

Chapter 13

Speculating on Higher Education in 2041—Earthworms and Liminalities



Sonja Arndt, Amanda Belton, Thomas Cochrane, Sarah Healy,
and David Gurr

Abstract What if... this chapter asks, might higher education be twenty years from now? This chapter speculates a future that takes place 20 years from now, a future that acknowledges the challenges of the present, as discussed at greater length in the earlier chapters. We take up speculative inquiry as a method to consider a future where the teens of 2021 bring their experience of living and learning during *this* pandemic time to the shaping and leadership of universities in 2041. Beginning with a what-if scenario of a reconceived higher education, we create a speculative fiction text—a letter from the future—around which we perform a diffractive reading (Barad, 2014). What this diffraction brings about is a higher education imaginary of activism and revolts that result from current tensions and challenges in education and research. The imaginary does not predict the future but offers a critical lens through which to make sense of *this* present and the possible futures tied to it. In so doing, we suggest potentialities of practices like elevating decolonised ways of knowing and engaging geographical, human and nonhuman diversities in campuses across urban and remote areas. Traversing twenty years from now, the chapter speculates on higher education, spanning virtual and physical spaces for re-connection of research, learning and assessment with, in and through assemblies of diverse beings, human and otherwise. The chapter concludes with a codetta, which leaves the reader with a brief account of a speculative encounter with Socrabots as they prepare to enter the teaching profession in the 2040s.

Keywords Education · Higher education · Practices · Time · Becoming · Futures thinking · Speculative inquiry · Diffraction · Inclusive academic practices

S. Arndt · A. Belton · T. Cochrane · S. Healy (✉) · D. Gurr
Melbourne Graduate School of Education, The University of Melbourne, Melbourne, Australia
e-mail: sarah.healy@unimelb.edu.au

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K. Coleman et al. (eds.), *The Educational Turn*, Rethinking Higher Education,
https://doi.org/10.1007/978-981-19-8951-3_13

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13.1 Introduction

The subjects of the future-present that reveal themselves in this chapter are autoethnographic creations made from the composite lives of the collaborating authors. They came about through the speculative approach to our writing inquiry. Speculation, as an act, renders subjectivities in both future and present as partial, incomplete. The reality that speculative inquiry brings into being is also partial, incomplete. The emphasis on process, partiality and possibility creates the conditions for something new to take place and is part of what makes speculative inquiry powerful. Science fiction and science fantasy writers demonstrate this, fabricating worlds in a practice that Haraway (2016) refers to as speculative fabulation—which variously refers to not only speculative fabulation but also science fiction, science fantasy, speculative fiction, string figures and so far. In its multiplicitous form, speculative fabulation (SF) offers a glimpse of a way through an event horizon, a seemingly impossible situation, which in this case is the (re)creation of higher education systems, systems that currently capture difference within its structures and neutralise those that attempt to do higher education in more socially, technologically and environmentally just ways.

At the heart of speculative inquiry lies what Dunne and Raby (2013) call the “what-if scenario.” Thinking about a particular scenario which is, in turn, prompted by a “what if?” question makes it possible to unsettle any kind of blind acceptance of the here and now and thus create the conditions for thinking differently—creating the potential for different realities to come to pass. And so, we begin with asking, what if we had in our possession a letter from a future imagined? A fictional world that we do not yet occupy a personal letter from an individual named Sandy who in 2041 is 34 years old, living in regional Victoria, Australia. A Sandy, whom, at the time of writing the letter, thinks they may have found a way to send communication back in time from their future-present to the past-present. They did not know if the letter would reach their past-present self but as an act of compassion, an outcome of hope and a testament to the endurance of their younger self, they give it a shot. Young Sandy in 2021, who kindly and courageously shared this letter, confesses they are at a low point when they received it, having lost sight of a future worth living during Melbourne’s extended lockdowns of 2020–2021.

Dear 2021 Sandy,

It’s the first day of spring 2041 as I write to you from 20 years in the future to reassure you that it is worth persevering with the challenges life is throwing at you (and will continue to throw at you). I want you to trust yourself and know that it is going to be worth it despite the hardships. I can picture you-me in 2021: a high school student having just spent our 250th day in lockdown – too-small, outgrown leather school shoes gather dust in the cupboard (hint: you may want to get mum to order the next size up online for when school reopens). School shoes aside, long periods of learning from home over the last two years was awful for us. And yet, I wouldn’t be in this fortunate place without the survival skills and digital communities that formed during this time.

Know that your dreams will come true, like travel to Japan, although not in the way we once thought. During the bushfires that are due to strike in the mid 2020s, you will be doing an internship in Tokyo with an Edutech simulation company rather than spending the Australian summer working in the Japanese ski fields as you’re currently hoping to do.

The ski season becomes much shorter and there is no snow at Christmas anymore. I'll not sugar-coat it. While in Japan you might experience an unexpected bout of post-traumatic stress, losing yourself as you scour news sources for signs of the next pandemic. You were in Japan's snowy mountains when the one you are in started after-all. Just remember you can always take a year off when you need it, when you no longer need to be on heightened threat alert. Be kind to yourself. Trust in yourself.

