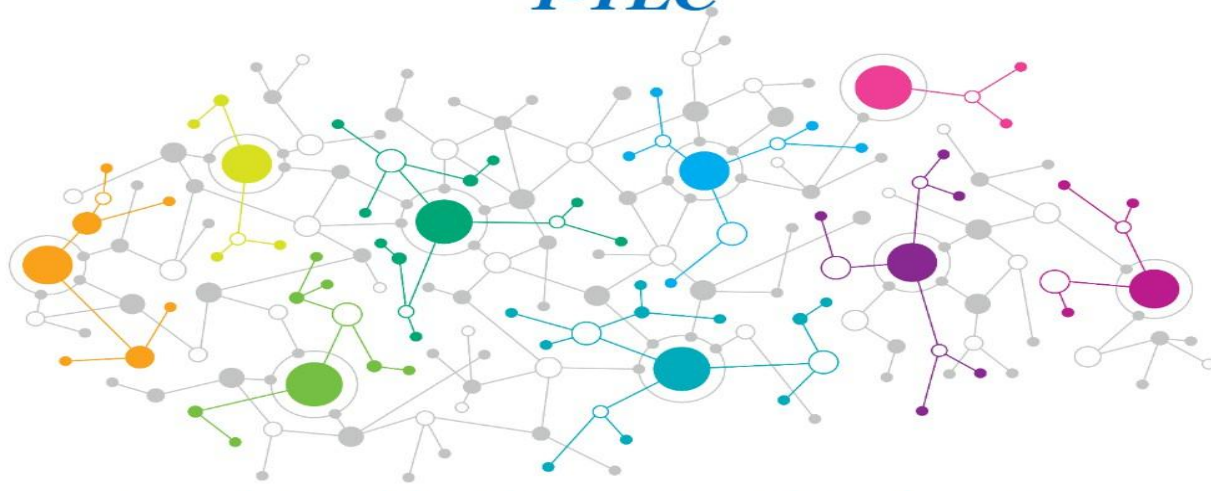




***INNOVATION, TECHNOLOGIES,
EDUCATION ET COMMUNICATION
I-TEC***



**Proceedings of the 5th International Conference on Education, Research,
and Innovation:**

“Empowering Learners & Unlocking Their Full Potential”

| | April 08-09, 2025 | | Oujda, Morocco | |

Edited by

Isam Mrah

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Foreword

Dear Colleagues,

In a time of rapid change, it is more important than ever that we stay grounded in our connections with one another and continue to maintain a strong sense of community that centers humanity. It is in this spirit of human connectedness that we co-author this foreword. We are colleagues who were first connected three years ago through a higher education collaborative technology project related to digital learning in teacher education. And now, three years on, with the launch of ChatGPT and the verge of an agentic revolution, it is our human connection that endures. Indeed, now is the time more than ever to center human connection, consciousness, and agency.

From Tempe, Arizona to Oujda, Morocco, we recognize the strategic importance of Artificial Intelligence and the need to integrate it into the higher education ecosystem in intentional and pedagogically sound ways. Universities and research institutions across the country are actively integrating AI in their day-to-day work whether through launching new programs, research initiatives, or partnerships to foster AI talent and innovation. Recently, a strategic program has been launched by the Moroccan Ministry of Higher Education, Scientific Research and Innovation and the OCP Foundation. The program is endowed with a substantial budget of 1 billion Moroccan Dirhams, to be distributed over four cycles between 2025 and 2028. The overarching goal is to stimulate the national scientific research and innovation ecosystem in Morocco. The aim is not just to keep pace with global technological advancements, but to position Morocco as a key player in the responsible development and application of AI. Some key areas of focus include specialized AI programs, research & development and international collaborations. These initiatives aim to equip the next generation of Moroccan professionals with the skills to thrive in an AI-driven world, emphasizing both technical prowess and ethical consciousness.

