# "THERE'S STILL SO MUCH MORE TO LEARN": LEARNING TO TEACH ONLINE DURING A GLOBAL PANDEMIC

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*The COVID-19 pandemic forced rapid closures of educational institutions worldwide in 2020. Online delivery has become a common means of providing continuity of learning, particularly for tertiary institutions. It remains unclear what impact this experience of online teaching under emergency conditions will have on future online teaching. This paper explores this question through a case study of 25 tertiary teaching staff at the University of Waikato in Aotearoa, New Zealand. Applying Bourdieu's categories of doxic and heterodox habitus, the paper argues that, for many staff, the experience of learning to teach online during a pandemic destabilized a prior doxic professional habitus. For some staff, this destabilization led to the construction of a more fluid, creative heterodox habitus open to innovative online teaching in the future. For others, the prepandemic doxic habitus instead spiraled into ongoing self-criticism and an associated collapse in professional confidence. Professional development initiatives seeking to build on the pandemic teaching experience need to be mindful of these contrasting experiences to increase the chances of improving online teaching practice in the longer term.*

**KEY WORDS:** online education, online teaching, online learning, COVID-19, pandemic pedagogy, habitus, Bourdieu, doxa, emergency remote teaching

## 1. INTRODUCTION

In early 2020, news broke internationally of a novel coronavirus in China, eventually named Sars-CoV-2, with the associated illness called COVID-19. Within months, Sars-CoV-2 had become pandemic worldwide, and unprecedented measures were taken to reduce the rate of viral transmission, including, in many countries, social distancing requirements, border closures, and varying degrees of "lockdown" that substantially limited economic and social interactions (Petherick et al., 2020; Douglas et al., 2020).

Particularly in the early months of the pandemic, face-to-face delivery of educational services was suspended in many countries. UNESCO data suggests that April 2, 2020 marked the high point of pandemic-related campus closures, with 172 countries imposing nationwide shutdowns, affecting more than 1.484 billion students at all levels of education—a staggering

84.8% of enrolled learners worldwide (UNESCO ISD, 2020). To ensure some continuity of learning, a variety of remote teaching strategies were deployed, including radio and TV broadcasts of educational content, correspondence study, and online teaching, with higher-income nations notably more likely to rely on online delivery (UNESCO et al., 2020, p. 6).

At least superficially, the tertiary sector, particularly in higher-income nations, appeared to face fewer challenges than primary or secondary sectors, with many institutions possessing at least some prior experience and infrastructure for online delivery. The emergency shift to online delivery, however, did not fit any prepandemic model for best practice in tertiary online teaching: it happened suddenly, in an ad hoc manner, using whatever equipment, software, or facilities could be accessed in pandemic conditions. Alternative terminologies, including *emergency remote teaching* (ERT), which this paper uses, were quickly proposed to help practitioners make sense of the difference between online teaching as a crisis response and online delivery in noncrisis situations (Hodges et al., 2020). Debates then quickly arose over whether ERT would have net positive or negative effects on the quality of student experience and student learning, given that it did not conform to any prepandemic model of best practice in online education.

This paper contributes to these debates by examining the experiences of tertiary teaching staff who engaged in ERT at the University of Waikato (UoW) during the initial March 2020 national lockdown in Aotearoa, New Zealand. It draws from a broader dataset that includes in-depth interviews with 25 staff, as well as focus groups and one-on-one interviews with 54 students, who had each experienced the initial unplanned shift to online learning in this period. The dataset is distinctive in systematically capturing student and staff experience at a very early stage in the pandemic shift to online teaching, and thus enabling the critical reflection and analysis that is central to the scholarship of teaching and learning (SoTL) (Boyer, 1990; Kreber, 2003). While the specific findings apply directly to the pandemic teaching and learning experience, they also carry broader implications for understanding teaching and learning through any complex and sudden disruption.

