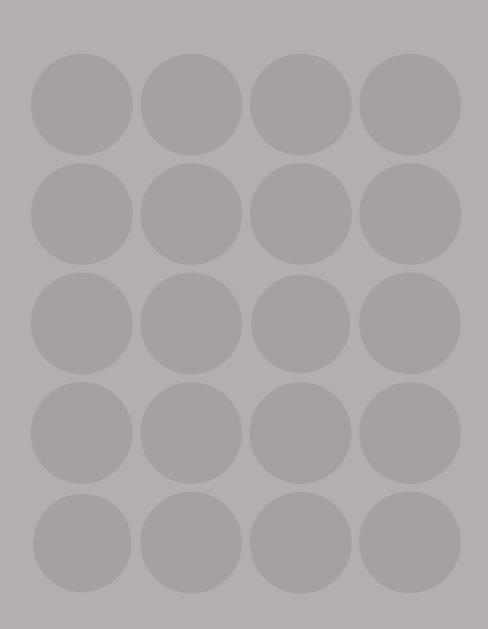
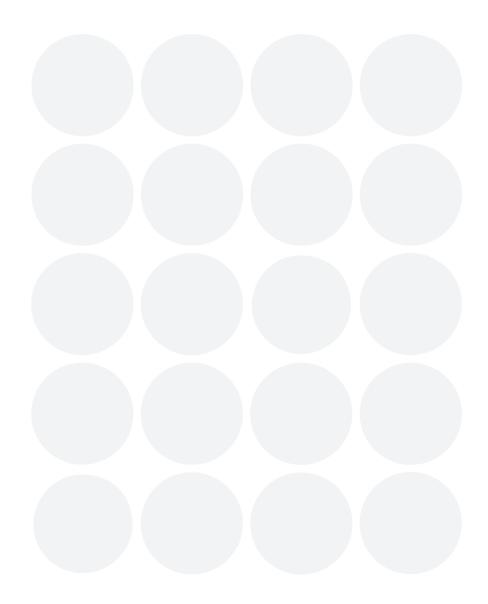
## THE DYNAMIC CURRICULUM:

SHARED EXPERIENCES OF ONGOING CURRICULAR CHANGE IN HIGHER EDUCATION

**EDITORS: JEAN HUGHES ELOISE TAN** 





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## **ACKNOWLEDGEMENTS**

The process of developing this book was not simple, with multiple authors and critical friends, each of whom has a busy, demanding job, of which writing for this book was a small part. While the ambitious timeframe slipped somewhat, the actual timeframe from conception to production, less than one year, was a remarkable achievement. It is appropriate to take this opportunity to acknowledge those whose efforts have brought this book to fruition.

Firstly I would like to thank each of the authors for their contributions to this book and the way in which they interpreted the overall aims of the book and applied it to their own institutional contexts. Through each individual chapter a clear picture of the institutional experience has been painted such that, in combination, all of the chapters provide a comprehensive overview of Irish higher education in the context of the Bologna process.

While ostensibly limited to the experience of DRHEA institutions, situating each chapter in the relevant literature and the addition of the perspectives of the critical friends provides a broader context in which to situate this book. The critical friends played an essential role by providing responses and additional insights into the theme of each chapter.

The Dublin Centre for Academic Development Steering Group - Morag Munro and Eloise Tan (DCU), Jen Harvey and Kevin O'Rourke (DIT), Áine Galvin and Elizabeth Noonan (UCD), Una Crowley (NUIM) and Ciara O Farrell (TCD), were instrumental in developing the initial idea and putting shape on the book, the themes and the chapters.

Dr Ciara O'Farrell played a vital role in the early, developmental stages by providing support for the academic writing process. In addition to facilitating writing sessions for the authors, Ciara played an essential role in assisting us to agree an overall shape and focus for the book.

As copy editor, Louise McDermott had the unenviable task of identifying our mistakes and ambiguities, providing corrections, feedback and suggestions, all of which made each chapter more coherent and readable. One seldom spots one's own mistakes and Louise's critical reading of each chapter enabled us to ensure that we said what we meant to say as clearly as we could.

A book such as this does not come together without significant effort and nobody has invested more time, effort and dedication to this project than my co-editor, Eloise Tan. From overall project management and coordination, to liaising with authors, critical

friends, graphic designer and printers, Eloise brought professional, thoughtful, reflective and insightful approaches to ensure that the book was of the highest quality. Her tireless dedication to keeping the project and all of its contributors on track, her feedback and her constant eye on the big picture has, above all else, brought the book to successful completion.

Finally, I would like to acknowledge the contribution of the HEA. The provision of SIF funding and support for the DRHEA in general, enabled this collaborative publication to come to fruition.

Jean Hughes

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## **PREFACE**

It is over a decade since the Bologna Accord was signed in 1999 and a discourse of how to transform, reform and renew the higher education curriculum continues to take centre stage in strategy and policy discussions at the institutional and national level in Ireland. However, while the discourse of higher education curriculum may have a presence at the policy level, there are few scholarly works that discuss or document the process of higher education curriculum development, or even what is meant by 'curriculum' in higher education. Of course the Bologna Accord is not the only driver of curriculum reform; widening participation, flexible and online learning, quality assurance, massification, and internationalisation of higher education also factor into the discourse and indeed take centre stage in some chapters within this book. This edited compilation, "The Dynamic Curriculum: Shared Experiences of Ongoing Curricular Change in Higher Education", adds to and widens the scope of scholarly work written by those who are on the ground enacting higher education curriculum reform. The "Dynamic Curriculum" compiles and documents the different experiences of seven Irish higher education institutions in the area of curriculum reform and while the seven institutions are all Dublin based, they range from the country's smallest higher education institution to the its largest, thus a broad scope is represented.

The authors of this book represent seven of the higher education institutions that work together under the auspices of the Dublin Region Higher Education Alliance (DRHEA). The DRHEA was formed in the context of the Strategic Innovation Fund Cycle II (SIF II) in 2008. One of the four component strands of the DRHEA is Enhancement of Learning (EOL) which is organised around a number of project areas: the Dublin Centre for Academic Development (DCAD); Transforming the Curriculum; Teaching for Engagement and Retention; and Enabling e- and Blended Learning. Three of the project areas were characterised by significant collaborative activity from the outset and each had relatively quickly yielded definitive, value-added, collaborative outcomes, as well as valuable, internal, institutional activity. However, the 'Transforming the Curriculum' project was organised so that most of the activity was focussed on internal institutional curriculum change, in particular to align with the National Framework of Qualifications (NFQ), thereby becoming compliant with the Bologna Accord. While a number of valuable networking and practice exchange events relating to Bologna had been organised, and institutions had benefitted from the experience and expertise of colleagues from other institutions, by definition 'Transforming the Curriculum' was much more internally focussed than inter-institutional in nature. This inward focus makes sense as each institution approached curriculum reform with objectives in mind that reflected particular institutional ethos, culture, strategic priorities and stages of development with respect to Bologna.

And yet, despite this inward focus, each institution shared common experiences by way of investing huge amounts of time, resources and people in the general area of becoming 'Bologna compliant'. In discussing how to make this project more collaborative, ultimately the focus became not on what we could do collaboratively in this area, but how we could collaborate to share and disseminate our collective experience, in particular, to inform those charged with curriculum development into the future. Essentially the focus became "what would have been valuable to have when we started our respective curriculum projects?". In that way, this book began with the idea of sharing our experiences in transforming the curriculum as academics, academic administrators and teaching and learning development staff.

Once this focus became clear the potential for collaboration was evident - documenting and reflecting on our respective activities to produce a useful resource for the academic community into the future. With this in mind, we then wanted to make sure that the book would be as valuable a resource as possible. This book was not intended to be a 'how to reform the curriculum' - given the complexities of curriculum, higher education change, institutional culture, tradition, scale and scope. It was decided that the best approach would be to identify key themes associated with curriculum change and to have each institution address a theme from a research perspective, also illustrating that theme in practice through a case study of their own institutional activity. These individual themes sit within an overarching theme of 'Innovation and Change', which is appropriate given the extent of curriculum change which has been taking place across Irish higher education. This book is not intended to be read from cover to cover, but rather each chapter is designed to be read independently such that readers may 'dip in' to a chapter which might be of particular interest to them. In this context some minor duplication has been allowed and cross-referencing between chapters has been minimised so that each one can be read in its own right

The explicit themes addressed in the book include: curriculum change at the institutional level as discussed in Hughes and Munro's chapter documenting Dublin City University's experiences in 'Curriculum change: achieving institutional cohesion while maintaining

individual autonomy'; modularisation and curriculum change as presented in Harvey, Hayes and O'Rourke's chapter for Dublin Institute of Technology, 'Modularisation and the crowded curriculum'; the introduction of virtual learning environments as presented in Palmer's chapter, 'Purposeful pessimism in the integration of technology: a case study in the Institute of Art, Design and Technology'; the role of assessment in curriculum reform as presented by Noonan and O'Neill in University College Dublin's chapter, 'Student engagement and assessment: the first year experience'; student centred pedagogy as discussed by Farrell and McAvinia in their chapter 'The place of the university teacher in a dynamic student-centred curriculum: a snapshot of practice at National University of Ireland Maynooth; universal design and curriculum reform as presented by Garvey and Foley in their chapter, 'Trinity Inclusive Curriculum: A Case Study on the Development of an Inclusive Curriculum Strategy'; and finally curriculum planning as strategic planning in McNutt's contribution, 'Strategic Planning and Curriculum Design – Strange Bedfellows?'.

As the book unfolded and chapters took shape, three overarching themes which serve as a backdrop to current Irish higher education, became apparent. The centrality of the National Strategy for Higher Education to 2030 (The Hunt Report 2011), the role of strategic planning as a driver of curricular change and the opportunities, tensions and challenges arising from such change, were common to each institution's experience. The Hunt Report (2011) is writ large in all of the chapters, in essence forming the backdrop to much of the curriculum development work taking place across Irish higher education. Most of the work being described in the book commenced not just before The Hunt Report was published in 2011, but before the Strategy Review Group was even formed in 2008. The readiness of DRHEA institutions to incorporate the Hunt recommendations into their reflections on curriculum indicates the readiness of Irish higher education in general to respond to those recommendations. Strategic planning is the second consistent backdrop to most of the writing in this book. In Chapter 7, McNutt poses a very pertinent question in the title of his chapter 'Curriculum Development and Strategic Planning: Strange Bedfellows?', drawing attention to issues in recent years about the increased use of business-like measures in higher education and the tensions this can cause, especially for traditional academic values and norms such as curriculum development. However, if the curriculum is seen in its broadest context, beyond content and formal learning processes, as discussed by Hughes and Munro in Chapter 1, then it is vital that curriculum is a core, if not the core, aspect of any higher education strategic planning process. It could be argued, and this

is quite evident from the chapters in this book, that the impetus of strategic planning has prompted the foregrounding of curriculum development as a cohesive institutional process, rather than as discrete activity localised in schools or amongst programme teams. The third theme evident across the chapters is that related to the opportunities, tensions and challenges which arise in the context of curriculum change and these are discussed from a number of perspectives. In Chapter 3, Palmer discusses e-learning in the context of national, as well as institutional strategy in this area, while O'Neill and Noonan examine the transition to third level and the first year experience and how a whole-institutional approach to address this area through assessment was adopted and implemented as an institutional strategic goal. Farrell and McAvinia, in Chapter 4, engage with recent international as well as national moves towards more student-centred curricula and what that means for university teachers.

The process of creating and compiling this book has been based upon the idea that we can learn more together by sharing our experiences than on our own. In keeping with that commitment to community of practice in higher education, this book has been designed to initiate dialogue between colleagues not only within Ireland but also throughout the international higher education research community. As such each chapter is followed by a response from what we call a 'critical friend'. The role of critical friends in the production of this book has been very important. At the design stage it was agreed that authors would identify relevant experts outside of the DRHEA to comment on and react to their particular chapters and the themes addressed. The critical friends took on this role with great enthusiasm and insight, their responses adding significantly to the chapters in particular and to the whole book in general. These critical friends come from across Ireland, and abroad, to offer their own insights into curriculum reform in higher education. As editors of this book, we invite you to take up the role of 'critical friend' and continue the discourse of curriculum reform by sharing your own experiences with this growing community of practice.

## Dr. Jean Hughes

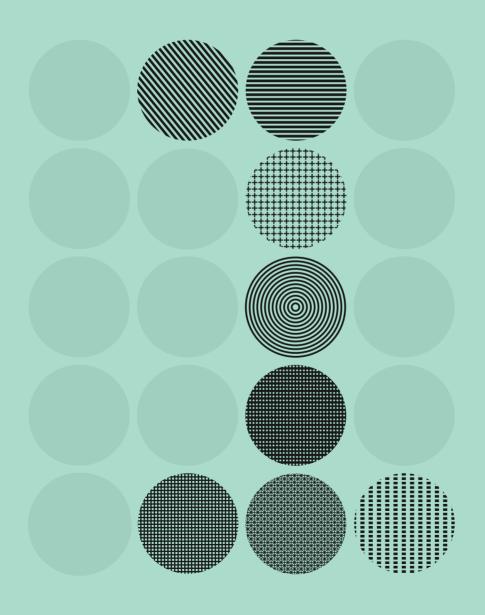
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# CURRICULUM CHANGE: ACHIEVING INSTITUTIONAL COHESION WHILE MAINTAINING INDIVIDUAL AUTONOMY



## **ABSTRACT**

Since the turn of the millennium there has been an increasing focus on curriculum reform in Irish higher education. Most of this activity has been prompted by external requirements to align programmes with the National Framework of Qualifications and achieve compliance with the requirements of the Bologna Accord. Although Irish higher education institutions have approached the matter of NFQ/Bologna compliance in different ways and over different timeframes, all have engaged in some degree of curriculum reform and development over the last five to ten years.

This chapter discusses the concept of curriculum reform in higher education, focusing in particular on matters such as the increasing emphasis on curriculum in the context of a concomitant dearth of discussion about it, the absence of a shared definition or understanding of curricula, and the centrality of curriculum to economic policy, notwithstanding this absence. It will then discuss Dublin City University's (DCU's) comprehensive curriculum transformation project, the Academic Framework for Innovation (AFI). The strategic drivers which contributed to the approach chosen by DCU, the lessons learnt and the questions which remain are presented.

## **Curriculum in Higher Education**

Paradoxically, although curriculum matters in higher education are central to government policy, curriculum per se is, at the same time, neglected as an area in its own right. Barnett & Coate (2005) refer to curriculum as "the missing term" in higher education' (p.13), and point out that perhaps one of the most important policy-related developments in the UK in recent times, the Dearing Report (NCIHE 1997), does not mention curriculum at all. In a similar vein, Hicks (2007) highlights the "dearth of writing on the subject" (p.2), citing, in relation to Australia, the absence of the term 'curriculum' in the review of higher education financing and policy Learning for Life - Final Report (West, 2007). Likewise the Irish Strategy for Higher Education to 2030, known as the Hunt Report (Hunt 2011), does not discuss curriculum in its own right either. Yet, despite not appearing explicitly as a policy concern, matters associated with curriculum development (such as skills and competencies, graduate attributes, and alignment of programmes with national priorities in terms of economic and societal needs) tend to be central to government discussion documents, policy developments and priorities for higher education development. Furthermore, as Barnett & Coate (2005) point out, addressing such issues in the absence of a focus on curriculum makes for a somewhat narrow debate, akin to "Hamlet without the prince" (p.6). These authors also argue that the higher education community itself is remiss in not initiating or conducting debates on curriculum; possibly, they posit, because of a fear of the development of 'national curricula' and the ensuing loss of academic freedom and autonomy that this might bring.

While there have been national curricula in compulsory education in most western countries for many years, at third level the focus has tended to be on the module or the programme, with curricula often driven primarily by academics' own interests and preferences (Hicks 2007). An additional dimension to consider in higher education is the role played by assessment, through which students largely define the curriculum (see James and McInnes 2001; Biggs & Tang 2007). Hicks describes this as "the tail (assessment) wagging the dog (curriculum)" (p.3), since assessment highlights and foregrounds the learning that will be rewarded.

So sparse is the discussion with respect to curriculum in higher education that it is difficult even to find an agreed definition of the term with respect to the sector. Smith (1996; 2000) presents four alternative conceptions of curriculum: as *transmission* of knowledge; as ends to be achieved (or *product*); as interaction of teachers, students and knowledge (active *process*); and as *praxis* - which extends the process model to take student and teacher experience into account in a dynamic interaction of action and reflection (Figure 1).

# Transmission Only really concerned with content One-to-many delivery model Process Interaction of teachers, students & knowledge Active process Product Set objectives, plan applied outcomes Technical exercise: Behavioural: Praxis Takes the experience of the learner and the teacher Dynamic interation of action and reflection

The UK Higher Education Academy's *Imaginative Curriculum Project* presents an alterative conception of curriculum: as encompassing what is to be learnt (content), why it is to be learnt (rationale and underlying philosophy), how it is to be learnt (process) and when it is to be learnt (structure of the learning process) (LTSN 2002).

Barnett & Coate (2005) discuss what they call "fuzziness" with respect to curriculum, noting that "the very idea of 'curriculum' is unstable, its boundaries uncertain". They go on to propose that a central question is "where does curriculum start and end?", suggesting that, in a limited view, curriculum is seen as the "intended educational experience", situated in the lecture hall, laboratory or seminar room while a wider view takes account of the "hidden curriculum" which extends to the library, study rooms, work placements and so on. They also pose the important question "to what extent does curriculum only exist when it is realised and engaged in by students?" (p.5).

## **Curriculum Models**

The focus on curriculum in the higher education literature tends to be most particularly on models for capturing curriculum development – that is, how a curriculum is planned, implemented and evaluated. Ornstein and Hunkins (2009) argue that, although these models may be useful technically, they often overlook human dimensions such as attitudes, values and feelings. Hence Ornstein and Hunkins caution that such frameworks should not be seen as a recipe for curriculum development and stress that professional and personal judgement must also be exercised.

Various curriculum models have been proposed. These have been classified as either product models (which tend to emphasise activities and effects) or *process models* (which tend to focus on plans and intentions) (Neary 2003, p.39). The two approaches are succinctly summarised in Figure 2 by O'Neill (2010).

O'Neill argues that curriculum models may be useful as a mechanism to

<sup>&</sup>quot;...systematically and transparently map out the rationale for the use of particular teaching, learning and assessment approaches" (p.2).

## **PRODUCT MODEL**

**Emphasises Plans and Intentions** 



Value in communicating transparent outcomes to students and moves away from lists of content

## **PROCESS MODEL**

**Emphasises Activities and Effects** 



More intuitive — get the processes, messages and conditions right — trust that outcomes will follow (Knight 2001)

Figure 2: Product and Process Curriculum Models - O'Neill (2010).

Finally, no discussion of curriculum is complete without reference to the seminal work of John Biggs, and in particular his concept of an aligned curriculum (Figure 3), see (Biggs 1999; Biggs & Tang 2007). Biggs echoes Ramsden (2003) and James and McInnes (2001) in arguing that, for a student, assessment essentially defines the curriculum. Thus a non-aligned curriculum can result in students focussing on narrow aspects of the curriculum, or placing too much emphasis on some parts and too little on others. From the teacher's perspective, the result may in effect be a tendency to 'teach to the test'. In Biggs's model (Figure 3) there is an alignment between learning outcomes, teaching approaches and assessment – his thesis being that if assessment drives the curriculum, then it is essential to ensure that it drives the right things.

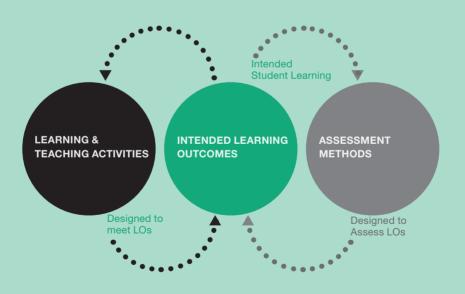


Figure 3: Aligning learning outcomes, learning and teaching activities and assessment. (Adapted from Biggs & Tang 2007, p.59).

## **Curriculum Development in Ireland**

In Ireland the impetus for programme development was traditionally prompted by external drivers such as economic or social priorities (for example, the growth of science and technology programmes and the requirements of accrediting bodies such as Engineers Ireland and An Bord Altranais), or internal drivers (for example, the desire of institutions to develop niche or high-potential areas or to gain reputations as centres of excellence). In addition, programmes were sometimes developed to advance areas of interest for individual academics or groups of academics (although this is becoming less common). In general, the main focus of new programmes tended to be on the content to be delivered, although in more recent times matters such as value for money, adequate resourcing and quality of student experience have also been taken into consideration. Many institutions have also developed rigorous processes for approving proposed programmes with a view to ensuring alignment with institutional strategies and priorities, likely viability in terms of market demand and availability of adequate resourcing.

## Beyond the Programme Perspective

The Bologna Declaration (1999) outlines a number of objectives for higher education across the European Higher Education Area and it has been a key driver for curriculum reform in Ireland. Priorities under the Bologna process are ease of readability and comparability of degrees; increased staff and student mobility; co-operation on quality assurance; a standardised credit system the ECTS (European Credit transfer System); and utilisation of learning outcomes to describe student achievement. Irish institutions have responded to the requirements for Bologna compliance in different ways with both mandatory, institution-wide, 'top-down' approaches and more informal 'bottom-up' approaches having been employed. Regardless of approach, however, it is clear that the focus on learning outcomes and ECTS necessitates a more comprehensive consideration of curriculum than has existed to date. While curriculum has traditionally been designed around the 'content imperative', the move to a learning outcomes paradigm demands valid teaching, learning and assessment methods, while comparability of awards demands transparency and visibility of these methods. In Ireland, the National Framework of Qualifications (NFQ), established in 2003, serves not only as a formal mechanism to guide the development of curricula and against which to benchmark them, but also has a broader purpose in that it prompts educators to make explicit many aspects of their curricula which were traditionally known only to themselves or visible only within their local discipline area. In addition, in our experience, adopting a learning outcomes paradigm has prompted much discussion and debate amongst academic staff, with several raising concerns about the move to an outcomes-based curriculum. In some cases, there is a concern that the approach brings with it an over-association with acquisition of skills and competences, and some academics argue that learning outcomes cannot be used to capture higher-order learning in an adequate fashion. An added concern is that informal learning and unintended outcomes, (dimensions of learning that are often associated with how individual students experience the curriculum), may be neglected, the fear being that 'what gets measured gets done'. However, even engaging with these factors, by definition, requires academics to take a more holistic approach than focussing primarily on content, and to consider the curriculum more broadly.

The curriculum in the context of overall institutional strategy has become an important feature in recent years. Higher education institutions have become increasingly focused on institutional strategies aimed at achieving better value for money and encouraging more cohesive approaches to the portfolio of programmes offered. In this context, institutions have developed processes and procedures to ensure that proposed programmes and changes to existing programmes go through robust approval mechanisms prior to launch. In addition, institutions have tended to look for efficiencies and economies of scale, seeking out opportunities for cross-programme teaching, better resource utilisation and the merging of class groups for the teaching of common subjects, amongst other approaches. Citing national policies like programme specification and subject benchmark statements which promote an outcomes-based approach, the UK's Imaginative Curriculum Project describes how "structural, regulatory and conceptual changes combined with pressures for curriculum reform are resulting in new expectations" (LTSN 2002, p.2). In Ireland, while there has been little formal policy and no equivalents to the UK national programme specifications or subject benchmarks, the development of the NFQ, with its generic award descriptors, provided a context within which to develop appropriate programme and module learning outcomes.

## The Role of Learning Outcomes in Enabling Curriculum Reform

Notwithstanding the potential issues and problems associated with learning outcomes (Adams 2008), their adoption as the paradigm for describing student learning across the European Higher Education Area has been the catalyst for a number of fundamental shifts in thinking about, and organisation of, curricula in higher education. Probably the most significant shift is that from a focus on teaching to a focus on learning, although, it is arguable that this transition still has a long way to go. However, the requirement to describe what is learnt rather than what is taught does necessitate a different way of thinking. We must now think not just about syllabus design but also about teaching approaches, learning opportunities and assessment methods – that is, the broader curriculum. Perhaps it is in the area of assessment that the most fundamental change has been required. In our experience, where content is the primary driver of curriculum a relatively narrow set of 'traditional' assessment approaches - essays, research papers, multiple choice tests and terminal written exams - tends to be most typical. However, when learning is described in terms of learning outcomes, traditional assessment approaches must often be re-examined to establish whether they are still fit for purpose, with the possibility that some assessment approaches will need to be reformed to ensure validity. In addition, in our experience the focus on learning outcomes has stimulated interest in more varied and contemporary assessment methods. Adopting learning outcomes has also required a broader perspective, beyond the programme, on matters more closely approaching 'curriculum'. Thus academics now need to consider informal learning, the learning environment and the student's own role in shaping his/her learning, and the use of a wider range of pedagogical approaches, when designing curricula. While, as has been noted above, some academics see learning outcomes as a reductionist mechanism, they may now, in an attempt to counteract the 'what gets measured gets done' phenomenon, place more emphasis on the variety of learning that occurs and the combination of factors that contribute to learning.

