Research on the Theoretical Framework Construction and Promotion Path of University Teachers' Leadership under the Background of Digital Technology

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Abstract

Leadership education rose and developed in the United States in the seventies and eighties of the last century. Colleges and universities undertake to cultivate new leaders who adapt to the development of the global trend of diversification. Leadership is also one of the most studied topics in social sciences, but the current academic research on leadership has not yet reached a widely recognized theoretical system, especially in recent years, with the development of digital technology, digital leadership has become an important part of teachers' data literacy under the background of digital informatization in recent years. The analysis of the elements, the construction of the model and the promotion path of digital leadership are the research contents that need to be focused on urgently.

Keywords

1. CONCEPT AND CONNOTATION

In recent years, with the rapid growth of digital technology innovation and data application, more and more information technology has been introduced into the field of education. Artificial intelligence, big data and so on have made the "Internet + education" deeply integrated. The construction and application of digital education resources in universities have a profound impact on leadership structure, leadership process and leadership characteristics. So far, scholars at home and abroad have not reached an agreement. In the context of digital leadership research at the teacher level, the existing scholars believe that teacher digital leadership can be further integrated into the new requirements of information technology for teachers' ability on the basis of the original concept of teacher leadership. The ability and process of influencing relevant groups such as students, colleagues and principals through digital ideas and skills. It mainly includes three dimensions: digital technology application ability, digital professional development leadership and school digital culture leadership. Only when teachers master and use digital technology, can they actively adapt to and be competent for the task of training digital talents under the background of digital economy in daily teaching, professional fields and school digital cultural atmosphere, so as to promote the spiral improvement of school digital leadership at a higher level in the continuous interaction of various forces.

To sum up, in different stages of information technology development, teachers' digital leadership has different connotations, some scholars focus on leadership, some scholars tend to define it as a leadership process, and some scholars pay attention to the organic combination of the two. The author believes that although the emphasis of relevant research on teachers'

digital leadership is different, the main core of teachers' digital leadership is that under the background of digital technology, teachers use digital technology to promote changes in attitudes, emotions, thinking, behavior and performance of students, colleagues and schools. So that these stakeholders can actively adapt to the development and requirements of the digital economy era.

2. CONSTRUCTION OF THEORETICAL FRAMEWORK

Based on the grounded theory, this paper attempts to refine and summarize the structural elements of teachers' digital leadership from bottom to top, and analyze the structural elements and their relationships in depth so as to construct a theoretical model. Based on the principle of purposive sampling, this paper takes 20 first-line university teachers with rich experience in online teaching and research in G city of South China as the interviewees, and explores their views and thoughts on some basic issues of digital leadership, so as to investigate their understanding of the concept and elements of digital leadership. At the specific operational level, the interview outline is determined according to the influencing factors of teachers' digital leadership, the impact of teachers' digital leadership on teachers' development, students' learning, organizational collaboration, team building and school reform. Ask the teacher to describe the scene of the event, the task to be solved, the key action to be taken, the result of the leadership event and the impact of the event on himself. Video interviews, telephone interviews and on-site interviews were conducted. Before each interview, the interviewees were asked to describe the field of teachers' digital leadership and the process of teachers' role transformation, and to explain the characteristics of the situation in the process of influence generation. Four teachers were selected to test the interview situation in the pre-interview, to verify the rationality of the interview outline, and to code the interview content to verify the validity of the interview outline.

The text of the interview recording was transcoded by the NVIVO10.0 analysis tool to form the text. The transcoding process strives to restore the interview situation objectively and truly, and to sort out the language information in the interview data. After eliminating the words unrelated to the topic and invalid words such as pronouns, adverbs and quantifiers, the original data of the interview will be used as the original data for coding. Then, the text materials obtained from the interview are studied and analyzed.

The text data obtained follows the analysis idea of "open coding-spindle coding-selective coding" for coding processing, based on the 35 categories of spindle coding for correlation, comparison, abstraction, extraction and generalization, and finally extracts the four main categories of digital leadership. They are digital leading insight, intelligent teaching organization, teacher professional development learning, and digital education policy decision-making.

3. ADVANCE THE PATH

The cultivation and promotion of university teachers' digital leadership is an important breakthrough to promote the digital transformation of education in the digital age, which affects the breadth and depth of the construction of digital campus in colleges and universities, and affects the effectiveness of training and transporting digital talents needed for industrial transformation and upgrading for the society. So how to cultivate and enhance the digital leadership of university teachers? Based on the connotation interpretation and model construction, this paper puts forward the following suggestions:

3.1. Updating the Cognitive Concept and Establishing the Educational Concept in the Digital Age

University teachers should be fully aware of their role in education and teaching, and they are the front-line implementers of digital education and teaching in the construction of digital campus, undertaking the important task of training for the digital age to meet the needs of the digital transformation of modern industry. Therefore, teachers themselves should have digital teaching awareness and value orientation, establish a new educational concept of highly integrating digital technology with education and teaching, and actively embrace the high requirements and new challenges for teachers in the era of digital technology, so as to truly realize the organic integration of digital technology and teacher leadership.

3.2. Promoting the Reform and Innovation of Management Mechanism

Educational administrative departments need to improve the ability of educational governance, improve the level of educational management supported by big data, strengthen the formulation and revision of relevant policies for the construction of teachers' digital leadership under the background of digital technology, and provide policy guarantee for the construction of teachers' digital leadership. We should break through and optimize the existing management methods, explore and build an information-based and digital teaching system, and provide more abundant resource system support, more flexible and timely space design and digital campus service support for teachers to enhance their digital leadership.

3.3. Synergy for Inspiring Digital Leadership

University teachers should not only make full use of digital technology and information means in their daily teaching activities, but also make digital and delicate arrangements in the design of teaching process, the development of teaching content, the organization of teaching activities, teaching evaluation and teaching reflection. At the same time, they should actively participate in other teaching practices related to the application of digital technology to promote their own initiative growth in the professional field. Promote the process of digital teaching reform in schools from the level of grass-roots teachers, so as to stimulate the overall effectiveness of digital leadership in schools.

3.4. Enhance the effectiveness of the integration of digital technology and subject teaching

It is the basic purpose of teacher technology leadership to improve the overall effectiveness of schools through the optimization of digital technology integration process, which is also the key factor affecting the effectiveness of school intelligent education development. Schools in the digital age have already moved from a closed to an open organizational form. As the core link of school education, the integration of subject teaching and digital technology involves the fundamental interests of education-related personnel to a certain extent. Teachers have unique advantages in connecting family and school, and communicate and exchange digital teaching experience through the construction of digital online learning and discussion mechanism. Finally, teachers should guide parents and students to deeply perceive the advantages and problems of the integration of digital technology and subject teaching through teaching concept propaganda, devote themselves to improving the understanding of intelligent education of parents and students, and encourage parents and students to actively discover the practical problems and improvements of intelligent education practice, so as to promote the effective improvement of students' learning effectiveness and school education quality.

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