

Proceedings of the 2026 Informing Science and Information Technology Education Conference (IⁿSITE)

July 26-31, 2026, San Jose, California, USA

Introduction

Welcome to the Proceedings of the Informing Science and Information Technology Education Conference: IⁿSITE 2026.

This year's conference is built around a deceptively simple theme: **“Re-Thinking the World of AI.”** The phrase invites us to look beyond artificial intelligence as merely another technological advance. Instead, it challenges us to reconsider many of the assumptions that have guided education, research, organisations, and society for decades. AI is no longer simply a tool that assists human activity; increasingly, it participates in creating information, generating knowledge, supporting decisions, and reshaping the way people learn and work. As these capabilities continue to evolve, so too must our understanding of what it means to inform and to be informed.

For more than twenty-five years, the Informing Science Institute has championed an interdisciplinary approach to understanding how information is created, communicated, interpreted, and used. That mission has never been more relevant. Artificial intelligence cuts across traditional disciplinary boundaries. It raises technical questions about algorithms and systems, educational questions about teaching and assessment, organisational questions about leadership and work, ethical questions about trust and responsibility, and societal questions about equity, privacy, creativity, and human agency. No single discipline can answer these questions alone. They demand the diverse perspectives that have long characterised the IⁿSITE community.

The papers collected in this volume demonstrate that the conversation surrounding AI has entered a new phase. Much of the early discussion focused on what AI could do. Increasingly, researchers are asking what AI should do, how it should be integrated into professional practice, and how humans can work alongside intelligent systems in ways that enhance rather than diminish human capability. Across these proceedings, AI is presented not as an end in itself, but as a catalyst for rethinking education, organisational practice, healthcare, cybersecurity, communication, and research.

Education remains one of the most significant arenas of transformation. Many contributions explore how universities are redesigning curriculum, assessment, and learning experiences in response to generative AI. The emphasis, however, is not simply on adopting new technologies. Instead, the research highlights the importance of cultivating critical thinking, digital literacy, ethical reasoning, and the uniquely human capabilities that AI cannot easily replicate. The challenge for educators is no longer whether AI should be incorporated into learning, but how institutions can prepare graduates to thrive in a future where collaboration between humans and intelligent systems becomes commonplace.

The proceedings also reveal that technological progress brings corresponding responsibilities. As AI becomes embedded within organisational and public infrastructures, issues of cybersecurity, governance, transparency, trust, and resilience become increasingly significant. Several authors investigate how organisations can protect information, manage emerging risks, and design systems that remain secure, reliable, and worthy of public confidence. These studies remind us that innovation without thoughtful governance ultimately undermines the very benefits that technology promises to deliver.

Equally compelling are the papers that examine the human experience of technological change. Questions of motivation, identity, inclusion, faculty development, learner confidence, cultural diversity, and organisational adaptation appear throughout the proceedings. These contributions reinforce a central insight of informing science: technologies do not create value independently. Their impact depends upon the individuals, communities, and organisations that design, adopt, interpret, and use them. AI may automate many tasks, but informing remains fundamentally a human endeavour grounded in communication, understanding, and trust.

One of the enduring strengths of I²SITE is its commitment to interdisciplinarity. This volume brings together scholars from information systems, education, computer science, psychology, organisational studies, cybersecurity, linguistics, healthcare, and many other fields. It is precisely this diversity of perspectives that enables meaningful progress on problems that are too complex to be solved within the boundaries of any single discipline. The international nature of the conference further enriches these discussions, providing insights drawn from different cultures, educational systems, industries, and institutional contexts.

Collectively, these proceedings suggest that *re-thinking the world of AI* is ultimately about re-thinking ourselves. Artificial intelligence is prompting us to reconsider how knowledge is created, how expertise is recognised, how learning occurs, how decisions are made, and how technology can serve humanity. The answers are unlikely to emerge from technical innovation alone. They will be found through thoughtful dialogue, rigorous scholarship, ethical reflection, and sustained collaboration across disciplines and across nations.

