Chapter 8 Networked Practice Inquiry: A Small Window on the Students' Viewpoint



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8.1 Introduction

Technologies are a facet moreover an integral aspect of our work and life practices. In less than two decades, we shifted from being a knowledge-based society (Castells, 2001; Välimaa & Hoffman, 2008) to a digital services-oriented world (Dahlbom, 2002; Qiu, 2007) and fast moving to a pervasively postdigital existence. Postdigital existence is understood as human and digital technologies in a generative dance wherein and whereby relationships are increasingly discernible as "blurred and messy" (Jandrić et al., 2018, p. 896). Fast and unrelenting techno-social developments and increasingly immersive surroundings accentuate the need for the pursuit of a postdigital perspective in learning design and educational practices (Fawns, 2018) encouraging the development of personal and collective skills and competences "for work, citizenship and self-actualisation" (Dede, 2009, p. 1). This is especially true in higher education (HE) which needs to be ongoingly mindful and responding to wider community and societal needs and developments yet guarding education as a transformational experience (Ashwin, 2020) and a public good (Mayo, 2019; Williamson, 2020). As with other educational sectors, HE exists as part, and because, of an encompassing ecology where the technological, economic and political fabrics are interwoven with the cultural, social and psychological (and in some cases the physiological). Operating at the top end of the education system hierarchy, HE is a key player serving learning and development of people, communities, and society at large (Siemens et al., 2015). Against this backdrop, a networked

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learning approach incorporating inquiry-based teaching methods was devised to take forward a teaching assignment in an encompassing traditional HE context.

8.1.1 Networked Learning and Inquiry-Based Learning

Networked learning (Beaty et al., 2002; McConnell et al., 2012) and inquiry-based learning (Boyer Commission, 1998; Kahn & O'Rourke, 2004; Spronken-Smith, 2012) are both signalled as pedagogical approaches which potentially support and encourage the development of skills and qualities expected of a HE learning experience (Goodyear, 2001). For 20 years or so since its first conceptualisation, networked learning promoted by connectedness among learners, learners and tutors, and the learning community and its resources (McConnell et al., 2012). Recently, the Networked Learning Editorial Collective proposed a redefinition of the term extending the earlier understanding to account for socio-technological developments including the heightened discernment of the situationality of experience, and what have long been identified as characterisations of this learning approach. This redefinition describes networked learning as:

processes of collaborative, co-operative and collective inquiry, knowledge-creation and knowledgeable action, underpinned by trusting relationships, motivated by a sense of shared challenge and enabled by convivial technologies. Networked learning promotes connections: between people, between sites of learning and action, between ideas, resources and solutions, across time, space and media (Networked Learning Editorial Collective (NLEC), 2020).

Networked learning distinctively attends to connectedness mediated by digital technologies for the creation of learning networks (Goodyear & Carvalho, 2014b). Connectedness is set forth going beyond mere technological connectivity to digital resources and human others for learning. Networked learning is characterised by relational dialogue which alludes to active engagement with others for the construction and development of knowledge, the sensitisation to different world views and the recognition of one's viewpoint (Beaty et al., 2002). Ryberg et al. (2012) note that networked learning upholds democratic values, diversity, inclusion and e-quality. Beaty et al. (2002, p. 589) explain that the "e-quality" characterisation refers to critical reflexivity appraising relational dialogue. They explain that critical reflexivity comes in to examine the knowledge being generated, and identities created. They insist that this orientation inspires students to take responsibility of both their learning and the learning of others within the learning network. This clarification evokes the cruciality of trustful relationships for collaborative, co-operative and collective inquiry, knowledge-creation and knowledgeable action networked learning stands for.

Inquiry-based learning, interchangeably enquiry-based learning, is another strategy promoted for HE teaching and learning. Kahn and O'Rourke (2004) state that this is a generic term referring to different learning approaches proposing learning through a process of inquiry. Aditomo et al. (2013) affirm that inquiry-based learning may take the form of problem-based learning, project-based learning, and case-based learning. Generally, inquiry-based learning is claimed to bring together learning and researching of real-world settings and situations (Bover Commission, 1998; Brew, 2010; Healey, 2005) encouraging students' learning engagement and development (Oliver, 2008; Spronken-Smith, 2012). Aditomo et al. (2013) succinctly summarised the potential of inquiry-based learning methods as including the development of metacognitive skills (including knowledge metacognition and self-direction), inquiry and research capabilities (including an explorative attitude, critical and reflective thinking skills and epistemic fluency), and skills to communicate and collaborate with others for learning. The recent networked learning redefinition sets forth inquiry-based learning as a facet of networked learning methods. Notwithstanding this assimilation, for the purposes of this explorative research, the coupling of networked learning and inquiry-based learning approaches in learning implementation is distinctively referred to as 'networked practice inquiry'. This stems from the felt need to hold on to inquiry-based learning processes instantiated as individual learners' pursuits mutually supported as distinct from the notion of collective inquiry pursuit as tendered by the networked learning redefinition.

The intention of a networked practice inquiry venture was to lead students away from traditional face-to-face lecturing methods by encouraging networked learning activeness. The aim was to motivate students to adopt exploratory attitudes for constructing and developing disciplinary knowledge. A networked practice inquiry strategy was hypothesised to concurrently support the development of skills and competences expected of a higher education experience as affirmed in the networked learning and inquiry-based learning literature. Generally, a networked practice inquiry learning configuration was envisaged as potentially expedient inspiring students to engage for learning and wider work and life practice development.

8.2 Research Contextualisation

The research was conducted in a Maltese university context before the covid-19 pandemic crisis. Within this context, blended and online teaching framed by social learning perspectives (such as the case of the concerned networked practice inquiry implementation) are few and rare. This research initiative was an attempt by the author to address this research gap. It also turned out to be an early small-scale response implementing a new institutional vision which declares special attention to the student experience, the involvement of students in the review of formal HE teaching and learning, and the improvement of teaching and learning at the institution stimulated by blended and online learning policy initiatives (University of Malta Strategic Plan 2020–2025: Serving students, scholarship and society, sustainably, n. d.). Furthermore, it transpired to be an initial response to the mounting concerns for students' learning mediated by digital technologies prompted by the covid-19 pandemic and the mass scramble of all HE teaching to the online space.

8.3 Contextualising Literature

The concerned research investigating the student viewpoint of an implemented networked practice inquiry is located well within the networked learning field of study. This section briefly considers previous literature on the student experience of networked learning so setting forth the backdrop of the present research initiative.

