

Embracing uncertainty and complexity to promote teaching and learning innovation.

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Abstract

Innovation in higher education is essential to drive improvements in teaching and learning (Hannan, 2005). However, transitioning innovations from pilot to mainstream is an ongoing challenge that has long plagued the education sector. Education is a complex system – a system of systems. Like all systems there is an inherent inertia or stability. Any change or impact on the system requires a strong catalyst. Over the past decades we have witnessed several catalysts that have had system wide impact. The advent of MOOCs, the global pandemic and most recently, generative artificial intelligence. Clearly, the scale of these noted catalysts vastly outweighs small organisational innovations, and therefore, the opportunities for change can also be considered vastly different. However, the processes for enacting change on a system remain similar. In this context, Mary Uhl-Bien (2021) argues for a model of complexity leadership, to promote organisational generative emergence. In Uhl-Bien's terms you can only fight complexity with complexity.

Much of the discussion to date surrounding ChatGPT has focused on its potential to transform assessment in education. However, this disruption elicits two reactions that reflect the complexity leadership approach posited by researchers such as Uhl-Bien (for an overview see Uhl-Bien and Arena, 2017). One approach has been to resist the disruption by attempting to maintain the status quo through blocking or banning use. The other approach is to invite play and interaction with the tool to understand the potential benefits and concerns for education practice. The uncharted territory that AI in education represents requires an innovative approach to navigate. We don't yet know how this will work, so innovation is key to advancing our understanding of how AI can best be used in education. In so doing, it is essential to work within the friction of disrupting stable education and organizational systems to move forward in advancing teaching and learning practice.

Complexity leadership, as advocated by Uhl-Bien, offers a framework for dealing with the dynamic and unpredictable environment of higher education. Leaders must understand the complexity of the system in which they operate, which includes acknowledging the different stakeholders and their roles, as well as the various external and internal factors that may impact the organization. Complexity leadership recognizes that change cannot be controlled, but can be guided through engaging with stakeholders, encouraging experimentation, and creating a safe environment for failure.

This "Trendsetter discussion" explores the role of generative AI on education calling for increased scholarship and innovation to bring research informed lens for integration into practice. The talk covers different models of innovation as well as the impact ChatGPT is beginning to play on how we rethink the role of teaching and the purpose of education. AI in education is not a new event. The large-scale media exposure of AI in education through tools such as GPT has brought about a significant public and professional awareness. Positive and negative. AI will be an increasingly significant disruptive force in education. The impact of ChatGPT on assessment is a glaring and obvious example of how AI will bring about change in the way we enact education. By adopting a complexity leadership approach, we can engage with this disruption, encourage experimentation, and create a safe space for failure. This can help us to better understand the potential benefits and concerns for education practice, while also fostering innovation in teaching and learning. Working in the friction of disrupting stable education and organizational systems is essential for advancing teaching and learning.

References

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