

EDITORIAL

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# Higher education futures at the intersection of justice, hope, and educational technology

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Our societies face enormous and intertwined economic, demographic, political, ecological, and social challenges. In this environment of uncertainty, doubts about the future of higher education have proliferated, particularly as demographic changes take hold, technology rapidly advances, wealth inequality increases, and climate destabilizes. In response to these challenges, and following experiences with the COVID-19 pandemic, many have argued the time is right to not only tinker with the status quo, but to imagine otherwise, to imagine alternative higher education futures that are more hopeful, more equitable, and radically more just. The articles in this special collection aim to further those efforts, imagine differently, embrace complexity, and address varied kinds of innovations in a wide set of contexts.

## Scope of the special collection

We invited prospective authors to reimagine the futures of higher education, and to contribute scholarship that speculates what higher education at the intersection of justice, hope, and educational technology could look like. Paulo Freire emphasized the importance of having a vision of hope for a more just world. He noted that “without a vision for tomorrow, hope is impossible” (Freire, 2007a, p. 45), and argued that the courage to dream of hopeful futures is a “fundamental necessity for human beings” (Freire, 2007b, p. 25) in resisting continued oppression. Yet a preponderance of educational technology literature focuses on the use of technology to enhance effectiveness, efficiency, and engagement, and much less on hope and justice. We were interested in reimagination aimed at resisting the flawed logics of technological solutionism and technological determinism. Where the educational technology literature abounds with papers which are optimistic about the possibilities of technology, our societies deserve scholarship which is imaginative, which emphasizes hopeful futures, and which centers justice-oriented perspectives. Such scholarship pursues what Houlden and Veletsianos (2022) see as hopeful education futures, defined by “connection, agency and community, and individual flourishing.”

Such scholarship ought to account for local and contextual realities, and can be empirical, theoretical, speculative, and anything in-between. Significant topics of interest within this realm included:

- Speculative methods and pedagogies
- Indigenous, Black, Queer, and (Dis)ability issues and methods
- Reimagining technology in higher education
- Co-creation with learners and/or other communities

In preparing for the special collection, we suggested a number of research questions. While papers in the special collection address some of these, much more work is necessary and we encourage researchers to consider how such questions might align with or complicate their future investigations. Some of these questions are the following:

- What does the intersection of hope, justice, and educational technology look like?
- How do current education systems need to transform to enable just and hopeful education futures?
- How can we understand hope and justice in the context of higher education futures?
- What is the role of hope and justice in imagining diverse education futures?
- What are the roles and limits of technology in desirable, just, and hopeful higher education futures?
- In what ways are hopeful and/or just technology-infused higher education futures similar or different across contexts?
- How can hopeful futures be enacted in practice? For example, how might speculative futures scholarship address problems higher education faces today?
- What do hopeful and speculative futures approaches reveal about current contexts and future orientations for higher education practices and policies?
- What methods might be used to support generative higher education futures that are at the intersection of hope, justice, and educational technology?
- Whose voices and perspectives are made explicit in generating hopeful educational futures, and how?

The focus on imagining futures meant that we prioritized exploratory papers which intentionally broke the molds of scholarly writing and challenged norms. Such molds bind the field to sameness and tend to restrict views of the future. In contrast, futures research can be bold and experimental in examining *what if's*, *what could be's*, and *what if we didn't*. To illustrate with an example, while the question “how should instructors integrate generative artificial intelligence (AI) into their teaching?” might produce valuable information, we ought to make space for imagining otherwise, by asking and answering questions such as:

- What if the current versions of generative AI are the least powerful options we will ever have? What would just education systems look like in futures which include much more powerful AI?
- What if we didn't assume that generative AI is inevitable, and instead worked on research that solved societal problems rather than research that focused on tools? (cf. Reeves & Lin, 2020)
- What could be the roles of AI in future learning environments, and how do learners imagine and anticipate them? (cf. Veletsianos, Houlden, & Johnson, 2024)

Such work entangles responsible imagination with existing ideals. This also means an accountability to both history and the present. While much of the work in this collection orients itself to the future, thinking about the future is always already engaged with the present (Ross, 2017) as our ideas about the future reflect what currently unfolds. Important work in education futures is making this emphasis on the impact of histories, and in particular histories of injustice and harm, central to the work of futures. Sriprakash (2022, p.2) for example, writes of the “importance of attending to the past and present injustice of education in configuring its possible futures.” Accordingly, she proposes the notion of education reparations for those for whom dominant (i.e., white, colonial) educational systems have caused profound harm as foundational for reparative futures of education. Thus, education futures oriented towards justice and hope are not simply about speculating about what might be, but include, if only implicitly at times, awareness and reckoning with the historical and ongoing sources of injustice in play in education systems today.

