

Examining the Impact of AI on Mental Health Services in Virtual K12 Schools

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ABSTRACT

As mental health challenges rise in schools, the need for innovative and accessible interventions has become increasingly important. According to the American Academy of Pediatrics, approximately 20 million school-age children are diagnosed with an emotional disorder. Students identified with emotional disabilities may be stigmatized, isolate themselves from their peers, and experience exposure to a weaker academic curriculum. This article makes the case for integrating Artificial Intelligence (AI) into mental health care, specifically in virtual school settings. By analyzing current research and emerging applications, the discussion highlights how AI can expand access to underserved student populations, reduce costs, and address barriers to treatment. Ultimately, this article argues that with responsible development and implementation, AI can play a transformative role in addressing the student mental health crisis.

MAKING THE CASE FOR ARTIFICIAL INTELLIGENCE AND MENTAL HEALTH

As we transition to a more technologically driven society, we see the potential for safe and ethical integration of artificial intelligence in virtual schools nationwide. Until recently, conversations around artificial intelligence and mental health support in schools have been limited (Miller & Brown, 2018). Virtual schools primarily utilize traditional methods of instruction and rely on contractual arrangements to fulfill service provisions within individual educational plans (IEPs), and the hiring process is left at the discretion of site administrators (Pulham & Graham, 2018). The virtual school makeup can function in many forms and serve a range of student populations. Virtual school formats can range from full-time online K12 schools or allow students to enroll in single courses.

“Some virtual education programs require students and teachers to be online at the same time (synchronous education); others allow students and teachers to visit online courses at their own convenience (asynchronous education). Others combine online work with in-person classroom instruction (blended

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instruction). Providers include public entities, nonprofit organizations, and for-profit companies” (Molnar et al., 2023, p. 2).

Virtual schools exist and function in all US states, with accreditation standards and educational governing bodies for regulation. Artificial Intelligence tools, such as machine learning, could be helpful in teaching and mental health service provision within virtual schools. Sanusi et al. (2023) compiled a review of machine learning research in schools. The study found that artificial intelligence and school integration are often viewed separately, and at times, they are viewed with resistance by both proponents and opponents of their adoption. Recent studies have highlighted a significant increase in the use of artificial intelligence (AI) tools among children and teenagers:

- **Teenagers (Ages 13-17):** Approximately 70% have used generative AI tools primarily for homework assistance (Abrams, 2025; Sanusi et al., 2023)
- **Children (Ages 0-8):** Nearly 30% have utilized AI for learning purposes, despite age restrictions on platforms like ChatGPT and Gemini (Abrams, 2025; Sanusi et al., 2023)
- **Students (General):** A global survey indicated that 86% of students are incorporating AI into their studies (Abrams, 2025; Sanusi et al., 2023)

These statistics underscore the growing integration of AI in educational settings among younger populations. It is imperative to encourage new research and study how systems of artificial intelligence can be used safely, including how schools can support the safe adoption of mental health tools among children and adolescents. As collective educational governing systems, we have an evident gap between current Artificial Intelligence (AI) advancements and the knowledge of AI among practitioners, teachers, and administrators in schools (Hadar Shoval, 2025). Safe and effective training partnerships in the development and design stages should provide educators with foundational and theoretical tools that support their work.

AI training in schools should align goals with current pedagogical practices and be grounded in current research on how students learn. The tech industry is well-positioned to facilitate partnerships that help address current knowledge gaps in AI. Partnerships with schools and AI experts could also increase the likelihood of implementing proactive strategies to address programmatic complexities. Strengthening literacy in artificial intelligence among teachers and direct service providers could facilitate understanding of the capabilities and limits of AI implementation. It is essential to ensure that strong research practices will address quality assurance, confidentiality, and protection of student data and safety policies. Ongoing research partnerships can be established, and we should seek to provide data-based recommendations to ensure quality control and consistency in feedback across stakeholders.

Definition of AI in Education

In this chapter, we discuss various areas of Artificial Intelligence in Education (AIed) and how adoption can benefit mental health services in schools. Artificial Intelligence has been defined as the “mechanical simulation system of collecting knowledge and information and processing intelligence of universe: (collating and interpreting) and disseminating it to the eligible in the form of actionable intelligence” (Garg & Sharma, 2020). AI in education is defined as a combination of “intelligent education, innovative virtual learning, and data analysis and predictions” (Chen, 2020, p. 75267). Current

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