

Exploring AI-Driven Conversations as Dynamic OER for Self- Directed Learners

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Plan for the presentation

- Introduction
- Discussion of Theory
- Proposed Conceptual Framework
- Challenges and Considerations
- Implications & Recommendations



Introduction

- AI in education - transforming future of education
- LLMs – fluent and coherent dialogues
- Personalisation, feedback and learner-driven exploration
- Real-time feedback - competencies: online collaboration, creativity, problem-solving, communication skills
- Questions remain about AI and OEP
 - Platforms = static, limiting transparency, adaptability
 - Need for open, transparent, adaptable systems

Full potential of AI in support of OEP – redesign environments – more open, transparent, adaptable

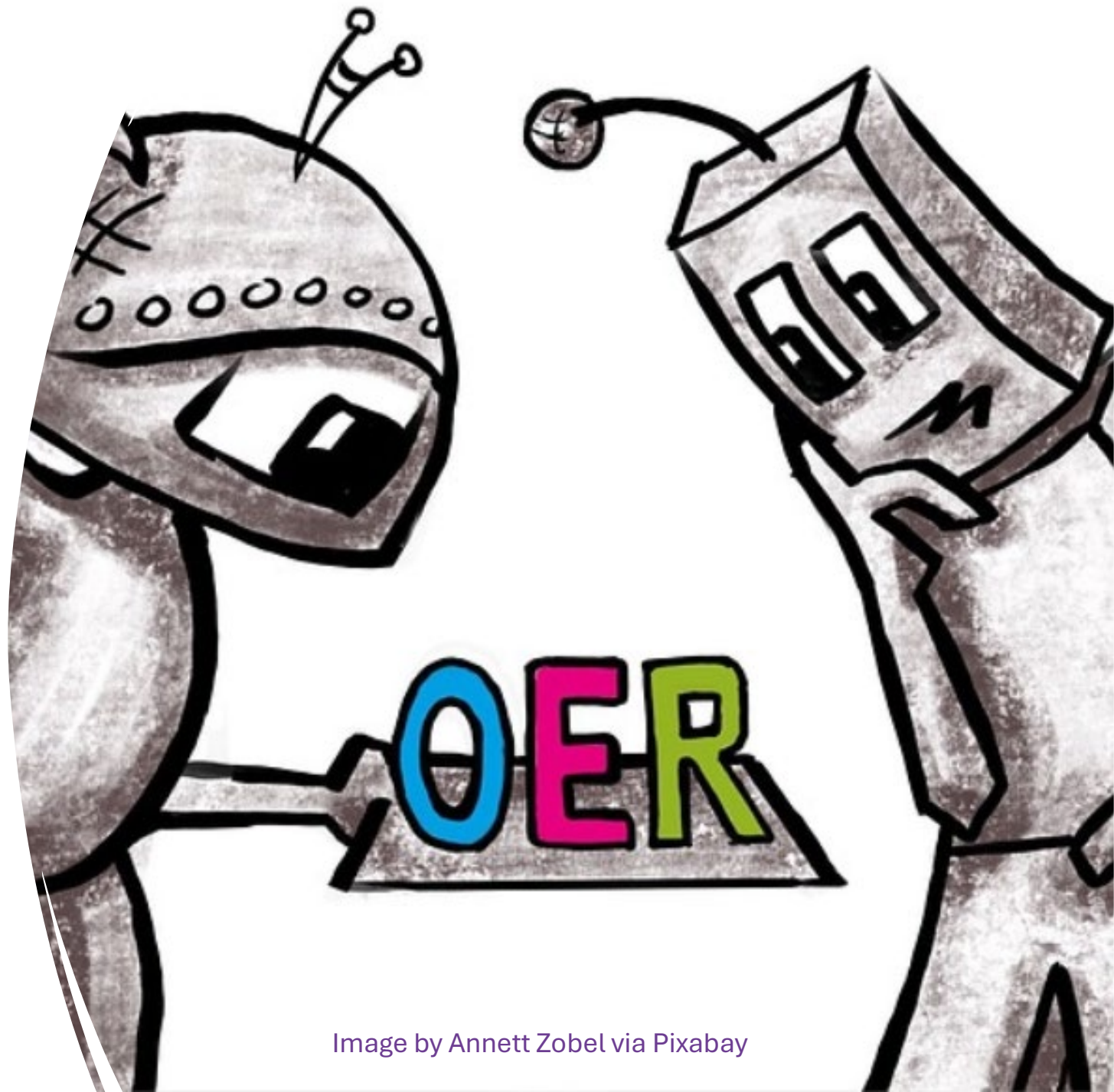


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Introduction

How can synthetically generated AI content be integrated into the educational discourse on openness?

