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# **RESEARCH ARTICLE**

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# Methods for dreaming about and reimagining digital education



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# Abstract

Utilising emancipatory approaches to educational technology in higher education allows welcoming creative and artistic modes of inquiry. This article presents two methods, a virtual makerspace and a guided fantasy story that were applied in a project concerned with rewilding higher education pedagogy. It is argued that the methods encouraged curiosity and care to address diversity and inclusion. They afforded mindfulness of individual needs and welcomed explorations of new directions that challenged potential biases (gender, race, disability or professionality). The article illustrates how these two methods may offer a safe space to dream and imagine educational spaces.

**Keywords** Postdigital, Post-pandemic, Makerspace, Guided fantasy, Care ethics, Rewilding

# Introduction

We begin with a brief vignette of a day in a "virtual makerspace".

We finished setting up the virtual world for our project Hacking Innovative Pedagogies, Higher Education Rewilded, or in short as we call it, the HIP project (https:// hip-project.uni-graz.at/de/). Each person in our research group had to create an avatar and try out the virtual world during our weekly research group meeting. If we wanted to rethink and reimagine higher education pedagogy our approach to interacting and thinking together should be *different* in order to help us overcome conventional thinking on how to interact with university students.

One of us observed: When I set up my avatar, I gave it a beard. I always thought that I would probably look quite good with a beard, even though the avatar really does not bear any resemblance with me. I was able to freely choose from a range of options. In the end I chose to wear a Santa hat, maybe because I did not want to appear too serious. We all found a space around our virtual table. When John (pseudonym) arrived, all chairs were gone. John just wanted to stand by the table but suddenly it looked like he was sitting on my lap. I turned my microphone on and said: "Haha John, you are sitting on my lap." He immediately got up and sat down



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in the corner of the room. I regretted saying this because he moved away. We quickly created another chair so John could sit with us.

The virtual makerspace that was piloted above, is one of the two methods we will present in this article that we used to infuse our work with creativity and imagination. Green (2020, p.115) refers to this as "freedom thinking" and describes the need to look for "liberatory methods" to allow "radical imagination".

The reason why we wanted to explore different methods to rethink technology for education is first, to go beyond technology-centric approaches since technology per se as the solution to pedagogical challenges has failed to produce innovative teaching and learning experiences (Winters & Mor, 2008). Second, we wanted to look into the failure of listening to diverse people's teaching and learning needs when it comes to uses of technology. While innovative higher education programmes (i.e., challenge-based, phenomenon-based or problem-based learning which may be utilising creative problem solving) gain from the insights of people with different backgrounds and cultures (Thong, Down & Kocsis, 2023), the same seems to be missing when it comes to rethinking the use of technology in education. Third, we observe the continued failure to offer just and fair access to education. While higher education practitioners continue to be 'wowed' by the promise to achieve educational innovation primarily through new forms of technology, tech 'success' stories most often benefit those who are affluent and have already easier access to education and does little to bring about more justice into education (Reich, 2020). Therefore, we take an interest in emancipatory approaches to the application of educational technology to "move away from technology-centric activities, welcoming artistic or activistic practices and crafts that have not commonly been considered" (Richterich, 2022, p.12).

Therefore, this authors' collective focuses on methods that support research on learning, teaching and educational technology that allow diverse communities to identify, discuss, and/or modify educational technology practices. In this article we will present methods that helped us in our attempt to reimagine digital education. We chose methods that challenged how we interacted with different communities including underrepresented or vulnerable groups in order to challenge who may be perceived to be a knowledge holder in the traditional researcher-participant arrangement. This requires a change of key parameters, however, what they all have in common is an acknowledgement of the expertise of our research participants.

However, we want to point out that we recognize the difference between a participant's and a researcher's needs and wants and that they are not the same. In higher education, the experts we are focusing on including researchers who are also teachers, some of whom are researching teaching others who have an interest in improving teaching, as well as learners who want to become teachers or learners who are interested in improving the conditions for learners, and educational technology experts with a keen interest to explore new facets of utilizing educational technology. These different groups of experts alongside with their individual needs have different agendas and may also be occupying liminal or precarious spaces (Winn, 2010) when they engage with each other on topics to do with higher education pedagogy and justice in education enacted through educational technology (Green, 2020).

