

Forum Insights

“TEL Tools” - PEDAGOGICAL RESOURCES FOR TECHNOLOGY ENHANCED
TEACHING AND LEARNING**2. Overview of the project as it has developed**

- Work began on the project in January. Initial activities were primarily in the area of research into existing TEL practice in Irish education institutes and the effectiveness and/ or ineffectiveness of same, as well as barriers and aids to implementation. The developed report (<https://goo.gl/bZ7u1T>) included findings from TEL-related surveys conducted by both project partners and other higher-level Institutions and identified a number of potential opportunities and threats which would be used to help inform project activities, as well as an initial outline of the content which could be developed for the project platform (an initial “scope document”) (<https://goo.gl/5J6H43>). This content scope document has since been revised to outline proposed content development as the project has progressed (<https://goo.gl/okNwOp>).
- Following the initial face-to-face meeting in February (<https://goo.gl/1yWku8>) work began immediately on the first stages of content development and project evaluation. Since the initial project meeting, the project consortium has ensured communication between partners has remained consistent via fortnightly (e.g.: at least once every 2 weeks) Skype calls or Adobe Connect presentation sessions (<https://goo.gl/8X1SZn>) as well as attempting to ensure transparency through the hosting of all developed project documents in Google Drive (which all project partners have access to).
- Evaluation and quality assurance have been consistent throughout the projects due to the efforts of UCD. Following the first face-to-face meeting, research was conducted into the appropriate format for project evaluation and quality assurance (<https://goo.gl/ENLVuh>) and a number of documents were developed based on this, including a QA & Evaluation Plan (<https://goo.gl/LzcHyV>) and a template for reviewing developed content (<https://goo.gl/ZXJ73R>). Recommendations regarding quality assurance and evaluation have also been elements for discussion in most of the fortnightly project calls.
- Content development has been ongoing since the initial face-to-face meeting. Existing TEL resources which partner institutes possessed were identified and discussed as part of the initial face-to-face meeting and responsibilities and a plan for the development of content was discussed and agreed. Based on these discussions and research, a template for creation of content was developed, which was used to help structure the development of content and to help ensure consistency across developed material (<https://goo.gl/qVYvPC>). Initial content developed using this template was used for the prototyping of project digital resources and for initial project platform prototyping. Based on the results of this initial content and platform development, this template for content creation was revised to re-structure

developed content, in order to enhance effectiveness for the target audience (<https://goo.gl/JLxrU9>). Following on from this, additional content was developed for prototyping and for use in the platform. To date, 24 scripts have been developed for use in the platform – focusing on the use of digital tools to facilitate teaching and learning activities (<https://goo.gl/xUguh7>).

- Platform design and development commenced in January. Research into the functionality, look and feel, user experience, etc. of similar platforms was conducted in order to help inform planning and development. Initial stages of design and development began following the initial face-to-face meeting in February. As part of the agile approach to platform development adopted for the project, a number of system review sessions took place in order to discuss and identify the platform structure and functionality, as well as the user path (<https://goo.gl/JUmJN5>). Following on from this, prototyping of the project platform took place with a view to initial platform functionality (<http://invis.io/3V3A0QB2H>). Based on this prototyping activity, some initial prototype platform components were developed and made available in order to facilitate initial piloting processes (<https://vimeo.com/130767354>).
- Initial piloting began in April, focused on piloting of some of the features of the developed platform prototype. Representatives of the target audience within CIT were asked to engage with developed platform prototype features as well as developed learning content. Towards the end of June, all of this feedback will be gathered and analysed and a pilot 1 report will be compiled.
- As part of both content creation and design and development of the online platform, additional work was conducted with regards to the arrangement and development of content in the platform – particularly with regard to the initial proposed structure in which platform content, consisting of short, media-rich learning objects (“Blocks”), were organised into groups of learning blocks with a larger learning objectives (“Stacks”). Following on from discussions during the initial face-to-face meeting, work began on the development of a “Stack Breakdown” document, designed to identify how Blocks and Stacks should be structured and therefore how content should be arranged and presented in the online platform (<https://goo.gl/0YW1KF>). Following on from initial platform development activities, it was found and agreed that the proposed structure for arrangement of content in the platform could be improved. Based on this, additional efforts were undertaken in order to consider how content should be arranged and presented in the platform and a new proposed arrangement, was discussed and agreed between project partners (<https://goo.gl/okNwOp>), which was then implemented in content development and platform prototyping activities.

- The project has created a development blog (<http://teltoolsproject.tumblr.com/>) for outlining the progression of the online platform and will, once the project platform is more appropriately aligned, also produce an official "Tel Tools" blog which will be related to project content development by providing case studies of instructors and students in Irish third level institutions who have effectively utilized TEL to the benefit of their teaching and learning.