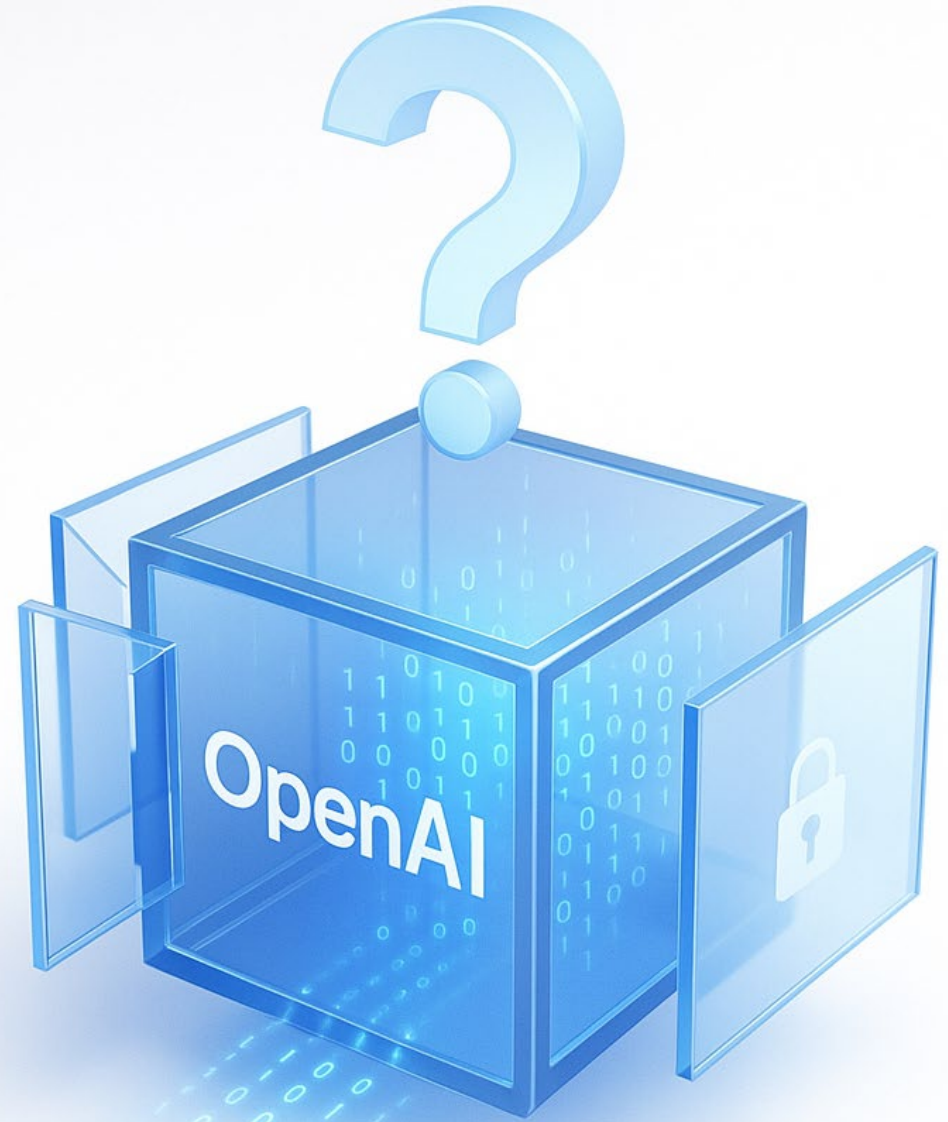



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Self-Directed Learning

- SDL as a process in which “individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes” (Knowles, p. 18).
 - Active, intentional role of learners
 - SDL = autonomy, responsibility and self-motivation
 - SDL crucial in OEP and flexible learning environments
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Self-Directed Learning

- Self-directed learners are best positioned to thrive through active engagement with OEP
- Critical awareness, discernment in identifying their capabilities and learning needs
- SDL competencies: goal-setting, self-monitoring, reflective evaluation