Under the umbrella of this broader research project, this paper focuses specifically on staff experience and analyzes how the staff interviews demonstrate significant shifts in how teaching staff experienced their professional identities during the ERT period. While the findings reflect data from all 25 staff interviews, the paper illustrates the key findings through a detailed discussion of two interviews that best express the typical experience of staff who had a better or worse experience of ERT. To do this, the paper applies Bourdieu's (1977) categories of *habitus*, *doxa*, and *heterodoxy* to make sense of these shifts. Specifically, it argues that, in their interviews, many study participants described a doxic prepandemic professional habitus—a set of embodied skills, knowledges, and beliefs that provide a taken-for-granted background of professional practice—from which participants drew a sense of competence and confidence in their classroom teaching. Emergency remote teaching provided a significant shock to that doxic habitus and often led participants to experience considerable self-doubt about their professional skills, competence, and identity.

Many participants, however, were eventually able to move through this shock, not by recovering their previously doxic habitus but by constructing a new *heterodox* professional

habitus. This heterodox habitus helped them redefine themselves as professionals who were also learning to teach online during a pandemic, enabling them to construct new professional goals that were more appropriate to their radically changed context. The new heterodox habitus was often more open to innovation but was also provisional, tentative, and vulnerable—and not all participants in this study were able to make this transition. This paper analyzes the formation of this new habitus and highlights implications for providing support and professional development—particularly when staff are teaching under stressful conditions or in circumstances where change is particularly rapid or unexpected.

## 2. EMERGENCY REMOTE TEACHING IN AOTEAROA

In Aotearoa, New Zealand, the national pandemic response escalated rapidly. Throughout the early weeks of 2020, only limited border closures were in effect, mainly affecting travel from China. On March 19, borders were suddenly closed to all nonresidents. On March 21, a national COVID-19 alert level system was introduced, defining restrictions for different levels of pandemic risk. On March 23, two days' notice was given before the country moved to the highest alert level—a "hard and early" lockdown strategy that, among other measures, included the complete suspension of all face-to-face education nationwide (NZ Doctor, 2020; WHO, 2020).

While the initial lockdown in Aotearoa was stringent, it was also, by international standards, comparatively brief (Robert, 2020). Outside of Auckland, where a major community outbreak in August once again closed campuses for a short period, the country's educational institutions had been permitted to provide on-campus instruction throughout the second half of 2020. The possibility of future lockdowns, however, continues to cast a long shadow over the delivery of educational services, with current national policy requiring all education providers to have plans in place for a rapid move to higher alert levels if necessary (NZ MoE, 2020). The long-term consequences of this experience remain unclear, with key debates discussed below.

## 3. LEARNING TO TEACH ONLINE – KEY DEBATES

The sheer scale and intensity of the shift to ERT has led a number of authors to suggest that this strategy could provide a stimulus for continuous professional development (CPD) in innovative online delivery (e.g., Fuller et al., 2020; Langlois et al., 2020; Trombly, 2020; Woolliscroft, 2020). Emergency remote teaching has unarguably provided a highly authentic, hands-on crash course in online delivery, and prior research has shown that authentic experience and experimentation with online teaching and technologies helps instructors learn effective pedagogies (e.g., Hinson & LaPrairie, 2005; McQuiggan, 2012; Gregory & Salmon, 2013; Forbes & Khoo, 2015; Walker & Forbes, 2018). This strategy to teaching, therefore, might be predicted to generate significant positive effects on future online teaching. At the same time, CPD models for online teaching highlight the importance of several factors that may not be readily available during emergency remote teaching,

including the capacity to adapt existing materials, provide contextualized development, reflect upon beliefs and assumptions about teaching, and leverage communities to support holistic development (Baran & Correia, 2014; Gregory & Salmon, 2013; McQuiggan, 2012). Since ERT provided little opportunity for many of these factors, its implications for future online teaching remain unclear (Cutri et al., 2020).

