Building Digital Teaching and Learning Capabilities in GMIT with DigitalEd.ie Knowledge Platform

Section 1: Background

At GMIT, we provide our students with a transformative third level learning experience, empowering our graduates to fully contribute to the social, economic and cultural betterment of society. We invest in excellent applied learning, teaching and research environments, reflecting the real needs of business, enterprise and the professions in our region.

Under the Best Educational Technology/ICT Initiative of the year category, this submission focuses on GMIT’s rapid transitioning to online teaching and learning and how this was made possible due to the development of the DigitalEd.ie Knowledge Platform and Digital Teaching and Learning Programmes developed by GMIT’s Teaching and Learning Office (TLO).

DigitalEd.ie is a digital teaching and learning education platform, providing access to the digital learning pathways and a suite of resources available to all staff. The site provides a gateway to help staff build digital capabilities and pedagogic expertise, to design, deliver and support flexible and online learning programmes. DigitalEd Information Sessions commenced in March 2020 and a monthly programme is co-ordinated by TLO for GMIT, in addition to self-directed and accredited digital pathways (see Figures 2 and 3). The DigitalEd.ie knowledge platform provides a range of curated digital resources, supports and courses that are available to staff to enhance their digital capabilities.

Section 2: Background to Programme Development (DigitalEd.ie)

In June 2019, the Teaching and Learning Office (TLO) team in GMIT commenced a digital capabilities audit across all campuses, and following this an audit of digital education tools available through various online platforms was conducted. In parallel to this activity, GMIT established a partnership with the State University of New York (SUNY) (a network of 60+ campuses in the State of New York delivering online programmes), to learn about their online teaching and learning strategies and approaches in building a student support services model for remote and blended learners. Following the review of SUNY teaching and learning resources for the online teaching community, GMIT TLO began to work on the development of a Digital Education knowledge platform, a Digital Champions programme, an online self-directed course on ‘how to teach online’ and a level 9, Certificate in Digital Teaching and Learning, aimed at higher education staff.

By October 2019, the national INDEX survey launched, and this examined the digital experience of staff and students in GMIT and higher education institutes throughout Ireland. This audit and evaluation of digital capabilities in GMIT, provided a strong foundation for the design of the DigitalEd.ie knowledge platform. The TLO planned to launch the Digital Education platform in quarter 2, 2020. However, when COVID-19 broke out in Ireland in March 2020, this quickly accelerated the TLO plans, and the launch was brought forward by several weeks to support the crisis unfolding. The team worked rapidly on the content to enable the launch of DigitalEd within a week of students having to learn from home. This early launch of DigitalEd.ie provided lecturers with immediate support to their role in online delivery and assessment for their students. This was an invaluable resource to support GMIT staff in the rapid transformation to online delivery and enabled staff to continue the academic year and successfully assess their students in this unprecedented pandemic. In addition, a suite of specialist online clinics and LTA support services emerged to guide teaching teams and students’ engagement with remote learning.

The Teaching and Learning Office in GMIT led out on the design and coordination of a range of rapid response initiatives to support staff and students. During the crisis of March-May 2020, collaborative discipline teams emerged, and a team of Digital Champions supported each other through various online panel sessions, sharing best practice in digital teaching and remote learning. To further support the digital transformation challenges emerging, GMIT Executive Board (EB) established the Blended and Online Learning Transformation (BOLT) initiative, to provide further COVID-19 rapid response supports, that would impact every functional area in the institute.
COVID-19 fundamentally changed the way we all live and work, and this impacted enormously on the digital teaching and learning experience in GMIT. The physical closure of our five campuses in GMIT, forced everyone online in a hurry and transitioned our learning, teaching, assessment activities to a new platform. In 2020, GMIT faced several digital teaching and learning challenges which influenced the development of DigitalEd.ie, including the accredited postgraduate programme and resources required on the knowledge platform.

Challenges included:
- Academic staff grappling with the intricacies of learning-management systems and unfamiliar online teaching and meeting technologies; and the challenges with managing new protocols for coursework and assessments.
- Technology equipment deficiencies for staff to deal with and remote and virtual access issues.
- Varying levels of digital capabilities among the teaching community to teach, learn and assess students in an online environment.
- Many staff were not familiar with working remotely and engaging with virtual learning environments and digital teaching and learning resources.
- There was a fear factor in approaching online teaching and engaging students effectively.
- The challenge of moving the practical and active learning elements, central to GMIT programmes to an online environment.
- Staff and student challenges in accessing library services in the remote teaching and learning environment.

