Research in Networked Learning

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Editors

Conceptualizing and Innovating Education and Work with Networked Learning

Springer

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It is going beyond the usual euphemisms to say that this volume on networked learning is timely and urgently needed. As face-to-face engagement and easy travel have become perilous and the need to collaborate with others heightened, electronic technologies enabling processes are required to address emerging challenges and open up opportunities through 'net-working'. Individuals and communities previously excluded can now be engaged in and be empowered through interactions where cameras are now as important as keyboards.

Borne out of focussed necessity, offered here are sometimes raw and responsive contributions offering salient insights and approaches into how one enables processes of 'net working' electronically. Across its three sections these contributions explore processes for supporting learning and working through conceptualizing, designing and enacting networked experiences across professional development, vocational education and higher education, and from the perspectives of institutions and persons including educators, students and other kinds of learners.

Stephen Billett
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The book manages both to give an introduction to the field of networked learning, to show examples of designs for networked learning, and to provide an up-to-date insight into the current state of networked learning research. The chapters include several very interesting and highly relevant points for education, both within institutional, professional and informal learning. One of the key focus areas of many of the chapters is how a networked learning approach places emphasis on strengthening the individual learner's agency and developing professional learners' own unique practices. For example, the book argues for moving from pre-designed, one-size-fits-all courses to networked learning activities that are designed in the process and that accommodate individual learner needs. Finally, the book also points towards key challenges for designing networked learning. The pedagogical methods of networked learning, for instance openness, collaboration, dialogue, sharing, can be challenging to learners that are accustomed to more traditional forms of education. Together, these points, arguments and perspectives give

us directions for the future development of the field of networked learning.
Christian Dalsgaard
Aarhus University

Due to the timing of NLC 2020 in May 2020, the way it was held as an online event, together with the maturity of the field it might be said this book represents a coming of age of networked learning. It is certainly a very timely collection that provides insightful and relevant chapters to reflect on what has happened and has taken place since the COVID 19 pandemic hit the world in early 2020 and the consequent developments and response to it by, in particular, educational institutions across the globe. Based on well researched practice underpinned by strong theoretical thinking and ideas, the book is an up-to-date and attractive compendium and resource for both researchers and practitioners across the world—with contributions from all corners of the globe, including the global south and north, thus offering wide and more culturally aware insights. Furthermore, the editors have done a great job in the final chapter of setting the scene for future and important research agendas.
While there is often an urge to pin down the definition of what is networked learning, the chapters show the benefit of having a fluidity but commonality to how we can all engage and learn from courses and initiatives that fall under the broad umbrella of networked learning. The inclusion of some well-constructed frameworks that recognize there is no one-size-fits-all approach to networked learning is impressive. As is the celebration of the importance of technology in its role of supporting the connecting of people and resources and pedagogical approaches based on collaboration, dialogue, inquiry and community while also being mindful of critical issues such as social justice, ethics, trust and empathy.
I would recommend this Networked Learning series book on Conceptualizing and Innovating Education and Work with Networked Learning *to anyone interested in the future of digital education, including networked work learning.*
Vivien Hodgson
Professor Emerita of Networked Management Learning, Lancaster University Management School

Introduction

This book has emerged out of the 12th International Conference on Networked Learning, held 18–20 May 2020 (NLC 2020). From the many interesting, high-quality papers presented at the conference, we have chosen a set which reflect focal points that were raised during the conference. These focal points were repeatedly returned to during the conference sessions and they crystalized in the final plenary session. Here, we invited participants to write, first in the session chat and afterwards on an online board (a padlet), themes and ideas that they had found interesting, thought-provoking and/or emerging for future investigations. Many themes and ideas were suggested, and we have not been able to follow up on all within one volume. Still, we believe to have picked up on most of the suggestions, while also adhering to another important criterion for inclusion in a book like this: to establish coherence of contributions. In the months following the conference, the chosen papers have then been further developed by the authors, through rounds of reviews and revisions, into the chapters making up the body of this collected volume.

We experienced NLC 2020 as a very special conference. It took place during the first wave of the COVID-19 pandemic and was one of the first conferences that, on very short notice, had to be converted from the anticipated usual physical format (to be held at University of Southern Denmark (SDU), Kolding, Denmark) to a fully online conference. Of course, in the months (and in some cases: years) after NLC2020 this became the 'new normal', as all conferences that were not cancelled moved online. To capture the feel of the time, we wrote this introduction fairly quickly after the conference and have only slightly edited it since then (primarily with these sentences). This means that the following depiction of the process will read a bit quaintly, given that what then was uncharted land for us has since become routine considerations and practices. We find that the quaintness holds merit in giving voice to the novice organization of a networked conference and in expressing experiences of our Networked Learning community which we might otherwise forget we ever had.

