



## Strengthening online teaching capability: Medical and health sciences faculty development

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Educational institutions have experienced a rapid pivot to online learning over the last two years due to global COVID-19 pandemic conditions. Historically, in moving to online teaching, research has found that educators experience varying degrees of success with key challenges being: time pressure; staff shortages; insufficient technical ability; technical difficulties; and lack of faculty development (FD) opportunities (Aghakhani & Shalbafan, 2020; McQuiggan, 2007; Nimrod, 2018; Rajab et al., 2020). These challenges are exacerbated in the current climate and, despite being in our third year of teaching and learning under ongoing pandemic constraints, there is still a paucity of literature around how faculty have been supported in their provision of online teaching initiatives (Daniel et al., 2021).

Our research aimed to identify features and enablers that staff value to strengthen their online teaching capability. Additionally, we intended to determine gaps in and future directions for strengthening staff online teaching capability, with a view to affecting change at an institutional level in addition to improving outcomes for students. To do this we used The Kirkpatrick Model as modified by Steinert et al. (2006) to evaluate FD initiatives and outcomes at the Faculty of Medical and Health Sciences at New Zealand's leading university, The University of Auckland.

We conducted a mixed methods study comprising five datasets: interactive learning (in H5P) FD workshop surveys (1); teaching staff surveys (2) and interviews (3); student Summative Evaluation Tool (SET) surveys (4); and assignment grades (5).

The FD workshop exit surveys (1) found that staff ( $n=105$ ) valued personalised support and active learning. Teaching staff ( $n=86$ ) surveys (2) showed that staff place high value on their Community of Practice (CoP) (Lave & Wenger, 1991), which were seen to provide personalised, technical, and emotional support. Similarly, findings from interviews (3) indicated that staff ( $n=20$ ) appreciated FD that was personalised, interactive, timely, and they were overwhelmingly grateful for support from colleagues. Some key areas were identified as needing further FD by staff: fostering online relationships and engagement, and teaching in culturally sustaining and universally accessible ways. There was also a strong belief that university management should support professional development by allocating time and resources to FD in online teaching.

Using SET data (4) from 2018 to 2021, we determined that providing students ( $n=809$ ) with online interactive resources was a key support for their learning. During this time, the grade mean for a student assignment, that was purposely redeveloped for online learning using H5P to facilitate interaction and engagement, increased significantly from 2018 to 2019 (9%,  $p<.001$ ).

FD in interactive learning using H5P, driven by early adopter teaching staff, resulted in creating content associated with a mean increase in assignment grades (level 4B - Change among the participants' students or colleagues [Steinert et al., 2006]), and the provision of an institutional licence (level 4A - Change in the system/organisational practice [Steinert et al., 2006]). The CoP approach ensured that personal connections were at the fore of FD and enabled effective modelling of pedagogical choices for interactive online learning. Providing personalized, just-in-time support through a CoP approach, interactive online teaching capability was improved, and institutional change was affected.

Keywords: Online teaching, faculty development, professional development, interactive learning

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