







Leveraging the pandemic to build a community of networked, engaged, and curious learners – our future leaders

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The COVID-19 pandemic has undoubtedly presented a multitude of challenges to the way education is delivered; its wide-reaching multidisciplinary impact has also presented a unique opportunity as a focus for real-world authentic learning. For some time now, technology has enabled interaction at a global scale, allowing students to connect with teachers and industry experts around the world. This paper reports on the innovative design of an intra-curricular program utilising COVID-19 as a focus for online, real-world connected learning, delivered to business students at a large Australian university during the pandemic lockdown. Implemented as an online intra-curricular initiative, 'Leading in a Post-COVID World' encouraged student engagement with the challenges of leadership to address issues on a personal, local, and global scale. Using a community of inquiry (CoI) lens we explore key features of the program and find that a CoI approach combined with principles of real-world learning and authentic experiences encourages student participation and engagement in this intra-curricular space.

Keywords: CoI; Connected learning; Authentic learning; COVID-19; Business education

Introduction

Although universities have long been considering new approaches to offer more flexible learning opportunities and online platforms, the COVID-19 pandemic provided an opportunity to accelerate aspects of online teaching and mainstream online learning. The transition to online and hybrid learning continues to be developed and improved as we undergo the 'second hump' of online learning in a post-COVID world (Siemens, 2020).

This paper reports on the novel practice of utilising COVID-19 as a focus for online, real-world connected learning in order to build a community of inquiry for students studying online due to the pandemic lockdown at an Australian university Business school. 'Leading in a Post-COVID World' (LPC) is an intra-curricular initiative; it draws on the learning that students take from across their different disciplines and programs (accounting, business analytics, marketing for example) and gives them opportunities to apply their knowledge in a collaborative and 'safe' space. LPC also draws on the principles of connected learning at scale (CLaS) (discussed in detail below) and technological affordances to facilitate online engagement between students, teachers and industry dispersed across multiple countries. The initiative encouraged student engagement with the challenges to address issues on a local and global scale. We utilise a community of inquiry lens to examine key features of the program. Results suggest the use of CLaS principles to underpin the program combined with innovative technology supported student learning and engagement in an intra-curricular space.

Community of Inquiry (COI) Framework

The Community of Inquiry (COI) framework, designed for online inquiry-based learning and rooted in social constructivism proposes that a meaningful educational experience occurs within a community of students and teachers through three different forms of 'presence': teacher presence, social presence, and cognitive presence (Garrison, Anderson & Archer, 1999). The framework assumes that higher order learning depends on development of a community which entails connection at both a cognitive and emotional level between learners who are physically separated (Fiock, 2020). Community is particularly important in online settings as it can increase satisfaction and cooperation among members of a learning community as well as commitment to collective goals, while increasing availability of support and flow of information (Rovai, 2000). Gray and DiLoreto (2016) found that social and cognitive presence can be enhanced through both synchronous and asynchronous discussions, audio and video, practical activities and through allowing students to self-select topics. A recent study by Armellini (2016) suggests that in the online learning space, increasing social presence

can promote cognitive and teaching presence. The COI framework is therefore considered a suitable lens for examining key features of the online LPC intra-curricular initiative.

Connected Learning at Scale (CLaS)

The pedagogical design of the Leading in a Post-COVID World program is underpinned by the principles of the CLaS initiative, developed at the University of Sydney Business School. CLaS was developed in response to the challenge of designing a transformational and connected education experience for students, with a particular focus on classes delivered at scale (both in terms of student numbers and complexity) (Bryant, 2019). Each unit that is delivered as part of the CLaS project has been (re)designed to embed three principles into their teaching, learning and assessment structure:

- **Information Engagement:** This involves reimagining the lecture and moving towards personalised learning where students have agency over how they navigate content and the use of interactive and engaging learning activities designed to support a variety of learning styles and paces.
- Connected Participation and Active Learning: This involves changing the ways in which academics engage with students in tutorials, workshops and classes, supporting more collaborative work, challenging their skills. Leveraging connections and embedding the critical use of work-ready and relevant technologies to foster creativity, collaboration and a sense of belonging.
- Relevant and Authentic Assessment and Feed Forward: This involves redesigning the assessment experience to model and embed practical, applied, and authentic contexts for assessment, providing feed forward that supports student learning past the marking and awarding of qualifications and into a lifelong process of learning.