An additional driver which has moved thinking in higher education beyond the programme and to curricular perspectives is the focus on pedagogical issues, with emphasis on quality of teaching, teaching accreditation, assessment and new tools and approaches (such as, learning technologies and e- and blended learning, peer learning, inquiry based learning etc.).

## Approaches to Curriculum Reform

When adopting the NFQ, the IoTs were required by HETAC to evidence that programmes were compliant with the relevant NFQ award descriptors. This work was initially carried out in 2003/04 over a narrow timeframe, and necessitated some redesign and retitling of awards in order to achieve compliance. In addition, all programmes and modules had to be described using learning outcomes aligned with the appropriate NFQ descriptors. There has been on-going activity in relation to curriculum development in the IoT sector since then.

The university sector was somewhat different, possibly due to the autonomy enjoyed by the institutions under the 1997 Universities Act. Initially the universities were required only to place (rather than to evidence) their awards on the NFQ. However, it was subsequently realised that this approach would not facilitate comparability of awards beyond just the level of the award, as programmes and modules were not described using learning outcomes. Different universities moved at different times and in different ways when it became evident that learning outcomes-based curricula had to be developed. Some saw an opportunity to incorporate a number of curriculum-related priorities, including NFQ and Bologna compliance, into large-scale projects, while others took a straightforward approach focused solely on NFQ and Bologna compliance, and there was a variety of other approaches taken. In the next section the approach of one university, Dublin City University (DCU), is described.

## **DCU's Academic Framework for Innovation (AFI)**

In 2007, DCU's Academic Council ratified a formal proposal to establish an Academic Framework for Innovation (AFI). Although one of the main priorities for the AFI was the provision of a framework for achieving NFQ and Bologna compliance, it was also designed to capture the recommendations of DCU's Modularisation Working Group and to realise the goals of the 2005-2008 Strategic Plan, Leadership Through Foresight. These goals included enabling inter-institutional collaboration; widening student choice (in terms of mode of study); fostering flexible approaches to programme development (in order to enable opportunities for student choice to be increased); accommodating diverse student backgrounds and needs; improving academic achievement; and supporting retention. Specific actions proposed to achieve these objectives included removing staged annual progression as a universal feature of DCU programmes, eliminating 'examination only' repeats and offering flexible timeframes for completion. The cross-university team involved in the implementation of the AFI was led by a senior academic and included representation from the Associate Deans for Teaching and Learning/Education from each Faculty, the Head of the Learning Innovation Unit, the Director of Information Systems and Services and the Director of Registry. In addition, via funding allocated to DCU via the Strategic

Innovation Fund (SIF), each School saw the appointment of an 'AFI Fellow', whose role was to support local colleagues. The key deliverables with respect to this process were as follows: award learning outcomes mapped to the NFQ award-type descriptors, developed for each DCU award; module descriptors (including learning outcomes) developed for each module; alignment of module and award learning outcomes; establishment of clarity and consistency with respect to ECTS and workload; and a major overhaul of the Marks and Standards Regulations in order to enable greater flexibility with respect to DCU programmes.

It was recognised at an early stage that if the above aims were to be achieved in a thorough and meaningful way, then input would be required from almost all of DCU's academic community, as well as from a range of academic support personnel. Two possible approaches were considered. The first approach would be 'bottom-up' and would begin with module coordinators developing module descriptors. The module learning outcomes would then be used to develop learning outcomes for each award, which would in turn be mapped to the NFQ award-type descriptors. The main potential advantage of this approach was that it would involve the majority of the academic population at an early stage of the process. However, a significant concern regarding the approach was the possibility that the module learning outcomes might not add up to a coherent programme. In addition, feedback from colleagues in other institutions indicated that people may run out of steam after revising the modules and often have little appetite to tackle the programmes. The second approach which was considered was a 'top-down' approach, which would take the NFQ award-type descriptors as a starting point. These would be used to develop descriptors for each DCU award, which in turn would be used as a basis for the development of module descriptors with learning outcomes and assessment that would contribute to the award descriptors. A possible danger associated with this approach is that the NFQ descriptors could have become the primary driver for the content of our curricula, perhaps leading to a lack of distinguishing features with respect to similar programmes in other institutions. However, for a number of reasons, this 'top-down' approach was deemed to be the more appropriate one for DCU. Firstly, from a curriculum perspective, it was considered to be a far more coherent approach. Secondly, it was felt that taking the award outcomes as the starting point would provide a basis from which to identify and remedy duplications, omissions and redundancy at the module level. It was also considered that building up expertise amongst Programme Chairs would allow them to provide additional and targeted support to module co-ordinators when the latter were subsequently developing module learning outcomes.

A range of support mechanisms aimed at engaging and assisting the academic community was provided. The process was initiated with a 'Learning Outcomes Week' which took place in May 2008. The programme for the week comprised various presentations and workshops including a general introduction to the learning outcomes paradigm, presentations on the role of learning outcomes in supporting and enhancing student learning and talks by colleagues from other institutions on their experiences in moving to outcomes-based curricula. Colleagues from DCU's Schools of Engineering, who had been through a similar process in order to meet the requirements of their professional

body, Engineers Ireland, also shared their experiences. The week concluded with a round-table discussion on 'locating values in the learning outcomes debate'.

Following on from the Learning Outcomes Week a range of workshops and clinics aimed at supporting Programme Chairs and their teams in developing award learning outcomes was offered. Programme teams then developed award outcomes between April 2008 and September 2008, with the final set of outcomes for each award subject to external review by representatives of other universities, the Higher Education Authority (HEA), the National Qualifications Authority of Ireland (NQAI) and the Irish Business and Employers Confederation (IBEC). The feedback received was then used to revise the programme descriptors before the final versions were approved by Academic Council in December 2008.

With over 120 programmes reviewed and described in terms of learning outcomes, the next step was to develop module descriptors and to map the contribution of module learning outcomes to award learning outcomes. This work took place during the academic year 2009/10. The AFI Fellows were key to supporting this process: by combining familiarity with, and overview of, learning outcomes with their own disciplinary expertise, they were able to assist colleagues in the process in the way best suited to each discipline. DCU also purchased a web-based system, Coursebuilder, which allows academics to enter award and module descriptors and provides a mechanism for mapping module learning outcomes to award learning outcomes (Figure 4).

| 900  |  |              |            |     |             |            |            |            |     |  |  |
|--|--|--------------|------------|-----|-------------|------------|------------|------------|-----|--|--|
| ↓ ★  C Q C Coogle  C T C C C C C C C C C C C C C C C C C |  |              |            |     |             |            |            |            |     |  |  |
|  | Programme Outcomes                                 | PO1          | PO2        | PO3 | PO4         | PO5        | P06        | PO7        | PO8 |  |  |
| M/E  | Supporting Modules                                 |              |            |     |             |            |            |            |     |  |  |
| м  | CM107: Social and Economic Studies                 |              | ₹          | -   | ₹           | ₹          | -          | -          | ₹.  |  |  |
| м  | CM121: Introduction to Media Practice              | <b>⊪&gt;</b> | ₹          | -   | ₹           | -          | -          | -          | -   |  |  |
| м  | CM151: Mediated Communication and Culture          |              | ₹          | -   | -           | -          | -          | -          |     |  |  |
| м  | LC110: Language, Culture & Internat. Communication | ₹4           | ₹4         | ₹   | ₹1          | ₽          | ₹1         | <b>₹</b> 1 | ₹2  |  |  |
| м  | CM102: Perspectives on Culture                     | •            |            | -   | ₹           | •          | -          | ₹          | •   |  |  |
| м  | CM135: Analysing Media Content                     | <b>5</b> 5   | <b>₹</b> 5 | ₹5  | ₹5          | •          | -2         | ₹5         | -   |  |  |
| м  | CM137: History and Structure of the Media          | ₽>           |            | ₹   | ₹           | ₹          | <b>₽</b>   | -          | ₹   |  |  |
| м  | CM138: Digital Media Skills                        |              | ₹          | ₹   | •           | ₹          | ₹          | ₹          | ₹   |  |  |
| м  | CM152: Psychology, Media and Creativity            |              |            |     |             |            |            |            |     |  |  |
| м  | CM201: Research Methods                            | ₹1           | ₹1         | ₹4  | ₹4          | ₹5         | ₽5         | ₹5         | ₹5  |  |  |
| м  | CM202: Television Drama: Form/Content/Context      |              | ₹          | ₹   | ₹           | ₹          | ₹          | ₹          | -   |  |  |
| м  | CM212: Analysing Advertising                       | •            |            | -   | •           | -          | -          | ₹.         | •   |  |  |
| м  | CM213: Media Writing and Expression                | ">           | -          | V   | •           | •          | •          | •          | -   |  |  |
| ч  | CM301: Degree Project                              | <b>-</b> 3   | <b>₹</b> 3 | ₹4  | <b>₽</b> 5  | <b>₽</b> 5 | <b>₽</b> 5 | ₹5         | ₹5  |  |  |
| ч  | CM382: Communication Theory                        |              |            |     |             |            |            |            |     |  |  |
| ч  | CM345: Year 2 Contribution                         |              |            |     |             |            |            |            |     |  |  |
| E  | CM204: Video Production 1                          | ≡.,          | ≡.,        | ≡.3 | <b>■</b> •4 | =.1        | =.3        | ≡.,        | ≡., |  |  |

Figure 4: Extract from an Alignment matrix in The Coursebuilder system: Mapping module-award learning outcomes to programme/award outcomes.

While the development of the award learning outcomes had involved a relatively small number of colleagues, this next stage involved input from a far larger pool of staff. We aimed to avoid a surface approach to curriculum reform and instead aspired to achieve the "radical revision and overhaul" of curriculum advocated in The DCU Strategic Plan *Leadership Through Foresight*, (DCU 2005). Thus in addition to writing module learning outcomes, module co-ordinators were asked to develop detailed module descriptors for each module and to include information on pre-requisite learning, indicative content and continuous and terminal assessment, with each learning outcome explicitly to be assessed by one or more specific assessment instruments. Details of the module workload (e.g. hours allocated to lectures, independent study, collaborative learning, tutorials, laboratories), coursework and resources and reading lists were also documented.

Support mechanisms provided at this stage included workshops and clinics, guidelines and resources for the development of module descriptors, and on the mapping process, in addition, of course, to the AFI Fellows who were a pivotal source of local, disciplinary-level expertise within the Schools. Module descriptors and module-award outcome mappings were subject to approval by Programme Boards and at School Teaching Meetings, with a final sign-off by Faculty Teaching and Learning/Education Committees.

In parallel to the curriculum reform process, a major overhaul of DCU's Marks and Standards regulations took place. This aimed to bring more consistency to the regulations across the entire university by reducing the number of derogations, standardising progression and awards criteria and designing-in a greater degree of temporal flexibility. The extent of the consultation undertaken and feedback received on this process is illustrated by the fact that over sixty pages of comments on the draft new regulations were submitted by members of the university community.

## **Impact**

As with any major organisational change, the AFI has resulted in tangible outcomes and outputs which can be evidenced empirically and intangible impact which may only ever be reported anecdotally. From an empirical perspective, all of DCU's 150+ programmes and 2500+ modules have been reviewed and revised and, more importantly, will continue to be periodically reviewed and revised. The degree of visibility and transparency achieved through the AFI is significant. A standardised format for writing and presenting programme and module descriptors has been developed, as has a process for aligning module learning outcomes and programme outcomes. Minimum standard information such as ECTS credits, workload, coursework, learning outcomes, assessment, indicative syllabus and reading lists is publicly available, for every module, through the DCU website. Prior to publication, module descriptors must be reviewed and approved by Heads of School; this is now an annual process, a fact which is likely to ensure continued academic quality. While the process of checking and revising the alignment between assessment instruments and learning outcomes is still on-going, the requirement to indicate in each module descriptor which assessment approaches assess which learning outcome(s) requires continuous review of assessment. The major redesign of Marks and Standards has resulted in more streamlined, cohesive and consistent application of these as well as providing for temporal flexibility. 31

The less tangible outcomes of the AFI are perhaps the most interesting and the most valuable. It is clear that the language of curriculum is used by academics across the campus to a far greater extent than before. Where previously the main focus was on programmes and, more specifically, on content, the curriculum focus is now broader, with discussions about learning outcomes, valid assessment, learning approaches and learning activities becoming more frequent. In the context of DCU's strategic intentions, flexibility is also becoming an increasing focus with different kinds of flexibility (e.g. temporal, in terms of mode, in terms of choice) the subject of continued discussion.

## Lessons Learned

At the end of a project, one always finds oneself thinking: 'if I knew then what I know now'. It is critical that reflection on the experience takes place to inform future activity. Some of the main lessons learnt in DCU are discussed below.

## Ambiguity and some confusion between 'project' and 'normal business'

Changing normal business while conducting normal business inevitably leads to difficulties, such as confusion and ambiguity. In some cases it was appropriate that decisions be made by the project team; in others, the project team needed to put matters through their local structures for discussion and agreement. In retrospect, it would have been more efficient had these matters been identified in advance so that the project plan could have incorporated the normal schedule of meetings, thereby facilitating a smoother flow of activity.

## New processes and procedures

Paradoxically, as some matters have become more visible and transparent, there is new ambiguity in other areas. For example, as the AFI has progressed it has become clear that new processes and procedures, in particular around academic approval processes, are necessary. But whether these should be developed within each Faculty or be standardised across the university is an important question. Matters of academic freedom, disciplinary difference, culture and traditional ways of operating, all come to the fore when examining how things are, and should be, done. In retrospect, it might have been better to design these procedures as the project progressed, involving the relevant people as the need unfolded, rather than having to step back at the end and look at the different areas where the new processes and procedures were needed.

## Need to re-energise on a continuous basis

Every so often the project lost momentum. The sheer scale and scope of the initiative meant that almost all DCU academics and a significant number of other staff were involved in some aspect of the endeavour, and this represented a significant additional workload. The project team needed to ensure that the AFI was on the agenda of meetings of the Senior Management Group, Academic Council and other significant committees and also that regular updates were provided to the DCU community, including reminders about what had been achieved thus far and indications of what still needed to be done.

## Normal business?

The question as to why this was any different from what universities should be doing continually – i.e. on-going updating of their provision?" was sometimes posed. The difference for DCU was that the entire portfolio was being reviewed and substantially rewritten all at once and in a delimited timeframe so it needed to be treated as a distinct project which would change normal business.

## AFI Fellows

While the appointment of Fellows in each School was pivotal to the project, and in particular to the embedding of expertise about learning outcomes, the timing of their appointment was not ideal. This was largely influenced by the timing of the allocation of SIF funding, and in particular the uncertainty at the time about whether or not that funding would continue. In order to maximise the funding opportunity, Fellows were appointed while deliberations about some aspects of the project were still in train. Thus, while the Fellows were in a position to support the rewriting of learning outcomes and the scrutiny of the appropriateness of assessment, there were still wider curricular matters for which processes or solutions had not been designed, when the Fellowships commenced.

## **Potential**

At the heart of the AFI is the concept of a 'framework for innovation'. The term was carefully coined to describe the development of an environment for continued curriculum development and reform, enabling DCU to be responsive and dynamic with respect to external changes and demands. Consideration of the two words 'framework' and 'innovation' is instructive. Under the AFI, a framework in terms of the infrastructure underpinning the curriculum academic, technical, administrative, regulatory - has been developed and designed in such a way as to facilitate development in future. In relation to innovation, the flexibility afforded by the uniform modular structure, and in particular the alignment matrices, may be significant if DCU continues to build on it. Already the value of such a framework has been evidenced: in September 2011 DCU launched 'Generation 21', an initiative which describes the distinctive graduate attributes and the underpinning aptitudes and proficiencies to which all DCU graduates will be enabled to aspire. While all Irish HEIs, particularly since the publication of the Hunt Report (2011), are focusing on describing their graduates' attributes, DCU was able not just to describe but also to trace the path to achievement of its attributes back through programme outcomes and into individual modules, as well as to map the attributes across learning and experiential opportunities provided by academic support areas. The framework, which affords consistency while ensuring academic freedom and maintaining (and evidencing) academic quality and standards, has enabled DCU to evidence pathways for achievement of graduate attributes in a very short timeframe.

Other potential developments afforded by the AFI include mechanisms for very quickly analysing the DCU portfolio of programmes to identify, for example, how most appropriately to embed activities to support the transition from second to third level and to provide opportunities to enable all students to gain entrepreneurial skills. The provision of stand-alone CPD modules and more streamlined development of non-major awards is also much simpler post AFI.

## Conclusion

Reflecting on the AFI process, three years after it commenced, requires a focus not only on the process and its outcomes but also on questions which have arisen, unintended or unanticipated consequences and what the potential of the AFI is and can be into the future. Some of the questions which arise, for example, are: was the AFI a means or an end? Was it the starting point or the journey? Was it process, project or product? In many respects, the AFI was all of these things and possibly many others. In essence, what was done was to change normal business while carrying out it out. Admissions, examinations and graduations had to continue while new ways of approaching these were being introduced. A problem-free transition from the existing set of Marks and Standards to a new set of regulations could not be assumed but needed to be carefully planned. Supporting one set of academic procedures while developing new ones was challenging, frustrating, sometimes confusing, but ultimately worthwhile.

A key outcome of the change process discussed above is that a framework, in terms of the infrastructure underpinning the curriculum – academic, technical, administrative, regulatory – has been developed and designed in such a way that it is likely to facilitate the on-going reform and development of DCU's curricula well into the future.

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## RESPONSE TO "CURRICULUM CHANGE: ACHIEVING INSTITUTIONAL COHESION WHILE MAINTAINING INDIVIDUAL AUTONOMY"

by Sarah Moore

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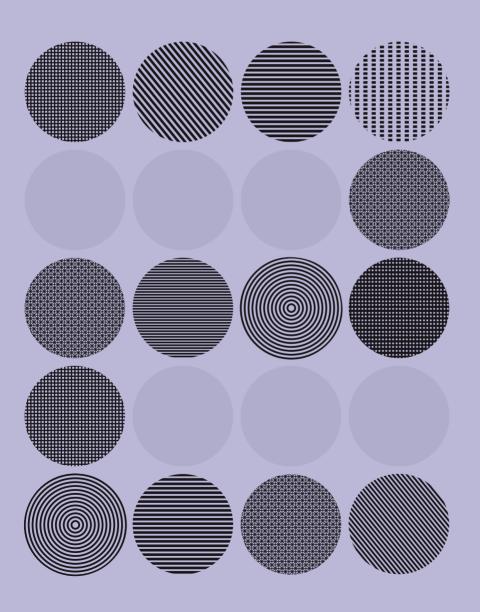
This chapter gives us a range of useful ideas and frameworks on which to base informed and structured conversations about curriculum development. Key underlying questions that it encourages us to think about include: who drives curriculum reform in higher education? Why does there tend to have been so little conversation about curriculum reform in the past? How can we encourage real debate and constructive conversation about it? Identifying key concepts such as the difference between a content and process approach to curricula is also useful, drawing our attention to some of the key fundamentals of the debate.

I very much agree with the authors that the Bologna-prompted focus on such priorities as ease of readability and comparability of degrees, standardising credits and articulating learning outcomes within the context of all HE programmes, have operated as a catalyst for useful, sometimes in-depth and occasionally transformative discussions in higher education, on the nature and purpose of specific programmes of learning. But there also remains a lingering concern that a detailed and committed focus on the learning experience is not yet complete and needs greater ownership within the disciplines. It is enormously encouraging that the authors note that one of the effects of a focus on learning outcomes has been to stimulate an interest in more varied and contemporary assessment methods. The realm of assessment and its potential to drive and energise learning has often remained underexplored, and if this increased interest can be shown to be influencing practice on the ground then it will be one of the things we can point to when exploring the impact of the Bologna process on the nature and quality of learning processes and environments.

I think the authors have also done a good job in recognising implicitly that while the articulation of a curriculum may assist its implementation, it can also risk doing the opposite. The big challenge that this chapter poses based on the experiences that have been shared is indeed that very tension. We need frameworks for curriculum reform and development that strike a balance between the real need for consistency and coherence (which is often facilitated through the top down process described) and the potential for creativity, openness and local learning dynamics and experiences (to which individual teachers need to be sensitive and responsive). In curriculum development, consistency without responsiveness creates a rigidity that could lock teachers into inappropriately inflexible pedagogical commitments. But on the other hand, responsiveness without consistency creates an obscure and non-transparent approach to engaging with the curriculum that is the very feature the Bologna agreement was designed to address. This chapter has added value to the debate by showing that these dimensions of curriculum reform do not need to be mutually exclusive, and by adopting a structured, informed and flexible approach to curriculum development we can recognise the uncertain and contested boundaries associated with curricula, while also creating useful frameworks for collaboration and articulation that serve to support our learning communities.

## MODULARISATION AND THE 'CROWDED CURRICULUM'

Jen Harvey, Nóirín Hayes Kevin C. O'Rourke Dublin Institute of Technology



## **ABSTRACT**

The introduction of a modularised system of programme design at the Dublin Institute of Technology has proved both a challenge and an opportunity. The move from a traditional 'fixed' curriculum to a more flexible, studentcentred approach to learning has provided a timely opportunity to examine the fundamental principles underpinning our approach to programme design and development. As part of the roll-out, the creation of an institutional module catalogue has allowed students and staff to examine in detail for the first time the content descriptions of over 250 programmes and 5,000 modules across the Institute's four colleges. As part of this process, the impact of various aspects of modularisation upon learning and the student experience have been explored: staff and student surveys have revealed that, while many respondents feel modularisation should facilitate student-centred flexible learning opportunities, they also consider that many of the potential benefits have not, to date, been achieved. While transparency within programme design has improved, response to policies developed to increase flexibility and student choice (e.g. through elective modules and varied learner progression routes) has been slow. The situation is complicated by a decision taken to introduce semesterisation in tandem with modularisation. Many staff report that they feel timeconstrained, being obliged to cover more course content and provide better student feedback within shorter periods than was previously the case. It is felt that this has, in turn, impacted upon the resultant depth, range and quality of student learning. So how do we address these problems? Has modularisation/semesterisation created new problems rather than solving old ones? This chapter attempts to address some of the issues involved.

"[U]ndergraduate education of every kind should enable students to make sense of the world and their place in it, preparing them to use knowledge and skills as means toward responsible engagement with the world. In order to contribute to the larger life of society, students must be able to draw on varied bodies of knowledge. They need to gain fluency in looking at issues from multiple points of view, which requires the opportunity to explore with others different ways of posing problems and defining purposes. These are the traits that have historically defined a liberal education. In this sense, the question of what business education should provide for students is part of the more fundamental question of what a college education should provide".

Chronicle of Higher Education 5 June 2011

In recent years, there has been a considerable increase in research and debate about curriculum reform in higher education, both in Ireland and internationally (examples include the Hunt Report (2011); the speech presented to the Royal Irish Academy in May 2011 by Minister Ruairl Quinn; and the OECD 2008 Assessment of Higher Education Learning Outcomes Project). Such debate often forms part of a wider discussion concerning the purpose of higher education generally, and it has become much more poignant in the context of recent economic global problems. In its 2005 Report Cumhacht Feasa: The Power Of Knowledge, the Working Group on Higher Education reported that

"The primary function of higher education is, quite simply, education. The simplest measure of the contribution of higher education to a society is the proportion of the population who have received that level of education (Royal Irish Academy 2005)."

This view has since been called into question. The headlines generated by the debate tend to be dominated by business gurus such as Craig Barrett (former CEO of Intel Corporation) calling for Ireland's universities to change from being "ivory tower institutions of learning" towards being "wealth creation centres" working closely with industry. The Hunt Report (2011) advocates similar reform, speaking of return on investment and holding that:

"In future, higher education will need to be more proactive in commercialisation and knowledge transfer, and will have to pursue this in collaboration with others in enterprise and the wider society. A renewal and transformation of the relationships between higher education and enterprise can position Ireland at the leading edge in the competitive global environment". This is the only way to ensure an effective return on sustained public investment in higher education and research over the next decade and for ensuring success in the application and commercialisation of new knowledge. (pp.31-32).

Within higher education itself, however, debate about broadening the curriculum is more muted, and in the context of the economic downturn it tends to be framed unfavourably by issues such as cutbacks in pay and concerns about imposed increases in workloads. Moreover, there are many questions that arise in respect of the curriculum in higher education in general, and at Dublin Institute of Technology (DIT) in particular. These range from the most basic ('What do we mean by curriculum?') to the more nuanced ('Is deepening the curriculum the same as broadening it?') to the normative ('Why should we consider broadening the curriculum?') and strategic ('How does broadening the curriculum relate to other initiatives within the Institute?'). Such questions must be considered in the context of internal and external drivers and uncertainties: any discussion around broadening the curriculum could prove counter-productive if it were undertaken in isolation from a wider academic discussion concerning institutional change and educational philosophy.