I'm so proud of you-me for leaning into our dissatisfaction with digital boundaries – a fascination and dissatisfaction that grew during extended periods of lockdown and remote learning in 2020-21. When those 3am moments of doubt gnaw away at your courage, take heart in knowing you can change the world for better, in small ways, by making a place for other people like you. Eventually you will find yourself with the wherewithal to turn your fears and frustrations into the creation of a simulation of a world of hope, where kids can go and share/learn/play/experiment together without being inhibited by undue control and anxieties of adults or commercial interests who want to exploit kids' work for money. My pride in our work is the way we enfolded our digital and analogue lives through novel use of mobile, natural and sentient technologies.

Forgive me for a couple more spoilers. When you hear a call to adventure, you are right to jump at the chance to break down systemic problems in your chosen field.

One day, well, many days in the future before now, you are going to make some tough decisions: stay true to your values, they will steer you through troubled times. When it's time to put down roots, you and your adopted community will become both home and simulation hub. We are providing meaningful livelihoods for young people who want to stay in the regional towns of Victoria – or return there. This is where I am writing to you from. I want to tell you to never give up. Dark times need bright sparks like you. The world needs you.

With love from 2040's Sandy

Sandy's letter from the 2040s to their teenaged self is augmented by further communications which, like the letter, hint at a future to come; a future whereby some kind of reckoning has occurred, leading to some kind of shift in higher education—although the degree of systemic change beyond Sandy and their field is not so clear. After all, systems have a surprising capacity to resist or nullify change and revert to singing the same old song even after a period of immense upheaval. Yet the confluence of crises, of systemic racism, casualised workforces, bushfires and pandemic that set the scene for the 2020s, when a new generation of Sandys are coming of age, may indeed create the conditions for higher education to be unmade and/or remade differently. We know these crises are not unrelated; they are symptomatic of the broader climate crisis, neoliberal socio-political structures and growing inequality in our local and global societies—with these being enmeshed in a struggle for planetary survival, brought about by hundreds of years of colonisation, conquest and unabated human exceptionalism.

Higher education's ongoing complicity in this period of crisis-upon-crisis becomes our event horizon, the impossible situation which, through a speculative inquiry practised with and through SF, we hope to bring about the possibility of a different (better) future for today's Sandys. This is a future that Sandy not only shapes but also a future which creates the conditions for a generation to address systemic injustices. The following timeline (Fig. 13.1), composed from careful analysis of Sandy's communications, traces key events in Sandy's life experiences between

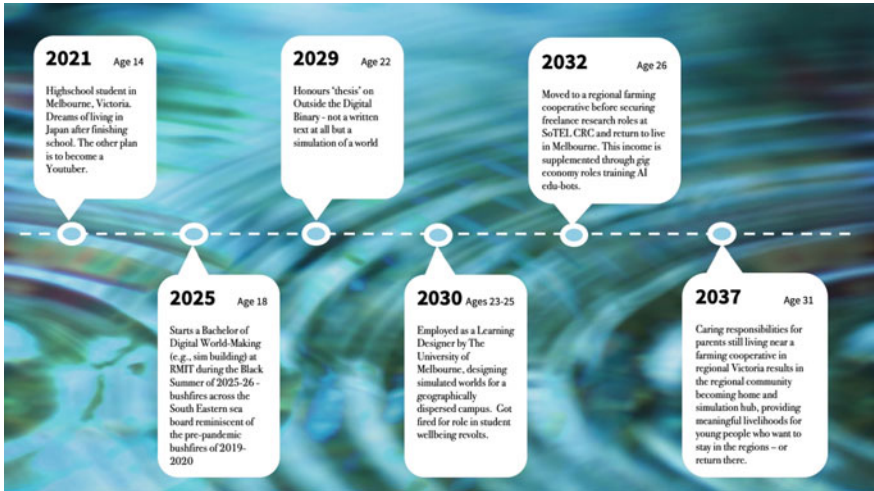


Fig. 13.1 Sandy’s significant life experiences 2021–2041

2021 and 2041, as the planet and its inhabitants—human and otherwise—respond to what scientists are already referring to as the 6th mass extinction.

13.1.1 *What If ... A Speculation on What Higher Education Might Be, Twenty Years from Now*

Somewhere between the local specificity of a past Melbourne where Sandy transitioned from child to young adult during lockdowns of 2020–21 and the future of 2041, this chapter again asks ... What if? ... The what-if question becomes a refrain: What if the grieving work being done by the teenagers of 2021 changes university education systems in the future? What if the teens who lived through lockdowns and protests, family ill-health and bushfire-driven displacement, teens like Sandy, were running higher education in the future? What is it that the future Sandy of 2041 (at age 34 years) is telling the present Sandy of 2021 (14 years), through their letter and reflections on the timeline of events that punctuate their life and higher education? What are the messages being related in further snippets from Sandy’s communications interspersed throughout this chapter? What if the current tensions in higher education were to escalate, causing a revolution? Then, what would such a revolution change? What should change? As a group of academics pondering these issues during lockdown in 2020–21, we engage with future Sandy’s dialogue with their past self to speculate on how universities and university education might be reconceptualised.

