

Using Blackboard (VLE) to Support Teaching Practice of Academic Staff in Response to COVID-19.

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Abstract.

This article outlines the applied development of a Blackboard Virtual Learning Environment (VLE) module to support academic staff at Trinity College Dublin with their pedagogical practice in the new paradigm. The arrival of the COVID-19 pandemic in Ireland, and its enforcing of an emergency 'pivot' to online delivery, has led to major and significant changes in teaching and learning practices at Trinity. Faculty engagement with the VLE prior to the pivot would likely have been described as moderate and firmly perceived as a remote digital content repository, rather than potentially adding value to the enhancement of teaching and learning (Farrelly, Raftery, & Harding, 2018; O'Rourke, Rooney, & Boylan, 2015). Practice changes in response to COVID-19 have impacted profoundly on both staff and students alike. This article describes an initiative by Trinity's Academic Practice & eLearning¹ (AP) team to support faculty within this Blackboard module as they prepare for an ongoing 'emergency pivot' to continued online delivery.

Key words: Blackboard; Online learning; Virtual Learning Environment (VLE)

1. Introduction.

In this article I firstly outline the reasoning behind, and benefits and related challenges to development of the 'Adapting our teaching for Learning online' Blackboard module. Blackboard² is a Virtual Learning Environment/Learning Management System (VLE/LMS) designed specifically to manage the delivery of learning materials to students and provide practitioners the ability to actively engage and interact with participants online via Discussion Boards, Blogs, Journals, Wikis and Webinars. In addition, the VLE can enhance cross disciplinary learning experience when complimented with an effective and engaging modular structure (Dobozy, 2017).

¹ <https://www.tcd.ie/CAPSL/>

² www.Blackboard.com

Our mandate from senior management was, through the module, to provide relevant engaging material and strategies to support the needs of staff as they began to adapt their existing resources for an online learning mode. Academics as a result would be prepared to adapt their classes for use in a blended or hybrid learning model, e.g. in which some students attend class within the College while others attend simultaneously remotely online (Hwang, 2018). Research related to VLE adoption clearly confirms how VLE use can re-enforce students motivation towards learning, whilst positively impacting their learning outcomes (Alhussain, 2017; Chen, Dobinson, & Kent, 2019; Hamad, 2017). Recognising the primacy of pedagogical competence over technological skill, the module highlighted three key core areas for practice enhancement, including Adapting existing content for learning online (Shenoy, Mahendra, & Vijay, 2020), Fostering student engagement online (Zayapragassarazan, 2020), and Assessments in online environments (Johnston & O'Farrell, 2020). In adopting a strategy of 'chunking', each of these broad thematic areas included a series of containers including pre-reading, case studies, exemplars, peer learning, video and quick-guide tutorials as well as extensive additional resources within the digital learning environment.

2. Asynchronous V Synchronous.

Recognising the need of staff to develop their insight into online teaching and learning practice, the AP Team developed a suite of asynchronous resources, supporting these with follow-up synchronous workshop webinars. This modelled best practice around the inclusion of both synchronous (real-time) and asynchronous (online without real-time interaction) strategies through the Blackboard VLE (Chen, Dobinson, & Kent, 2020). In recognising the need for flexibility in academic colleagues' access to resources, the development of asynchronous recorded material provides academic staff the ability to engage with student queries, feedback, and group discussions via synchronous webinars. With pedagogy as the driver, the module resources highlighted several key components within Blackboard and used these to accelerate staff familiarity with tools such as discussion forums, lecture capture, webinars, polling, interactive whiteboard and the use of adaptive release. The development of a central resource provided teaching staff an opportunity to experience at 'first-hand' how they might use these tools/components in their own teaching and learning to meet their strong sense of professional responsibility to their students (Biesta, Priestley, & Robinson, 2015).

