

# Advancing the Scholarship of Teaching and Learning in Larger Enrolment Courses: Lessons Learned From an Online Community of Practice

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### **ABSTRACT**

In this reflective essay, we describe our experiences—as an educational development consultant, an instructional designer, and a research assistant—in developing a large enrolment online community of practice during the COVID-19 pandemic. In this paper, we explain how the COVID-19 pandemic presented the higher education community with an opportunity to explore and expand best practices in blended and online teaching through a large enrolment community of practice. We expand on Wenger-Trayner and Wenger-Trayner's (2015) description of a community of practice (CoP) as a "living curriculum" (p. 4) to include an online perspective based on Hoadley's (2012) and Xue et al.'s (2021) considerations of content, process, and context. We then explain the benefits we observed as facilitators of the online CoP (OCoP) to faculty development and the scholarship of (SoTL), specifically through teaching and learning collaboration, interdisciplinarity, innovation, and validation. We conclude with a current bird'seve view of the OCoP and summary of learning from our observations during the first year of implementation.

*Keywords:* blended and online, community of practice, faculty development, scholarship of teaching and learning (SoTL)

DOI: <a href="https://doi.org/10.29173/isotl613">https://doi.org/10.29173/isotl613</a>

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# INTRODUCTION

Communities of practice (CoPs) have been called "living curriculums" and "learning partnerships," creating teaching development spaces led by and intended for educators (Wenger et al., 2011, p. 9). These spaces are interactive, multifaceted, and participant-driven, potentially creating sustainable and innovative approaches to faculty development. CoPs are directly related to the scholarship of teaching and learning (SoTL) and have been shown to increase the quality and accessibility of teaching development opportunities in post-secondary institutions, presenting educators with a sustainable and effective professional development framework (Tierney et al., 2020). The COVID-19 pandemic caused the authors, as academics and staff in the higher education community, to critically reflect on how a teaching and learning centre at a large Canadian university can continue to support faculty, especially those that teach large enrolment courses.

While COVID-19 physically removed many faculty members from their campus offices, the pandemic also created unique opportunities to build online communities where educators could gather and share their teaching practices with others. The large enrolment online community of practice we facilitate is an example of an online, educator-led, transdisciplinary initiative that provides peer-to-peer mentorship, leadership, and a knowledge-sharing network for large-enrolment educators. This online CoP (OCoP) is resourced through a partnership between the external funding at the teaching and learning centre and several educators from various faculties at the higher education institution.

Grounded in the principles of voluntary participation, safe space, and participant-driven conversations (Wenger et al., 2011), the OCoP is a space for educators teaching large enrolment courses to learn from others and share their own teaching practices during the pandemic and beyond. Initially formed to build community during the pandemic and respond to the challenges that an immediate pivot to emergency remote teaching presented for large enrolment courses, the OCoP has now evolved into a sustainable community of members who share a desire, willingness, and capacity to continue connecting online for the betterment of their own teaching and learning practices.

In this paper, we provide observations, reflections, and insights regarding our experiences as founders and facilitators of the OCoP. From our observations as facilitators, we have witnessed that this informal mentorship and leadership network has created the opportunity for transdisciplinary knowledge transfer, quality collaborations among educators, and improved confidence in teaching blended and online large enrolment courses. The perspectives shared in these proceedings are those of the authors and do not include any data or information provided by members of the OCoP; therefore, this study does not require an ethics clearance. Given the reflective nature of these observations, a formal SoTL study may be warranted to further explore the impact of the OCoP from the perspectives of participants.

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# **FRAMEWORK**

# The Why

The COVID-19 pandemic abruptly impacted teaching in higher education. Every faculty member and instructor had to immediately pivot their teaching practice from in-person to remote learning. Due to the urgency in restrictions caused by the pandemic, the change in teaching modality occurred without a grace period to revisit courses, without additional training, and without extra support for faculty and instructors. At our teaching and learning centre, we recognized that the immediate pivot to emergency remote teaching resulted in an urgent need to assist our faculty and instructors. Faculty and instructors who were teaching large enrolment courses were identified as a specific group where immediate support would benefit them and their students. The centre initially reached out to the campus community by hosting a workshop for faculty and instructors, then through follow-up emails and meetings. During these gatherings, we identified a desire, availability, and opportunity to provide support to faculty and instructors teaching large enrolment courses.