Barnett and Coate (2005) comment on the lack of academic debate around curriculum and curriculum design in higher education. This, they suggest, may result in an "overly narrow conceptualisation of curricula", one that does not take into account the complexities of the curriculum within a wider social context (p.27). While considerable effort appears to be expended on driving curriculum change internationally, generally in response to various external and internal drivers (often economic), they contend that this change tends to reflect the interests of a minority of stakeholder groups and often does not reflect those of academics. Without a wider associated debate, Barnett and Coate argue, curriculum change takes place by stealth rather than by design. As a result, the curriculum has become focused on skills and knowledge rather than on the development of key ideas such as criticality and personal autonomy, ideas often widely considered to be integral elements of a university education. It is reactive rather than proactive.

Barnett and Coate also argue that a curriculum "in a world of uncertainty" should be fluid, multi-textual and dynamic (p.54). Curriculum design should focus on collaboratively and imaginatively creating space in which students can engage across three interrelated dimensions: knowing, acting, and being. These three building blocks are already evident, they suggest, within all curricula, but the relative emphasis and the nature of their interrelationships, are likely to vary depending upon the discipline and institution. A proposed widening of the curriculum might entail a shift from the acquisition of propositional knowledge towards the development of personal or practical knowledge as a student engages with knowledge within his or her discipline. Work- or community-based components might also complement active academic engagement by the student as he or she puts theory into practice to gain new skills and acquire new knowledge. But the importance of a third dimension, that of 'being', is considered by the authors to be fundamental if a student is to be able both to make sense of the world and to take responsibility for the way skills are being developed and realised. This component could be described as "capability, self-realisation and self-reliance" (p.63). The ways in which these

three dimensions are integrated within the curriculum can bring an additional degree of depth to the purposes of the curriculum – for example, in professional subject areas where there is a need to develop a sense of being a professional (e.g. a nurse, a lawyer) within the context of underlying knowledge and associated practical skills.

DIT offers programmes that range from junior music classes and apprenticeships through degrees at Bachelor's, Master's and PhD levels. Its four constituent colleges include Engineering and Built Environment, Sciences and Health, Arts and Tourism, and Business. The Institute is distributed across thirty eight locations in Dublin, and with few exceptions programmes are based on specific sites; therefore the opportunity for intellectual crosspollination is physically restricted, and ideas about broadening the curriculum and interdisciplinarity face spatial as well as academic barriers. Since the inception of the Institute in 1887 as the Kevin Street Technical School, its programmes have always been professionally focused. Today, not only must all programmes presented for validation demonstrate evidence of support for the programme from industry/commerce, but the quality-assurance procedures demand that the reviewing panel must include at least one external member from industry/business. It is not surprising therefore, that DIT's reputation tends to emphasise its vocational aspects rather than its acknowledged research strengths. In Ireland, as elsewhere, there is a tradition of distinguishing between university (or liberal) education and technical (or vocational) education. However, recent debate has tended to downplay the value of the humanities in favour of scientific and technical subjects that are more directly focused towards specific careers, on the assumption that education is a tool for wider economic growth rather than a good in itself. For a counter-argument to this view, see Nussbaum (2006). In response, the chairman of Google, Eric Schmidt (2011), has criticised the narrow focus of education in the UK, suggesting that the divide which has emerged between the arts and sciences is damaging to the entrepreneurial spirit.

In this context, the Hunt Report (2011) allows for the establishment of technological universities in Ireland (although it tacitly acknowledges the dual nature of our current system by referring to the possibility that such new universities "could result in a third tier of institutions"). It challenges third-level institutions to reconsider curricula and argues that:

"Higher education needs to be externally responsive to wider social, economic, environmental and civic challenges, in addition to being internally responsive to the needs of students and researchers" (p.35).

The Hunt Report goes on to ask

"what are the right skills for the graduates of 2015 and 2030 and what mix of skills should we pursue as learning outcomes of higher education?".

It contends that more attention should be paid to

"core skills such as quantitative reasoning, communication skills, team-working skills and the effective use of information technology"

in order to address societal needs in the coming years. It also stresses that the model of education is changing towards one in which the process is life-long:

"The emphasis has switched from over-specialisation towards a deeper and broader disciplinary foundation, with learning objectives that explicitly seek to nurture in students the creativity, enthusiasm and skills required for continual engagement with learning" (p.35).

In direct response to the report, some Irish higher education institutions have begun to put in place strategies that will support the development of 'graduate attributes' within their programmes in a more explicit manner. For example, Dublin City University's Generation 21 plan, launched in September 2011 by the President, Professor Brian MacCraith, aims to "change the way the university prepares and shapes graduates for life and work in the 21st century" (Carbery 2011). All modules on all of DCU's undergraduate programmes have been reviewed to map their learning outcomes on to the graduate attributes and identify gaps:

"It's our responsibility to ensure we've done all we can to make sure they are developing the attributes that we know employers want today", according to Professor MacCraith.

At DIT, The Hunt Report has provided an opportunity for an examination and an expansion of the existing curriculum in the context of a portfolio of applied and professionally-focused programmes. For example, in March 2011, the DIT established The Lead, Engage, Achieve, Develop (LEAD) module to encourage, promote and support the development by students of a range of skills related to employability by means of engagement in extracurricular and co-curricular activities such as volunteering, mentoring and involvement in clubs and societies. Similarly, initiatives in the areas of digital/information literacy and in terms of supporting academic, personal and professional development among students, especially those in their first year in college, have become more common in recent years.

#### Modularisation

Since the 1990s, a variety of decisions to move either towards or away from modularisation has provided many institutions with an opportunity to initiate radical changes in teaching and assessment practice through curricular reform as all their programmes go through a restructuring and redesigning process. In 2000, it was estimated that 95% of higher education institutions in the UK designed their programmes in terms of credit-based modules (Turner 2002). Watson et al (1999) describe the rapid uptake of modularity from the launch of the first modular degrees in the 1970s in, for example, The Open University and Oxford Brookes University, when modularity simply meant the division of courses into separate units of learning, until current times when modularity is associated with principles of "credit accumulation, progressive assessment and student responsibility and choice" (Turner 2002 p.1).

In addition, the Bologna Accord provides an international framework within which to consider programme design and curriculum reform. Although the Accord has been criticised as being primarily structural and managerial in focus (Appleton 2009), its attention to student mobility, recognition of qualifications and associated developments means it is shifting the curricular discourse away from the traditional discipline-based, career-focused approach towards one that is more student-centred and focused on societal needs and the role of lifelong learning as a dynamic process. The Trends Report of 2005 suggests that there is a

"pedagogical shift intended by the Bologna Process, evident through its support for modularisation and the development of learning outcomes within programmes" (p.18).

Turner (2002) observes that

"It is not uncommon for module systems to have been imposed on institutions or departments for one reason or another, with inadequate motivation for staff involvement" (p.3).

Ewell (1988) suggests a need for transparency with respect to any proposed changes to institutional systems, as well as tangible support from senior management and the extensive development of assessment expertise on the part of individual staff, if observable changes in institutional culture are to be achieved. Otherwise, there is likely to be a resistance to the changes, involving as they do a movement away from well-established and familiar practice. At DIT, a large effort has been invested in the move to modularisation since 2002. This has included an extensive consultation process at local school level through Programme Committees and at Institute level through the Learning Teaching and Technology Centre and Academic Council. This process has been supported through the roll out of a range of mechanisms to support staff development initiatives, training opportunities and the development of variety of resources.

All DIT programmes now conform to a modular structure, defined by European Credit Transfer System (ECTS) credits and with qualifications that align to the National Qualifications Authority of Ireland (NQAI) framework. An internal report in 2008 identified five interconnecting principles to guide the progress of modularisation (DIT Modularisation Academic Working Group Report 2008). These are:

- (i) Creating a vision
- (ii) Maintaining the focus
- (iii) Making modularisation visible
- (iv) Unlocking the potential
- (v) Maintaining standards.

The vision for modularisation was originally rooted in the Institute's strategic plan, Vision for Development 2001-2015, which had as its first theme the enhancement of DIT as a 'Multi-Level, Learner-Centred Environment'. In this context, it was stated that:

"The major purpose of introducing modularisation is to offer students more choice and freedom with respect to how they construct and participate in a programme of study. Albeit any such programme must meet the academic requirements of the particular area of study. It is hoped that opportunities for more inter-disciplinary studies will be afforded to students". (available at http://modularisation.dit.ie/h\_who.htm)

At the end of 2007, shortly after the process of redesigning all programmes to be modular had been completed, an online survey of academic staff (a cross-Institute sample of 197) was conducted. One-third of the respondents had been lecturing in DIT for between

5 and 10 years and a further third had been lecturing for over 20 years, while 91% had authored modules. At that stage, 75% of respondents felt that, although programmes were modular, 'modularisation' 'had not been fully implemented'. There was an apparent recognition that the underpinning principles of modularity would take time to embed within institutional culture, and 72% strongly agreed, or agreed, that within the DIT 'modularisation has not yet reached its full potential' with only 6% indicating disagreement. However, it was felt that 'there are strong incentives to modularise' (42%).

At that stage of the roll-out, the majority of staff who responded felt that modularisation encourages student-centred opportunities, with 53% agreeing, or strongly agreeing, that 'it enables access, transfer and progression'. Just over half of the sample either agreed, or strongly agreed, that modularisation provides 'flexible choice for students' (52%) and 'facilitates inter-disciplinary programmes' (54%). However, 60% of the respondents either agreed, or strongly agreed, that modularisation 'fragments the learning process', and just over a third felt that it is a 'barrier to an integrated approach to learning'.

Challenges characteristic of modular rather than course-based systems have been well documented. Turner (2002), for example, outlines the main issues as being related to the duration and size of modules – learning hours, diversity of students on modules, enrolment processes, perceived centralisation of decisions, an over- emphasis on assessment, as well as a preoccupation with modules rather than with the wider curriculum (p.5). Brown and Knight (1994) also talk about a tendency for institutions to adopt a localised perspective on course design, certainly during the initial stages of modularisation, instead of initiating changes at an institutional level across programmes. The latter approach often results in the fragmentation and bunching of assessments or over-assessment within programmes (Mutch 2002).

Almost all respondents to the DIT staff survey indicated that they felt modularisation had had an impact on the provision, assessment and development of programmes. Approximately two thirds of the respondents believed that it had impacted on their 'teaching style' (64.5%). But almost half of these indicated that this impact was negative. Thirty eight per cent felt time constrained, mentioning pressure to cover specific content (24%) and decreased breadth of topic (24%). Comments included:

"There is no time to engage in the wider-than the syllabus debate/discussion with students."

"Teaching becomes more compact not enough time for depth' 'less time for interactive learning."

"I am constantly stuck for time."

"Sometimes I feel that learning has become production lined."

Although the survey was clearly identified as accessing data on modularisation, many of the comments had more to do with the concomitant introduction of semesterisation rather than with modularisation per se: lecturers were implicitly encouraged to design modules to fit a 15-week semester timeframe to include examination periods, rather than

extending them over two semesters. However, some lecturers noted a positive change in their approach:

"I plan my teaching load a little better".

"I have become more focused on learning outcomes - which is a benefit!"

Changes to assessment practice were more frequently noted: 62.4% of respondents commented that they had changed their 'approach to assessment'; 44 % of the total survey recorded a negative impact. Thirteen per cent of the negative responses included mention of an increase in the number of assessments, indicating that, as a result of modularisation, they felt increased pressure to organise assessment and provide feedback within a shorter timeframe.

"I don't do integrated assessments with other lecturers/modules anymore because of time pressures".

"Basically, we are over-assessing and over-burdening our students over shorter periods of time".

"I give out assessments earlier & huge pressure to give timely feedback".

Almost all staff commented that they felt modularisation had impacted on student learning in terms of depth, range and quality.

"I think they may actually read less and they certainly attend fewer classes as the pressure mounts, time runs out and assignments become due".

"Modularisation has encouraged a less integrated, more surface approach to learning".

"I think that students "package" their courses and focus on grades rather than on learning".

"Students cram in a shorter time period, and then forget".

"Students have more pressure as there are more exams".

"On balance, modularisation has encouraged a less integrated, more surface approach to learning".

In general, the survey found limited evidence of shared modules across programmes or the inclusion of electives in curriculum design. Since this time, it has become more evident that the move to a broader curriculum within the disciplines is much slower and more difficult than had been originally envisaged. The need to meet the academic requirements of specific programmes of study is the most commonly cited reason given for this, with many academic staff feeling that such time as is available to them must be devoted exclusively to the subject-matter of the discipline. This school of thought holds that broadening the curriculum, however desirable in itself, is not practical as it will involve either losing some existing essential elements of the programme or subjecting students to longer hours of classes and study; the latter issue would be complicated by the fact that academic staff are contracted to teach a specified number of hours per week. In this context, a suggestion that all programmes should be designed to allow students to

select an optional, non-prescribed module worth 5 ECTS credits per year was dismissed by academic staff as unworkable. It would appear that colleagues consider that our curriculum already fills the time allotted to it and there is no room to manoeuvre. It is as if broadening the curriculum can only occur through the addition of modules rather than through reforming or redesigning the curriculum. Moreover, there is no great appetite for the change which such reform would surely entail, especially given the perception that there has been minimal debate at ground level around the topic.

At the end of 2007, the DIT Students' Union (DITSU) conducted a survey of third- and fourth-year students to ascertain their views on modularisation. These cohorts had experience of both a pre- and a post-modularisation environment. In total there were 596 responses, with a fairly even spread across the constituent colleges. The survey questions related to the students' perceptions of the modularised system. On the issue of how it had been introduced, and why, just over 72% of respondents indicated that they felt no clear rationale had been provided to them, 21% said they had been informed that the shift to modularisation was taking place to enable wider choice for students, while 6.5% said they had been told it was to facilitate lecturers and administration. In a question asking if a wider choice of options and electives was available as a result of modularisation, only 7.6% felt that this was the case, with almost 25% strongly disagreeing. Over 33% felt that, as a result of modularisation, they now had fewer written examinations and more continuous assessment. In addition, 70% considered continuous assessment to be a more 'student-centred' method of assessment than examinations.

The opinions about assessment are backed up by a more recent study conducted in 2011 by means of reviewing almost 4,000 modules from the institutional module catalogue. With respect to assessment mechanisms, it emerges that 33% of modules are assessed through coursework alone, though this rises to 59% of modules in the case of the College of Arts and Tourism. Surprisingly perhaps, out of the total number of modules reviewed, only 6% were assessed solely on the basis of examination, though 10% of the modules from the College of Engineering and the Built Environment fell into this category.

#### **Conclusions**

DIT's quality assurance procedures require that copies of all approved programmes and their constituent modules be deposited in the library and available for review. Since 2010, digitisation has enabled the details of over 5,000 individual modules to be made available online through the CourseWise system bringing the potential for comparison within and across programmes directly to the desktops of students and staff alike (see http://www.dit. ie/coursewise for further details). The sheer number of available modules, which represent almost 300 programmes, is itself somewhat overwhelming, and savvy students have already begun to question why they are confined to registering on a particular module within their programme when a similar module which appears more attractive is on offer elsewhere in the Institute.

Of the five interconnecting principles (described earlier) identified as essential to progressing the modularisation project within DIT it can be said that there is (i) a stated vision under-

pinning developments, (ii) a focus of attention to modularisation and (iii) a mechanism – CourseWise – for making modularisation visible. These three principles exist within a robust quality assurance framework thus achieving the fifth principle – (v) Maintaining standards. However, the visibility of the online module catalogue has clearly yet to be fully capitalised upon, and raises the issue of principle (iv) – unlocking the potential of modularisation – which provides a context for discussing the topics of programme development, curriculum reform and the broadening of the curriculum. In this regard, DIT's Academic Council has, on two separate occasions, agreed to adopting 'Broadening the Curriculum' as a theme for the academic year, resulting in a focus on the topic through, inter alia, teaching fellowships, presentations at the annual Showcase of Learning & Teaching Innovations and education seminars for academic staff. Such activities have demonstrated that the links between modularisation and semesterisation are unclear and that work will need to be done to address the confusion caused by the simultaneous introduction of the two.

The full potential of modularisation can be realised only when there is a distinct route which new developments can take and a clear ambition to be achieved for the Institute as a whole. To maintain the momentum already gained and build upon the different initiatives in a way that creates a cohesive approach to actions across the Institute, an integrated and strategic approach will be required. This is particularly important given the findings of the 2011 NQAI review which resulted in a number of recommendations regarding the integration of processes and procedures to assist in the development of a "a simpler, coherent analytical approach to quality". Achieving agreement on an educational philosophy, and the curricular implications of this for DIT, requires a guided, high-level discussion and debate among academic staff. Such a debate must take account of other existing DIT strategies such as those pertaining to learning, teaching and assessment, research, the existing programme menu, and programme- and module-level learning outcomes. It also involves consideration of various other developments that are already under way such as the review of the first year experience, the introduction of optional modules, current curriculum reform initiatives across schools and the impact of community engagement projects. Only in this way can DIT fully capitalise on the efforts made to date and thus respond meaningfully to the needs of our students as individuals and of our society at large.

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### **RESPONSE TO "MODULARISATION AND THE CROWDED CURRICULUM**"

by Kelly Coate

In the field of the scholarship of teaching and learning, it has been far easier to find research and ideas about pedagogies and assessment than curriculum. Recently, this situation has started to change, as new literature is emerging that documents curriculum change and provides some new theoretical perspectives on higher education research itself. Notable examples include the forthcoming volume (2012) by Paul Blackmore and Camille Kandiko which looks at examples of high-level curriculum reform from around the globe, and the collection edited by Eli Bitzer and Nonnie Botha (2011) focusing on curriculum reform across South African higher education institutions.

The Dynamic Curriculum collection and the preceding chapter from colleagues at DIT are welcome additions to this literature and provide further evidence that the field of curriculum studies in higher education is becoming more and more important. I think there are a number of reasons why curriculum is emerging as a key issue now. As the authors of this chapter discuss, curriculum reform has been driven in a number of institutions by changes to the over-arching structures (e.g. semesterisation and modularization). These changes were perhaps initially proposed more for administrative reasons than for academic ones, but as the changes have become embedded there are now academic issues emerging.

One of the key issues that has emerged for many higher education institutions is the extent to which the curriculum supports the over-arching goals of the institution, particularly in terms of preparing students for life beyond graduation. The authors of this article raise some of these questions in relation to the education provided at DIT. There are a number of reasons why these questions are being asked now, I feel. Firstly, the expansion of the higher education system (particularly in Ireland) was recent and rapid, and we are in some senses catching up with a new reality of mass higher education.

Secondly, we have a better understanding of the fast pace of change in society itself, brought into sharp relief by the sudden economic crisis. Many questions can be posed about the extent to which we can predict the types of futures our students will encounter, and therefore the extent to which we can prepare them for an uncertain world. The higher education curriculum is at the heart of this challenge, as it may be the case that the curriculum is no longer fit-for-purpose.

As the authors discuss in this chapter, then, it is possible to change structures so that the curriculum is semesterised and defined by appropriate ECTS, while also becoming aligned to the NQAI framework, without fully modularizing. Modularisation might be resisted to some extent, but if, and when, it becomes established there are deeper questions about the aims of the curriculum still to be addressed. And they are not easy questions to address, either from a disciplinary perspective or an institutional one. The reform of content and delivery methods is a much bigger challenge than an administrative reform, as the authors acknowledge here.

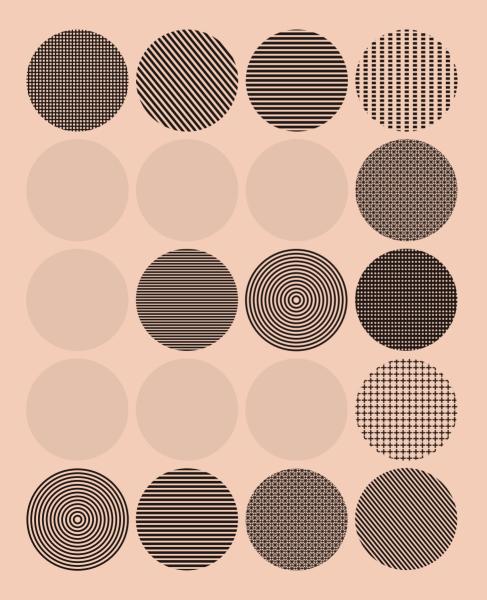
The concern with the 'overcrowded curriculum' is salient: a curriculum with 5,000 modules across 300 programmes is perhaps not unusual, but it does present the types of challenges that have prompted reform elsewhere. The type of 'high-level' discussion needed to guide these changes will inevitably address questions such as: what do our graduates do when they leave DIT? What do we want them to be able to do, in terms of core competences or attributes? What are the characteristic features of studying for a degree from DIT? These discussions need to take place both at a high level and within programme teams. The answers may begin to point to areas which are overcrowded or no longer necessary.

As many educators have been pointing out, we live in a time where access to knowledge and information has never been easier. Perhaps part of the answer to the overcrowded curriculum is to have confidence to drastically reduce the content from the curriculum. Students need to learn how to find and use good quality information, but they no longer need us to deliver the content to them. The educational spaces that we assemble for our students can be devoted to inculcating the types of skills they need for an uncertain future, rather than bombarding them with information we no longer are sure will be useful to them in the future. It is a long journey that DIT, along with many other institutions, embarks on when reform of the curriculum is on the agenda, but it is fundamental to the continued success of the higher education system.

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#### **ABSTRACT**

This chapter is written for lecturers, educational technologists, educational developers and ICT teams in higher education. It presents a case study of elearning in an institute of technology. Based on the literature review the analysis of technology focuses on three dimensions – the type of use, the level of use within an organisation and the support of teaching and learning. The chapter argues for a purposeful pessimism (Selwyn 2011) in the examination of technology in use. It emerges from the implementation of elearning in IADT and the work of the DRHEA Enabling eLearning group.

#### Introduction

The DRHEA Enhancement of Learning is a complex Strategic Innovation Fund (SIF) collaborative project across the eight Dublin public higher education institutions. IADT has participated in this project since its inception, with particular reference to the Enabling e – and Blended Learning project. This project focused on developing an elearning network of excellence.

The DRHEA elearning audit (2009 p.3) defines elearning as: "the use of ICTs to improve the quality of learning for all students and to extend access to higher education to those who are unable to attend on-campus". Many terms are used when discussing technology and learning, e.g. elearning, blended learning, information communication technology (ICT), educational technology, all with a wide variety of meanings. In this chapter, 'technology' and 'ICT' will be used interchangeably to refer to learning with technology.

This chapter emerged from a sense in IADT that the separate strands of learning and elearning need to be considered in tandem. It outlines the national context for elearning and places IADT within this context. Relevant literature is considered, including literature relating to types of elearning and how technology is used to support teaching and learning. Next a case study is presented that reviews the use of the virtual learning environment (VLE) Blackboard and identifies patterns of use across the Institute both within and across programmes. To conclude the chapter considers some key factors in the development of elearning in the Institute and argues that it has moved from learning to use technology to learning with technology.

#### National Context for eLearning

Irish higher education has expanded and developed over the last twenty years. Between 1992 and 2004 the percentage of the 17–18 year olds entering higher education increased from 36% to 55% (Department of Education and Science 2007). During this time considerable funding has been made available for the ICT infrastructure in higher education and higher education institutions started to use virtual learning environments (VLEs) to support learning (Cosgrave et al. 2011, p.30). The following examples provide a cross section of programmes that support the use of ICTs in higher education in Ireland:

• Dublin eLearning Summer School is a week-long event exploring educational technology that has been facilitated by the Dublin Institute of Technology since 2003 (DIT2011).

- National Digital Learning Repository (NDLR) supports collaboration in the creation and sharing of digital teaching resources across Irish higher education and started as a pilot project in 2005 (McAvinia and Maguire 2011, p.39).
- Irish Learning Technology Association (ILTA) is an association of lecturers and educational developers set up to support learning with technology. Since 2000 it has run EdTech which is a national conference often convened at institutes of technology.

Recent national policy for higher education continues to call for the integration of technology within teaching and learning settings. The Hunt Report (2011) recommends that students have an "excellent teaching and learning experience" with state-of-the-art resources including "e-learning facilities" (DES 2011, p.14). The Hunt Report sets out planning priorities that impact on elearning including flexible learning, cross-disciplinarity, the first-year experience, access and progression, and community engagement.

IADT's approach to elearning has been developed and reviewed in the context of the above national drivers for the use of technology in higher education. IADT has over 2000 students on a range of programmes that include film-making, business, humanities, psychology and multimedia design. As an institution, its vision is to:

"...be at the forefront of teaching, research and innovation at the convergence of the arts, technology and enterprise, and to contribute to Ireland's development as a creative knowledge economy" (IADT 2008, p.10).

