

LEARNING FROM RAPID SOLUTIONS

Transitioning to a new era: Future directions for staff development during COVID-19

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Abstract

The COVID-19 pandemic created an urgent need for staff development. However, COVID-19 has created many challenges, including the inability to meet in-person, travel restrictions to conferences, overwhelming clinical demands on already over-extended faculty members and the increased need to focus on personal health and safety. Although current challenges were immediately met with solutions borne out of an emergency, questions remain on how to identify and sustain best practices and further evolve staff development beyond the immediate crisis. Reviewing the Medical Adaptations series revealed several lessons. Several authors used cognitive apprenticeship to provide scaffolding upon which learners can build skills, knowledge and attitudes. Additionally, moderators were recommended during live educational sessions in order to manage the chat box and engage the audience. Comprehensive IT support was key. A post-session debrief helped deepen understanding and provided a space for peer support and community building. Building a repository for educational materials was recommended. Although we made significant gains in the ability to offer staff development, we must consider potential and unintended consequences and explore how we can use transformative learning theory to capitalize on what we have gained. Utilizing technology can potentially increase access to online learning; however, when not implemented carefully, it can magnify inequities. While providing IT support can serve to mitigate some inequities borne by socioeconomic and generational differences, additional strategies should be implemented to account for English as a second-language learners; those with disabilities who do not have access to adaptive technology; and other marginalized groups who may already feel vulnerable to presenting arguments in oppositions of authority or the majority. Crafting online education experiences to allow for small group, peer-to-peer and social interactions is vital to continued professional and identity development. Now that the urgency has lessened, taking time to ensure what is being offered follows best practices in developing and disseminating quality online education is paramount for broad acceptance.

1 | INTRODUCTION

Sheets and Schwenk defined staff development as 'any planned activity to improve an individual's knowledge and skills in areas essential to the performance of a faculty member in a department or residency program, (eg teaching skills, administrative skills, research skills, clinical skills)'. The goals of staff development are broad and include three main driving forces, identified by Gruppen et al: public accountability, the changing nature of health care delivery and the need to sustain academic vitality. Indeed, pandemic aside, staff development is an extensive undertaking, requiring significant institutional support and resources.¹

The COVID-19 pandemic created an urgent need for staff development. New skills were required to perform the necessary tasks of restructuring lectures from in-person to online, staying up to date on frequently changing health care guidelines and continuing activities important for career advancement. However, COVID-19 has created many challenges for staff development, including the inability to meet in-person, travel restrictions to conferences, overwhelming clinical demands on already overextended faculty members and the increased need to focus on personal health and safety. Although current challenges were immediately met with solutions borne out of an emergency, questions remain on how to identify and sustain best practices and further evolve staff development beyond the immediate crisis. This paper will first discuss lessons learned from the Medical Adaptations series,² using the conceptual framework of solution-ism, the idea that technological solutions can be adopted to solve problems without fully comprehending the complexity of the issue,³ to guide the discussion. Then, we will attempt to address recommendations for moving forward.

2 | LESSONS LEARNED FROM ADAPTATIONS SERIES

Two medical educators reviewed manuscripts accepted to the Medical Adaptations series using the methodological framework presented by Arksey and O'Malley. Step 1: the research question was identified by defining the study population as staff finished with training, undergoing continuing medical education. Step 2: the two reviewers independently identified relevant studies in the Medical Adaptations series. LZ earmarked 11 pertinent papers, and AMJ earmarked 12 papers. Step 3: after becoming familiar with the literature, the authors chose to focus on papers that offered suggestions specifically on using technology to develop and deliver staff development, as the authors believe leveraging the strengths of technology will be instrumental in the evolution of teaching and learning. After focusing on five key adaptations articles, several themes were apparent. Step 4: we used a descriptive outline approach to organise these themes. Step 5: these key themes include virtual conferences, virtual workshops, evidence-based online resources for clinicians and guides for helping staff transition to online teaching.

