

Research on the Pathways to Enhance Mental Health Teachers' Intelligent Education Competencies in the Digital and Intelligent Era

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Abstract

The advent of the digital and intelligent era is profoundly transforming the field of education, particularly mental health education, bringing unprecedented challenges and opportunities. This paper focuses on the updated requirements for mental health teachers' intelligent education competencies in the digital and intelligent era, deeply analyzes the practical impact of these competencies in this new era, and proposes the components of mental health teachers' intelligent education competencies. It further elaborates on the pathways to enhancement, including taking intelligent knowledge competency as the foundation to strengthen knowledge learning and training, using intelligent nurturing competency as the guidance to innovate nurturing models and methods, adopting intelligent moral competency as the entry point to cultivate moral awareness and behavior, and regarding intelligent learning competency as the source to establish a lifelong learning mindset. These pathways aim to promote continuous self-improvement among mental health teachers and contribute to nurturing healthy and intelligent talents for the new era.

Keywords

Digital and intelligent era; mental health teachers; intelligent education competencies.

1. Introduction

The advent of the digital and intelligent era is profoundly transforming the field of education, especially mental health education. In response to the requirements outlined in the "Outline of the National Education Power Development Plan (2024-2035)" to open up new paths and create new advantages for development through the digitization of education[1], as well as the call in the "Special Action Plan for Comprehensively Strengthening and Improving Mental Health Work for Students in the New Era (2023-2025)" to strengthen the construction of the mental health education teacher workforce[2], mental health teachers need to possess high levels of intelligent education competencies to confidently face the impacts and challenges brought by intelligent education to traditional education. Only in this way can they improve the quality of mental health education and promote the healthy growth of students.

2. The Practical Impact of Intelligent Educational Competence for Mental Health Teachers in the Era of Digital Intelligence

The Age of Digital Intelligence, or "Digital Intelligence Era," refers to the overall era in which human society has entered the digital and intelligent age, marking a deep integration of digitization and intelligence. As digital technologies such as artificial intelligence, big data, and cloud computing continue to mature, the field of intelligent education, empowered by these

technologies, is no longer limited to a single area, presenting great potential for development[3]. This, in turn, poses new challenges to teachers' competencies. The impact of the Digital Intelligence Era on the field of mental health education is particularly significant. It not only manifests in the transformation of mental health education models but also places new demands on the intelligent education competencies that mental health teachers should possess. Firstly, mental health teachers need to master the basic knowledge and application skills of intelligent technologies and continuously enhance their ability to apply these technologies to better serve students. For example, by utilizing intelligent screening and mental health early warning systems, teachers can promptly identify students' psychological issues and take effective intervention measures.

Additionally, teachers can employ advanced technologies such as virtual reality and artificial intelligence to provide students with immersive mental health education experiences, enhancing teaching effectiveness. Secondly, digital and intelligent technologies provide mental health teachers with abundant data support, enabling them to gain a deeper understanding of students' psychological states and needs. Based on this data, teachers can design personalized teaching plans, teaching students in accordance with their aptitude and with a clear purpose. This not only improves teaching efficiency but also fosters students' autonomous learning abilities and innovative thinking.

Thirdly, the Digital Intelligence Era allows high-quality mental health education resources to be widely disseminated and shared, enabling teachers to easily access advanced teaching concepts and methods from both domestic and international sources, enriching their teaching content to meet the needs of different students. Lastly, the Digital Intelligence Era provides mental health teachers with more learning and development opportunities. Teachers can continuously improve their professional competencies and skill levels by participating in online training, seminars, and other means. Intelligent technologies can also assist teachers in self-reflection and evaluation, helping them promptly identify their shortcomings and formulate improvement plans, promoting teacher professionalization and career development.

