## Chapter 6

# Technology-Enhanced Pedagogical Models to Learn Critical Citizenship at a South African University

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### **ABSTRACT**

Although knowledge-centred approaches anchored in students' knowledge production abilities, heterogeneous learning styles and diverse learning needs are widely celebrated, perplexing questions persist on how these learning capabilities and enablements can be sufficiently harnessed to support technology-enhanced pedagogical designs. This chapter contributes to this discourse by proposing knowledge-centred models that integrate sound pedagogical strategy, ubiquitous technologies and situated learning to address student learning priorities and challenges in a Global Citizenship course at a South African university. Laurillard's (2001) Conversational Framework rendered a theoretical lens for interpreting the learning priorities, challenges experienced and the appropriateness of the proposed technology-mediated pedagogical interventions. Findings suggest that although collective engagement and peer-based networking were salient in the course, challenges of fostering deep learning, scaling the course, enhancing sustainable course delivery and accommodating diverse learning needs of students were reported. Technology-mediated pedagogical models that drew on emerging Web based technologies were designed to resolve these challenges.

### INTRODUCTION

Technology integration (TI) is a heavily contested term in higher education. Its operational definition ranges from: the adoption of computers and networks as integral components of diverse curriculum aspects (Panel on Educational Technology, 1997), the appropriation of technology in ways that shift pedagogical styles and learning experiences (Sheingold & Hadley, 1990), to supporting teach-

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ing effectiveness and learning outcomes through the use of technology (Dexter, 2002; Redmann, Kotrlik & Douglas, 2003). However, contemporary literature on technology integration has focused more on how the inclusion of learning technologies in academic settings has affected learning environments and classroom cultures (Orlando, 2005), and the effects of technology adoption on qualitative changes of the curriculum like the accomplishment of more authentic and complex goals (Ertmer, 2005). Other TI studies have emphasised using technology to support active learning and participation in classrooms (Weathersbee, 2008) and to target higher level thinking, procedural and technical skills in the curricula (Dexter, 2002). Therefore, an overarching theme in TI definitions is the deployment of specific combinations of information and communication technologies (ICTs) and learning platforms to ensure effective delivery of pedagogical goals.

TI into the course enhances student on-task behaviors, allows their deep engagement with content, supports knowledge application and analysis of information and trains them to sift authentic information in an information driven world (Dockstader, 1999). Despite the good intentions of TI into curricula components, many technology-enhanced pedagogical approaches are still predominantly transmission-based because technology is merely harnessed as a supplement rather than an integral component of the learning process. As such, the availability of technology equipment does not in itself guarantee its effective and successful adoption in the classroom (Vrasidas & Kyriakou, 2008). Unsurprisingly, students continue to find technology-enhanced lectures less captivating and uninspiring. To further compound the challenge of insufficiently transformed pedagogical designs, the increasing cultural diversity and cosmopolitan nature of South African universities coupled with students' varying access to emerging technologies in-class and out of classrooms means that the pedagogical challenge at these universities lies in designing technology-enhanced pedagogical designs that

harness the learning capabilities of heterogeneous students with diverse learning needs, complex learning priorities, and learning styles.

This paper argues that effective pedagogical design of knowledge-centred learning environments necessitates a pragmatic, strategic integration of traditional learning designs with knowledge generating environments of the cloud (which the new generation of students have traditionally grown up in but educators have sub-optimally exploited) to capitalise on the educational benefits of both environments. This blend is critical because traditional learning environments like Learning Management Systems (LMSs) have "largely failed to empower the strong and effective imaginations that students need for creative citizenship" (Campbell, 2009, p. 58-59) in the Social Web. On the other hand, over reliance on flexible, cloud-based environments like Personal Learning Environments (PLE) can be costly as institutions and students have little leverage with application providers when performance degrades, applications crash, or data is exposed or lost (Mott, 2010). A comparison of traditional environments' educational benefits to those of PLEs triggers a Gordian Knot, where choosing one learning environment over the other creates tradeoffs where the value of one environment is relinquished while simultaneously taking on its weaknesses (Mott, 2010). Practically, the study unravels the pedagogical challenges which the Global Citizenship programme team encountered during the pilot phase (pre-design) of a citizenship programme implemented at an English speaking South African university and the constitution of the pedagogical models implemented in the programme (post design).

### LITERATURE REVIEW

### Critical Citizenship

Critical citizenship (CC) is an inexorably complex concept that defies a precise definition. Bickmore (2005, p. 2) conceives it as "difficult citizenship"

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