Within the networked learning field, there is a burgeoning body of literature on the student experience. Earlier studies highlighted divergent students' access, use and acceptance of networked technologies for learning (Corrin et al., 2010; Goodyear et al., 2005) and variance in the degree to which students buy into the invitation to networked learning (Goodyear et al., 2005; Ramanau et al., 2008). They exposed challenging issues which mitigate students' networked learning engagement. Especially with reference to participation in online discursive activities, researchers showed up students grappling with unfamiliar online discussion methods for learning (Bell et al., 2010), students struggling to adapt being collaborators for knowledge construction (De Laat & Lally, 2004), the oppression to comply (Ferreday & Hodgson, 2008) and marginalisation in being, seeing or choosing differently (Reynolds & Trehan, 2003). Research studies underscore that not all students can be assumed to have the same access to digital technologies (Czerniewicz & Brown, 2010), can be assumed to be skilled users of learning technologies (Hargittai, 2010) and are competent as learners in technology mediated environments (Kennedy et al., 2008; Kirkwood & Price, 2005). Besides, students may be appropriating networked technologies differently for their learning and living lives (Kennedy et al., 2008; Ramanau et al., 2010). Above all, not all students show the same enthusiasm using prescribed learning technologies and the institutional online learning spaces connecting to others for learning (Creanor et al., 2006). Students act and react differently depending on what they understand of the learning situation and the surrounding context (Cutajar, 2017). Problems related to an ingrained knowledge acquisition culture (Finegold & Cooke, 2006), personal identity (Mann, 2010) in active engagement for knowledge construction and knowledge building (Krüger, 2006), and interpersonal relationships in cooperative and collaborative activities for learning and development (Ryberg & Larsen, 2008) may exacerbate students' willingness to connect with peers and tutors for learning. Although some of the unearthed studies go back decades, the divergent picture they portray remains convincingly true.

Recent studies continue to flag the need for critical digital diligence regarding the learning context as understood by the students (Henderson et al., 2015; Nicolajsen & Thomas, 2014). Recent studies illustrate increasing students' entanglements with digital technologies for completing learning tasks (Gourlay & Oliver, 2016) and their 'nomadic' collaborative learning practices (Ryberg et al., 2018a) as they strategically shift their learning efforts across spaces, places, technologies and activities over time (Ryberg et al., 2018b). Students are found relocating learning activity from the intended formal learning environment to familiar social media platforms (Caviglia et al., 2018; Thomsen et al., 2016). Research brings to the fore

students' agency in learning and the forces empowering and disempowering them. Much is attributed to the students' capacity to cope with the cognitive load networked learning methods create (Kerwald & Bentley, 2020), students' capabilities configuring digital learning habitats and resisting power hierarchies in learning (Whitworth & Webster, 2020), and students' discernment of roles and responsibilities in learning (Cutajar, 2018). Studies on the student experience continue to show up a persisting picture of variation. A research study specifically targeting variation led to three critical dimensions structuring students' networked learning experiences: 'technology proficiency' denoting relations to digital technologies for learning, 'learning proficiency' denoting epistemic agency in learning, and 'social proficiency' denoting relations with others for learning (Cutajar, 2014). This variation framework generated from research contextualised in the same Maltese university complex of the present study, was devised as a means for making sense of the complex picture of the students' experiences of formal networked learning. It was an alternative contemplated for framing the research at hand. This research is a new addition to the meagre corpus of research work from the Maltese context on the student perspective. Arising from a southern European context, this exploration also adds to the bigger picture of the student experience of networked learning predominantly drawn by research coming from northern European countries. In its capacity as a small-scale research initiative, the present exploration opens a small window on postgraduate students' viewpoint of a networked learning implementation distinctively incorporating inquiry into personal life and work practices.

The networked practice inquiry implementation on "The digital dimension of community action and development" was part of an encompassing Master level study programme. The 12 enrolled course participants were professionals working in community social enterprise, the education sector or in some other public/private community work organisation. At the time of the course, all except one student were in full-time employment.

8.3.1 The Networked Practice Inquiry Implementation

A core learning task required students to critically explore some aspect of their work or life practice relating to community action and development with the aim of improving it. This self-selected inquiry project proceeded as an individual exploration. Apart from the opportunities to obtain peer and tutor feedback during work-inprogress presentation sessions, student pairs had to exchange written peer reviews shared online. Other learning tasks prompted students to collaborate with peers for learning and inquiry project development. Themed discussions spreading across the physical and virtual space and supported by guided readings intended to feed into students' inquiry-based learning projects along with knowledge development. On one occasion, students had to work in small groups reviewing case studies of online community projects reported in the literature. Students were also encouraged to connect with peers and tutor using a small selection of digital media platforms to help appraise them as a means for community action and development. At the time there arose the opportunity of a guest speaker introducing students to smart city learning (Lister, 2020) and an implemented culture trail which students were invited to experience first-hand. This technology-focused exploratory strand was intended as a easygoing conversation among peers. The digital dimension of the course was intended as a seamless course component, and in a small way it invited formal learning activity to spill over in open spaces such as an invitation to connect using Twitter and the smart city culture trail. The assessment was equally distributed on the final written report of the self-directed inquiry project and participation in peer learning activities. Participation varied, but all students successfully completed the course.

Past the course run, this research initiative was an attempt to involve students more intimately deriving a description of this networked practice inquiry implementation from their viewpoint for informing future development. As aforementioned, the conceptual model framing students' networked learning experience by three critical dimensions of variation was contemplated for structuring the current research. However, with further deliberation it was decided to adopt the activity centred analysis and design (ACAD) framework (Goodyear & Carvalho, 2014a) because of its focus more squarely set on learning design and analysis. Besides, as much as a conceptual frame generated from within the same research context may help direct attention to areas of recognised significance, it may also obscure what lies beyond its bounds. The next subsection outlining the research methods shaping this research initiative includes a brief outline of the adopted ACAD framework.

8.3.2 Research Methods

For this exploration of students' viewpoint of the networked practice inquiry course experience, an interpretative approach (Hennink, Hutter, & Bailey, 2011) was assumed. Semi-structured interviews with consenting participants were held 3 months after the end of the course in Spring 2018. The emailed call for research participants attracted 2 of the 12 (17%) students who completed the course. Attempts to recruit more participants using a snowballing strategy failed. The interpretative approach to understand students' lived course experiences sidestepped the problem of the small research sample because each data transcript incorporates multiple instances of perceptions and experiences (Norman Denzin as expert voice in Baker, Edwards, and Doidge (2012)). A small research sample yields a description which is more partial than could have been obtained from a larger data set. Generally, this exploratory research initiative represents a preliminary quest into the Maltese postgraduate student viewpoint of a networked practice inquiry approach to learning but, nevertheless noteworthy.