We present this article as a conceptual contribution based on empirical examples focused around the following two methods: (1) fantasy storytelling and drawing and (2)

reimagining higher education pedagogy in a virtual world. These methods were used to gain insights into our participants' experiences and knowledge of digital technology in the context of education. The methods were chosen to create the conditions for imagination and co-creation on the basis that imagination is not a distinct form of thinking "but actually integral to all thinking and, as such, is essential for living a meaningful life" (Bleazby, 2012, p.95). The methods are also a response to the postdigital frameworks of thinking we have applied. The postdigital position acknowledges the untangleable entanglement between human and technology or "the state of the digital world" (Savin-Baden, 2021, p.3).

The article will start by explaining why there is a need to reimagine higher education pedagogy before sharing the details of the two methods.

## Reimagining and rewilding technology in higher education

This article focuses on the need to reimagine and rewild technology in higher education. In her lament on the rise of neoliberalism in higher education, Moriarty (2019) finds inspiration in Isabella Tree's (2018) notion of 'rewilding' as a process of restoration and growth and concludes that it needs restorative powers in higher education too, to rethink higher education production driven agendas. "Reimagining and rewilding technology in higher education is a process to rediscover ways that support the complexity of human learning, take note of inequalities generated through human/digital technology relationships, with the overall aim to reduce the negative impacts of often industry driven digital environment building (Bilandzic, 2016).

To achieve reimagination and rewilding, we need approaches that allow us to build on the nested ingenuities in the communities of teachers, students and higher education IT experts (Beskorsa et al., 2023). To reimagine means we need to come up with or simply remember approaches and opportunities that support the experimenting, creating and sharing of digital education solutions. Reimagining centred around playful forms calls on us to consider approaches that are responsive to the teaching and learning of different communities, that are considerate of disciplinary needs, and inclusive of the diversity of learners to offer just access to education (Dillard, 2016). Rewilding affords communal reimagination "through educational events by attending to the sociomateriality of places, beings, objects and affordances of the learning experience as a whole in order to provoke phenomenal moments of defamiliarized encounter with - in a more -than - human world" (Sitka-Sage et al., 2017, p.33).

Rewilding is also a response to the dichotomy of education being both, a cause of unsustainable human activity, while at the same time providing the transformative potential for more sustainable ways of life (Wamsler, 2020). Bowers (2014) cautions that persisting uncritical narratives about the potential gains made through educational technology that keep shaping policy and decision making lack critical perspectives and push a constant rhetoric of progress that is unattainable for individuals. Higher education thus needs to relearn and reimagine digital education with curiosity and care to address diversity and inclusion strategies. It needs to be mindful of the individual needs of teachers and learners and to consider assemblage processes that embrace teaching as happening within a larger and complex system (Rodrigo & Romberger, 2021). Rewilding is also a post-pandemic realization that digital education is far more than delivery of content but a place to support people more holistically (Veletsianos & Houlden, 2020). The way

how we want to achieve rewilding here is by using imagination and fantasy. Suvin (2016) writes that:

Fantasy is – and seems to have historically always been – a literature for "the time of troubles," when central authority is markedly weakened, gangs of official and unofficial brigands abound, and ideological hegemonies totter: millenarian sects and false prophets arise and all of us search for new sacred books, so that in art too individualism gives ground to "additive and composite" creativity. (Suvin, 2016, p.422)

What is suggested here is that fantasy allows people to feel somewhat safe when their trust in existing systems crumbles (Kraatila, 2021). Students, teachers and university administrative staff are at times challenged to talk about contentious topics regarding teaching and learning conditions that might stir up emotions or such exchanges may suffer from bias (Trowell, 2024). It was thus our intention to offer our participants immersive alternative scenarios they could feel safe to 'play'.

# Background to the two empirical examples

In this article we draw on the methods used in the 2022–2025 project Hacking Innovative Pedagogies: Higher Education Rewilded (https://hip-project.uni-graz.at/de/) funded as an Erasmus+cooperation project. The project aims to "rewild" by focusing on just and fair pedagogies and the use of bottom-up approaches. Set in three countries (Austria, Ireland, and Denmark) we established that each University embraces their own culturally-historically nested higher education pedagogy (from a more "classical" university pedagogy, traditionally focused on face-to-face teaching (University of Graz), to recently adopted challenge-based pedagogy (Dublin City University) and a long-established problem-based learning pedagogy (Aalborg University). Aligned with the project aims we had to identify methods that would work in each environment via participantfocused, creative approaches.

