

Veletsianos, G., & Houlden, S. (2024). Youth perspectives on three speculative futures for higher education. *Journal of Open, Distance, and Digital Education, 1*(1), 1-17. https://doi.org/10.25619/gv5shv76

Received: 29 March 2024 | Revised: 15 May 2024 | Accepted: 05 June 2024

Youth perspectives on three speculative futures for higher education

George Veletsianos¹ 🕩 and Shandell Houlden² 🕩

¹ Learning Technologies, College of Education and Human Development at the University of Minnesota-Twin Cities, USA

² School of Education and Technology, Royal Roads University, Canada

Correspondence: George Veletsianos | e-mail:georgev@umn.edu

Abstract

Higher education futures have become an increasingly popular area of scholarly research, as researchers, educators, and institutions grapple with the changes to higher education exacerbated by the COVID-19 pandemic. Much of scholarly work in this area involves the creation of scenarios or design fictions to think about education futures. In this paper, we examine the under-explored perspective of youth ages 18-25 on design fiction futures. We designed three distinct scenarios describing higher education in 2033 to elicit feedback from youth. Specifically, we were interested in examining what futures youth found hopeful and what futures they found to be otherwise, and their reasons for this thinking. Descriptive and thematic analysis of survey data (n = 181) revealed that (a) those futures which confronted climate change were the most hopeful, and (b) those futures which indicated lack of affordability, reduction of choice, and increased surveillance were the least hopeful.

Keywords

Speculative futures, higher education futures, youth perspectives, anticipatory regimes, hope



© The Author(s). 2024 Open Access - This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

1 Introduction

What might the future of higher education and of open, distance, and digital education (ODDE) look like? How many possibilities are there for what comes next? These are open questions, ones which in recent years have attracted significant attention (Conrad & Wiebe, 2022; Kupferman, 2020; Houlden & Veletsianos, 2023; Hrastinski & Jandrić, 2023; Suoronta et al., 2022). While this body of scholarship, including our own work, is necessary and valuable, there is a preponderance of professional and expert perspectives on the futures of ODDE, with far less attention given to those of youth. Understanding and supporting the perspectives of youth is necessary because higher education conventionally focuses on youth and impacts their future.

For ODDE practitioners and researchers, understanding youth perspectives is urgent because of the changing student demographics of those enrolling in and seeking online and digital education. While mid-career learners and professionals were the typical demographics of ODDE providers and open universities, increasingly, though unevenly, younger learners seek out online and distance education opportunities for numerous reasons, including its flexibility and ability to cater to their life circumstances and needs. These shifts make it necessary for online, open, and digital learning researchers, practitioners, and leaders to understand youth perspectives on the future of higher education, thereby informing their planning and practices.

In this paper therefore, we contribute to speculative futures scholarship while also engaging young people's perspectives. To do so, we created an exploratory survey with three education futures and asked participants about their perceptions of them. Specifically, we were interested in understanding what futures youth participants found hopeful or not, and why they felt this way. We first provide a brief overview of the context for this work, and describe the research questions and scenarios we used. Then we describe our methods, results, and findings. One unexpected finding is a connection between the emotions of surprise and hope, which we explore in detail in the Discussion section.

2 Context

Much of the work on education futures has relied on the insights and creativity of researchers, many in the fields of ODEE and education technology, to imagine possible futures. Their goal has been to think about what might emerge one day in various education systems, and to reflect on present day systems, ideologies, concerns, technologies and trends, which are always in some way evident in imagined futures (Ross, 2017). Elsewhere, education futures as a project, has been taken up by corporate and state interests, whose perspectives are rarely radical in what they imagine as possible. Over-determined as they are by the operation and maintenance of hegemonic power, some researchers have observed that this constructs a kind of "elite futurism," where some futures become more likely or even appear inevitable (Houlden & Veletsianos, 2023; Ramos et al., 2019). Consider, for example, how advertising materials, position statements, white papers, and similar content from education. No education technology company is in the business of eliminating the role or need for education technology, which is to say that it is in their interests to manage how the future of education is imagined and practiced.

In the context of perceptions of inevitable futures, hope becomes a challenge: what is there to hope for if something seems unavoidable? Yet it is not so simple. Hope itself is a contested and shifting concept, with multiple dimensions, including emotional and cognitive processes situated in the individual and related to individual goals and possible futures (Ojala, 2017). Ojala broadens hope beyond the individual experience to relate it to broader contexts and problems, such as hope

for a future livable planet for all despite climate change. Hope is an orientation to something desirable that could come to be, and that there is room for the unknown or uncertainty. In contrast, lack of hope, or hopelessness, suggests a belief in the inevitability of undesirable possibilities coming to pass.

Even as the research of speculative education often aims to address concerns about diversity and justice, to date it primarily represents the perspectives of scholars. That is, such futures themselves lack diversity, as they are often produced by experts, professionals, and academics, and are thus informed by their perspectives. What's more, a significant portion of this work, though centering the mission of education as being about justice and liberation, has concentrated around imagining education futures which are, if not dystopian, then at minimum characterized by lack of meaningful hope. In such futures the conditions of teaching and learning are profoundly impacted by some of the more harmful tendencies within contemporary education and economic systems, including those facilitated by technology. These include regimes of control of both educators and learners, increased privatization of schooling, uncritical adoption of technology, and individualization and atomization of learning via surveillance and algorithmically determined curricula (Houlden & Veletsianos, 2023).