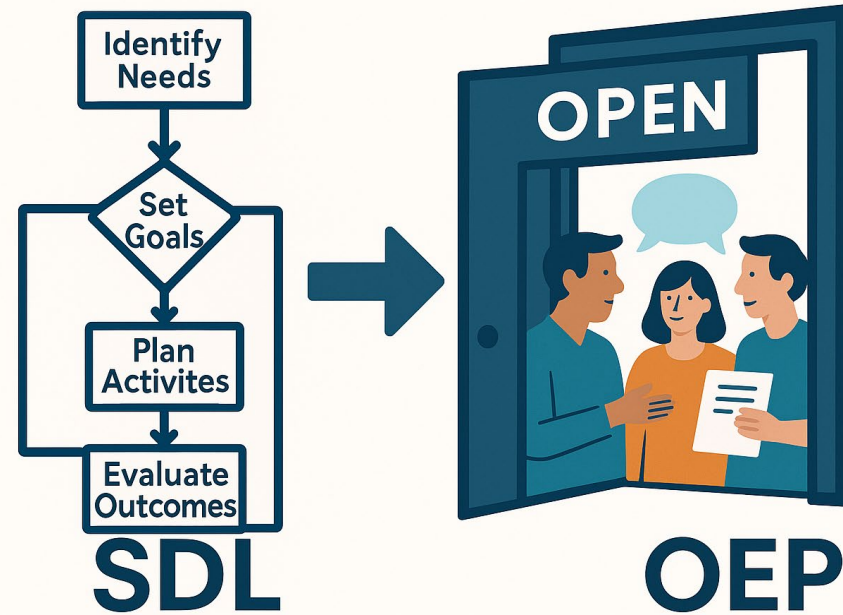



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Open Educational Practices (OEP) and Open Educational Resources (OER)

- Open education, OER, OEP – shared commitment to access and removing learning barriers
 - Cronin defines OEP as a broad concept: “includes the creation, use and reuse of OER, open pedagogies, and open sharing of teaching practices”
 - Definitions:
 - student engagement and creativity
 - dimensions of openness
 - Andrade et al.: “practices which support the (re)use and production of OER through institutional policies, promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path”
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OER and AI

Talk: Why Open Education Will Become Generative AI Education

- 25 years + Goal of open education movement increasing access to educational opportunity.
- Primary tactic of open ed movement for accomplishing this goal - creating and sharing OER.
- “However, using generative AI is a demonstrably more powerful and effective way to increase access to educational opportunity. Consequently, if we are to remain true to our overall goal, we must begin shifting our focus from OER to generative AI” David Wiley (2024)

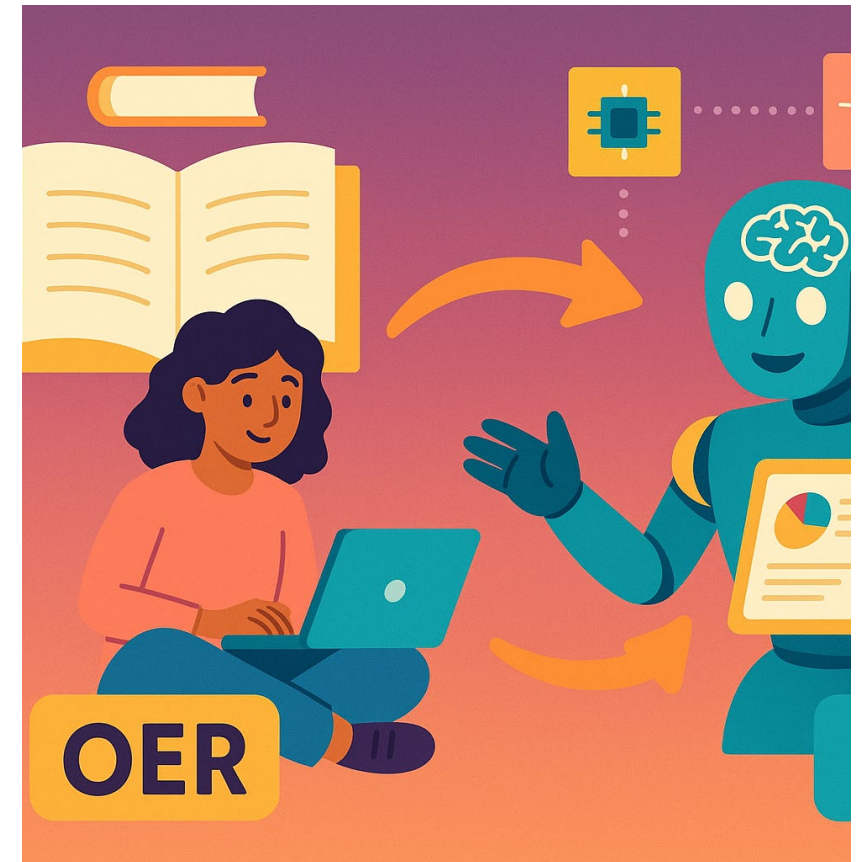


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AI in Education

- AI technologies are central to the future of OER and OEP
- Challenge: how does synthetically generated AI content fit within the framework of openness?
- UNESCO *Guidance for Generative AI in Education and Research*
 - need for AI that is inclusive, ethical, equitable (linguistic, cultural diversity), support lifelong learning
- UNESCO's *AI Competency Framework for Teachers*:
 - Lifelong learning – key principle
- Dr Stefania Giannini, UNESCO Assistant Director-General for Education:
 - “teachers urgently need to be empowered to better understand the technical, ethical and pedagogical dimensions of AI”