We identified two particular methods (described in detail below): a virtual makerspace and a guided fantasy story. The virtual makerspace was conducted with a class of 20 master level teaching degree students from the University of Graz as well as 10 participants who responded to an open call who came from Austria, Estonia, Denmark, Italy, and the Ukraine – totalling 30 participants in all. The 10 participants external to the university were PhD students, IT specialists and University lecturers. The 30 participants reflected diversity based on age, gender, culture, professional background and experience, language (including a deaf person). The 17 participants of the guided fantasy stories were recruited at each University location and represented University students, lecturers and IT experts, again echoing a wider range of diverse backgrounds. Informed consent was collected from all participants after institutional ethical approvals were granted for the research.

Next, we will introduce the method used for the virtual makerspace followed by method of the guided fantasy story.

# Method 1: a virtual world to "hack" pedagogy

The first method described here is the application of a virtual makerspace. It connects to the idea of maker-, hackerspaces or fab-labs that emphasize the notion of 'learning-by-doing' (Richterich, 2022). Those participating and interacting in such spaces receive

a challenge or propose a challenge and come together with the aim to find a solution (often within a set timeframe) (Richterich, 2022). The participants (see details above) received written information about the makerspace and the details of the activity. The makerspace activity was set to take place over a three-week period.

Prior to that, we started our preparations by setting up the virtual makerspace (see Fig. 1) using the SPOT-Virtual Office for Teams software (https://www.spotvirtual.com/en) and exploring it in our own research group (vignette at the start of the article). The virtual makerspace offered degrees of familiarity, in regard to the 'look' of the avatars and the space, which was an important feature so that participants could quickly find their way in the virtual world. However, we soon felt the initial set up of the rooms were too clinical and feedback we received from pilot interviews confirmed what (also confirmed in the feedback from the fantasy stories presented later) we already knew that 'nature' and degrees of openness and flexibility' was something people were longing for in educational settings. So, we adapted the makerspace and set the rooms against the backdrop of a virtual forest to give a stronger sense of openness, added plants and posters of animals and nature inside the space (see fig. 2).

We developed five different challenges, shared them with our participants and asked them to review them and propose, if they wanted, additional challenges. Two new challenges were added, and one existing challenge was adapted. For example, challenge 4 said: Against bias in visual media: Create and design some teaching principles using where possible examples on how to work with visual media while avoiding or addressing bias to do with race and/or gender and/or disability. This challenge had been adapted by participants, since the earlier version did not specifically mention disability.

In this project we wanted to give people the possibility (not obligation) to transform themselves in the virtual world by way of choices in the set up and naming of their avatar. We asked participants not to use their real names and refrain from using video and to only interact as their avatar either synchronously or asynchronously over the three-week duration. To support everyone, we prepared chaptered videos that explained technical details of the virtual world (e.g., how to set up an avatar etc.) and asked participants to



Fig. 1 The first layout of the virtual makerspace



Fig. 2 The virtual makerspace adapted

vote for their preferred challenge. Groups of 3 and 4 were created around challenges that individuals were interested in and provided freedom to come up with novel propositions to those challenges. The research team arranged daily synchronous "office hours" where participants could meet the research team to ask questions. Data collection (based on informed consent) included screen recordings during office hours and the final products of each group. Later, we analysed the products stemming from these activities based on a pedagogical framework we developed as part of this project (reported elsewhere).