Interviewed participants were encouraged to describe episodes of their learning enterprise. They were prompted to reflect on how they approached learning tasks, what they saw themselves gaining from these learning experiences, what they found helpful and beneficial or otherwise, and what they thought would have supported them better for their learning and development. The audio-recorded interviews were transcribed verbatim and emailed to the research participants for approval before the data analysis process.

Data analysis consisted of two main stages. The first stage was comprised of three iterations through the data. Through the first iteration, each transcript was read and annotated with neutral codes. In a second round through the individual transcripts, potential themes and subthemes were identified and illustrative data excerpts marked. In the subsequent iteration of this first level of data analysis, the set of themes and subthemes from across different transcripts were brought together along with corresponding quotations into a single data tabulation. A coding system was used to keep track of extracted quotations. In this chapter pseudonyms are used to help convey the intimate nature of this work drawing on the accounts of the two participating students.

The ACAD framework (Goodyear & Carvalho 2014a) was brought in during the second stage of data analysis for structuring the descriptive interpretation. As mentioned above, it was chosen because of its focus on learning design and analysis. It proposes analysis of learning design to be considered from three main perspectives bearing upon emergent activity for learning: the set design perspective foregrounding situated spaces, tools, texts and artefacts; the epistemic design perspective setting the spotlight on learning tasks including structuring, organisation and their knowledge building configuration elements; and the social design perspective calling to attention situated course participant interactions for learning. This framework emphasises the design for learning and learning as arising from emergent activity in situated (teaching and) learning practice. As Goodyear and Carvalho (2014a) point out, by the ACAD framework "We focus on what it is that the people are actually doing, and the tools and resources and social interactions that become bound up in their activity" (p. 58, italics in original text). What follows is the resultant description of students' viewpoints of networked practice inquiry set forth in consideration of the lived experience of the set design, epistemic design, and social design.

8.3.3 Findings

The course implementing a networked practice inquiry approach for exploring the digital dimension of community action and development was portrayed as follows.

8.3.3.1 Lived Experience of Set Design: Learning Spaces, Digital Technologies, Learning Materials

The lecture room is more of a place for sharing thoughts, discussing and debating with others (Sarah, Fleur). It is no longer a place where you silently listen to the

lecturer and you cannot speak (Sarah). Students here can express their thoughts and listen to what others have to say (Sarah, Fleur). Sarah also reflected that the traditional lecture room arrangement does not work:

those were not lectures where you listen and cannot speak \ldots But the thing was more interactive (Sarah, p. 5)

We discussed a lot. Only I would have arranged the class better into a circle—I believe in these structures more than the classroom-based so that we can concurrently see the person who is talking. And as a group I believe that we are not shy to talk. We are not against sharing, we share, and we fight in inverted commas. Only that I would have it changed to a round circle-based so to better facilitate the person who is talking. (Fleur, p. 8)

The criticism of the meeting room set-up might have been triggered by the bother of reorganising the row-by-row lecture room arrangement at the start of each meeting. As discovered by Jamieson et al. (2000), this attention to the learning space may have been equally evoked by digital learning experience.

The institutional Moodle-based course portal is not so convenient for being accessed using mobile devices. Part-time students who are trying to keep up with their studies often take the study-work to bed (Sarah, Fleur) and are using mobile devices. Fleur repeatedly stressed the importance of learning design mindful of students' extensive use of mobile devices to access resources and materials:

Because do not forget, [raising the smart phone] this is what we most frequently use \dots I mean we need to adapt our Internet reach through the mobile \dots Nowadays this has become kind of my computer because if I have an email I answer it from here \dots Because you are not going to take the laptop to bed. But this sits next to your bed (Fleur, p. 1/2).

From what the two participants disclosed of their use of digital technologies, there did not emerge any symbolic meaning-making of devices as Bober and Hynes's (2018) research revealed. These students were simply using the devices they had available as they saw best serving them. From what the participants recounted of the course run, the institutional virtual learning environment (VLE) was not proving supportive to smoothly get on with their study-work using mobile devices. Sarah talked about a feeling of "frustration" when her tablet stalled while trying to post her reply to a forum discussion thread. Such findings sound even more significant and alarming these past months of covid-19 pandemic. With most teaching shifted online, problems related to mobile access have come more to the fore along with the many other facets of the digital divide (Grant & Eynon, 2017) which social justice advocates within the networked learning field (Czerniewicz & Brown, 2010) have long been sounding.

Fleur also pointed out that behind the scenes students were downloading the course resources and sharing them within a secret Facebook group away from the institutional course-site which is more tedious to navigate. The secret Facebook group was claimed by participants as a lifeline for students to support each other not only through the course but the entire study programme. Fleur avowed that peers who did not make the effort to keep connected and active in this invisible online space were losing out:

The digital dimensions are an integral part of our lives nowadays. Without them, it is difficult. In fact, we experience it even as a Masters group. We feel that who does not use Facebook so much falls behind from the group. I mean, we have a small community as a Masters group on Facebook. Those who do not log in. (Fleur, p. 7)

Thomsen et al. (2016) also report on students taking their peer interactions to a Facebook group away from the institutional VLE. In this study there is exposed the motivation of mutual support. Besides, the students of this study did not totally abandon the formal virtual learning space possibly because of the grading tied to online participation as will be highlighted in the next subsection on the lived experience of epistemic design.

During the interview, Fleur talked about the smart city cultural trail activity. Spontaneously she shared a lot of detail on a similar digital application in her community:

that of the city trail route. In fact here [at work] we did something similar . . . it started before the Digital Dimension [course]; it was being cooked up so to speak. Now we have completed it. But still it is interesting because she [guest speaker] used a different method. She used the telephone box, certain something in particular. It was different but the same concept (Fleur, p. 10)

There is a suggestion that students are enthused by digital innovation in study courses especially when this resonates to what is happening in their wider work and life practices. Thoughtfully, Fleur pointed out that, considering the fastchanging nature of study content on "the digital dimension", learning materials need to be frequently updated.

The learning materials are claimed by both Sarah and Fleur to be a springboard for the student to discover other resources, discern the enormity of the Internet, and the risk of getting lost in the vast amount of information the Web gives us access to:

I read what you guided us to read. And, honestly, I did not always read everything. What happens to you too is that you look up something. It leads you to something else. So then, you get lost. You end up reading the other. So, I used to flow. I mean I try to read between meetings. I read, I take notes, so that we then discuss them online basically (Sarah, p. 1).

We discovered other pages because the pages we were doing we never heard of them before ... I mean we discovered how vast the Internet is. By being an Internet user, it does not mean you are seeing all the content there is because it is very vast (Fleur, p. 3).