The transition has been challenging, but this also presented a number of opportunities for digital transformation at GMIT. In responding to the COVID crisis, the Teaching and Learning Office DigitalEd.ie Knowledge Platform and the digital teaching and learning professional development programme addressed these challenges and offered much needed support and guidance, and a flexible framework for academic staff to develop their digital capabilities (see Figure 1, 2 and 3).

The level 9, Certificate in Digital Teaching and Learning (10 ECTS) was developed as a follow-on to an existing level 9, Certificate in Technology Enhanced Learning (TEL), to reflect the advancement in education technologies and the expansion of this subject area. The programme is described as follows:

**Certificate in Technology Enhanced Learning (L9, 15 ECTS)**
This course provides participants with an opportunity to try out technologies and to consider how they can make effective use of such technologies to enhance their teaching. This course is primarily intended for academics working in higher education. The contact sessions provide an opportunity for discussion and sharing of experiences and viewpoints. A Moodle Technology Enhanced Learning (TEL) page provide for content management, assessment submission, and discussion fora. In addition, participants populate an individual Moodle page (their Comprehensive Learning Environment) with material specific to the delivery and assessment of a module or element of a module for a selected cohort of learners. Responses to practical and reflective tasks and activities are also uploaded to the TEL Moodle course page.

**Certificate in Digital Teaching and Learning (L9, 10 ECTS)**
This module facilitates teaching staff to build digital capabilities and pedagogic expertise, to design, deliver and support flexible, distance and online learning programmes. Participants engage with a suite of online digital teaching and learning resources, digital pedagogy approaches, online design frameworks and quality scorecards, and the relevant technology to become an effective online teacher and academic digital champion. The module is delivered through a blended learning approach and includes a suite of online learning courses and digital transformation workshops. On completion of this module the learner will/should be able to:
1. Critically assess a wide range of digital pedagogies to enable online and blended teaching and learning practice.
2. Evaluate the role of the online educator learning models that underpin effective online teaching competencies.
3. Construct a suite of digital teaching and learning resources to convert a module/programme to online/blended delivery.
4. Differentiate between digital pedagogies, tools, technologies, and effective delivery methods for teaching online.
5. Develop effective student engagement and assessment strategies and recognise the diversity of online learner(s).
6. Identify and implement an online course design strategy utilising quality scorecards and frameworks.
7. Appraise peer mentoring and community-based learning strategies and apply to digital teaching practice.

This programme demonstrates best practice in ICT and gives the participants the skills and knowledge to include technology enhanced learning software to their teaching practice. TEL tools are used to demonstrate their importance in engaging students (i.e., Padlet, Socrative, Mentimeter) and the use of new technologies such as H5P, Microsoft Forms and Screencasts, to provide more engaging and interactive content for the students. The course also demonstrates how various technologies can be used to enhance online assessment, all important skills for the delivery of education in a COVID pandemic. Overall, the programme prepares lecturers (the students on the course) to use technology effectively to deliver blended and online modules confidently using a combination of ICT methods for engagement, assessment, and effective delivery of the module.

There is great demand for both TEL and DTL Certificates. Lecturers also have the opportunity to take the self-directed pathway outlined in Figure 2. In 2020, 35 lecturers completed the programme. In 2021, both courses again are fully subscribed with over further 35 lecturers (students) expected to graduate in 2021.

