**Presentation to Joint Oireachtas Committee on Education and Social Protection**

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**Thoughts on the Quality of Teaching and Learning at Third Level**

**Background**

In a recent EU report on the *Modernisation of Higher Education[[1]](#footnote-1),* former President, Mary McAleese articulated what many other commentators have said, and continue to say, namely:

“*The balance between research and teaching has been regrettably and unnecessarily thrown out of kilter, with the result that teaching and learning have been overshadowed and even overlooked. It is time to rebalance this*.”

Fortunately, this statement is quite wrong if the intention is to say that teaching *quality* has been neglected. Having taught in DCU for the best part of 30 years, it is my view that *there has never been as much emphasis on Teaching and Learning (T&L) as there is now*. In this submission I explain why the above statement by the former President is incorrect, I describe what is being done in DCU in the broad area of T&L, I explain why our current efforts at maintaining quality in an era of declining state funding are beginning to fail, and finally I point out that the quality of student learning is being affected by wider cultural forces that are beyond the control of the institutions.

**Note:** Notwithstanding the fact that the word ‘teaching’ is used throughout this paper, it is the view of this author that the use of that word in a third level context is problematic. Students attend third level education to learn, not to be taught in the traditional sense of the word. Third level education acts as a transition between secondary school and the workplace and this has to be reflected in the ‘teaching’ methods employed at this level.

**Note:** All views expressed are those of the author and do not reflect any form of official DCU policy.

#### Commitment to Teaching and Learning at DCU

At the outset, it is worth pointing out that promotion procedures in DCU (and in other institutions) demand that lecturers provide strong evidence of a commitment to teaching. As well as providing evidence of teaching quality (not an easy task in itself), candidates must provide evidence of module development, innovation and leadership in teaching. I will return to the promotions issue later in this paper.

Within DCU itself, teaching quality is maintained and encouraged using a variety of student-centred and systems-centred mechanisms as outlined in the table below.

#### Table 1 Teaching and Learning Quality Mechanisms in DCU

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| **Mechanism** | **Comment** |
| Student Surveys of Teaching (SSOT) | Done as a matter of course for all modules |
| Continuous assessment | Used to diversify learning and to ease pressure on students – this has a significant impact on academic workloads |
| Loop | Most lecturers make lecture notes and associated materials available online using the **Loop** system |
| School Teaching Meetings | Attended by student representatives |
| Examination Reviews | All students entitled to view their exam scripts and discuss with lecturer |
| Faculty Teaching Committee | Attended by Student Union rep. |
| External Examiner Reports | Received annually |
| Annual Programme Reviews (APR) | Written annually by Programme Chair |
| Periodic Programme Reviews (PPR) | Written at 5-year intervals by school teaching committee |
| Annual Module Reviews | To be implemented in 2016/2017 |
| School Quality Reviews | Includes feedback from student focus groups |
| Professional Reviews | Where required, e.g. Nursing, Engineering etc. |
| Student Tracking | At risk students monitored using **GURU** software |
| Student Support | e.g. Maths Learning Centre |
| Teaching Enhancement Unit | Provides support to all teaching staff |
| President’s Awards for T&L | Rewards excellence and innovation in teaching |

A notable aspect of the modern university (and IoT) environment is the number of staff whose area of research expertise lies in discipline-centred T&L rather than the discipline itself. In DCU, to name just two examples, we have **CASTeL**, the Centre for the Advancement of Science and Mathematics Teaching and Learning, and the **SAILS** project (Strategies for Assessment of Inquiry Learning in Science), an EU-funded project led by DCU. In the Faculty of Science and Health, there are many individual lecturers in all of our constituent schools, from the Sciences to Mathematics to Nursing to Health and Human Performance, who investigate a variety of innovative approaches to teaching. These include inquiry based learning, peer assessment, collaborative writing, digital learning etc. Support is provided to all staff by the *Teaching Enhancement Uni*t and the *National Institute for Digital Learning*. The Teaching Enhancement Unit runs a wide range of workshops and online courses that all academic staff can attend. It is also worth noting that St. Patrick’s College Drumcondra will soon be fully incorporated into DCU, leading to the creation of a fifth faculty, the Institute of Education.