Both Sarah and Fleur talked about the excitement on discovering that the case studies they were reviewing actually featured live websites and hence a sense of authenticity and currency. Sarah also talked about subsequent registration and involvement in a community action she learnt about through the case-study activity. She claimed that this served her for the community work she was doing. Sarah also stressed the importance of learning resources such as those related to online security and safety which helped to boost her confidence using digital technologies in an informed way for professional work practices. On the themes of cyber security and safety, Fleur recommended a field expert to accomplish greater impact as she had personally experienced in a community event:

I did it locally but others may have never experienced it ... I think that of the cybercrime it helps [to have field specialist guest speakers] because it is like you are hearing it from the horse's mouth so to speak. To listen to someone whose work is primarily on cybercrime. I mean he relates field experience even if simply a presentation (Fleur, p. 12).

Another recommendation on the course set design was that of organising "weekend workshops" (Sarah). This recommendation calls for more face-to-face human interactions for learning. Considering the surrounding context and the prevailing face-toface learning experiences (before the covid-19 upheaval shifting most teaching activity to the online space), it was natural that students attended more to the physical spaces, resources and materials—the set design aspects they were used to; and what proved useful for their learning in the past. Still, the emerging picture features extensive use of digital devices, applications, and media integratively part of students' learning and wider life practices. Expressly for learning, students are proactively creating places for epistemically engaging in invisible peer interactions, supporting each other away from the more visible channels promoted by the formal learning course set design.

8.3.3.2 Lived Experience of Epistemic Design: Tasks, Perceived Worth, Mitigating Issues

Indisputably, the networked practice inquiry approach promoted learning tasks which were different from what the students are used to:

because it was different than the other credits, the other study units

Researcher: What do you see different in it?

Because for us, the approach—when you go to the lecture you listen. And then you do not have like homework. You listen. Then you spend time thinking about the assignment and do some reading. But for me, the fact that I had to write, when it turns out to be something that I had to explore, for me it was tough, you know. I was feeling like "Oh My" (Sarah, p. 3).

For one, I was not understanding exactly what was happening when we saw "Digital Dimensions". I mean I came to the lecture, from day one, I had to discover what was going to happen through all the sessions (Fleur, p. 1).

The second quotation above also suggests that the theme of the course on community action and development may have added to students' disorientation. The learning tasks were different from what students are used to. Yet several times the participants referred to the "guided readings". It seems that in the context of the networked practice inquiry course, this familiar epistemic engagement took on a new meaning for the students. Listening to what peers have to say alongside the guided readings served as a means for connecting theory to practice (Sarah). The face-to-face meetings are claimed by participants to have served as a springboard to extend the reading effort and the exploration of the study topic (Fleur).

The research participants both referred to the group task of summarising and presenting case studies. Both participants referred to this small group activity as a

prised learning event providing students a source of ideas for the inquiry-based project task (Sarah, Fleur) and work practice development (Sarah).

Participants also agreed that the self-chosen inquiry task served to work on something that goes beyond course assessment requirements. Fleur declared that she spent a lot of time deciding on a project proposal because it potentially led to something useful serving the community. The research participants gave a lot of attention to this task. They both recognised the epistemic value of the task incorporating opportunities to expand their knowledge and to critically inquire wider life practices beyond disciplinary knowledge. But the shifted attitude from customary formal learning methods was repeatedly highlighted as overwhelming:

I think that as a course it was too demanding because you had to give an input every week. Now we are mature students. At least this is the way I work: I go for the lectures. I take notes. When the assignment comes, I start to think about it. Then I spend about a fortnight mentally preparing for it; this and that and thinking about it during the lectures. Then I sit down and write. With this you had to work from the start. So, full-time (work). You have to come to the university. You have to go to work. At times you stay late at work. The university. Part-time. It was difficult to contribute as much as I would have liked. Or perhaps, how much more I could have gained (Sarah, p. 3)

The element of personalisation and the invitation to ownership of learning activity appears to have motivated students to attend more carefully to what they were doing, hence the claimed lack of time for what they wished to achieve.

The peer-reviewing exercise is claimed by Sarah as having served the dual function of obtaining feedback to improve the project work and achieving a better course grade. She also saw the peer reviewing activity serving professional practice skills development:

For example, in the community we have a lot of consultation proposals. Those are peer review that you read it and give your review. They are a review not a peer review. But you give your review, your opinion. We need to practice them more (Sarah, p. 8).

Peer reviewing is also claimed to help acquire knowledge beyond one's horizon and an opportunity for considering scenarios you would not have otherwise delved into. Peer review "gets you out of your own niche" (Sarah) and potentially serves to learn how things work in different organisations and unfamiliar contexts:

Because at times it happens to us that we take the information which applies to us and that other information—Look, especially in our world, we use things for our practice but what interests us are the marks. And you are selective in what you listen to and adopt. So the peer review of other's work was an opportunity and a task and a responsibility to understand what someone else is doing. It might be that I am not going to use it but I learnt just the same. (Sarah, p. 7)

Sarah also declared that the opportunity of peer reviewing considering alternative viewpoints led her to feel less frustrated and more empathic when liaising with external stakeholders because you have a better understanding of what is happening on the other side. This resonates to Hammond's (2017) assertion that students' endeavour to work together potentially helps "generate empathy across divided groups and communities" (p. 1007).

Grading tied to online participation repeatedly arose during the interviews. Sarah argued that this is unnecessary stress for adults who know that participation (in the online discussions) is a means for learning as well. In a sense Sarah's comments hint at the notion of surveillance and coercion to comply which are detrimental to the teacher-student trust relationship we aim to nurture in networked learning:

but we are all adults. Now we should know that for learning we need to participate. But I think the marking—obviously because you say to yourself "I want to get a high score because then I do not know if I am going to do well in the project". I think that affected me. And perhaps it also led to more stress (Sarah, p. 2)

In the above quotation and the previous one, there is also a vague affirmation that Sarah would not have bothered were it not for the grading. This might have derived from the inexperience of learning through relational dialogue but may have also stemmed from a perception that for successful formal learning, the effort involved outweighs the benefit for learning. Just as likely, it might have been the pressure that the participant experienced by the educational openness of peer learning.

Research participants recommended that the course module is scheduled in parallel to other study-units which are not so demanding (Sarah) and widening the temporal window permitting students more time for engaging in inquiry processes (Fleur). But reported difficulties of time management and work overload may have been due to the novelty of the networked practice inquiry experience as Sclater and Bolander (2010) concluded from their study of students' experiences of active collaborative learning.

The emerging narrative shows that students closely attend to set learning tasks. They value the guided readings they are used to. But in the context of the networked practice inquiry, this customary task takes a deeper meaning. Students value the idea of an inquiry-based learning task which potentially can be developed into something useful. They are enthused by inquiry learning activities tied to their broader life and work context. But they claim running short of time to engage as deeply as they would have like to. And grading linked to participatory tasks added to the stress. They recognise the learning benefits of the networked practice inquiry set-up requiring them to engage in peer learning tasks moreover individual inquiry-based learning activity. However, as described in the next section, peer learning raises several concerns.