The desire to form a community of practice came from faculty and instructors who, as a result of the pandemic, were not able to meet in person to collaborate and share teaching strategies and resources that meet the needs of students in their large courses. This desire to create connections, even virtual ones, arose from the inherent collaborative aspect of teaching in higher education contexts that became challenging during the pandemic. The virtual nature of teaching remotely meant that faculty and instructors were available to meet online. Not having to travel to meetings and locate rooms in our large campus, meant faculty and instructors had time to connect virtually. Finally, the pandemic presented opportunities for the campus community to use existing and new technologies to meet and collaborate. Based on these initial conversations and interactions with faculty and instructors, we collaborated to form an online community of practice (OCoP) for large enrolment faculty and instructors that would strive to meet the immediate needs of this group.

# The What

The OCoP was formed using Wenger et al.'s (2011) community of practice framework where the domain, the community, and the practice are the foundations of the community. Wenger et al. (2011) distinguish a community of practice from a traditional community using these three characteristics to highlight the intentionality of each of these areas and their relevance to teaching and learning. First, the domain represents the shared interest of the OCoP members and their dedication to improving their teaching practice and the quality of instruction in large enrolment courses. The identity of the group is formed in respect to this characteristic. Similar to the findings in Xue et al. (2021), we observed that the community provides camaraderie and mentorship opportunities for members. The community represents the collective members' desire to pursue their common Anselmo, L., Wright, A., & Stepanchuk, A. (2022). Advancing the scholarship of teaching and learning in larger enrolment courses: Lessons learned from an online community of practice. *Imagining SoTL*, 2(2), 52-62. https://doi.org/10.29173/isotl613

interests and connect with faculty and instructors from different disciplines who share the same interests and wish to engage in discussions to share experiences and resources. Lastly, the practice provides the OCoP with a space to organize the meetings, house shared resources, and store meeting notes and reflections from meetings. In this realm, a repository of knowledge, resources, and experiences, such as pedagogies for online teaching and learning technologies, are built based on participants' contributions. While the foundation of our CoP was based on a traditional perspective, the pandemic forced us to revisit a face-to-face CoP framework and reimagine it in an online space.

#### The How

Our OCoP examined the three characteristics from Wenger et al.'s (2011) community of practice framework and reimagined the community functioning solely in an online space. The benefits of an OCoP are supported in the literature. Xue et al. (2021) note that some advantages of an OCoP include knowledge dissemination and professional development, as well as improving teachers' technological knowledge, intercultural awareness, teaching pedagogy, and beliefs in teaching self-efficacy. While these benefits may also be present in a traditional CoP, what makes a OCoP unique is how technology is used to discover, connect, build, and sustain the community.

Hoadley (2012) proposed four techniques through which technology can be used to support a community of practice. The COVID-19 pandemic presented the opportunity to revisit a CoP in an online format; however, it was first through an online workshop hosted by our teaching and learning centre that we discovered the need for an OCoP for faculty and instructors to discuss the challenges and benefits of teaching large enrolment classes. Technology could and would support this need. The university had an institutional license for a video-conferencing platform that would provide the technology required to virtually host faculty and instructors. Therefore, we used this technology to connect community members. Once the willingness to meet was determined, we decided to use this same videoconferencing platform to host regular meetings. Since the platform was institutionally supported, all members had access to the technology and did not require additional training to participate in the OCoP.

We also used technology, in the form of a learning management system (LMS), to build a repository of shared resources. The LMS we used, D2L Brightspace, was supported by the university, which meant community members were familiar with it and able to contribute easily. Each community member was added to a messaging application where they could collaborate, communicate, share files, and continue discussions after the regularly held meetings. In this collaborative space, members shared teaching practices and strategies that arose out of the conversations that took place during the online meetings. For the OCoP to be sustainable, certain considerations were examined to strengthen the feasibility of the OCoP and the benefits for members.

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# **CONSIDERATIONS**

Establishing an OCoP for faculty development was based on several considerations. To encourage the exploration and expansion of best practices for blended and online learning at the university, we developed a flexible framework for the OCoP, in which participants were able to share leadership and expertise. Furthermore, we aimed to create and hold the space for the members, maintaining consistent coordination and support. Our goal was to promote an inclusive environment that would be conducive to and driven by the needs of the OCoP members in respect to blended and online learning.

As a result of university and government regulations designed to reduce the spread of COVID-19, most classes at the University of Calgary transitioned swiftly from predominantly face-to-face to either blended or online teaching modalities. This applied not only to coursework and student-faculty interactions, but also to professional development opportunities for academic and non-academic staff. For the OCoP to work well within the landscape of the university during the pandemic, we used technology to create and hold space, supporting both the community and the shared practice. Our aim was to create a community with a less rigid framework, accept new members on a rolling basis, and always adapt to the changes in restrictions imposed by the waves of the pandemic. The OCoP embedded its members in authentic contexts, using media and software that were also used for instruction at the university.

