RMU4U

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RECTOR'S NOTE

Prof. Dr Roshima Said
Acting Rector

"Together we advance knowledge with integrity, creativity, and purpose—many voices united to shape a brighter, sustainable future."

Assalamualaikum warahmatullahi wabarakatuh,

Alhamdulillah, with gratitude to Allah SWT, I am pleased to welcome you to the fourth volume of RMU4U e-Bulletin. This publication continues to serve as a reflection of our vibrant intellectual community at UiTM Kedah, bringing together voices from diverse disciplines and perspectives. In this issue, with 42 insightful contributions, we witness not only the richness of research topics but also the strength of our shared purpose. While the papers range from sustainability in fashion and design, digital literacy, and artificial intelligence to law, economics, and cultural heritage, they are united by a common aspiration: to advance knowledge that is meaningful, ethical, and impactful for society.

Our academic journey is significant because of this harmony amid diversity. Whether addressing contemporary challenges in technology and governance or celebrating the timeless values of culture and tradition, our scholars demonstrate that knowledge is most powerful when it is connected, when different fields meet at the crossroads of innovation, integrity, and service to the community.

As Rector, I am profoundly inspired by the dedication, innovation, and scholarly excellence demonstrated by our academics and researchers. You are not only advancing knowledge within our university but are also fulfilling UiTM's noble mission, creating impactful ideas that serve the nation and uplift the ummah.

Your work reflects a deep commitment to relevance, integrity, and service. Let us continue to nurture a culture of collaboration, creativity, and excellence, ensuring that our contributions remain forward-looking, transformative, and rooted in the needs of society. Together, we are shaping a brighter, more sustainable future through education, research, and innovation.

Congratulations to all the dedicated contributors whose passion and perseverance have brought this volume to life. My heartfelt appreciation goes to the Research Management Unit for their steadfast leadership and solid commitment in making this achievement possible. May RMU4U continue to shine as a beacon of knowledge, uniting diverse voices in a shared mission of discovery and excellence. Together, may we be inspired to reach even greater heights in the pursuit of impactful research and innovation.

One purpose. One vision. Many voices, one future.

Sincerely,
Prof. Dr Roshima Said
Acting Rector,
Universiti Teknologi MARA Keda

A MESSAGE FROM THE CHIEF EDITOR

Dr Azyyati Anuar
Chief Editor,
RMU4U E-Bulletin

"RMU4U Volume 4 celebrates diverse scholarship, uniting research, innovation, and culture to inspire collaboration, sustainability, and inclusive growth."

We are pleased to present Volume 4 of RMU4U, a platform dedicated to showcasing research, innovation, and thought leadership across diverse academic disciplines. This issue reflects the dynamic intellectual ecosystem we strive to cultivate, highlighting contributions that bridge theory and practice while addressing pressing contemporary challenges. In the Business, Accounting, and Finance section, we feature 15 insightful papers that explore the evolving landscape of global markets, financial resilience, sustainable accounting practices, and digital transformation in business operations.

These works not only provide empirical findings but also propose actionable frameworks for industry adoption, underscoring the vital role of research in shaping competitive and ethical enterprises. The Designer Thoughts segment presents 6 stimulating papers that merge creativity with problem-solving. From design thinking methodologies to innovation in product aesthetics and usability, these contributions remind us that design is not merely about form but about crafting meaningful user experiences.

This section will be of particular interest to those who value the intersection of artistry, functionality, and human-centered solutions. Our IR 5.0 category brings together 6 pioneering papers examining the fusion of automation, artificial intelligence, and human capital development in the context of the Fifth Industrial Revolution. The authors challenge readers to consider how technology can be harmonized with ethical and inclusive practices, ensuring that digital progress translates into equitable societal benefits. In the Law and Policy section, 7 comprehensive papers analyze legal reforms, governance frameworks, and policy innovations that respond to shifting socio-economic realities.

