

Research on Intergenerational Transmission of Cultural Capital in Digital Transformation of College Teachers

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ABSTRACT

Taking college teachers as the research object, this paper explores the intergenerational transmission mechanism of cultural capital in digital transformation. Through literature review and case group analysis, it reveals the differences in digital literacy among teachers of different generations and analyzes the interactive relationship between educational policies and teacher transformation. The study finds that family cultural capital has a significant impact on the formation of teachers' digital literacy, and the education system plays a key role in the reproduction of cultural capital. The research aims to provide theoretical support for teachers' digital literacy training and practical suggestions for educational policy-makers.

KEYWORDS

Cultural capital; Digital literacy; Intergenerational transmission

1 Introduction

With the rapid development of information technology, the field of higher education is undergoing a profound digital transformation. This transformation has not only changed traditional teaching methods but also put forward new requirements for teachers' professional abilities. In this context, teachers' digital literacy has become an important indicator to measure their teaching ability. However, the formation of teachers' digital literacy does not simply rely on technical training, but is affected by various social factors, among which the role of cultural capital is particularly prominent. As a non-economic resource, cultural capital plays an important role in the growth of individuals and may affect their social status and career development through intergenerational transmission. In the field of education, research on cultural capital mainly focuses on the impact of family background on academic performance, but rarely involves its role in the formation of teachers' digital literacy.

The research questions of this paper are: How does cultural capital affect the digital literacy and teaching practice of college teachers? What are the differences in digital literacy among teachers of different generations? What is the relationship between educational policies and teacher transformation? Through the discussion of these issues, this paper attempts to reveal the mechanism of cultural capital in teachers' digital transformation and provide a theoretical basis for the formulation of relevant policies. The research methods of this paper mainly include literature review and case analysis. The literature review part will sort out the relevant research on cultural capital theory, digital literacy theory and intergenerational transmission theory, providing a theoretical basis for subsequent analysis; the case analysis part will select teachers of different generations to analyze their actual performance and challenges in the process of digital transformation; through multi-dimensional empirical analysis, this paper aims to provide theoretical support for the improvement of college teachers' digital literacy and practical suggestions for the optimization of educational policies.

2 Literature review

The theory of cultural capital was put forward by Bourdieu. Its core view is to emphasize the non-economic resources accumulated by individuals through family, school and social environment in the process of growth. These resources are not fleeting, but continue to play a key role in the long-term development of individuals. They not only shape individuals' ways of thinking and behavior habits but also may profoundly affect individuals' access to social status and career development paths through intergenerational transmission ^[1]. In the field of education, previous studies have mostly focused on how cultural capital affects students' academic performance. However, research on the role of cultural capital in the formation of college teachers' digital literacy is relatively scarce, and there is still much room for exploration in this field.

As an indispensable part of the modern education system, digital literacy is defined as the ability of individuals to effectively acquire, evaluate, use and create information in a digital environment ^[2]. With the in-depth penetration and widespread popularization of information technology in the field of education, digital literacy is no longer an additional item of teachers' professional ability but has become one of the core indicators to measure whether teachers can adapt to the requirements of education and teaching in the new era. It is worth noting that the formation of digital literacy cannot

be achieved only by simple technical training. It is also affected by many factors, including individuals' cultural background, educational experience and social environment. These factors are intertwined, jointly providing a complex and diverse space for cultural capital to play a role in the formation of digital literacy, making the relationship between cultural capital and digital literacy worthy of in-depth exploration.

The intergenerational transmission theory points out that in the course of growth, individuals will inherit cultural capital from their parents or other family members. This inheritance not only involves material resources, such as books and learning tools but also includes non-material resources, such as thinking modes, values and learning habits^[3]. In the field of education, the impact of intergenerational transmission has long been widely concerned, especially reflected in the impact of family background on students' academic performance. For example, parents' educational level and occupation type will affect their children's learning performance through intergenerational transmission. Unfortunately, the current research on the specific mechanism of intergenerational transmission in the formation of college teachers' digital literacy is far from sufficient, and a systematic and in-depth understanding has not yet been formed.