As illustrated by papers in the collection, such work need not be strictly empirical. It can be theoretical and provide conceptually rich interpretations of the future and the role of futures in education. For example, speculative methodologies were used in a number of contributions, foregrounding the role of storytelling in how futures are imagined.

### **Methods for futures otherwise**

Scholarship focusing on higher education futures needs approaches and methodologies that can support meaningful findings and develop fields of study. A unique aspect of the special collection is its focus on scholarship that *speculates* with and about futures. In making this invitation, we deliberately opened the door to a range of speculative methods, recognising both their usefulness and their growing popularity in educational research (Cerratto-Pargman et al., 2023; Houlden & Veletsianos, 2022).

It is useful to note that not all futuring approaches are speculative, by which we mean that they do not all treat the future as a domain that is temporally and epistemologically ‘messy’ (Ross, 2023). Many use participatory and other methods as part of a framework that aims to understand signals, relationships, and pathways to preferred futures, even within highly complex settings; or to seek more effective ways of representing or predicting futures (Minkinnen 2020). Speculative methods, broadly, are attuned to problem-making (Michael, 2021) – attempting to ask questions and take perspectives that unsettle possibilities and ways of knowing.

Creative, literary, and artistic methods have been increasingly understood and valued as appropriate responses to questions about education and learning futures. A wide range of still-uncommon but nonetheless useful creative approaches have been used in education, including scenario-building, the production of fictions or fabulations; and creative fabrication, designing or evoking objects that researchers, students, participants or others can think with. In this collection, for example, Bayne and Ross and Mishra, Oster, and Wagner rely on variations of social fictions to explore what possible futures might be desirable for those seeking more just and liberatory horizons. Educational researchers are drawing on methods from art and design, literature, and a range of post-qualitative social research approaches which aim to make space for futures “otherwise” – in our case, futures that work against dominant imaginaries, predictions and

anticipatory practices that risk reducing possibilities for convivial and just applications of data, technology and digital pedagogies in higher education (Hrastinski & Jandrić, 2023).

Overall, these “futures otherwise” methods take an attitude to the future that is committed to keeping it *open*. In creating and enacting such methods, concepts of relationality and design as an ontological practice help us understand what this means. Escobar (2018, p. 110) has explained:

*every tool or technology is ontological in the sense that, however humbly or minutely, it inaugurates a set of rituals, ways of doing, and modes of being... in designing tools, we (humans) design the conditions of our existence and, in turn, the conditions of our designing. We design tools, and these tools design us back.*

The same may be said about methods for designing educational technology futures. Productivity, efficiency, and individualisation shape many ways of doing and being with educational technology today, because of the way many such tools were designed. To have a different future, design requires different political, social, and educational conditions (or at least the possibility to imagine current conditions otherwise). Such imagining otherwise can, if we are open, be generatively informed by radical and utopian work, which is influencing educational research that aims to claim space for marginalised communities and knowledge to shape technology futures.

Thus, speculative methods promote active analysis, resistance, rejection, and recoding of what may otherwise seem to be predestined hopeless futures, towards pursuits of possible, just, liberative futures. Speculative methods have a long historical legacy of revolutionary action with examples from Indigenous storytelling to that of Black Radical Imagination and Afrofuturism, honouring how speculative thinking can liberate the mind. These approaches not only necessitate a break from realism, but are a way to heal, uplift, and liberate (Toliver, 2021). It is necessary for future research in the area to engage and build upon these foundations and history and not overlook them, lest it remain mired in projects of domination (Philips, 2021). In so doing, researchers will need to look to emergent methodological approaches and paradigms as standard quantitative, qualitative, and mixed method studies are insufficient approaches to understanding the intangibles, the impossibles, and the “yet-to-come.” In this collection, for example, Otrell-Cass, Costello, Lyngdorf and Mendel play with such rethinking of methods by using “a virtual makerspace and a guided fantasy story” to explore rewilding the future of education. This creative thinking, and a continued and deeper engagement with the histories of speculative methods and speculative thinking especially as they relate to education continue to be necessary strategies for imagining education futures otherwise.

### **Technology in relation to hopeful, just education futures**

Questions about higher education futures are almost always simultaneously questions about technology, given that technology today is deeply integrated in many higher education systems around the world. From learning management systems, to student reliance on mobile phones to access courses and materials, to the use of online proctoring and surveillance systems, education today is replete with diverse forms and uses of technology for teaching, learning, research, and administration. It is no surprise then that visions of the future often explore the logics and possibilities of these technologies. Since

the COVID-19 pandemic and the rapid (though often temporary) deployment of emergency remote teaching around the world, as well as the rise of generative AI, recent years have seen the expansion of the scope and perspectives on education technology, and the futures it might suggest and generate.