In keeping with that vision, since 2002 IADT has had a strategic commitment to elearning particularly with regard to the use of virtual learning environments (VLEs) – initially WebCT and now Blackboard. IADT aims to have 75% of academic staff as active Blackboard users by the end of 2012 and 90% by the end of 2014 (IADT 2011, p.8).

#### **Literature Review**

Throughout the literature available on technology and education, various themes repeat in relation to how educators approach technology in practice. Njenga and Fourie (2010) in their analysis of the use of technology in higher education identify one such theme as the 'redemptive power' (Njenga and Fourie, 2010, p.202) of technology. This is echoed by Selwyn (2011, p.713) when he asserts that "Educational technology is an essentially 'positive project'", a theme evident in Ehrmann's (2009a) belief that "technology is magic". Bennett and Oliver (2011, pp.179–180) note that learning technology research has focused on the pragmatic, rather than on educational principles. Much of the discussion about elearning focuses on a reduction of costs (OCED 2005; Njenga and Fourie 2010) or a saving in time (Ehrmann 2009b). Selwyn (2011, p.713) concludes that "Educational technology has ....become a curiously closed field of academic study".

Much writing about elearning and technology has been in policy papers and journals such as Research in Learning Technologies, with little in mainstream higher education journals. A review of Studies in Higher Education shows that, since 2009, there have been three articles out of 135 which include any reference to ICT or technology in the titles. A similar review of the International Journal of Academic Development shows that there

were no articles with any reference to ICT or technology in the titles among the forty-six published since 2009. The literature suggests three dimensions for elearning – 1) the type of elearning, 2) the spread of elearning in an organisation (e.g. the number of staff who use it) and 3) how technology can support teaching and learning and the curriculum.

#### Types of eLearning

Two Irish studies have reviewed the use of technology, including VLEs. The DRHEA elearning audit (2009, p.3–4) reviewed elearning across the eight Dublin higher education institutions and identified key strengths and challenges for elearning. These include a high level of organisational sponsorship of elearning, the widespread adoption of institutional VLEs and a high level of use by students and staff. It notes that 'however, the VLE in the majority of modules is used primarily for electronic information distribution rather than eLearning' (DRHEA 2009, p.4). Use of the VLE was further explored in a multi-institutional study that used student survey data from institutions over two years to develop a sense of how VLEs are used (Cosgrave et al. 2011). It showed that VLE use is high across the country (ibid, p.30). VLEs are used mainly to provide access to course notes and readings; the next most common use is for assignment submission, with use of online discussions and online quizzes lagging behind (ibid, p.35). Students indicated a willingness to use VLEs, but noted that their use was determined by the level of lecturer use and that, where VLEs were used, they were unlikely to impact on class attendance (an adverse impact in this regard is a matter of concern for lecturers) (ibid).

These two studies provide a sense of VLE use, but it could be argued that they also provide information about the types of elearning in Irish higher education. The OECD (2005) has identified four types of learning, as shown in Table 1 (which has been adapted to include reference to VLEs):

| Type of eLearning | Features  |
|-------------------|---|
| Web-supplemented  | Classroom based, online module outline and lecture notes and links to online resources (basic VLE use), use of e-mail             |
| Web-dependent     | Online discussions and assessment, possibly online project work (more advanced use of a VLE), little reduction in classroom time. |
| Mixed mode        | Online work (e.g. online discussions), often using a VLE, replaces classroom time. Some attendance at class is still required.    |
| Fully online      | Online work only, usually through a VLE.  |

Table 1 Types of eLearning (Source: OECD 2005).

The web-supplemented mode is evident in both the DRHEA elearning audit (2009) and the multi-institutional VLE survey (Cosgrave et al. 2011, p.30). The analysis suggests that most staff in higher education teach in a web-supplemented mode, with fewer staff in a web-dependent mode and the smallest number teaching fully online courses.

#### Organisational Spread of eLearning

A second aspect to the use of technology is the number of staff involved. Selwyn's (2011, p.716) argument for the "purposeful pursuit of pessimism" regarding educational technology suggests that we start by 'examining the compromised and problematic everyday uses (and non-uses) of technology in education' (p.717). This echoes Ehrmann's (2010) revision of what he believed about technology and learning. Both essentially argue that educational technology should work with the mainstream – meaning the ordinary teachers and lecturers rather than the innovators – to develop and support student learning. This is considered in terms of the IADT case study which is presented later.

Gilbert (2011b) notes that 'the unrecognized revolution in higher education is the growing use of word-processing, presentation graphics (PowerPoint), electronic mail, and the World Wide Web by lecturers as they teach traditional face-to-face programmes. Gilbert (2002, 2011a) developed the concept of low threshold applications (LTAs) in terms of technology use, defining an LTA as "an activity or application of information technology that is reliable, accessible, easy to learn, non-intimidating and incrementally low-cost in time, money, and stress". He identified LTAs as entry points to educational technology for many teachers. These technologies have become part of the taken-for-granted tools for all lecturers in higher education, and staff use them as needed.

#### Technology Enhanced Curricula

Lastly, Chickering and Ehrmann (1996) considered how technology could be a lever to facilitate the implementation of Chickering and Gamson's (1987) seven principles for undergraduate education. They note the value of asynchronous communication and the ability to support student collaboration and apprentice-like learning, as well as the diverse assessment possibilities enabled by technology. This approach is echoed by Biggs (2003, pp.214-215), who identified four uses of educational technology: managing learning, engaging learners in appropriate learning activities, assessing learning and distance or off-campus teaching. Much of this can be achieved through an institutional VLE (Lea 2007, p.22). Clyde and Delohery (2005) develop this by identifying how technology can support teaching and learning through enabling the distribution of course materials to students and supporting communication with students. Donnelly, Harvey and O'Rourke (2010) report on a range of initiatives in elearning practice that exemplify some of these ideas.

Selwyn (2011, pp.714-716) argues for a technological pessimism in education that explores how technology is used in practice rather than focusing on how technology could or should be used. The Irish studies cited earlier provide a sense of technology in use, particularly the widespread use of VLEs (technology in practice) but then they focus on its limited use (how technology could and should be used). This is a pity, as the change that has occurred

through the use of technology is significant and is demanding on lecturers. Mishra and Koehler (2006, p.1017) argue that the "thoughtful pedagogical uses of technology require the development of a complex situated form of knowledge". Developing this knowledge takes time and effort. Ehrmann (2010) now argues that the

"...most important technologies for major, cumulative change in education are the technologies that many faculty and students take for granted".

#### Case study: IADT and the Virtual Learning Environment (VLE)

Debates about educational technology are often founded in "technological optimism" (Selwyn 2011, p.713), although the evidence is that

"...despite repeated predictions of inevitable change and impending transformation, digital technologies are used inconsistently in educational settings" (Selwyn 2011, p.714).

The IADT case study is an example of purposeful pessimism (Selwyn 2011), as it shows that technology has changed teaching and learning in IADT over the last ten years. As mentioned in the introduction, elearning is part of the Institute's strategic approach to teaching and learning (2003;2008;2011). This case study explores the development of elearning in IADT, particularly the use of Blackboard. It emerges from the SIF2 DRHEA project 'Enabling e- and Blended Learning' and other parallel projects as well as from the author's experience of teaching using the VLE for the last eight years.

#### Institutional Supports

The backbone of elearning in the Institute is Information Services (IS). IS manages the technical infrastructure, including Blackboard. Support for elearning is managed by the Institute's Teaching and Learning Committee. This Committee is a representative committee drawn from the three schools, the Library and IS and the Staff Training Learning and Development Officer. It is chaired by the Head of Department of Learning Sciences and has the brief to lead teaching and learning, including elearning, in the Institute. It has developed the Institute's Learning Teaching and Assessment Strategy (IADT, 2010b). The strategy identifies three key aims as being: 1) developing knowledge, skills and competencies, 2) supporting student learning, and 3) preparing students for life after IADT.

Elearning is now supported in IADT in a variety of ways. Since 2009, the Institute's Educational Technologist has been seconded to work on the SIF II projects (DRHEA e-Learning Project and Institutes of Technology Ireland Flexible Learning Project), as an eLearning Project Officer. He provides elearning support and workshops. There are teaching and learning seminars, organised by the Staff Training Learning and Development Officer using both IADT staff and external experts. There is formal academic professional development through the Athlone Institute of Technology Certificate in Learning and Teaching that has run since 2009. This is complemented by IADT's participation in the DRHEA eLearning Summer School and the Dublin Centre for Academic Development (DCAD) Online Learning module.

Parallel to formal and informal staff development activities, staff were supported to develop digital learning materials in 2009-2010, 2010-2011 and 2011-2012. The completed materials have been uploaded to the National Digital Learning Repository (NDLR). Since 2010, there has been an annual Teaching Showcase to share teaching and learning (including elearning) expertise and develop a community of practice in IADT.

#### Adoption By Staff and Students

Initially staff use of the VLE was minimal as shown by as shown by Figure 1. By 2006 it has increased substantially, perhaps stimulated by the EdTEch2005 conference, which was held in IADT.

#### **VLE USE BY STAFF**

2002-2006

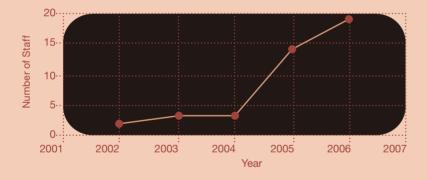


Figure 1 VLE use by IADT staff 2002-2006

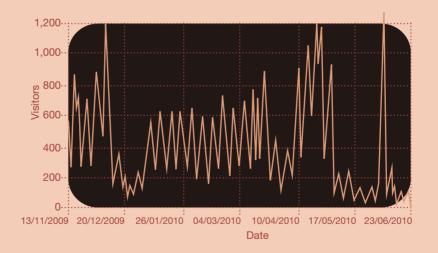
As the use of the VLE increased, the Institute moved to integrate Blackboard with Institute management information systems (MIS) such as Banner and HR Core. This enabled a move to a single sign-on for staff and students – a single username and password provides access to Institute networks and to the VLE, and students are automatically enrolled in the appropriate Blackboard courses when they register each year.

Student surveys in 2008 and 2009 indicated a variable level of Blackboard use across the Institute. It was clear that the staff championed its use but that coherent use at

programme level had not been achieved. This finding was complemented by a staff survey in 2010 (IADT 2010c). The staff survey had 29 respondents and identified key reasons for using Blackboard – such as student requests, management requests and the availability of training sessions. Other motivational factors for staff use of Blackboard included 24x7 access for staff and students, ease of access for readings and resources, time saved photocopying as well as previous experience with eLearning and "proper practice in the 21st century" (IADT 2010c). Almost all survey participants used Blackboard to distribute copies of lecture notes and share other course material with students. About half of the lecturers surveyed provided full lecture notes before or after class. About half of the lecturers used Blackboard for assignment submission by students (50%) and notifying students of class times/changes (43%). About a quarter used Blackboard for giving assignment results and running online discussions about the course.

By 2009-2010, daily visits to Blackboard were as shown in Figure 2. At this stage, IADT had over 2000 students, so 600 visits per day showed increasing use by students and staff.

#### **DAILY VISITORS**



A similar but increasing pattern of use was observed in 2010-2011, with a very clear spike in terms of use when there was bad weather in November and December 2010 and during the examination period in May 2011, as shown in Figure 3.

#### REPORT FOR BLACKBOARD

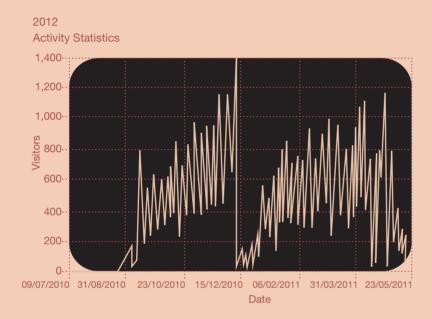


Figure 3 VLE Daily visitors September 2010 - May 2011

#### Current Examples of Blackboard Use in IADT

There are many examples of innovative use of the VLE throughout the institution. In the BA (Honours) in Animation programme, online journals are used in a third-year screen-writing module to develop critical analysis skills. In a second-year module on the same programme, similar online journals are used to get instant feedback from learners through a 'muddiest point' exercise at the end of class. In the BSc (Honours) in Applied Psychology programme, online journals are again used in the fourth-year Advanced Psychology module to stimulate and record reflective thinking. In the same programme, online discussion fora and blogs are used in a fourth-year Learning and Instruction module to stimulate reading

and to develop writing skills by enabling the sharing of work and the creation of some of the content of the module.

In addition to these innovations, an alternative way of using Blackboard has developed. For example in the MSc in Cyberpsychology and the BA (Honours) in Design in Visual Communication, one Blackboard course is used for each year of the programme, with each module having a folder on it. This has facilitated assessment, particularly assignment submission, and has been much easier for students and staff to manage. Other ways of using Blackboard have developed alongside these teaching and learning innovations. There is a Library course with relevant material for all students, and two of the Schools use Blackboard courses to provide students with programme handbooks and information on issues such as examination timetables. Programmes with a focus on the visual and the practical find it harder to adapt to VLE use, although there has been considerable innovation. The ability of systems to manage and transfer images has been a major factor in the adoption of the VLE.

#### **Future Collaborations**

Future developments in educational technology depend on sharing experiences and learnings (Ehrmann, 2010). Selwyn (2011, p.717) suggests that educational technologists should work with, and within, the educational system as agents of change.

The DRHEA elearning network has reviewed the situation as is (DRHEA 2009), and through regular meetings it has developed a shared sense of what is possible in the everyday worlds of lecturers and students in terms of elearning. This sharing across institutions in the Dublin region has developed elearning within the institutions and IADT, as a small institute, has benefitted from this. It should continue.

The second level of collaboration has been through the DRHEA eLearning Summer School. This draws on expertise across Dublin to work with lecturers for a week on a wide range of teaching and learning themes, linked through technology. It develops relationships between lecturers within and across the DRHEA institutions that support and develop lecturer engagement with technology. It has been recognised as best practice (Boylan 2011) and IADT will continue to support it. In 2011 it led to two staff taking the DCAD module in Online Learning – further evidence of collaboration.

Parallel to the collaboration across the DRHEA, IADT's collaboration with Athlone Institute of Technology has enabled staff to develop their knowledge and skills of educational technology. Through the Certificate in Teaching and Learning, staff have developed screencasts and explored their own use of technology, including Blackboard.

These collaborations have enriched IADT, and it is planned to continue them after the completion of the SIF projects.

#### **Conclusions**

Through this case study of elearning at IADT, this chapter has shown one example of how technology has changed teaching and learning at what essentially was a face to face higher education institution.

Although use of the VLE varies across programmes, the VLE has made a considerable difference as it complements the classroom, studio and laboratories in meaningful ways. In ten years, IADT has moved from having two academic staff users of the VLE to having over 140, about 70% of the academic staff. The impact of ICT infrastructure and support in every programme is clearly evident. It can be argued that IADT has seen a shift from learning to use technology to learning with technology. However, the pattern of adoption of technology, particularly of the VLE, depends on the discipline and on individual choice.

Through the use of the VLE it is evident that IADT has moved to web-supplemented learning (OECD 2005) for almost all programmes. There are some programmes and modules that are web-dependent and, in one project, mixed-mode learning has been used (OECD 2005). Most staff are using elearning in some way, and those staff are being supported by a wide range of staff development activities, as recommended by Ehrmann (2010). The level of VLE use suggests that technology is becoming part of the curriculum in action. This is supported by Ehrmann's (2009c) suggestion that small gradual steps are the most appropriate for sustainable change in teaching and learning and is an example of purposeful pessimism (Selwyn 2011).

The institutional supports mentioned earlier (IS, the elearning Project Officer, Teaching and Learning Committee) were key enablers of change at IADT. Some of these institutional supports were directly provided through the DRHEA SIF2 project. In this way IADT is a case study of how national drivers for elearning can be realised in an institutional context. Under the management of a Head of Department, and supported by IS and Teaching and Learning, the eLearning Project Officer was able to focus on the implementation of the VLE from a systems point of view. This focus was complemented by appropriate user support including elearning workshops and one-to-one tutorials with staff, and was supported by the elearning network of excellence of the DRHEA. Without this consistent support it is hard to see how the Institute would have developed as it has.

Elearning helps IADT to implement its curriculum principles. Educational technology helps to develop knowledge, skills and competencies, support student learning and prepare students for life after IADT. The case study indicates that technology can support and enhance teaching and learning in higher education at a slow but steady rate. The everyday implementation of technology in higher education has been one of the major changes over the last twenty years. The reality about technology, particularly VLEs, is that it is part of the higher education landscape, is used in a variety of ways and can aid student learning and the development of skills.

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## RESPONSE TO "PURPOSEFUL PESSIMISM IN THE INTEGRATION OF TECHNOLOGY: A CASE STUDY IN IADT"

by Pat Seaver

Since management of expectation plays such an important part in implementing innovation in organisations, it is apt that the author opens with a call for purposeful pessimism'. However what follows is a clear outline of the factors which have resulted in the effective use of elearning throughout IADT. The benefit of this chapter is not limited to individual academics wishing to develop their own use of technology. It is also a useful primer for those wishing to develop elearning changes on a department-wide or institution-wide basis and is of particular relevance to The Hunt Report (2011).

Removal of technical and organisational barriers to implementing effective elearning strategies is well documented. However, brevity of the chapter limits details of staff development and the precise pathway to DRHEA's "shared sense of what is possible in the everyday worlds of lecturers and students in terms of elearning". This might be an area of future research – particularly the effectiveness of informal support in creating new communities of practice; as might the creation and sharing of digital learning resources.

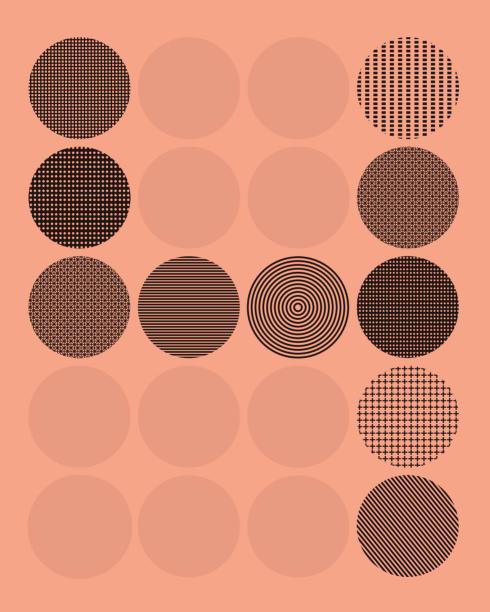
While my own experience is based on supporting Primary and Post-primary use of ICT as an effective tool for learning, there are parallels. Teachers did not, and do not, embrace innovation instinctively. Firstly, technical and organisational barriers were removed. Secondly a wide range of supports were provided, tailored to meet the specific needs of individuals and departments. Finally, dialogue was encouraged regarding the very nature of what was to be achieved: education delivered in a form that met the needs of learners in a changing world. It is in those that embraced this dialogue most enthusiastically that transformation has been greatest.

It is this conversation that must be encouraged to develop throughout higher education, from educational technologists working within institutions as agents of change, to higher level collaboration between institutions, such as those in the DRHEA. The value of this institution-level collaboration is illustrated by the determination to maintain it after completion of the SIF funding period.

Therein lies this chapter's challenge to curriculum design. Elearning is part of the higher level landscape. However, effective elearning is not guaranteed; it is possible but requires an engagement at all levels, supportive technical infrastructure, wide and varied staff support, especially for mainstream lecturers, and dialogue among teachers as to the nature of learning with technology. Finally, an institution must accept that once all this is in place progress will be in small steps if it is to be sustainable.

# STUDENT ENGAGEMENT AND ASSESSMENT: THE FIRST YEAR EXPERIENCE

Elizabeth Noonan Geraldine O'Neill University College Dublin



#### **ABSTRACT**

Student engagement in the first year of university has received considerable attention by higher education researchers and policymakers internationally (Krause et al 2005; Nicol 2009). UCD's current Strategic Plan to 2014 has prioritised fostering early and lasting student engagement (UCD 2010). Arising from the plan, the University's 'Focus on First Year' strategic project was initiated and an important part of this initiative included a focus on assessment in the First Year (UCD Teaching and Learning 2011). The main objectives of this activity were to evaluate how first year assessment practices were supporting student engagement and to make recommendations for enhancement. In order to design an institutional framework to enhance assessment in the First Year. theoretical data and evidence of current institutional practice were gathered and critically evaluated. Four specific methodologies were used: a comprehensive literature review; institutional data analysis of First Year assessment; case-studies of institutional practice and expert practitioner advice. These methodologies integrated evidence from both theory and practice.

Based on this evaluation it became evident that a design framework would need to incorporate a dual focus to address the design and operational issues at module level whilst also providing a more strategic design perspective from the vantage point of a School or Programme. Nine design principles emerged: six module and

three strategic design principles. These principles were supplemented by an extensive suite of expert resources, openly accessible, to assist academic staff planning changes to first year assessment (O'Neill and Noonan 2011a, 2011b; O'Neill, Noonan and Galvin 2011).

The framework (nine design principles and resources) was then used to direct enhancement of First Year Assessment redesign in a new implementation phase of the project (UCD Teaching and Learning 2012). The dual focus of the framework provided an holistic lens with which to examine and identify directions for enhancement of first year assessment practices both locally and internationally.

#### Introduction

Student engagement in the first year of university has received considerable attention by higher education researchers and policymakers internationally (Krause et al 2005; Kift et al 2009; Nicol 2009). This is perhaps not surprising since participation rates in higher education have been increasing over the last 20 years as a consequence of government policies to produce educated graduates to meet economic workforce requirements. Universities have responded positively by incorporating additional student numbers, developing a wider array of programme offerings and in many cases implementing more flexible curricular structures.

Student success in the first year, in terms of transition into higher education and subsequent progression at undergraduate level remains an area of international policy and research interest. Reasons for this interest include:

- Completion rates for students;
- The implications of on-going diversification of the student profile and access to higher education;
- The responsiveness of higher education institutions in meeting learner requirements;
- Student engagement and success particularly in the First Year.

More recently in the Irish context, The Hunt Report (2011) has emphasised the necessity of ensuring the appropriateness of the structure and underlying pedagogy of the first year of higher education as a foundation for success in higher education. This recommendation highlights a need to bridge the experience between the second level experience and the experience of learning in higher education.

In addition over the last ten years, the impact of the Bologna Accord has shaped curricular structures and promoted the development of credit-based, learning-outcomes focussed curricula. The increasing flexibility of curricula and programmes presents challenges in terms of integration and coordination of the learning experience for students. It could be argued that the more flexible higher education learning experience in some ways exacerbates the difference between second level and university level learning, not only in the academic demands but also through the demands for learners in navigating the curricular structures.

It has long been held that assessment has a critical role in moulding student learning behaviours, and much of Boud's (1995) work focuses on this issue, and he is well known for his concept of 'assessment for learning'. This approach highlights assessment as an important aspect of curriculum design which should both support, and promote, learning as well as certify its achievement. However Boud (1995 p.35) also states categorically that

"..the effects of bad [assessment] practice are far more potent than they are for any aspect of teaching. Students can, with difficulty, escape from the effects of poor teaching, they cannot (by definition if they want to graduate) escape the effects of poor assessment".

Taken together, the question of student engagement (Krause et al 2005); the design of flexible programmes (Linn 2000; Fink 2003) and the design of assessment (Nicol and MacFarlane-Dick 2006), this paper presents a case-study of practice at University College Dublin which addressed current practices of assessment in the first year at the University. It presents how a more coherent assessment design framework was developed to better support student learning and transition in the first year at University. This paper will set out the strategic context in which this work was initiated, it will describe the methodology and the key findings from each strand of activity, it will address assessment and programme structures and it will present how these factors influenced the assessment design framework which emerged from the work.

#### The Strategic Context: Curriculum Change and Consolidation

In 2005, UCD in line with its Strategic Plan 2005-2008, implemented a fully modular, semesterised, credit-accumulation based curriculum called "Horizons". This new curriculum was fully aligned to the Bologna three programme cycle at undergraduate, graduate and doctoral level and was described using learning outcomes. Implementation of semesterisation and the modular structure was based on the principle of modules as the basic building block of the curriculum and the University Regulations defined a module as:

"...a coherent and self-contained unit of learning, teaching and assessment, which comprises a defined volume of learning activity, expressed in terms of learning outcomes, which are in turn linked to assessment tasks. The volume of educational activity is expressed in hours of student effort and which is linked directly to the credit value of the module" (UCD Academic Regulations 2011, p.11).