3. Design – Benefits and Challenge.

A second key principle informing the development of the AP module was to design and promote an informal mode of content delivery. This stands in contrast to a more formal approach typically provided in online education by Trinity Online Services (TOS), for example through interactive animated learning activities. Designing programmes specifically for online delivery, the Trinity Online model combines audio/visual, graphic design, graphical learning activities, and animation to develop visually appealing online interactive content. The adoption of this approach would have required months of planning and input from a team (TOS) already working at or beyond capacity to develop online content across College before the enforced pivot to general online delivery – an ideal unachievable in the time and resource constraints of the almost overnight Covid-19 pivot. The Academic Practice team of four Academic Developers, two Support Officers, and a Learning Technologist, under the guidance of the Head of Academic Practice began in May 2020 with a key ‘curate, don’t create’ pragmatic approach, recognising the limits within which most colleagues would be working. Developing a central resource and disseminating it through Blackboard –the institutional VLE to which all staff have access - combines an opportunity for academics to firstly engage with the VLE in using the integrated tools to develop content and secondly to provide robust pedagogical guidance and share good practice. The application of instructional design techniques (Brown & Green, 2019) within the established ADDIE instructional model of instructional design provided developers with a structured systematic approach of the process as they endeavoured to produce a logical flow of the content (Trust & Pektas, 2018).

Key to augmenting content within the module included a commitment by the AP developers to follow guidelines for inclusive practice, drawing upon the universal design for learning methodology, (Al-Azawei, Serenelli, & Lundqvist, 2016). Initial findings of the Irish National Digital Experience (INDEX) survey highlight and reflect previous student feedback related to a required consistent use of a VLE by staff across third level education (National Forum, 2020). Reflecting these findings and related feedback from Trinity students, the development team adopted a transferrable, customisable and scalable VLE ‘template’ within their module design, to provide a consistent student experience (Varga-Atkins, 2016). The underpinnings of the VLE module approach is to provide a consistent approach to its layout, such that it could be replicated by participants as part of their pivotal change to teaching online whilst developing their individual course module content.

4. Components.

In establishing peer support the AP module set out to develop both asynchronous reciprocity between participants by facilitating constructive debate through the use of discussion prompt and synchronous interactions during follow up webinar sessions. Traditionally, a Community of Practice as defined by Wenger (n.d., p. 1) describes a process of collective learning with 'groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly'. In recent times COP's have evolved with digital technology/education (Donaldson, 2020) and social networks (Sekkal, Amrous, & Bennani, 2019). In particular the emergence of online or virtual community building (vCoPs) plays a significant and relevant contribution whilst enhancing support during the current COVID-19 pandemic (Mills et al., 2020). Moreover, recent research suggests that vCoPs can facilitate 'the sharing of workload and expertise, and provide a support network to boost scholarship, career satisfaction, and ultimately advance the science of education', (Yarris, Chan, Gottlieb, & Juve, 2019, p. 3).

4.1 Discussion forums.

The informal nature of vCoP's can further provide opportunities for interprofessional development, mirroring evidence highlighted previously by McLoughlin, Patel, O'Callaghan, and Reeves (2018). By promoting the use of a Blackboard discussion forum component, the developed AP module successfully engaged participants through discussion threads to develop a supportive vCoP, enabling participants to share frustrations and exchange good practice amongst peers. Furthermore, in providing that sense of community, accessible 24/7, afforded staff the freedom to engage within robust discussions traditionally developed in 'corridor conversations' on-campus. Promoting this approach should enable staff to similarly use this Blackboard tool to engage with their own students in a curricular context.

4.2 Lecture Capture.

'Panopto', a lecture capture solution Integrated within the Blackboard VLE provided the developers an opportunity to record and promote key teaching and learning strategies. Whilst ubiquitous mobile technologies provide the ability for anytime-anywhere learning, the addition of an application such as Panopto compliments asynchronous remote learning in provisioning the potential for engaging active and social learning (Witton, 2017). Furthermore, developers were allowed to highlight the inclusivity and potential accessibility benefits of the application via

the transcription of audio content (Kandler & Thorley, 2016).