Emerging literature also highlights significant challenges for CPD during ERT, including the absence of context-specific CPD, lack of preparation time, and tension with staff beliefs about teaching. Two studies highlighted how staff accessed CPD from within their institution only (Cutri et al., 2020; Rupnow et al., 2020), which did not, however, ensure that CPD would reliably address contextual needs. Rupnow et al. (2020), for example, reported that staff felt that their local CPD did not align with what they wanted to achieve or that it did not provide enough support or resources for particular aspects of their teaching. In addition, staff readiness and receptiveness to professional development is affected by factors such as emotional responses to online teaching, academic structures and hierarchies, and disruptions to staff identities as experts and researchers (Cutri & Mena, 2020). Cutri et al. (2020) found, for example, that, in the first months of the pandemic, those who reported a willingness and comfort with trying new teaching practices displayed a high level of online teaching readiness (Cutri et al., 2020). However, one staff member referred to this as "forced readiness" (Cutri et al., 2020, p. 533), which may reduce its long-term impact. Online teaching readiness may also be reduced during periods of stress and uncertainty, when staff may be subject to burnout, manifesting through emotional exhaustion, depersonalization, and dissatisfaction (Watts & Robertson, 2011), all widely reported during ERT. The current case study contributes to these debates by analyzing a further factor relevant to understanding ERT's impact on CPD: the way the pandemic destabilizes what this paper calls the professional habitus of teaching staff. The research method is outlined below.

## 4. METHOD

This paper draws on a dataset from an overarching qualitative research project that interviewed 25 academic teaching staff and also conducted focus groups and interviews with 54 students from the University of Waikato (UoW) who were engaged in teaching or learning during Aotearoa, New Zealand's, initial lockdown from March to May 2020. The project received ethics approval from the UoW Arts, Law, Psychology, and Social Sciences (ALPSS) Human Research Ethics Committee (HREC) on June 9, 2020. The current paper draws solely on staff data. Noncasual academic teaching staff were recruited in August 2020 through announcements on the UoW website, online staff hubs, and newsletters for different campuses and disciplines. Twenty-six staff were recruited and interviewed, of whom 25 engaged in ERT during the Aotearoa lockdown (the exception is excluded from this analysis). Interviews were held between August 27 and September 14, 2020, using Zoom's built-in record function to capture camera, screen, and voice data. Interviews took between 40 and 90 minutes and were autotranscribed and anonymized. All participants returned signed consent forms.

All research team members are affiliated with UoW's Te Puna Ako / Centre for Tertiary Teaching & Learning, which assisted staff across the university to shift to ERT. To minimize conflicts of interest due to researchers and participants working in the same institution, participants selected their preferred interviewer. One team member serves in a university leadership capacity and recused themselves from collecting or analyzing staff data in case this might discourage candid responses.

Table 1 summarizes participant characteristics, but notable is a skew toward female participants, greater representation of education and STEM fields, and a high representation of participants with more than 15 years of teaching experience. Ethnicity data were not collected. The majority of participants characterized themselves as having limited prepandemic experience teaching online.

**TABLE 1:** Participant overview

| Variable | No. of Participants |
|---|---|
| Gender | Female: 16<br>Male: 9<br>Nonbinary/other: 0 |
| Discipline | Arts & Soc. Sci.: 4<br>Management: 4<br>Education: 7<br>STEM: 9<br>Other: 1 |
| Title | Senior Tutor: 3<br>Lecturer: 5<br>Senior Lecturer: 12<br>Assoc. Prof.: 1<br>Prof.: 4 |
| Years teaching | 1–5 yrs: 6<br>6–10 yrs: 3<br>11–15 yrs: 1<br>16–20 yrs: 8<br>21+ yrs: 7 |
| Online teaching experience | Extensive: 10<br>(Four planned to teach at least one subject online prepandemic)<br>Limited: 15 |
| Level of subjects taught<br>(participants taught more than one) | 1st yr UG: 13<br>2nd yr UG: 11<br>3rd yr UG: 13<br>> 3rd yr UG or PG: 13 |
| Size of student cohort taught<br>(participants taught more than one) | 1–10 students: 10<br>11–30 students: 17<br>31–60 students: 9<br>61–90 students: 7<br>> 90 students: 10 |