To what extent can justice be served by the overall lack of hope in such futures? As a critical strategy or critique, these perspectives are no doubt valuable for understanding and anticipating possible and increasing harms in contemporary education systems. Yet, they are incomplete with respect to engaging the future. Indeed, taken together they paint a picture that suggests that the future of education often appears terrible. But why is this an incomplete strategy? Why might a lack of hope fail to achieve liberation? We argue elsewhere that the impact of a failure to imagine more hopeful futures can inadvertently contribute to the very problems the more dystopian and hopeless futures seek to name and confront. They do so by offering limited or no alternatives (Houlden & Veletsianos, 2023). That is, they can create an affective condition around the inevitability of certain futures, sustaining what Markham (2021) calls "discursive closures" which constrain not just what is thought possible, but what is even thought or imagined. If certain futures are (or at least *feel*) inevitable, why bother imagining otherwise? How can one even hope for alternatives if one can't even imagine them?

At stake here, then, is a fundamental question of hope and its possibilities. Hopelessness is a disastrous condition for the individual, the collective, and even the planet. A preponderance of negative narratives contribute to the functioning of what Dinerstein (2014) calls 'anticipatory regimes,' and thus contribute to the "political construction of hopelessness," which is an affective state which disempowers people from participating in meaningful ways to bring about political change. Such hopelessness—its development, proliferation, and continuity—serves particular people and ends, i.e., those who benefit from the maintenance of the status quo and would profit from the futures laid out by those anticipatory regimes. There are real consequences to hopelessness: Amsler and Facer (2017a, p. 6) associate this affect with a sense of powerlessness which limits how people challenge "structural foreclosures and ideological consensus." In other words, the affect impacts how people act in and resist the world.

Thankfully, futures don't need to be strictly or heavily dystopian or negative, and in fact occur on a spectrum of possibilities. Dunne and Raby (2017) highlight some of the different trajectories through which futures can be thought, including the probable, the plausible, the possible, and at the intersection of the plausible and probable, the preferable. Probable futures scenarios are those which seem likely to happen barring some major disruption such as a pandemic or global war. Plausible futures explore "alternative economic and political futures" with the instrumental aim "to ensure an organization will be prepared for and thrive in a number of different futures" (p. 4). Dunne and Raby call this "the space of scenario planning and foresight," which is a common approach in the education futures designed by corporations and consultancies.

These are futures, for example, which anticipate changing demographics and changing student enrolment, the impact of climate change on campuses, and shifting priorities for skills-development based on shifting economic demands related to advances in technology (eCampusOntario, 2021; OECD, 2018; Pelletier et al.; WEF, 2021). Possible futures are those that are scientifically possible, regardless of what they are (i.e., regardless of whether they are positive, catastrophic, ambivalent, etc.). Somewhere in the overlap of the plausible and probable is the preferable, which they note is itself a loaded term given that it can be unclear to whom a future might be preferable.

While not explicitly noted in Dunne and Raby's (2017) explanation of preferable futures, there are also the futures which fall on the opposite end of the spectrum, those which would not be preferred, or those which would be undesirable (again, this can be relative depending on the audience). Such futures can be valuable for offering critical insight, even acting as warnings about the implications of events and technologies in place today. But without offering examples of the preferable, i.e., futures that could happen *and* that many people would find desirable, there is a risk of the foreclosure of alternative possibilities through the very over-representation of such undesirable futures.

Each of these different trajectories intentionally or unintentionally serves particular views of the world. Depending on their source or objective, they may reflect different anticipatory regimes, which are ways in which ideas about the future shape feeling, thinking, and behaviour according to 1) orientations to various levels and types of uncertainty; 2) adaptation to established probabilities; 3) cautious risks; and 3) likely results (Adams et al., 2009; Amsler & Facer, 2017a). Quoting Adams et al. (2009, p. 252), Amsler and Facer (2017a) observe, anticipatory regimes "not only imagine the future but discipline our present being and becoming in order to minimize the risks of a future which is 'felt as inevitable in the present'." Action in the present, in other words, is determined by a sense that particular futures are likely or already established.

Amsler and Facer (2017a) take up the notion of anticipatory regimes to consider the ways in which, among other things, neoliberal socio-economic agendas create anticipatory regimes to shape how individuals, organizations, and states, orient towards the future in ways that serve those agendas, particularly within the context of education. Key within such regimes is the lack of criticality, i.e., that there is "no critical practice of anticipation; not a democratic or autonomous 'investment' in the active creation of undetermined futures, *but the organization of the future as a site of anxiety and control*" (p. 10, emphasis ours). Our concern is that the over-representation of non-hopeful futures, which feature this sense of the future as a site of anxiety and control, contribute to sustaining the very anticipatory regimes they seek to trouble and control, contribute to a sense of inevitability of certain futures. That is, through the "contraction of the space of possibility," they risk contributing to a political construction of hopelessness which inadvertently serves the maintenance of the status quo (Amsler & Facer, 2017, p. 6).

This isn't to say that unhopeful, non-optimistic, or dystopian futures should not be produced. Rather, they need to be brought into balance with more affectively diverse stories, to multiply the possibilities for futures beyond the scope of despair and dystopia (Houlden & Veletsianos, 2023). Futures are stories. And stories, while they may not literally *directly* change the world, shape behavior, imagination, and the belief in what is or is not possible. They can punch holes in walls to let light in or recontextualize darkness, but they can also create walls and the sense that some walls are impenetrable. Too many stories of a single type or category risk building such walls around imagination, even if those stories are meant to stand as warnings. This would remain true if all our futures were those which were entirely hopeful—the issue is less that descriptions of

futures tend towards the dismal and more the excess of a litany of warnings without visions of alternatives. It is the prevalence of one kind of stories without alternatives that over-determines a sense that possible futures are very limited, even as futures are themselves anything but inevitable.

