

# PRACTICES AND PERSPECTIVES OF SCIENCE INSTRUCTORS IN RESPONSE TO THE COVID-INDUCED MOVE ONLINE

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The 2020 COVID-19 pandemic profoundly disrupted teaching and learning activities at Australian universities, necessitating a pivot from primarily campus-based delivery to fully online. Although this presented opportunities for teaching innovation, educators also faced complex challenges as they considered how best to deliver their subject in a largely unfamiliar online context. These challenges were paramount for teachers in the STEM disciplines, who needed to adapt largely face to face practical and experiential learning to the online format. We present here quantitative data describing the shifts in delivery modes across these activities from a broad institution-wide survey, in tandem with qualitative narratives from STEM academics describing their experiences during the move online. Whilst there are undoubtedly difficulties with adapting practical learning online, we have also seen instructors develop remarkable innovations including the delivery of home lab kits, the integration of 3D video and drone footage and leveraging affordances within the learning management system to engage students and connect them to the discipline. As universities move to a largely blended approach to teaching and learning, careful consideration of the unique challenges faced by instructors of practical and experiential learning will be required, as will the promotion and support of innovative approaches.

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