

Chapter 54

The Case for Universal Design for Learning in Technology Enhanced Environments

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ABSTRACT

This chapter examines the intersection of two drivers in the contemporary higher education environment. First, the increase in blended learning, propelled by advances in computing technology and the drive towards student-centred, active learning pedagogies influenced by social constructivism. Second, the need for university curriculum to become more inclusive as the sector continues to respond to the social justice and business aspects of the widening participation agenda. In response to this need for effectively designed blended pedagogies in technology-rich physical and online environments and the need to design for inclusion, this article argues for the adoption of the principles of Universal Design for Learning to be used in curriculum design and development. Not only is an implementation of Universal Design for Learning easier in a technology-rich learning environment, it is the ethical responsibility of universities to provide accessible curriculum as they seek to attract and retain more students through pathways and equity programs.

INTRODUCTION

During the last decade, teaching and learning at higher education (HE) institutions has been profoundly influenced by the widespread adoption of the Internet and networked communication technologies. In fact, the widespread use of learner management systems and online and blended course offerings have very much come in to the mainstream of university practice, with the strategic and effective use of technology enhanced learning (TEL) now part of the core business of universities as they plan for the future. This process is driven variously by software development, inexpensive computing and mobile devices, student expectation in a culture of ubiquitous computing, by a reassessment of didactic teaching methods and an acknowledgement of the growing acceptance of pedagogies influenced by social constructivism.

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Another area of influence in higher education in many parts of the world is the widening participation agenda and its various manifestations, particularly in Organisation for Economic Co-operation and Development (OECD) countries (Gale & Sellar, 2011). This can be broadly categorised as a range of policies that have influenced universities to continue to improve access to education to a broad base of its populace for reasons of social justice, economic advancement and as part of an increasingly commercialised and competitive global HE environment. Regarding the Australian context (Rizvi & Lingard, 2011, p. 5) note, 'The idea of social equity has been a recurrent theme in public policies relating to Australian higher education for almost four decades'. Along with a compelling business and social justice case there are powerful legislative drivers (Seale, 2006; Rizvi & Lingard, 2011) in Australia for the widespread adoption for the principles of equity and widening participation. The 2008 Bradley Review of Australian Higher Education makes an overt link between participation in higher education and social and economic development. Based on this, in 2009, the Australian Government announced targets that by 2020, 20% of University students are to come from low socioeconomic status (low SES) backgrounds and by 2025, 40% of 25 to 34 year olds are to hold bachelor degrees. Meeting these targets will require a comprehensive and nuanced approach (Cuthill & Schmidt, 2011). Growing student numbers in this way, particularly in the context of Australia's ageing population, means that an increasingly diverse student cohort will be part of the Australian HE sector in the near future, meaning that issues of equity and inclusion will be increasingly prominent. Students that span the spectrum of 'non-traditional learners and include the following groups; Aboriginal and Torres Strait Islanders; low SES (Socio-Economic Status) students; students from different ethnic/cultural/religious groups and different language backgrounds (i.e. international students but also local students from whom English is a second language); students working fulltime/part time; students with carer responsibilities; mature-age students; students with non-school qualifications as pathways into HE (including VET qualifications, pathway programs, work/life experiences); disabled students (including learning disabilities and both visible and invisible physical disabilities) 'first in family' students and rural/regional students. It should be noted that these definitions have fluid boundaries and any student may simultaneously identify with more than one group. As student cohorts become more diverse, it is reasonable to assume that this plurality will increase.

This push for widening participation, particularly at my own institution, has meant that university classes are more diverse than ever and therefore proactively catering for the teaching and learning needs of these cohorts is being seen as increasingly important. Meeting the educational needs of these groups means that teaching and learning must be designed to be more inclusive to ensure that we don't just attract diverse students, but that we also retain them and provide the most effective environment, we can to help them successfully become expert learners. The way that we, as a sector, rise to meet the challenge of inclusion in a technology-enhanced and commercialised environment will help define higher education in the years to come. This means that we need to take a long view of inclusion and begin to implement strategies, institution-wide, that will benefit our students, not just within the three or four year period of their program but during the next decade and beyond. One of these strategies is a process for inclusive curriculum design for all students called Universal Design for Learning (UDL).

This article outlines and argues for a possible solution to the twin challenges of technology enhanced learning and widening participation – for universities thorough adoption of the principles of UDL in technology enhanced learning environments and for the focus of designing for diversity to move from the periphery to centre of priorities. It contends that the drive towards blended learning, supported by technology-rich learning environments provides a unique opportunity for the implementation of universally designed approaches.

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