' self-reports. That is to say, researchers understand teachers' views on their own digital abilities through questionnaires or interviews. Although this approach can reflect the subjective feelings of teachers, it lacks observation of actual teaching behaviors. Future research should pay more attention to teachers' performance in real classrooms. For instance, how they use digital tools to promote student interaction, how to enhance learning motivation, and how to improve learning outcomes. This type of research can more truly reveal the actual level and impact of digital teaching ability.

Existing research reminds us that improving digital teaching ability is a complex process. It is not only about learning techniques, but also involves teachers' teaching concepts, psychological adaptation and professional support. Digital teaching is not merely "online teaching" or "using devices", but rather a teaching innovation based on technology. This requires teachers to have the awareness of continuous learning and the awareness of reflection.

5. Conclusion

This difference reflects the priority directions of different education systems and also reminds us that China's teacher education needs to further incorporate digital teaching capabilities into the teacher training and evaluation system to form a sustainable growth path.

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Existing research reminds us that improving digital teaching ability is a complex process. It is not merely about learning technology, but also involves teachers' teaching concepts, psychological adaptation, professional support, and digital teaching. It is not just about "online teaching" or "using equipment", but rather teaching innovation based on technology. This requires teachers to have the awareness of continuous learning and the awareness of reflection.

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