Scholars in China have also carried out useful explorations in related fields. From the perspective of family cultural capital, Tang Xiaojing made an in-depth analysis of the behavioral differences of parents from different social classes in the education process. She pointed out that parents of different classes often transmit different levels of cultural capital to their children through direct and indirect educational methods, and these differences in cultural capital will ultimately affect their children's academic achievement^[4]. This research result provides an important enlightenment for us to understand the intergenerational transmission of cultural capital in the field of education. It can be inferred that family cultural capital may also play a key role in the formation of college teachers' digital literacy. Teachers from families with high educational levels may have access to more digital resources in their early growth, such as various online courses, e-books and digital learning tools. The accumulation of these resources may give them a natural advantage in the development of digital literacy^[5]. On the contrary, teachers from families with low educational levels may lack the opportunity to contact digital resources in the process of growth, so their cultivation of digital skills may be relatively lagging behind, thus facing more challenges in the process of improving digital literacy.

In addition, a study carried out by the China Institute for Educational Finance Research of Peking University in 2023 further revealed the imbalance in the intergenerational transmission of cultural capital. The study showed that in the transmission of intergenerational resources such as cultural capital, there is an obvious Matthew effect, that is, the probability that children from highly educated families obtain cultural capital is 5.8 times that of children from low-educated families^[6]. This phenomenon may also exist in the formation of digital literacy among college teachers, which means that differences in family cultural capital may lead to an unbalanced development of digital literacy among teachers, further widening the digital ability gap between teachers.

At the same time, some studies have paid attention to the role of the education system in the transmission of cultural capital, pointing out that the type of cultural capital advocated by the school education system is often consistent with the cultural capital of the middle and upper classes of society, which to a certain extent excludes students from the working class, and then affects the academic achievement of children from different classes^[7]. By analogy, in the cultivation of college teachers' digital literacy, if the education system is biased in the allocation of digital resources and digital skills training, and tends to favor teachers with specific cultural capital backgrounds, it may further widen the gap in digital literacy among teachers, which is not conducive to the improvement of the overall digital ability of the teaching team.

In the research on the relationship between digital literacy and teachers' professional development, scholars such as Zhong Baichang found through the analysis of OECD survey data that the development of teachers' digital literacy is affected by many factors, including the number of training opportunities and the intensity of resource support^[2]. Family cultural capital is likely to indirectly affect the development of teachers' digital literacy by influencing their ability to obtain these training opportunities and resource support. For example, teachers with higher family cultural capital may be better at using their own social networks and resources to obtain more information and opportunities for digital literacy training, thus having more advantages in improving digital literacy.

To sum up, although the current academic research on the three concepts of cultural capital, digital literacy and intergenerational transmission is relatively rich, the research that organically combines the three to specifically explore the intergenerational transmission mechanism of cultural capital in the formation of college teachers' digital literacy is still relatively weak. Future research needs to deeply analyze how family cultural capital affects college teachers' digital literacy through specific paths, and what role the education system plays in the intergenerational transmission of cultural capital, so as to provide a solid theoretical support for formulating more targeted strategies to improve teachers' digital literacy.

3 Analysis of current situation of digital transformation of college teachers

3.1 Current situation of teachers' digital literacy

The current situation of teachers' digital literacy reflects their adaptability and technical level in the digital environment. Studies have shown that young teachers usually have high digital literacy and can skillfully use various digital tools for teaching and management. In contrast, middle-aged teachers have certain deficiencies in digital literacy, especially in the application of new technologies and the innovation of teaching methods. Elderly teachers face greater challenges, often lacking digital skills and struggling to adapt to the digital teaching environment. These differences not only affect the teaching effect of teachers but also have a profound impact on students' digital learning experience ^[5].

3.2 Relationship between educational policies and teacher transformation

Educational policies play an important role in teachers' digital transformation. National policy orientations, such as the "Outline for Building a Powerful Education Country" and the "Education Informatization 2.0 Action Plan", provide policy support for the improvement of teachers' digital literacy. However, the implementation effects of these policies vary significantly among different regions and schools. Some schools have effectively improved teachers' digital ability by establishing a digital literacy training system; while other schools have failed to achieve the expected transformation goals due to insufficient resources. Therefore, the formulation and implementation of educational policies need to pay more attention to local differences to ensure the fairness and effectiveness of policies ^[5].