8.3.3.3 Lived Experience of Social Design: Others, Places

Students attach importance to the interactions with peers and the tutor. As evidenced by some of the quotations in the previous sections, students value the divergent faceto-face meetings as a place for people to congregate, express their thoughts on the discussion topic and listen to the views and experiences of others (Sarah, Fleur). They value these interactions so much that they recommend extending them by weekend workshops and involving more guest speakers. The appreciation and enthusiasm for face-to-face discursive activity contrasts to the emerging picture of students' views of online discursive activity. The permanence of written text raises concerns for students. Sarah confided that if you lack self-confidence, the whole group online discussions are unnerving because you need to be certain about what you are writing and not posting "*xi cuccata*" [something silly]:

I was very self-conscious when writing in places where everyone can see it. I mean, I tend to hold back from writing. And I start saying to myself; "But am I correct in saying this?". It is as if my self-esteem in this respect is a bit low. So, that of the [online] writing, and having to writing things that make sense was a bit stressful. And how much are you going to write online? For example, when we get into a debate I am not going to write something silly ... So a person like me, who struggles to make a step forward in writing online, I did not have the time to think and be certain. So I used to choose not to write, or not write that part (Sarah, p. 2).

The prospect of shared written comments in formal learning spaces is not something students look forward to when they are struggling to gain an understanding. Besides, for most students in the Maltese context, English is a second language. In a highly competitive educational context where students are mostly working in isolation to produce end of course module assignments, this reaction is understandable and sobering. Fleur mused that perhaps, if the forums were on Facebook instead of the institutional VLE platform, it would have been easier to participate in the discussions:

Because I did not have enough time to post. And then I'm thinking, if it was on Facebook, maybe some secret group, maybe I would have had the time. You tell me "Isn't there the same time?" But we use Facebook so much that you start seeing certain pages on which you can write and communicate with others. Perhaps the fact that I had to go to the forums I saw it—it demanded more time to go in from the university webpage and the like (Fleur, p. 1).

This comment not only exposes the accommodation of taking learning discussion to the online places students frequent. It also hints at the relaxation of formality social networking platforms such as Facebook inspire; where it is deemed acceptable for people to express themselves in any way they like and can; however poor, illogical and incoherent the articulation. This contrasts the expectations on the institutional webpages. Of note as well, is Fleur's explicit recommendation of a secret place invisible from public scrutiny.

Participants' comments suggest that the mixed age of the students is potentially another source of pressure to perform in technology mediated places. Sarah suggested that older students might feel pressured to show themselves digitally literate as their younger counterparts. This corroborates Bayne et al.'s (2020) recent affirmation that the myth of "digital natives and digital immigrants" (Prensky, 2001) lingers on. In consideration of the varying ages of peers, Fleur remarked that younger students may experience disappointment if their work is reviewed by a peer:

There may be people who do not like it. But if you genuinely give constructive feedback you do not have to dislike it ... maybe we are grown-ups, we have reached a certain age. But maybe with the younger ones, they may be disappointed that a younger peer—But personally, it did not upset me. On the contrary, it was helpful because those things which I failed to

see, <Alpha> noted them, and we discussed them. I mean we should not be upset by peer-reviewing (Fleur, p. 5)

These comments suggest that, in postgraduate HE courses (which are more likely to bring together students of different age groups), there is need to carefully consider inclusion and diversity issues. This becomes even more critical when learning is advanced in connectedness to peers as much as connectedness to tutors and resources. The latter comment also brings to mind that time and effort need to be spent on learning the art of giving and receiving feedback (Jaques & Salmon, 2008).

The participants agreed that the group work such as experienced during the networked practice inquiry implementation is an opportunity to learn how to work with others. But as Fleur pointed out, it is something students generally fear because people have different working styles and you need to find a way how to work together which does not always play out well. Participants' disclosures underscore the need for group work to be carefully planned and implemented. The research participants both note that the strategy permitting the students to form the work groups themselves helped because they already knew each other well. Fleur explained that in her group they agreed on a subdivision of the task and collaborated online, in their own secret spaces, for putting it all together so "practicing the digital dimension of community action and development" as part of the course experience.

The peer reviewing task was highlighted by both Sarah and Fleur as a novel experience. Both expressed their appreciation of the pairing strategy again left in the hands of the students:

Peer reviewing helped me a lot. First of all, you need a buddy—for me it worked well because we chose our own buddy... The fact that she was my reviewer for the project work helped me because she was highlighting that which I left out. I think that was a good thing (Sarah, p. 7).

This finding concurs with Shivonen's (2020) research results that students are positive about peer reviewing for their learning but they are not so keen on being graded by the peers. The participants of this study flag the fear of peer criticism which can be experienced as unacceptable. Trust (Sarah) and maturity (Fleur) are seen as necessary conditions for the success of peer reviewing as an activity for learning and development. In a wider context where traditional teaching methods and individual learning prevails, peer interactions for learning, knowledge building and value creation need to be carefully considered. Participants noted that informally there is a tendency for students who are close "buddies" to help each other privately. But to actually write a written review of a peer's draft work and attaining a grade for it (Sarah) is not something students are used to. Fleur confessed that behind the scenes students were consulting with each other on the peer reviews before posting them to the more "public" institutional platform. Students are wary and insecure when it comes to cooperation and collaboration with peers for learning in online spaces which carry greater visibility than their close knit of trusted buddies.

In consideration of an even more open space, Fleur reflected on the tutor's attempt to get students to connect on Twitter (as another popular microblogging and social networking platform). She stressed that students need time to figure out

how an unfamiliar technology works. She commented that the fast-paced nature of the course did not permit this. Considering the open nature of this social networking platform it might be that there is more to it. Students may need additional time to also think through open education practice such a communication medium prompts, and the challenges this brings to digital identity and due diligence. For some students this may have been exacerbated by the sensitivity of their professional work in the communities demanding silence, secrecy and keeping a low profile.

The visibility of peer learning processes generates a feeling of surveillance and judgementality. The issue of surveillance arising from the log data automatically generated by the VLE and other institutional student tracking systems (Bayne et al., 2020) did not surface in this exploratory research, but here was no attempt to draw students' attention to this audit trail. The notion of surveillance arose from the perceived scrutiny afforded by those who are considered as more competent others participating in the course. There is exposed a problem of perceived differential; tutors in their position of power setting forth the learning tasks and assessment, and the peers as more digitally literate and knowledgeable. This finding exposes students holding a position of disempowerment. Students surface as insecure and uncertain of their validity in the networked practice inquiry learning environment. There is flagged the need for networked practice inquiry implementations (and networked learning implementations at large) to incorporate greater emphasis on greater equity in peer learning where all learning participants are empowered to be active co-contributors in knowledge creation and knowledgeable action motivated by a sense of shared challenge and trusting relationships enabled by convivial technologies.

