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## **UMPSA conducts International Community Service Programme through AR and VR at Tadika Islam Mutiara Amaliyah Medan**

1 October 2025

MEDAN, 18 September 2025 – The Flexible Learning & Micro-Credential Centre (FLEXMC), Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA), successfully implemented an International Community Service Programme with 33 students of Tadika Islam Mutiara Amaliyah in Medan, Indonesia.

The programme was conducted with the strategic collaboration of the Faculty of Computer Science and Information Technology, Universitas Sumatera Utara (USU), which is an academic partner in

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strengthening Malaysia–Indonesia regional relations.

This initiative also focused on digital literacy based on Science, Technology, Engineering, Arts & Mathematics (STEAM) with the use of virtual reality (VR) as an innovative learning medium to stimulate the cognitive and emotional development of children.

Various interactive activities were conducted, including an introduction to augmented reality (AR) and VR, mini science experiments, creativity training through robotics, and STEAM learning simulations with the concept of ‘learning through play’.

The programme was conducted with a child-friendly approach and guided by teachers, facilitators from the Faculty of Computer Science and Information Technology, and the FLEXMC technical team.

This programme is one of the important agendas of international community collaboration under the community grant project of FLEXMC, UMPSA, and Universitas Sumatera Utara (USU), namely ‘SMART & HAPPY KIDS: STEAM Digital Literacy Based on Virtual Reality for Cognitive and Emotional Stimulation of PAUD Children in Deli Serdang’, which began on 19 July 2025.

This study produced a Busy Book module specially developed for PAUD Tadika Islam children in Deli Serdang as a creative and interactive learning support material.

According to the Project Leader, Associate Professor Ts. Dr. Awanis Romli, the involvement of FLEXMC UMPSA in international community service programmes such as this is highly significant because it not only opens up opportunities for knowledge and technology transfer but also strengthens UMPSA’s reputation as an institution committed to flexible education and micro-credentials at the global level.

Also present were the FLEXMC Head of Technical, Ts. Dr. Danakorn, and FLEXMC Senior Executive, Mohd Shahri, the FLEXMC Senior Executive who played an important role in ensuring the effectiveness of implementation, as well as the sharing of the digital technology.

This programme also supports several Sustainable Development Goals (SDGs), among them, SDG 4: Quality Education – expanding access to innovative learning from early childhood, SDG 9: Industry, Innovation & Infrastructure – promoting digital technology as an educational tool, and SDG 17: Partnerships for the Goals – strengthening regional cooperation through academic networks between UMPSA and USU.

FLEXMC UMPSA is confident that through this joint programme and study, bilateral relations with international institutions can be strengthened while providing a positive impact on the international community in efforts to shape a young generation that is technologically literate and competitive.

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