Thus, to Amsler and Facer's (2017a) pursuit of criticality in the face of anticipatory regimes, we add that criticality might also contain an intentional gesturing towards those preferable alternative futures and possibilities. There is an ethical demand to fulfil the breadth of the spectrum of education futures, and that is especially true for people who will live through such possible futures, namely youth. This means that diverse speculative futures contain within them a pedagogical strategy of hope. Such hopeful futures do not disavow the crises and injustices of both history or the current present moment; this isn't naïve optimism or totalizing visions of a singular positive future that meets everyone's needs in the exact same ways. Rather, this is hope which opens up and proliferates what is possible with an eye towards a present which actively chooses and pursues desirable possibilities. This is hope which makes space for the perspectives of diverse people working towards diverse ways of being and knowing in the world.

To this end, in this paper we sought to understand and grow the perspectives of youth on higher education futures, which is an under-studied area of research. Some recent research stands as an exception, as it focuses on the perspective of students. Flynn et al. (2023) argue that student perspectives are necessary as a benefit to all, and that including their perspectives empowers students themselves to contribute to academic spaces while helping them develop critical thinking and citizenship skills. In Flynn et al. students were invited to imagine higher education in the year 2042, and some of what learners imagined included things such as more robust support across multiple dimensions of student life (i.e., not just academic) and increased digital forms of learning, which emphasizes collaboration, diversity and flexibility. Similarly, within the context of ODDE, Veletsianos (2020, p. 2) argued that to understand online learning is to listen to learner voices and to understand online learning is to understand it "through the lens of student experience [which] helps us narrow our distance from the online students we serve." There is benefit, to staff as well, who gain perspective on how students experience learning and what challenges they face today.

3 Research questions and theoretical framework

Our study was informed by the following research questions: *What kinds of learning futures do youth hope for? What makes these futures hopeful? What futures do they not hope for? Why?* These research questions position the study within the macro level category of online and distance education research (Zawacki-Richter & Bozkurt, 2023), because they examine issues intersecting the global, rather than institutional or individual, level, including access, equity, ethics, distance teaching systems, and models. Answers to these questions are important for ODDE researchers, practitioners, and policymakers because they (1) aim to expand the picture of the future of ODDE through including more diverse groups of people in thinking about the future, (2) focus on hope, which in and of itself is an understudied concept in ODDE, and (3) avoid taking ODDE for granted, and instead focus on the broader question of futures, aiming to explore what youth hope for and what the role of ODDE might be in such hopeful futures, rather than assuming a particular pre-determined role for ODDE in those futures.

To answer these questions, we developed three future education scenarios and asked youth participants to respond to them. Positioned in 2033, these futures represent three distinct possibilities for what education *could* look like in a decade. We selected 2033 as a time which was not so far into the future that it would seem irrelevant to youth (e.g., 3033), but was still far enough



into the future for the possibility of significant change to have transpired. Each future is oriented differently to an anticipatory regime that takes late-stage capitalism as a point of departure for imagining the future. Notably, these are not intended as predictions but are rather informed by trends within discussions and research on education futures, both within the scholarly and corporate discussions on the future of education. They are also by no means meant to cover all possible futures, and some key thematic areas are not addressed in depth in these scenarios, including, for example, education futures in which Artificial Intelligence (AI) supplants human educators, which in 2023 became a widely-discussed topic given the expansion of generative AI platforms such as ChatGPT (Eapen et al., 2023; Hancock et al., 2023).

Future 1 is described as a future in which technical and business education dominates. This is the scenario in which higher education is almost totally oriented towards economic demands and expectations. We modeled this scenario after work in the literature which emphasizes futures in which the arts and humanities decline due to their lack of economic practicality. In such examples, the survival and growth of higher education heavily features future labor as a key indicator of institutional success, including meeting demands for skilled technologists and finance workers. Additionally, surveillance technologies are further integrated into institutional apparatuses, with data being a key management tool of student learning and outcomes. Already a concern in education at all levels, a number of education scholars have speculated about the risks of increasing use of these types of education technologies, many suggesting negative outcomes resulting from it (Collier & Ross, 2020; Selwyn et al., 2020). We described this future as follows:

Future 1: The year is 2033. In the decade following the COVID-19 pandemic, higher education has increasingly become driven by collecting and analyzing vast amounts of student data, such as tracking student time online, physiological data, employment rates, etc. Learners attending public colleges and universities primarily pursue technical skills associated with a few streams of programs, including computer programming (such as the development of Artificial Intelligence and green technology), health, economics, finance, and business. The arts, social sciences, and humanities are no longer publicly funded. Learners can pursue such programs in expensive private universities, but only a few can afford them.

The second future – the university for local community and local knowledge – pivots towards more regenerative forms of education, with a focus on systems-level solutions to imagined disasters of the next decade (Wahl, 2016). With respect to anticipatory regimes, this future departs from the strict techno-utilitarian approach to embrace more relational modes of teaching and learning. Universities in this scenario have a mission grounded in justice and supporting knowledge for communities, with an emphasis on inter-generational learning relevant to specific places. This scenario is more utopian in its vision, even as it contends with a proposed future history of increasing climate and ecological catastrophe.

Future 2: The year is 2033. After a period of instability brought about by the disastrous effects of climate change, biodiversity loss, and global conflict, higher education has become totally focused on addressing these crises. Earlier efforts have been vastly scaled up to focus education resources on supporting climate justice for the most vulnerable people and places in the world. Universities have become hubs of local knowledge and places for community cultural and scientific development. In these spaces students develop climate and people-friendly trades and skills. They also develop their critical and creative thinking focused on decolonization and anti-racism. Learning happens through projects and through solving local problems, and learners of all ages join programs based on interest, curiosity, and community need.



Finally, the third scenario describes a situation in which traditional universities are rare and inaccessible for most and the "social media university" emerges to fill the gap. This scenario anticipates a future in which technology companies, particularly social media companies, further commodify education according to neoliberal logics. This style of university is a platform-based form of digital higher education in which celebrity experts and influencers occupy the role of educator as a function of their social media followings and professional prestige. Without financial support, learners/users exchange labor for skills development, while wealthy students continue to attend more conventional institutions to pursue their interests. The notion of a social media university reflects the interest of education technology startups which offer ODDE experiences offered by celebrities and influencers (e.g., Veletsianos & Houlden, 2014).