#### Why is there a perception that teaching is neglected at third level?

There are three key reasons. The first is that anecdotes about poor teaching are very powerful.[[2]](#footnote-2) The worst lecturers, who are often, somewhat paradoxically, the most memorable, are perceived as being typical of the sector. The second reason is that many observers and commentators presume that third level ‘teaching’ should have many of the same attributes as second level teaching. In fact, and as mentioned above, the use of the word ‘teaching’ is problematic in a third level context because there is a real danger that by adopting methods that are employed at second level we will create a dependency culture amongst our students and ill-prepare them for the workplace. (Many would say that this has happened already.) The key difference between second level learning and third level learning is that in the latter, the majority of learning is, and is *supposed to be*, done independently. A typical module in the STEM disciplines, for example, will require about 4 hours of independent learning for every hour of contact time. This is in stark contrast to second level where, except for the last few weeks before the Leaving Certificate, student learning is mainly done in the classroom. The third reason is that third level institutions are operating within the context of a global prestige race. The prestige of a university, and its ability to attract the necessary funding to ‘stay afloat’, is most rapidly advanced by improving its research metrics and, crucially, by improving its reputation among academics worldwide. Academics are hugely influenced by research output as *the* measure of an institution’s quality and under-funded institutions have no choice but to play the ‘game’. None of this, however, means that an institution can afford to neglect the quality of its teaching because that will ultimately lead to declining interest amongst school-leavers and a weakening of the institution’s reputation amongst employers.[[3]](#footnote-3)

#### Should university lecturers have to have or acquire a formal qualification in teaching?

There is no question that all academics who teach would benefit from some formal or informal learning in teaching-related disciplines like cognitive science. However, there is no convincing evidence to suggest that by simply requiring all academics to gain a formal qualification[[4]](#footnote-4), teaching standards will improve across the sector. Indeed, a 2012 report produced by the OECD[[5]](#footnote-5) went to considerable lengths to make the point that improving the quality of teaching at third level requires a multi-faceted approach. It requires buy-in at the level of the institution, at the level of the programme and at the level of the lecturer. If we focus solely on what occurs in the classroom or lecture theatre (e.g. on an individual lecturer’s ability to engage a class), we will miss out on a huge amount of what is required to deliver teaching excellence. It is quite clear that unless the *culture* of an institution is one that values teaching and learning, no amount of compulsory teacher training will improve standards. Instead, new lecturers will simply tick that particular box and subsequently focus on those aspects of the academic career that are valued by their institution.

When it comes to many ongoing discussions about T&L quality in Ireland[[6]](#footnote-6), the ‘elephant in the room’ is *research*. Universities, and increasingly the IoTs (soon to be TUs despite the fact that they are particularly badly funded) are *defined* by the fact that they have a dual mandate, i.e., they are required to both educate and to create new knowledge through research. In addition, universities and IoTs are increasingly seen as drivers of innovation and economic growth. Therefore, we have to view third level teaching through a different lens from that used for primary and secondary education. This is not to suggest that we should accept sub-standard teaching; rather it is to suggest that the overall quality of a third level student’s learning experience derives from many elements and these include not only the quality of the classroom experience and the level of support that he/she gets from the academics, but the quality of the campus as a learning space and, crucially, the opportunities that students get to work with, and learn from, research-active academics. Most of all, the quality of the student learning experience is highly dependent on the commitment of the individual student and this is something over which educators have limited control; wider cultural factors are extremely important as discussed later.