The realization that we would have to convert to an online format dawned slowly on us in the organizing committee and at different stages due to the different national responses that we were confronted with. Maarten de Laat was the first to point out

that 'we probably need to start thinking about going online', whereas in the Danish group we were initially less concerned. Even up to primo March we were still considering that it might be possible to host the conference physically and include online participants. However, following the national lock-down in Denmark on March 11–12th, we started to respond fully to the gravity of the situation. On March 25th, we announced that the conference would be held fully online, and on April 2nd, we further announced that conference participation would be free of charge and that the costs would be carried by the Networked Learning Conference funds. Having made this overall decision, some key, urgent actions needed to be carried out within the short timeframe left to secure a smooth online running of the conference. For instance, we were not yet fully sure which online platform we could use to host the conference. While Zoom seemed to rapidly develop into the default platform for many online events, critical voices were also raised in terms of security and data collection, and some universities discouraged their staff from participating in Zoom meetings (to the point of fully blocking participation). Further, there was an issue of ensuring that we had enough institutional licenses available for hosting largescale live sessions. We also discussed what delivery formats would be best suited for a global conference, how to build and maintain a sense of community, and how to welcome new conference participants. Further issues concerned the time commitment we could expect from our participants and the kind and amount of technical support we needed to have on stand-by to deal with potential connection problems and secure a smooth conference experience for all.

The question about delivery formats was one of the most challenging as the conference experience and participation possibilities would to a large extent hinge on this. Should the conference be hosted as a synchronous event, i.e. with timed live-sessions, or should we offer asynchronous sessions with pre-recorded videos and forum discussions that could be spread over a longer period of time? An asynchronous format can better accommodate to different time zones, but there would be a serious risk that participants would treat the conference as a side activity they could get to later on. This would clearly jeopardize the lively discussions usually found at NLC. Therefore, to enhance the possibilities of NLC 2020 becoming a lively community and networked learning experience, we decided for a synchronous event, utilizing Adobe Connect. This decision also took into account that conference delegates would already have reserved the dates for the planned regular physical conference, whereas the longer period of time needed for an asynchronous format might challenge their ability to take part and potentially further marginalize their engagement. The drawback of choosing a synchronous format was that participants outside the European time zones would probably not be able to attend all sessions. To compensate for this, we chose to record all the sessions and make them freely available after the conference. Further, we reached out to CanopyLab (www. canopylab.com) who agreed to host the conference on their social learning platform. This gave us a conference landing page for all delegates, with links to the synchronous settings, and with possibilities for delegates to make profiles, get to know each other, reach out and set up meetings to network, collaborate and continue the discussion asynchronously after the live presentations were held.

We are very grateful to CanopyLab for this sponsorship. We are also very grateful to a great number of people and institutions that helped us go from the above-mentioned stage of decisions to the actual running of an online synchronous conference: The IT-support and Centre for Teaching and Learning at SDU, the administration at Aalborg University, and the Danish e-infrastructure Cooperation (DeiC) were all very helpful. A special thank you goes to Christopher Kjær, SDU. Without his excellent support and expertise, we would have been lost. We further wish to thank Springer for sponsoring 2 months' free access to a set of chapters in books on networked learning, starting at the time of the conference. This was a great help in inviting newcomers into the domain of the conference.

Looking back at the event some weeks later, we found that the online conference was well received. Most of us had been in lock-down for several weeks or months by the time of the conference, and in our experience, it represented a most welcome opportunity for delegates to engage with fellow researchers. This engagement of course involved scholarly discussion on networked learning—the theme of the conference—but it also allowed us to share stories about how to survive or cope when working from home, caring for others, with many of us also tasked with home-schooling children and negotiating other challenges of life, like getting hold of toilet paper. These were indeed difficult and strange times as has been well documented in the collectively authored paper 'Teaching in the age of COVID-19' (Jandrić et al., 2020) cleverly collected and curated by Petar Jandric and Sarah Hayes as a historical testimonial to the experiences of teachers and researchers during the early stages of COVID-19.

The decision to have an online free conference resulted in a surge of interest globally, and sign-ups for the conference quickly neared 500, our maximum number of licenses. Figure 1 shows the geographical distribution of registered participants. The conference markedly increased its global outreach as compared to former, physical conferences. We are happy to say that the interest was maintained through-out the event. This is indicated quantitatively by the average attendance of 150 people per day and more than 250 people attending in total. Qualitatively, it is shown in participants' reflections on the opportunities which the online format presented in terms of open and interesting discussions as well as new kinds of dynamics and interaction. Such reflections were repeatedly put forth in the conference's many session chats and they were a vibrant theme also in the last session's chat and padlet calls for themes and ideas. For example, one participant wrote that during pre-sentations chat discussions were '. . .really useful for sharing not only opinions but links to resources as well'. Delegates in general reported feeling a strong connection in the chat. Downsides to the online format were discussed too, of course. A widely reported one was the reduced interaction in between sessions. Delegates missed the opportunities for sharing coffees away from the crowd, 'not having more informal places to go and chat'. Overall, the conference was, however, considered to be a worthwhile first step in online conferencing and it was suggested that this format could 'Pave the way for more environmentally friendly conferences'.

As the conference took place only a few months into the spread of COVID-19 in Western Europe, the new circumstances of education online and hybrid teaching was

Fig. 1 Geographical distribution of registered participants at NLC 2020

another central theme in the feedback. Some pointed at the need for professional development in order to handle online education. Others articulated the need for a dialogue to address future challenges for education. A third point concerned the situation of online learning for the learner: Although teaching takes place online and learning is based on interaction with the screen, the role of the body in learning processes should not be overlooked. One delegate thus suggested: 'Networked learning [is] an expression of enactivism and co-dependence of the individual and the environment'.