Future 3: The year is 2033. Public universities and colleges around the world struggle to stay open due to sharp declines in enrolments and continuing social and economic instability. Many schools close, and those that remain become increasingly unaffordable. Students that pursue higher education usually come from wealthy families. However, a variety of companies emerge to fill gaps. These companies offer short courses that help people develop work skills, such as how to use different kinds of software and how to analyze data. Some of the teachers in these companies are individuals who found success in their industries and are well-known chefs, international authors, famous engineers, and business executives of all kinds, for example. They have huge social media followings and are celebrity instructors. These companies do not provide any kind of financial aid, and access to their courses usually comes with strings attached, such as contracts to do temp work for the company.

By designing scenarios which describe futures shaped by different orientations to radical change and upheaval, our goal was to better understand how youth felt about possible significant changes, which changes gave them hope, and also which they found to be more or less preferable in terms of how hopeful they found them. These feelings were evaluated by providing participants with ten options to select from. The first six included all of Ekman and Cordaro's (2011) "basic" emotions, namely anger, disgust, happiness, sadness, fear, and surprise. In addition, we added indifference, hopeful, and anxious as emotional states with specific relevance to thinking about the future, as well as an "other" option.

4 Method

4.1 Participants

We recruited 181 Canadian youth aged between 18 and 25 years who responded to a questionnaire described below. Mean participant age was 21.9 years with a standard deviation of approximately 1.1 years. 111 participants identified as women, 55 as men, and 10 as non-binary. Three individuals identified as gender fluid, one person did not identify with any provided options, and one individual did not provide an answer.

Participants' level of education varied, with one person having less than a high school education, 19 having completed high school, and 95 having attended some college or university. Additionally, 62 individuals held a bachelor's degree, three a master's degree, and one a professional degree. Participants' geographic location within Canada varied. 85 participants were from Ontario, 32 from British Columbia, 26 from Alberta, 13 from Quebec, nine from Saskatchewan, six from Manitoba, five from Newfoundland and Labrador, three were from Nova Scotia, and two from New Brunswick.



4.2 Data collection

Data were collected from February 28 to March 2, 2023, using a questionnaire distributed by Prolific to potential participants. The questionnaire took participants ten minutes to complete. Prolific is a research platform connecting researchers and survey respondents who are compensated for their involvement. Prolific is noted in the literature as a favored tool for participant recruitment for a number of reasons, including for example that it is designed specifically for researchers, has clear guidelines for treatment of participants, and gives researchers the direct option to vet individual responses as they are available (Palan & Schitter, 2018). It has gained broad utilization across various fields of study (Basol et al., 2021), including in our own studies (Veletsianos et al., 2022; Veletsianos et al., 2024).

4.3 Data analysis

Quantitative and qualitative data were collected. Quantitative data are reported using descriptive statistics. Qualitative data for questions pertaining to why participants felt a scenario was the most or least hopeful was entered into NVivo and coded by one researcher using an inductive constant comparative approach to answer the research questions (Glaser & Strauss, 1967). The codes and analysis were discussed with a second researcher who reviewed the analysis to assess for oversights or differences before a final code list was established. The qualitative data analysis followed the same analytic strategy as a previous study from the larger dataset (Veletsianos et al., 2024).

4.4 Limitations

The participant pool draws on Canadian youth ages 18-25, meaning that the data only reflect a limited perspective on education futures, grounded in one geographic and cultural locale. Additionally, within Canada itself, the Territories are not represented at all, meaning that perspectives from the Canadian North, which is distinctive as a locale for education due to its primarily rural and remote nature, are absent.

5 Results

The first series of questions invited participants to report how they felt about each scenario, with options for sad, helpless, anxious, afraid, hopeful, disgusted, indifferent, happy, surprised, and "other" which included an optional text box. Results are reported in figure 1 below.

Future 1, the business and technical school had the highest number of "sad" results (n = 153), and the lowest "happy" (n = 3) and "hopeful" (n = 10) results. The remaining results were as follows: "anxious" (n = 85); "afraid" (n = 73); "helpless" (n = 62); "surprised" (n = 45); "disgusted" (n = 42); and "indifferent" (n = 26). Notable "other" responses (total n = 25) for Future 1 included "disappointed" (n = 7) and "disbelieving" (n = 2).

Future 2, the university of local and community knowledge, in contrast, had the highest response for "hopeful" (n = 146), and the lowest for "sad" (n = 18), despite the fact that the scenario describes significant climate catastrophe. Of the three futures, participants reported feeling the most "happy" (n = 115), most "surprised" (n = 72), least "helpless" (n = 9), least "anxious" (n = 35), least "afraid" (n = 15), least "disgusted" (n = 5), and least "indifferent" (n = 18) about this future. Notable "other" (n = 19) responses for Future 2 included "excited" (n = 4) and "curious" (n = 2).

Future 3, the social media university, as with Future 1, largely generated negative feelings, with the most representation of all three futures in the categories of "helpless" (n = 74), "anxious" (n = 74), "anxious"

106), "afraid" (n = 80), "disgusted" (n = 79) and "indifferent" (n = 30). Similar to Future 1, many participants found it "sad" (n = 104). Few participants indicated it made them feel "hopeful" (n = 15), and fewer still "happy" (n = 3). Notable "other" (n = 18) responses for Future 3 included "angry" or "upset" (n = 7) and "frustrated" or "annoyed" (n = 3).