The final aspect of the CLaS approach is to embed these principles in the context of understanding and solving critical global, local and personal challenges, which are even more pressing and urgent for a post-crisis world. Class activities, exercises, cases and examples, along with more active pedagogies such as crowdsourcing and digital storytelling focus learning on these challenges across the curriculum and the student experience.

Leading in a Post-Covid World (LPC) – pilot program

The LPC initiative initially ran as a one-semester intra-curricular program in Semester 2, 2020 with over 1800 students enrolled. Real-world activities such as leadership skill development, pitching for impact and data analysis were combined with collaborative problem solving and individual reflection on what constituted leadership for good. Built-in opportunities for formative feedback throughout the program were supported through synchronous online workshops and peer mentors. The program culminated in a live Forum where finalists presented their pitches to address and solve the critical global or local challenges that were concerning them the most to a panel of industry experts. LPC concluded with the opportunity for participants to gain digital badges at three levels (silver, gold, platinum) in recognition of their participation. There were numerous elements in the program; we examine three key sections and map them to the COI framework (see Table 1).

Modular Learning Design

LPC consisted of four distinct modules: Alpha, Sigma, Pi and Omega. Each module consisted of a pre-recorded masterclass followed by a synchronous workshop. This format provided a consistent structure across all modules. Information engagement with the masterclasses provided insights from Australian and international experts. These were followed by synchronous workshops in MS Teams, in order to increase interaction and engagement. A canvas site was developed for students enrolled in the program. Links to the masterclasses and workshops were placed on the Canvas site. Students also received communications when each module went live. Welcome activities before the modules started were encouraged on the canvas site with each student asked to post a book cover representing their current experience studying during lockdown. Peers and facilitators provided comments about the book cover selection. This provided a sense of community (Wenger, 2000).

Asynchronous Elements: Masterclass and Fireside chat

For each module a pre-recorded asynchronous Masterclass and Fireside chat was made available through the Canvas learning management system (LMS) using Vimeo. Students were able to access and engage with content at their own pace. The use of pre-recordings allowed students to pause and playback content. This approach also allowed international experts to present to students across time zones and undertaking the program at their own pace. The Masterclass consisted of a keynote presentation by a global expert covering a critical topic: mindset; economic planning; future trends; and coping with challenges. A Fireside chat discussion followed between the

keynote speaker, leading academics from the university, and thinkers (including leading researchers, alumni and global industry experts) on the topic presented in the Masterclass and provided students access to a range of different perspectives.

Synchronous Elements: Workshops and Webinars

The Masterclass presentation was followed by an online synchronous workshop with group and individual activities on the masterclass content. The workshops were hosted by three academic facilitators including a peer mentor to provide feedback throughout the initiative. The workshops were run online in MS Teams, which allowed students to work in small groups (max. 10 students) posting ideas during live video calls, while having access to posted content afterwards. Due to the range of participants across multiple countries, students were provided with multiple workshop days and times to select per module. Between each module, a research webinar series Research Connections, was run with leading researchers from the Business School sharing their research on Covid-related topics. Students were encouraged to ask questions and reflect on content for their group projects.

Real-world engagement

As this was an intra-curricular initiative it was important to provide students with authentic, real-world learning opportunities that would develop their industry skills such as collaboration and working in a team and provide them with the opportunity to apply the knowledge they have gained from their diverse programs. Students collaborated on a crowdsourcing project called Futuremakers (Tyrrell, 2020) to analyse critical global or local challenges. In their LPC workshops, students collaborated in groups (max. 5 students) to suggest solutions for a problem and develop a group pitch to present for peer and industry feedback. Other aspects of the program encouraged students to design and develop their own leadership legacy through critical reflection, helping students develop the skills to present their core values to future potential employers. Participation in the program was recorded and recognised with digital badges deployed on the students' LinkedIn profile.

Connection

Building connections was a central tenant of the program. The program was designed as a learning community which the students could feel part of. The workshops engaged students as partners in learning (Mercer-Mapstone et al., 2017) by including current postgraduate students as part of the academic facilitation team to provide feedback on group tasks and the collaborative pitch presentation. For the group presentations, the students self-nominated the global or local challenges that they were going to pitch at the Forum. Students could then self-select which group they would like to join with up to five students per presentation. The academic team supported by posting comments and providing feedback. The peer mentor team led drop-in sessions on MS Teams before the Forum, for groups to present their pitch presentations for verbal feedback and discussion. Written qualitative feedback was provided by the peer mentor team to the finalists on their pitches at the completion of the program. Peer mentor involvement in the workshops helped to promote connection across the program (Mercer-Mapstone et al., 2017).