Participants in the virtual makerspace then needed to utilize an avatar to meet or move around (see Fig. 1). The use of avatars combined with the possibility to communicate via audio or chat and the exchange of emotions (for instance by using emoticons) should support participants' sense of interaction with each other and bridge the physical with the digital space more quickly. The use of an avatar allows individuals, who may feel otherwise uncomfortable, underrepresented, marginalised or perhaps unwelcomed in 'traditional' makerspaces (Bean et al., 2015), to feel less intimidated. As mentioned earlier, the groups were made up of participants with different backgrounds ranging from students, IT staff, PhD students and university lecturers. Considering university as a space with highly visible hierarchies this could result in uneven and unwanted power relations for group work. The call for better inclusion of students in learning design and co-creation activities is not new and since the pandemic lockdowns more collective approaches that include learning designers and other staff have similarly received more attention (Costello et al., 2023; Prusko & Kilgore, 2023). Considering how to ensure inclusion so that participants could express themselves and their ideas without being judged in such a diverse professional setting became central in this context. The possibility to create an avatar (by choosing how the avatar looks like) and developing a story around this avatar is an important characteristic and adds a dimension of playfulness to this experience (Nardi, 2010). Lisa Nakamura observed that "programming language and Internet connectivity have made it possible for people to interact without putting into play any bodies but the ones they write for themselves" (Nakamura, 2013, p.6). Thus, shaping the avatar's virtual appearance allows participants to reflect either details of their actual self (Nowak & Rauh, 2005), or their made-up self (Messinger et al., 2008) and can support a

feeling of 'presence'. Freeman and Maloney (2021, p.238) describe this also as "selective self-presentation or performance" that allows online participants to "construct, perceive, and experience their digital presentations". However, the creation of an avatar is not an innocent practice, since the makerspace is to be understood in "binary opposition" to the real "world" (Kolko et al., 2000, p.4) but rather as an extension of it and asymmetrical power relations along the lines of gender, race, ability etc. continue in the virtual world. To be able to choose your avatar's skin colour does not liberate from or sensitize to the racism people experience on a daily basis. A similar point can be made with regard to the choice of gender identity. While creating your own avatar invites playfulness with gender and may challenge biologistic conceptions of gender as a fixed, binary category, it may also evoke the notion that gender is something that can simply be stripped on and off at will. Even though gender is a performance, as Butler (1990) has famously pointed out, it is important not to ignore the experiences of discrimination and violence that shape the real bodies of women and marginalized genders. Interestingly, as we found out in an evaluation survey we conducted among the participants in the makerspace, the majority (13 out of the 17) chose a gender identity for their avatar that is in accordance with their gender identity in the offline world. However, there were also notions of posthuman playfulness and humorous imagination that challenged this gender system. For instance, one participant chose a gingerbread person as an avatar and thus challenged not only the binary gender system but also anthropocentric conceptions. The format of the virtual space allowed the individuals to come and go, at times the groups agreed on or anytime. We regularly observed participants just "popping in". The allocated spaces each group had were used to collect and share ideas to address their chosen challenge, it provided permanency and stability while offering brokerage of language barriers and the sharing of resources.

The "Hacking Innovative Pedagogies" project was underpinned by technofeminist theories and care ethics (Noddings, 1984; Tronto, 1993) to address responsibility, attentiveness, vulnerability and safety. Care then had to play a part in the method of reimagination and rewilding. Care was identified as a relational practice that is both cognitive and affective; a pedagogy of care puts listening to the needs of the cared for, dialogue and trust at its center (Noddings, 2012). While questions of emotions and care are more accepted in educational settings with children, they are still rather neglected in higher education and learning. As Noddings (2012, p.776) points out, caring and learning both require making connections and that in turn requires time and some form of continuity of persons and places, which is a challenge in the context of higher education. A pedagogy of care places cooperation over competition and is thus at odds with the individualistic neoliberal paradigm in education. Following Joan Tronto's conception of care, it is also about "creating the conditions [....] to feel safe in the world" (Tronto, 2015, p.4), a notion that we we aimed to transfer to the online world. The research methods had to be mindful of the intention and challenges of a pedagogy of care. Taking care when thinking about technology in education was given even greater impetus by a post-pandemic realisation that technology is neither neutral nor free of bias (Antonsen & Lundestad, 2019) and the rising issue of the well-being of students.

Indeed, a paradox of the pandemic is that while it was one giant act humanity trying to care for itself (Costello et al., 2023) it did not change many existing inequalities and reminded us of the tensions in how and for whom care is conceptualised and enacted.

Indeed, online learning experiences have been reported to be increasingly the root of the problem of students feeling lonely and disconnected and that this required reimagining how to care when learning goes online (Burke & Larmar, 2021). Burke and Larmar (2021) applied four key concepts of Noddings' framework of care (modelling, dialogue, practice, and confirmation) to propose a "pedagogy of care for online teaching" through "a through person-centred online interaction" to cultivate a dynamic of care". (p.611). They conclude also that dialogue between teachers and learners plays a key role in ensuring feelings to be heard, seen and valued and that the act of caring requires practice to reflect on how to care for others.