The breadth of topics from regulatory compliance in emerging industries to community rights in a globalized economy reflects the critical role of law as both a safeguard and an enabler of change. The Literature and Culture segment enriches this volume with 8 thought-provoking papers that delve into narratives, identities, and cultural dialogues shaping societies today.

Whether revisiting classic literature through modern lenses or exploring contemporary cultural phenomena, these works invite readers to appreciate the role of the humanities in fostering empathy, critical thinking, and cultural continuity. Collectively, these 42 scholarly contributions affirm the breadth and depth of academic engagement within our community. They underscore our commitment to advancing knowledge that is relevant, impactful, and forward-looking. This volume is not only a testament to our contributors' dedication but also a resource for policymakers, practitioners, educators, and learners who seek informed perspectives and innovative solutions. We extend our heartfelt appreciation to all authors, reviewers, and editorial team members whose collective efforts have made this publication possible. We hope that RMU4U Vol. 4 will spark dialogue, inspire collaboration, and contribute to the enrichment of both academic scholarship and practical application.

Let us continue to explore, innovate, and contribute, together shaping a future where knowledge serves as the foundation for sustainable and inclusive growth.

Warm regards,
Dr Azyyati Anuar
Chief Editor,
RMU4U E-Bulletin

EQUIPPING GENERATION ALPHA WITH AI FOR FUTURE CAREERS

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Career Readiness in the Age of AI: Essential Skills for Tomorrow's Jobs

The fast-paced modern world of technology demands that students today be taught the skills that they will need to survive in an artificially intelligent future. With the transformations that Artificial Intelligence (AI) is bringing to industries and society, it has become essential for parents to prepare the next generation to face such changes. In order to discover a way to enter this new era, a couple of educational pathways may guide students in establishing the required competencies. These programs emphasize basic AI literacy, technical competencies, and key soft skills, qualifying students to meet the complicated requirements of the future workforce.