4 Intergenerational transmission of cultural capital in teachers' digital transformation

4.1 Impact of family cultural capital on teachers' digital literacy

Family cultural capital has a significant impact on the formation of teachers' digital literacy. Studies have shown that children from highly educated families usually have advantages in digital literacy because they are exposed to more digital resources from an early age, such as e-books, online courses and digital games. These resources not only improve their digital skills but also enhance their adaptability to the digital environment. In contrast, children from low-educated families may face greater challenges in digital literacy because they lack access to digital resources, resulting in insufficient digital skills. Therefore, family cultural capital plays an important role in the formation of teachers' digital literacy ^[8].

4.2 Accumulation and transformation of teachers' own cultural capital

The accumulation and transformation of teachers' own cultural capital is an important factor affecting their digital literacy. Studies have shown that teachers accumulate a certain amount of cultural capital through continuous learning and practice in the teaching process, and these capitals play an important role in the formation of digital literacy. For example, some teachers master the use of digital tools by participating in digital literacy training courses and apply them to teaching practice. In addition, the experience and knowledge accumulated by teachers in teaching are also important components of their cultural capital, and these experiences and knowledge play a key role in the formation of digital literacy.

4.3 Reproduction of cultural capital in education system

The education system plays an important role in the reproduction of cultural capital. Studies have shown that school education not only affects students' accumulation of cultural capital through curriculum settings and teaching methods but also affects students' digital literacy through teachers' demonstration role and teaching practice. For example, some schools have effectively improved teachers' digital ability by establishing a digital literacy training system and applied it to teaching practice. This kind of training not only improves teachers' digital literacy but also promotes the improvement of students' digital literacy. Therefore, the education system plays an important role in the reproduction of cultural capital, and it is necessary to ensure the fair transmission of cultural capital through policy support and resource input.

5 Case analysis of digital transformation practices of teachers of different generations

5.1 Digital transformation of young teachers

Young teachers usually have high digital literacy and can skillfully use various digital tools for teaching and

management. They have usually received systematic digital literacy training and actively apply digital technology in teaching practice. For example, some young teachers have enriched teaching content and improved students' learning interest by using online teaching platforms and virtual reality technology. In addition, young teachers pay attention to interaction and feedback in teaching, and maintain close contact with students through digital tools, which enhances the teaching effect. This positive performance in digital literacy not only improves the teaching quality but also enhances students' learning experience. Studies have shown that young teachers have significant advantages in digital literacy, which is closely related to the educational environment and family cultural capital they received from childhood. For example, some children from highly educated families have access to more digital resources in the process of growing up, such as e-books, online courses and digital games. These resources not only improve their digital skills but also enhance their adaptability to the digital environment.

5.2 Transformation dilemma of middle-aged teachers

Middle-aged teachers have certain deficiencies in digital literacy, especially in the application of new technologies and the innovation of teaching methods. They usually have rich teaching experience but may lack confidence in the use of digital tools. For example, some middle-aged teachers still adhere to traditional teaching methods in teaching and ignore the application of digital tools, resulting in poor teaching effects. In addition, in the process of improving digital literacy, middle-aged teachers often face the problems of insufficient resources and limited training opportunities, which restrict their further development in digital literacy. This phenomenon reflects to a certain extent the impact of intergenerational differences on teachers' digital literacy. Studies have shown that middle-aged teachers have a certain lag in digital literacy, which is closely related to the social environment and family cultural capital they were in during their growth. For example, some middle-aged teachers lacked the opportunity to contact digital resources during their growth, resulting in certain shortcomings in digital literacy.

5.3 Transformation challenges of elderly teachers

Elderly teachers face greater challenges in digital literacy. They often lack digital skills and find it difficult to adapt to the digital teaching environment. For example, some elderly teachers still rely on traditional blackboard teaching in teaching and feel unfamiliar and uncomfortable with the use of digital tools. This phenomenon not only affects their teaching effect but also has a profound impact on students' digital learning experience. Studies have shown that there is a large intergenerational difference in digital literacy among elderly teachers, which is closely related to the social environment and family cultural capital they were in during their growth. For example, some elderly teachers lacked the opportunity to contact digital resources during their growth, resulting in large shortcomings in digital literacy. Therefore, elderly teachers need more support and training in the process of digital transformation to improve their digital literacy level.