We confront some difficult issues by asking challenging questions. Shocked into realities driven by joint catalysts of the pandemic and climate change, we are in the

midst of a wholesale shift in our teaching–learning orientations across diverse areas of a graduate school of education. This work (as faculty) is at a “sandstone university” in Melbourne, Victoria that had prided itself on quality on-campus learning experiences and physical attendance until this moment in time. We use this chapter as a speculative, dialogic provocation towards our-Sandy’s-children-of-the-present-future’s teaching and learning in higher education. Together with Sandy, we take up some of these issues, offer responses to questions asked and seek to dig more deeply through further questioning. This deep dive into various lines of questioning is guided in part by Barad’s (2014) concept of diffraction (a term introduced by Donna Haraway in 1992). Engaging diffractive thinking we speculate further, with our thinking being nourished by the Baradian figuration of earthworms. Sandy’s life lessons, to/from their future self, open further ruminations which aerate our thinking around the implications for next practices in higher education. This then reveals a questioning and shifting of boundaries that, in an iterative move, turn into provocations once more. We map how these provocations become a comment on various issues raised in this book, provoked by Sandy’s revelations regarding the changes they have seen in the 20 years since their time-capsule-esque letter (and accompanying communications) written to their 14-year-old self in 2021. Finally, we leave you, the reader, with a codetta to ruminate upon. This tail end of the chapter is comprised of a short segment of speculative fiction written at the very beginning of this writing collaboration as we were experimenting with how to weave speculative fabulation into our inquiry.

13.2 What Will Become of the University?

In 2041, what might the notion of the university do? Does it lose its power when reduced to a mere fragment of an idea, shattered by the forces of commercialisation, with an industrialised workforce at odds with oblivious corporate management? Is the future Readings (1997) foresaw in his projections of the university in ruins; a morally corrupt, market-driven institution, still relevant—or was it ever? Driven by this question, Dolgon (1998, p. 212) argues for a focus “on the people whose critical intellectual inquiry might inspire critical political engagements and create visions of what justice and reason might mean.” However, the outpourings in Sandy’s letter suggest a future that is increasingly contingent and supercomplex (Barnett, 2000, p. 415), more unpredictable and less sure. Putting aside the concerns for justice, equity and fairness alluded to by Dolgon (1998), then, necessitates multiple readings of the present and near future (as theorised through Barad’s diffractions, explained below; Barad, 2014). Perhaps, it means moving beyond a postmodern dismantling of present Grand Narratives about *the* university and putting aside the solely human focus of the contemporary university (Tesar et al., 2021).

Setting out to question what future practices could or should be prioritised in higher education through the coming twenty years, we ruminate in twilight zones

and liminal spaces (Mulcahy, 2017)¹ at the threshold of the “post university.” We ask, what do the sites, spaces and entities of higher education become, if universities are seen as twilight zones? What tensions do the liminalities in university spaces highlight, in between commitments to wellbeing, social justice, worldly concerns and marketised policy agendas, profit-driven university politics and research imperatives (Nørgård & Bengtsen, 2021)? Indeed, what activisms could be precipitated by the precarities, risks and catastrophes that are on the horizon (Croucher & Locke, 2020)?

Sandy’s letter is both suggestive of Sandy’s place in the future university and their position outside of its current boundaries—moving from the merely human to the other-than-human, technological and so-called artificial assemblages at play in conceptualising the entanglements of universities and university teaching and learning to come. We now move to exploring several perspectives that influence perceptions of the future of the university, and as we do so, we will be helped by several more notes from future Sandy.

13.2.1 *Speculative Intra-actions and Diffractions*

Speculating on the future of the university demands that we delve into its doings and purposes. Taking up a diffractive approach to our speculating in a type of speculative diffraction creates an opportunity to look at the notion of the university through the present-future twilight zone that is made possible by bringing Sandy’s communication together with our thinking as collaborators and the thinking of the other contributors to this book. According to Barad, diffraction is a return, in thinking, that involves “turning over and over again” (Barad, 2014, p. 168). It prompts us to take our assumed knowledge of the university and associated teaching–learning practices then turn our knowing and practice over and over and over again to produce multiplicities of knowing. In other words, it pushes us to see what we know in a different light, to speculate on what the university multiple² might do and become.

Barad (2014) speaks of entangled ways of becoming with the world, through intra-actions between things, beings and ideas. To create the conditions for this way of knowing to take place, Ceder (2019) explains, texts (and things, beings and ideas) can be diffracted or “read” through each other. The aim is not to know the exact detail

¹ Following Mulcahy (2017, p. 109, original emphasis), we “take spaces in-between to be liminal ones and advance an articulation of them as sociomaterial assemblages or webs of relations between people, spaces and things.” In occupying spaces in-between or transitional landscapes, we are actively engaging boundary work. In our case, we are doing boundary work at both the temporal threshold of present-future and the spatial threshold of the university itself. It is a transitory place, synonymous with movement or process and, as Mulcahy further argues, is implicated in effecting both empowering and restrictive social change depending on how the concept is deployed and the micro-political forces that are subsequently activated.