However, it should also be noted that the development of mental health teachers' intelligent education competencies in the Digital Intelligence Era is a "double-edged sword." Some mental health teachers may become overly reliant on intelligent technologies, neglecting the importance of traditional teaching methods, leading to poor teaching outcomes. At the same time, some teachers may struggle to adapt to the teaching transformations of the Digital Intelligence Era, lacking the necessary digital literacy and intelligent technology application abilities, which affects teaching quality. In the Digital Intelligence Era, students' mental health data has become an important resource, but it may also face risks of leakage and misuse. Some mental health teachers lack awareness of data security and protection. Moreover, intelligent technologies are updated and replaced at a very fast pace, requiring mental health teachers to continuously learn and master new technologies to adapt to the demands of teaching transformations. This may bring certain training pressures and time costs to teachers, requiring them to invest more energy and resources into learning and practice. Furthermore, the lack of emotion and self-awareness in artificial intelligence may also lead to a lack of humanistic care and emotional communication between teachers and students.

3. The Connotation and Components of Mental Health Teachers' Intelligent Educational Competence in the Era of Digital Intelligence

In 2018, the General Office of the Ministry of Education issued the "Notice on Launching a Pilot Program to Promote the Construction of the Teaching Staff with the Help of Artificial Intelligence," which explicitly proposed strengthening the training of teachers' intelligent educational competence to improve their professional level[4]. Relevant national policy

documents have highlighted the need to focus on the diversified development direction of teachers' intelligent educational competence, mainly reflected in their ability to master and apply intelligent educational technology, data-driven instructional decision-making skills, innovative thinking and practical abilities, ethical and responsible consciousness, and continuous learning capabilities. Research on teachers' intelligent educational competence has clearly become a hot topic.

Regarding the definition of the connotation of intelligent educational competence, there is currently no consensus. More and more domestic scholars have conducted theoretical explorations on the connotation and framework construction of intelligent educational competence. While discussing the connotation, characteristics, and value of intelligent educational competence, they have begun to construct a framework for teachers' intelligent educational competence suitable for their national conditions. Liu Bin believes that teachers' intelligent educational competence is a new representation of teachers' information technology literacy in the intelligent era, representing an update and structural expansion of the connotation of teachers' information technology literacy[5]. Li Xiang constructs a "three-dimensional and four-stage iceberg structure model" of teachers' intelligent educational competence, proposing that it is a comprehensive competence that integrates AI knowledge, teaching abilities integrated with AI, and AI education ethics and beliefs[6]. Fu Mingming believes that teachers' intelligent educational competence, led by "competence and creativity as the core," mainly includes five aspects: teachers' professional knowledge competence, professional ability competence, technical tool competence, professional emotional competence, and professional ethical competence[7]. Luo Yaguo et al. propose that teachers' intelligent educational competence covers seven aspects: technical knowledge and skills, instructional design and implementation, assessment and feedback, learning and tutoring, ethics and safety, lifelong learning and professional development, and innovative and critical thinking[8]. Ding Nan et al., starting from the cultivation of normal university students, construct a framework of intelligent competence for normal university students that is compatible with the "one practice and three learnings," covering three dimensions: intelligent learning competence, intelligent teaching competence, and intelligent social moral competence[9].

Teachers' intelligent educational competence is a basic competence that teachers should possess in educational teaching practice in the era of digital intelligence. It is an important competence that integrates technology-oriented and human-oriented development. It is a dynamically developing competence that keeps pace with the times, emphasizes continuous learning and innovation. Therefore, this paper argues that mental health teachers' intelligent educational competence in the era of digital intelligence refers to the comprehensive embodiment of knowledge, abilities, attitudes, and ethics that support mental health teachers in professional practice and development in a digital and intelligent educational teaching environment. It involves understanding and mastering artificial intelligence technology and its educational applications, designing and implementing intelligent educational teaching, intelligently assessing and intervening in students' mental health status, maintaining a rational attitude and ethical practice in a digital and intelligent educational environment, and continuously learning and updating. Specifically, the connotation of mental health teachers' intelligent educational competence in the era of digital intelligence consists of the following four dimensions.