A standard module size of five European Credit Transfer System (ECTS) credits was adopted, and all modules were to be delivered and assessed within the semester. Each semester comprised six modules, giving an annual full-time student workload of 60 ECTS credits per academic year. There are two major points of significance to this structural change. Firstly the concept of the module as a self-contained unit of learning constructively aligned with the associated assessment tasks was designed to provide curricular flexibility and thus modules could be core to more than one programme. Additionally through the provision of student free choice of two modules per year as electives (ten credits), the policy that all modules should have a number of elective places available meant that students from a wide and diverse range of programmes could take the same module. In summary, this flexibility heralded an opening up of programmes and created

learning opportunities for students across disciplines other than their core programme. In this regard a new relationship in curriculum design terms was established between the module as the basic building block and the programme as a more student negotiated pathway of learning.

Secondly, the University implemented a change in its assessment policy in the new modular curricular format. Where previously year-long courses had been assessed at the end of the academic year through a traditional diet of examinations, the impact of semesterisation meant that there were two points of assessment: at the end of semester one and the end of semester two. As part of the curricular re-design process, the University issued a policy statement which required that examinations should not be the sole means of assessment for a module. The rationale for this policy was to ensure that students' received interim feedback through assessment on their progress in a module, that the weighting of assessments moved away from 100% summative assessment and that students were exposed to more modalities of assessment which were in turn aligned to the specified learning outcomes. In summary the University's curriculum change process led in to an increase in the number of curricular units (modules); a reduction in their size and an increase in the volume and frequency of assessment.

Following the successful implementation of a fully modular curriculum, the next phase of the University's strategic development identified a process of curricular consolidation as a key priority. Within the 2009-2014 University Strategy, 'Forming Global Minds', these goals were expressed in terms of the articulation of desired graduate attributes and concurrently a focus on enhancing the nature and structure of the Horizons curriculum:

"Further develop the UCD Horizons undergraduate curriculum, strengthening programmes, fostering student engagement and fully exploiting the flexibility of the modular curriculum" (UCD 2010, p.5).

In the context of student engagement, the transition period in First Year was identified as the first strategic priority, and in relation to this objective, assessment and engagement were specifically highlighted:

"A review and reform of the structure, outcomes, assessment and remediation strategies for first year, and in particular the first semester, to support the transition from 2nd- to 3rd-level and to adapt to the different needs of different students" (UCD 2010, p.16).

As part of a wider project on 'Focus on First Year', under the leadership of Professor Bairbre Redmond, a subgroup was set up to consider the implementation of these goals for curricular consolidation and enhancement, i.e. the "First Year Assessment Project 2011-2012" (UCD Teaching and Learning 2011). This project laid the foundations for further phased implementation of a new UCD strategic project entitled 'Assessment ReDesign Project 2012-2014' (see UCD Teaching and Learning 2012). This paper particularly focuses on outcomes of the first phase, - the 'First Year Assessment Project 2011-2012' (UCD Teaching and Learning 2011).

#### **First Year Assessment Review**

The review of first year assessment commenced in November 2010, with the establishment of a project group comprising a representative group of: Vice-Principals for Teaching and Learning; Programme Deans; Teaching Fellows; Administrative Directors; and staff from UCD Teaching and Learning. At the outset, the group undertook a brain-storming exercise to identify on the key components/principles of the first year learning experience. This exercise allowed the identification of known issues including engagement, over-assessment and the pace of student learning and it also identified some desired attributes of the first year learning experience. From that exercise four streams of work (data collection methodologies) were identified and these proceeded concurrently (See Figure 1). These were:

- 1 A review of Institutional Data Analysis of Assessment;
- 2 A comprehensive review of literature on 1st Year Assessment;
- 3 A survey and collation of case-studies of practice, both UCD and internationally;
- 4 Consultation with an international expert on student engagement and feedback, e.g. Professor David Nicol.



Figure 1: the Four Data Collection Methodologies.

#### Institutional Data Analysis of Assessment

Data from the institutional First Year module descriptor assessment practices were gathered and interrogated to provide a picture of the volume, type and frequency of assessment activities. All first year modules (n=390) for the academic year 2010/2011 were included within the data set. The data were analysed by programme and by school and for the first time the University had a picture of its assessment practices from the perspective of the student learning experience. Whilst there had been anecdotal recognition that assessment may have increased under modularisation, the data confirmed this to be the case. High-level trends and issues to have emerged from the data included:

- Over 53% of modules had three or more assessments with an average loading
  of 2.8 assessments per module. The cumulative effect for students and staff
  on some programmes was upwards of 16 assessments per semester;
- Assessment loads varied between semester 1 and semester 2, with the assessment load in semester 1 appearing higher in some instances;
- There were discernible peaks of assessment activity: in weeks 7 and 8; 11 and 12; and 14-15;
- Almost 1/3 of First Year assessment was by means of end of semester exams, but if Multiple Choice Questions (MCQs) and class tests are included, the proportion of assessment which is conducted under test conditions rises to almost 46%:
- A proportion of modules were also using attendance as a form of assessment 18.5%.

The data (see Figure 2) confirmed a high volume of assessment in terms of student workload and when reviewed at programme level it became apparent that some students undertook in excess of 35 assessments per academic year. This figure indicated the potential over-assessment which was taking place and could pose issues for student engagement in terms of attendance and learning behaviours. The other interesting trend was the timing of assessments which indicated that from a student perspective there were discernible peaks of activity at certain times in the semester (see Figure 2).

Additionally, the reliance on examinations in weeks 14/15 could be interpreted to have consequences for the amount of time, and hence the pace of content being covered by students, which was effectively compressed into 12 weeks, with week 13 for revision. Interestingly the use of attendance and participation as a form of assessment was suggestive of efforts by staff to address perceived student engagement issues.

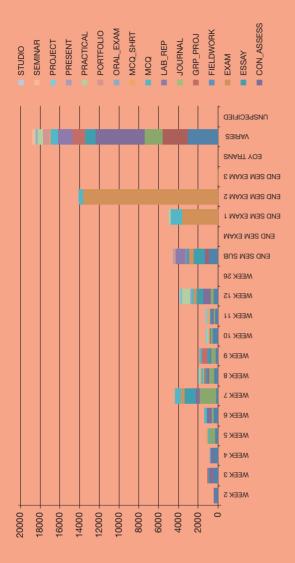


Figure 2: The Type and Timing of all UCD First Year, 1st Semester Assessments.

#### Review of Assessment Literature

A comprehensive literature review was under-taken drawing on the most contemporary international research on assessment and in particular assessment in the first year. Taking account of Krause et al's (2005) longitudinal study of First Year Engagement in Australian Universities, which typified the 'risk' factors for student success, the literature review sought to identify practical examples or instances for addressing these through assessment practice. The literature review was also informed by the spirit of Chickering and Gamson's (2011) educational principles which emphasise the importance of clarifying learning expectations for students and setting a challenging learning experience with well-designed assessment to enhance student learning and engagement. Some themes that emerged from the review were:

- The need to support transition to University level learning (Gibney et al 2010; Taylor 2008);
- Develop student autonomy for learning through collaborative and social learning and assessment (Huba and Freed 2000; Nicol 2010; Oakley et al 2003);
- Provide timely and useful feedback to students on their progress (Salder 2010;
   Kift et al 2009; REAP 2010);
- Design of the efficient use of student w orkload including time within the class-room and independent learning activities and staff correction time (QAAHE 2010; Hornby 2003; Ross 2010);
- Regaining a more strategic approach to assessment design (PASS 2011; Mutch 2002; Knight 2000);
- Consideration for developing more space in first year curriculum to allow for enagagement with content (Land 2007; Land et al 2005; Dirkx and Prenger 1997).

#### UCD Case Studies of Practice

An exploration of practices in assessment and learning design to promote student engagement and success was also undertaken. This work built on that of the UCD Fellows in Teaching and Academic Development (Gibney et al 2010) which had examined the expectations and experiences of first year students at UCD. The original study had indicated two important findings:

- Discernible difference in students' confidence in their abilities and potential to be successful:
- A mis-match between the amount of time students believed they needed to devote to learning (28 hours/week) in comparison to the expected amount of learning time (40/hours per week).

The review of practices nationally and internationally started from this point to identify

approaches which would engage students actively in learning and where assessment and learning design were closely aligned to achieve this end. International examples were identified through published case studies of good practice (REAP 2010; PASS 2011) and the evaluation of these case studies focussed on identifying:

- The key components of the practice;
- Evidence of the evaluation of its success:
- The degree of transferability of the practice to UCD.

In addition a number of internal UCD case-studies of known innovative and successful approaches to First Year learning and assessment were also collated and disseminated (O'Neill, Noonan, and Galvin 2011).

#### **Expert Practitioner Advice**

The group also commissioned an input from an international expert, Professor David Nicol, whose work on student engagement and feedback had come to prominence through an assessment project conducted across all universities in the Glasgow region. The central thesis of Nicol's work (2007; 2009; 2010) was that engagement and empowerment are closely inter-linked and necessary qualities for student success particularly in the early stages of programmes.

His work proposed that the development of students' self-monitoring skill, which allows them to understand how they are performing, is critical to student success and has implications for both assessment design and the availability and frequency of assessment feedback. In particular, his work promoted a wider interpretation of feedback as being dialogical between learner and teacher, rather than being teacher-centric (Nicol 2010). In practice he advocated developing students' self-regulating abilities through peer review of assessment and learning activities in class. Getting students to work with assessment criteria with a view to understanding what levels of performance are necessary for success he argued, would allow them to become better autonomous and more empowered learners. He also advocated a wide repertoire of feedback approaches which extended beyond formal written feedback on assessment tasks and involved group feedback, exemplar work, technology mediated assessment (Nicol and Milligan 2006) and in-class feedback on student learning through the use of the '1 Minute Paper' (see example, O'Neill and Noonan 2011a, p.19). This is a technique which quickly enables a lecturer to get a gauge of those concepts students have understood or not within class, and allows gaps in understanding to be addressed in the next class. Overall Nicol's work emphasised the notion of feedback and student self-regulation skills as an on-going learning process, inextricably linked with the design and delivery of curricula.

# **Synthesis into the Nine Assessment Design Principles.**

The vast array of data gathered by the group had provided information on:

- UCD assessment practices;
- Directions for developing assessment from the literature;
- Practical examples of successful initiatives undertaken elsewhere in HE;
- The potential for re-framing assessment and feedback to promote better learning.

From the outset, the group had been keen to explore the theory and practice of assessment to inform the recommendations about how First Year assessment at UCD might be enhanced. It believed that changing assessment practice from the picture presented by the student assessment data, had to be approached from a learning design perspective rather than a focus on technical adjustment of the number and form of assessments.

The analysis of the data had indicated a separation between module and programme, where assessment design and implementation was localised at module level away from the programme. Based on the richness of the data gathered and the theme of accelerated content coverage within the semester which had emerged from the group's initial brainstorming, it was decided that the principle of 'deliberative design' might provide a useful organising concept to isolate some key lessons from the data set. Working with this concept, it became evident that what would be required was a solution which addressed assessment as a learning design issue at both module and programme level. Consequently a set of nine principles: six module design principles and three programme design principles were developed as follows:

The Six Module Design Principles (O'Neill and Noonan, 2011b).

- 1. Allow students, where possible, have opportunity for regular, low stakes assessment with opportunity for feedback on their progress.
- 2. Develop students' opportunities for in-class self and/or peer review of their learning against assessment criteria.
- Allow students multiple opportunities for well-structured and supported col laborative learning and its assessment (peer and group-work, project work).
- 4. Consider the redesign of the learning sequence of module learning activities in an efficient and effective manner, including the related blended learning opportunities.
- 5. Introduce more active/task-based learning which uses more authentic assessments (i.e.subject/discipline identity).
- Consider the student work-load demands within the module, as well as in parallel modules.

The Three Strategic Design Principles (O'Neill and Noonan, 2011a).

- Design space into the curriculum for more engagement in the discipline/ subject.
- 8. Develop a coherent approach to use of assessment, i.e. mapping assessments to 'core' learning outcomes for the stage.
- 9. Implement a range of approaches to streamline assessment.

The 1st Year Assessment Design Principles were published as a set of resources for academic staff, with each design principle fully elaborated with the underpinning theoretical literature which had informed it. The principles were in turn supplemented with a rich body of resources based on international good practice, and a separate resource of UCD casestudies (O'Neill, Noonan and Galvin 2011) which described changes implemented in the design and assessment of first year modules. The 1st Year Assessment Design Principles and associated resources were published on the UCD Teaching and Learning website, an executive summary of the assessment data findings along with the Design Principles was circulated to Programme Deans and Heads of School to inform programme planning and module updates for academic year 2011/2012, see also http://www.ucd.ie/teaching/resources/assessment/focusonfirstyear/

#### **Some Lessons Learned**

The Impact of Curricular Flexibility.

Modular curricular structures have often been criticised in terms of their flexibility for fragmenting the curriculum structure and the student learning experience into smaller units. Some have described the shift in the design emphasis away from the programme to the module as a weakening of the coherence of the student learning experience (Knight 2000). Whilst traditionally the programme as a learning unit provided the necessary coherence in terms of teaching, learning and assessment, the onus for creating this coherence is now placed on the student who needs to negotiate their pathway through a sequence of modules. It was clear from our work that this phenomenon needs to be managed in a deliberate way through effective assessment and learning design. The advantages of modularisation in terms of curricular clarity and learning outcomes present a challenge. This is in particular in terms of moving from an over-emphasis on content coverage and teaching, to designing for an effective student learning experience with content as an enabler to help students acquire key academic principles as well as learning attributes and skills. Careful and thoughtful assessment design which supports learning as well as certification is critical.

# Developing Students' Learning Capacity.

The importance of developing students' learning capacity so that they can be autonomous, self-regulating individuals is an important graduate attribute to which many would subscribe. Many educators would probably agree that the world into which graduates enter on completion of their university education requires them to be learners for life with the capacity to synthesise information effectively (Clark and Linn 2003) and to discriminate between competing arguments and information sources competently. In this context, developing capacities for these higher order learning skills based on core disciplinary knowledge is important. Boud and Falchikov (2007) argue for the development of schemes of assessment tasks that progressively promote the development of students' abilities to make increasingly sophisticated judgements about their own learning. Such approaches to assessment place assessment as a crucial element in developing students' capacity to learn for the longer term. The argument and practice advice for adjusting assessment and feedback activities within the educational setting to develop this capacity for self-regulation of learning, as espoused by Nicol (2007), is quite powerful in this regard.

#### Evidence-Based Evaluation of Practice.

This project demonstrated, perhaps not surprisingly the importance of using an evidence-based approach to set a new direction for changing practice. As well as understanding and illustrating current assessment practices at UCD, the search for solutions focussed on bringing together directions suggested by assessment literature and validated examples of practice change elsewhere. The largest challenge was to evaluate these and relate them concisely and effectively to the particular curricular structures in operation within the University. In this regard, the articulation of new assessment design principles based on evidence of their effectiveness allowed the development of a framework which integrated both theory and known good practice.

#### **Future Directions**

Following publication of the 1st Year Assessment Design principles a number of directions to focus on-going implementation have been identified, these are:

 Development of programme approach to assessment strategies in a new Assessment ReDesign project (2012-2014).

As a result of programme planning activities carried out in academic session 2010/2011 a number of programmes (n=5) had prioritised a review and development of their assessment approaches. Consistent with the strategic and module assessment design principles, work is being undertaken initially with these five programmes to develop an holistic and strategic perspective on the range and kind of assessment in operation (See UCD Teaching and Learning 2012). This project will be rolled out further over the next two-three years in UCD as a strategic priority.

- Alignment between policy, curriculum documents and design principles.
   This will involve a review of the module descriptor document and in particular developments to hyper-link fields within the descriptor to the assessment design principles.
- Learner-centred model of feedback.

Using the principles of developing students' self-regulating capacities, the concept of a more dialogical approach to feedback will be promoted (see also podcast resource, O'Neill 2011).

Approaches to large group assessment.

In an era of mass higher education, with increasing class size, examining solutions to large-group assessment is an important and complex issue. Work will be undertaken to look for innovative solutions in this regard which maintain the quality and standards of assessment and feedback without increasing staff effort.

In summary, UCD set out to make an evidence-based approach to changes in its 1st year assessment. This paper sets out how this was implemented and achieved, resulting in the production of a set of nine assessment design principles. UCD is now in the next phase of the project's implementation and these principles are informing a *new Assessment ReDesign project 2012-2014*. This phase takes a programme approach to assessment, with continued emphasis on change in first year. Five programmes are working through this in 2012 and further programmes will be involved over the next 2-3 years. Further dissemination of this phase of project will be completed as it is implemented and evaluated. This phase may well support the validation or refinement of the nine assessment principles. Only time will tell.

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# RESPONSE TO "STUDENT ENGAGEMENT AND ASSESSMENT: THE FIRST YEAR EXPERIENCE"

by Helena Lenihan

The chapter raises some very pertinent issues of great policy relevance regarding student engagement and assessment of first year university students. Drawing on inter-alia a review of international literature and a UCD case study (whose authors analyse available data regarding assessment in programmes and modules), the chapter rigorously and holistically evaluates how first year assessment supports student engagement, and proffers recommendations for improvement. The ultimate aim of the chapter is to stimulate debate regarding the design of institutional frameworks that enhance assessment of first year third-level students.

Many third-level institutions, both nationally and internationally, have focused on supporting first year students, initiating programmes to facilitate transition to third level. An example of this is the University of Limerick's 'First Seven Weeks' programme, designed to support students during the formative weeks of their third-level experience. Many interested in pedagogy agree that we have a fundamental obligation to create a student-centered learning environment. I particularly liked the manner in which the authors of this chapter employed a methodological approach/framework that integrated evidence from both theory and practice.

One of the key issues of any assessment is that the assessor should decide a priori what he/she wants to assess and what is to be achieved by such assessment. The chapter highlights the importance of this concept in a way that is thought-provoking for the educator. Having taught a microeconomics class of over 500 first year students for the last twenty years, I believe that the function of higher education is to enable students to think in new ways – to cultivate skills they would not otherwise develop. Argumentative training in critical thinking is, in my view, a key component of higher education, and a highly transferable skill. Expertise, ideas, entrepreneurship, innovation and intellectual properties are key resources in the current era of 'knowledge economies' and 'knowledge entrepreneurship'; in my view, an integral feature of higher education should be to promote such characteristics. With respect to all these desirable attributes and transferrable skills, the key challenge is assessment of student learning. Noonan and O' Neill effectively identify a challenge (and a real opportunity) for third level educators and policymakers: developing innovative assessment practices that support first year student engagement.

In a user-friendly but evidence-based manner, the authors draw on the UCD case study to document the implementation of UCD's goal to make changes to its first year assessment practice. They highlight that assessment is a learning design issue at both module and programme level. Against this background, the key contribution of the chapter is that it introduces nine design principles that can be employed to enhance first year assessment and foster first year students' engagement in the higher education context.

The authors identify some interesting avenues for future research. In particular, I would like to see more focus on assessment for students in large classes (a common feature of the first year student experience); informed debate as to 'optimal' assessment practices; and discussion of the effect of class size on student engagement. I would also recommend surveying students regarding their experiences of assessment and engagement (something which is overlooked in the chapter). In this regard, insight could be gained via surveys or focus groups involving second year students regarding their experiences of assessment in first year.

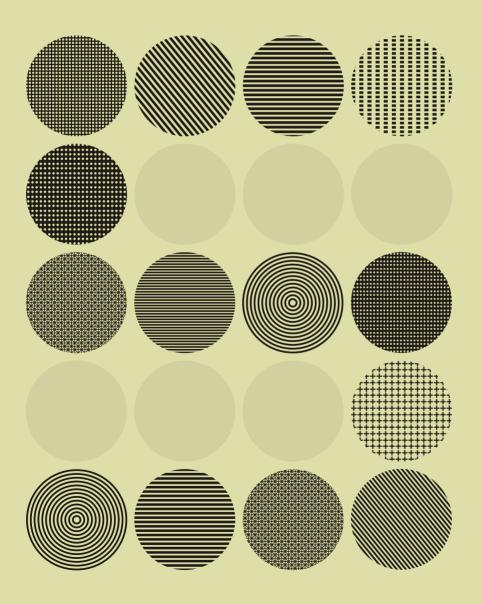
As the authors correctly argue, the timing and extent of assessment needs to be better managed at course level. Moreover, I find that in teaching first year students it is extremely important to communicate (both verbally and in writing) what I am trying to assess and my underlying rationale for adopting a particular approach. The authors clearly articulate assessment techniques that can be employed to ensure student engagement (e.g. a Minute Paper). To the 'quick hit' list for a very large class, I would add putting up a multiple-choice question and requesting that students declare their preferred option. This not only helps students to gauge their own individual learning, but also (equally importantly) helps the instructor judge the level and extent to which students are engaging with the subject matter.

Experience has also taught me the importance of giving students 'practice' assessments prior to the 'real' one. In the first semester of my first-year microeconomics module, the students undertake four on-line tests using Aplia (an on-line economics learning tool developed by Paul Romer in 2000). The first one of these is a practice test with instant on-line feedback; as the authors of the chapter identify, speed and frequency of feedback is a key issue. One of the real benefits of Aplia is that it offers facilities for both formative and summative assessment. Future research is merited in the area of the benefits/costs of on-line versus paper-based assignments in terms of encouraging student engagement. Any curriculum design challenges us to maintain a balance of breadth and depth that develops students' independent lifelong learning capacity, so that they become adaptable and versatile graduates. Ensuring that assessment mechanisms measure both breadth and depth of learning is an associated challenge.

In conclusion, I commend the authors for their engagement in a critical debate surrounding issues of assessment and its key role in forming and influencing first year student engagement and learning behaviour. I feel that their proposed design framework has broad-based applicability beyond the UCD case study, and that it holds many transferable lessons for educators and educational policymakers alike.

THE PLACE OF THE
UNIVERSITY TEACHER
IN A DYNAMIC STUDENTCENTRED CURRICULUM: A
SNAPSHOT OF PRACTICE AT
NUI MAYNOOTH

Alison Farrell, Claire McAvinia NUI Maynooth



# **ABSTRACT**

In this chapter we explore the changing role of the university teacher in contemporary higher education which is frequently policy-driven, research-led and student-centred in its approach to teaching and learning. We begin, with reference to the literature in this area, by suggesting a working definition of student-centred learning. We contextualise this definition with reference to The Hunt Report (2011), the predominant higher education policy document in Ireland at present. We then briefly explore how lecturers in other institutions see themselves, as noted in a review of the research in this area, before looking to NUI Maynooth and presenting a snapshot of the lecturers' experiences and perceptions of their role in this University. As a result of our work with lecturers we present three key findings with regard to what lecturers here see as part of their role: to teach well; to teach as part of induction into a given discipline; to teach for inspiration, motivation and enjoyment. We conclude by suggesting that student-centredness and good teaching are necessarily interwoven and that the role of the university teacher is more important than ever in the changing higher education environment.

#### Introduction

The shift towards the idea of 'student-centred' higher education has been the subject of numerous policy documents, and research in higher education, over the past two decades. Although most people working in curriculum development, and indeed many academics, are engaging with this change, the process is complicated by the broad nature of definitions of student-centredness. Furthermore, it is not always clear what becomes of the teacher in a student-centred learning environment. These factors, combined with overarching changes in higher education (including modularisation and massification) as well as the advent of new technologies, have led some to question whether the role of university teacher is still relevant in a changing landscape.

In this chapter, we seek to address these issues through discussion of the literature and presentation of a snapshot of the role of the university teacher in contemporary higher education. We focus particularly on the Irish context, The Hunt Report (2011) and our experiences as academic developers in NUI Maynooth. We argue that the university teacher has important roles to perform in the learning environment. Neither 'sage on the stage' nor 'guide at the side' (Jones 1998, p.27), the university teacher makes manifold contributions to the learning experiences of the student.

# What is Student-Centred Learning?

References to student-centred learning abound in the literature and rhetoric of higher education. The authors found particularly useful the discussions of Struyven, Dochy and Janssens (2010), Blackie, Case and Jawitz (2010), Sadler (2004), Hockings (2009), Elen et al. (2007), Exeter et al. (2010) and Postareff et al. (2008). Much of this work refers to well-known publications in the area by Prosser and Trigwell (1999), Biggs (1999), Felder and Brent (1996), Ramsden (1992, 2003), Meyer and Land (2005), Rogers (1961), Barnett (2008), Entwistle et al (2000), Brown (1989), and Gibbs and Coffey (2004), to name but a few.

A useful working definition of student-centred learning is provided by Lea, Stephenson and Troy (2003), with reference to Cannon and Newble (2000). They describe student-centred learning in terms of ways of thinking and learning that emphasise "student responsibility and activity in learning" (Cannon and Newble cited in Lea, Stephenson and Troy 2003, p.321). They unpack this phrase by noting that within student-centred learning there is:

"A reliance upon active rather than passive learning, an emphasis on deep learning and

understanding, increased responsibility and accountability on the part of the student, an increased sense of autonomy in the learner, an interdependence between teacher and learner... mutual respect within the learner-teacher relationship, and a reflexive approach to the learning and teaching process on the part of both teacher and learner. Implicit within this approach is the principle that students should be consulted about the learning and teaching process; that is, that it is student- rather than teacher-centred" (Biggs 1999). (Lea, Stephenson and Troy 2003, pp.321-322)

We use this description as a working definition in this chapter, while acknowledging that there are many other definitions and descriptions in this area of research.