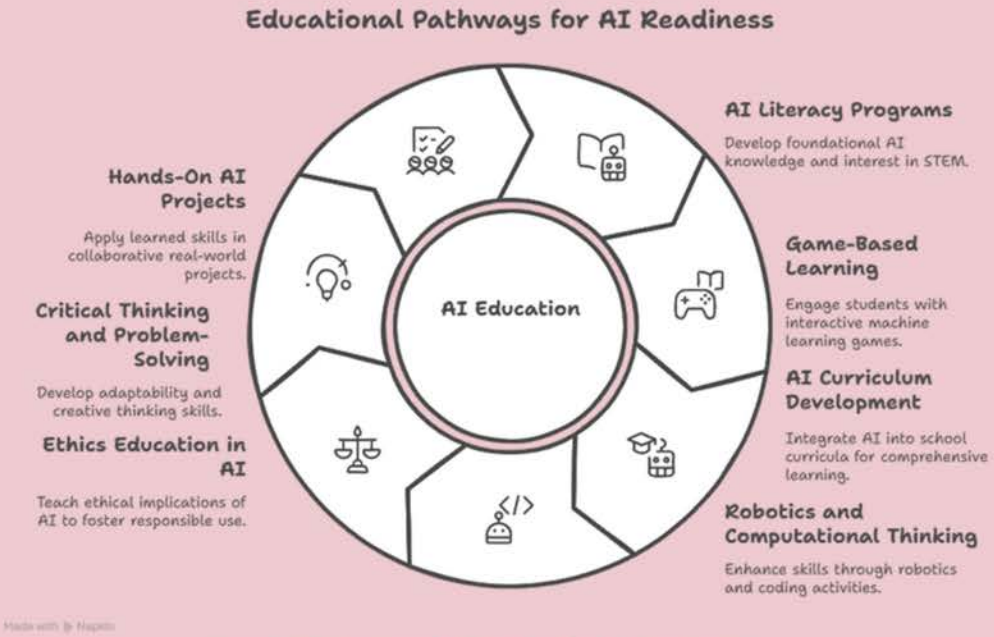

Figure 1: Educational Pathways for AI Readiness

AI Literacy Programs: A Foundation for the Future

AI literacy is necessary to become familiar with the increasingly present tools in our lives and work. Su and Yang (2023) also underlined the significance of AI literacy programs (including the AI4KG program) that demonstrated promising results regarding the development of students' conceptualization of AI concepts. Accordingly, these programs develop a general awareness of AI and a general interest in Science, Technology, Engineering, and Mathematics (STEM) setting students up to succeed in their educational and professional endeavors. Thus, early introduction to AI will ensure that students acquire fundamental skills that will be priceless in the future technologically influenced job markets.

AI Curriculum Development: Tailoring Education for Young Learners

It is crucial for AI implementation in school programs to ensure that the learners are ready to live in an increasingly technological world. Kim et al. (2021) urged the creation of AI-focused curricula to be used in elementary schools and designed to equip students to comprehend and use AI in practical situations. By demystifying AI concepts and motivating students to learn by doing, these curricula enable students to play with AI in a manner that develops their technical knowledge and instills critical thinking. In essence, an effective AI curriculum is the basis of the technical literacy that the students will require in the future workforce.

Game-Based Learning in Machine Learning

Game-based learning is another productive idea for teaching AI-related concepts, turning complicated subject matter into an interesting and approachable one. Voulgari et al. (2021) emphasized the advantages of teaching machine learning to primary and secondary school students with the help of games. This approach interactively presents machine learning and makes students curious about technology, which will improve their problem-solving skills. Through a playful, hands-on approach to machine learning, students will have a more profound knowledge of the subject. This is essential since machine learning is still one of the driving forces behind industry innovations.

Robotics and Computational Thinking: Enhancing Early Education

The introduction of robotics in early education programs is crucial to the acquisition of both computational thinking and problem-solving abilities. Lee et al. (2025) demonstrated how AI-based robots can improve AI literacy and computational thinking skills in preschoolers. By introducing kids to robotics, we can expose them to code and technology and foster logical thinking and creativity. Correspondingly, the skills form an essential part of future jobs that require proficiency in technical knowledge and critical and creative thinking.

Integrating AI in Early Childhood Education

AI tools in early childhood education are likely to produce a prominent positive effect on developmental results in numerous cognitive areas. Huang et al. (2024) observed that AI technologies may be adjusted to the particular requirements of young learners and deliver customized learning experiences, helping them to flourish academically and personally. In particular, AI-enhanced learning technologies assist in acquiring the most important skills, including problem-solving, flexibility, and creativity, which will be the key to succeeding in the job markets of the future that AI will shape.

Ethics Education in AI: Preparing Responsible Innovators

As AI is embedded further into all aspects of living, it is also essential that students become educated with regard to the ethical consequences of technology. According to Krotz and Schelhowe (2020), AI education courses that include an ethical aspect are crucial in ensuring students become responsible technology consumers and producers. Furthermore, ethical AI education will guide students through the nuances of AI's influence on society and form a high sense of morality. The significance of highlighting the societal implications of AI is that in the future, young people will be more inclined to make a responsible contribution to technology, which will positively impact society.

Critical Thinking and Problem-Solving: Building Adaptability

Problem-solving and critical thinking will remain highly marketable skills as AI transforms the labor market. The study by Parsakia (2023) asserted that the problem-solving and critical thinking skills of students can be improved dramatically with the help of AI-assisted tools. As a result of AI tool implementation into the learning curriculum, students will be more prepared to solve future tasks, keep in mind the changing technologies, and be creative thinkers. These skills will be critical in a labor market that rewards flexibility and innovation.

Hands-On AI Projects: Encouraging Collaborative Learning

Practical AI projects allow students to assess their knowledge in practice. By helping students engage in collaborative projects involving AI technologies, they can acquire practical skills, shape their creativity, and improve self-esteem. These projects can enforce technical knowledge, instruction, teamwork, and communication, which are critical in the new work environment.

