Strategic Use of Learning Technologies in Irish Higher Education

It's time to move from small-scale innovation to major strategic initiatives

Introduction

We have managed to squeeze a bit more money out of a government facing an election. So have a lot of other people. The politicians will have to deal eventually with the increased borrowing this temporary generosity has caused. There is little prospect of it being extended again next year. This is the scenario facing those of us in higher education in the short term. The long-term prognosis is not great either. Changing demographics will reduce the number of young people going through the Leaving Certificate, and will increase the number of older people depending on the state for pensions and ever-more-sophisticated healthcare interventions.

Alongside our pressing need for increased investment in housing, we will also have significant investment needs around the energy transition for decades to come (KPMG, 2023). Then, of course, there is the eventual reckoning of the debt built up through government generosity to the many lobby groups over the years. So it is unlikely that higher education will be at the top of any list of government spending priorities in the foreseeable future. Added to growing demands for serving a larger and more diverse set of stakeholders is a corresponding ratcheting up of accountability expectations, and we have our work cut out for us. We have much to do to make the processes of higher education more efficient and more effective – to 'do more with less'.

The need for digital transformation

Success here won't be about just incremental gains but transformational strategies. While learning technologies have often been touted as a way to increase efficiency, in

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Irish higher education faces increasing financial constraints and must adopt transformative strategies to thrive. While learning technologies have often raised costs, they can be harnessed strategically to improve efficiency, access, and quality, as this article shows. By embracing large-scale digital transformation, Irish universities can remain competitive in a global education market.

many cases they've actually raised costs. When done wisely, however, they can help hold down costs, expand access, and reinvent the delivery of education.

The private sector provides valuable insights into digital transformation. Companies that harnessed technology to fundamentally reshape their business models have consistently outperformed those that only refined existing processes (Bloomberg, 2022). Higher education must adopt a comparable strategy. Merely incorporating technology into conventional teaching methods will not be enough. Institutions must welcome innovative educational models that can revolutionise the delivery of learning.

At present, universities tend to implement minor changes such as staff training, pilot programmes, and integration of digital tools. To tackle financial challenges and increasing demands, senior leadership needs to strategically embrace new models that prioritise not just quality but also expanded access, lower unit costs, and greater affordability.

Finding new ways forward

There are models of international success that Irish institutions could follow. One possibility is international online programmes, aligned with an institution's research strengths. Irish universities are strong in areas such as biotechnology and nanotechnology, which are very suitable for high-quality online undergraduate and postgraduate programmes. Such programmes can reach out to world markets, generating revenue and enhancing the institution's reputation.

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Internationalisation presents a unique opportunity for 'teaching at scale'. For example, the Georgia Tech online Master of Science in Computer Science costs less than €6,000 and has more than 15,000 students enrolled to date; it shows how online education scaling can reduce costs and increase access, creating surplus revenue. Such international programmes could become a strategic priority for Irish institutions, leveraging research strengths to offer broader access and minimising fees.

Another model is integration of education with the workplace. Work placements improve employability and make learning more relevant. Many vocational programmes already include an element of internship, but institutions could go further in delivering whole degrees within the workplace.

In this model, the school leaver would go directly into the workplace, working part-time while studying online. This method enriches education by better connecting theory with practice. It democratises education, since students generate income while studying, often within the home. And it benefits

institutions with reduced congestion on campus, sharing resources, and integrating online courses into lifelong learning.

Campus alternatives and emerging methods

Campus-based education excludes people with disabilities, caring responsibilities, or unpredictable, precarious lives. In hybrid models, students view and participate in classes on campus or online – or may switch freely. Greater access and even unit-cost reductions through increased enrolment may be enabled by expanding hybrid programmes.

Flipped learning, where students review recorded lectures before class and participate in applied learning during the session, significantly enriches the educational experience. Institutions might embrace it as their primary approach, allowing instructors to dedicate more time to interactive teaching. Moreover, recorded materials can offer robust support for flexible and cost-effective educational delivery across a variety of formats. Reduced in-class time alleviates pressure on physical space and can reduce students' on-campus days, lowering commuting and accommodation demands.

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Flipped learning might evolve into project-based learning, where learners would study their content online, coming onto campus to work on projects that integrate knowledge from a number of modules. This engages learners more deeply with their learning and mirrors real-world problem-solving. It can also support flexible, cost-efficient education by reusing materials across programmes and promoting collaborative learning environments.

These are just a few examples of new models emerging globally, with more continuing to develop. Artificial intelligence (AI) presents both challenges and opportunities for higher education. While it has the potential to disrupt conventional teaching methods, it also offers tools to improve student support, automate administrative processes, and personalise learning experiences. Incorporating AI into higher education could help address financial and operational challenges, allowing institutions to deliver more efficient and high-quality services.

Strategy for the future

The pressures on Irish higher education – reduced funding, increased competition, and rising expectations – make the strategic adoption of learning technologies imperative. It is no longer sufficient simply to conduct small-scale experiments. Institutions will have to scale up, adopt global models, and consider redeploying resources to maintain quality of education while managing costs efficiently.

The future of higher education is in transformation, not digitalisation. Irish institutions can flourish in an increasingly competitive, resource-constrained world by adopting technology in strategic ways.

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Dr Neasa Ní Chuaig has been appointed as the new Head of the Department of Language and Literacy Education at Mary Immaculate College

Neasa has been with MIC since 2017 as a lecturer in Education with expertise in Irish. Prior to this, she taught in the University of Galway, as well as Dublin City University, Maynooth University, and St Mary's University, Nova Scotia, Canada.

Neasa received her undergraduate degree in Irish and Legal Science from the University of Galway and went on to receive a Masters in Modern Irish in the same University, having grown up in the Galway Gaeltacht. She also completed teaching qualifications in the University, including a Professional Diploma in Education and a TEFL (Teaching English as a Foreign Language) certificate.

She went on to complete her doctorate in Dublin City University under the supervision of Professor Pádraig Ó Duibhir and Dr Eithne Kennedy. On completion of her PhD, she began working with the National Council for Curriculum and Assessment as an Education Officer, where her main role was the development of the Primary Language Curriculum from Third to Sixth class.

She is very much looking forward to the new role and to working with colleagues to develop and champion aspects of language and literacy within the department and the wider college community. Speaking about her appointment to the role, Neasa said:

"I am delighted with this new role and proud to have the opportunity to work with my colleagues to develop opportunities and tackle the challenges associated with the work of our department".

Dr Angela Canny, Acting Dean of Education at MIC added: "We are delighted to welcome Neasa as our new Head of the Language and Literacy Department in the Faculty of Education. Neasa has been a valued member of our Faculty for a number of years and she brings a wealth of experience to this role."