(1) Intelligent Knowledge Literacy

Intelligent knowledge literacy refers to the ability of mental health teachers to understand and apply basic knowledge of artificial intelligence technology and its educational applications. Mental health teachers are required to master the fundamental principles and operational methods of artificial intelligence technology, understand its application prospects and trends

in the field of education. They should be familiar with the use of intelligent teaching systems and platforms, such as intelligent psychological counseling software and online psychological assessment tools. They should be able to utilize artificial intelligence technology or software to assist in instructional design, implementation, and evaluation, thereby enhancing the pertinence and effectiveness of mental health education.

(2) Intelligent Nurturing Literacy

Intelligent nurturing literacy represents the ability of mental health teachers to leverage smart technology to promote students' mental health growth and comprehensive development. Mental health teachers are expected to utilize intelligent technology to provide personalized psychological counseling and consultation to students, conduct intelligent assessments and interventions on students' mental health status, and develop targeted mental health services for them. Furthermore, they should create a favorable mental health education environment using smart technology, such as simulating psychological scenarios through virtual reality technology to enhance students' psychological experiences and insights. They should also learn to use intelligent technology to facilitate home-school collaboration in education, strengthening communication and cooperation with parents to jointly focus on students' mental health growth.

(3) Intelligent Ethical Literacy

Intelligent ethical literacy refers to the ethical norms and sense of responsibility that mental health teachers adhere to when using intelligent technology. Mental health teachers are required to respect and protect students' privacy and data security, refraining from disclosing students' personal information and mental health data. When using intelligent technology, they should follow principles of fairness, impartiality, and transparency, ensuring that the use of technology complies with educational ethics and laws and regulations. They should provide students with correct education on technology ethics, guiding them to use intelligent technology rationally and preventing addiction and dependence.

(4) Intelligent Learning Literacy

Intelligent learning literacy represents the ability of mental health teachers to continuously learn and update their knowledge of intelligent technology, enhancing their professional competence. Mental health teachers are required to maintain sensitivity and curiosity towards new technologies and applications, actively learning and mastering the latest knowledge of intelligent technology. They should participate in training and seminar activities related to intelligent education, exchange experiences and insights with peers, and continuously improve their professional competence and teaching abilities. They should apply the learned knowledge of intelligent technology to teaching practice, continuously exploring and innovating methods and models of mental health education.

4. Paths to Enhance the Intelligent Education Literacy of Mental Health Teachers in the Digital-Intelligent Era

(1) Strengthening Knowledge Learning and Training Based on Intelligent Knowledge Literacy

Firstly, enhance professional knowledge learning and training. Schools should regularly organize thematic seminars and workshops, inviting industry experts to share the latest intelligent technologies and their application cases in mental health education. Teachers should be encouraged to participate in relevant academic conferences at home and abroad to stay informed about the latest international developments and broaden their horizons. Special funds should be established to support teachers in attending advanced study programs or further education courses for systematic learning of the theoretical foundations and practical applications of intelligent technologies.

Secondly, establish a technical support and cooperation system. Schools should cooperate deeply with enterprises to build a learning community for intelligent technologies, sharing application experiences and achievements of digital-intelligent technologies in mental health education, and promoting experience exchange and technical mutual assistance among mental health teachers. An intelligent technology laboratory or innovation center can also be established to provide teachers with more space and resources for practical exploration, enabling them to adapt flexibly to the transformative development of intelligent technologies. Lastly, encourage autonomous learning and feedback. Teachers should be encouraged to use online learning platforms, such as MOOCs and micro-lectures, to independently study courses related to intelligent technologies. Guide teachers to participate in open-source projects or independently develop intelligent educational tools to enhance their practical abilities. Teachers should be encouraged to apply the learned intelligent technologies to teaching practice and continuously optimize their teaching methods through practical feedback.