Conclusion

To sum up, AI is swiftly defining the future of work, and parents must ensure their kids are ready to enter the new environment. Accordingly, parents can support their children in becoming AI-literate by investing in AI literacy programs, game-based learning, robotics, and ethics education. The programs provide the students with technical skills and equip them with critical thinking, problem-solving, and moral reasoning skills that will help them in the future. Nevertheless, it is crucial that, as AI keeps affecting a range of industries, Generation Alpha's students should be provided with the means to excel in tomorrow's job markets.

References

Huang, R., Bao, Y., Wang, Y., & Wei, J. (2024). Exploring AI tools in early childhood education: Usage patterns, functions, and developmental outcomes. https://doi.org/10.5772/intechopen.1007116

Kim, S., Jang, Y., Kim, W., Choi, S., Jung, H., Kim, S., ... & Kim, H. (2021). Why and what to teach: AI curriculum for elementary school. Proceedings of the AAAI Conference on Artificial Intelligence, 35(17), 15569-15576. https://doi.org/10.1609/aaai.v35i17.17833

Krotz, F., & Schelhowe, H. (2020). Ethik und KI. Merz, 64(5), 6-11. https://doi.org/10.21240/merz/2020.5.7
Lee, B., Ku, S., & Ko, K. (2025). AI robots promote South Korean preschoolers' AI literacy and computational thinking. Family Relations, 74(3), 1354-1375. https://doi.org/10.1111/fare.13189

Parsakia, K. (2023). The effect of chatbots and AI on the self-efficacy, self-esteem, problem-solving and critical thinking of students. HN, 1(1), 71-76. https://doi.org/10.61838/hn.1.1.14

Su, J., & Yang, W. (2023). AI literacy curriculum and its relation to children's perceptions of robots and attitudes towards engineering and science: An intervention study in early childhood education. Journal of Computer Assisted Learning, 40(1), 241-253. https://doi.org/10.1111/jcal.12867

Voulgari, I., Zammit, M., Stouraitis, E., Liapis, A., & Yannakakis, G. (2021). Learn to machine learn: Designing a game-based approach for teaching machine learning to primary and secondary education students. https://doi.org/10.1145/3459990.3465176

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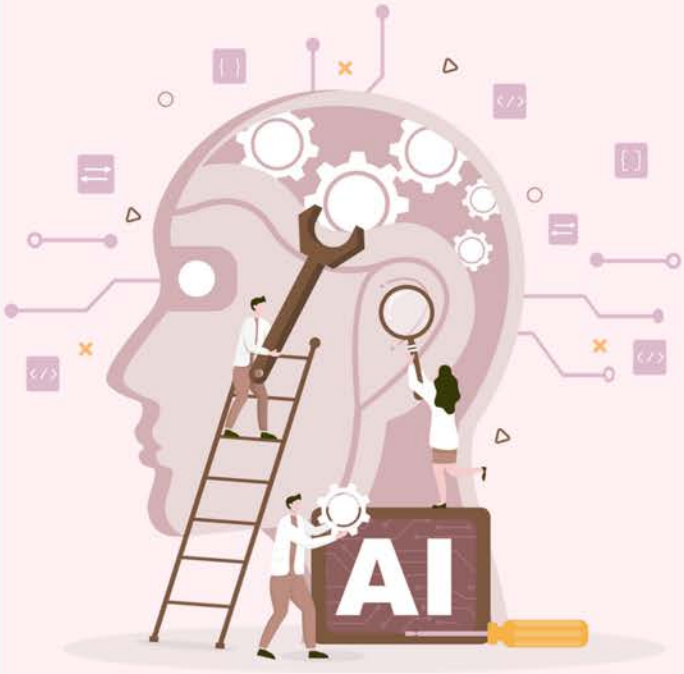

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