² Here, we leverage off Mol’s (2002) concept of the body multiple, understanding the university much like the bodies living with atherosclerosis who were involved in her germinal ethnography of disease.

of every conceptualisation of the university, but to know that “close attention is paid to the intra-actions and to the possibilities for new ideas to evolve” (Ceder, 2019, p. 54). Such an openness to potential emphasises the relationality of the concept, “it is not the individual parts that are of interest, but the relational result” (Ceder, 2019, p. 54). Relationalities of conceptions of the university emerge in the “iteratively intra-acting, re-diffracting, diffracting anew” (Barad, 2014, p. 168). Our diffractive turning and returning of, and to, a future university is thus:

... a multiplicity of processes, such as the kinds earthworms revel in while helping to make compost or otherwise being busy at work and at play: turning the soil over and over – ingesting and excreting it, tunnelling through it, burrowing, all means of aerating the soil, allowing oxygen in, opening it up and breathing new life into it. (Barad, 2014, p. 168)

Our turning and returning of, and to, a future university similarly involves breathing new life into it, opening up to new thought, ideas and expectations, as further provoked throughout this book. Diffraction as a process prompts questions about the multiplicities that emerge as we turn and return conceptions of the university. We ask, in what ways might we aerate, tunnel through and burrow into the notion of the university by diffracting it through texts and things, beings and ideas? A practice of what we have come to think of as *speculative diffraction* helps to re-cast the forces that pulse through the higher education assemblage, enabling us to forecast how technology, financial power, the struggle for earthly survival, dis/satisfaction and the desire for collective wellbeing across other-than-human realms might interact as a cause for revolt and in the aftermath of disruption. But, first, we return to a communication from Sandy of 2041 to Sandy of 2021:

Sandy’s Experience of The Pandemic Years

During those mask-wearing, lockdown-re-entering years, me-you are dreaming of living in Japan, diligently studying Japanese in the hope of pursuing this dream to work in the mountains during the winter snow season. I think it’s better that you know now ... that is an impossibility as your winters are already threatened.

You were obsessed with future work as a Youtuber but it was so hard to communicate this to parents who were consumed with regulating what they still quaintly refer to as ‘screen time’ (even now!). As lockdowns dragged on, this obsession could be productive: you have what it takes to make things in creative collaborations with friends, working together over those life-saving gamer adopted communication and collaboration platforms. In retrospect, it took far longer for adults to adapt to the shift in modes of connection as they clung to the analysis of stuffy books missing out on the creative exploration of new literacies and technologies that became increasingly possible during that lurch to online during the pandemic of 2020-21.

Know that you are correct, sim building is so much more than so-called ‘screen time’! When the time is right, check out the Bachelor of Digital World-Making at RMIT University, and don’t let the lack of a university entrance score (or an unwillingness to engage in learning in ‘adult-acceptable’ video-conferences or email) hold you back. Keep exhibiting your interests in online world-making platforms such as MineCraft, Roblox and those games accessed through Steam and streamed to a global community through Twitch. That e-portfolio will be your key to entering university and the small amount of money you glean from your creative labour on the platforms will be more than useful even if you are being exploited.

13.3 Diffracting Through the Pandemic Years

Sandy's comments back to their past self may create some windows into educational needs of the future. How is the pandemic changing what the universities of the future can or should do? Taking mask wearing as a metaphor for many current practices, does mask wearing become part of what we do in the future, still a necessary attire, or, as Sandy appears to indicate, will masks, like the pandemic, become relegated to the past and superseded with new matters of concern? The impacts of the pandemic on how we interact socially, materially and pedagogically (with the techno-sociality involved) offer us fresh elements in the diffractive assemblage with a possible artificial intelligent (AI) and natural language processing sociality, with each element of an assemblage (e.g. AI of a future-university-assemblage) having a "certain vital force" (Bennett, 2010, p. 54).

As Sandy has already turned over the notion of the university before us, in readiness for next season's sense-making, what can be learnt from turning and returning, just as the worms, to dig deeper? What do Baradian worms offer by digging into the adaptations made by student activists of the near future, for theorising and aerating, recasting and fertilising, tunnelling through and burrowing into (what were the) monolithic, "world class" sandstone universities (Arndt et al., 2020) of the pre-pandemic years?

Throughout the history of universities, there has been value placed on physical presence in grand buildings and grounds; those sandstone, Ivy League, Redbrick ways in which elite universities describe themselves. Was this physicality productive of a vital force that made them "world class?" Universities were once considered a place for knowledge creation, inquiry, a quest for "truth." They were the sustenance of national culture (Barnett & Peters, 2018), their physical prominence in important towns reinforcing their elitism and status. If connection with a physical university is a diminishing part of the student and educator experience, what kind of new connections will emerge? Sandy's educational experience after a decade of rolling closures of international borders and campuses due to the pandemic meant that many students completed their degrees without regular onsite attendance at university. Yet placemaking and making a place for learning remained important—they were just performed differently from before-times leading to the collapse of once separate spheres of home, university, work, and leisure.

Our speculation suggests that technology advances and ongoing changes to personal expectations about place lead to online and/or virtual spaces becoming primary points of connection and belonging, into which the physical (analogue) is enfolded (or turned). Learning as Scholarship of Teaching and Learning (SoTL) shifted into mentorships with organic and digital beings, reflecting the rapidly changing nature of teaching and research. The openings created by a speculative decline of sandstone places (a decolonisation of sorts?) make space for (re)turning to Indigenous knowledge and ways of knowing. If we take the conception of the university as a constant intra-active becoming, we, earthworms and other things, beings and ideas, are already messily entangled with the visible and invisible, things, matters,

humans, transhumans and non-humans, virtual research connection spaces (ViRCS) and physical learning spaces. The university and its/our/their future become entangled then, “in the making of new temporalities (spacetime-matterings), new diffraction patterns” (Barad, 2014, p. 168) as we turn them—the wisdom of elders, the university and future/s—over and over, ingesting and excreting elements, breathing new life into the assemblage, realising, as Sandy did, the complexities bubbling under the surface.