Figure 1: Participant feelings reported for each future

Participants were then asked to identify which futures they found the *least* and *most* hopeful. 62.1% (n = 118) of participants selected future 3 as the least hopeful. The second least hopeful future was Future 1, the technical and business school, with 34.7% (n = 64). Future 2 was only selected by 3.2% (n = 6) as the least hopeful. Concomitantly, the future selected as most hopeful by the vast majority of participants (88%, n = 168) was Future 2. The second most hopeful was Future 1 with 7.9% (n = 15) and Future 3 was last with 4.2% (n = 8).

Finally, participants were asked to explain why they selected a future as least or most hopeful. Open-ended responses were categorized and coded as described in the methods section. In total there were 87 codes with 624 total references for reasons given for why each selected future was most or least hopeful. The codes with the most references were each from the future either selected as most hopeful or least hopeful. Tables 1 and 2 indicate the most frequent codes by reference volume.

Table 1 lists the reasons why a future was selected as most hopeful. Because most participants selected Future 2 as the most hopeful, the preponderance of reasons and codes were related to that future.

Code	Example	п
Future 1: The busin	ess and technical school	
Market for this	It is most hopeful as it will bring a large amount of students	6
education	working in very in demand fields	
Practical	I'd go with this someone just because we still need a functioning	6
	economy (even though the climate crisis is just as, if not more, important)	
Most realistic	This future is closest to what I see realistically would happen	5
Future 2: The unive	rsity of local and community knowledge	
Focus on	Given the state of the world (in an environmental sense), I think	62
addressing climate	that we need to immediately shift our focus towards climate	
change	change, preservation, and social justice as soon as possible.	
Solutions-oriented	It is good that schools are teaching students about the ecological	35
	crisis because it is raising awareness and shaping minds to find	
	solutions.	
Focus on	I love this future as it places emphasis on community	35
community	collaboration to solve global issues. As humans, community is a	
	necessity to achieving greater well-being	
Focus on justice	the skill to develop ones critical thinking skills along with their	27
	ability to recognize decolonization and anti-racism is another	
	ability our society truly needs to develop	
Future 3: The social	media university	
Freedom of choice	This has the most options for people to explore.	2
Most accessible	Seems the most accessible	2
Addresses gaps	because even in a difficult social and economic situation, some	1
	companies find the strength and kindness to fill the gaps by	
	offering courses and workshops instructed by knowledgeable	
	individuals	
Inspirational	Inspirational and informative	1
Practical	The short courses seem useful and applicable	1

Table 1: Reasons why a future was selected as *most* hopeful

Table 2 lists the reasons why a future was selected as least hopeful. Because most participants selected futures 1 and 3 as the least hopeful, the preponderance of reasons and codes were related to those futures.

Code	Example	n
Future 1: The busine	ess and technical school	
Elimination of arts	A world without the arts? Atrocious	27
Elimination of social sciences	I currently study in the social sciences and have taken an LSAT to apply into Law, so an educational system that removes focus from these types of things seems not only bleak, but also relatively stupid (I see these areas of education as being valuable).	16
Elimination of humanities	I do find it very unhopeful that humanities are not publicly funded in this scenario. I think for true advancement we need more interdisciplinary work.	15
Lack of affordability	Because the barrier of cost will be very difficult for many to overcome	12
Elimination of choice	I find it the least hopeful because you are basically forcing a heavy majority of people into career paths that they themselves may not enjoy.	11
Surveillance	the amount of tracking feels very dystopian	11
Future 2: The univer	sity of local and community knowledge	
Climate catastrophe is real	The issue of climate disaster is a very bleak outlook	2
Racism still exists	Because this future reminds us of how much more work we need to do. A future should not need to mention anti racism	1
Wrong approach to crisis	The world as we know it is a global corporation. Barring a war that brings us back to the stone age, it will continue to be a global enterprise. To have a harmonious existence we would need not focus our resources into "anti-racism" or decolonization	1
Too ideological	It seems like an ideologically autocratic future, whether you agree with these policies or not.	1
Future 3: The social	media university	
Only benefits wealthy	The only people that seem to benefit from this future are the already rich and wealthy. There is no help for the poor and downtrodden.	27
Unfair	We're hoping to create a better opportunity for people to get fair access to education but this is the opposite	26
Exploitative	The last scenario seems the least hopeful as it includes the most discrete evidence of worker exploitation in exchange for course access, which is uniquely worse than the other two scenarios in that the last scenario depicts the active exploitation of workers for a company while the other scenarios only seem to suggest less than ideal circumstances as a consequence of climate change, institutions, and governments.	20

Table 2: Reasons why a future was selected as *least* hopeful

6 Discussion

The purpose of this study is to better understand what youth hope for education futures, and what makes those futures hopeful or not. To answer these questions, we focus on the data centred on hope, and in particular the connections between hope and the operation of affective experience of anticipatory regimes, including through what participants found surprising, realistic, and unrealistic. These latter two factors were not factors we set out to study specifically, but instead emerged in the data, as we explain next.

While participants had diverse perspectives on what futures they find hopeful and why, distinct themes and trends emerged both within the quantitative and qualitative data. For those for whom Future 1 (the future of the business and technical school where the arts and humanities are no longer publicly-funded) was found to be most hopeful, the primary reasons given was connected to how closely it reflected anticipatory regimes present today. For example, participants indicated that they found this future hopeful because it meant there were jobs for people, that the economy could still function, and that it was most realistic.

Notably, at no point in the questionnaire itself did we ask participants about whether they felt a future was realistic. Rather, this is a perspective they brought with them as a way to judge the hopefulness of a future, not one we sought to implicate. In other words, some participants' responses reflect Markham's (2021) discursive enclosures, even when they are not asked to imagine futures for themselves, as highlighted in her work. That is, discursive closures can emerge even for the audience, not just the creator, of futures. This seems to reflect the power of anticipatory regimes in constraining futures, and indeed even what one hopes for, given how few people actually found Future 1 hopeful. Despite this possibility, 45 participants still found this future to be surprising, suggesting that what is realistic to some is surprising to others. This surprise doesn't rule out the possibility of it being realistic, but future research could investigate the degree to which these two factors impact each other, especially as a function of hope.