The makerspace environment as a method, combined with making the key aims of the project explicit was meant to support this process. By asking participants to use avatars in a virtual world environment we hoped at providing participants with modes of empowerment that could support their diverse backgrounds and invite creativity. The products the groups developed included a virtual escape room as a learning space that would more creative and unexpected learning challenges, and guidelines for university teachers to offer inclusive classrooms (i.e. for deaf or blind students) and more.

#### Method 2: using storytelling to dream educational futures

The notion that world does not have to be the way it is and the belief that transformation is possible is core to critical pedagogy. As Freire (2021) emphasizes in his pedagogy of hope, it is important to perceive of the future not as determined and without alternative, but as a problem and invitation to political action. Imagination then, is one of the most powerful sources of resistance to the status quo and thus of critical pedagogy. One format of imagining how the world could be different has been achieved through speculative fiction. Fantasy genres like science fiction and speculative fiction involve that storying is typically set in an alternative universe or world which sets apart from other types of storytelling (Martin & Sneegas, 2020). The 'storyworlds' in speculative fiction are often set within 'contextual rule-sets' (von Stackelberg & McDowell, 2015, p.25-26) and include a play with 'what-if' scenarios. Martin and Sneegas (2020) point out that speculation requires critical analysis and that to understand such imaginaries they need to be viewed through the cultural-political lens they were constructed within. To apply the notion of critical speculation in a method that can be utilised with participants unfamiliar with speculative fiction we decided to utilise a guided fantasy story approach. The method of the fantasy story was proposed by one of the authors to be used to investigate what higher education teachers, students and IT experts wished that technology in education could be like. The guided fantasy method had been used in a different study before when one of the authors was investigating hopes and fears for the future environment with 13-17-year old pupils (Unterbruner & Otrel-Cass, 2010). In the HIP project we adapted the fantasy story method to suit the group of participants (details about the participants see above). In preparation, a quiet spot was found and drawing utensils and A5 papers were prepared for the participants (see fig. 3).

A story was then told (see Table 1) while participants were asked to keep their eyes closed. They had to imagine a future education environment in 20 years' time.

After the story was told, the participants were given a few moments and when they were ready, they were asked to draw a picture. Every participant produced a drawing.

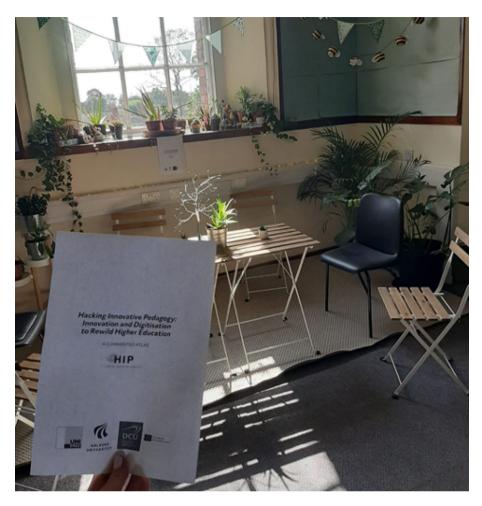


Fig. 3 A cosy space to dream about future education

#### Table 1 Instructions for a guided fantasy story

#### Instructions for a fantasy journey

Sit down and make sure you're comfortable. Close your eyes. Breathe in and out a few times so you feel very calm.

In your fantasy, you will get up now from your seat, and leave the room and then the building. You see a path and you choose to walk down that path. In the distance, you can see a gate and you decide to walk to that gate until you're standing right in front of it. Have a look at it. What is it made of? What color is it? How can you open it? While are you looking at the gate? You realize that behind the gate you can see an education environment 20 years in the future. The future education world behind the gate is 20 years ahead of you. Open the door and walk into this world. Have a look around you. Perhaps you're in the countryside or in the city. Perhaps you meet other people, perhaps you don't. Maybe you can hear something or smell something (two minutes silence)... Now think about coming back, but take your time. Walk back to the gate, turn around and have another look around. Then walk through the gate and close it firmly behind you. If the future education world that you

visited was comfortable and nice, you can come back whenever you like. If the world in 20 is making you uncomfortable this gate will stay closed. Now walk back the same path that you came until you're back in the building and back in the room. When you're ready you can open your eyes and have a stretch. Now draw what you saw then explain your drawing.