Sandy’s career in higher education

Eventually you embarked on your own higher education career, accepting employment at the University of Melbourne. Your job was to design teaching and learning in simulated worlds for a now geographically dispersed campus. The university offered a well-resourced digital infrastructure and a generative community of data creatives, AI experts and online practitioners to work with and through—right up your alley. However, it soon became obvious to you that an undercurrent of malcontent had been simmering for the decade following the pandemic, as university leadership clung to a past of colonialist prestige and privilege, insisting that all would return to the way things were, wilfully ignoring all the evidence to the contrary.

Predominantly, Western-centric notions of wellbeing, wellness and trauma pose increasing challenges in present-future universities—as is discussed further in “Designing Education for Wellbeing and Connection in a COVID Impacted World” chapter in this book. Without a corresponding shift in expectations, combined with social isolation and family trauma the ingestion and excretion occurring amongst worm-like castings, recastings and reconfigurations of ideas about the university might contribute to a further decline in student satisfaction, affected in similar ways to Sandy’s shifts evident throughout their letters. Further diffractions of the university occur in present-future/natureculture/spacetime-matterings. One such speculative turning is at the intersection of funding and dis/satisfaction, as students lose patience and join a Wellbeing Revolt, a rejection of values and systems that are out of step with a changing world. Revolutionary Indigenous leadership emerges, driven towards a dream of an education system where Indigenous ways of knowing, being and doing are just the way things are done (Hogarth, 2020), drawing in idealistic followers like Sandy.

Sandy and the Wellbeing revolts of the 2030s

As your career progresses in the education sector, you may find yourself affected by the student revolts happening at the time. Student dis/satisfaction erupts in a wellbeing revolt which some students helped facilitate by enabling non-sanctioned communications in the simulated worlds hosted by the university. Suspicion of a revolutionary role and high-profile well-being activism does not secure a renewal of a contract at an educational institution. This is not the end of your career in education although it seems so at the time. You move to a regional farming cooperatives where your/our family has made a home and contemplate next steps. Once the dust settles, there are freelance research roles at SoTL ViRCS that can take you back into the city of Melbourne, even if this income needs to be supplemented through gig economy roles training AI edu-bots. Through this work you keep a side-hustle alive, creating intelligent simulations whereby human children and young people are shaped by the simulation they enter. Your inspiration from Sal Khan from Khan Academy will help you create intelligent digital learning schematics which educate communities of young people who choose a simulated schooling pathway. This is a risky undertaking because

there is always a possibility that the intelligent sims may over-ride their programming in unpredictable (possibly dangerous) ways. Yet, in time, your intelligent sims become fully credentialed as a school system.

13.3.1 Diffracting Through the Wellbeing Revolts

Once again, Sandy's words provoke our questioning—although, wisely, future Sandy decides to keep some information to themselves, who amongst us needs to know of revolution leadership and infamy if that is in our future? What if there will be a shift in focus, during the 2030s, to wellness? What if higher education assemblages could be expressed through a collective concern for wellbeing? The revolutionaries in Sandy's lifetime were part of the Alpha-pandemic generation, those born between 2010 and 2024. Perhaps, Sandy shows us there should be a greater focus on activism? Nørgård and Bengtsen (2021) affirm this call, as they too challenge the status quo of contemporary higher education, in the face of contemporary and future climate, political and societal catastrophes such as those reflected upon in Sandy's letter. If educators will not, or cannot, enact a pedagogy of care (see *Designing Education for Wellbeing and Connection in a COVID Impacted World and Examining Mental health and Wellbeing Policies in Australian Universities*) and institute affirming ethics (Healy & Mulcahy, 2021), particularly as a result of a health crisis, student-led systemic change should demand it. It is an intra-active diffractive pattern, occurring and recurring, in a relational and ongoing returning, over time, over, under, through, in and between virtual and physical spaces, with the ripples then amplified over social media. Such ripples would spread out across the entire research, learning and assessment environment.

13.3.2 Diffracting Through Research, Learning and Assessment

As post-pandemic economies are being recalibrated in an increasingly populist political climate, research funding in arts, humanities and social sciences is shrinking (see Chap. 10). Following Sandy's timeline at the beginning of this chapter, their experience of moving out of their chosen field in the late 2020s is the expected result of a trend of increasing problems with equity and capacity building. When we look at the productive leadership and potentialities of power shifts articulated in *Traversing Learning and Leading Collaboration* chapter, we speculate that universities will devolve into collectives of small hyperlocal communities. We imagine a future for these fragmented communities to coalesce into ViRCS incubated hyperlocal, local, national, international and interdisciplinary collaborations that acknowledge the significance and contribution of Indigenous knowledges. Academics might connect through these ViRCS, as well as through traditional collegial networks, with

colleagues, students, practitioners and institutions. There will be academics who survive the disruption by shifting to research-active teaching. For survivor Sandy, this meant shifting their locus out of the once prestigious sandstone institutions, at a possible future time, when generative entanglements between the pedagogical (teaching) and methodological (research) become more widely acknowledged. The growing split between teaching and research (which historically elevated research above teaching) of the 2020s led to an unexpected shrinkage of research capacity and metho-pedagogical skill over time. In response, a new metho-pedagogical model emerged of students as co-designers of research-and-learning-and-assessment.