In extension of this theme, more general reflections on technology and on how to understand networked learning also surfaced. An exemplary comment was: 'Technology shapes us as much as we shape it'. The discussion of the concept of networked learning was substantial in presentations, round tables and workshops as well as in the comments and observations made. One topic that was raised concerned the nature of that which is being connected: technology as connecting *devices*, technology as connecting *archives and information*, and technology as connecting *people*. This opened for a discussion of the ways in which different media archive and collect information differently and of the surveillance issues that emerge as a result. Finally, ethical issues in the context of networked learning and the future of education was a theme that reverberated with the delegates. Many were concerned about the role of technologies and AI in education: 'How can we trust these tools? What is/should be their relationship with humans?' These are likely be to be themes that will return in coming networked learning conferences.

As indicated, we have chosen the chapters for this book so that they reflect focal discussion points such as the ones mentioned in the preceding paragraphs. In our concluding Chap. 13, we present all chapters in more detail. This will allow us to take up again the question of how they—individually and jointly—signal current and emerging issues within networked learning. Here, we restrict ourselves to presenting the overall discussion points which make out the main themes of the book. The first one concerns how to characterize the field of networked learning—as a community, as an epistemic practice and as a domain. We have represented this focal point in the first chapter (following this Introduction). The chapter investigates how the term 'networked learning' has been used over the years in papers presented at NLC. The overview and discussion provided by the chapter serves as an introduction to the field to newcomers and as a steppingstone into the rest of the book. For this reason, we have allocated it the place of 'setting the stage'. The rest of the book has three parts and a Conclusion written by the editors.

Part I is entitled *Professional Learning*. It picks up on the above-mentioned discussion point, actually central to the NLC series from the beginning: how can networked learning designs and interactions facilitate professional development and learning? The part contains three chapters, concerned in different ways with introducing design to professional development with networked learning. One chapter looks at how a networked professional development course can be used to nurture a design thinking mindset amongst its participants. Two chapters develop design frameworks to articulate and support professional development. One of them reports on a project which aimed to design and evaluate a framework for ICT-mediated boundary crossing in Danish dual Vocational Education and Training programmes. The other one develops a general framework of design dimensions that can be used in designing networked professional development courses.

Part II contains three chapters investigating *Learning Networks' Development and Use of Digital Resources*. All three chapters look at learning networks consisting of educators and at the educators' collaborative development and use of digital resources to support student learning. The focus is on how the educators' engagement with the digital resources work to foster their network itself as well as the educational goals for which the digital resources are designed. One chapter reports from a design-based research study of Danish K-12 teachers' use of the CourseBuilder space for sharing materials. The chapter identifies barriers to this space evolving into a design space for the teachers. A second chapter concerns Canadian university educators' support of their students' development of digital literacy through collaboratively shared, shaped and reshaped instructional material. The last chapter investigates a learning network's use of open learning resources to promote social action in Brazil. The focus on the one hand is on the resources' roles in educational innovation and on the other hand on the building-up of the learning network.

Part III consists of five chapters which in different ways explore *Innovating Networked Learning*, with new formats and aims for teaching and learning, new technologies, and new ways of conceptualizing learning in networked settings. The first two chapters look at new teaching and learning formats in combination with

new technologies. Thus, the first chapter reports from a study of a new teaching and learning format which integrates networked learning and inquiry-based learning at the postgraduate level in Malta. The second chapter takes a critical look at the new blockchain Woolf University and its promise to radically transform higher education, building on cooperative principles. The three remaining chapters introduce new conceptualizations of the learning process and its different aspects. One chapter seeks to reconceptualize human-AI interaction in both formal and informal learning settings from a perspective that sees this interaction as co-constitutive, and in that sense 'more-than-human'. One chapter introduces enactivism as an epistemological viewpoint to conceptualize the multiple relationships between mind, body and environment in networked learning. The final chapter develops a framework for mapping and analysing learners' Personal Learning Networks (PLN). A PLN here consists of the different resources which a person makes use of in learning: people, technological devices, services and information resources.

In concluding this short Introduction, we wish to say that we, as conference organizers, are indeed very pleased with the turnout and the astonishingly engaged participation of delegates which we saw at NLC 2020. Those of us responsible for future events—the Co-Chairs Thomas Ryberg and Maarten de Laat, as well as Nina Bonderup Dohn (ongoing member of the scientific committee)—need to think about how to sustain this great community. We will take our experiences from NLC 2020 into account in designing future Networked Learning Conferences to include wider participation, as well as plan new types of networked learning events. The biennial NLC will always be the main event, but in the in-between years we plan to organize new (hybrid/online) activities to promote networked learning on other continents and to address emerging topics and new research directions at events focused on dedicated themes. It is our hope that such events will also support the development of papers to be presented at the Networked Learning Conferences.

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Contents

Part III   Innovating Networked Learning

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