Interviews were semistructured and designed to follow an informal, conversational approach informed by narrative oral history interview techniques and hermeneutic phenomenology (Creswell & Poth, 2018, p. 65–82), with prompts as needed to cover the following topics:

- teaching background and approach, including prepandemic experience with online teaching;

- lockdown teaching responsibilities;

- challenges;

- supports;

- use of specific technologies;

- perceptions of student experiences;

- future plans, including professional development.

Interviews were coded iteratively using NVivo12, with codes abstracted from the interview data until saturation was achieved (Saunders et al., 2018). Previously coded data was reviewed and recoded as new codes emerged, and a sample of data was recoded at the end to check consistency and reliability (cf. Campbell et al., 2013). The present paper focuses specifically on comments coded as expressing views about professional habitus and about future plans.

The next section analyzes two illustrative interviews, representing the two most common types of reaction to the ERT experience from the UoW case study. The first illustrates the most *typical* experience from the dataset: someone whose prepandemic, doxic professional habitus experiences an intense shock from ERT but who ultimately emerges with a more fluid, creative heterodox habitus. The second illustrates a much more negative experience, where the shock from ERT is too intense for more than a *survival mode* response.

In the analysis below, participant numbers are used rather than names, the singular "they" is used to avoid identifying gender, and quotes are edited for clarity and to remove identifying information.


## 5. LEARNING TO TEACH ONLINE DURING A PANDEMIC

This section presents highlights from the interview data taken from two participants whose experiences each illustrate key trends within the dataset as a whole. The first interview analysis focuses on Teacher 14, a staff member whose ERT experience was typical in many distinct ways, and which therefore can illustrate common themes across the staff data as a whole. The second analysis focuses on Teacher 25, whose experience was typical of teaching staff who found the ERT experience particularly difficult and whose confidence suffered in an ongoing way. By focusing on these two stories, it is possible to provide a coherent narrative that captures these teachers' attempts to adapt to very challenging circumstances, in a concise form.

## 5.1 Teacher 14: "I Got Much Less Precious about It Very, Very Quickly"

Teacher 14 is an experienced teacher in a STEM field who is familiar with Moodle but who normally teaches face-to-face, and whose subject matter was challenging to translate into online delivery.

Like many participants, Teacher 14 reported a prepandemic teaching habitus that relied heavily on implicit understanding of student body language and tone. This doxic habitus was disrupted by the ERT shift to prerecorded lectures, which prevented the bidirectional communication Teacher 14 normally relied on to make on-the-fly adjustments to their teaching:

> I've really struggled with not having actual feedback from the students. Because, when you're teaching, you can tell pretty quickly if you've completely lost people, or you're laboring a point and they're all bored… when you're just recording, you're speaking into a void, and so you're sort of reliant on the fact that, if the students don't get it the first time, they'll go back and rewatch it. And you just have to trust that they will, because you can't keep repeating yourself. You have to assume that they, they've got it.

Workload also greatly intensified, undermining prepandemic boundaries between personal and professional life. In Teacher 14's words, the workload was:

> Huge, absolutely huge… I'd get to the end of the day and be wiped out. And I remember, at about week three you know, everyone's posting 'I'm learning to make my own yogurt during lockdown!' and it's like, who has time to do—who are these people? I'm literally falling on the floor and sleeping when I'm not [working].