Within these key themes, there were several shared techniques. Two papers^{4,5} on faculty development programmes employed elements of cognitive apprenticeship.⁶ The main tenet of which is to provide scaffolding or structural support upon which learners can build skills, knowledge and attitudes. Prior to a workshop or conference, pre-session technical training was provided to familiarise staff with the web platform so they could capitalise on the workshop or conference session.^{4,5,7} Methods of education included instructional videos as well as online information technology (IT) clinics. During the live educational session, moderators were recommended^{4,8} to manage the chat box as well as engage the audience. Breaking out into small group sessions facilitated active learning and discussion during the deployment of activities.⁵ Offering several varied hands-on activities with constructive feedback engaged faculty member in active learning.⁵ Comprehensive IT support was key for several authors.^{4,5,7,8} Detailed instructions for faculty members, moderators and speakers were recommended.^{7,8} A post-session debrief served the purpose of deepening understanding and providing a space for peer support and community building.^{4,5,7} Building a repository for educational materials was suggested, given the challenges of participants being located in different time zones.^{7,8}

A major benefit of moving staff development offerings online is that there is no time constraint related to physical presence at a conference or workshop. Therefore, activities can occur over a prolonged period of time, allowing the opportunity for multiple asynchronous activities followed by constructive feedback. Educators outside of a traditional academic centre, for example physicians in a community or rural practice, or those with less flexible schedules, may find it easier to participate in virtual staff development. Common issues discussed by these authors include the lack of informal sidebar conversations and subsequent community building in a virtual setting.^{4,8} However, Veerapen found that post-session debriefs discussing lived experiences, Q&As and peer-to-peer suggestions were helpful in establishing a sense of community.

An additional paper in the adaptations series⁹ discussed the rapid development of resources for physicians to quickly improve their knowledge on treating COVID or for physicians redeploying into unfamiliar clinical settings. Recommendations for quickly building online learning content included using a standard template, having a strict timeline for completion and distilling information down to a concise and practical form. A major challenge included needing IT support for web platform security.

3 | FUTURE RECOMMENDATIONS

The pandemic necessitated an urgent shift in the way we offer staff development. Innovative approaches to medical staff development emerged as a means to continue to provide educational offerings to our learners, provide just-in-time training for clinical work and offer a means to participate in career development. Key to these innovations, technology afforded us the opportunity to offer emergency online education¹⁰ in which we quickly pivoted our in-person offerings to

online. These adaptations allowed participation in low-cost or no-cost professional development opportunities, ability to offer otherwise forgone education to our learners and the ability to connect more easily with national and international colleagues. Although we made significant gains in the ability to offer staff development, we must consider potential and unintended consequences and explore how we can use transformative learning theory to capitalise on what we have gained.

Potential unintended consequence of offering emergency online education versus providing thoughtfully developed, high-quality online education includes utilising strategies that dissuade long-term uptake and participation, exacerbating inequalities and losing a sense of community. Online education has been studied for decades and does not simply mimic in-person teaching, in a virtual environment. Yet due to necessity, at the height of the pandemic, in-person content was simply moved online, mostly utilising web-based meeting products like Zoom (Zoom Video Communications Inc) for delivery. High-quality online education utilises a variety of platforms and technologies to engage learners synchronously and asynchronously in fostering critical thinking, encouraging thoughtful analysis of information, promoting self-reflection and providing a platform for learners to intentionally acquire relevant skills and knowledge.¹¹ The Adaptations articles articulate the use of technology to support best practices for online learning such as a moderated group chat, small group learning in a digital space and a repository of educational content that can be accessed asynchronously.

Utilising technology can potentially increase access to online learning; however, when not implemented carefully, it can magnify inequities. Busy staff with competing demands like dependent care, individuals who already feel marginalised or devalued and those not already facile with technology may be disadvantaged by a shift to online education. Three Adaptions articles^{4,5,7} outline the importance of providing IT support and education on how to use technology in a learning environment. This support may serve to mitigate some inequities borne by socioeconomic and generational differences; however, additional strategies should be implemented to account for English as a second-language learners; those with disabilities who do not have access to adaptive technology; learners who do not have the ability to purchase an at-home computer, video equipment or secure high-speed Internet access; and marginalised groups who may already feel vulnerable to presenting arguments in opposition of authority or the majority.