# Student-Centred Learning, the Role of the University Teacher and the National Strategy

Student-centred learning is not only of concern to researchers or teachers in higher education. It has also been the focus of strategy at government level both here and internationally (National Committee of Inquiry into Higher Education 1997; Hunt (2011). A review of the teaching and learning sections of The Hunt Report (2011) showed that the strategy does not attempt to define the role of the teacher at third level, although it does include a number of statements concerning teaching in higher education. It suggests that teaching "should reflect different learning styles and different disciplinary areas" (p.52). It quotes Boyer (1990), stating that teachers in higher education

"need to stimulate active, not passive learning, and to encourage students to be critical, creative thinkers, with the capacity to go on learning after their college days are over" (Hunt, pp.52-53).

Teachers, Hunt says, need to provide opportunities for active learning, and it is not sufficient for them to be experts in their disciplines:

"they also need to know how best to teach that discipline ... have an understanding of learning theories ... know how to apply these ... [and] appreciate what teaching and learning approaches work best for different students in different situations" (p.59)

There is also a mention of Continuing Professional Development (CPD) for teaching staff, and of the desirability of parity of esteem between teaching and research. Some of these insights are reflected in how staff at NUI Maynooth see their current role. Before examining that specifically, we will briefly look at some of the literature regarding how lecturers elsewhere see themselves.

#### Lecturers' Reflections on their Roles

There is extensive research into teachers' conceptions of teaching in higher education (Sadler 2004). This literature is concerned with, among other things, who and what is at the centre of learning, and it explores the nature of knowledge. In terms of identifying what good teaching might look like, Ramsden (2003) noted six key principles of effective teaching in higher education:

"interest and explanation; concern and respect for students and student learning; appropriate assessment and feedback; clear goals and intellectual challenge; independence, control and engagement; learning from students". (Ramsden 2003, pp.93-99)

Skelton (2004) records seven key aspects of teaching excellence derived from research with Fellows of the UK's National Teaching Fellowship Scheme:

- (i) Reflecting upon and meeting the individual needs of students;
- (ii) 'Starting from where the students are at' in their thinking and encouraging them to adopt an 'active' approach to learning;
- (iii Recognising the importance of communication: knowing and valuing students and being available for them;
- (iv) Valuing and making use of new technologies in teaching;
- (v) Adopting problem-solving methodologies;
- (vi) Recognising the importance of transferable skills;
- (vii) 'Offering learners flexibility and choice.' (p.458, sic).

Badger and Sutherland (2004) draw on Issacs' work in 1994, with regard to lecturers' opinions on the main aims of lectures:

"...to make students think critically about the subject; to demonstrate the way professionals reason in this subject; to make students more enthusiastic about the subject; to give students the most important factual information about the subject; to explain the most difficult points; to demonstrate how to solve problems; to provide a framework for the students' private study". (p.278)

This list is refreshing in its pragmatism, and remains current almost twenty years after being written. Badger and Sutherland's own research used semi-structured interviews with twenty-five lecturers across a range of subjects at one university in the UK. The lecturers were asked about the purpose of lectures. 80% of the respondents noted 'information transfer' as one of the functions. Just over half of them used lectures to demonstrate some aspect of the subject; half 'regarded the aim of lecturing as inducting first year students who were new to that subject into the ways of thinking and models of [the] subject'; just under half considered motivation 'as part of the role of the lecturer: to try to make the students enthusiastic about their subject'; the same number aimed "to teach the students to think critically and not to accept information or assumptions without challenging them" (ibid., pp.282-283). Badger and Sutherland also noted that the majority of the lecturers highlighted the relationship between lectures and assessment.

The role of the lecturer, therefore, is not perceived by lecturers themselves merely to be concerned with transmission of information, nor do they describe it only in terms of their own subject specialisms. It is noteworthy that students are mentioned so frequently in

lecturers' discussions of their own practice. It would seem from these reflections that discussion of teaching is implicitly student-centred, and students are at the heart of lecturers' practice even within the confines of a traditional lecture setting. Elsewhere in the literature, however, it may be seen that some interpretations of student-centredness imply a reduced role for the lecturer. We consider this issue briefly in the next section.

# Sages and Guides

In our Introduction, we referred briefly to the broad-ranging changes in higher education over the past two decades which have been demonstrated to have influenced and altered academic roles (Taylor 1999; Henkel 2000; Jones 2004). Modularisation, semesterisation, widening participation initatives and institutional expansion have all affected the management and organisation of higher education institutions. Calls for curricula to change and include generic skills, and for institutions to support students transitioning to higher education from previous educational settings, have also prompted change (or, at least, consideration of change). As if these developments were not significant enough, the nature of information, and its management, retrieval and analysis, have been transformed since the late 1980s. Technology has re-ignited discussion of the role of experts in many areas of human activity, including teaching. Taken in combination with the wider changes in higher education, it is not difficult to see how this debate has led to claims that there is either no role, or else a much reduced role, for the university teacher.

While we would not seek to defend teaching methods which focus on reading verbatim from notes or books, or reciting information which any student could access unaided, we argue that the role of the teacher as expert remains significant, and it encompasses more than the presentation of knowledge. References to teachers as "guides at the side" do not recognise the subtleties of the teacher's role and his or her ability to translate, interpret, explain, illustrate, manipulate, synthesise and contextualise information in a way that a student or novice cannot. As expert, the teacher brings his/her experience of managing information, unpacking it, arguing it, comparing and contrasting and forming an opinion (Brabazon 2002). It is what the teacher can do with the information that is important, not merely the fact that he or she is in possession of the knowledge and facts. Hockings (2009) relates this debate back to the issue of student-centredness, finding in her research with students that they were "only really trusting what the teachers said" (p.92). She suggests that students demonstrate a "strong dependency" on the lecturer as expert and authoritative voice.

For reasons of space, we can focus on this discussion only briefly. But we nonetheless signal here the importance of the teacher's role in teaching, as expert, as interpreter, and as critical friend to the student. Rather than becoming sidelined in a changing educational landscape, the university teacher may be well placed to support students who are themselves trying to negotiate that same landscape, and indeed a rapidly-changing world beyond the walls of the institution.

# **A Local Snapshot of Teaching**

Given the rapid expansion of NUI Maynooth in recent years, the growing diversity of its student body and the development of new discipline areas within our Faculties and research institutes, we wished to take a snapshot of teachers' practice and consider whether and how roles were evolving. Interviews with nine lecturers in a range of discipline areas (including sciences, social sciences and humanities) were undertaken. The interview participants had different numbers of years' experience of lecturing, and the majority had worked at more than one higher education institution during their careers. The interviews were semi-structured and focused on questions about current practice as well as on how lecturers thought they might teach in the future. The data were transcribed and anonymised, and interviews numbered to ensure confidentiality. The data were then analysed using a grounded approach (Strauss and Corbin 1998) with constant comparative analysis and identification of core themes. In the following sub-sections, we present three themes emerging strongly from the data: that teachers want to teach well, that they seek to induct students into their disciplines, and that they seek to inspire love of subject in their students.

Teachers Want to Teach Well.

The key finding from analysis of the interviews was, put simply, the desire of teachers to teach well. Although the lecturers clearly valued their research, and were keenly aware of the importance of research to their careers, analysis of the data did not show that teaching was neglected or undervalued as a consequence. The interviews contained extensive discussion of how lecturers taught and why they made the decisions they did, even if there was a degree of uniformity or predictability about the kinds of teaching they undertook in some compulsory courses. The involvement and active participation of students in teaching events was an intrinsic part of teaching well (Interviews 3, 4). Awareness of students' responses – even in a lecture hall – was shown (Interview 6), and the "work pattern" (Interview 9) that evolved between lecturer and students over a semester was discussed. The extent to which lecturers were concerned with getting students into the room, and the potential challenges to this (whether from timetabling, room availability, or electronic provision of teaching materials), were notable. At the level of presentation, teachers consciously selected materials which could motivate students and enrich courses. A lecturer in humanities commented:

"I also wanted to not make it too dry, I wanted to give them supplementary materials where they could have a sense of the cultural scene [..] I wanted to give them visual material as well as music, cultural material" (Interview 2)

At the level of interaction, one lecturer spoke of the value of discussion with students, and sought ways of introducing more discussion even within a large student group:

"In an arts programme, discussion is so important, exchanging ideas, backing up your ideas, somebody challenging your ideas [..] It doesn't necessarily have to be me challenging the ideas, they can challenge each other's ideas" (Interview 9)

Lecturers in the physical sciences described the value of working with students in the

laboratory setting, not only in terms of teaching the subject but also in supporting the students' personal development and broader skills:

"the opportunity to interact with students in a laboratory, you can see the learning taking place and you can see the student growing in confidence and all of that" (Interview 3

"practical science classes in the experimental sciences have a great use in that they teach a certain amount of material and they give a practical skill. But they have an equal value in that they get students to work and cooperate and plan, in a group of four for example, and they have to coordinate who is doing what [..] and that actual experience is as valuable" (Interview 4)

One of the interviewees focused on the issue of academic development, recognising that university teachers were susceptible to teaching in the way that they had been taught (Interview 4). He suggested that they needed to be "reflective practitioners" (Interview 4), and we highlight this comment as one indication of the impact that professional development activities have had across the sector.

#### Teaching As Induction into the Discipline

In the words of one interviewee, teaching was about "bringing the subject to life" for her students (Interview 8), and showing that the subject was "not limited by the walls of the lecture theatre". This reflects the finding that lecturers sought to share their work in specific disciplines and their own love of subject with students. When they discussed teaching in the later years of undergraduate courses, they referred to bringing aspects of their own research into teaching (Interviews 2, 6 and 9), and connecting these two areas of their work. Sadler (2011) notes that one of the main intentions of a participant in his research was "to enable the students to think like historians" (2011, p.10). This was evident in our data also.

However, it is well to note here the challenges lecturers had encountered. The students' apprenticeship into a discipline was a complex process, involving learning principles and understanding threshold concepts, becoming familiar with themes and theories, and learning to speak the language of the discipline. The importance of reading in the disciplines was emphasised by a number of the interviewees - perhaps unsurprisingly, these came from the humanities and social sciences. Changes in reading habits amongst students (Interview 7, Interview 1) were a source of significant concern to lecturers, and in their teaching they had developed different methods of encouraging secondary reading. One lecturer posted "tasters" (Interview 2) – excerpts of readings on the course reading list - in the institutional virtual learning environment. This prompted students to take on the full readings. But for another lecturer, electronic media were rejected: he did not provide resources to students in order to ensure that they visited the Library, and he felt they should search for a range of materials as well as using those on the reading list (Interview 5). Lecturers were worried that students faced numerous distractions which discouraged them from reading and from deep engagement with course materials. Perhaps predictably, technology was often cited here:

"students today are different from students.. how they approach their learning is different and the process of learning for a student today [...] when I was a student it [technology] didn't exist and even 15 years ago it didn't exist in this form that it is now in" (Interview 3)

Teaching for Inspiration, Motivation and Enjoyment

The lecturers who participated in these interviews were engaged with teaching their students in ways that would inspire and motivate them. A great teacher can bring a subject to life for a student and can be a source of inspiration, encouragement and motivation; a teacher's evident enthusiasm for a subject can be infectious and can buoy up a student struggling with difficult concepts and challenging material. Committed, engaging teachers can open up subjects for students, whet their appetites for deeper research into the material presented and bring about an enjoyable learning experience for all concerned. Blackie et al note the challenges of supporting academics in this kind of inspirational teaching (Barnett 2008) and "institutional framing of learning which promotes vitality and agency, energy and enthusiasm" (Mann 2008 cited in Blackie, Case and Jawitz 2010, p.11), which in the literature is deemed necessary.

These themes too were reflected in our interviews: all of the lecturers were keenly aware of time constraints and other resource pressures. Teaching well could be compromised by such issues as the room in which they found themselves, the time of day or day of the week on which they taught and the availablity of materials they needed. A more subtle influence on their practice was the scarcity of time for their own professional development: although they had aspirations to engage to a much greater extent with teaching and learning development (Interview 2, Interview 9), time constraints were frequently cited as a major obstacle to this.

# **Conclusions**

This chapter opened with the question of what the role of the university teacher might be in a dynamically changing student-centred curriculum. Through our examination of the literature, and our analysis of data gathered locally, we have argued that "student-centredness" and good teaching are necessarily interwoven with each other. We have disputed the notion that the teacher is – or should be – somehow sidelined or marginalised in a student-centred environment. On the contrary, the role of the university teacher is more important – not less – in a media-rich, ever-expanding and complex university. Discussion of teaching, whether that presented in the literature, or that undertaken locally with our colleagues, references the student constantly.

In conclusion, then, we argue that teaching and learning developments – including those supported by the DRHEA and other funded initiatives – should not lose the connection with people teaching in the disciplines. Rather, the expertise of such people, their specific understandings of teaching in their subjects and their analysis of their own relationships with their students need to be part of our discussions and our work as academic developers in the sector. We suggest that building and maintaining these interactions will support a dynamic, student-centred learning environment in the longer term.

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# RESPONSE TO "THE PLACE OF THE UNIVERSITY TEACHER IN A DYNAMIC STUDENT-CENTRED CURRICULUM: A SNAPSHOT OF PRACTICE AT NUI MAYNOOTH"

by Sally Brown

The role of university teachers in a student-centred environment is changing in the twenty first century as approaches to teaching, learning environments, and student expectations morph to align with current requirements. This is particularly true in relation to the shift from a focus on teacher-led content delivery to a student-centred focus on personalised learning pathways. The authors of this chapter have reviewed the literature and identified diverse aspects of student-centred university teaching staff. To their comments I would add that such teachers:

- Are passionate about teaching and regard it as a high priority within their framework of employment;
- Knows their subject material thoroughly and are keen to help their students understand it:
- Adopt a scholarly approach to their own practice of teaching and regularly and critically review innovations and using evidence-based practice to improve their teaching;
- Give students real problems to solve and issues with which to engage in authentic contexts;
- Are reflective and regularly review their own practice, striving for continuous personal learning and improvement;
- Are well organised and plan curriculum content, delivery, assessment and evaluation effectively;
- Ensure that assessment practices are fit for purpose and contribute to learning;
- Demonstrate empathy and emotional intelligence;
- Are unafraid to take risks but leave nothing to chance;
- Articulate clear rationales of what they are trying to achieve in their teaching;
- Worry less about what students think about them than how much the students are learning;
- Continuously challenges students out of their comfort zones.

We can tell whether teachers are fitting the bill if their students are satisfied, learn well, achieve highly and have fulfilling learning experiences. Additionally, quality assurors and Professional and Subject Bodies approve of the standards of graduating students and

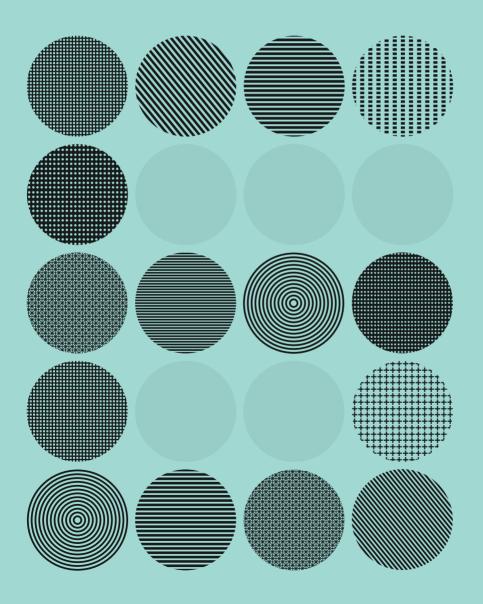
have no complaints about systems and processes. At the same time, university managers can be confident that the student experience offered is of an appropriately high quality, and they deal with few complaints. Excellent teachers also tend to be satisfied, motivated and find their workloads manageable.

Student-centred learning is not just an issue for teachers alone: managers too bear a responsibility to ensure that promotion and reward systems recognise the importance of teaching. It is essential that Higher Education Institutions (HEIs) have systems in place to identify and reward outstanding teachers, and use them as advocates and mentors for others. Such HEIs must foster a culture of scholarship of teaching that encourages teachers to disseminate good practice and learn from one another. In my view, this can particularly be achieved through dialogues around what makes for excellent teaching, particularly by using dialogic mutually-supportive peer observation systems.

Alison Farrell and Claire McAvinia have usefully contributed to the discourse on professionalising higher education teaching through their study, demonstrating how student-centredness and outstanding teaching are closely aligned. By showing that teachers are strongly orientated to teaching well, and that they are important guides to students in understanding the disciplines, and by focussing on inspiration, motivation and enjoyment as key characteristics of excellent teaching, they provide useful pointers to enhancing the student learning experience.

TRINITY INCLUSIVE
CURRICULUM:
A CASE STUDY ON THE
DEVELOPMENT OF AN
INCLUSIVE CURRICULUM
STRATEGY

Michelle Garvey, Brian Foley Trinity College Dublin



# **ABSTRACT**

Since the late 1990s the population of Trinity College Dublin (TCD) has greatly diversified to include students from disparate social, economic and cultural backgrounds. However, teaching and assessment methods in their broadest sense have not diversified at the same rate, with mainstream practices tending to continue to follow a 'one size fits all' approach more suited to teaching a homogenous student population. This leads to a culture of 'additional supports' that is both undesirable and difficult to maintain as diversity increases.

#### Introduction

In October 2008, the Trinity Inclusive Curriculum (TIC) project commenced, with the aim of responding to the increasing diversity of the student population through the promotion of appropriate inclusive practices. Inclusive practices follow the principles of universal design so as to respond to the needs of all learners within a community. It should be noted that the term 'Curriculum' has caused challenges as there is no single definition of the concept and this has led to misunderstandings regarding the scope of the project. Often curriculum is defined as 'what the individual teaches' (i.e. the content of a programme). Fraser and Bosanquet (2006) note two curriculum orientations, product orientation (content) and process orientation. TIC follows the process orientation, using Fraser and Bosanquet's definition of curriculum as "the students' experience of learning", where the lecturer (and the institution as a whole) provides a framework for learning that responds to students' needs to create an effective learning environment for all students.

TIC has developed a series of innovative resources for use by teaching staff both within TCD and externally, including a resource website collating good practice guidelines for inclusive teaching and assessment, and an online tool comprising self-evaluation questionnaires aimed at lecturers (and other teaching staff, e.g. teaching assistants). This chapter will review the rationale for the introduction of inclusive practice, and will describe the activities involved and the resources developed by TIC. It will then critically analyse the impact of TIC in TCD and elsewhere, assessing both its strengths and weaknesses and discussing where and why TIC had limited success. The outstanding challenges to be overcome, and the lessons learnt along the way, will be highlighted for the benefit of other institutions embarking on similar strategies.

# **Inclusion in the Literature**

An inclusive curriculum is achieved by following the principles of universal design. Literature which tends to confirm this has been growing since the 1990's, when widening participation in higher education became a policy objective in many countries. Universal design is a 'common sense approach to making everything we design and produce usable by everyone to the greatest extent possible' (Institute for Human Centred Design 2011). Universal design moves beyond accessibility for disabled users to recognise and respond to the great diversity of the human population, and the diverse ways through which buildings, services, or products are accessed and utilised. A major development in this field was the publication

by Connell et al (1997) of seven principles of universal design for the production of physical objects. These were equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort, and design accounting for diverse size and shapes. Shaw, Scott and McGuire (2001) adapted them for use in education and added two further principles specific to the learning environment: that learning takes place in a variety of settings, and that there is a clearly conveyed openness to meeting the diverse needs of learners.

The Centre for Applied Special Technology (2011) presents an alternative description of universal design for learning as providing multiple means of representation, expression and engagement. This means that information is presented in diverse ways, assessment methods allow for alternative means to express understanding, and teaching is done in such a way as to stimulate interest and motivate learning.

TIC has combined and simplified elements from both approaches when describing inclusion, and advises lecturers to strive for flexibility and clarity, as encapsulated in Figure 1 below. TIC has devised five steps towards inclusion:

- 1. **Flexibility in teaching methods.** Course design builds in a range of teaching methods to accommodate diverse backgrounds and learning preferences;
- Flexibility in assessment methods. Course design builds in a range of assessment methods to accommodate diverse backgrounds and learning preferences;
- 3. **Flexibility in teaching materials.** A range of teaching materials is used to accommodate diverse backgrounds and learning preferences;
- Clarity in course outlines and requirements. Documentation is accessible, responsive to student needs, and available on time to allow optimal preparation;
- Clarity in course materials. Materials are accessible and available on time to allow optimal participation.

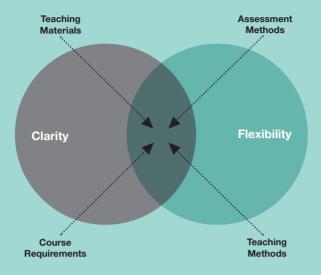


Figure 1 – The interconnection between flexibility and clarity for inclusion.

While there is extensive literature on the theoretical basis for inclusion and universal design for learning, there has been limited empirical research into outcomes (Roberts et al 2011; Shelly, Davies and Spooner 2011). This limited research reports that inclusive practices can address many challenges in large, lecture-driven environments (Parker, Robinson and Hannafin 2008) and improve learning and engagement for all students (McGuire-Schwartz and Arndt 2007). Research addressing inclusive assessment strategies has reported that clarity regarding academic expectations can contribute to student success and attainment (Hills and Thom 2005), and that offering choice and flexibility in assessments is experienced positively by both staff and students (Garside et al 2009; O'Neill 2011). Hence the literature indicates that the move towards an inclusive teaching and assessment environment is one that benefits all students.

#### **Rationale for TIC**

In the decade before the establishment of TIC, the student population of TCD greatly diversified in line with government and institutional policies that aimed to widen access to university education. This diversity is set to increase further in line with HEA (2008) and TCD (2009) Access Plans, which have set new targets for access to be achieved by 2013. The growing diversity of the student population leads to a growing diversity of needs, as students from many different social, cultural and economic backgrounds strive to fit into traditional modes of teaching, assessment and student support models. Specific needs arise for many different reasons. For example, students may have to balance academic

study with external responsibilities, manage disabilities, or cope with studying within an unfamiliar educational culture or working through English, when is not their first language.

Prior to TIC, TCD catered for this diverse student population almost solely through additional supports rather than through any changes to mainstream teaching and assessment practices. These supports were organised from specialised support offices rather than through the students' programmes of study, and involved specialist staff (in, for example, the Disability Service, Mature Students' Office, and Trinity Access Programmes (TAP) Office) responding retroactively to specialised needs. Approaching diversity exclusively through additional supports is unsustainable and undesirable for both theoretical and practical reasons, including the following:

- It considers the additional needs that may arise for students within the
  environment as problems which originate within the students themselves. It is
  their responsibility, with the support of specialist staff, to find strategies to meet
  these needs.
- It presupposes a dichotomy between 'traditional' and 'non-traditional' students.

  There are two negative outcomes of the dichotomous approach:
  - It loses sight of those students within the university population who, while
    not registered with access offices, may have particular needs (e.g.
    undiagnosed/undisclosed disabilities, carer responsibilities, disadvantaged
    backgrounds, English as a second language);
  - It creates a dichotomous student support structure, where mainstream
    provisions support 'traditional' students and 'traditional' student learning needs,
    while support for 'non-traditional' students is viewed as requiring a specialist
    skill-set. This disregards the fact that, through an understanding of universal
    design principles, academic staff can effectively support the majority of
    students' needs, and it therefore unnecessarily narrows the support base
    for students.
- The workload and co-ordination necessary to make supports and adjustments available increase as the diversity of the student population increases. As a result of efforts to ensure that mainstream practices are inclusive and offer flexibility and clarity, the need for additional adjustments is lessened (e.g. if all hand-outs are created on the basis of accessible information guidelines, there is no need to format hand-outs for students with specific disabilities).

TIC views all students as being situated along a continuum of learner differences with individual learning needs. Traditional teaching practices respond to some, but not all, needs. Many of these practices could be redesigned to meet the entire spectrum of student learning needs. Therefore, a blended approach to inclusive teaching and assessment, where universal design principles are incorporated into mainstream practices for the benefit of all students (e.g. circulating hand-outs in advance), and dedicated offices focus on more specialist support (e.g. providing sign language interpreters for deaf/hard of hearing students) is most effective.

# **TIC Approach**

The TIC project commenced in TCD in October 2008 with three years' funding through the Strategic Innovation Fund Cycle II (SIF II). The overarching objective of the strategy was to embed inclusion into the academic environment through the development of resources to enhance inclusion and through training and awareness-raising activities.