While ERT intrinsically generated extra workload, many interviews suggested that doxic professional values also played a significant role in workload intensification. Consistent with Cutri & Mena's (2020) work on the importance of values for online teaching readiness, participants whose sense of professional self was deeply bound together with ideals of organization and preparedness particularly struggled with ERT. Teacher 14's interview captured how many participants experienced guilt for not meeting their usual standards for preparation and planning, and tried to compensate by taking on additional work:

> Honestly, I think a lot of that was to do with not feeling I had the time… going: I'd really like to do this properly at some point when I've had time to think about it, and rather than, you know, the kind of the firefighting approach. Just, we've just got to make it work somehow. And I think that's probably why I was more amenable to the one-on-one resume sessions with students, because it's like, well, you know, I've got no idea how useful material I'm giving them is, so I need to at least be available to help them over and above that as required.

For many participants, the first sign of an emerging heterodox habitus was a gradual adjustment of their goals and values to better match the ERT context. Teacher 14, for example, initially approached prerecorded lectures with the doxic ideal of delivery in a traditional lecture hall—an ideal that magnified the workload:

> So it actually turned out to be an absolutely huge amount of work, because of course just recording 15 minutes takes about two hours, and you start off thinking, well, this has to be perfect, right? So you do your first recording, and halfway through the dog'll bark or… one of the other dogs will snore. So, you know, the first couple, you keep stopping and rerecording…

Soon, however, new values, more appropriate to the ERT context, emerged: the lecture hall experience does not need to be recreated—students just need to be inducted into the new home-based lecture experience:

> And then, after about two days of this, it's like, I'm just gonna have to live with it, right? So I kind of introduced my dogs on camera and said, look, if you hear snoring, it's this, if you hear barking, it's this… So I got much less precious about it very, very quickly.

With more experience of ERT came more confidence in new teaching methods, a finding consistent with prior literature on the role of experimentation in online CPD (e.g., Hinson & LaPrairie, 2005; McQuiggan, 2012; Gregory & Salmon, 2013; Forbes & Khoo, 2015; Walker & Forbes, 2018). Particularly pivotal for Teacher 14 was learning that, even in the disembodied environment of ERT, bidirectional communication with students was still possible. Interestingly, it was a mistake that generated this insight:

> For the first test, ninety percent of the students made the same mistake, and I couldn't work out why they'd made this mistake. And then one student contacted me and said, "You've… said it's wrong." I thought, well it is wrong… "But you did that in your [prerecorded] example!" Which was actually great, because it meant they'd all watched this thing, you know… So I could then go back and go, "Oh look, I made this really stupid mistake, and you all copied me, and now you all lost a mark in the test!" But that was, you know, it was good to see that they were actually following the example, and really kind of paying attention to it, to the point where they all did the wrong thing. So that was good.

The phrasing here is almost giddy. The thrill of realizing that communications sent "into a void" had actually been reaching the students completely overrides any concerns about a mistake on a video. For Teacher 14, this pivotal event anchored a new confidence in online teaching.

Greater confidence was not limited to achievements in the professional space: more than half the participants spoke about the importance of developing new boundaries between personal and professional life. Teacher 14, for example, developed a new lunchtime routine:

> I think one thing that I said I was going to maintain: …There wasn't one day during lockdown that I ate my lunch at my desk whilst working. I was like: This is a really good habit. I should keep this habit.

Both prior literature and participants' comments suggest that the capacity to sustain such beneficial habits—and build on the creativity and innovation sparked by the ERT experience —may rely a great deal on future workplace incentives (cf. Baran & Correia, 2014; Gregory & Salmon, 2013; McQuiggan, 2012). Many participants expressed the belief that teaching was devalued and that efforts to improve teaching would not be rewarded. While they identified

opportunities to apply their ERT experience to future teaching, they also noted pessimistically that they did not expect to be given time and place for the CPD needed to support such innovations.

As for Teacher 14, unfortunately, their new lunchtime habit "didn't last, I think, more than a week once we got back to campus." It remains to be seen whether teaching innovations will prove more enduring.