We extend our sincere appreciation to all of the authors who have contributed their scholarship to I²SITE 2026. Their work advances the fields of informing science, information technology, and education while enriching an international conversation that continues to grow in both depth and significance. We also thank our reviewers, whose expertise, generosity, and commitment to constructive peer review have ensured the quality and rigour of the papers presented in this volume.

It is our hope that these proceedings will serve not only as a record of current research but also as an invitation to future inquiry. The questions raised here will undoubtedly evolve as artificial intelligence continues to develop, yet the underlying mission of informing science remains constant: to improve the ways information informs individuals, organisations, and society.

As you explore the papers that follow, we invite you to engage with new ideas, challenge existing assumptions, and contribute to the ongoing conversation about the future of AI and the future of informing itself.

Michael Jones, Betty Boyd, Eli Cohen, and Geoffrey Liu

ISSN: 1535-0703

Proceedings of IⁿSITE 2026

Table of Contents

	ARTICLE #
AI-Enabled Deliberate Practice for Cybersecurity Mastery (AIDPCM): An Adaptive Learning and Cyber-Range–Integrated Framework [Research in Progress]	
Sebastian Hayes, Albert Tay, Emma Craig, Karlos Andrei Reategui Dina	1
Beyond STEM-Related Stereotypes: Evidence of a Female Advantage in Database Modeling [Abstract]	
Adi Katz, Ronit Shmallo	2
What Drives Students to Recommend a Hybrid English Course? Evidence from the Scale-Up of an Online Learning Platform [Poster]	
Dan Bouhnik, Tal Lewis	3
Faculty Perceptions of Hispanic-Serving Institution External Funding: New Faculty Motivations and Challenges in South Texas Higher Education	
Diana Polendo Luna, Jeffery Chernosky	4
Redesign of an Introduction to Computer Networks Course – Integrating TPACK with Generative AI [Research in Progress]	
Joyce Vogel, Thierry Dana-Picard, Dan Bouhnik	5
We Are Required to Re-Think the World of AI	
Jeremy Horne	6
Re-Thinking Fairness in AI Screening: Filtering Background Bias Before Teaching the Model [Abstract]	
Hsing-Tzu Cathy Lin, Jung-Yu Lily Wu	7
Understanding AI-Assisted EFL Learning: The Roles of Expectancy Value, AI Literacy, and Self-Regulated Learning [Abstract]	
Kate Tzu-Ching Chen, Ming-Tzer Lin	8
Exploring the Future Metaverse: Research Models for User Experience, Business Readiness, and National Competitiveness [Abstract]	
Amir Reza Asadi, Shiva Ghasemi	9
Privacy Perceptions in Using Generative AI Tools Among Israeli Students [Abstract]	
Maor Weinberger, Dan Bouhnik	10
Design Space of Interactive Persona Systems: A Systematic Literature Review of the Evolution of Personas in the Age of Generative AI	
Amir Reza Asadi, Hazem Said	11
Improving Computer Vision Learning Outcomes with Gamified Project-Based Learning [Abstract]	
Mau-Tsuen Yang, Ya-Chun Shih	12
Measuring Differential Responses: A Cross-Engine Audit of Generative AI Bias [Abstract]	
Jeffery Chernosky, Emma Halvarsson	13
Exploring Cloud Technology Adoption in Higher Education: Implications for AI-Enabled Teaching and Learning Readiness [Abstract]	
Parna Biswas, Pamela Roy	14

