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A permanent Pivot to online learning, or will universities bounce back to normal?

Neil Gordon, University of Hull

Introduction

The Coronavirus pandemic has had a profound impact on how universities (higher or tertiary education) globally have taught students, throughout 2020 and into 2021. The response to the Coronavirus pandemic saw a mass pivot towards online learning in many countries (Gardner, 2020). The initial emergency switch over as countries introduced lockdowns and restricted mass gatherings and movement, saw staff rapidly adapting teaching materials and assessment. This initial period also saw students moving from large social support networks to isolated study. As countries entered second and third lockdowns, and as there were opportunities for more medium term planning, institutions adopted more structured approaches to remote learning. In this discussion paper we will consider the issues and potential challenges for universities in the post-Covid world.

This paper outlines some of the issues for online learning and considers different types of online learning. It goes on to outline the issues experienced during 2020 and 2021, and looks forward to what is needed for successful blended approach to learning in the future.

Blended or online learning in universities up to 2020

Blended learning – with a mix of face-to-face and online support – had been increasing within Higher Education for some time. The balance of face-to-face to online varied, as had the quality and utilisation of the online elements. The balance between face-to-face learning and

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online learning differs, depending on the nature of a university, the context in which it sits, and the nature of different subjects and how they are typically taught. A balanced approach would see these elements having equal weight. Of course, such a perfect balance is not necessarily appropriate nor beneficial.

A taxonomy of face-to-face and online based learning

The use of terms such as blended and online learning has been a cause of confusion to many, as different interpretations and definitions abound. The following seeks to summarise the key approaches as a potential taxonomy of face to face and online learning, and their combinations. This s akin to the approach used to compare different types of business model from traditional bricks and mortar, to clicks only entirely online companies.

Term | Description

- |Face-to-face teaching (f2f) | Physically co-located teaching and learning. This may be in a campus, or at a satellite classroom.
- Online learning | Purely online learning: all teaching, tuition and assessment is delivered online.
- Mobile learning (m-learning) | Online learning optimised for mobile devices e.g. tablets and smartphones
- Blended Learning | A mix of f2f and online, where the f2f and online material are used to varying amounts, but a significant amount of each is expected. Some define blended based on the idea that the online material does not replace F2F material, but complements it.
- Flipped Learning | Typically, a blended approach, where some materials are provided for students to digest prior to the supporting event (online of F2F)
- Concurrent learning or Synchronous learning | Sometimes called "blended synchronous learning" or "hybrid synchronous learning": these approaches have some students in a F2F location, with others joining through online conferencing facilities.
- Blended Synchronous Learning | A blended approach, where some students are located in a physical (F2F) location, and others participate through online facilities.

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- Hybrid Learning | Potentially used interchangeably with blended, though some use it where there the online has replaced some F2F activities.
- Hybrid Synchronous Learning | A hybrid approach, where some students are located in a physical classroom, whilst others join through online conferencing facilities
- Virtual Learning Environment (VLE) | Typically, a web-based learning resource: it offers access to learning materials. It may include some assessment tools, as well as some communication and collaboration tools. Note: such VLEs do not currently support virtual environments
- Massive Open Online courses (MOOC) | Online learning with features to support extremely large cohorts. The open nature reflects that they typically are free (though some charge for certification).
- | Virtual Reality (VR) | Noted here as VLEs are not VR: though there is scope for Virtual Reality based learning environments (VRLEs) that support concurrent learning.

This taxonomy was informed by a range of papers and websites: see the References and Bibliography (Bower et al, 2015), (Hrastinski, 2019), (Siegelman, 2021).

Within higher education, f2f learning has been increasingly integrating aspects of online learning: with Virtual Learning Environments providing access to learning materials, and sometimes to provide online assessments and to provide aspects of collaborative support (e.g. discussion forums, online meetings). Depending on the use of these online materials, they typically have been providing blended learning as they support the F2F learning. Ways in which blended learning can do this include the flipped approach (Bergman and Sams, 2014), with the potential to improve student engagement in their learning.

The Pivot in 2020

The Coronavirus pandemic, that began in 2019, saw a range of social responses as countries responded to growing cases and fatalities. A common approach was to lockdown the population, with education one of the areas that was closed. For campus based universities, this meant students could not study in their traditional manner. In many cases, the response was to pivot to a blended approach: though in practice for many this was actually wholly online. It would be more accurate for most institutions to say that the institution was using a hybrid approach – with some degree programmes using a blended approach to teaching, whilst many degree programmes were entirely online. Within some institutions, the hybrid synchronous

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approach was used: where some students were learning purely online, and others had a hybrid learning experience.

Technology and learning during Covid-19

Technology has come to the rescue of universities, with support for teaching that would have been unthinkable a century ago. Virtual learning environments (VLEs), supplemented by live teaching platforms (Zoom, Microsoft Teams and GoogleMeet for example) have been utilised to provide an echo of the type of campus-based teaching that is still the expectation for many students. (HEPI, 2020). Some of the recognised challenges with online learning, as found with MOOCS over the last decade, and as experienced by those institutions already experiences with online only teaching – have become common across education in 2020. These issues are explored in the next two sections.