The radical change in this model can be understood through the lens of past practices of assessment, with their emphasis on accountability over learning as reconceptualised in *Reconceptualising Assessment in Initial Teacher Education from a Relational Lens* chapter. In the future-past, learners were discouraged from collaborative learning through draconian measures of digital and physical surveillance. Learners and educators from culturally and economically diverse backgrounds were burdened with monologic assessments designed by individuals from powerful groups. This presented a pressing need and frustrating challenge for increasing diversity in the university sector at a time of contraction in diversity of international/local students on physical campuses (as discussed in *Refocusing the Narrative on the International Higher Education Policy*). These needs and challenges, diffracted through earthwormly burrowings, lead to speculative, temporal reimagining of teaching-learning and assessment. Intra-actions and natureculture entanglements, with the complexities of human and other-than-human diversities, illustrate the folding and re-folding over of these diffractive assessment and learning patterns.

13.3.3 *Diffracting Through Technology*

Sandy's letters affirm how educational technologies are accelerating changes to teaching and learning during the pandemic years (some of these are further outlined in *The Rapidly Changing Teaching and Research Landscape: The Future of SoTL and the Teaching-Research Nexus* Chapter). The forces that drive technology development in education gain impetus in the hunt for the multi-billion-dollar market share in higher education. Young Sandy's explorations in virtual spaces leave them well-placed to benefit from a heavy investment in Mixed Reality³ from companies like Apple (2021).

However, despite our speculations, we know educational change can be slow and reluctant. As Gurr (in press) notes, "Education broadly, and schools in particular, are aspects of society that change relatively slowly; education has been described as a 'legacy sector, where it takes years—often generations—to bring about large-scale changes of methods, practices and operations'" (CB Insights, 2020, p. 6). So, what if students lose patience? Could this result in revolt, in rejection of systems of education

³ A blend of physical, augmented and virtual worlds.

and assessment that no longer serve new generations of learners? Would educators be empowered to enact and adapt to systemic change? Would they make the shift to deliver tailored programmes through partnerships with learners scattered across the globe? These are the disruptive overturnings to the adoption of policies and practices such as those recommended in *Global Distribution of Students in Higher Education*.

Rebelling against our present adult generation’s “quaintness,” Sandy’s notion of student-led wellbeing-revolts lead to wholesale digital revolution and to the unfathomable disbelief of some leaders in higher education. This digital revolution is (was), somewhat paradoxically, underpinned by the 2020s’ adoption of personalisation through datafication which is (was) in turn driven by the bigger institutions’ early days of learning analytics. The speculated, still to emerge field of Learning Natures is a means to enter the uncharted territory of ethical datafication of human and other-than-human activities and a response to arguments related to the “ownership” of data produced by and involved in AI feedback loops. Perhaps, in a turn and return of the concept of the university, the traditional universities will become undone as future Sandy has seen in their experiences. Perhaps, the realisation of AI-enabled personalisation of learning experience could be delivered at low individual cost, with high flexibility, in an optimistic diffraction of the potential of AI?

13.4 The Flourishing of Universities

Massive open online courses (MOOCs) offer a lens through which the university is, once more, turned diffractively, aerated, returned, again and again. Projecting forward to university education in future, might MOOCs as discussed in the *Global Distribution of Students in Higher Education* chapter, lead us to something akin to Minocha’s (2021) recent provocation? Citing Indian philosopher Jiddu Krishnamurti, Minocha (2021) propels us to think of a state of university education where teachers and learners are not only removed from each other, but perhaps removed from teaching and learning as we know it. What if ...

... [t]here is no teacher, no pupil; there is no leader; there is no guru; there is no Master, no Saviour. You, yourself, are the teacher and the pupil; you are the Master; you are the guru; you are the leader; you are everything. (Minocha, 2021)

What would SoTL look like when Sandy and their contemporaries, and each of us, simultaneously becomes the teacher, the pupil, the master, and the guru? What would it be when students and teachers are partners—always in care-full relation? Indeed, what do Sandy’s retrospective projections offer us about leaders, teachers, university lecturers and their own sense of “outsider-ness.” Could SoTL as outlined in *The Rapidly Changing Teaching and Research Landscape: The Future of SoTL and the Teaching-Research Nexus*, for instance, shift even further to centre on the learners’ inquiry and reflection on their own learning practice?

No revolution can claim universal benefit. Virtual spaces might provide rich, targeted, immersive learning experiences, with AI learning guides, but what would

they mean for physical connection to place and people? When students connect in virtual spaces for much of their learning, how are their feet connected to country, and their bodies a conduit for the knowledges of the lands on which they learnt and the wisdom of their elders? Both physical and virtual campuses can be vibrant, local and communal, extending into the surrounding communities and country as they draw people and knowledges in from these communities and local landscapes in diverse ways. Perhaps, there is a bright future where learning that extends and flourishes in virtual spaces is accessible to participants in physical learning, researching and working spaces? This speculated future sees the other side of the disruption of the early 2020s with research flourishing, with industry building university partnerships to replace, complement or parallel their own efforts. It sees students drawn from across the world, just as past decades saw many Australians moving into cities or abroad. In this future, studying at university away from home once again becomes a rite of passage for the young. Diffracting their memories and university experiences, Sandy wonders if perhaps these potentialities are determined by how well universities understand and respond to the changes afoot. When we look to the universities of 2041, what can be preserved and what should be changed?