Rethinking Student Evaluations of Instruction [Abstract]	
Nicole Buzzetto-Hollywood	15
Pedagogical Recommendations for Leveraging the Use of Artificial Intelligence in Writing Doctoral Dissertations to Address the Education Adoption Gap [Abstract]	
Azad Ali, Ramesh Soni	16
Mindset and Academic Achievement [Abstract]	
Nicole Buzzetto-Hollywood, Leesa Thomas-Banks, Leslie West	17
Exploring the Competency for AI-related Job Positions [Abstract]	
Shu-Chun Ho, Pei-Tzu Lan	18
Creating A Certificate Program for Professional Communications Excellence with Virtual Reality and AI [Abstract]	
Jeffrey Bohler, Ryan Reid, Benjamin Larson, Ichhya Shrestha, Sushma Garaka, Joshua Tobias	19
The Use of Digital Technologies to Improve Early Diagnosis and Intervention in Women’s Health in Underserved Countries, Thereby Reducing Healthcare Disparities [Abstract]	
Angela Wells, Amarachi Gift Onyediako, Courage Lekpa David, Elizabeth Omotoye, Victoria Chidimma Okoh	20
Explainability in AI and Machine Learning: Bridging the Gap Between Intelligence and Interpretation	
Yahel Giat, Amichai Mitelman	21
Federated Machine Learning Outperforms Centralized Machine Learning for Fraud Detection: Evidence From 284,807 Real-World Transactions [Abstract]	
Samuel Sambasivam	22
From Democratization to AI: Expert Narratives on Six Inflection Points in Information Technology’s Evolution	
Odunayo G. Adepoju, Samuel Akinnusi, Amir Reza Asadi, Hazem Said	23
From Algorithm to WYSIWYG: Lexical Diffusion of Information Technology Innovations into the Oxford English Dictionary, 1926–2026	
Lakshmi N Pamarthi, Jeffrey A Bohler. Edward Walker	24
Exploratory Study on Expert Perception on the Inflection Point in the Discipline of Information Technology	
Lily Dzamesi, George Owusu Dameh, Amir Reza Asadi, Hazem Said	25
Professional English Anxiety and Comprehension of AI-Generated Clinical Texts in Medical Education [Abstract]	
Hung-Chang Liao, Ya-Huei Wang	26
Integrating Neuro-Linguistic Programming into Multimodal Illness Narratives: An Informing Science Approach to Enhancing Human-Centered Communication and Informing AI Design in Healthcare Education [Abstract]	
Hung-Chang Liao, Ya-Huei Wang	27
From Silence to Speech: AI Conversational Apps and the Rise of Beginner EFL Confidence in Oman [Abstract]	
Mona Abdelfattah, Ahmed Al Mata’ni, Muhammad Naeem, Sanja Pecelj, Evangeline Aguilar Arguelles, Cleophas Odera	28
NeuroTalento Mexico: A Multidisciplinary Pilot Scheme to Train Students to Create Neuroinclusive Workplace Solutions for Workers With Brain Injuries and Neurodivergent Conditions Utilizing Data	

Science, Clinical Knowledge, and Case Studies [Abstract]	
Angela Wells, Lekpa Kingdom David, John H. Martin, Amarachi Gift Onyediako, Valeria Ibarra Pacheco, Dana M. Fergins	29
From Anxiety to Autonomy: Learners' Perceptions of AI Feedback in Oral Presentation Rehearsals in Omani Higher Education [Abstract]	
Mona Abdelfattah, Ahmed Al Mata'ni, Jennifer Paquibut, Hazar Hedi Ayadi	30
Students' Experiences Using an AI-Powered Speaking Tool in English Courses in Higher Education [Abstract]	
Ilan Daniels Rahimi, Gila Cohen Zilka, Dan Oziel, Eliya Kab	31
Mitigating Cybersecurity Risks in Legacy Healthcare Systems: Policy, Technology, and Response Strategies for Critical Infrastructure [Abstract]	
Angela Wells, Maurice Dawson Jr., Philip Adewuyi, Tony Williams, Danny Bruce, Samson Quaye	32
Beyond AI Information Retrieval: An Interdisciplinary Examination of Scholarship and Self-Authorship [Abstract]	
Imani Akin, Ramona Burress, Courtney M. Burress IV, Pennington A. Burress	33
Artificial Intelligence, Knowledge Sharing, and Organizational Performance: A Systematic Literature Review	
Armel Djangone	34

Review Process

All full-paper submissions underwent double-blind peer review, meaning that both author and affiliation information were removed and the reviewers' identities were also concealed. Each paper was evaluated by a panel of four or more external reviewers. Reviewers were matched to papers using a formula to minimize the cognitive distance between reviewers' stated expertise and interest and the topics covered in the paper.

Reviewers were instructed to mentor the authors by providing feedback on how to improve the submission. They were further required to recommend whether or not the paper should be accepted using a nine-point scale (from "reject" to "must accept").

Selected proceedings papers were also published in one of the Informing Science Institute journals.