Even with its described climate disasters, Future 2 was by far the most favoured future, with 88% of participants finding it the most hopeful. In Future 2, the climate and community are central to the mission of higher education, which the data indicate makes people feel hopeful and happy. Suggested by such findings is a somewhat predictable sense that what makes youth hopeful in this study is both a perceived sense of climate solutions and an emphasis on community. While ODDE literature and practice engage with the concept of community in numerous ways (e.g., through developing pedagogical practices to support community-building in online courses or using various technologies in the service of community-building), there is much less engagement with environmental, climate, and ecological issues as they relate to ODDE. A question that remains unexplored is the relationship between ODDE and climate solutions. To what degree is ODDE in service to climate solutions and in what ways? Notably, Future 2 is the scenario least constrained by the conservatism of anticipatory regimes which focus primarily on neoliberal economic growth and individualism, which are indeed the very regimes which turn on a logic of conservative climate action so that economies are not negatively impacted by decarbonization and greenhouse gas reductions.

The qualitative data indicate that the primary reason participants indicated Future 2 to be hopeful was the focus on climate action, suggesting a strong connection for youth between hope and meaningful action in the context of the climate crisis. Given the threats, existential and otherwise, that the climate crisis represents for the human species in the not-too-distant future, this too is perhaps predictable (Huggel et al., 2022). It is, however, at odds with the dominant anticipatory regimes in play amongst global economic elites, and consequently within how higher education operates and to what it orients. For example, in response to the United Nations Climate Change

Conference which took place in 2023 in the United Arab Emirates (COP28), there was concern from both climate scientists and activists that numerous governments from around the world would hedge their climate action in order to sustain an imagined future defined by economic growth rather than ecological sustainability, even as such futures become increasingly less probable given the anticipated impacts of radically changing planetary systems (Amnesty International, 2023; IPCC, 2022).

What is also notable about Future 2 is that wealth inequality does not feature prominently in the way it does in the other two scenarios. While the design of the scenarios was to highlight a few trends within the education futures discourses and measure attitudes and responses to those trends, that Future 2 was found to be most hopeful may also be connected to the idea that education is more affordable or more widely accessible. Future research could examine this possibility in more specificity. For example, are youth more concerned about climate or about equal access to desired and chosen fields of study?

The few participants who indicated Future 2 as least hopeful were largely focused on the fact that the climate crisis and racism still existed, though two others felt it was either too ideological or too unrealistic of an approach. This latter critique is interesting, reflecting as it does an expectation that for a future to be hopeful it must be *realistic*. While this wasn't stated by a large number of participants, the question remains here what determines what is realistic, and it would be worthwhile to assess the degree to which futures which hew closely to dominant contemporary anticipatory regimes are understood to be realistic and those which significantly depart from those regimes are understood to be unrealistic. Such an investigation could then improve an understanding of the connection between realism and hope.

Participants also found Future 2 to be the most surprising, which is also noteworthy. Since the data do not explain this, we don't know why people found this to be the case, but that Future 2 is both the most surprising and the most hopeful is compelling, and a line of inquiry around the relationship between futures which are more hopeful, and their unexpectedness, merits further investigation. Why, for example, are youth surprised by the possibility of what is characterized as a hopeful future? Is this a direct symptom of the troubled times unfolding around us and the preponderance of disaster and disaster narratives? Who benefits from an intensification of inevitability, in which hope flounders? Suggested in these findings is that surprise might in some way disrupt feelings associated with inevitability, which may open the door to hope, and the kinds of action that hope may precipitate.

Indeed, hopelessness, and the political construction of hopelessness, are states of being *without* surprise. That is, they are a belief or affect grounded in a notion of particular expectations likely to be met, in inevitability, to the extent that believing otherwise, believing in viable alternatives, is not really felt as possible. Why bother hoping for alternatives, and importantly then working for alternatives, to what is already a perceived given? As researchers, educators, and activists it is important to ask what these findings suggest is necessary within the work of education futures and futures more broadly, particularly for youth. That is, not just in terms of researching youth perspectives, but what do they actually need? What are they owed? Leveraging surprise may be a tactic in undoing some of the political s of hopelessness by creating the conditions to imagine futures that in the first instance shift anticipation and futures towards more diverse possibilities.

Methodologically, this might mean thinking carefully about the type of stories researchers tell and invite. While we could simply aim to envision positive futures, which might be constrained by researcher bias towards what might be considered positive, aiming for surprise might invite or encourage more unpredictable visions, thereby further proliferating possibilities, as we suggest is needed (Houlden & Veletsianos, 2023). In other words, this would be to tackle hopeful futures not with the goal of necessarily imagining what makes someone or something hopeful, but instead to begin from the question of what might be surprising. Thus, the pedagogical strategy of hope we suggest is needed might not begin explicitly with hope, but instead work with surprise as a constituent element for making visible discursive enclosures and anticipatory regimes. Surprise then becomes a tool of critical anticipation. Follow up research might ask of participants why particular futures are surprising to them, for example, and work from there.

In the case of Future 3 (the social media university), for those few for whom it was hopeful, their limited responses connected to freedom of choice and accessibility, suggesting an appreciation for a certain type of flexibility made available by the idea of the social media university. However, by and large, Future 3 was found to be unhopeful, with both Future 1 and 3 receiving the most negative responses with respect to how they made participants feel. The reasons given for why Future 3 was found to be unhopeful include a sense that only the rich benefit from university structured in this way, that it was unfair, and that it was exploitative to students. As wealth inequality and oligopolies intensify around the world, striking a balance between futures that imagine the very real risks associated with such processes, risks that are already present in global economic systems today, and the possibility of alternatives is a necessary task. Future 3 describes a scenario in which social media companies essentially control education markets, and as the data show, such a future is not hopeful for most people.