Technology influences how a community of practice is fostered and supported (Hoadley, 2012). It can also be a source of alternative solutions in the face of rapid changes in the socio-economic environment to ensure continuity in the CoP functioning. All three dimensions of the CoP (mutual engagement, joint enterprise, and shared repertoire) are facilitated by technology in terms of the content, process, and context (Hoadley & Kilner, 2005).

A common space for asynchronous collaboration is crucial for all OCoP members to be able to store, share, and manipulate information and knowledge created by the community. This area, referred to as "content affordance," includes the sharing of resources and tools in a way that can be easily accessed by the participants (Hoadley & Kilner, 2005). In our OCoP, this was fulfilled by creating separate collaborative and resource sharing spaces.

Technology was also used to connect the OCoP members across different faculties and to accommodate those instructors who were teaching across university campuses. Biweekly videoconferencing meetings eliminated the need for the participants to be physically present in the same space to be able to have discussions and exchange ideas. They were also able to keep up to date with the discussion in the community by referring to the detailed meeting notes, made available to everyone in the group, regardless of attendance. This way, technology allowed us to facilitate interaction and collaboration among all OCoP members, regardless of the geographical location or schedule conflicts. By bringing people together across Anselmo, L., Wright, A., & Stepanchuk, A. (2022). Advancing the scholarship of teaching and learning in larger enrolment courses: Lessons learned from an online community of practice. *Imagining SoTL*, 2(2), 52-62. https://doi.org/10.29173/isotl613

all faculties, the OCoP impacted the social environment of its members. Ultimately, such context affordance resulted in a diverse set of topics for each meeting, which were chosen by the group members based on their varied backgrounds.

Our online community of practice was explicitly created to provide an opportunity for faculty development in the areas of blended and online teaching and learning. The flexibility of the framework, along with the technological affordances fostered an inclusive, welcoming environment, where each member was able to share their experiences and exchange ideas in multiple ways. The community functioned and evolved around the learning goals set by the members themselves, influencing the role of the OCoP in the university community as well as in the landscape of the scholarship of teaching and learning (Hoadley, 2012)

#### FACULTY DEVELOPMENT AND THE PROMOTION OF SOTL

Communities of practice have been a common approach to faculty development in higher education for decades (Sherer et al., 2003). Recently, scholars have found that CoPs have incredible potential to promote SoTL by fostering a sense of belonging through collaboration (Dzidic et al., 2017), fostering interdisciplinary knowledge translation and mobilization (Tierney et al., 2020), encouraging innovation by engaging in critical inquiry with others (Smith et al., 2015), and affirming educators' sense of connectedness and validation within their individual and collective experiences (Hodges, 2013). These transformative experiences have the potential to not only catalyze educators' advancements in SoTL, but also to enhance the relationship that students and educators have with disciplinary content and expertise in the classroom and beyond.

# **Collaboration**

Collaboration between educators from diverse disciplines, backgrounds, and contexts may be challenging in higher education due to the nature of our work. The opportunity to connect with other faculty members from different areas may be more or less encouraged or accessible depending on institutional structures (both physical and social), faculty or department priorities, and perceived connectedness to one's colleagues and peers (Wilson et al., 2020). Further, newer faculty members may sense an expectation to develop their portfolios in isolation prior to collaborating with others, for several reasons, generally related to expectations about merit, tenure, and promotion (Smith et al., 2015). By developing an OCoP that welcomed educators from all 14 faculties at the institution, we created a space where collaboration and connection to peers was welcome and normalized. Similar to Dzidic et al.'s (2017) study, we found that participants utilized the OCoP to develop meaningful, respectful, and collegial relationships with peers from diverse disciplines, which resulted in collaborations that extended beyond the digital walls of the OCoP.

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# **Interdisciplinarity**

The interdisciplinarity of the OCoP promoted knowledge mobilization and diversification of teaching strategies across members' specializations, departments, and faculties. One example of this mobilization in action was a recent collaboration of nine OCoP members facilitating a series of plenary discussions about designing large enrolment courses, including strategies for facilitation, assessment design, and reflection. These discussions were attended by more than 60 participants from across the university community, receiving praise and recognition for the benefit that such diverse perspectives brought to participants' teaching practices. The collaboration and interdisciplinarity of the OCoP has directly contributed to the expansion of SoTL principles and practices within our institutional context, providing us with multi-faceted examples of how SoTL is mobilized in higher education (Dzidic et al., 2017; Hodges, 2013). Understanding and experiencing SoTL principles through, for instance, an online community of practice, highlights the intersection between SoTL work and practice for educators. For example, we observed a member of the OCoP feeling more engaged with SoTL as they participated as a panelist in several teaching development workshops at our teaching and learning centre.