# The Importance of Stakeholder Input

TIC aimed to develop resources targeted at enhancing the inclusivity (as specified in the previously listed five steps) of the academic environment found specifically within the Irish third-level sector, particularly within its home institution, TCD. This necessitated a clear understanding of the teaching and learning practices, and policies and processes, already in place. Therefore, TIC made it a priority to establish links with stakeholders both within TCD and across the wider third-level sector who could offer personal insights into current teaching and learning practices and provide feedback on current strengths and weaknesses. This was achieved through regular consultations with stakeholders within the TCD community (academic staff, students and staff working within the Disability Service, the TAP office, the International Office, and the Mature Students Office) and representatives from external institutions, numerous student surveys and a series of pilot audits completed with input from volunteers from across the College community.

There are two negative outcomes of the dichotomous approach:

#### **Inclusive Outputs**

The TIC project, in terms of the design and development of two key resource outputs, primarily used information obtained through collaboration with the stakeholders. These outputs are:

- An online self-evaluation tool to assist in the design and review of teaching and assessment practices, and
- A resource website offering multimedia materials to help staff create a more inclusive learning environment.

The format and content of these resources, which were constructed to disseminate good inclusive practice to academic staff seeking to enhance inclusion within their teaching and learning processes, were developed with constant input from the stakeholders. This ensured that the resources would be pertinent to the academic context and to the issues and concerns affecting the stakeholders.

The development of the resources was an iterative process involving stakeholder feedback on numerous drafts, with the most in-depth feedback sought through the piloting of prototypes over the academic year 2009/10. The final goal was to have a user-friendly, engaging self-evaluation tool and website, that could be used together or separately to provide academic staff with all information needed to confidently apply principles of universal design and inclusion to their teaching and assessment.

#### Resource Website

The TIC resource website (www.tcd.ie/capsl/tic) was created as a one-stop-shop for information and quidelines on inclusion and universal design which could be used by staff involved in any aspect of university teaching and assessment. The TIC website is not the first website devoted to inclusion and universal design in university education, and it was developed with reference to work already done internationally including the University of Strathclyde's 'Teachability' (http://www.teachability.strath.ac.uk/), Open University's 'Making Your Teaching Inclusive' (http://www.open.ac.uk/inclusiveteaching/index.php). and Monash University's 'Inclusive Teaching for Diverse Learners' (http://www.monash. edu.au/lls/inclusivity/). TIC differs from these websites in two respects. Firstly, existing resources for inclusion focused heavily on disability and the needs of students with specific disabilities. TIC, however, strives to demonstrate how inclusive practices benefit all. Therefore it focuses on practices that benefit a broad range of students and refers teaching staff to the Disability Service website for disability-specific guidelines. Secondly, TIC was created in collaboration with Irish stakeholders, with the result that it is tailored to the context and realities of the Irish third-level sector, refers to Irish policies and practices and directs readers to relevant Irish resources elsewhere. The homepage is illustrated in Figure 2.



Figure 2 - TIC Resource Website Home Page.

The website is divided into three main sections. The first section, 'Good Practice Guidelines', is aimed at teaching staff and comprises a series of guidelines covering inclusion within all aspects of a course of study, from course design and recruitment of students, through teaching, to assessment/progression. The second section looks at information creation, in its broadest sense, and offers guidelines to all staff within TCD on how to ensure compliance with the institutional policy on accessible information. This section may also be of benefit to those in external institutions who seek to ensure that their web resources, presentations, and Office and Adobe documents are accessible. The final section is aimed at library staff and offers guidelines on inclusion in the context of the library.

The website has been designed to be a quick reference guide that, following universal design, is simple to use. Therefore, information is displayed in brief bullet points as far as possible. The fact that users may wish to engage with inclusion in more depth was considered in the design of the site, and users can choose to click on links that will offer more guidance and information on the rationale for guidelines (for example, one bullet point recommends the use of 'sans serif fonts' on documents, while a link describes and lists 'san serif fonts' and explains their benefits).

Multimedia material has been created for the TIC website so that, often, users have the option of accessing information in a variety of formats. Various video clips have been created, including some showing current TCD staff discussing their practices and experience of engaging with TIC.

The TIC resource website has been created for use either independently or together with the TIC online self-evaluation tool.

#### Self-Evaluation Tool

The TIC online self-evaluation tool (www.tictool.ie), originally referred to as the TIC audit tool, has been developed to provide staff seeking to enhance the inclusivity of their teaching practices with the opportunity to complete a comprehensive evaluation of these practices and to get feedback on changes they might make to them for the benefit of their students. Previous projects, including the University of Strathclyde's 'Teachability', have used responses to trigger questions as a basis for compiling reports and recommendations for future inclusive practice. However, the TIC tool is unique in that it is an online application with the ability to automatically produce anonymous, confidential action reports without the need for input from a second party. Furthermore, like the TIC resource website it was created to respond to the Irish educational context, and its focus is broader than disability.

The TIC self-evaluation tool was developed iteratively, with regular input from staff and student stakeholders. Following the initial input, a draft tool was created which underwent a twelve-month trial by means of twelve in-depth pilots covering all faculties and both undergraduate and postgraduate programmes. The aim of the pilots was to assess the usability of the format and the usefulness of content through classroom observation, resource review, and staff and student feedback. Following these pilots an online prototype was created, further piloted and further developed.



Figure 3 - Evaluation Options on the TIC Tool.

The TIC self-evaluation tool offers users a series of evaluation types, as shown in Figure 3. Academic staff can evaluate modules, programmes, their own individual teaching practices or their discipline's research programmes. There is also an evaluation aimed at all staff to assess compliance with the College Accessible Information policy, and one aimed at librarians to assess inclusion in the library. The tool is not an auditing system with users scored and benchmarked against others. Instead, it is a personal anonymous reflective aid for users, with questions designed to promote reflection and evaluation.

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Figure 4 - Example from a Module Evaluation.

Each evaluation follows a tick-box format, with a text box available also for any further details, as shown above in Figure 4. Questions are sub-divided into a series of sections which, for academic evaluations, follow the life-cycle of a course of study through design and intake, to assessment, progression, and student feedback. Evaluations focus on the processes within a course and do not cover the teaching content. Upon completion of an evaluation, users are provided with an in-depth action report, which includes feedback based on user responses and suggestions for enhancing inclusion.

Staff input has moulded the tool and led to the addition of many features. For example, because it was noted that users might not have the opportunity to complete an evaluation in one sitting, a log-in system was added to allow them to save their responses and return to them at an appropriate time. Only the user and any invited collaborators have access to saved responses. Collaborators can be added when evaluations are being completed, allowing for co-operation and communication across programme and module teams.

The process of completing an evaluation has been designed to be an informative activity in itself. Questions promote reflection and often include examples of good practice that the user may be engaging in or may wish to consider engaging in. Throughout the evaluation process, users are offered links both to further information on the TIC website and to external websites. As with the resource website, multimedia material has been added to the TIC tool to allow users the option of accessing information in a variety of formats.

#### Current Position of TIC in TCD

As the TIC strategy has time-limited funding, the sustainability of the TIC resources is a constant consideration. This issue is being addressed in two ways. Firstly, resources have been designed to be as user-friendly as possible to ensure on-going usefulness and enhance the likelihood that teaching staff will continue to choose to engage with them. Secondly, we have worked to embed the use of these resources within TCD procedures and systems (e.g. curriculum design, quality review, awards and promotions) to ensure their continued use beyond the lifecycle of the TIC project. To date, engagement with TIC is not formally required in any TCD process but it is encouraged in some. For example, the guidelines for school quality review now include questions on catering for diverse students and suggest the use of TIC as a resource in self-evaluation (see TCD 2010, p.9). Likewise, the guidelines for the TCD Provost Teaching Award suggest that inclusive practices can be cited as part of a case for an award (see TCD 2011, p.14), and training programmes for new academics and postgraduate teaching assistants include an introduction to inclusive practices.

In summary, while there is raised awareness of, and interest in, inclusive practices, and many staff are voluntarily using the TIC resources, TIC has not been embedded into the academic environment in a systematic and formal way.

# **TIC's Impact Elsewhere**

A number of higher education institutions have expressed interest in TIC. The TIC resources have been demonstrated within several institutions and staff from at least fourteen institu-

tions across Ireland and the UK have registered as users of the TIC online tool to date.

Feedback from these users has helped pinpoint TCD-specific terminology, which has been adapted to ensure the resources are understandable and relevant across the higher education sector nationally. However, it is necessary to strike a balance between the benefits institution-specific information brings and the need to ensure that the resources are usable across the higher education sector. Reference to TCD-specific policy or resources can sometimes enhance the relevance of the TIC resources for the TCD user (e.g. references to Accessibility checkers for TCD buildings, and links to the TCD policy on Accessible Information), and so have been preserved within the resources. Staff in one university have responded to this by planning the development of their own evaluation tool that will use the TCD tool as a template but will be tailored for use within their specific environment. TIC is happy to work with any institution seeking to follow this path.

# **Embedding Inclusivity**

In this section of the paper we wish to discuss the problem of embedding inclusivity in an academic institution, not just from the perspective of a project such as TIC but with reference to a number of generic issues. First, however, we review and assess some aspects of the TIC project.

# **Evolution of Emphasis**

In the early phase of the TIC project, the focus was very much on the technical aims: selection and collation of resource materials, and information on inclusivity and on the design of the evaluation tool. Once the initial set of trials of the tool was underway, it became readily apparent that serious consideration would have to be given to the challenge of embedding its use in College practice. While there was a generally favourable reaction to the prototype, and staff reported that the evaluation process was beneficial, staff were unlikely to begin the evaluation unless specifically approached by the TIC team.

There were elements of the project which did find application and were readily adopted: the template for course handbooks, the guidelines for reading lists, and the database structure for compiling statistics on 'non-traditional' students. The challenge with respect to embedding the main outcomes of the project lay not so much with discrete elements as with the overall approach and philosophy.

At the same time as the main embedding challenge was coming into focus, there was an evolution in thinking on the part of the project team with regard to the use of the tool. Initially, attention had been directed towards developing a more structured approach to supporting 'non-traditional' students. As the tool began to take shape and was subject to trials, it begun to be realised that it could be applied in ways that would enhance good practice with respect to all students. Thus, rather than following the traditional/non-traditional categorisation model, the model underlying TIC is that of a student body on a continuum of learner differences..

### Strategy and Impact

In seeking to have the self-evaluation tool embedded into College processes, two lines of action were pursued:

- (i) the bottom-up approach of working with individual academics and schools through testing and demonstrating the tool, and
- (ii) the top-down approach of targeting College policies, and decision-making fora, into which TIC could be incorporated.

The experience and outcomes with respect to the bottom-up approach have largely been positive. Individual academics have found the tool and resource materials to be useful, and they have tended to follow up on foot of the self-evaluation feedback. A typical response from academics would be to the effect that they recognised that actions indicated in feedback should be taken. While the response of individual schools was also favourable, they were not so inclined to undertake formal adoption as school policy.

A similar observation can be made with respect to the top-down approach. While individual committees were happy to commend the work and select elements (e.g. the course handbook template), they were less inclined to either recommend or decide on formal assimilation into academic policy.

# **Analysis**

It is always possible to find reasons a particular initiative does not achieve total success in a local context; one might consider, for example, why TCD, thus far at least, has not found it worthwhile to embed TIC. Two such local reasons may be offered: firstly, the institution has recently emerged from two rounds of restructuring, leaving little appetite for further 'good new ideas.' Secondly, a major project on a new student administration system is under way, necessitating academic stability during the transition period. While there may well be a degree of validity in these local arguments, it is probably also the case that there are more generic reasons for the delays. The following are suggested as more generic reasons.

- (i) It has been pointed out above that those more closely involved with the TIC project made the transition from viewing a traditional/non-traditiona distinction in the student body to seeing a continuous spectrum of non-differentiated needs. The underlying design of the TIC approach is predicated on this continuous spectrum model. However, it is quite likely that individual schools, and the institution itself have not yet evolved to the continuous model in their thinking.
- (ii) Closely associated with the traditional/non-traditional divide is the problem of offloading of "issues". For example, if a matter arises in the case of a student with a disability it can be convenient for academic staff to refer it to the Disability Service. Even the term "inclusive" could itself prompt the offloading tendency as it is often considered to refer to 'special needs' which require specialist input.
- (iii) There is also a problem with regard to perceptions of the work of the academic.

Anything which is not core academic work (i.e. teaching and research) is seen as administration. This is viewed pejoratively within the academic context term as it signals extra work that is claimed to be diverting time and energy from the real work. This would apply particularly in the case of anything that might, even remotely, be related to quality, since quality reviews have a reputation for generating administrative work.

# To Sum Up:

it seems that projects such as TIC will always have a degree of success but will confront significant challenges when it comes to formal embedding in academic institutions, whether through a bottom-up or a top-down strategy. Central to meeting this challenge, it is suggested, is acceptance at all levels of the institution of the continuous spectrum model of student needs. A model involving discrete elements induces and reinforces problems relating to terminology and to the way in which academic staff perceive their responsibilities to students.

#### **Conclusions**

This paper has reported on a project carried out at TCD aimed at the development of a tool and associated resource base for promoting inclusive practice among the academic community. Various design aspects of the self-evaluation tool, its field testing and re-design have been discussed, together with ancillary work relating, for example, to course handbooks and guidelines on reading lists. While the system has generally been favourably received, there is still reluctance, particularly at school and institution level as distinct from individual level, to have it formally embedded into College practice. This situation has been analysed in some depth, with one particular underlying perspective on inclusivity being suggested as key to successful embedding: whereas those closely associated with the project found themselves evolving towards a continuous spectrum view of the student body, schools and the overall institution were still leaning on a traditional/non-traditional distinction. Such a distinction, it has been argued, is the root cause of the difficulties associated with embedding.

# **Acknowledgement**

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## RESPONSE TO "TRINITY INCLUSIVE CURRICULUM: A CASE STUDY ON THE DEVELOPMENT OF AN INCLUSIVE CURRICULUM STRATEGY"

by Gerald Craddock

Educational change can be difficult and as Fullan (2006) states, just having a "theory in use" is not good enough on its own. The people involved must also push to the next level, to make their theory of action explicit Fullan argues. There lies the crux of the findings of the authors, in which they present a well-grounded critical appraisal of the Trinity Inclusive Curriculum project. The project has developed a series of innovative resources based on the principles of universal design for use by staff in response to increasing diversity of students attending Trinity College. However, as they discover, the challenge now is whether these resources can be integrated into teaching practice across the institution. It has long been the difficulty of systems change, that although materials and practices may be developed, changing mindsets and attitudes require more time and persistence. According to Fullan the time it takes for change to occur is greatly underestimated. In a study of student assimilation of assistive technology at 3rd level, Craddock (2005), cites a minimum of five years for a successful outcome to be achieved and found a supportive learning environment was an essential factor.

The authors deliver important evidence of the lessons and challenges learned in the development of an inclusive curriculum based on the principles of universal design for learning (UDL). However, they also point out that there is a dearth of empirical research on measuring the outcomes of this approach. Being a relatively new field, Universal Design, is an important area for further research and for guidelines to be developed. In this regard a number of new external developments will have a beneficial impact on further advancing this innovative work.

It is now recognised at International, European and National levels that Universal Design is a critical component to achieving a more inclusive society. The United Nations convention on the rights of people with disabilities (CRPD 2005) has determined that "..governments provide products, services and environments that are universally designed".

170 countries have signed this agreement and it is hoped that this will be signed into law in Ireland later this year or in early 2013. The World Disability report (2011) published by the World Health Organisation (WHO) and the World Bank provides for the first time at a global level evidence of universal design as a crucial element to mainstreaming and inclusion for all areas of peoples' lives.

The International Classification of Functioning, Disability and Health (ICF), has been developed over a number of years by the World Health Organization (WHO) and formally adopted by its General Assembly in 2001. As a classification system its aim is to provide a language and framework that encompasses what a person can do, covering activities and participation together with environmental and other contextual factors. Such a framework

is indispensable if valid comparisons across countries are to be possible, but is also enormously helpful in providing a common framework for use by different data collectors and systems in the same country. Without such an agreed framework within which to set a wide range of information and a standardised common language to describe it, communication across countries and disciplines becomes impossible and one is confined to a fragmented set of non-comparable observations. The ICF is, in effect, a bridge, not merely between indicators and data sources, but also a bridge between scientific values and the political and social values expressed in the CRPD (Bickenbach 2011). The ICF is also seen as a universal classification system that supports evidence for advancing Universal Design (see Steinfeld 2006; Danford 2006).

At a national level legislation has recognised that Universal Design is the preferred approach to inclusion at all levels of the environment including services, products and information communications technology. The establishment of the Centre of Excellence in Universal Design (CEUD), through the Irish Disability Act (2005), as the national statutory agency to promote UD, is Ireland's response to this global movement.

These international and national legislation and policy initiatives can provide the framework for the systems change that the authors are proposing through the "continuous spectrum of non-differentiated needs". The authors are unequivocal in determining that the existing model of "approaching diversity exclusively through additional supports is unsustainable and undesirable".

In conclusion this work is invaluable in the Irish educational context. The next stage of its development will be critical in pursuing and demonstrating better learning outcomes for the two central stakeholders, notably the academics and the students. This is about delivering diversity in practices that delivers a personalised education for all, rather than the existing fragmented approach to different student populations.

The comments in this article are the personal view of the author rather the view of the National Disability Authority (NDA).

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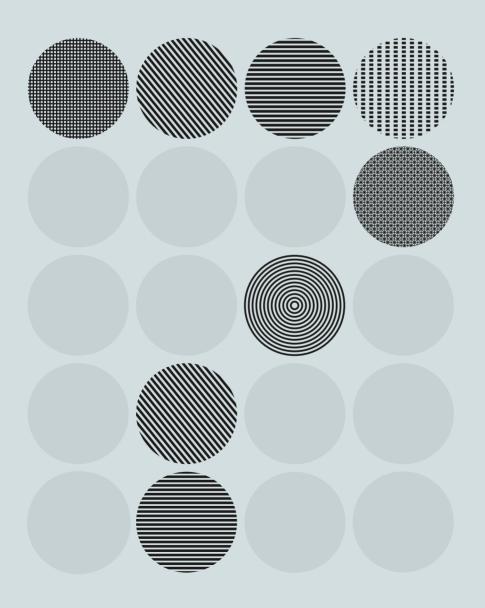
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# STRATEGIC PLANNING AND CURRICULUM DESIGN – STRANGE BEDFELLOWS?

Larry McNutt Institute of Technology Blanchardstown



#### **ABSTRACT**

The purpose of this chapter is to describe how the National Framework of Qualifications (NFQ) and other education policy directives have impacted on the design and development of industry-focussed programmes at the Institute of Technology Blanchardstown (ITB). Since its establishment in 1999, the Institute has been actively engaged in a co-operative syllabus design approach with partners in business and industry. These partner organisations are representative of a range of discipline domain areas including social care, information technology, engineering and horticulture. The emphasis has shifted from providing opportunities for adult employees to upgrade their existing qualifications (e.g. operative to technician) to providing opportunities for the acquisition of additional or complementary qualifications (e.g. engineers undertaking postgraduate programmes in IT).

This chapter will describe the stages of the curriculum design model implemented by ITB which includes (i) needs analysis and marketing plan (ii) financial and human resource plans (iii) syllabus design and (iv) accreditation process. It will also describe the importance of using minor and special-purpose awards, industry certification and exit awards to optimise transfer and progression opportunities within the NFQ. Finally, the chapter will argue that aligned with the existing frameworks that support our accreditation and quality assurance procedures we must also endeavour to encourage

and support those involved in curriculum design to share the values and beliefs that underpin and motivate their work. What is required is a forum to discuss and debate the many challenges and opportunities that currently impact on the education sector. An opportunity for educators to reflect on their practice and address the myriad of tensions and frustrations that exist as they attempt to balance the needs and demands of the various discourses shaping higher education policy.

#### Introduction

The role of curriculum design within the landscape of higher education is often seen as both marginal and subservient to the needs of strategic planning and quality assurance. The discourse surrounding programmes of study is more likely to centre on the demonstrated linkages with strategic objectives than on any articulation of the underlying ideology that forged the final curriculum. However, this scenario has been evident ever since the linkages between a healthy and thriving economy and a similarly healthy and thriving higher education sector began to become apparent. As Ashton and Green (1996) have commented,

"At no time in the history of capitalism has the education and training of the workforce assumed such widespread importance as at the present conjuncture", (p.1).

Similarly, it has been recognised that:

"The desirability of the relationship between undergraduate education and the national economy has been acknowledged in the UK since at least the 1963 Robbins report. It is often forgotten that the report placed instruction in skills for the economy first in its list of academic aims because it wished (apparently with limited success) that it not be overlooked." (Yorke & Harvey 2010)

This is now an accepted view internationally, as reflected by the OECD report "Learning Our Lesson: Review of Quality Teaching in Higher Education" (2010) which states that:

"Higher Education is becoming a major driver of economic competitiveness in an increasingly knowledge-driven global economy."

It is not surprising, therefore, that this perspective has been the hallmark of the ITB mission since the Institute was founded in 1999, a mission that was encapsulated in the Dáil debate from that period which saw:

"......the new institute as a model for the future in many respects. It will help to meet the skills needs of emerging industries. It will also devote itself to improving the level of participation in third level education and training in north west Dublin. This is an area with one of the lowest participation rates in the country, a situation which we cannot allow to continue. The institute will only have achieved its mission if it succeeds in making a significant impact on the level of participation in the region." (http://debates.oireachtas.ie/dail/1999/06/15/00023. asp).

The first question to be addressed in any subsequent curriculum endeavour became the Institute's watchword: does it meet the needs of industry and/or address the participation rates in the local catchment area? The expertise and enthusiasm of staff have enabled a range of partnerships with local industry and the community to develop, in particular in the core areas of curriculum design and research; this has ensured that the portfolio of undergraduate and postgraduate programmes has direct relevance to industry and society. In June 2006 the Higher Education and Training Awards Council (HETAC) delegated authority to the Institute to confer awards. Since then, it has offered a broad range of academic programmes mainly between NFQ levels 6 and 9. A key responsibility of the Institute as part of our delegation from HETAC is the requirement to review all academic programmes within a five-year cycle; this is known as Programmatic Review. This project is usually managed by an academic school but requires cooperation and input from all functional areas. The terms of reference of the project group are based on agreed quality assurance processes and procedures which address the monitoring and evaluation of academic programmes. A typical project plan, identifying key tasks and deliverables, is described in Table 1. A key outcome of the Programmatic Review process is to provide an informed basis for the redesign and development of programmes to address the objectives of the Institute's strategic plan (http://www.itb.ie/AboutlTB/strategicplan.html).

| Tasks | Description  |
|-------|--|
| 0     | Overview of process and deliverables                 |
| 1     | Preparation of planning document                     |
| 2     | Identification of stakeholders                       |
| 3     | Review of current programmes                         |
| 4     | Retrieval/collation of academic programme statistics |
| 5     | Stakeholder feedback on existing programmes          |
| 6     | Departmental overview                                |
| 7     | Academic programme SWOT analysis                     |
| 8     | Development of proposals for change                  |
| 9     | School overview                                      |
| 10    | Completion of final report – draft                   |
| 11    | Completion of final report                           |
|       |  |

**Table 1: Programmatic Review Template** 

However, the above is only one of several planning and review processes that impact on curriculum design and development. The purpose of this paper is to describe how curriculum design has evolved at the juncture of these multiple review processes, the others being the Institute's strategic planning process and responses to the requirements of delegated authority. In addition, the impact of the National Qualifications Authority of Ireland (NQAI) and the National Framework of Qualifications (NFQ) will be considered, and finally there will be a reflection on how the roles and expectations of the employer, the adult learner and the educator have changed.

#### **Strategic Planning in Higher Education**

Curriculum design and strategic planning may seem like strange bedfellows; however, the increase in the adoption of strategic planning in higher education has had a marked impact on curriculum design and development initiatives. This has been observed by O'Riain (2006) who comments that:

"The place of the university in society is perhaps more hotly contested in recent decades than at any other time. The realisation among policy makers and business elites that universities play a crucial role in economic development and the growing emphasis on a "knowledge economy", have placed the goals and organisation of universities firmly on the public policy agenda."(p.189)

A new vocabulary has emerged that is now embedded in new programme proposals: this includes terms such as key performance indicators, environmental scanning, unit costs and marketing plans. The strategic plan is seen as the bedrock of future development, and the planning process provides a regular (five-yearly) opportunity to review and refresh the mission and values that underpin and validate the myriad of activities and services that characterise a higher education institution.

