Open Discussion #3

NICE MAY 2025

Theme Dilemma between Education and

Preparedness in Digital Space

NexComm 2025 & DigitalWorld 2025



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Ignitor

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Themes

- A. Curriculum Inertia vs. Industry Evolution
- **B.** Skill Obsolescence (deskilling) and Lifelong Learning
- C. Practical Gaps in Problem-Solving and Innovation
- **D.** Misaligned Evaluation and Credentialing Systems
- E. Digital and Cognitive Readiness for the Al-powered Era
- **F.** Educator Preparedness and Institutional Mindset



A: Curricula

Curriculum Inertia vs. Industry Evolution

- Graduates lacking adaptive, cross-disciplinary, or digital competencies
- Continuous learning as a strategic necessity (e.g., micro-credentials, bootcamps)
- Balancing foundational knowledge with short-cycle skills
- Incorporation of self-learning, online tools, and resilience training

- What are examples of fast-moving fields that academia consistently lags behind?
- Who should own the responsibility for curriculum updates faculty, institutions, or external stakeholders?
- How do we balance academic integrity with market relevance?



B: Deskilling

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Skill Obsolescence (deskilling) and Lifelong Learning

- Mismatch between static university curricula and rapidly evolving industry needs
- Emerging domains (AI, data ethics, sustainability, digital platforms) not included in core programs
- Bureaucratic obstacles, latency, procrastination, and accreditation delays in curriculum reform
- Role of industry advisory boards are hardly shaping academic directions
 - Are universities training students for first jobs or for continuous evolution?
 - How can institutions formally integrate upskilling and reskilling into alumni pathways?
 - Should degrees include built-in "renewal" mechanisms, like certifications?



C: Practical innovation

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Practical Gaps in Problem-Solving and Innovation

- Lack of exposure to real-world scenarios and constraints; there is no earning from failures
- Project-based, challenge-driven, and industry-coached learning as reform paths
- Missing integration of ethical reasoning, design thinking, and decision-making under uncertainty
- Entrepreneurship, product management, and systems thinking as missing links
 - Why are many graduates uncomfortable with open-ended or ill-structured problems?
 - How effective are internships and capstones in closing the experience gap?
 - Should problem-based learning become a dominant pedagogy?

D: Evaluation vs Credentials

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Misaligned Evaluation and Credentialing Systems

- Rigid grading systems vs. demonstrated capabilities and outcomes
- Poor recognition of informal and experiential learning
- Disconnect between degrees and real qualifications (skills vs. diplomas)
- Shift toward competency-based and portfolio-based assessments
- Lack of education on innovation
 - Do grades still reflect readiness or are they an outdated proxy?
 - Should portfolios, simulations, and real-life deliverables become standard metrics?
 - How can universities validate informal and self-taught competencies?

E: Digital and Al awareness

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Digital and Cognitive Readiness for the AI-powered Era

- Deficient digital literacy and computational thinking in non-technical disciplines
- Cognitive overload and superficial learning from over-standardized curricula
- Neglect of critical thinking, human-Al interaction, and explainable systems
- Emerging cognitive tools (e.g., LLMs, LCMs, AR/VR, simulation labs) in education

- Are today's students cognitively prepared to collaborate with AI systems?
- What basic digital or AI literacy should every graduate possess?
- How can immersive tools (e.g., VR, LLMs) be used responsibly in learning?



E': Al literacy

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- Student's digital fluency vs total reliance on Al
- Educator's choice of balancing between technological support and centered learning.
- Graduates' basic digital/AI literacy, data literacy, and AI ethics





 Immersive tools in learning: clear educational focus, students' ethical awareness of digital environments, and emotional well-being (immersive rooms vs VR Goggles)

F: Skilled educators

Educator Preparedness and Institutional Mindset

- Educators' lag in adopting modern tools and interdisciplinary methods
- Institutional resistance to change status: academic silos and tradition-bound curricula
- Training the trainers: upskilling faculty in pedagogy, tech, and open practices
- Role of open-source materials and collaboration with industry educators

- Are most professors modeling the kind of learning they expect from students?
- What institutional barriers discourage innovation in teaching?
- Should faculty development be mandatory and regularly assessed?



IARIA F': Preparedness - Skilling and Deskilling

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Educators should avoid immersing their students into the *Uncanny Valley* (M. Mori) and try "webbing" teacher's and students' narratives to foster a sense of security and trust

 To overcome institutional barriers, such as rigid curricula, reward systems, which prioritize research output over teaching excellence, Scholarship and Learning (SoTL) could be a solution. Teacher "as a ga

 Embedding faculty development into institutional practice: mandatory support and assessment, innovation and collaboration, accessible professional development





Formal education vs real-world

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Misalignment is neither accidental nor irreversible.

Diligent actions are needed.

Task: reimagine academic curricula not as static repositories of knowledge, but as living frameworks — adaptable, interdisciplinary, and anchored in the evolving needs of society and technology.

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Two lanes

Education for research and discovery Practical education





THE STAGE IS YOURS