The teaching team and its participants collaborate with international organisations who lead out on technology enhanced learning development and this includes membership of Association for Learning Technology (ALT UK https://www.alt.ac.uk/) and the Online Learning Consortium in the US (OLC) in the US (https://onlinelearningconsortium.org/). For further enhancement on the programme, the teaching team also collaborate with SUNY, New York State University, who offer online learning across 60 campus sites in New York State, and the University of Southern Denmark (USD), Centre for Excellence in Technology Enhanced Learning.
The structure of the programme is presented in Figure 2 and 3, mapping out the self-directed and accredited pathway discussed in section 3. There are so many benefits to the lecturers and ultimately ‘students’ of GMIT as a result of engaging with the DigitalEd development pathways and linked programmes including TEL and Digital Teaching and Learning. The benefits are wide ranging and include: increased use of digital technologies in their teaching practice; an opportunity to collaborate with multi-disciplinary teaching teams on digital student success initiatives; increased engagement with the students through the lecturers use of tools such as Padlet, Mentimeter, Polls, Quizzes etc.; opportunity for student centred teaching practice (allow students to lead their learning using TEL tools); alternative and enhanced assessment opportunities (i.e. Forums, E-portfolios, MCQ structured quiz etc.); opportunity for students to learn new skills for use in the workplace (online meetings, online presentations, improving digital literacy, ICT skills); improvement of retention rates by keeping students engaged; increased understanding of learning analytics; influences design of blended learning opportunities, saving travel costs for students and also enhancing the student experience.

This chart maps out a self-directed programme route for GMIT academics to develop their digital teaching and learning capabilities. The path begins with the Discovery Tool, then participants can move on to engage with a collection of online courses and resources on the DigitalEd Learning Pathway, at their own pace. Following this, TLO recommend exploring the GMIT module design scorecard, and then engaging with a suite of relevant workshops from the monthly TLO digital programme. A wealth of resources is available on the DigitalEd.ie knowledge platform.

This chart maps out a GMIT accredited pathway to develop digital teaching and learning capabilities in GMIT. The path begins with engagement with the Discovery Tool and signing up to commence the level 9 Certificate in Technology Enhanced Learning (TEL) and/or the Certificate in Digital Teaching and Learning (DTL). Both courses run over one semester and all the assessment outputs are linked to their teaching practice. During the course, participants will also explore the GMIT module scorecard and TLO Moodle template, and a range of digital tools to enhance student engagement and course design.

Key highlights from the DigitalEd.ie structure include:

- GMIT TLO developed a Level 9, Certificate in Digital Teaching & Learning to ensure that all the digital champions had the required skills and accreditation to provide an excellent digital training/advisory service to their colleagues across 14 departments in GMIT.
- The development of a suite of digital teaching and learning online resources available on DigitalEd.ie and GMIT Moodle, provided for a ‘one-stop-online shop’ for colleagues to access training resources and a gateway to digital education platform DigitalEd.ie. TLO SharePoint site, DigitalEd media channel and the DigitalEd.ie platform resources, provided guidance to hundreds of staff during the pandemic.
- A suite of self-paced learning courses was offered to all staff and reviews of digital tool resources and special blog posts and articles was published on the DigitalEd.ie platform. Various digital experts in GMIT contributed to the knowledge bank of resources throughout the COVID emergency. Published outputs were also shared on various GMIT social media platforms.
- The GMIT Digital Champion programme, has been an innovative engagement strategy, that has proved to be an invaluable initiative, that has enabled digital practice to be embedded at a departmental level.
- Throughout the pandemic, the GMIT community availed of various technologies to enable sharing of best practice through the use of Microsoft TEAMS, Moodle Discussion Forums, Social Media channels.
Section 5: Value and Impact

The impact on staff engagement with the DigitalEd.ie programme and supporting initiatives is wide ranging and includes:

- 125+ Ask Me Anything (AMA) Clinics delivered to academic staff covering digital learning and teaching skills.
- 147 webinars/workshops delivered online on digital T&L development strategies.
- 3,447 GMIT staff registrations for online T&L digital education webinars.
- 105 teaching and learning video demonstrations on resources produced by TLO and made available on the TLO media channel.
- 42 Learning, Teaching and Assessment resources/special guides developed.
- 30 GMIT staff completed an accredited level 9, learning pathway in Technology Enhanced Learning or Digital T&L and 18 graduates became Digital Academic Champions, providing one to one and small group mentoring sessions in their academic departments.
- 10 specialist student remote learning support resources and services have been established to help student’s engagement with online learning.
- A one-stop-shop (online portal) was set up for students called the ‘GMIT Student Hub’. There have been 9,009 unique users to the Hub since Sept. 2020 with over 400k page visits to date. The more popular areas of the hub include Exams/Online Assessment Guides and My IT.
- 18 student graduates were recruited in August 2020, to provide mentoring and support to students from first year to final year and create an online sense of belonging to GMIT.
- Top digital T&L topics where academic colleagues sought support and guidance from T&L rapid response clinics and workshops include: Assessment Design and Set-up; Moodle; H5P; MS Lens; Breakout Rooms; MS Stream; OneNote; Learning Design Strategies; Class Management; Structuring and Online Lecture; Creating Video; TEL tools; Gradebook; online whiteboard; student engagement strategies.
- 4,000+ visits have been recorded to the TLO DigitalEd.ie platform, enabling self-directed learning and a range of digital education resources.