#### Can we measure teaching quality?

The short answer is “not yet”. Good teaching occurs when students learn well but there are no simple metrics that we can use to assess learning. We must bear in mind that we do not even have standardised testing in the third level sector so we are very limited in our ability to make objective assessments as to how much our individual students have learned. Indeed, it is the view of this author that the standard within the third level sector is both variable and fluid, and subject to drift.

Given the difficulties with quantifying learning, we need to be very careful about using proxies like *student engagement*. Numerous studies have shown that students being engaged and enthusiastic in the classroom does not necessarily equate with effective learning.[[7]](#footnote-7) Most of all, we need to be extremely careful not to equate innovation with quality and not to let ideology dominate how we assess teaching, something that has dogged the assessment of teaching by Ofsted in the UK.[[8]](#footnote-8)

In passing, it is worth nothing that there is a widespread sense in academic circles that teaching quality, despite what the application forms might imply, is not valued in the promotion race. In the view of this author, the innate difficulties associated with evaluating student learning are at the heart of this problem. If we were to discover or create learning metrics analogous to those we have for research, we might get to a situation where promotion committees did not have to rely on research metrics as the tie-breaker in a highly competitive process. Relying on research metrics is a case of picking the ‘low hanging fruit’ and there are no easy solutions here.

#### Is T&L suffering due to the cuts in funding to Higher Education

The short and worrying answer is “yes”. The table below gives a few examples of the ongoing process of ‘death by a thousand cuts’.

#### Table 1 Some effects of cuts on teaching quality

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| * Lecturers over-teaching to the point where they become stale and uninspiring and operating at far less than 100% of their ability * Lecturers teaching subjects outside their area of expertise * Increased reliance on part-time adjuncts who, while highly knowledgeable and valuable in their own way, often cannot teach to a schedule that is student-friendly * A curtailment of opportunities to do meaningful final-year research projects * Crude, automated methods of assessment (think multiple choice) being used to cope with huge class sizes * A general reduction in contact time not because it is pedagogically appropriate but because it makes teaching loads manageable (so-called ‘smarter teaching’) * A reduction in time available to develop innovative and potentially better ways of content delivery * Class sizes that are so big that there is little or no opportunity for innovation * Student-unfriendly timetabling of lectures due to severe logistical constraints caused by lack of space and high teaching loads * Inability to offer genuine choice to students because of logistical constraints. |

#### Is there a particular challenge with maintaining T&L quality in STEM disciplines?

There most definitely is. Consider the recent announcement of the Government’s intention to increase the state funding for ‘research and innovation’ from the current annual amount of €2.9bn to €5bn by 2020. As part of this investment, a 30% increase in PhD student numbers is anticipated as is a 30% increase in the number of postdoctoral researchers. At the same time, the Government has pledged in its recently-published Capital Investment Plan (*Building on Recovery*) to inject a mere €100m into ‘Higher Education’ over the same period. These two pledges, when taken together, and following on from a decade in which state funding per student has consistently declined, show *an unfortunate absence of joined-up thinking*. Undergraduate students are the pipeline for tomorrow’s researchers and innovators, and funding directed towards ‘research and innovation’, especially large research centres, has a very small effect on the quality of many students’ education. Unless we have a rolling plan for *capital investment* in undergraduate education, especially laboratory facilities, we will struggle to have an economy based on research and innovation.

In this context, it is worth noting that CAO first preferences for Science and Applied Sciences have declined since 2013 and this is a trend that needs to be monitored. It is quite possible that we have been in a *science bubble* and funding plans that presume a limitless supply of high calibre students to fill PhD positions should be re-examined. In passing, it is the view of this author, and it is probably not a commonly held view in academic circles, that the whole area of PhD education and training needs to be reviewed and hard questions need to be asked as to the real value of PhD training to Irish industry. The key question that is rarely asked is this: is a PhD graduate of more value to a company than an equally-talented graduate with four years of industrial experience and does that added value, if it exists, justify the considerable investment involved?

