

**IUA Enhancing Digital Capacity in Teaching and
Learning Project: Autumn Semester 2019 Pilot at the
University of Limerick
Digital Peer Review Assignments and Student Produced
Animated Videos**

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Abstract

The Irish Universities Association (IUA) led project, Enhancing Digital Capacity in Teaching and Learning in Irish Universities (EDTL), is a 3-year project involving all seven Irish universities. The project began in January 2019 and runs until the end of 2021. The EDTL project aims to enhance the digital attributes and educational experiences of Irish university students through enabling the mainstreamed and integrated use of digital technologies across the teaching and learning process. To achieve this, the project focuses on the professional development of all staff who teach or support learning in order to build their digital competence, confidence, and capacity. (<https://www.iua.ie/ourwork/learning-teaching/digital-learning/>)

This paper describes the autumn semester 2019 EDTL pilot project at the University of Limerick (UL) with participating educators from the School of Engineering and the School of Allied Health. The UL project lead for the IUA EDTL project worked with educators from both Schools to pilot, respectively, student peer review assignments using different approaches with Turnitin, and a digital assessment initiative in which students were tasked with creating an Information Sharing Animation (ISA), or animated video.

The project activities during this autumn semester pilot included project scoping, professional development, the educators' self-assessment of their current digital competence proficiency levels against the European Framework for the Digital Competence of Educators (DigCompEdu-<https://ec.europa.eu/jrc/en/digcompedu/framework>), development of relevant student support resources, implementation, evaluation, and future plans under consideration by educators.

Keywords

Digital, teaching and learning, higher education, learning and teaching, irish university, digital capacity, engaging pedagogy, professional development, Univeristy of Limerick, project team, professional development activity, irish university association, irish higher education, discipline group, digital competence, irish national digital experience, university context, digital skills, speech and language therapy, communication skills, peer review, peer feedback, peer assessment, evaluative judgement

1. Introduction and Motivation

Scoping meetings between the UL project lead and the educators identified specific digital assessment initiatives to work on and established the scope of the respective pilot projects with both Schools. Educators were introduced to the DigCompEdu Framework and encouraged to undertake a self-assessment of their digital competence proficiency levels before work began on the collaboratively implemented initiatives in their modules, and again afterwards to gauge whether they felt their digital competence, confidence, or capacity had changed as a result, and to reflect on reasons why.

Across a number of 4th year School of Engineering modules, participating educators in the School took two different approaches to conducting digital peer review assignments. The first approach used the Turnitin.com website to conduct peer and self-review assignments with students. The second approach made use of built-in Turnitin functionality within an Assignments tool on ULs institutionally supported virtual learning environment (VLE), Sulis.

From a pedagogical perspective, this strand of the pilot had multiple aims. Educators from the School of Engineering were motivated to encourage student peer interaction and dialogue around assignments and ultimately learning, and to facilitate the development of self-reflection and self-assessment competences in their students through engaging them in peer review activity. Through these activities, educators intended to nurture a capacity within their students to evaluatively judge their own work against that of their peers and develop an internal judgement of quality (Nicol et al., 2014). Importantly, evidence of technical writing is a required Engineer's Ireland Programme Outcome for programmes accredited for Membership leading to Chartered Engineer. Within the Mechanical Engineering and Design and Manufacture Engineering programmes this is addressed in several ways. Peer review activities promoted transparency around technical writing.

The UL project lead worked with educators in the School of Allied Health to pilot a new digital assessment initiative with students taking a Therapies & Technologies module over a 6-week academic block of study. Students were tasked with developing a 2-3 minute Information Sharing Animation (ISA) on a specified Speech and Language Therapy (SLT) area that they chose from a list of relevant topics. In addition to the aim of enhancing the digital confidence, competence and capacity of

educators to be able to set up and run digital assessments of this kind, a further clear motivation for this pilot was to enhance the digital competence of students by progressing them from being consumers of online educational resources to being developers of them.

2. Methodology

As part of their *ME4517 Energy Management* module assessment, 4th year Mechanical Engineering students submit two Short Technical Reviews. These short writing assignments are submitted via the Turnitin.com website and are each marked out of 5%. Prior to submission of the first Technical Review, the academic week 2 tutorial focusses on giving formative feedback to students' first drafts of the Technical Review. The first Technical Review is reviewed and assessed by the lecturer using the Feedback Studio functionality provided by Turnitin. The second Technical Review is reviewed and assessed initially through blind peer review. Marks for the second Technical Review are awarded for peer review (5%) and peer grading (5%) by two reviewers.

As part of *DM4027 Measurement and Quality Systems (Eng)* and *PT4047 Measurement and Quality Systems* modules, 4th year students, submit reports online via the Assignment/Turnitin tool on Sulis as part of their assessment. Students subsequently engage in a peer review activity of their peers' assignment submissions. Grading of each report is out of eight marks, where each student can receive up to two marks for the following criteria: *Presentation, Accuracy, Context, Discussion*. Each report is blind peer reviewed and marked by two classmates and receives the average of the two peer review scores. All scores are moderated by the module leader to ensure fairness.

For their summative assessment, due at the end of academic week 6, students on the *SL6087 Therapies and Technologies* module had to develop a 2-3 minute Information Sharing Animation (ISA) on a specified Speech and Language Therapy (SLT) area that they chose from a list of relevant topics co- created by the academic team in UL and their clinical partners to meet their information sharing needs and priorities. The ISA functioned to summate and explain a sometimes complex topic to an audience in layman's terms through the medium of animation. As students were required to use freely available animated video software, support resources were developed to respond

to the technological demands involved in developing, submitting and sharing the ISAs. Students were assessed on four core criteria: *Content*, *Organisation*, *Communication* and *Use of Technology*. A core learning point for students is to use technology in a way that conveys an unfamiliar and typically specialised topic in a clear manner. This emphasis on communication is especially important for SLT students whose understanding of both normal and disordered communication is heightened. Using the medium of animation helps students to clearly engage with this and develops a keen awareness of how digital tools can be employed in their practice to benefit their work with both typical and atypical communicators.

3. Conclusions and Future Work

The autumn semester pilot project is still in operation at UL. Ethical approval to gather, analyse and use feedback data from project participants involved will be sought. An Online Hub for the EDTL project at UL is currently under development. It is envisaged that this Online Hub will serve multiple purposes, as an introduction to the IUA EDTL project for interested parties, as a shared space for collaborative engagement, discussion and planning of initiatives for educators participating on the project, and as a mechanism through which educators can evidence that they have met project criteria to be eligible to be awarded a digital badge accredited by the National Forum for the Enhancement of Teaching and Learning.

4th year students taking School of Engineering modules have to date successfully engaged in peer review of at least two of their peer's work and provided appropriate feedback commentary, and a grade, according to the relevant grading rubric criteria. Their own assignment submissions have also received peer reviews, and they are required to return to their own work and reflect on it following peer grading.

Similarly, all students taking the SL6087 module produced a variety of ISA reflecting a high level of technological and communication skills. While some students struggled with the technological aspects, all students reported being happy to learn animation skills and perceived those skills would benefit them considerably both in obtaining employment and in continuing uniquely to their future practice. With regard to future work, both sets of educators are considering further exploration and development

around the areas of assessment design, student and staff feedback literacies, and academic integrity, including creative commons licensing and attribution.

References

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