Reflecting on the engagement figures achieved, extraordinary goodwill was demonstrated by those who teach, learn, support and lead in GMIT, and much was learned for the future in our digital transformation development journey. A cycle of continuous improvement in digital education is ongoing in GMIT, through action research studies underway with GMIT TLO on the programme outlined in this submission. This is critical to our digital transformation journey, which is current today, but it will also be crucial in the post-COVID-19 context, in which the use of blended and online learning is only expected to increase in GMIT and across the higher education sector globally.

Key collaborative initiatives that gained great traction and engagement among the academic community was the DigitalEd workshops and webinar series that ran online each month from March 12th with the TLO. The sessions provided a valuable online space for all staff to learn at their own pace and peer learning opportunities arose across campuses, where colleagues shared experiences. The resources made available through the TLO enabled colleagues to engage with digital learning, on several different levels including, how to use the various online teaching platforms (e.g. TEAMS), assessment guidelines, pedagogical considerations, deployment of online exams, assessments and more. Figure 4 presents overall staff feedback on the clinics/webinars provided by TLO and how staff benefited from the engagement and collaboration. The majority either agreed or strongly agreed that sessions positively enhanced their knowledge and skills and increased their confidence levels in their ability to teach online or use technology more effectively.

Figure 4: Benefits of the DigitalEd.ie development sessions

<table>
<thead>
<tr>
<th>Benefit Description</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enriched my knowledge regarding feedback tools and engaging students online</td>
<td>20%</td>
<td>50%</td>
</tr>
<tr>
<td>Provided useful tips and strategies for effective online teaching</td>
<td>50%</td>
<td>10%</td>
</tr>
<tr>
<td>Facilitated collaboration and peer learning opportunities</td>
<td>30%</td>
<td>10%</td>
</tr>
<tr>
<td>Improved confidence in using technology in my teaching</td>
<td>10%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Section 6: Excellence in Education and Training

A summary of the Educational Technology initiatives under DigitalEd.ie that have impacted staff in GMIT are presented in Table 1 and the feedback from participants on the programme is presented in Table 2, demonstrating excellence in digital education training and development.

Table 1: Digital Education Technology initiatives under DigitalEd.ie

<table>
<thead>
<tr>
<th>Digital Education Initiative supporting DigitalEd.ie</th>
<th>Description</th>
<th>Who benefited?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Digital Teaching &amp; Learning Knowledge Platforms</td>
<td>Digital Teaching and Learning education platform on DigitalEd.ie that provides access to digital learning pathways, a discovery tool, digital stories, a digital resources directory, a digital champions network and a digital education forum. Access the platform at <a href="https://DigitalEd.ie">https://DigitalEd.ie</a></td>
<td>Lecturers and professional services staff in GMIT. It is also accessible to the higher education sector under a Creative Commons Attribution-Non-Commercial-Share Alike 4.0 International Licence. 5,000+ visitors recorded to date (as at Feb. 2021)</td>
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<tr>
<td>2. AMA Clinics – Ask Me Anything Clinics</td>
<td>Online One-to-One Clinics with the TLO team of Learning Technologists to troubleshoot online teaching challenges with Moodle, Teams and more and to assist in redesigning of a module or assessment for online delivery.</td>
<td>All Lecturers in GMIT. 150+ AMA clinics to date (as at Feb. 2021)</td>
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<tr>
<td>3. Digital Academic Champions</td>
<td>A programme developed to allow digital champions, who have undertaken formal training in digital teaching and learning to mentor their colleagues in online delivery in each academic department.</td>
<td>All Academic Dept’s in GMIT. 18 Digital Champions in place as a mentor in their academic department since April 2020.</td>
</tr>
<tr>
<td>4. Student Hub – Online Portal</td>
<td>From Sept. 2020, GMIT established a central student portal ‘one stop online shop’ where students can gain access to a variety of student supports and information on studying, online assessments, IT services, campus information, health and wellbeing, student life, finances, student rights and responsibilities, and planning for the future.</td>
<td>All Students in GMIT. Supported by the BOLT initiative serving all students.</td>
</tr>
</tbody>
</table>
Commentary

"...remote access was very convenient and excellent. Content was engaging and input from colleagues highlighted the relevance and application of..."