When OCoP members connected their teaching practices to the principles of SoTL in these spaces, we found them identifying as embodied SoTL practitioners. In this way, we reflected that OCoP members may have found SoTL enacted at the micro-level through informal conversations with peers in community spaces, such as the OCoP, and at the macro-level through facilitating formal teaching development offerings to their peers and colleagues from across disciplines. Expanding the impact of an OCoP to explore the connection to SoTL requires further study to achieve a fuller understanding.

#### Innovation

A key outcome of collaboration and interdisciplinarity is the opportunity for members to innovate their teaching and learning practices (Dzidic et al., 2017). This occurs incrementally, through conversations with peers from diverse backgrounds with diverse perspectives, resulting in tangible strategies and approaches that they then take back to their own classrooms, as shown by Dzidic et al. (2017). In one instance, a member adapted our OCoP framework for use in a new multi-institutional initiative that they were leading. In another instance, we observed two members with entirely different approaches to teaching engaging in a critical discussion about what constituted meaningful participation in their courses. As Smith et al. (2015) noted, the potential benefits that these critical conversations and engagement within the group could bring may relate to the participants' sense of belonging and validation of their role within the institution.

#### Validation

As educators in post-secondary institutions continue to teach and work remotely, the need for validation through connection and critical inquiry grows (de Wilde et al., 2021). One of the most persistent reflections we have heard from participants in the OCoP has been the incredible value gained from the simplest human connections. Conversations with peers make members feel that they are not alone in their experiences (Wilson et al., 2020). As educational developers and instructional designers, our focus may drift beyond the value of simply holding space for educators to connect with their peers in a loosely structured, conversationbased forum where they drive both the focus and engagement with one another. As Wenger et al. (2011) explain,

The challenge of community is that it requires sustained identification and engagement. Negotiating and renegotiating a reason to learn together, helping each other, following up on ideas, developing shared resources, sustaining a social space for learning—all this requires time and commitment. Not everyone has to have the same level of commitment, but there has to be enough for the community to feel alive as an entity. (p. 10)

It has been noted that communities find their own balance of engagement, commitment, and value when given the opportunity to self-regulate and embrace members' various forms of participation (Wright et al., in press). By providing the resources and supports to coordinate an OCoP, members were the ones who made the space sustainable and grounded in the core values of SoTL.

# **CONCLUSION**

Faculty and instructors of higher education institutions hold the student experience as a key component of why, how, and what they teach. The COVID-19 pandemic impacted faculty and instructors' ability to communicate and collaborate with each other by limiting their opportunities to gather and share ideas and strategies that support student success. The disadvantage of no longer being able to connect in person was even more apparent with those faculty and instructors who teach large enrolment courses. In these courses, certain challenges were heightened when teaching pivoted to emergency remote learning. This gap was recognized by staff at the teaching and learning centre. Initial input was soon gathered from these instructors and a need was recognized to establish an online community of practice for large enrolment courses. Our teaching and learning centre was in a unique position to establish this community.

Based on the community of practice framework established by Wenger et al. (2011), we created the OCoP to provide a dedicated online space for large enrolment faculty and instructors to connect, communicate, and collaborate virtually during the pandemic. Certain factors were considered to ensure the goal of the OCoP met the community members' needs. Essential components of the OCoP included shared leadership and expertise, a flexible framework, and consistent and coordinated Anselmo, L., Wright, A., & Stepanchuk, A. (2022). Advancing the scholarship of teaching

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support. These considerations were all supported by the intentional use of technology to create an inclusive and meaningful experience for all community members. Hoadley (2012) and Xue et al. (2021) served as a foundation to highlight how technology can support and strengthen a community of practice. Lastly, we found that the OCoP enriched faculty development and the scholarship of teaching and learning for its members by providing opportunities to reflect on, innovate, and validate their teaching practices.

The OCoP brought members from various disciplines and teaching experience together to share, support, and learn from each other. As creators and facilitators of the OCoP, we noticed that the interdisciplinary nature of the group allowed for knowledge sharing that had the potential to impact some members' teaching strategies and practices. We also observed that participation in the OCoP may have created opportunities for innovation and exposure to new teaching practices. Finally, in our experience, many members benefitted from the conversations and connections as a result of membership in the group. This allowed them the chance to critically reflect on their own teaching practice and beliefs. The OCoP began as a response to the COVID-19 pandemic and a desire to support faculty and instructors who teach large enrolment courses during the pivot to remote teaching and learning. One year later, the OCoP has evolved into a rich, engaging community that continues to benefit from the comradery and connections that have enhanced members' teaching and learning practices and the promotion of the scholarship of teaching and learning. We will continue to observe and reflect on the shared experiences of the OCoP to ensure the continued purpose of supporting our large enrolment faculty and instructors.