After the drawing researchers and participants engaged in a semi-structured conversation where each participant told the others about their vision (through the drawing) and answered questions to elaborate on different aspects of their stories. The sharing of each other's stories created trust and a space of care by listening to the needs and wishes



#### Fig. 4 Drawing and storytelling

of the others and a "space of possibility" (hooks, 1994, p.12) that opened a dialogue between the participants. The ensuing conversations were based on topics on how to work with innovation to do with technology in education, suggestions for change, place of work and the importance of learning communities.

The interactions between the researchers and the participants were multimodal in nature (Kress, 2000), meaning that language, gesture, the drawings served the dialogue and communication of ideas about the nature of technology in education. Kress (2011, p.242) explains that:

There is a potent point to multimodality as such, namely the assertion that 'language' is just one among the resources for making meaning; and that all such resources available in one social group and its cultures at a particular moment ought to be considered as constituting one coherent domain, an integral field of nevertheless distinct resources for making meaning; all equal, potentially, in their capacity to contribute meaning to a complex semiotic entity, a text or text-like entity.

As a project team, we co-designed the fantasy story method together and then the three separate local research teams implemented it in their own institution with minor local adaptations as suitable to the participant mix and location. In Ireland for example we engaged in a shared group drawing following a guided invitation that modified the protocol to include language of rewilding and growth. The ecological metaphors derived from our project conceptual framework also cued participants to their environment as we had convened in "The Treehouse" an inviting but somewhat underused student space which is full of house plants (Fig. 4). Two researchers analyzed the drawings and subsequent exploratory stories created in the interviews drew out key themes. The following excerpt for example illustrates the theme of the potential problematic nature of digital technologies and post-pandemic anxieties and techno-scepticism:

So, my fear is that everything will go so digital that it will be lonely and isolating, and that we will be just stuck at our own desks, learning by ourselves [...]. All that kind of stuff

I really like that we've come back after COVID and that we've, you know, kind of come back but my hope is that [the digital] would be more immersive, more collaborative and that [...] education would help us tackle our real-world issues properly. I couldn't put it in [the picture I drew] properly [but I wanted to show things] balanced so that it's not all pressure, pressure, pressure and stuff like that." - Participant B

This quote was based on the below Fig. 5 and as part of a participant testimony titled "Properly balanced and not all pressure, pressure, pressure".

In the image the fear of digital education is illustrated by empty chairs and silence. The hope by contrast features people, plants, the sun and dialog. This later led us into further dialog about the interplay of connection and presence and the fitting role of the digital and the face-to-face classroom (particularly in light of falling in-class attendances post-pandemic). The interplay of words and imagery was highly generative as a research method and allowed us "to be open to alternative and other representational possibilities [that] better acknowledge and accommodate the representation of academic knowledge in ways beyond words" (Bayne et al., 2020). However, it also offered participants safety to discuss issues of care (and lack thereof) in both the workplaces and learning spaces of higher education. Students shared the pressures they were under, including meeting basic needs such as accessing university laptop rental schemes. The frank, open and not always comfortable nature of the conversations occurred in a window of safe space that the methodology had helped to generate at least for a while.

# Conclusion

What do virtual worlds and fantasy stories as methods used in our project have in common? They are methods that allow participants to reimagine education and feel safe to speak and dream about education as relational and caring and to think about the role digital education may have in this (Veletsianos & Houlden, 2020).

In this article we explained our approach to challenge a technology-first approach in higher education pedagogy since we wanted to consider the diverse needs and experiences of the higher education communities. We also set out to utilise strategies of *care* when reimagining technology in higher education. This is due to the observation that higher education environments are often organised into hierachies that braid "privilige and marginalisation" for instance through forms of "platform capitalism" that became much more evident during the times of the COVID pandemic (Purkayastha, 2023, p.421).

