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Integrating AI Technology into the Merdeka Curriculum to Support Students Mental Health and Emotional Monitoring

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ABSTRACT
This study investigates the integration of Artificial Intelligence (AI) into Indonesia's Merdeka Curriculum to support students' mental health and emotional well-being. Using a qualitative case study approach, interviews were conducted with teachers, school counselors. The research identifies AI's potential to offer real-time insights into students' emotional states, aiding early detection of psychological distress and fostering personalized socio-emotional learning. However, concerns about data privacy, teacher training, and ethical implementation were highlighted. The study emphasizes the need for a balanced approach that aligns AI with the values of the Merdeka Curriculum, suggesting that successful integration requires collaboration, policy regulation, and ethical practices.

Keywords: Artificial Intelligence, Merdeka Curriculum, Student Mental Health

1 Introduction

As technology advances, the integration of Artificial Intelligence (AI) in education shows promise in enhancing learning experiences and supporting mental health. AI tools like emotion recognition systems, sentiment analysis, and natural language processing can detect early signs of emotional distress, providing educators with real-time insights into students' well-being. This aligns with the Merdeka Curriculum's focus on learner autonomy, flexibility, and holistic development, aiming to foster academically and emotionally intelligent individuals. As mental health becomes increasingly recognized as crucial for student growth, especially post-COVID-19, AI offers a potential solution for addressing emotional well-being within the curriculum. However, the use of AI for emotional monitoring in Indonesian schools faces challenges, including data privacy concerns, ethical issues, and cultural perceptions of mental health, which need careful consideration for successful implementation.

2 Literature Review

Research shows that AI has significant potential in supporting children's mental health by detecting emotions through facial expressions, voice, text, and physiological cues. This allows for timely interventions and personalized support that can foster emotional awareness and resilience. In classrooms, AI provides data-driven insights to help teachers monitor student well-being more efficiently. However, ethical concerns, data privacy, and the need to maintain human connection must be carefully considered in its implementation.

Artificial Intelligence (AI) has emerged as a promising tool in supporting mental health and emotional monitoring, especially among children and adolescents. Through technologies such as affective computing, AI can analyze facial expressions, voice tones, and writing patterns to detect emotional states like stress, anxiety, or depression in real-time. These applications enable teachers, parents, and

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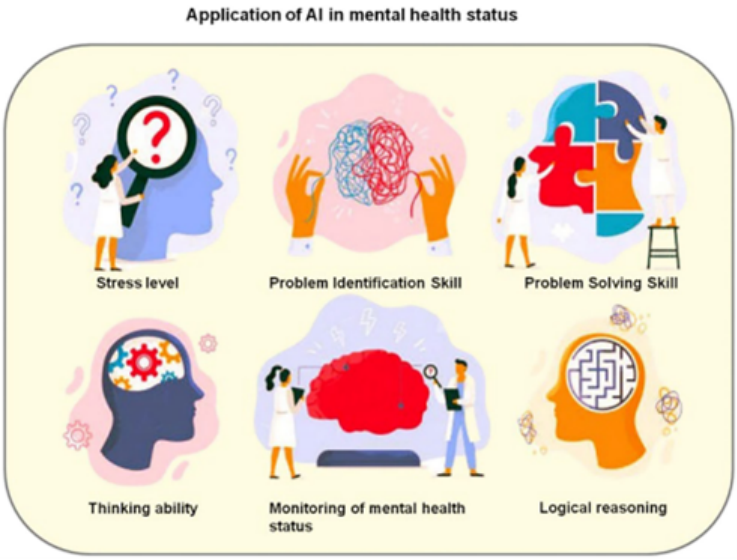
Tabel 11. Application of AI in Mental Health Status

