

ENHANCING TEACHING PRACTICE

Teaching During COVID-19 (International) Lessons Learnt in Computing

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The coronavirus pandemic has forced an unprecedented global shift within HE in the ways that we educate students. Computing education traditionally focuses on experiential, in-person activities. The pandemic has mandated that educators catalyse overnight innovations in the educational setting.

Many new practices have emerged that offer valuable lessons to be carried forward into our post-COVID-19 teaching [1]. These adaptations include the acquisition of new infrastructure, evolving expectations, revised course development strategies and the adoption of new modes of course delivery. Last year, our research team [2], explored the ways in which higher education computing faculty responded to this dramatic shift in the (educational) world based on a survey of computing academics worldwide.

This presentation will use these results to inform what the post-COVID-19 academic landscape might look like, and how we can use lessons learned during this educational shift to improve our subsequent practice. The exploration will strive to identify practices within computing that appear to have been improved through exposure to online tools and technologies, and that should therefore continue to be used in the online space. In the broadest sense, our motivation is to explore what the post-COVID-19 educational landscape will look like for computing education. Whilst grounded in computing education, the lessons learnt and recommendations may be applied in a wider context beyond computing.

[1] Angela A. Siegel and Mark Zarb. 2022. Capturing Lessons Learned from Pandemic Adaptations in CS Teaching: Exploring how COVID-19 has Affected the Future of Teaching and Learning in Computer Science. In Proceedings of the 53rd ACM Technical Symposium on Computer Science Education V. 2 (SIGCSE 2022). Association for Computing Machinery, New York, NY, USA, 1193. DOI:<https://doi.org/10.1145/3478432.3499189>

[2] Angela A. Siegel, Mark Zarb, Bedour Alshaigy, Jeremiah Blanchard, Tom Crick, Richard Glassey, John R. Hott, Celine Latulipe, Charles Riedesel, Mali Senapathi, Simon, and David Williams. 2021. Educational Landscapes During and After COVID-19. In Proceedings of the 26th ACM Conference on Innovation and Technology in Computer Science Education V. 2 (ITICSE '21). Association for Computing Machinery, New York, NY, USA, 597–598. DOI:<https://doi.org/10.1145/3456565.3461439>