Mapping LPC to the Col Framework

Recent studies (such as Fiock, 2020; Armellini & De Stefani, 2016; Nolan-Grant, 2019) have found that utilising the COI framework can provide support for analysis and design of online learning experiences. In Table 1 three key features of the intra-curricular initiative have been mapped against the Community of Inquiry framework (social, cognitive and teaching presence) alongside key supporting literature in order to highlight the connections across the program. An ongoing part of the project is the further mapping of the whole initiative to the Community of Inquiry framework. Leading in a Post Covid world was a unique pilot program designed and deployed during a crisis. It provided students with the opportunities to learn in an environment that connected a community of students and academic staff working together on authentic real-world problems.

Table 1. Kev features	of the initiative mapp	ed against CO	I framework and the literature

Leading in a Post-COVID World Key Features		S	С	Т
Modular Learning Design				
•	Course and topics introduced through short videos (Vimeo) with walk-throughs of tasks	Х		Х
	and technologies (Lowenthal & Dunlap, 2018; Nolan-Grant, 2019)			
•	Knowledge represented in multiple ways using a variety of technologies (Canvas, Vimeo,	Х	Х	Х
	Zoom, Padlet, Sway, Sli.do, MS Teams) (Fiock, 2020)			

• • •	 Students given control over the pace of presentations (Vimeo) (Fiock, 2020) Modular style was consistent, clear and easy to navigate (Canvas) (Lowenthal & Dunlap, 2018) Explicit instructions, goals and guidelines (Lowenthal & Dunlap, 2018) Active learning (Dunlap et al., 2016) Small group sizes for activities (groups Max. 10 students) (Richardson & Lowenthal, 2017) 	Х	X X	X X
Real W	/orld Engagement			
•	Students crowdsourced and selected problems (crowdsourcing platform) (Lowenthal & Dunlap, 2018)			Х
٠	Authentic, real-world and reflective activities (Fiock, 2020)		Х	Х
•	• Timely, supportive and constructive feedback (Lowenthal & Dunlap, 2018)			Х
•	Collaborative group problem solving (Max. 5 students per group) (Fiock, 2020)	Х		
Connec	ction			
•	Teachers and facilitators were introduced to students through posts (Canvas) and video (Vimeo) introductions (Fiock, 2020)	Х		
•	Initial ice breaker activities (MS Teams/Canvas) to develop trust) (Fiock, 2020)	Х		
•	Students as partners in learning (Mercer-Mapstone et al., 2017)	Х	Х	Х
•	Peer mentoring (Mercer-Mapstone et al, 2017)	Х	Х	Х

Extending the pilot program

This innovative online intra-curricular initiative was in fact a pilot program. As is the case with pilots, several challenges were encountered in this first iteration including digital access and learning to use new technology. We built the program around the assumptions of ubiquitous connectivity (Willems, Farley & Campbell, 2019), noting at times that access may have been severely impacted by the pandemic, being unable to access hardware and software from home and possibly having to share Internet bandwidth with family members.

We also faced the challenge of how to engage students in multiple time zones along with the need to support students and teaching staff in learning new technologies. Whilst asynchronous options were offered, we need to think more broadly about how teacher presence is enacted in an asynchronous mode and furthermore how we develop our academic facilitators and peer mentors in this regard (Ó Ceallaigh, 2021). A benefit of learning at scale is that it creates an opportunity to offer synchronous events at different times (Gabaree et al., 2020). We would like to offer students opportunities to further interact with content and with their peers. For example, when you miss a live-streamed press conference on the pandemic updates but tune-in after the event and can still see and 'react' to others' comments that were made during (and also after) the presentation.

In the next iteration, we will continue to design and extend further opportunities for students to engage with research in a global context through the Research Connections webinars. In addition, we are expanding the direction of the program by widening the boundaries to include not only the COVID-19 health crisis, but other crises. For example, looking at how leaders responded in the global financial crisis of 2008. Furthermore, we plan to integrate aspects of LPC into the curriculum and open the units as electives for students across all faculties to enrol.