#### Are student committed to their third level education?

Unfortunately the numbers speak for themselves as shown in the figure below. If the ‘independent learning time’ allocated to typical modules in the modern modular system is to be believed, the majority of students are simply not fulfilling their part of the education bargain. Indeed, given the data shown below, it is surprising that non-progression rates are not higher.

**Figure 1** Time devoted to independent learning (study and continuous assessment) by third level students (Data from studentsurvey.ie)

It would seem that there are wider cultural forces at work here and the third level institutions can do only so much to counter them. Students seem to have unrealistic expectations regarding the level of work required to perform well at this level and this is aggravated by the highly distracting, smartphone culture in which they live. Furthermore, many academic staff bemoan the dependency culture that *we* have created to the extent that some academic staff feel almost “harassed” by students.[[9]](#footnote-9) One example of how a dependency culture has been created is the modern practice of posting lecture notes and associated material online. This has led to a drop in attendance rates and an increasing reluctance on the part of students to study or read any material beyond what has been provided by the lecturer. The subject becomes the online notes and nothing more. In effect, we have evolved a paradoxical situation where education is dominated by discussions about ‘problem solving’, ‘critical and creative thinking, ‘21st Century skills’ and the like, yet we are increasingly adopting (out of a sense of fear perhaps) teaching methods that actually discourage students from being independent learners. We have designed a system whereby huge numbers of school-leavers attend third level education but it is increasingly a case of “third level education but not as we know it”.

**Conclusions**

As a society we have placed a large emphasis on third level education over the last two decades and there is no questioning the benefit, financial and otherwise, that accrues to individuals who have had the opportunity to learn at third level. However, we, i.e., citizens, educators, students, policy-makers and employers, do not seem to have any clear vision as to what third level education should be. Many employers, for example, see third level education as little more than training while, as I have suggested above, many stakeholders seem to view third level as an extended form of second level. Others, particularly some academics, cling to the traditional view of third level education as an inherent good that should not have to justify its existence for utilitarian reasons. Many policy-makers view the third level sector as playing a vital role in establishing Ireland as a knowledge economy, yet there is a curious reluctance to fund the essential facilities required to support this ambition.

We need to have a nationwide discussion about third level education but it has to be informed by evidence. I believe we need a national survey, similar to the highly-regarded *Growing Up in Ireland* study. We need to track a very large cohort of students from the first year of third level to graduation and beyond for at least a decade. Let’s see if all students receive the undoubted benefits of third level education regardless of the institution they attend or the discipline that they study. Let’s find out how well our education system really prepares young people for life and their careers and let us see precisely how our society and our economy benefits from the investment we have made. At the moment, discussions around third and fourth level education are dominated by anecdote, opinion and ideology. Given the amount the state spends on education that does not seem good enough.

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1. http://ec.europa.eu/education/library/reports/modernisation\_en.pdf [↑](#footnote-ref-1)
2. In contrast to the anecdotes, the Irish Survey of Student Engagement (studentsurvey.ie) suggests that at least two thirds of students are satisfied or very satisfied with the quality of their third level education and only a small percentage express outright dissatisfaction. [↑](#footnote-ref-2)
3. The reputation of an institution amongst employers also affects international rankings. [↑](#footnote-ref-3)
4. A postgraduate diploma in third level teaching, for example [↑](#footnote-ref-4)
5. http://www.oecd.org/edu/imhe/QT%20policies%20and%20practices.pdf [↑](#footnote-ref-5)
6. Much of this discussion is channelled through the National Forum for the Enhancement of Teaching and Learning in Higher Education [↑](#footnote-ref-6)
7. http://www.ewa.org/sites/main/files/file-attachments/brown\_ctr\_2015\_v2.pdf [↑](#footnote-ref-7)
8. The ongoing and heated debates between the ‘Progressives’ and the ‘Trads’ in the UK is a good example of where ideology can rear its ugly head/ [↑](#footnote-ref-8)
9. Based on a recent survey of DCU staff conducted by SIPTU [↑](#footnote-ref-9)