Challenges for students during the pivot

Isolation, motivation and engagement have all presented as issues for students during the lockdown period. Engagement has been a particular issue: students have been struggling to study with more students disengaging from their work (Hill & Fitgerald, 2020). Mental health has also appeared to suffer, though the medium to longer term impact of this is yet to be seen (Savage et al, 2020). The isolation and lack of peer support – formal and informal – has had varying levels of impact, partly depending on how far institutions and course staff were able to develop suitable frameworks for online community and student-to-student support. Whilst the challenges were many, the attainment outcomes are more nuanced – data in the UK shows a record number of first class degrees (The Guardian, 2021).

Challenges for educators during the pivot

For staff, key challenges during this period have been around workload, managing new technologies and developing new skills. Workload changes are potentially the biggest challenge for staff with a rebalancing of F2F and online learning, whatever form it takes. Institutions that are primarily online typically allow significant resource in the development, delivery and support of their online provision. However, for institutions undertaking this unanticipated shift, the issue of workload and resourcing is unknown territory with a variety of levels of support and allowance.

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Good practice in online asynchronous material tends to suggest 20-minute episodes: so translating existing lecture materials involves segmenting material, redesigning interactive elements, and allowing for different feedback mechanisms (feedback in terms of audience response and engagement). Supporting live synchronous online sessions is also requires a different skills and technologies with their own learning curve and support requirements. Finally, purely online assessment has a whole range of issues, such as collusion, how to manage timed assessments if they are deemed appropriate, how to manage team and group work etc.

Discussion: what next

Technology has long been recognised as a way to provide flexibility and to offer students choices in the how, where and when they study (Gordon, 2014). The pivot to online learning saw the mass movement of this in practical terms, to varying degrees of success. The challenge for campus based institutions is how to offer hybrid synchronous learning that maintains the benefits of a campus education, without demanding excessive resources to offer it. Flexibility in assessment and teaching can create more robust systems – able to cope with future crises – though these are also labour intensive in terms of creating and maintaining content. The potential for collaborating across institutions – with a MOOC like approach – could be one way forward, though in a sector where competition is the norm this type of cooperation may be a step too far. In the future, it is clear that institutions need to adopt flexible approaches that allow students to have the benefits experienced from 2020 and 2021, whilst emphasizing the opportunities for campus-based experiences for those that want and can access those.

References

Bergmann, J. and Sams, A., 2014. *Flipped learning: Gateway to student engagement*. International Society for Technology in Education.

Bower, M. Dalgarno, B. Kennedy, G., Lee, M., Kenney, J. (2015) Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis, Computers & Education, Volume 86, Pages 1-17, ISSN 0360-1315, https://doi.org/10.1016/j.compedu.2015.03.006.

Gardner, L., 2020. Covid-19 has forced higher ed to pivot to online learning. Here are 7 takeaways so far. *The Chronicle of Higher Education*, *20*.

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Citation: Gordon, N. (2021). A permanent Pivot to online learning, or will universities bounce back to normal? *Academia Letters*, Article 2394. https://doi.org/10.20935/AL2394.

Gordon, N., 2014. Flexible pedagogies: Technology-enhanced learning. *The Higher Education Academy*, pp.1-24.

HEPI. (2020) Students' views on the impact of Coronavirus on their higher education experienceHigher Education Policy Institute Available online: https://www.hepi.ac.uk/2020/06/30/students-views-on-the-impact-of-coronavirus-on-their-higher-education-experience/ [Accessed 25/04/21]

Hill, K. and Fitzgerald, R., 2020. Student perspectives of the impact of COVID-19 on learning. All Ireland Journal of Higher Education, 12(2).

Hrastinski, S. (2019) What Do We Mean by Blended Learning?. TechTrends 63, 564–569 https://doi.org/10.1007/s11528-019-00375-5

Nordmann, E., Horlin, C., Hutchison, J., Murray, J.A., Robson, L., Seery, M.K. and MacKay, J.R., 2020. Ten simple rules for supporting a temporary online pivot in higher education.

Savage, M.J., James, R., Magistro, D., Donaldson, J., Healy, L.C., Nevill, M. and Hennis, P.J., 2020. Mental health and movement behaviour during the COVID-19 pandemic in UK university students: Prospective cohort study. Mental Health and Physical Activity, 19, p.100357.

The Guardian. (2021) Record one in three UK students gained first-class degree in 2020. Available online: https://www.theguardian.com/education/2021/jan/27/record-one-in-three-uk-students-first-class-degree-2020 [Accessed 10 May 2021].

Siegelman, A. (2021) Blended, Hybrid, and Flipped Courses: What's the Difference? Temple University. Available online: https://teaching.temple.edu/edvice-exchange/2019/11/blended-hybrid-and-flipped-courses-what%E2%80%99s-difference [Accessed 25/04/21]

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