As noted by three Adaptions articles,^{4,5,7} informal sidebar communications or happenstance in-person gatherings are important for community building. Potentially lost in the transition from in-person to online staff development was the development of community. Crafting online education experiences to allow for small group, peer-to-peer and social interactions is vital to continued professional and identity development.

Although emergency online education was an acceptable short-term solution, transformative learning theory¹² can offer a grounding framework which we can use to ensure innovative approaches to staff development persist beyond the pandemic. Transformative learning theory utilises a disorienting event to challenge current thinking.

It posits that learners evaluate new ideas and skills (ie learning utilising technology) against previously held understandings (ie in-person education is superior to online). Learners shift their worldview utilising critical reflection as opposed to simply acquiring new information. They no longer accept previous understandings wholly in order to make room for new insights or ways of doing things.

We have new tools and processes to develop staff in ways we did not conceive possible or acceptable pre-COVID. Although the pandemic wages on, and it is unclear when we will be able to safely meet in person again, we must take this opportunity to capitalise on the ground gained with the current acceptance of using technology to deliver online staff development. In order to do so, it is imperative that we provide staff with the highest quality offerings. Now that the urgency has lessened, taking time to ensure what is being offered follows best practices in developing and disseminating quality online education is paramount for broad acceptance.

AUTHOR CONTRIBUTIONS

Leila Zuo and Amy Miller Juve- substantial contribution to the conception and design of the work, drafting, and revising it critically. Gave final approval for submitted paper. Agrees to be accountable for all aspects.

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REFERENCES

- McLean M, Cilliers F, Van Wyk JM. Faculty development: yesterday, today and tomorrow. *Med Teach*. 2008;30(6):555-584.
- Eva K, Andersen M. Medical education adaptations: really good stuff for educational transition during a pandemic. *Med Ed*. 2020;54(6).
- Woodruff JN. Solutionism: a study of rigor in complex systems. *Med Educ*; 2020;1-3. <https://doi.org/10.1111/medu.14377>
- Buckley H. Faculty development in the COVID-19 pandemic: so close - yet so far. *Med Educ*. 2020. <https://doi.org/10.1111/medu.14250>
- Eltayar AN, Eldesoky NI, Khalifa H, et al. Online faculty development using cognitive apprenticeship in response to COVID-19. *Med Educ*. 2020;54:665-666.
- Merritt C, Daniel M, Munzer BW, et al. A cognitive apprenticeship-based faculty development intervention for emergency medicine educators. *West J Emerg Med*. 2018;19(1):198-204.
- Veerapen K, Wisener K, Doucet S, et al. A scaffolded structured approach for efficient transition to online small group teaching. *Med Educ*. 2020;54:761-762.
- Nadarajah VD, Er HM, Litley P. Turning around a medical education conference: Ottawa 2020 in the time of COVID-19. *Med Educ*. 2020;54:760-761.
- Brunner M, Vogelmann B, Smith J. Rapid development of an outpatient-to-inpatient crash curriculum for COVID-19 providers. *Med Educ*. 2020;953-954. <https://doi.org/10.1111/medu.14244>
- Hodges C, Moore S, Lockee B, et al. The difference between emergency remote teaching and online learning. *Educ Rev*. 2020.
- Sun A, Chen X. Online education and its effective practice: a research review. *J Inform Technol Educ*. 2016;15:157-190.
- Mezirow J. *Transformative Dimensions of Adult Learning*. San Francisco, CA: Jossey-Bass; 1991.

13. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol*. 2005;8:19-32.
14. Gruppen L, Simpson D, Searle N, et al. Educational fellowship programs: common themes and overarching issues. *Acad Med*. 2006;81(11):990-994.
15. Sheets KJ, Schwenk TL. Faculty development for family medicine educators: an agenda for future activities. *Teach Learn Med*. 1990;2(3):141-148.

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