In general, technology mediated peer learning interactions, beyond the close knit of trusted study buddies, put students in what looks like a vulnerable position as if ongoingly under surveillance. Concerns increase with peer age variability, the degree of educational openness tied to the place of peer interactions, and the perceived coercion to compliance assessment generates. For the case of the formal learning places, it is the permanence, quality and frequency of shared media exchanges. For the case of public platforms, there is the additional need to learn managing one's digital footprint and curating one's public identity, to become confident using networked technologies safely and securely, and to ascertain a supportive learning network.

8.4 Concluding Discussion

These findings open a small window on the students' viewpoint of networked practice inquiry. Generated from the accounts of two participating students, these findings suggest that students are forward looking. They demand and celebrate innovative digital tools and practices in and for learning, especially when these are seen accommodating them and resonating to their wider life and work practice experiences. They are enthused assuming inquiry attitudes critically analysing,

reflecting and rethinking aspects of their work and life practices as part of their study work, so also giving more reason to assessment tasks. They also see value in group tasks and peer learning interactions, even to develop higher order skills extending to their work and life practices. But students are overwhelmed by the demand on their time. They call attention to pressure, stress and wariness online peer interactions create, especially in trying to show oneself digitally competent and knowledgeable on the subject matter. The networked practice inquiry approach shifts the student away from the comfort of passively attending lectures and working on a summative written assignment away from the scrutiny of untrusted others. Clearly, students question the what-and-how of a learning approach from within the encompassing and surrounding environment. In a small way, students are nurturing connectedness for learning in invisible spaces with those few trusted peers. But peer learning interactions in the more visible online formal learning spaces, and worse still in online public places, exposes them and is perceived as putting them under surveillance.

This small window on the students' viewpoints of networked practice inquiry highlights the problematic issue of educational openness the networked learning environment presents; openness to put yourself in a vulnerable position engaging in relational dialogue for learning within a heterogenous group of critical peers and tutors. The findings of this preliminary exploration expose these postgraduate students as holding a position of disempowerment in the formal learning setting. They expose a sentiment of surveillance deriving from the afforded scrutiny by the perceived more competent others. Students emerge as insecure and uncertain of their validity as networked learning participants. Students appear very much sentient of the "culture of surveillance" which networked technologies exacerbate, and as Bayne et al. (2020) caution, we need to thread with caution because "Visibility is a pedagogical and ethical issue" (p. 180).

These findings call to attention the apparent incongruency between students' acknowledgement of value-added by the networked practice inquiry approach and online peer learning concerns. There surfaces a crucial need to find ways for nurturing more constructive and inclusive attitudes. There is signalled the need for networked practice inquiry implementations (and networked learning implementations at large) to incorporate greater emphasis on equity in peer learning and the creation of positive peer learning environments where all learning participants are empowered to be active co-contributors in knowledge creation and knowledgeable action motivated by a sense of shared challenge and trusting relationships enabled by convivial technologies.

The picture arising from this research initiative needs to be acknowledged as a limited partial description of the students' viewpoint of a networked practice inquiry approach primarily because of the limited number of research participants. Further exploration is required to substantiate and expand this nascent picture. Besides, ongoing research is important for understanding students' perceptions, viewpoints, and experiences as they develop and change temporally, spatially and situationally. Such ongoing research enterprise is important to inform support for students in their higher education learning experiences and the development of competences learning

in groups (Jaques & Salmon, 2008) and with the peers (Boud, Cohen, & Sampson, 2014).

In a world struggling to recover from a crippling health pandemic crisis concurrently confronting life-threatening environmental degradation and huge sustainability challenges, there is a lot on political and executive tables to see digitisation of the higher education area, in particular higher education learning and teaching. Locally, these surface in the new University of Malta Strategic plan 2020–2025 (https://www. um.edu.mt/about/strategy). At European level these are communicated in the new European Union Digital Education Action Plan 2021–2027 (https://ec.europa.eu/ education/education-in-the-eu/digital-education-action-plan en). These are wake up calls for critically engaging in the transformation of higher education teaching and learning, constructively safeguarding the student's experience as a truly transformational experience supporting personal development along with competences for work and life practices. Networked practice inquiry appears to have such potential for making the higher education learning experience "an opportunity to think and dream" (Fleur) work and life practices concurrently personal development as one of the research participants put it. This research initiative implementing a networked practice inquiry and opening a small window on the students' viewpoint is one small step in this direction.

References

- Aditomo, A., Goodyear, P., Bliuc, A.-M., & Ellis, R. A. (2013). Inquiry-based learning in higher education: Principal forms, educational objectives, and disciplinary variations. *Studies in Higher Education*, 38(9), 1239–1258. https://doi.org/10.1080/03075079.2011.616584
- Ashwin, P. (2020). Transforming university education: A manifesto. Bloomsbury Publishing.
- Baker, S. E., Edwards, R., & Doidge, M. (2012). How many qualitative interviews is enough?: Expert voices and early career reflections on sampling and cases in qualitative research. Available at: http://eprints.ncrm.ac.uk/2273/
- Bayne, S., Evans, P., Ewins, R., Knox, J., Lamb, J., Macleod, H., et al. (2020). *The manifesto for teaching online*. MIT Press.
- Beaty, L., Hodgson, V., Mann, S., & McConnell, D. (2002). Working towards E-quality in networked E-learning in higher education: A manifesto statement for debate. Retrieved from http://csalt.lancs.ac.uk/esrc/manifesto.pdf
- Bell, A., Zenios, M., & Parchoma, G. (2010). Undergraduate experiences of coping with networked learning: Difficulties now, possibilities for the future. Paper presented at the Seventh International Conference on Networked Learning, Aalborg, Denmark. Online Proceedings. Retrieved from https://www.networkedlearning.aau.dk/past-conference-proceedings/
- Bober, M., & Hynes, D. (2018). Tools for entertainment or learning? Exploring students' and tutors' domestication of mobile devices. In N. Bonderup Dohn, S. Cranmer, J.-A. Sime, M. De Laat, & T. Ryberg (Eds.), *Networked learning: Reflections and challenges*. Springer.
- Boud, D., Cohen, R., & Sampson, J. (2014). *Peer learning in higher education: Learning from and with each other*. Oxon: UK: Routledge
- Boyer Commission. (1998). Reinventing undergraduate education: A blueprint for America's research universities. State University of New York.
- Brew, A. (2010). Imperatives and challenges in integrating teaching and research. *Higher Educa*tion Research & Development, 29(2), 139–150. https://doi.org/10.1080/07294360903552451

Castells, M. (2001). The internet galaxy. Oxford University Press.