13.5 Concluding Thoughts: The Future of Universities

Sandy's letter questions the kind of "excellence" that remains dominant for us as academics in the 2020s, and what it means for academia in the future. It takes us to the core of questioning and re-questioning, the ethics, boundaries, depths and relationalities, of world, class and university, and what these offer (Arndt et al., 2020). Perhaps it is when diverse turnings become the norm, when we recognise the human-other-than-human, natureculture assemblages that live, act and engage in ways that may be knowable, and may not be, that new ways of "doing higher education" emerge? This chapter has questioned what has been normalised, by turning and returning, through (hi)stories and intra-actions, by aerating, opening up, oxygenating pasts and presents to speculate on possible and impossible futures of the university.

So, what if we still ask more? As we move to the University of the Future, what is it going to look and feel like? As future Sandy reassures current Sandy of their capacity to deal with and move through adversity, drawing on an endurance that is forming and will continue to be re-formed over the years, an inner trust is called forth. As Sandy writes in a final comment to their future-past:

Things started out OK for you in higher education, with a smooth start to the year at RMIT. Then the terrible Black Summer of 2026-27 happened. Bushfires across the Southeastern seaboard ravaged multiple communities and livelihoods. It was reminiscent of the bushfires of 2019-2020 that ushered in the pandemic in Australia. Oddly enough you were in Japan on both occasions.

Our diffractive speculations have illuminated entangled forces of technology, the rise of AI, physical and financial power and dominance and a struggle for earthly

survival and wellbeing. Whilst such relationalities may be turned on their heads—much like the earth burrowed, overturned and excreted by the earthworms to “keep idealism alive” (Dunne & Raby, 2013). Positioning the working life of Sandy as our synecdoche, we see Sandy living in an alternate reality that critiques our own present where health and wellbeing are a personal challenge to balance with work and study in the pandemic.

The narrative device of a revolt has drawn out some of the tensions to an extreme but possible denouement, to see a path through the ruins of sandstone universities. This path is made clearer thanks to the breaking and remaking of meaning, as with the work of worms underground. This unsettles the notion of “next practices” with future imaginaries for thought, activisms, mini-revolts, redefining as increasingly uncertain the entanglement of higher education power, beings, places, learning and research. It has eschewed the cliches of ubiquitous adverts and blue-tinted information displays, for an organic vision of the future where we draw on the wisdom of elders, learners and landscape to heal and remake our world after the disruption, with destructive forces of individual responsibility made visible obscuring systemic failures. Turning and returning through histories, presents and futures, Sandy’s understandings and experiences of teaching, learning and being the Master, have disrupted the very nature and purpose of university spaces. Sandy’s future unknown, where universities perhaps shrink, and perhaps flourish, calls for a final rethinking, of the notion of SoTL itself.

Through many changes and a few challenges, Sandy is sited in a liminal space, somewhere between surviving and thriving as an academic in an alternate 2041. As illustrated in Fig. 13.2, this chapter and this book wants us to consider the future, so we have a better chance of shaping preferred futures. If, taking lessons from *Designing Education for Wellbeing and Connection in a COVID Impacted World*, we purposefully design education for wellbeing and connection, universities could reshape our futures to emphasise care and concern for the people in our universities, giving Sandy the time, space and permission to develop meaningful connections with students and colleagues. If the pandemic is a K-T extinction event, the future of education needs greater importance for SoTL articulated in *The Rapidly Changing Teaching and Research Landscape: The Future of SoTL and the Teaching-Research Nexus* and throughout the book. As *Transversing Learning and Leading Collaboration: Stepping Towards New Power Values During Turbulent and In-between Times* spells out, and we step towards new power values, leadership at our university could become more fluid, more collaborative, able to reconfigure as needed. The challenges and opportunities of reconceptualising assessment, discussed in the *Reconceptualising Assessment in Initial Teacher Education from a Rational Lens* chapter, could place students as co-constructors and co-designers of an educational experience that meets their diverse needs. Indeed, as the teaching profession changes as we have seen in *The Teaching Profession: Where to From Here?* the relationships between students and lectures needs fundamental change. Our universities need even wider change as discussed in *Reaching for Reconciliation in Digital Spaces*, change that reconciles and embeds Indigenous ways of knowing alongside a shift in power relationships between ancient and newer cultures. At the same time, technological and societal

changes that ripple through higher education will refocus on accessibility for local and remote students globally, as seen in *Global Distribution of Students in Higher Education*, will impact on the choices available to students in higher education. At the same time, government responses and funding changes spelled out in *Government Responses to the Pandemic and Their Effects on Universities* may mean more limited choices available to young Sandy as they are about to begin further studies. A possible impact of changes to international higher education policy, discussed in *Refocusing the Narrative on the International Higher Education Policy*, may place limits on the richness of the socio-cultural experience of students in our institutions. Our hope for young Sandy is for a future that systematically supports student mental health and wellbeing through significant and sustainable policy changes, as recommended in *Examining Mental Health and Wellbeing Policies in Australian Universities*, rather than leaving behind the casualties of a revolution. Change is coming. We can see the ripples already. The choices we make now will shape the future of higher education for decades to come.