We realised that, to offer real innovation in higher education, in the sense that something new and better is gained from the introduction of technology to education, other methods are needed. Therefore, we propose in this article a rewilding approach which requires methods that give the different communities that shape digital higher education a voice and explore how things could be different. We postulate that we need to *rewild* 

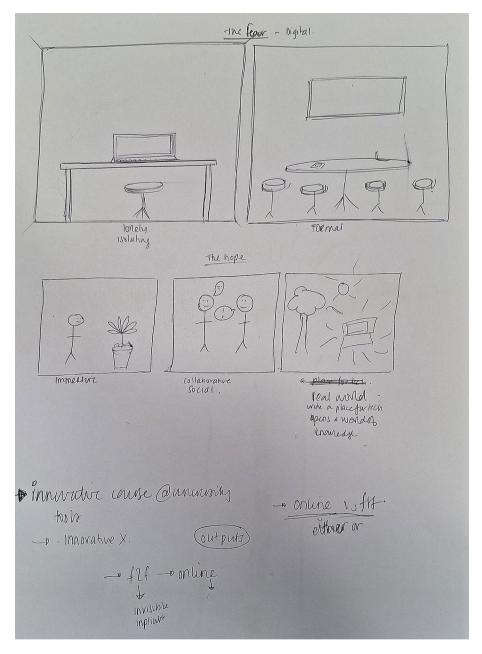


Fig. 5 Properly balanced and not all pressure, pressure, pressure

higher education in the sense that we need to think with others so we can work towards a communally reimagined education. To bring more justice into education through technology we need to move away from egocentrism and anthropocentrism so we can instead attend to the intricacies of "educational events" and take care of the "sociomateriality of places, beings, objects and affordances of the learning experience as a whole" (Sitka-Sage et al., 2017, p.33).

The methods we shared here tapped into participants' imagination and gave them individually time and space to dream about an education to be. We shared a virtual makerspace approach that transports participants into a virtual world where the usual norms and hierarchies of people interacting face-to-face are challenged. However, this does not mean that virtual implies necessarily feelings of uncanniness, since the environment provided familiar features of low-fidelity game environments, where for instance avatar figures resembled those used in popular social media (e.g., TikTok) (McMahan et al., 2016). When then an individual transcends from the real to a virtual environment, they adopt what Vella and Gualeni (2019) call a virtual subjectivity. However, this subjectivity takes its point of departure in "the perspective of one's actual subjectivity" (Vella & Gualeni, 2019, p.11). In this way, the virtual world not only provided participants with tools but also a feeling of familiarity and psychological safety that is known to support creativity leading to more playful expressions (Edmondson, 2018). The two methods presented here support participants to share and reimagine digital education in 'everyday, intimate, micro-geographical spaces in which care... *happens and matters*' (Horton & Pyer, 2017, p.13).

The virtual makerspace as a method, challenges potential biases, based on gender, race, ability or professionality. Its intention is to reduce the risk for participants to fall into existing deficit models and allow for different modes of interaction but also of being. The virtual makerspace as a method can helps ask questions of digital education to explore collective ethos building and team problem solving. The guided fantasy story provides a method for a "safe space" to dream about hopeful new educational futures and address fears. Imagination allows participants to explore points of departure to explore utopian visions characterised by a focus on "well-being and the practical hopes and desires, where community, social patterns and trust are considered and the forces that challenge them" (Otrel-Cass, 2019, p.151). More so, offering the participants imaginative methods provided an opportunity to immerse themselves in environments that provided safety to reimagine defaults (Kraatila, 2021; Suvin, 2016;) and in so doing to come up with alternatives to even technology itself in higher education - for our imagination is not a simple technology. If research wants to disrupt conventional thinking and rewild digital education pedagogy in higher education, it will be necessary to step outside the usual realms of practice and utilise methods that are based on a critical imaginative enquiry (Benjamin, 2019) to reconstruct and dream new hopeful digital education pedagogies of courage and care.

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#### Author contributions

The four authors contributed equally to the production of the article and followed the Vancouver protocol, that is they participated equally in the collection of data, the analysis and the preparation of the manuscript.

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#### Data availability

The data that support the findings of this study are available from the authors, but restrictions apply to the availability of these data, since they include personal data, and are protected through DS-GVO (GDPR) rules, in particular, since participants in the Hacking Innovative Pedagogies (HIP) project were guaranteed protection from releasing personalised data in accordance with Art. 12, 13 and 14 DS-GVO about the purpose, legal basis and rights in connection with the processing of personal data by the University of Graz. Anonymised data are however available from the authors upon reasonable request.

#### Declarations

#### **Competing interests**

The authors declare no competing interests.

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