Further examination of the qualitative data makes clear that youth responded to different issues within each scenario to assess how they feel about a scenario. For example, the loss of the arts (n = 27), the social sciences (n = 16), and the humanities (n = 15) in the first scenario was of primary concern for many. In the third scenario, injustice, inequality, and exploitation of labour was of most concern. The two issues are quite different, and so to better understand what specific things people hope for and want to avoid, future research scenarios could be designed with only minor tweaks between them, and then participants could rank and explain rankings for the scenarios.

This would be, in a way, comparable to testing for single variables as a way to better understand what priorities people share or don't share for the future. Arguably, this could also be assessed by asking people directly, but one of the benefits of scenario testing and more narrative-based research methods is that it can reduce the risk of respondents answering the way they think they are supposed or expected to, i.e., it might reduce response bias (Clarke et al., 2019). Another interesting line of research would be to compare perspectives based on different identity factors, particularly around age and socio-economic status. To what extent, for example, does access to financial wealth impact which futures people find hopeful? What factors provoke hope in some but not others? While this paper has focused primarily on hope, and its relationship to surprise, and to a lesser extent realism, as is the nature of speculative futures work, there is much more to explore to better understand futures and their role in education.

7 Conclusion

The work of education futures is not intended to be a prescriptive process, rather as Amsler and Facer (2017a) suggest, it is an "experimental process of generating and enlarging the space of possibility itself through practices of critical, disobedient anticipation" (p. 9). In our view, critical, disobedient anticipation involves balancing a critique of "what could go wrong" (and therefore, "what is already wrong") with alternative, hopeful, and even surprising possibilities. What could go right in education and ODDE? What could go right for our possible futures more generally? What work is needed to refuse the anticipatory regimes which shape and over-determine the futures imagined as possible by both educators and learners alike? It is worth considering what is owed to youth with respect to the creation of hopeful futures, and perhaps also to consider what is needed for hopeful futures to become unsurprising or everyday futures.



Funding

This research was undertaken, in part, thanks to funding from the Social Sciences and Humanities Research Council.

References

- Adams, V., Murphy, M., & Clarke, A. (2009). Anticipation: technoscience, life, affect, temporality. *Subjectivity*, *28*, 246–265.
- Amsler, S., & Facer, K. (2017a). Contesting anticipatory regimes in education: Exploring alternative educational orientations to the future. *Futures*, 94, 6–14. https://doi.org/10.1016/ j.futures.2017.01.001
- Amsler, S. & Facer, K. (2017b). Introduction to 'Learning the Future Otherwise: Emerging
- Approaches to Critical Anticipation in Education.' *Futures*, 94, 1-5. https://doi.org/10.1016/ j.futures.2017.09.004.
- Basol, M., Roozenbeek, J., Berriche, M., Uenal, F., McClanahan, W. P., & Linden, S. V. D. (2021). Towards psychological herd immunity: Cross-cultural evidence for two prebunking interventions against COVID-19 misinformation. *Big Data & Society*, 8(1), https://doi.org/ 10.1177/205395172110138
- Clarke, V., Braun, V., Frith, H., & Moller, N. (2019). Editorial introduction to the special issue: Using Story Completion Methods in Qualitative Research. *Qualitative Research in Psychology*, 16(1), 1-20. https://doi.org/10.1080/14780887.2018.1536378
- Collier, A., & Ross, J. (2020). Higher education after surveillance? *Postdigital Science and Education*, 2(2), 275–279. https://doi.org/10.1007/s42438-019-00098-z.
- Conrad, D., & Wiebe, S. (Eds.). (2022). *Educational fabulations: Teaching and learning for a world yet to come*. Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-93827-7.
- Dewey J. (1938). Experience and education. Indianapolis: Kappa Delta Pi.
- Dinerstein, A. C. (2014). The politics of autonomy in latin america: The art of organising hope. NY: Palgrave.
- Dunne, A., & Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*. Cambridge, MA: The MIT Press.
- Eapen, T.T., Finkenstadt, D.J., Folks, J., & Venkataswamy, L. (2023). How Generative AI Can Augment Human Creativity: Use it to promote divergent thinking. Harvard Business Review: AI and Machine Learning. https://hbr.org/2023/07/how-generative-ai-can-augmenthuman-creativity
- eCampusOntario. (2021). 2021 Foresight report: The hybrid futures. *eCampus Ontario*. https://www.ecampusontario.ca/wp-content/uploads/2021/10/The-Hybrid-Futures-Tagged-20210915.pdf
- Ekman, P., & Cordaro, D. (2011). What is meant by calling emotions basic. *Emotion Review*, 3(4), 364-370. https://doi.org/10.1177/1754073911410740

Facer, K. (2011). Learning futures: Education, technology and social change. London: Routledge.