3. Partners

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4. Key outcomes of the project (link to any available material/resources)

- <https://goo.gl/bZ7u1T> - Research on TEL in Irish Higher Education
- <https://goo.gl/5J6H43> - Initial Scope Document
- <https://goo.gl/1yWku8> - Face to Face meeting in February
- <https://goo.gl/8X1SZn> - Fortnightly Skype Calls Minutes
- <https://goo.gl/ENLVuh> - Project evaluation and quality assurance research
- <https://goo.gl/LzcHyV> - QA & Evaluation Plan

- <https://goo.gl/ZXJ73R> - Content Review Template
- <https://goo.gl/qVYvPC> - Template for creation of content (V1)
- <https://goo.gl/JLxrU9> - Template for creation of content (V2)
- <https://goo.gl/xUguh7> - Developed Content Scripts
- <https://goo.gl/JUmJN5> - Platform System Review Sessions
- <http://invis.io/3V3A0QB2H> - Initial Platform Prototype
- <https://vimeo.com/130767354> - Video of Interactive Platform Prototype
- <https://goo.gl/0YW1KF> - "Stack Breakdown" Document
- <https://goo.gl/okNwOp> - Revised Content Scope and Stack Breakdown Document
- <http://teltoolsproject.tumblr.com/> - Project Development Blog

5. Outline how the project benefits the higher education sector nationally

As noted in the recent report, 2015 NMC Technology Outlook for Higher Education in Ireland: "in order for emerging technologies to be creatively leveraged by students in courses, lecture halls, and virtual learning environments across Ireland, lecturers and support staff need to be confident and effective in applying them.". The report also noted that "Teacher professional development still does not fully acknowledge that digital literacy continues its rise in importance as a key skill in every discipline and profession".

Conole (2002) notes that in the UK a lack of training in both students and instructors is a primary cause for low uptake of TEL in teaching. O'Connell (2008) notes that a part of this problem "is a social rather than a pedagogic one, and lecturers may need to experience being an online student themselves in order to gain the necessary confidence to move to an online environment. Putting staff training online can be one response to this problem".

The project intends to benefit the higher education sector nationally by developing and offering teaching and learning resources that will equip instructors with the tools and knowledge required to utilize tools and resources for TEL in an effective and practical manner. The project content will develop training related to the practical and beneficial application of TEL, based on best international practice and theory, to a variety of approaches to teaching and learning (e.g.: reflective practice, problem or case-based learning, collaborative development, etc.).

The online nature of the platform and the structure and presentation of learning content in the platform has been chosen in order to maximise the effectiveness and efficiency of training for the target audience, based on initial project research conducted. For example, in the "Principles and First Insights from the Sectoral Consultation on Building Digital Capacity in Irish Higher Education" report; under "20 Questions on Technology-Enhanced Learning – Initial findings", it was noted that "Responding teachers say that they look to pedagogy first – technology second". Content in the platform has therefore been structured with a view to ensuring that all content is rooted with a view to pedagogical criteria (e.g.: "Giving timely feedback to students using Screencasts").

6. Outline how the project benefits students

The project will implement a "trickle-down" benefit system with regard to students, in which the development of instructor's skills and knowledge will allow them to better facilitate TEL, providing them with new methods of delivery, assessment, communication, etc. which will ultimately benefit the student with regard to their the delivery and facilitation of teaching and learning, in turn benefitting the student's educational experience.

Furthermore, enhanced digital literacy on the part of instructors will be facilitated by the training provided by the platform, which will in turn benefit student digital literacy. As noted in the 2015 NMC Technology Outlook for Higher Education in Ireland report, "In order for emerging technologies to be creatively leveraged by students in courses, lecture halls, and virtual learning environments across Ireland, lecturers and support staff need to be confident and effective in applying them."

7. Other national/international development work that complements this project

The project intends to build upon existing national development work in partner institutions by supporting ongoing activities in the area of TEL. Within each of the institutions, a TEL unit or department provides guidance and expertise with regard to the use of technology for teaching and learning- including workshops, digital learning objects, etc. on the successful development and/ or application of TEL:

- <http://www.dit.ie/lttc/elearning/>
- <http://www.ucd.ie/teaching/resources/e-learning/>
- <http://www.cit.ie/tlu>
- <http://www.ittralee.ie/en/InformationFor/Staff/CentreforEducationalDevelopment/>
- <http://www.ucc.ie/en/teachlearn/tel/>

It is intended that this work will also be of benefit, in a national sense, to all other similar departments/ units in other third-level Irish educational institution, such as the Centre for Academic Practice and eLearning (CAPSL) in Trinity College, the Continuing Professional Education (CPE) unit in University of Limerick, etc.

All resources developed by the consortium, including the primary online resource and developed content, research findings and results of the needs analysis, standards for development & implementation of TEL tools, etc., will be made available under an Attribution-NonCommercial Creative Commons license. This will ensure that the developed results will be of use to as many as possible and will seek to maximise impact of the developed results within the higher education sector.

8. Next steps

Following the completion of the project's pilot report at the end of June, content development will continue until the end of July to develop additional further learning material for the online platform. Platform development will also begin again in August in order to continue to progress the development of platform functionality. Evaluation and quality assurance work will

continue, with a focus on the reviewing of developed learning content.

In September, a second stage of piloting is due to take place. Representatives of the target audience (e.g.: instructors) from UCC, CIT, DIT and ITT will be asked to engage with the developed content and platform prototypes and their feedback will be gathered and analysed. During October, this feedback will be compiled into a second piloting report.

Additionally, in October, a series of "Information sessions" are due to take place, which will coincide with project piloting (and project dissemination). These information sessions will involve live web-conferencing sessions aimed at providing training to instructors from across Ireland on the use of TEL for teaching and learning and on the use of the project resources developed (for self-instruction in TEL) as well as providing an opportunity for discussion with regard to individual's ongoing practice and training, or lack thereof, in the use of TEL.

References

Conole, G.C. (2002) E-Learning and future perspectives. Invited talk at Northumbria conference, 2nd July 2002.

O'Connell, Eileen. (2008). Can E-Learning Be Used to Further Improve the Learning Experience To Better Prepare Students For Work In Industry. Dublin Institute of Technology