INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:
Building Intelligent Digital Ecosystems for Smart Education

Name, Title and Affiliation of Chair:

Peter ILIC, Senior Associate Professor, University of Aizu

Details of Session (including aim and scope):

Theme and Objectives:

As education becomes increasingly connected and data-driven, digital ecosystems now extend beyond institutional infrastructures to encompass the diverse network of personal devices, platforms, and services that mediate teaching and learning. Smartphones, tablets, wearable technologies, cloud-based tools, and AI-enhanced assistants are no longer peripheral but integral nodes in smart educational ecosystems.

This invited session examines how these interconnected systems spanning institutional, community, and individual levels can enhance learning effectiveness, personalization, and lifelong engagement. It seeks conceptual models, design frameworks, and empirical studies that advance understanding of intelligent integration, interoperability, and governance across this expanding educational landscape. Ethical, cultural, and sustainability concerns are also central to the discussion of resilient and inclusive digital ecosystems.

Scope and Topics (indicative):

- Conceptual and architectural models of educational digital ecosystems
- AI-driven personalization and adaptive learning within ecosystems
- Learning analytics, data interoperability, and standards for smart education
- Institutional and cross-institutional ecosystem governance
- Ecosystem design for lifelong learning and workforce reskilling
- Ethical, cultural, and accessibility perspectives in connected learning environments
- Innovative pedagogical models and emerging technologies shaping smart learning ecosystems

Submissions on related or emerging themes that align with the session focus are also encouraged.

Expected Outcomes:

The session aims to stimulate interdisciplinary discussion bridging computer science, educational technology, and learning sciences.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

University of Tsukuba, Japan
University of Piraeus, Greece
University of South Australia, Australia

Website URL of Call for Papers (if any):

KES Website

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