No	Benefits	Disadvantage
1	Detects children's emotions in real-time through facial expressions, voice, and text	Potentially violates children's privacy if data is not properly managed
2	Helps teachers and parents identify early signs of stress or anxiety	May cause dependency on AI systems, reducing human interaction
3	Provides timely recommendations for psychological interventions	Recommendations may be inaccurate if algorithms are not locally adapted
4	Reduces the burden on teachers in monitoring the emotional condition of all students	Long-term use may lower children's ability to recognize their own emotions
5	Increases attention to emotional well-being in education	May cause discomfort or anxiety in children due to constant monitoring
6	Enables objective and consistent monitoring	Risk of emotional data misuse by third parties

professionals to identify psychological concerns early and provide more targeted interventions. Additionally, AI can offer personalized feedback, helping students develop emotional awareness and self-regulation strategies. While the potential is significant, the implementation of such technologies must be accompanied by strong ethical considerations and data privacy protections to ensure they do not negatively impact children's development.



Gambar 7. Clean dishes are neatly arranged on the classroom dish rack

3 Research Methods

This study employs a qualitative research paradigm to explore how artificial intelligence (AI) technology can be integrated into the Merdeka Curriculum to support students' mental health and emotional monitoring. The qualitative approach is chosen to deeply understand the experiences, perceptions, and contextual realities of educators, students, and stakeholders regarding the use of AI in educational and emotional contexts.

This study employs a descriptive qualitative approach to explore the integration of AI in education, focusing on emotional and social dynamics rather than numerical data. Data were collected through semi-structured interviews with educators, focus group discussions with students, and document analysis of curriculum and policies. Thematic analysis was used to identify key patterns and themes, providing in-depth insights into the benefits, challenges, and ethical considerations of using AI to support student well-being within the Merdeka Curriculum framework.

4 Result and Discussion

The integration of AI into the Merdeka Curriculum shows strong potential to enhance students' mental health and emotional monitoring. Findings from interviews, focus groups, and document analysis reveal that while awareness of AI's benefits is high, acceptance varies due to concerns over maintaining human interaction. Students responded positively to AI support, especially in managing stress, while teachers saw value in reduced monitoring workload. However, significant privacy and ethical concerns were raised, emphasizing the need for clear data protection policies and informed consent. Challenges include limited infrastructure and teacher training. Overall, successful integration requires aligning AI with the curriculum's holistic and student-centered goals.

The study highlights the potential of integrating AI into the Merdeka Curriculum to support students' mental health, but emphasizes that successful implementation requires addressing several challenges. First, AI should complement—not replace—human interaction; teachers must remain central in providing empathetic support. Second, strong data privacy protections and informed consent are essential due to the sensitivity of emotional data. Third, adequate teacher training in both AI tools and emotional intelligence is necessary for effective use. Fourth, disparities in infrastructure and resources must be addressed to ensure equitable access. Finally, AI integration must align with the Merdeka Curriculum's holistic, student-centered goals, enhancing rather than diminishing human-centered learning.

5 Conclusion

Integrating AI into the Merdeka Curriculum can enhance student mental health support through real-time emotional monitoring, aligning with the curriculum's holistic, student-centered vision. With proper teacher training and data protection, AI can become an inclusive and human-centered educational tool.

References

1. Abohty, A. S., & Fathi, M. (2022). Artificial intelligence in education: A review. Education and Information Technologies, 27(4), 4567–4586. https://doi.org/10.1007/s10639-021-10673-8
2. Alim, S., & Prasetyo, Z. K. (2023). Penerapan Kurikulum Merdeka: Analisis kesiapan guru dalam pembelajaran berdiferensiasi. Jurnal Pendidikan Indonesia, 12(2), 155–163.
3. Arrieta, A. B., et al. (2020). Explainable Artificial Intelligence (XAI): Concepts, taxonomies, opportunities and challenges toward responsible AI. Information Fusion, 58, 82–115. https://doi.org/10.1016/j.inffus.2019.12.012
4. Barret, N., & Dawson, D. (2020). Emotional AI and education: A new frontier in mental health monitoring. Journal of Educational Technology & Society, 23(1), 32–43.
5. Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117(3), 497–529.
6. Budiman, D. (2023). Peran teknologi AI dalam pendidikan karakter dan kesejahteraan siswa di era digital. Jurnal Teknologi Pendidikan dan Pembelajaran, 6(1), 4

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