"...highly informative and everyone was very engaged and supportive. I like that nobody felt silly asking the simplest of questions and I hope GMIT continues to host these during 2020/2021 as they are needed."

"...fantastic to have had the opportunity to uptake so many valuable training sessions. I learned something from each one and really appreciated all the guidance on where to find your level in all this. Also, the obvious sense of community support really felt good! I truly don't know how it was pulled together so quickly..."

Who benefited?

All Students and Staff in GMIT

### Table 2: Feedback commentary and related teaching and learning theme

<table>
<thead>
<tr>
<th>Teaching and Learning Theme</th>
<th>Commentary</th>
</tr>
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<tbody>
<tr>
<td>Student Engagement</td>
<td>&quot;...great variety...atmosphere was very positive and supportive. Some had breakout groups which was great to meet colleagues and discuss...&quot;</td>
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<tr>
<td></td>
<td>&quot;It was great to get an opportunity to meet other colleagues online and to share their resources and skills. A lot of ideas and tips were also added to the forum and links shared to extra resources was great too. Having the sessions recorded was a positive so the videos are there to go back over...&quot;</td>
</tr>
<tr>
<td>Active Learning Techniques</td>
<td>&quot;...very well presented and knew the content and how to apply it across disciplines. Also, the opportunity to practise the methods e.g., planning blended learning for modules and spend some time with the technology...Having advice on hand and shared experiences from staff was really useful in getting ideas of how you could apply the methods and technology&quot;</td>
</tr>
<tr>
<td>Peer Learning</td>
<td>&quot;...highly informative and everyone was very engaged and supportive. I like that nobody felt silly asking the simplest of questions and I hope GMIT continues to host these during 2020/2021 as they are needed&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Very good Teaching and Learning Q&amp;A clinics and saved resources provided for follow-up...one-to-one advice would be most welcome heading into Sept 2020 in adapting what we've learned to our modules and individual practices.&quot;</td>
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<tr>
<td>Online Learning</td>
<td>&quot;...remote access was very convenient and excellent. Content was engaging and input from colleagues highlighted the relevance and application of many elements of the technology to teaching. I felt empowered to engage with online learning technologies in the future&quot;</td>
</tr>
<tr>
<td>CPD Level Communications</td>
<td>&quot;...well-organised, informative and relevant webinars...there may be value in providing an indication of the level at which each webinar is 'pitched' e.g., level 1, beginner, etc. This might prevent those of us who are just about keeping our heads above water in the digital 'ocean', from that sinking feeling&quot;</td>
</tr>
<tr>
<td>COVID impact on time and teaching practice</td>
<td>&quot;even though the courses were fantastic, I found it a bit overwhelming with all the information coming at me from all sides every day. I really wanted to complete all the programs as they became familiar with GMIT expectations: who we are; what we do; and how we can help you throughout your time in college. This course can be accessed here.&quot;</td>
</tr>
<tr>
<td>Supportive Online Learning Community</td>
<td>&quot;Great to be able to partake of sessions via webinar and to have sessions recorded. Very easy to sign up for sessions, presenters were really good...created a very good sense of community and goodwill. Even by taking a course that was deemed introductory or basic I learned so much. Leads me to believe there is nothing basic. We all learn something.&quot;</td>
</tr>
<tr>
<td>Value of CPD in Teaching and Learning</td>
<td>&quot;...fantastic to have had the opportunity to uptake so many valuable training sessions. I learned something from each one and really appreciated all the guidance on where to find your level in all this. Also, the obvious sense of community support really felt good! I truly don't know how it was pulled together so quickly...&quot;</td>
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For further information on this case study, contact:

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