AI in Education

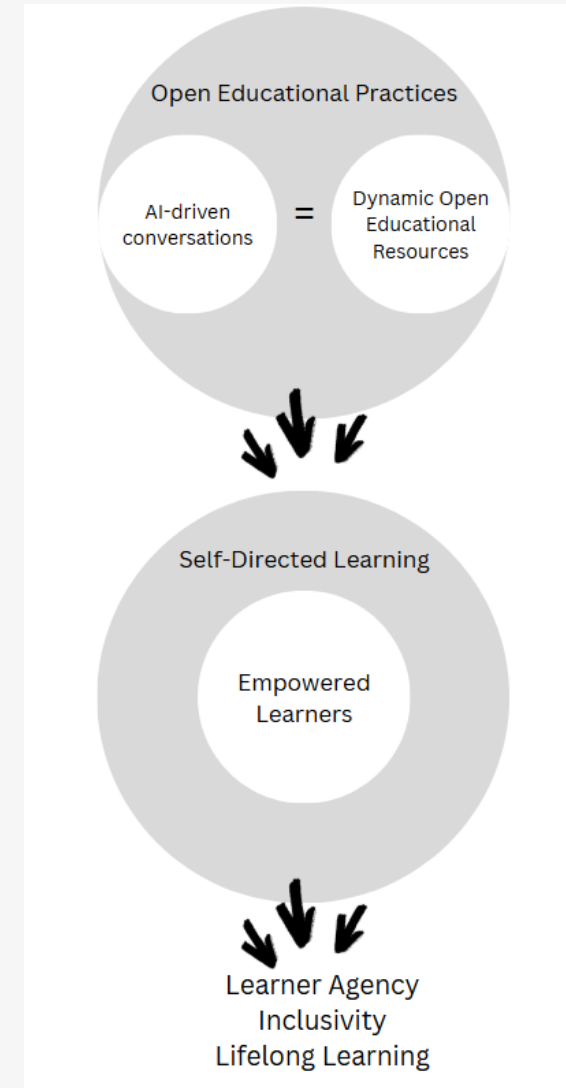
- SDL is an essential capability for teachers and students
 - AI literacy
 - continuous learning
 - Thoughtful integration of AI as dynamic OER
 - Personalised feedback
 - Supporting multimodal interaction
 - Learner co-construction
 - Learner engagement
 - Reach and adaptability of resources
 - Inclusive access
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AI-Driven Conversations as Dynamic OER


- AI-driven classroom conversations shift the focus to learners
 - Students:
 - Responsibility,
 - autonomous decisions,
 - actively construct knowledge through dialogue
 - Careful prompting, generative AI supports the creation of diverse and inclusive learning resources
 - AI-generated conversations function as dynamic OER:
 - Resources respond in real time to learners' needs, provide contextualised feedback, and promote co-construction of knowledge
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Proposed Conceptual Model


- **Dynamic OER: catalyst for SDL**
 - fostering autonomy,
 - reflective thinking,
 - goal-oriented learning behaviours.
- **Engage with AI-mediated content (adapts in real time),**
 - better equipped to take initiative in managing their own educational journeys
- **Focus: Empowered learners**
 - develop confidence, skills, and motivation
 - drive their own learning within open, AI-supported contexts
- **Goals of Open Education**
 - advance learner agency, inclusivity, and lifelong learning
- **Designing AI-enhanced learning environments**
 - Personalise content
 - Elevate learners' roles as co-constructors of knowledge.




Challenges and Considerations

- Ethical and legal concerns
 - Authorship, ownership, responsible content generation questioned
 - Systemic biases
 - Need to reflect diverse cultural, linguistic, and socio-economic perspectives.
 - Fragmentation of OER infrastructure
 - Unconnected repositories
 - difficult for teachers and learners to locate, adapt, or remix materials effectively
 - Teacher preparedness
 - Lack foundational knowledge of AI
 - Importance of training and support – AI literacy
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Implications

1. Integration of AI within open education requires a renewed focus on ethical and inclusive design
 2. Institutions must address the technical limitations of the existing OER infrastructure
 3. Professional development must be prioritised (AI education)
 4. Researchers - to evaluate the impact of AI-driven OEP on learning outcomes, learner engagement, and equity
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Recommendations

- For institutions and policymakers:
 - Clear ethical guidelines for AI use in open education
 - alignment with SDL principles and learner agency.
 - Compatible and accessible OER infrastructure
 - supports remixing and contextual adaptation.
 - Promote inclusive AI design
 - reflect the diverse cultural, linguistic, and educational backgrounds of learners.
 - Provide sustained, reflexive professional development
 - AI literacy and SDL
 - Encourage ongoing, cross-disciplinary research
 - effectiveness and equity of AI-enhanced, open, SDL environments.
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Thank You