## 5.2 Teacher 25: "It's Kind of Hard to Be Back to Being a Novice"

Almost all participants characterized the first frenetic weeks of ERT in very negative terms— terms like "survival mode," "firefighting," "emergency response," "treading water," "chaos," and related words, pervade the dataset. A subset of participants found even this early ERT period energizing (cf. Fuller et al., 2020; Langlois et al., 2020; Trombly, 2020; Woolliscroft, 2020). Overwhelmingly, however, participants experienced at least some level of uncertainty and self-doubt before recovering to experience themselves as creatively heterodox—a finding consistent with Cutri et al. (2020).

In some cases, however, this period of creative heterodoxy never arrived. For a subset of participants, the feeling of being overwhelmed never ended, and the harsh self-judgements of their doxic prepandemic habitus never relented. This section explores an interview with Teacher 25 that illustrates many elements typical of this group.

Like Teacher 14, Teacher 25 struggled with a sense of disconnection from students:

> The strategies that I use that I'm confident about in teaching—face-to-face delivery activities that I use, the way I can respond on the spot to the dynamics of the classroom —those things are all stripped away in an online environment, and you have to learn new skills.

Teacher 25, however, never achieved a breakthrough moment that induced confidence in online teaching. Instead, they continued to suffer from debilitating self-recrimination, due to extremely high expectations carried over from their prepandemic doxic habitus:

> I think I found it difficult, you know, to go from being someone whose students—like, I get… nominated by my students for teaching awards. And to suddenly be someone that, you know, students are writing me emails complaining about the format of the lectures. And they have no idea how much goes into putting those materials together. They're just annoyed because it's not what they were expecting. And, you know, it's kind of hard to be back to being a novice. I feel like I'm a bit of a novice again.

At the same time, Teacher 25 struggled to find a quiet place to focus when working at home:

> It takes time, and when you can close your office door and focus without interruption, that's easy for an academic, right? But when you have to do that whilst there's a whole lot of other things going on around you, that's not easy, and made it very, very difficult for me. And also made it difficult to feel good about what I was doing.

In spite of the overall negative experience of ERT, Teacher 25 did express clear, specific CPD goals for future online teaching. These goals, however, are driven by harsh self-

judgements and deferred to an unspecified future due to perfectionist self-expectations:

> At some point, I would like to do more work with the creation of activities in Moodle itself, because there are lots of activities that I could set up, and I have materials that would work, too, to deliver in different kind of activity formats. But my early efforts to do that taught me that I have a lot to learn before I can put material out that I'm happy with. So, there were problems with the way I was setting up tasks, and students got frustrated, and very quickly I decided that I would rather go low-tech until I had it polished.

Like many participants, Teacher 25 reported seeing some literature on ERT and found reassurance in hearing that many others also struggled. This literature has given Teacher 25 insight into the problem posed by their own high expectations, although it remains a work in progress:

> I also had a really helpful article… that you guys have probably come across… the article talked about the types of pressures that you shouldn't be trying to put on yourself at short notice, under really difficult circumstances anyway, outside of the teaching role, and basically to just do the best that you could with what you had. And so that's what I did. I did the best with what I had.

For such participants, the shock to their confidence meant that ERT never became a generative or creative experience. Teacher 25, for example, self-describes as "part of the general population that's struggling this year." For this subset, CPD initiatives may need to take particular care to avoid provoking or exacerbating preexisting burnout (cf. Watts & Robertson, 2011) by unintentionally reinforcing existing tendencies to self-criticism and a perception of underperformance. CPD for this group may also be more effective if it can be deferred to a period when they have recovered their confidence and are not required to operate so far outside their professional comfort zone.