(2) Innovating Education Models and Methods Guided by Intelligent Nurturing Literacy

Teachers should learn to use intelligent technologies to deeply mine and analyze students' mental health data, formulating more precise personalized teaching plans. Based on students' interest characteristics, diversified teaching resources and activities should be designed to enhance students' learning interest and classroom participation. On this basis, by using intelligent platforms to monitor students' learning situations in real-time, corresponding teaching strategies can be flexibly adjusted to ensure teaching quality. Teachers should boldly explore new models of integrating advanced technologies such as virtual reality and augmented reality into mental health education, such as virtual psychological counseling rooms and psychological drama performances. Students should be encouraged to use intelligent technologies for autonomous learning and exploration, cultivating their abilities in creative thinking and problem-solving.

Additionally, intelligent technologies can be used to conduct remote psychological counseling and home-school co-education, breaking the limitations of time and space and improving the convenience and effectiveness of education. An intelligent platform can also be used to establish a home-school communication mechanism, regularly providing feedback to parents on students' mental health status and learning progress. Parents should be invited to participate in the school's mental health education activities to jointly focus on students' mental health growth. At the same time, parents should be provided with relevant training and guidance on intelligent technologies to help them better understand, support, and cooperate with the school's mental health education work.

(3) Cultivating Moral Awareness and Behavior with Intelligent Ethical Literacy as the Entry Point

Firstly, teachers must abide by ethical norms. Strengthen learning and training on the ethical norms of intelligent technologies to improve teachers' ethical awareness and sense of responsibility. When using intelligent technologies, teachers must strictly comply with relevant laws, regulations, and ethical norms, protecting students' privacy and data security. Regular ethical reviews should be conducted on the application of intelligent technologies to ensure their use complies with educational ethics and legal requirements. In education and teaching, actively demonstrate the positive role and value of intelligent technologies, guide students to view and use intelligent technologies correctly, and cultivate their network literacy and social responsibility through vigorously carrying out network public welfare activities such as network security promotion and network civilization construction. Teachers should also play an exemplary role, setting a good moral example for students by abiding by the ethical norms of intelligent technologies.

(4) Establishing a Lifelong Learning Concept with Intelligent Learning Literacy as the Source

Teachers themselves should establish a lifelong learning concept, constantly updating their knowledge and skills to adapt to the development of the digital-intelligent era. Teachers should be encouraged to view learning as a way of life and a professional pursuit, continuously improving their professional competence and comprehensive abilities. By establishing learning reward mechanisms and holding learning achievement exhibitions, teachers' enthusiasm and motivation for learning can be stimulated. Teachers should learn to use diverse learning platforms such as online learning platforms, MOOCs, and micro-lectures to acquire the latest intelligent technology knowledge and teaching methods. They should participate in interdisciplinary learning, strengthen their ability to integrate interdisciplinary resources, design interdisciplinary teaching content and activities, and broaden their knowledge horizons and ways of thinking. By attending academic conferences, seminars, and other events, teachers can exchange learning experiences and insights with peers, jointly enhancing their intelligent learning literacy.

Finally, teachers should regularly reflect on and summarize their intelligent teaching practices, extracting experiences and lessons learned. By writing teaching logs, case analyses, and other means, they can record their teaching practices and growth journeys. They should communicate and discuss with colleagues and experts to jointly explore the application and improvement directions of intelligent technologies in mental health education.

5. Conclusion

The enhancement of intelligent educational literacy among mental health teachers in the era of digital intelligence is a process of continuous exploration and practice, and its effectiveness will directly impact the quality and future of students' mental health education. By taking intelligent knowledge literacy as the foundation, strengthening knowledge learning and training; using intelligent nurturing literacy as the guide, innovating nurturing models and methods; focusing on intelligent moral literacy as the entry point, cultivating moral awareness and behavior; and regarding intelligent learning literacy as the source, fostering a lifelong learning mindset, mental health teachers can continuously improve themselves and contribute to nurturing healthy and intelligent talents for the new era.

Author Introduction

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