## Navigating challenges on wide-scale adoption of video for HCI education: the HCIvideoW experience

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More than four decades ago, PCs and home videodisks were first used to deliver full courses [7]. The intervening years have seen a growing maturity of video technology for its creation and dissemination, yet many universities had been reluctant to adopt its use. This can be partly attributed to perceptions about videos not being a good substitute for lectures [5] and having prohibitive production costs, even though it is known that even low-cost filming in informal settings can be very effective and positively affect student engagement [6]. Indeed, while there had been a huge uptake in purely online education (e.g MOOCs, Khan academy, P2PU), the heterogeneity of content and style in traditional universities have been the main barriers to effective use of data and reuse of educational materials [2].

Forced by COVID-19, however, these barriers to adoption have suddenly dropped. This has brought about a number of challenges for those not already using video in their teaching, including scalability of the learning activities and assessment.

As a response, and informed by our previous discussions with a community of practitioners on the use of video in our institutions [1,8,9,10], we got together in March to plan a workshop (#HCIvideoW), to discuss with Human-Computing Interaction educators with diverse backgrounds, experiences and at various degrees of technology adoption.

The workshop participants, now over forty members and growing, continue to meet regularly, acting as a community. Concrete outcomes have been shared [3] and this has already led to new developments, including a new video-based tool for students to share physical prototypes developed in direct response to the discussion in one session [4]. Together, we are continuing to explore ways to improve instructors' teaching experiences to become better prepared for a post-pandemic world.

## **CCS CONCEPTS**

Social and professional topics ---> Computing education

## **KEYWORDS**

Video, HCI education, barriers for adoption, community building, HCIvideoW

## REFERENCES

- [1] Dix A, Malizia A, & Gabrielli S (2016, June). "HCI and the Educational Technology Revolution". In Proceedings of the International Working Conference on Advanced Visual Interfaces (AVI '16). ACM, New York, NY, USA, pp. 368–371. DOI:10.1145/2909132.2927472
- [2] Dix A (2016). Challenge and Potential of Fine Grain, Cross-Institutional Learning Data. L@S: Third Annual ACM Conference on Learning at Scale, ACM, pp. 261–264. DOI: 10.1145/2876034.2893429 <a href="https://alandix.com/academic/papers/LS2016/">https://alandix.com/academic/papers/LS2016/</a>
- [3] Dix A, Wilde A, Vasilchenko A, & Evans C (2020, April). Virtual workshop on video for HCI education #HCIvideoW. <a href="https://hcibook.net/hcivideow/">https://hcibook.net/hcivideow/</a>
- [4] Dix A (2020) Rockall Fishery Protection (Physical prototype through video). [Online] <a href="https://hcibook.net/gen/PhysProto/v0/rockall">https://hcibook.net/gen/PhysProto/v0/rockall</a>.
- [5] Evans, C (2018, May) It's Me or the Video: can videos substitute for lectures in the flipped classroom? In: HCI and the educational technology revolution #HCI 2018, collocated with the 2018 international conference on advanced visual interfaces (AVI'18), pp. 1-4.
- [6] Guo PJ, Kim J & Robin R. (2014) Proceedings of the First ACM Conference on Learning at Scale. L@S'14. New York: ACM. How video production affects student engagement: an empirical study of MOOC videos; pp. 41–50.
- [7] Pollak R. A (1981, October) Videodisc-supported computer instruction. In Proceedings of the 9th annual ACM SIGUCCS conference on User services (SIGUCCS '81). Association for Computing Machinery, New York, NY, USA, pp. 254–256. DOI:10.1145/800079.802599
- [8] Wilde A, Vasilchenko A, and Dix A (2018). HCI and the educational technology revolution #HCIEd2018: a workshop on video-making for teaching and learning human-computer interaction. In Proceedings of the 2018 International Conference on Advanced Visual Interfaces (AVI '18). Association for Computing Machinery, New York, NY, USA, Article 9, 1–3. DOI:10.1145/3206505.3206600
- [9] Wilde A, Dix A, Evans, C, Vasilchenko A, Maguire J & Snow S (2019). Towards a Taxonomy of Video for HCI Education. Trends and Good Practices in Research and Teaching, 31.
- [10] Wilde A, Simeone A.L & Evans C (2020) HCI and the educational technology revolution #HCIEd2020: a workshop on video-making for teaching and learning human-computer interaction. In Proceedings of the 2020 International Conference on Advanced Visual Interfaces (AVI '20). Association for Computing Machinery, New York, NY, USA, Article 9, 1–3. DOI:10.1145/3399715.3400861