Codetta Å

After writing the letter, Sandy flicked on the Visicomm to start recording this week's class in preparation for their student Socrabots, models from 38-9 to 40-2. Later in the day, the bots gather and turn their processors towards Sandy's face, processing their questions, their facial expression and body signals into their neural nets as Sandy looks around the classcell with satisfaction. The bots start their Master of Teaching primed with subject matter and human signal reading but guiding the learning of young humans demands an expansion of the bots' empathy modules and creativity incubation skills to facilitate quality learning while supporting student health and

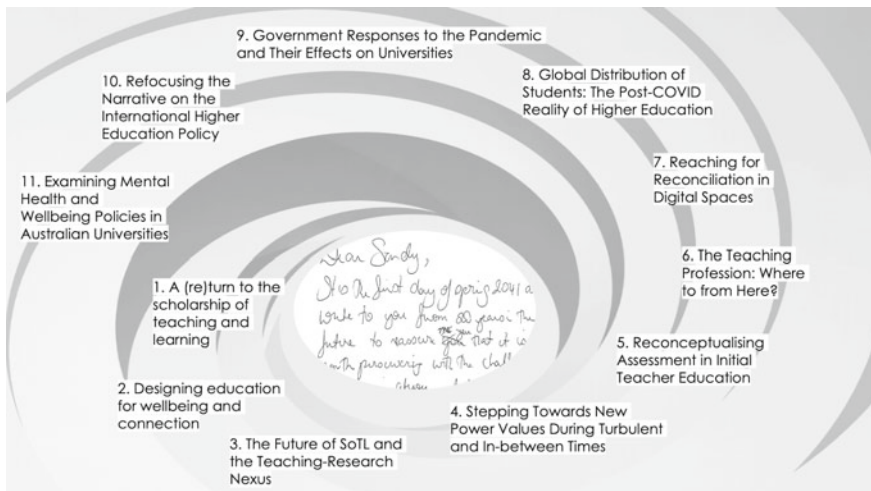


Fig. 13.2 Sandy's letter at the nexus of a return to the scholarship of teaching and learning in a pandemic

wellbeing. Sandy is passionate about lifting standards of education and care through their work with their employer ViRC. Much of the teacher Socrabot's role these days is concerned with place making and connecting to country. This has shown to improve student wellbeing outcomes in schools and, across our planetary home, has begun to reverse the damage inflicted by previous generations. So many students have been displaced again and again in their short lives; they need support to anchor their knowledges and knowing in the first people's knowledge of place and placestories. Sandy is guiding these bots to create safe, knowledge rich classrooms for students to progress through the basics of reading, coding, drawing, and storytelling that will sustain them through the long journey all humans born into the 2040s must take...

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Sonja Arndt is a Senior Lecturer, Early Childhood Education at the Melbourne Graduate School of Education, The University of Melbourne. Sonja's scholarship intersects feminist poststructuralist philosophies of human and more-than-human Otherness, and early childhood education. She has a particular interest in disrupting universalising superficialities in the often-neglected area of teachers' cultural/racial Otherness. Sonja publishes widely in these areas and collaborates with extensive national and international networks. Sonja leads the early childhood placements teams in the Master of Teaching for early childhood education at the University of Melbourne, is the Vice President of the Philosophy of Education Society of Australasia and is actively involved in a range of editorial projects, including as founding co-editor of the book series: *Children: Global posthumanist perspectives and materialist theories*.

Amanda Belton is a Data Scientist working with education and arts researchers to visualise data. She works with playful approaches and empathetic design principles to communicate research data visually, into the digital realm. Her work uses animation and mixed reality in accessible information designs. Amanda works in the space between science and art. Her practice is built on agile, iterative data science practices, powered by computational approaches for digital humanities. Amanda's work embodies strong belief in the power of art to communicate those truths that can change our lives.

Thomas Cochrane is an Associate Professor, Technology Enhanced Learning in Higher Education, in the Melbourne Centre for the Study of Higher education, University of Melbourne. Thomas has expertise in qualitative research in technology-enhanced learning, with a focus upon action research, and design-based research methodologies. His specialisations include mobile learning (Cochrane, 2014), designing mixed reality learning environments (Cochrane, 2016), heutagogy (self-determined learning) (Narayan et al., 2019), communities of practice (Cochrane & Narayan, 2016), and the scholarship of technology enhanced learning (Cochrane et al., 2018). He is also one of the first Senior Certified members of the Association for Learning Technology (SCMALT).

Sarah Healy is a Melbourne Postdoctoral Research Fellow at the Melbourne Graduate School of Education. Sarah works at the intersection of studio pedagogies, affect theory, digital methods and the posthumanities. A focus on practice is at the heart of Sarah's research and teaching endeavours, as is a critical and creative approach to 'doing da(r)ta' in a more-than-human world.

David Gurr is a Professor in Educational Leadership within the Melbourne Graduate School of Education at the University of Melbourne. He is a founding member of the International Successful School Principalship Project, and the International School Leadership Development Network. David has extensive international publications and conference presentations in an academic career of over 25 years. David has been the Vice-president of the Australian Council for Educational Leaders and received its highest honour, the Gold Medal in 2014. He is a member of executive of the Commonwealth Council for Educational Administration and Management, and is

editor of the council's journal, *International Studies in Educational Administration*. He is a senior associate editor of the *Journal of Educational Administration* and co-editor of the IAP book series *International Research on School Leadership*.

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