

Workshop on Inclusive Design

Creating Learning Materials That Work for All Students

King Fahd University of Petroleum & Minerals (KFUPM), Dhahran, Saudi Arabia
16–17 December 2025

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Creating Learning Materials That Work for All Students
16–17 December 2025, King Fahd University of Petroleum and Minerals, Saudi Arabia



Welcome from the Organiser!

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Event Summary

The *Workshop on Inclusive Design: Creating Learning Materials That Work for All Students* was held as a two-day hybrid event at **King Fahd University of Petroleum & Minerals (KFUPM)** in *Dhahran, Saudi Arabia*, on **16–17 December 2025**. The workshop brought together in-person participants and online speakers to explore inclusive learning design, accessible material development, persona-driven approaches, and the role of artificial intelligence and emerging technologies in improving educational equity. The programme combined keynote-style talks, demonstrations, guided discussions, hands-on activities, and reflection sessions, *creating a practical forum for exchanging methods and experiences in inclusive education*.

At a Glance

Two-day hybrid workshop; inclusive design, UDL and Inclusive Education Toolkit; international speakers; talks, demonstrations, networking and hands-on practice.

Programme Overview

Day	Theme	Main Components
Day 1	Foundations, technology and persona-driven design	Introduction to accessible education; inclusive research; inclusive learning experiences; AI-augmented personalised learning design; Industry 4.0 for inclusive education; engagement detection from video data; persona-driven material creation.
Day 2	Toolkit practice, reflection and next steps	Introduction to the Inclusive Education Toolkit and Universal Design for Learning; hands-on adaptation of learning materials for specific learner personas; peer feedback; embedding accessibility in day-to-day teaching; closing and certificate distribution.

Contributors and Organisation

The workshop featured contributions from **Prof David J Brown** (Nottingham Trent University, UK), **Prof Mufti Mahmud** (KFUPM, Saudi Arabia), **Prof Gosia Kwiatkowska** (University of East London, UK), **Prof Neelu Jyothi Ahuja** (University of Petroleum and Energy Studies, India), **Dr Claudia Lizette Garay-Rondero** (Tecnológico de Monterrey, Mexico), **Dr M Arifur Rahman** (Nottingham Trent University, UK), **Dr Sweta Bhattacharya** (Vellore Institute of Technology, India), **Mr Nicholas Shopland** (Nottingham Trent University, UK), and **Prof M Mostafizur Rahman** (AIUB, Bangladesh). It was jointly organised by KFUPM's Deanship of Academic Development and College of Computing and Mathematics under the patronage of the Dean of College of Computing and Mathematics, **Dr Abdullah Sultan**, the Dean of Academic Development, **Dr Abdulaziz Alaswad**, and the Director of Educational Effectiveness & Efficiency Center, **Dr Mojeeb Al-Rhman Al-Khiaty**. The workshop was funded by the **IEEE Systems, Man, and Cybernetics Society** and **IEEE Equity, Diversity, and Inclusion**, and technically co-sponsored by the **Asia Pacific Neural Network Society (APNNS)**.

Key Focus Areas

- Inclusive design and accessible educational materials for diverse learners.
- Universal Design for Learning and practical use of the Inclusive Education Toolkit.
- Persona-driven adaptation of presentations and other teaching resources.
- AI, serious games, virtual learning environments, and inclusive digital technologies.

Workshop Activities and Engagement

The event combined lecture-style delivery with discussion-led and practice-oriented sessions. Photographs from the workshop show active engagement in plenary talks, smaller interactive sessions, and collaborative reflection. The overall format supported knowledge exchange across accessibility, inclusive research, educational technology, and AI-enabled learning design.



Group photograph of participants and speakers.



Group photograph of in-person speakers and organisers.



Dr Abdullah Sultan, Dean of the College of Computing and Mathematics, inaugurated the workshop.



Dr Mojeeb Al-Rhman Al-Khiaty, Director of the Educational Effectiveness & Efficiency Center, chaired the opening session of the workshop.

Contributors



The contributors of the workshop. From top left: Prof David J Brown (Nottingham Trent University, UK), Prof Mufti Mahmud (KFUPM, Saudi Arabia), Prof Gosia Kwiatkowska (University of East London, UK), Prof Neelu Jyothi Ahuja (University of Petroleum and Energy Studies, India), Dr Claudia Lizette Garay-Rondero (Tecnológico de Monterrey, Mexico), Dr M Arifur Rahman (Nottingham Trent University, UK), Dr Sweta Bhattacharya (Vellore Institute of Technology, India), Mr Nicholas Shopland (Nottingham Trent University, UK), and Prof M Mostafizur Rahman (AIUB, Bangladesh).



Plenary presentation in the main lecture theatre.



Interactive round-table style session at KFUPM Student Affairs.

Conclusion

The workshop provided a focused platform for advancing inclusive educational practice through both conceptual and applied perspectives. By combining accessibility frameworks, persona-driven design, Universal Design for Learning, and AI-supported educational technologies, the event highlighted practical pathways for creating learning materials that work for a wider range of students. The strong academic and professional mix of contributions positioned the workshop as a meaningful step towards broader adoption of inclusive design principles in higher education.