Such futures are painted by various interest groups as wonderful opportunities for inclusivity and the expansion of access to education, while others have taken more cautious, critical and even pessimistic perspectives. In this critical tradition, Facer and Selwyn (2021) have called for “non-stupid optimism” about what such changes might herald for education and education futures, noting that risks about how we think about the future of education, especially with respect to technology, can be shaped by dominant techno-solutionist and techno-optimist attitudes which themselves are often conditioned by drives for increasing economic growth and capital accumulation.

Reflected, at least partially, in this divergence of perspectives and criticality is the reality that education futures are not monolithic and they focus on justice and hope to varying degrees. That is, they are diverse and serve multiple functions. The technosolutionist approach that Selwyn and Facer critique, for instance, often falls within the category of “elite futurisms,” or futurisms which privilege narrow perspectives of those with power, and are thus invested in maintaining particular structures of power (Ramos et al., 2019). Elsewhere this has been labeled a business-as-usual approach in which unfettered economic growth can and should theoretically continue to be pursued as a way to ostensibly improve educational equity.

Such futures often implicitly sustain white futurities, or ideas about the future in which whiteness continues to implicitly shape the conditions of what is deemed natural or desirable (Adamu, 2023; Whyte, 2018). Notably, these elite futurisms are often bound up with the use and proliferation of technology. Indeed, visions of education futures in which every individual learner has their own personal device, communities are connected with the highest speed Internet available, and personalized learning alongside AI instructors occurs, are examples of this kind of thinking given they are premised on logics of modernity and progress.

However, such futures, and the ways in which technology is embraced within them, are not the only perspectives on the future of education or how technology might be used therein. There are many to name and explore, including among others, Indigenous futures, Afro- and African futures, queer futures, crip futures, and rewilded futures, some of which overlap and intersect with each other through shared ideas or interdisciplinary theoretical approaches. In this issue, for example, Hall draws on Indigenous epistemological frameworks and Marxist theory to reframe the roles and possibilities of AI in education and beyond.

Shared or related sensibilities occur elsewhere as well, such as in the way crip futurisms envision futures informed by the ways in which disability and disabled people shape, modify, and invent new technologies to meet their needs, educational and otherwise (Hamraie & Fritsch, 2019). This repurposing and modifying of technology similarly inflects the projects of rewilded education futures. Magilchrist (2021), for example, uses the ideas of rewilding as a kind of critical utopian approach to education technology, in which educational technology and its implementation aim to enable more equitable and fundamentally sustainable use of digital devices and processes. Toft Norgaard and Holflod’s contribution in this collection pushes these ideas of rewilding further by

approaching them through a lens of design processes. Allman et al., again in this collection, reconsider what an online encyclopedia might look like when reflecting values of openness and generosity.

The future of education in such futurities is inflected by related attitudes toward technology which do not assume that more technology or “advancing” technology is better or is key to solving problems, as is common in elite futures. Such attitudes also recognize that the design of technology needs to be in the hands of people and communities who would use it. Such perspectives reflect Facer and Sriprakash’s (2021) suggestion that futures need to be “provincialized,” meaning that the actual design of futures, whether education futures or otherwise, needs to be a local, community-led process which centres the realities and contexts of the people and environments for whom a future is relevant or meant to address. In other words, futures cannot be left alone to the hands of futures experts or elites, but must be *of* and *for* the people. Gallagher et al’s paper in the collection centers this idea by focusing on “refugee students and teachers participating in a blended bridging programme designed to prepare students for entry and success in higher education.”

While these more holistic and justice-oriented education futures are in many ways distinct from each other, they share commonalities with respect to their treatment of educational technology. In particular, there is a shared sense that technology is intended to serve people, and that the use of technology needs to be responsible, meaning at least two key things: design and implementation of technology includes the perspectives and experiences of diverse users, and the use of technology is grounded in an awareness of and responsibility to the material realities that go into the production of technology, namely the energy, labour, and other resources (e.g., mineral) that go into production. In other words, speculating about the *futures of education*, and the role of technology in these futures, can bring technology into critical awareness in multiple ways, both informing what is possible down the road, but also what needs to be addressed in the present moment.

Consider this collection an invitation. An invitation for more scholarship and for different kinds of scholarship that is speculative and imaginative, that includes stories and storytelling, and that invokes justice and hope.

#### Author contributions

All the authors listed contributed to the writing of the paper.

#### Declarations

##### Competing interests

The authors have no competing interests.

Published online: 02 July 2024

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Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.