



Going forward with backward design

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The establishment of the 'Centre for Educational Design and Development' heralds a new approach to programme and course design at Christchurch Polytechnic Institute of Technology. The immediate task for our team now designated 'Educational Designers' is to engage faculty in a design process that starts with context rather than content, and is informed by current and emerging models of learning centred practice. It must also meet broader institutional goals for developing high quality, flexible and inclusive learning experiences and enhancing the teaching performance of staff, as well as accounting for the challenge of using technology to transform teaching and learning and improve the quality of the learning experience (Laurillard 2010) in a 'supercomplex world' (Barnett 2000).

Ideally this is an evolving and emerging philosophy but while we work to become a team, the institute requires us to meet deadlines, thereby propelling us into making decisions about who we are and how we work, and about our processes and practices.

Keywords: significant learning, constructive alignment, learning centered, student engagement, assessment for learning, transforming practice

Background

As Educational Designers in the recently (2010) established Centre for Educational Development at Christchurch Polytechnic Institute of Technology (CPIT), we feel ourselves to be on the edge of an unknown future. As a new team, we are experiencing a myriad of competing, yet exciting, demands. While we work to become a team, the Institute requires us to meet deadlines, thereby propelling us into making decisions about who we are and how we work.

The aim of the Centre for Educational Development is twofold: to facilitate the development of high quality, flexible and inclusive learning experiences and to facilitate the development of staff to enhance staff teaching performance. The drivers for this include:

- An approach to the design of programmes which provides an upfront approach to pedagogical design
- A whole of institution approach to curriculum e.g. introduction of Maori exemplars and sustainability
- Ensuring team based collaborative approaches to programme development both intra institution and inter institution and redevelopment in support of learning, teaching and graduate skills.

Having to write a policy to give mandate and authority to our practice necessitated that we establish principles on which our practice was based. The Design, Development and Approval of Programmes policy relevant principles include:

- i. Education design will be informed by current pedagogy including understandings of constructive alignment (Biggs & Tang, 2007), learning-centred approaches, student engagement and using assessment (formative and summative) to enhance learning.
- ii. Education design will where possible anticipate future developments, consider the needs of students and be responsive to the changing needs of industry in the context of the graduate profile.
- iii. Education design will encourage a partnership model involving Faculties and the Centre for Educational Development that respects appropriate discipline expertise (including regulatory bodies) and pedagogical expertise.
- iv. Education design will apply modes of delivery and assessment that are appropriate and sufficiently flexible to meet the needs of learners, the institution and other stakeholders.
- v. Education design will give attention to embedding and contextualisation of generic competencies eg communication, research, sustainability, literacy and numeracy, bi-cultural and international exemplars, and information and digital literacies will be included, where appropriate.

The very process of responding to these demands will of course be the vehicle for establishing a shared understanding, for enacting the philosophy of our practice and for our becoming a community of practice.

The evolving and emerging philosophy to date is focused on learning centred, constructivist approaches, informed by Govers' (2010) model of 'Guided Tour' and by learning designers, such as Oliver and Herrington (2003), and Laurillard (2010). We define educational design as:

‘a collaborative process that integrates institutional and discipline contexts and goals with learner needs, pedagogy and technology by planning for learning that engages learners and teachers in an aligned set of learning activities, learning resources and learning supports.’
(Design Development and Approval of Programmes – Academic Policies and Procedures Manual – CPIT).

Policy is pertinent; practice is paramount. Our challenges include: How are we going to engage faculty academic staff to support them to engage with their learners? How do we challenge yet enable staff? How will we make the process both productive with an outcome and educative? How do we usefully become change agents encouraging a future focus when our own national context is so uncertain? How can we shift the focus from content to context? How do we address the challenge of preparing a curriculum adequate for a 'supercomplex world'? (Barnett 2000). How do we address the challenge of using technology to serve what we want it to do for education, to use technology to transform teaching and learning and improve the quality of the learning experience? (Laurillard, 2010). How will we usefully evaluate the process using learning design to capture practice and inform evaluation? A process has been designed and put into practice. The tenets of its design are that it be sufficiently rigorous to be credible and useful, yet flexible enough to be adaptable to the context in which we will be working. This process is still being refined and evaluated. In promoting this model of process to faculty, we want to ensure it is iterative and integrated rather than linear.

A project design team comprising people with expertise in educational design, curriculum knowledge, learning technologies, quality evaluation, as well as external stakeholders will 'collaboratively co-design' (Jarche, 2010) the programme. This design will be informed by an underpinning philosophy specific to the programme, making explicit the values, principles, and culture of the discipline. A profile of the graduate is brainstormed in terms of the knowledge, skills and attributes required to meet future demands in the 21st century. The graduate profile, along with a shared understanding of the philosophy of the programme, is seen as critical to the ongoing process. All other aspects of the programme design must align with the graduate profile. This 'backward design' (Wiggins, 1998 in Fink, 2003) is pivotal to forward focused design. Learning and teaching approaches, including the selection of appropriate learning technologies, and assessment designs are planned, with the team being challenged to provide a rationale for their choices. The design of the curriculum evolves from consideration of all these factors.

The process shifts the focus to collaborative co-design, moving away from a content-centric development perspective, thus allowing the institution to respond to local contexts and to prepare students for an unknown future.

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