#### **AUTHOR BIOGRAPHIES**

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# **REFERENCES**

- de Wilde, J., Cavalli, G., & Fuller, S. (2021). Online communities of practice for academic practice and a sense of belonging. In J. Sheldon & V. Sheppard (Eds.), *Online communities for doctoral researchers and their supervisors* (1st ed., pp. 83–94). Routledge. <a href="https://doi.org/10.4324/9780429274749-6">https://doi.org/10.4324/9780429274749-6</a>
- Dzidic, P., Castell, E., Roberts, L. D., Allen, P. J., & Quail, M. (2017). Reflections on the emergence and evolution of a scholarship of teaching and learning community of practice within a research-intensive higher education context. In J. McDonald & A. Cater-Steel (Eds.), *Communities of practice:*Facilitating social learning in higher education (pp. 219–239). Springer. <a href="https://doi.org/10.1007/978-981-10-2879-3">https://doi.org/10.1007/978-981-10-2879-3</a> 10
- Hoadley, C. (2012). What is a community of practice and how can we support it? In S. Land & D. Jonassen (Eds.), *Theoretical foundations of learning environments* (2nd ed., pp. 287–300). Routledge.
- Hoadley, C. M., & Kilner, P. G. (2005). Using technology to transform communities of practice into knowledge-building communities. *ACM Siggroup Bulletin*, 25, 31–40. <a href="http://www.tophe.net/papers/Hoadley-KilnerSIGGROUP05.pdf">http://www.tophe.net/papers/Hoadley-KilnerSIGGROUP05.pdf</a>
- Hodges, L. C. (2013). Postcards from the edge of SoTL: A view from faculty development. *Teaching & Learning Inquiry*, *I*(1), 71–79. https://doi.org/10.20343/teachlearningu.1.1.71
- Sherer, P. D., Shea, T. P., & Kristensen, E. (2003). Online communities of practice: A catalyst for faculty development. *Innovative Higher Education*, 27(3), 183–194. <a href="https://doi.org/10.1023/A:1022355226924">https://doi.org/10.1023/A:1022355226924</a>
- Smith, K. A., Streveler, R., & Guerra, R. C. C. (2015). Connecting and expanding the emerging engineering education research & innovation (EER&I) communities. *2015 IEEE Frontiers in Education (FIE) Conference*. https://doi.org/10.1109/fie.2015.7344023
- Tierney, A., Aidulis, D., Park, J., & Clark, K. (2020). Supporting SoTL development through communities of practice. *Teaching and Learning Inquiry*, 8(2), 32–52. <a href="https://doi.org/10.20343/teachlearningu.8.2.4">https://doi.org/10.20343/teachlearningu.8.2.4</a>
- Wenger-Trayner, B., & Wegner-Trayner, E. (2015). *Introduction to communities of practice: A brief introduction to the concept and its uses.*https://www.wenger-trayner.com/introduction-to-communities-of-practice
- Wenger, E., Trayner, B., & de Laat, M. (2011). *Promoting and assessing value creation in communities and networks: A conceptual framework*. Ruud de Moor Centrum. <a href="https://www.asmhub.mn/uploads/files/11-04-wenger-traynerdelaat-value-creation.pdf">https://www.asmhub.mn/uploads/files/11-04-wenger-traynerdelaat-value-creation.pdf</a>
- Wilson, A., Wilson, C., & Witthaus, G. (2020). Using a community of practice in higher education: Understanding the demographics of participation and impact on teaching. *International Journal on Teaching and Learning in*Anselmo, L., Wright, A., & Stepanchuk, A. (2022). Advancing the scholarship of teaching and learning in larger enrolment courses: Lessons learned from an online community of practice. *Imagining SoTL*, 2(2), 52-62. <a href="https://doi.org/10.29173/isotl613">https://doi.org/10.29173/isotl613</a>

*Higher Education, 32*(1), 39–48.

- Wright, A. C., Jardine, L., Anselmo, L., & Dyjur, P. (in press). An online community of practice framework for higher education. In K. Rainville, D. Title, & C. Descrochers (Eds.), *Expanding the vision of faculty learning communities in higher education: Emerging opportunities for faculty to support and engage with each other.* Information Age Publishers.
- Xue, S., Hu, X., Chi, X., & Zhang, J. (2021). Building an online community of practice through WeChat for teacher professional learning. *Professional Development in Education*, 47(4), 613–637. https://doi.org/10.1080/19415257.2019.1647273