As agents of their own learning it is critical to have students actively engaged with the curriculum. Adopting the 'chunking' of content via multiple short recordings on a particular theme is of particular benefit as an instructional strategy to reduce cognitive load as students process learning material (Baker, 2010). Furthermore, with the inclusion of comprehension checks, the application provides the ability to embed formative assessment (quiz – automated with built-in feedback) or self-check questions, as they progress through the learning material (Soupeez, 2018). The incorporation of the application further provided the ability to model and promote other relevant functionality of the tool to staff, for example incorporating a student assignment folder to receive audio and/or video reflections or presentations from students (Stoneham, 2016).

4.3 Collaborate Ultra (webinars).

As a key example of synchronous learning, the use of interactive webinar software like Collaborate Ultra can facilitate teaching and learning opportunities for remote learners. Since the module launch in June of 2020, the Academic Practice team have provisioned a series of embedded webinar workshops facilitated by two Academic Developers and a Learning Technologist, to promote and share 'best practice' with teaching staff and their peers. As a means for promoting active learning, the inclusion of live polling within each workshop highlighted the effective use of this strategy to advocate and facilitate engaging discussion and monitor student progress (Barr, 2017; Ismail, Elihami, & Mustakim, 2019; Wong, 2016). The further inclusion of adaptive release within the VLE provides a mechanism to incorporate content-based rules (checkpoints) related to student progression. As such, the combination of polling with the adoption of adaptive release within the VLE provides learners with 'control of context, pace and scope of their learning experience', (Martin & Whitmer, 2016, p. 1).

However, technical and pedagogical challenges do exist when implementing this overall approach in relation to broadband connectivity and provision of a more inclusive education for those students with disabilities; we were able through the webinar approaches, to clarify and amplify these challenges with participants.

The embedding of presentation material within an interactive whiteboard afforded the workshop presenters an opportunity to contextualise with participants the ability to present and interact

with their own students. The use of virtual 'Breakout Rooms', further contributed to a unique experience in facilitating collaboration with shared content, whilst interacting with audio, video and text chat. In essence, experiences and discussions within this setting provided staff a unique but general view on the 'student experience', its needs and potential connectivity issues. Previous experiences of working in virtual environments have detailed the complexities and reality of delivering within a demanding environment (Cornelius, 2014), whilst further highlighting the advantages to such components to integrate 'active learning, participant reflection and skill development', (Hokanson et al., 2019, p. 1). By adopting a strategy driven by a pedagogy-first, technology second approach, the AP module has evolved to offer colleagues authentic learning environment, profiling meaningful concepts, strategies and transferable practice.

5. Feedback.

To date approx. 50% of academic staff within the college have self-enrolled on the developed AP module. A similar percentage have enrolled on follow up webinar workshops. Initial polling feedback from within the VLE suggests that approximately 90% of workshop participants believe that the module and webinars had been of distinct benefit to their teaching and learning practice. With c. 50% of academic staff having enrolled in the AP module to date, feedback has been overwhelmingly positive. Noteworthy feedback via 'whiteboard' postings suggests, '*...Discussion boards really useful*', '*...Repeated pattern of layout within 'blocks' is beneficial*', '*...The structure was very clear*', '*...Very engaging, short recordings good*' and '*...Text and videos helpful to reinforce learning*'.

6. Conclusion.

The AP module was developed to meet the needs of a broad academic community with a diverse range of digital competencies. Adopting the VLE as our dissemination method for professional development focused on enhancing digital T&L and allowed us to present, profile, and promote the use of a specific set of tools and resources available within the institutional VLE. Although too early to say whether this pivot to online will have lasting effect on teaching practices at Trinity, early indicators and feedback from staff attest to the value of using the VLE to enhance and upskill staff in digital competency at Trinity.

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