The increased statutory requirements relating to governance and accountability, in addition to greater fiscal controls and the marketisation of higher education, have created a welcoming and fertile environment for strategic planning to flourish. As Pisapia and Robinson (2010) have noted:

"There is clear agreement that the idea of strategic planning is good. After all who doesn't want to see the future, find new possibilities and recognize threats that will facilitate or hinder our search for success, and then establish and seek to position the organisation in terms of its environment through a series of cascading goals and objectives?" (p.2)

It is important to state that strategic planning in higher education is not without its critics. For some commentators, it is part of the encroachment of the new managerial agenda favouring performativity and the commoditisation of education (Grummell et al. 2009). Pisapia and Robinson (2010) in describing the failures of strategic planning in higher education refer to the work of Kezar (2001) who points to the distinctive organisational features found in universities for an explanation. These features include (i) relative independence from environmental factors (ii) voluntary collaboration (iii) multiple power and authority figures and (iv) image as opposed to bottom line performance measures.

Similarly, Miech (1994, p.1), commenting on Henry Mintzberg's seminal book "The Rise and Fall of Strategic Planning", which challenges the premise that strategic planning ever improved the financial performance of business firms, poses the question:

"What if educational reformers imported a management tool from the business world to improve schools, and subsequent research indicated that the same tool never worked particularly well in business in the first place?"

Despite the mixed evidence, strategic planning in higher education institutions is a reality and is increasingly required by governments to illustrate that institutions are properly planned and managed. In this context ITB has engaged in, and adopted, appropriate strategic planning approaches. Although there are some variations regarding the steps involved in creating and organising a strategic plan, the Centre for Organisational Development and Leadership at Rutgers University argues that all plans generally involve the following:

| Mission, vision and values     | Reviewing the organisation's guiding principles as an essential reference point for planning, especially when determining how to allocate resources and measure achievements. |
|--------------------------------|---|
| Collaborators and stakeholders | Identifying critical stakeholders, with particular attention to their expectations for the plan's development and implementation.   |
| Environmental scan             | Examining cultural issues, resource concerns, and other factors that may impinge on the planning process.   |
| Goals                          | Identifying the organisation's aspirations in tangible, achievable, and measurable terms.   |
| Strategies and action plans    | Translating goals into a series of concrete strategies and activities with appropriate timelines.   |
| Plan creation                  | Describing the goals and strategies to be adopted to achieve these goals in a manner that is comprehensive yet easily understood.   |
| Outcomes and achievements      | Monitoring progress and, most importantly, evaluating outcomes and achievements in relation to key performance indicators.  |

**Table 2: Rutgers University Overview of Strategic Planning.** 

The translation of this concerted and collaborative effort into a series of recognisable strategic objectives was an important milestone for ITB (see the extract below from ITB's Strategic Plan 2006-2011):

"Over the next five years, we aim to:

- 1. Achieve a more diverse student community and growth in student numbers.
- 2. Develop our teaching role- same high standards, new styles and methods.
- 3. Make ITB a vital resource for the region.

To do this, we will:

- 4. Set high standards for the use of our resources.
- 5. Ensure cohesion in our work as a college community".

The strategic plan also presented the framework for further discussions at academic department and school level as to how each area could contribute to achieving the objectives. For example, to achieve Strategic Priority 1 Achieve a more diverse student community and growth in student numbers, the academic departments set targets: (i) to increase student numbers; (ii) to improve retention rates; (iii) to develop transfer and progression opportunities for students with level 6 qualifications or equivalent (e.g. Higher Certificate awards). The impact on the curriculum design process was to prioritise new initiatives that addressed these goals. A key success factor in achieving these goals was encouraging academic staff participation in discussions at an individual, departmental and discipline level. In many instances, this has been facilitated by the Performance Management and Development System (PMDS) introduced in the sector which supports the development of Team Development Plans (TDPs) and subsequently Personal Development Plans (PDPs) for each staff member. The challenge for the school management team was to develop, encourage and support specific projects that would contribute to the achievement of these goals by identifying appropriate actions in each department's TDP.

Reporting arrangements to both Academic Council and Governing Body are also an integral part of the strategic planning process; summaries of the various achievements within each department against the strategic priorities are presented on a regular basis. The importance of academic staff involvement in such processes has been noted in the literature: for example, Barker and Smith (1997) in their description of a revised model for strategic planning in higher education contend that:

"The model does not suggest an authoritative procedure (top down), but shows relationships. Nor does it show the necessary interaction between deans and between departments; but this is a necessity especially in issues such as core curriculum, interdisciplinary studies and internationalising the curriculum. Faculty participation in these decisions is a must if these programs are to be successfully implemented." (p.301)

In addition, cross-functional dependencies are addressed during the Institute's planning week. This provides an opportunity for all departments to present their plans for the coming year and to address cross-functional issues. These engagements reflect the key dependencies that exist between the various functional areas within the Institute. The successful delivery and management of academic programmes requires the optimal interaction and cooperation of these internal stakeholders. A summary of these interactions is represented in Table 3 below.

| KEY TASKS                                       | LINC     | 뜻 | Computer Services Manager | Finance  | Estates Office | Library  | Admissions | Marketing and Development | Academic Council | Head of Department/Section | Governing Body | President/TMG √ |
|---|----------|---|---------------------------|----------|----------------|----------|------------|---------------------------|------------------|----------------------------|----------------|-----------------|
| Staff recruitment and development               | 1        | √ |                           | 1        |                |          |            |                           |                  | 1                          | √              | √               |
| Course design and development                   |          |   |                           | √        | √              |          | <b>V</b>   | 1                         | <b>V</b>         | √                          | √              | √               |
| Course marketing and promotion                  |          |   |                           | 1        |                |          | √          | 1                         |                  | 1                          |                |                 |
| Course management                               | 1        |   | 1                         |          |                | <b>V</b> |            |                           |                  | 1                          |                |                 |
| Student admissions                              | <b>V</b> |   |                           |          |                |          | <b>V</b>   |                           |                  | <b>V</b>                   |                |                 |
| Examinations and assessments                    | 1        |   |                           |          |                |          | <b>V</b>   |                           |                  | 1                          |                |                 |
| Student appeals, reviews and rechecks           |          |   |                           |          |                |          | <b>V</b>   |                           |                  | 1                          |                |                 |
| Timetabling                                     | 1        |   |                           |          | <b>V</b>       |          |            |                           |                  | 1                          |                |                 |
| Workshop and laboratory specification and setup |          |   | <b>V</b>                  | <b>V</b> | <b>V</b>       |          |            |                           |                  | <b>V</b>                   |                | 1               |
| Industry partner consultation                   | <b>V</b> |   |                           |          |                |          |            | 1                         |                  | √                          |                |                 |

**Table 3: Key Cross-functional Dependencies.** 

As ITB was a relatively new institution when the strategic planning process was being developed and implemented, it was possible to incorporate the ethos of collaboration and responsiveness into that process, resulting in a dynamic and innovative strategic planning culture.

The approach to curriculum design and development taken within ITB was also applied to many programmes co-operatively developed with local and regional industry sectors. The National Framework of Qualifications and the Bologna Accord provided a structure that supported a range of responses designed to address national skills shortages. From the early to mid-2000s when the key areas of engineering and technology were addressed, to more recent times, which have seen upskilling programmes for unemployed graduates exemplified by the current Springboard initiative (http://www.bluebrick.ie/springboard/). Consequently, the original hallmark of flexibility with respect to all academic programmes on offer (e.g. modularisation, semesterisation and delivery within an ACCS framework) was greatly enhanced by the introduction of minor awards and special-purpose awards aligned to the National Framework of Qualifications. The main beneficiaries in the new framework were the learners – we now had a range of awards that allowed us to tailor accredited academic programmes to suit their needs. The next section will explore the various approaches adopted to address the different constituencies of learners.

### **Curriculum Design and the Learner**

The challenges facing Irish higher education have been encapsulated in The Hunt Report (2011) . These include recognition of the increasing diversity of the student cohort:

"The strategy is framed against a range of new challenges that are facing higher education. The capacity of higher education has doubled over the past twenty years and will have to double again over the next twenty. Those entering the system now and in the future will have very diverse learning needs, and many will be "mature" students. Higher education itself will need to innovate and develop if it is to provide flexible opportunities for larger and more diverse student cohorts." (p.10)

The report also demands that the higher education system become

"more flexible in provision in both time and place" and that it, "facilitate transfer and progression through all levels". (p.11)

These challenges have a marked resonance with ITB, particularly in terms of the demographic of its catchment area. In the 2006 census, 21% of residents in the Blanchardstown area were immigrants. This is reflected in our first-year intake for 2009/10, in which 16% of students were of a nationality other than Irish, with 39 different nationalities represented. In addition, 23% of our first-year intake is classified as mature students (over the age of 23), with 15% progressing to ITB from Further Education ( FETAC) level 5 or 6 programmes.

The response at curriculum design level to meeting these challenges has been diverse and innovative. A summary is presented below in Table 4.

| Student Group                  | Characteristic  | Response  |  |  |  |
|--------------------------------|---|---|--|--|--|
| Full-time school-leavers       | Interested in degree-<br>level studies  | Offering a choice of courses within the same discipline on the CAO system at levels 7&8, with clearly articulated transfer and progression routes.  |  |  |  |
|                                | Retention in year 1   | Adopt Problem Based<br>Learning and other student-<br>centered approaches in year<br>1; offer exit awards at level 6  |  |  |  |
|                                | Challenged by the transition to full time third level study and coping with the associated demands. | Exploit the advantages of<br>the modular system and<br>accumulation of credits, e.g.<br>special-purpose awards and<br>minor awards as exit options  |  |  |  |
|                                | Numeracy and literacy<br>challenges   | Drop-in centres for<br>mathematics and literacy;<br>learning-style screening<br>provided by the National<br>Learning Network's BUA<br>(Building Upon Achievement)<br>Centre and funded by the<br>HEA through the Strategic<br>Innovation Fund |  |  |  |
| Work-based/ part-time students | Demands on time   | Flexible timetabling and use of blended approach  |  |  |  |
|                                | Diversity in content  | Co-operative syllabus design with industry partners   |  |  |  |
|                                | Accessibility   | Use of online resources/<br>weekend workshops to suit<br>shift patterns   |  |  |  |
|                                | Location  | On-site delivery  |  |  |  |
|                                | Recognition   | Advertise the modular system and the option of accumulating credits   |  |  |  |

| *************************************** |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Under-represented Groups                | Need a culture of support and encouragement  | Learner support from the<br>National Learning Network<br>BUA Centre  |  |  |  |  |  |
|   | Recognition and links<br>to other education<br>providers with flexible<br>progression routes | Learning partnerships with<br>Post-Leaving Certificate/<br>Further Education Sector,<br>e.g. CISCO Regional<br>Academy, E4 project |  |  |  |  |  |
|   | Improved methods of programme delivery   | Adoption of alternative delivery methods including the incorporation of critical thinking strategies and blended learning models.  |  |  |  |  |  |

Table 4: Innovations in curriculum design and delivery.

Curriculum design brings with it a new vocabulary including learning outcomes, aligned assessment methods, flexible delivery, embedded awards, transfer and progression opportunities and innovative assessment techniques.

In ITB the activities associated with curriculum design are formalised and supported by a number of important decisions and activities designed to demonstrate that:

- (i) the initiative is aligned to our strategic plan; this is a requirement of both the HEA and the Governing Body of ITB;
- (ii) there is support from both School and Department;
- (iii) an outline proposal is submitted to Senior Management for approval;
- (iv) market research has been undertaken in conjunction with the Marketing and Development unit; one key question to be answered being "is there a real demand from our catchment area?";
- (v) we have the ability to sustain the delivery of the programme in terms of financial resources (both capital and recurrent), appropriate staffing and support for the initiative at local and national level;
- (vi) a formal course development proposal is submitted to the Registrar for consideration by academic council;
- (vii) there is agreement on the planned accreditation process i.e. on level of award, mode of delivery, flexible options and launch date;

- (viii) there is agreement on CAO positioning i.e. how the programme is different from existing offerings;
- (ix) flexible learning variations have been considered;
- (x) promotional events and key marketing opportunities have been identified, and appropriate promotional literature has been developed.

In addition, and to meet our requirements under the ENQA Standards and Guidelines for Quality Assurance in the European Higher Education Area, the Institute has developed a series of policies and procedures for internal quality assurance. The Standards and Guidelines cover the following areas:

- Policy and procedures for quality assurance;
- Approval, monitoring and periodic review of programmes and awards;
- · Assessment of students:
- · Quality assurance of teaching staff;
- Learning resources and student support;
- Information systems;
- Public information.

To cover the requirements in the above areas ITB has also developed a comprehensive document management system.

In many respects what has evolved is a Curriculum-Centred Strategic Planning Model (Dolence 2004) which enables the Institute to exploit opportunities afforded by the National Framework of Qualifications for the benefit of all learners. The development of an optimal learning environment for our diverse student body can be achieved only by the creation of a quality culture that imbues all of our and is not viewed as an elaborate auditing or 'tick the box' exercise. Whilst the curriculum is at the heart of what we offer, the learner must always be central to why we do what we do.

However, it must also be acknowledged that there is a major risk associated with the adoption of this approach, in that it could be viewed as the de-facto acceptance of the dominance of the managerial and commodification agenda within higher education. One of the symptoms of which is the reduction of the academic voice in decision-making, as higher education institutions' governance structures become increasingly 'secularised' with more representation from outside academia on bodies such as Governing Authorities (Grummell et al. 2009, Feller 2008, Deem 1998). Fleming (2006) argues:

"Too much education has been about work, skills, instrumental learning and how to do things. It has been preoccupied with defining learning tasks and outcomes, behavioural objectives and measurable competence. Too much has been about the system, the formal state sector, the economy and training. These are important and need support, but a

different kind of learning is being proposed. It involves a critical reflection on assumptions that underpin our beliefs, a discourse to justify what we believe and taking action on the basis of new agreed understandings." (p.108).

In the next section I will argue that a critically reflective practice must underpin our approach to curriculum design and strategic planning if we are to ensure that the learner remains at the heart" of our endeavours. However, to commence this process we must create a forum where we can excavate beneath our practice and explore and debate the values and beliefs that motivate our work.

#### **Challenges and Reflection**

There are many examples today which indicate that different sectors of society are having their voice heard. The DRHEA is well aware of the direction of higher education policy, as articulated in numerous statements from the HEA, the Department of Education and Skills, government Ministers and most explicitly presented in the Hunt Report. In the public spaces where debate rages on, the necessity for cutbacks and the reform of the much maligned public sector, there is one voice that remains relatively mute: that of the Irish higher education practitioner. We are silent on the impact that the decisions of other agencies are having, and will have, on our practice. That is not to suggest that we do not have opinions; but somehow, in the struggle with competing discourses in the field of higher education, the practice of educators and their evolving role have been overshadowed.

The backbone of any profession is comprised of the values, beliefs, motivations and assumptions of its practitioners. There is a continuing need for a forum to encourage and provide opportunities for their voices to be heard in relation to the myriad changes bearing down on the sector, a forum that would seek out the personal voice and the real stories from the coalface of higher education – informed by individual values and beliefs and also allowing space for fears and frustrations to be aired. A forum that could evolve and develop a collective voice to inform and influence higher education policy. In addition an opportunity to voice the personal as well as reflect on the professional will enable individuals to use their wealth of experience and focus individually and collectively on how best to continue to play a pivotal role in re-shaping their profession. Goodman (2003) contends that in our post-modern era

"beliefs and values need to be the primary context in which material interests and social practices occur. And in this context I want to make clear that I do not believe a value-free position is possible." (p.3).

As an educator, I was struck recently by a paper by Dr. David Baume (in Harvey & Fitzpatrick 2011) in which he posed the following question:

"What do we do when our values collide with custom, practice or regulation? A useful first step is to make our values explicit. A second step is to see where and how we might enact our values – all versions of them with current regulations. A third step is to discuss our values with colleagues and see how much agreement there is. A fourth step is to seek to change the regulations, remembering that, at a profound and important level we are the University"

The Dublin Centre for Academic Development (DCAD) aims to bring together the 'ordinary' academics across the Dublin Region. Baume's questions (above) presented to me a set of guidelines that I suggest should underpin and motivate the work of the DRHEA partners in the area of curriculum design and development. The DCAD can act as a forum for espousing and capturing the underlying values and beliefs that underpin our work, for seeking out opportunities to enact these values to the extent possible in the current challenging environment and for encouraging further collaborative and shared projects, which will also contribute to our own understanding of the features of education as a practice.

Hogan (2010) captures this eloquently in describing the integrity of a practice

"....that which entitles practitioners to the freedom to pursue co-operatively the inherent benefits of the practice to high levels of excellence, with due accountability to the public but without undue interference from outside interests." (p.39)

It is our responsibility to "re-colonise" the dual endeavours of curriculum design and strategic planning by embracing them and enhancing their associated procedures and process with a vocabulary and rationale that resonates with our shared beliefs and values. To undertake this task we must address our own personal frame of reference and be prepared to discuss what we do and why we do it. We need to demonstrate that we do not subscribe to a protectionist sense of autonomy (Hogan, p.62), but approach this unique human endeavour with both our heart and our mind.

This is the defining challenge facing each of us as we strive to improve our practice as educators with the ambition that we can address the needs of our learners. Delpit (1995) describes just how important this task is:

"We do not really see through our eyes or hear through our ears, but through our beliefs. To put our beliefs on hold is to cease to exist as ourselves for a moment — and that is not easy. It is painful as well, because it means turning yourself inside out, giving up your own sense of who you are, and being willing to see yourself in the unflattering light of another's angry gaze. It is not easy, but it is the only way to learn what it might feel like to be someone else and the only way to start the dialogue." (pp.46–47).

This paper captures the collective endeavours of the staff at ITB in the area of curriculum design and strategic planning; supporting mechanisms designed to support and nurture the real dialogue that characterises a higher education experience.

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### RESPONSE TO "STRATEGIC PLANNING AND CURRICULUM DESIGN – STRANGE BEDFELLOWS?"

by Bill Hunter

In his chapter, Larry McNutt has sought to address the critical question "to whom does the curriculum belong?" or perhaps more pragmatically, "whose interests does curriculum change serve?" The chapter suggests that there are multiple owners (or beneficiaries) of curriculum change: employers, learners and educators. The last group is perhaps larger and more complex than some might think since, in this context, "educators" must include a wide range of roles in an academic institution—instructors, program managers, academic administrators, facilities managers and financial managers—whilst also incorporating educators and planners in government ministries. There are others who might also benefit (or suffer) from curriculum change—textbook publishers, software developers, equipment suppliers, learners' families and so on. That is to say, McNutt's description of the situation at the Institute of Technology in Blanchardstown portrays the curriculum as belonging to and/or benefitting society as a whole. In a book designed to improve academic staff's understanding of the curriculum development process, just asking this question has value; revealing the breadth of the stakeholder group may open the eyes of anyone who was inclined to approach the task from the narrow perspective of their own interest group.

However, it should not be surprising that an analysis of how McNutt frames the question would lead us to conclude that the curriculum belongs to everyone. In a review of the forces that changed American school curricula over the period 1870-1970, Cuban (1976) concluded that the most important determinant of curriculum change was "...social change, e.g., broad social, economic and political movements." (p. 76) In the case of ITB, those broad social forces include the influences of instability in the local, national and international economies and a government conviction, widely shared among western democracies (and reflected in policy statements), that the raison d'être for postsecondary education is preparation for work. Indeed, in recent years, there has been so much agreement across the political spectrum and across international borders regarding the vocational purpose of postsecondary education that many people would be hard-pressed to suggest alternative reasons for getting a higher education.

However, other ways of thinking about the purposes of curriculum are quite well known to education scholars. For example, Schiro (2008) examines curriculum change in terms of four ideologies that have long been identified by curriculum theorists: scholar-academic, social efficiency, learner-centred, and social reconstructionist. The dominant current approach to postsecondary curriculum (described above) fits neatly into the social efficiency model:

"Social Efficiency advocates believe that the purpose of schooling is to efficiently meet the needs of society by training youth to function as future mature contributing members of society. Their goal is to train youth in the skills and procedures they will need in the workplace and at home to live productive lives and perpetuate the functioning of society." (Schiro 2008 p. 4).

It is not surprising that this ideology should appeal to the leaders in the corporate sector who hope to have a good pool of productive employees at their disposal or to political leaders who are held responsible for managing the economy or to learners who hope to increase their chances of finding gainful employment? Nor is it surprising that many learners should have such an instrumental view of the learning process.

In his analysis of curriculum change, Cuban (1976) also asked the question "Which of these forces are amenable to planned change?" (p. 77). For him, the question mattered because the answer would help to shape proposals for government financial support. The broad social, political, and economic forces that currently support the social efficiency model can and do change, but they change slowly and they are not necessarily responsive to the interests or perspectives of faculty members or curriculum developers. That is, the social efficiency perspective is an appealing viewpoint that addresses the needs of many, but instructors and curriculum developers might benefit from thinking about the other ideologies as well. Irish educators might well find that other curriculum ideologies could give them greater latitude in their work.

McNutt has provided a valuable service in describing the curriculum processes currently underway at ITB. As a critical friend, I would encourage him to also ask "Is this enough? Don't we need to examine the curriculum development process critically and make room for alternatives?" This is a question that can only reasonably be asked and answered by the staff of ITB (or any institution). The strategic planning process might seem to be the best place to raise the question, but strategic planning is already an instrument of the social efficiency ideology—it assumes that a systematic, consensus-building technical approach to planning will yield the right directions. Faculty know, however, that many people will not partake in the strategic development process and that others will participate only with a kind of head-nodding compliance because they do not really believe that the process matters. McNutt notes this head-nodding possibility when he talks about the need to avoid tick the box responses to the strategic planning exercise. He also points to a more organic (less technical) aim for the process when he says "In the next section I will argue that to ensure that the learner is at the 'heart' of our endeavours we must excavate beneath our practice and explore and debate the values and beliefs that motivate our work."

This sense of depth—of something at work that is deeper than the strategic plan—was also part of Cuban's (1976) thinking. He talked about curriculum development in terms of a hurricane metaphor in which the surface of the ocean is greatly disturbed by the

atmospheric changes of the hurricane but deep below the ocean surface, life goes on relatively unaffected. He uses the metaphor to explain his observation that classroom practices seemed to remain fairly constant over the 100 years he studied even though there had been a variety of major curriculum shifts during that same time. He does not mean to suggest that instructors are unresponsive to changes in curriculum demands, but rather that there is a need for much more research on the dynamics of classrooms and the kinds of variables that do in fact impact on classroom practice.

This, I think, is the task for curriculum developers in ITB and other DRHEA institutions. The strategic plan processes and the document taxonomy that McNutt describes could be regarded as the skeleton upon which a full curriculum development process could be built. The muscles for that process would be the classroom practices that enable that skeleton to move. The curriculum development process, borrowing from the various ideologies as befits the mission of the institution, ties together the strategic plan and classroom practice as the tendons and ligaments tie bones and muscle together The nerves (and brain) would be the processes of assessment, analysis and interpretation that acquire information from the environment (faculty, students, the community) to determine what directions the "body" is actually moving in and to determine whether adjustments are needed (and what those adjustments might be). And the skin might be the public images of these institutions. Of course, the heart of the matter must be the love of learning that keeps the process alive.

A curriculum that belongs to everyone must be a dynamic curriculum and it must drive innovative and responsive teaching—this is the idea that McNutt's chapter evokes in me and I hope it is an idea that will resonate with all in DRHEA.

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Morag Munro is Learning Technologist at Dublin City University. She graduated from The University of Strathclyde in Glasgow with a BEng in Chemical Engineering, followed by an MSc in Energy Systems and Environment. She is currently working towards a Doctorate in Education with the University of Glasgow which is focused around a critical analysis of neoliberal conStructions of learning technology in Higher Education.

After graduation, she worked as a Learning Technologist at the University of Strathclyde from 1998 to 2001. Between 2001 and 2003 she worked in instructional design and project management in various e-learning companies in Ireland. Outside DCU, she is the Editor of ALT-N.

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Pat Seaver is the Director of Blackrock Education Centre (BEC). BEC is an agency of the Department of Education and Skills in Ireland and it is one of a national network of 21 such Centres that provides support for teachers and others involved in education. BEC serves a region of approximately 250 schools, both Primary and Post Primary with over 5000 teachers. He is currently also the Project Manager for the "TEST 2R", which is the Trinity Early Screening Test – Reading and Writing. It is a research project originating in Trinity College Dublin, which aims to create an Irishnormed screening instrument to detect the risk of literacy failure. In the past Pat served as the ICT Advisor for BEC and as the Head of ICT at Pobalscoil Neasáin.

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Dr. Eloise Tan is a Teaching and Learning Developer at the Learning Innovation Unit, Dublin City University. Her main responsibility is to support and deliver training to academic staff around university teaching. Prior to coming to DCU she worked as a Lecturer at the University of Toronto and McGill University, where she received her Ph.D. in Culture and Education. Her current research interests include diversity and equity in higher education, curriculum in higher education, and online learning.



