## 6. CONCLUSION

These two illustrative responses to ERT do not exhaust the insights that could be abstracted from this dataset. In particular, interesting analyses could be made of the small subset of interviewees who were already highly experienced online teachers before the pandemic, many of whom still experienced trajectories very similar to Teacher 14, but some of whom also experienced a heterodox shift in relation to how they approached interpersonal relationships and pastoral care. A small number of participants also emerged from the ERT experience with a reinforced commitment to teach online but often still with significant heterodox transformations to their teaching habitus. In the words of one participant, the ERT experience showed them that "there was so much more to learn." Whether this was a positive or negative insight, however, depended on how successfully participants could let go of the expectations generated by their prepandemic doxic teaching habitus and construct a more fluid and more self-forgiving heterodox alternative.

This research suggests a significant factor that was relatively overlooked in the prepandemic literature on online teaching: CPD, whether for online teaching or for other significant changes to teaching practice, needs to be more mindful of the prospect that teaching staff

could experience threats or disruptions to their teaching habitus—to how they understand and embody their professional identities and how they ground their confidence as a teacher in habitual performances of their teaching role. These disruptions, in turn, carry a risk for self-criticism and burnout, while also providing a barrier to the development of more effective teaching strategies. Pandemic conditions made this dimension of teaching practice particularly visible, but any significant transformation of teaching practice is likely to require the integration of new forms of embodied performance into a renewed professional habitus. The embodied and emotional nature of this task is more complex and encompassing than simply learning a specific technical or even pedagogical skill—and the pandemic ERT experience suggests that it is also not something that experienced teaching staff expect to do. CPD that addresses this challenge explicitly—for example, by giving staff the metacognitive tools and vocabulary to understand this dimension of their teaching practice—could ease the disruption, provide insight, and help teaching staff more actively participate in the development of a more fluid, heterodox teaching identity.

## REFERENCES

Baran, E. & Correia, A. (2014). A professional development framework for online teaching. *TechTrends, 58*(5), 96–102. https://doi.org/10.1007/s11528-014-0791-0

Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge, England: Cambridge University Press.

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate.* Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Campbell, John L., Quincy, Charles, Osserman, Jordan, & Pedersen, Ove K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research*, 42(3), 294–320. https://doi.org/10.1177/0049124113500475

Cresswell, J. & Poth, C. (2018). *Qualitative inquiry & research design: choosing among five approaches, 4th ed*. Sage.

Cutri, R.M. & Mena, J. (2020). A critical reconceptualization of faculty readiness for online teaching. *Distance Education, 41*(3), 361–380. https://doi.org/10.1080/01587919.2020.1763167

Cutri, R.M., Mena, J., & Whiting, E.F. (2020). Faculty readiness for online crisis teaching: Transitioning to online teaching during the COVID-19 pandemic. *European Journal of Teacher Education, 43*(4), 523–541. https://doi.org/10.1080/02619768.2020.1815702

Douglas, M., Katikireddi, S.V., Taulbut, M., McKee, M., & McCartney, G. (2020). Mitigating the wider impacts of COVID-19 pandemic response. *BMJ*, 369. https://doi.org/10.1136/bmj.m1557

Forbes, D. & Khoo, E. (2015). Voice over distance: A case of podcasting for learning in online teacher education. *Distance Education, 36*(3), 335–350. https://doi.org/10.1080/01587919.2015.1084074

Fuller, R., Joynes, V., Cooper, J., Boursicot, K., & Roberts, T. (2020). Could COVID-19 be our 'There is no alternative' (TINA) opportunity to enhance assessment? *Medical Teacher*. https://doi.org/10.1080/0142159X.2020.1779206

Gregory, J. & Salmon, G. (2013). Professional development for online university teaching. *Distance Education, 34*(3), 256–270. https://doi.org/10.1080/01587919.2013.835771

Hinson, J.M. & LaPrairie, K.N. (2005). Learning to teach online: Promoting success through professional development. *Community College Journal of Research and Practice, 29*(6), 483–493. https://doi.org/10.1080/10668920590934198

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 27 March. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Kreber, C. (2003). The scholarship of teaching: Conceptualizations of experts and regular academic staff. *Higher Education*, 46(1), 93–121.