Conclusion and next steps

At a time when many students around the world were socially and intellectually isolated and seeking opportunities to engage and learn, 'Leading in a Post-Covid World' provided an opportunity to connect in an intra-curricular online space. Creative application of sound pedagogical design principles (CLaS, COI, SaP), together with appropriate supporting technologies enabled the initiative to be developed and successfully delivered in a short time frame. Despite the initiative being offered at a time when many were adapting to the challenges presented by COVID-19, c.1800 students engaged with the initiative, which speaks to the importance of real-world, connected learning experiences at scale, that help students grapple with authentic and relevant problems. The inclusion of students as partners and peer mentoring further strengthened the community. A community of inquiry approach continues to provide a theoretical framework to help when designing and evaluating an online program.

Further research is needed in this area to contribute to the sparse literature on designing intra-curricular online programs and design for learning that enables student agency over pathways and structures of interactivity and engagement. To this end we have received human ethics approval to evaluate the program in its next iteration.

References

- Armellini, A., & De Stefani, M. (2016). Social presence in the 21st century: An adjustment to the Community of Inquiry framework. *British Journal of Educational Technology*, 47(6), 1202–1216. https://doi.org/10.1111/bjet.12302
- Bryant. (2019, July 20). Being a part of Our Place: Designing a transformative and connected learning experience at the University of Sydney Business School. Teaching@Sydney. <u>https://educational-innovation.sydney.edu.au/teaching@sydney/being-a-part-of-our-place-designing-a-transformative-and-connected-learning-experience-at-the-university-of-sydney-business-school/</u>
- Dunlap, J. C., Verma, G., & Johnson, H. L. (2016). Presence + experience: A framework for the purposeful design of presence in online courses. *TechTrends*, *60*, 145-151. https://doi.org/10.1007/s11528-016-0029-4
- Fiock, H. S. (2020). Designing a Community of Inquiry in Online Courses. *International Review of Research in Open and Distance Learning*, 21(1), 135–153. https://doi.org/10.19173/irrodl.v20i5.3985
- Gabaree, L., Rodeghiero, C., Presicce, C., Rusk, N. and Jain, R. (2020). Designing creative and connected online learning experiences. *Information and Learning Sciences*, 121(7/8), 655-663. <u>https://doiorg.ezproxy.library.sydney.edu.au/10.1108/ILS-04-2020-0121</u>
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education. *The Internet and Higher Education*, 2(2), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6
- Lowenthal, P., & Dunlap, J. (2018). Investigating students' perceptions of instructional strategies to establish social presence. *Distance Education*, 39 (3), 281-298. <u>https://doi.org/10.1080/01587919.2018.1476844</u>
- Mercer-Mapstone, L., Dvorakova, S. L., Matthews, K. E., Abbot, S., Cheng, B., Felten, P., Knorr, K., Marquis, E., Shammas, R., & Swaim, K. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students as Partners, 1*(1). https://doi.org/10.15173/ijsap.v1i1.3119
- Nolan-Grant, C. R. (2019). The Community of Inquiry framework as learning design model: a case study in postgraduate online education. *Research in Learning Technology*, 27, 1–15. https://doi.org/10.25304/rlt.v27.2240
- Ó Ceallaigh, T. J. (2021). Navigating the role of teacher educator in the asynchronous learning environment: Emerging questions and innovative responses. *Irish Educational Studies*, 0(0), 1–10. https://doi.org/10.1080/03323315.2021.1932553
- Richardson, J. C., & Lowenthal, P. (2017). Instructor social presence: A neglected component of the community of inquiry. 2, 531.
- Siemens, G. (2020, April 1). Faculty and staff need to prepare for a two hump problem with going online. Twitter. <u>https://twitter.com/gsiemens/status/1245258342332686336</u>
- Tyrrell, J. A. (2020, November 2). Future Makers in the Business School. Teaching@Sydney. https://educational-innovation.sydney.edu.au/teaching@sydney/future-makers-in-the-business-school/
- Wenger, E. (2000). Communities of Practice and Social Learning Systems. *Organization*, 7(2), 225–246. https://doi.org/10.1177/135050840072002
- Willems, J., Farley, H., & Campbell, C. (2019). The increasing significance of digital equity in higher education: Australasian Journal of Educational Technology, 35(6), 1–8. <u>https://doi.org/10.14742/ajet.5996</u>

Bryant, P. J., Arthars, N., Eden, D. & Huber, E. (2021). Leveraging the pandemic to build a community of networked, engaged and curious learners – our future leaders. In Gregory, S., Warburton, S., & Schier, M. (Eds.), *Back to the Future – ASCILITE '21. Proceedings ASCILITE 2021 in Armidale* (pp. 241–245). <u>https://doi.org/10.14742/ascilite2021.0136</u>

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