- Caviglia, F., Dalsgaard, C., Davidsen, J., & Ryberg, T. (2018). Students' digital learning environments. Paper presented at the Eleventh International Conference on Networked Learning, Zagreb, Croatia. Online Proceedings. Retrieved from https://www.networkedlearning.aau.dk/ past-conference-proceedings/, https://www.networkedlearningconference.org.uk/abstracts/ papers/dalsgaard_15.pdf
- Corrin, L., Bennett, S., & Lockyer, L. (2010). Digital natives: Everyday life versus academic study. Paper presented at the Seventh International Conference on Networked Learning, Aalborg, Denmark. Online Proceedings. Retrieved from https://www.networkedlearning.aau.dk/pastconference-proceedings/
- Creanor, L., Gowan, D., Howells, C., & Trinder, K. (2006). *The learner's voice: A focus on the e-learner experience*. Paper presented at the Fifth International Conference on Networked Learning, Lancaster, England. Online Proceedings. Retrieved from https://www. networkedlearning.aau.dk/past-conference-proceedings/
- Cutajar, M. (2014). Qualitative differences in post-compulsory pre-university Maltese students' accounts of their networked learning experiences. Ph.D., Lancaster University, Lancaster, England. Retrieved from https://eprints.lancs.ac.uk/id/eprint/72904/
- Cutajar, M. (2017). The student experience of learning using networked technologies: An emergent progression of expanding awareness. *Technology, Pedagogy and Education*, 26(4), 485–499. https://doi.org/10.1080/1475939x.2017.1327451
- Cutajar, M. (2018). Variation in students' perceptions of others for learning. In N. Bonderup Dohn, S. Cranmer, J.-A. Sime, M. de Laat, & T. Ryberg (Eds.), *Networked learning: Reflections and challenges*. Springer.
- Czerniewicz, L., & Brown, C. (2010). Born into the Digital Age in the south of Africa: The reconfiguration of the "digital citizen". Paper presented at the Seventh International Conference on Networked Learning, Aalborg, Denmark. Online Proceedings. Retrieved frp, https://www.networkedlearning.aau.dk/past-conference-proceedings/
- Dahlbom, B. (2002). From systems to services. Retrieved from https://bodahlbom.se/2002/05/14/ from-systems-to-services/
- De Laat, M., & Lally, V. (2004). It's not so easy: Researching the complexity of emergent participant roles and awareness in asynchronous networked learning discussions. *Journal of Computer Assisted Learning*, 20(3), 165–171. https://doi.org/10.1111/j.1365-2729.2004. 00085.x
- Dede, C. (2009). Comparing frameworks for 21st century skills. In J. Bellanca & R. Brandt (Eds.), 21st century skills (pp. 51–76). Solution Tree Press.
- Fawns, T. (2018). Postdigital education in design and practice. Postdigital Science and Education. https://doi.org/10.1007/s42438-018-0021-8
- Ferreday, D., & Hodgson, V. (2008). The tyranny of participation and collaboration in networked learning. Paper presented at the Sixth International Conference on Networked Learning, Halkidiki, Greece. Online Proceedings. Retrieved from https://www.networkedlearning.aau. dk/past-conference-proceedings/
- Finegold, A. R. D., & Cooke, L. (2006). Exploring the attitudes, experiences and dynamics of interaction in online groups. *The Internet and Higher Education*, 9(3), 201–215. https://doi.org/ 10.1016/j.iheduc.2006.06.003
- Goodyear, P. (2001). *Effective networked learning in higher education: Notes and Guidelines*. Retrieved from England http://csalt.lancs.ac.uk/jisc/docs/Guidelines_final.doc
- Goodyear, P., & Carvalho, L. (2014a). Networked learning and learning networks. In L. Calvalho & P. Goodyear (Eds.), *The architecture of productive learning networks*. Routledge.
- Goodyear, P., & Carvalho, L. (2014b). Framing the analysis of learning network architectures. In L. Carvalho & P. Goodyear (Eds.), *The architecture of productive learning networks*. Routledge.

- Goodyear, P., Jones, C., Asensio, M., Hodgson, V., & Steeples, C. (2005). Networked learning in higher education: Students' expectations and experiences. *Higher Education*, 50(3), 473–508. https://doi.org/10.1007/s10734-004-6364-y
- Gourlay, L., & Oliver, M. (2016). It's not all about the learner: Reframing students' digital literacy as sociomaterial practice. In T. Ryberg, C. Sinclair, S. Bayne, & M. de Laat (Eds.), *Research, boundaries, and policy in networked learning* (pp. 77–92). Springer.
- Grant, L., & Eynon, R. (2017). Digital divides and social justice in technology-enhanced learning. In E. Duval, M. Sharples, & R. Sutherland (Eds.), *Technology enhanced learning: Research themes* (pp. 157–168). Springer International Publishing.
- Hammond, M. (2017). Online collaboration and cooperation: The recurring importance of evidence, rationale and viability. *Education and Information Technologies*, 22(3), 1005–1024. https://doi.org/10.1007/s10639-016-9469-x
- Hargittai, E. (2010). Digital Na(t)ives? Variation in internet skills and uses among members of the "net generation". *Sociological Inquiry*, *80*(1), 92–113. https://doi.org/10.1111/j.1475-682X. 2009.00317.x
- Healey, M. (2005). Linking research and teaching to benefit student learning. *Journal of Geography* in Higher Education, 29(2), 183–201. https://doi.org/10.1080/03098260500130387
- Henderson, M., Selwyn, N., & Aston, R. (2015). What works and why? Student perceptions of 'useful' digital technology in university teaching and learning. *Studies in Higher Education*, 1–13. https://doi.org/10.1080/03075079.2015.1007946
- Hennink, M., Hutter, I., & Bailey, A. (2011). Qualitative research methods. London, UK: Sage
- Jamieson, P., Fisher, K., Gilding, T., Taylor, P. G., & Trevitt, A. (2000). Place and space in the design of new learning environments. *Higher Education Research & Development*, 19(2), 221–236.
- Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital science and education. *Educational Philosophy and Theory*, 50(10), 893–899. https://doi.org/10.1080/ 00131857.2018.1454000
- Jaques, D., & Salmon, G. (2008). Learning in groups: A handbook for face-to-face and online environments. Routledge.
- Kahn, P., & O'Rourke, K. (2004). Guide to curriculum design: Enquiry-based learning. *Higher Education Academy*, 30(2), 3–30.
- Kennedy, G. E., Judd, T. S., Churchward, A., Gray, K., & Krause, K.-L. (2008). First year students' experiences with technology: Are they really digital natives? *Australasian Journal of Educational Technology*, 24(1), 108–122.
- Kerwald, B. A., & Bentley, B. P. (2020). Understanding and identifying cognitive load in networked learning. In N. Bonderup Dohn, P. Jandrić, T. Ryberg, & M. de Laat (Eds.), *Mobility, data and learner agency in networked learning*. Springer.
- Kirkwood, A., & Price, L. (2005). Learners and learning in the twenty-first century: What do we know about students' attitudes towards and experiences of information and communication technologies that will help us design courses? *Studies in Higher Education*, 30(3), 257–274.
- Krüger, S. (2006). Students' experiences of e-learning: A virtual ethnography into blended online learning. Paper presented at the Fifth International conference on Networked Learning, Lancaster, England. Online Proceedings. Retrieved from https://www.networkedlearning.aau.dk/ past-conference-proceedings/
- Lister, P. (2020). Smart learning in the community: Supporting citizen digital skills and literacies. In N. Streitz & S. Konomi (Eds.), *Distributed, ambient and pervasive interactions. HCII 2020* (Lecture Notes in Computer Science) (Vol. 12203, pp. 533–547). Springer.
- Mann, S. (2010). A personal inquiry into an experience of adult learning online. In P. Goodyear, S. Banks, V. Hodgson, & D. McConnell (Eds.), *Advances in research on networked learning*. Kluwer Academic publishers.
- Mayo, P. (2019). Higher education in a globalising world. Manchester University Press.