6 Research findings and discussion

Through the analysis of the digital literacy of teachers of different generations, this paper finds that cultural capital plays an important role in teachers' digital transformation. Firstly, family cultural capital has a significant impact on the formation of teachers' digital literacy. Children from highly educated families usually have advantages in digital literacy because they are exposed to more digital resources from an early age. In contrast, children from low-educated families may face greater challenges in digital literacy because they lack access to digital resources, resulting in insufficient digital skills. Therefore, family cultural capital plays an important role in the formation of teachers' digital literacy.

Secondly, the accumulation and transformation of teachers' own cultural capital is an important factor affecting their digital literacy. Studies have shown that teachers accumulate a certain amount of cultural capital through continuous learning and practice in the teaching process, and these capitals play an important role in the formation of digital literacy. For example, some teachers master the use of digital tools by participating in digital literacy training courses and apply them to teaching practice. In addition, the experience and knowledge accumulated by teachers in teaching are also important components of their cultural capital, and these experiences and knowledge play a key role in the formation of digital literacy.

Finally, the education system plays an important role in the reproduction of cultural capital. Studies have shown that school education not only affects students' accumulation of cultural capital through curriculum settings and teaching methods but also affects students' digital literacy through teachers' demonstration role and teaching practice. For example, some schools have effectively improved teachers' digital ability by establishing a digital literacy training system and applied it to teaching practice. This kind of training not only improves teachers' digital literacy but also promotes the

improvement of students' digital literacy. Therefore, the education system plays an important role in the reproduction of cultural capital, and it is necessary to ensure the fair transmission of cultural capital through policy support and resource input.

7 Conclusions and suggestions

By analyzing the intergenerational transmission mechanism of cultural capital in the digital transformation of college teachers, this paper reveals the differences in digital literacy among teachers of different generations and discusses the interactive relationship between educational policies and teacher transformation. The study finds that family cultural capital has a significant impact on the formation of teachers' digital literacy, and the education system also plays a key role in the reproduction of cultural capital. Therefore, to strengthen teachers' digital literacy training, it is necessary to formulate targeted training plans according to the differences in digital literacy among teachers of different generations. For example, training on innovative teaching methods and the application of digital tools can be provided for young teachers, practical guidance on the operation of digital tools and the integration of teaching can be provided for middle-aged teachers, and curriculum support for improving digital adaptability can be provided for elderly teachers. At the same time, the combination of online and offline methods should be adopted, and platforms such as MOOCs, micro-courses and virtual teaching and research offices should be used to enhance the flexibility and accessibility of training. In addition, the design of educational policies should pay more attention to local differences to ensure the fairness and effectiveness of policies. For example, the digital ability of teachers can be improved by establishing a digital literacy training system and applied to teaching practice. Policy makers should fully investigate the actual needs of different regions and different types of schools, avoid the "one-size-fits-all" approach, and ensure the rationality and pertinence of resource allocation.

At the same time, we should promote educational equity, narrow the digital divide between urban and rural areas and between generations through policy support and resource input, and ensure that all teachers can obtain equal opportunities and support in the digital transformation. This not only helps to improve teachers' digital literacy but also helps to promote educational equity and the overall improvement of teaching quality. For example, financial subsidies and special funds can be used to support teachers in underdeveloped areas to participate in digital literacy training; at the same time, a regional digital educational resource sharing platform can be established to promote high-quality digital teaching resources to tilt towards primary schools, so as to realize resource sharing and balanced development. In addition, teachers should be encouraged to continuously learn and practice in the teaching process, accumulate and transform cultural capital to improve their digital literacy level. Teachers should take the initiative to participate in various training activities, actively try new teaching methods and technical means, and transform the knowledge learned into practical teaching ability, so as to improve their professional literacy and teaching effect. Finally, it is necessary to further explore the dynamic mechanism of cultural capital in the digital transformation of education, study its manifestations in different educational stages and different teacher groups, and provide theoretical support for the formulation of educational policies.

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