The impact of AI transcends technical fields and touches virtually every aspect of human life. To this end, it is critical that every citizen and professional interacting with AI understands the ethical and societal impacts of AI and is equipped with the consciousness to interrogate, evaluate, and develop responsible AI. Embedding explicit opportunities to learn and apply the ethics of AI across the curricula will ensure that all faculty and students have the tools to navigate the tensions that arise when making decisions around teaching and learning in the

age of GenAI. For faculty, when, how, and where should GenAI be integrated for instruction and when should it not? For students, the same questions arise - when, how, and where should I engage GenAI tools as a critical thought partner and when should I not? For researchers, when is it ethical to engage in the use of GenAI tools and when should use of GenAI be disclosed? How will we collectively and individually make these and many other decisions? The overarching theme is that of principled innovation, one of the nine design aspirations at Arizona State University - advancing innovation in education to create positive change for humanity. In other words, we must ask ourselves - just because we can do something, should we? Now is the time to remember that we are at the center of every decision around AI. It is us as humans who need to navigate an AI landscape wrought with benefits and harms, opportunities and risks. How will we navigate? We have a choice.

To truly harness the transformative potential of AI in education and ensure equitable access and robust development, a comprehensive and urgent strategy for AI in education is imperative for us all. The work underway in Morocco will provide a cohesive framework for curriculum development, teacher training, ethical guidelines, infrastructure investment, and inter-institutional collaboration, ensuring a unified and impactful approach to preparing Moroccan learners in the AI era.

The future of AI in education, both globally and in Morocco, is not predetermined. It is a future that we must actively co-author. Pioneering a human-centric future for AI education is the major key. Indeed, by centering human connection, consciousness, and agency in every decision and educational endeavor, we can ensure AI serves humanity, unlocking new possibilities while preserving our core values and planet. Ongoing collaboration and human connection will ensure that we navigate together and benefit from collective wisdom and ingenuity. We are the architects of a future with AI and we determine what comes next in the story of humanity. We believe in a future that nurtures the imagination, creativity, and sustainability of humans and the earth. We invite you to reach out and connect with us as well, whether as thought partners, in collaborative research, or through the exploration of innovative ideas.

Janice Mak || Arizona State University ||

Mourad Benali || CRMEF, Oujda ||

Message from the Editor (s)

This volume comprises selected papers presented at the International Conference on Education, Research, and Innovation on the topic “Empowering Learners & Unlocking Their Full Potential” which was held on April 08-09, 2025 at Mohammed I University, Faculty of Letters and Human Sciences, Oujda, Morocco. The papers herein explore a wide spectrum of ideas—from innovative pedagogies and digital transformations to inclusive practices and future-ready skills—all converging toward a shared vision of learner empowerment.

The 2025 ICERI conference provided a venue for in-depth discussions and reflections on ways to advance effective higher education instruction to meet the increasing demands of today's graduate students. The event showcased a multifaceted range of innovative research, fostering stimulating dialogues and insightful exchanges among participants from diverse backgrounds around a multitude of educational and pedagogical issues. More specifically, the conference served as a dynamic platform to explore innovative approaches, policies and practices that empower learners and foster lifelong learning in today's interconnected world, marked by fast-paced technological progress, dynamic global mobility and shifting workplace demands.

Another aim of the colloquium was to prompt educational practitioners to reflect on their teaching practices in order to examine the overall effectiveness of their instructive approaches. Discussions were geared towards working out the best practices for reviewing existing instructional programs and identifying opportunities for further development. The event provided a forum that facilitates collaboration and networking among educational institutions to encourage the exchange of expertise and resources and provide guidance on future research directions.

The proceedings book is intended for academia, researchers, educators, and practitioners working in the fields of innovative pedagogies. The discussions have important implications for higher education curriculum development, particularly in what regards reviewing existing instructional programs and identifying opportunities for further development.

As editor, I extend my deepest appreciation to the authors for their rigorous research and valuable insights, the reviewers for their careful evaluations, and the organizing committee for their tireless dedication. My gratitude also goes to all participants who enriched the

discussions and contributed to making this conference a space of collaboration and inspiration.

I hope this proceedings book will serve as both a record of the stimulating exchanges that took place during the conference and a resource for educators, researchers, and policymakers striving to unlock the full potential of learners worldwide.

Isam MRAH

ICERI 2025 Conference Coordinator

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