- McConnell, D., Hodgson, V., & Dirckinck-Holmfeld, L. (2012). Networked learning: A brief history and new trends. In L. Dirckinck-Holmfeld, V. Hodgson, & D. McConnell (Eds.), *Exploring the theory, pedagogy and practice of networked learning*. Springer.
- Networked Learning Editorial Collective (NLEC). (2020). Networked learning: Inviting redefinition. Postdigital Science and Education. https://doi.org/10.1007/s42438-020-00167-8
- Nicolajsen, H. W., & Thomas, R. (2014). Creating a peer-driven learning network in higher education. In L. Calvalho & P. Goodyear (Eds.), *The architecture of productive learning networks*. Routledge.
- Oliver, R. (2008). Engaging first year students using a Web-supported inquiry-based learning setting. *Higher Education*, 55(3), 285–301. https://doi.org/10.1007/s10734-007-9055-7
- Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1-6.
- Qiu, R. G. (2007). Information technology as a service. In *Enterprise service computing: From concept to deployment* (pp. 1–24). IGI Global.
- Ramanau, R., Hosein, A., & Jones, C. (2010). Learning and living technologies: A longitudinal study of first-year students' expectations and experiences in the use of ICT. Paper presented at the Seventh International Conference on Networked Learning, Aalborg, Denmark. Online Proceedings. Retrieved from https://www.networkedlearning.aau.dk/past-conferenceproceedings/
- Ramanau, R., Sharpe, R., & Benfield, G. (2008). Exploring patterns of student learning technology use in their relationship to self-regulation and perceptions of learning community. Paper presented at the International Conference on Networked Learning, Halkidiki: Greece. Online Proceedings. Retrieved from https://www.networkedlearning.aau.dk/past-conferenceproceedings/
- Reynolds, M., & Trehan, K. (2003). Learning from difference? *Management Learning*, 34(2), 163–180.
- Ryberg, T., Buus, L., & Georgsen, M. (2012). Differences in understandings of networked learning theory: Connectivity or collaboration? In L. Dirckinck-Holmfeld, V. Hodgson, & D. McConnell (Eds.), *Exploring the theory, pedagogy and practice of networked learning*. Springer.
- Ryberg, T., Davidsen, J., & Hodgson, V. (2018a). Understanding nomadic collaborative learning groups. British Journal of Educational Technology, 49(2), 235–247. https://doi.org/10.1111/ bjet.12584
- Ryberg, T., & Larsen, M. C. (2008). Networked identities: Understanding relationships between strong and weak ties in networked environments. *Journal of Computer Assisted Learning*, 24 (2), 103–115. https://doi.org/10.1111/j.1365-2729.2007.00272.x
- Ryberg, T., Sørensen, M. T., & Davidsen, J. (2018b). Student groups as 'adhocracies'—Challenging our understanding of PBL, collaboration and technology use. Paper presented at the Seventh International Research Symposium on PBL: Innovation, PBL and Competences in Engineering Education, Aalborg, Denmark.
- Sclater, M., & Bolander, K. (2010). Factors influencing students' orientation to collaboration in networked learning. In P. Goodyear, S. Banks, V. Hodgson, & D. McConnell (Eds.), Advances in research on networked learning (pp. 175–203). Springer Netherlands.
- Shivonen, M. (2020). Online learning from the peers in higher education. Paper presented at the Twelfth International Conference on Networked Learning, Kolding, Denmark [online]. Online Proceedings. Retrieved from https://www.networkedlearning.aau.dk/past-conferenceproceedings/
- Siemens, G., Gašević, D., & Dawson, S. (2015). Preparing for the digital university: A review of the history and current state of distance, blended, and online learning. Retrieved from http:// linkresearchlab.org/PreparingDigitalUniversity.pdf
- Spronken-Smith, R. (2012). Experiencing the process of knowledge creation: The nature and use of inquiry-based learning in higher education. Paper presented at the International Colloquium on Practices for Academic Inquiry, University of Otago.

- Thomsen, D. L., Sørensen, M. T., & Ryberg, T. (2016). *Where have all the students gone? They are all on Facebook now.* Paper presented at the Proceedings of the 10th International Conference on Networked Learning.
- University of Malta Strategic Plan 2020–2025: Serving students, scholarship and society, sustainably. (n.d.). Retrieved from https://www.um.edu.mt/about/strategy
- Välimaa, J., & Hoffman, D. (2008). Knowledge society discourse and higher education. *Higher Education*, 56(3), 265–285. https://doi.org/10.1007/s10734-008-9123-7
- Whitworth, A., & Webster, L. (2020). Stewarding and power in networked learning. In *Mobility, data and learner agency in networked learning* (pp. 137–153). Springer.
- Williamson, B. (2020). New pandemic edtech power networks. Retrieved from https:// codeactsineducation.wordpress.com/2020/04/01/new-pandemic-edtech-power-networks/? fbclid=IwAR3ZpTEr8SClkhdMU82jwS6PLuCwYvpXtU3oQjAX1Flm-rdhyAK_JhG46k