Langlois, S., Xyrichis, A., Daulton, B.J., Gilbert, J., Lackie, K., Lising, D., MacMillan, K., Najjar, G., Pfeifle, A.L., & Khalili, H. (2020). The COVID-19 crisis silver lining: Interprofessional education to guide future innovation. *Journal of Interprofessional Care*. https://doi.org/10.1080/13561820.2020.1800606

McQuiggan, C.A. (2012). Faculty development for online teaching as a catalyst for change. *Journal of Asynchronous Learning Networks,* 16(2), 27–61. https://doi.org/10.24059/olj.v16i2.258

New Zealand Doctor (NZ Doctor) (2020). Timeline – Coronavirus. https://www.nzdoctor.co.nz/timeline-coronavirus.

New Zealand Ministry of Education (NZ MoE) (2020). Guidelines for tertiary education organisations on how to operate under different alert levels. *Ministry of Education website*. https://web.archive.org/web/20210224151650/https://www.education.govt.nz/assets/Uploads/final-final-detailed-tertiary-guidelines-for-alert-levels.pdf

Petherick, A., Kira, B., Hale, T., Phillips, T., Webster, S., Cameron-Blake, E., Hallas, L., Majumdar, S., Tatlow, H., Boby, T., & Angrist, N. (2020). Variation in government responses to COVID-19, version 10, *BSG Working Paper Series*, Blavatnik School of Government, Oxford University, 10 December. https://www.bsg.ox.ac.uk/sites/default/files/2020-12/BSG-WP-2020-032-v10.pdf

Robert, A. (2020). Lessons from New Zealand's COVID-19 outbreak response. *The Lancet*, 5(11), E569–E570. https://doi.org/10.1016/S2468-2667(20)30237-1

Rupnow, R.L., LaDue, N.D., James, N.M., & Bergan-Roller, H.E. (2020). A perturbed system: How tenured faculty responded to the COVID-19 shift to remote instruction. *Journal of Chemical Education, 97*, 2397–2407. https://dx.doi.org/10.1021/acs.jchemed.0c00802

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H. & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and

operation. *Quality & Quantity*, 52(4), 1893–1907. https://dx.doi.org/10.1007%2Fs11135-017-0574-8

Trombly, C.E. (2020). Learning in the time of COVID-19: Capitalizing on the opportunity presented by the pandemic. *Journal of Professional Capital and Community.* https://doi.org/10.1108/JPCC-05-2020-0016

UNESCO Institute for Statistics Data (ISD) (2020). Education: from disruption to recovery. *UNESCO.org.* https://en.unesco.org/covid19/educationresponse

UNESCO, United Nations Children's Fund, & World Bank (2020). What have we learnt? Overview of findings from a survey of ministries of education on national responses to COVID-19. *UNESCO.org.* https://unesdoc.unesco.org/ark:/48223/pf0000374702

Walker, R. & Forbes, D. (2018). Cross-institutional peer observation by online tutors: Sharing practice 'outside the family.' *Innovations in Education and Teaching International, 55*(3), 285–293. https://doi.org/10.1080/14703297.2017.1281751

Watts, J. & Robertson, N. (2011). Burnout in university teaching staff: A systematic literature review. *Educational Research, 53*(1), 33–50. https://doi.org/10.1080/00131881.2011.552235

Woolliscroft, J.O. (2020). Innovation in response to the COVID-19 pandemic crisis. *Academic Medicine.* https://doi.org/10.1097/ACM.0000000000003402

World Health Organisation (WHO) (2020). New Zealand takes early and hard action to tackle COVID-19. *World Health Organisation Western Pacific*, 15 July. https://web.archive.org/web/20201006231133/https://www.who.int/westernpacific/news/feature-stories/detail/new-zealand-takes-early-and-hard-action-to-tackle-covid-19