- Facer, K. (2021). *Background paper for the Futures of Education initiative: Futures in education: Towards an ethical practice*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000375792
- Facer, K., & Sriprakash, A. (2021). Provincialising futures literacy: A caution against codification. *Futures 133*, 102807.
- Flynn, S., Byrne, J., Devoy, M. A., Johnston, J., Lowney, R., Magee, E., Molloy, K., Moloney, D., Munro, M., Ongolly, F., Ryan, J., Stone, S., Waters, M., & Wright, K. (2023). Vibrant, open and accessible: Students' visions of higher education futures. In L. Czerniewicz & C. Cronin (Eds.), *Higher Education for Good* (pp. 335–352). Open Book Publishers. https://doi.org/ 10.11647/obp.0363.14
- Freire, P. (1970/2000) Pedagogy of the Oppressed, London : Continuum.
- Glaser, B.G. & Strauss, A.L. (1967). *The Discovery of Grounded Theory*. Chicago, IL: Aldine Publishing Company.
- Hancock, B., Shaninger, B., and Yee, L. (2023). Generative AI and the future of HR. McKinsey & Company.
 https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/generative-ai-and-the-future-of-hr.
- Huggel, C., Bouwer, L. M., Juhola, S., Mechler, R., Muccione, V., Orlove, B., & Wallimann-Helmer, I. (2022). The existential risk space of climate change. *Climatic change*, 174(1-2), 8. https://doi.org/10.1007/s10584-022-03430-y
- Hrastinski, S., Jandrić, P. (2023). Imagining education futures: Researchers as fiction authors. *Postdigital Science & Education 5*, 509–515. https://doi.org/10.1007/s42438-023-00403-x
- Houlden, S. & Veletsianos, G. (2023). Impossible Dreaming: On Speculative Education Fiction and Hopeful Learning Futures. Postdigital Science & Education 5, 605–622. https://doi.org/10.1007/s42438-022-00348-7
- IPCC. (2022). Summary for Policymakers. In H.-O. Pörtner, D. C. Roberts, E. S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, & A. Okem (Eds.). Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press. https://www.ipcc.ch/report/ar6/wg2/
- Kupferman, D. (2020). (Nothing but) futures. Access: Contemporary Issues in Education, 40(1), 47– 50. https://doi.org/10.46786/ac20.2409
- Markham, A. (2021). Challenges to intervening in future speculations of memory, data, and algorithms. *New Media & Society*, 23(2), 382-405. https://doi.org/10.1177/1461444820929322
- OECD. (2022). *Trends shaping education* 2022. Paris: OECD Publishing. https://doi.org/ 10.1787/6ae8771a-en
- Ojala, M. (2017). Hope and anticipation in education for a sustainable future. *Futures*, 94, 76-84. Organization for economic co-operation and development (OECD). (2018). The future of education and skills: Education 2030. https://www.oecd.org/education/2030/ E2030%20Position%20Paper%20(05.04.2018).pdf
- Osberg, D. (2010). Taking care of the Future? The complex responsibility of education and politics. In D. Osberg, & G. Biesta (Eds.), *Complexity theory and the politics of education* (pp. 157-170). Sense Publishers.



- Palan, S., & Schitter, C. (2018). Prolific. ac–A subject pool for online experiments. *Journal of Behavioral and Experimental Finance*, 17, 22-27. https://doi.org/10.1016/j.jbef.2017.12.004
- Pelletier, K., McCormack, M., Reeves, J., Robert, J., & Arbino, N. with Al-Freih, M., Dickson-Deane, C., Guevara, C., Koster, L., Sánchez-Mendiola, M., Skallerup Bessette, L., & Stine, J. (2022). 2022 EDUCAUSE Horizon Report, Teaching and Learning Edition. Boulder, CO: EDUCAUSE. https://www.learntechlib.org/p/221033/
- Ramos, J., Sweeney, J. A., Peach, K., & Smith, L. (2019). Our futures: By the people for the people. How mass involvement in shaping the future can solve complex problems. *Nesta*. https://media.nesta.org.uk/documents/Our_futures_by_the_people_for_the_people_WEB_v 5.pdf
- Ross, J. (2017). Speculative method in digital education research. *Learning, Media and Technology*, 42(2), 214-229. https://doi.org/10.1080/17439884.2016.1160927
- Selwyn, N. Pangrazio, L., Nemorin, S., & Perrotta, C. (2020). What might the school of 2030 be like? An exercise in social science fiction. *Learning, Media and Technology* 45(1), 90-106. https://dor.org/10.1080/17439884.2020.1694944
- Staley, D. J. (2019). *Alternative universities: Speculative design for innovation in higher education*. Johns Hopkins University Press.
- Suoranta, J., Teraïs, M., Teraïs, H., Jandrić, P., Ledger, S., Macgilchrist, F., & Prinsloo, P. (2022). Speculative social science fiction of digitalization in higher education: From what is to what could be. *Postdigital Science and Education*, 4(2), 224-236. https://doi.org/10.1007/s42438-021-00260-6.
- UNESCO (2021). Reimagining our futures together: A new social contract for education. Report from the International Commission on the Futures of Education. https://unesdoc.unesco.org/ ark:/48223/pf0000379707
- Veletsianos, G. (2020). *Learning Online: The Student Experience*. Baltimore, MD: Johns Hopkins University Press.
- Veletsianos, G., & Houlden, S. (2014). On the "university of the future": A critical analysis of cohort-based course platform Maven. *Learning, Media, & Technology*, 49(3), 401-413. https://doi.org/10.1080/17439884.2023.2164862
- Veletsianos, G., Houlden, S. & Johnson, N. (2024). Is Artificial Intelligence in education an object or a subject? Evidence from a story completion exercise on learner-AI interactions. *TechTrends*, 68, 411–422. https://doi.org/10.1007/s11528-024-00942-5
- Veletsianos, G., Houlden, S., Hodson, J., Thompson, C.P., & Reid, D. (2022). An Evaluation of a Microlearning Intervention to Limit COVID-19 Online Misinformation. *Journal of Formative Design in Learning 6*, 13–24. https://doi.org/10.1007/s41686-022-00067-z.
- Wahl, D. (2016). Designing regenerative cultures. Triarchy Press.
- World Economic Forum (WEF). (Jan. 28, 2021). What will education look like in 20 years? Here are 4 scenarios. World Economic Forum. https://www.weforum.org/agenda/2021/01/future-of-education-4-scenarios/
- Zawacki-Richter, O., & Bozkurt, A. (2023). Research Trends in Open, Distance, and Digital Education. In O. Zawacki-Richter & I. Jung (Eds.), *Handbook of Open, Distance and Digital Education* (pp. 199–220). Springer Nature. Singapore. https://doi.org/10.1007/978-981-19-2080-6_12

