Maynooth University
National University of Ireland Maynooth

Maynooth University Teaching and Learning Showcase

2014

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Gliog-Ghraiméar Gaeilge [A Quick Guide to Irish Grammar] – A Cross-Platform Mobile Application

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Ollscoil na hÉireann Má Nuad

OVERVIEW / CAD É?:

- This grammar guide has been designed for Nua-Ghaeilge students here in Maynooth, both at under- and postgraduate level, as they attempt to master the finer points of the written language. Given that all teaching in *Roinn na Nua-Ghaeilge* is carried out through the medium of the Irish language, this grammar app will help students in all modules. That said, It will be of particular assistance in the case of the core grammar modules, NG101, NG103, NG201, NG211, NG301, NG301, NG601 and NG611, modules being taken this year by 432 students.

HOW IT WORKS / CONAS A OIBRÍONN SÉ?:

- The app created is a cross-platform mobile application supporting iOS, Android and Windows Phone 8. The app was developed with the PhoneGap framework which allowed for development on multiple platforms.

- The app has been designed in line with the Department's current grammar curriculum, in a 'topic by topic' format, allowing students to readily access the key points of the material being covered.

Student Feedback / Aiseolas ó mhic léinn

"Excellent App."
"App is well laid out and straight forward to use."
"Brilliant, very easy to use and clear display."
"Clear and understandable."
"Great app. Would definitely pay for this."
"I will definitely be using it while doing assignments and essays".

IMPACT / ÉIFEACHT?:

- Students studying *Nua-Ghaeilge* will now be encouraged to use this app, not only as their lecturers guide them through their grammar classes, but also as they tackle written assignments and material in other modules within the subject, allowing them to confidently answer their own questions in relation to the written language at the touch of a button.

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Interactive Communication Platform for Students

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OVERVIEW:

- A more student-friendly, dynamic version of the standard student departmental handbook
- Students do not always check their emails or find it easy to sift through numerous emails
- One single online area where students have access to FAQ answers, standard information and simultaneously receive updates on events (internal and external) and career opportunities etc.

HOW IT WORKS:

- All students registered to any law module, undergraduate or postgraduate, are automatically registered to the 'Law: All Students' Moodle page
- Students can pose questions to their peers across all years and programmes in the News Forum
- The platform is updated regularly with details of events, tutorials, career opportunities. Contact details etc.

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> "It was very helpful to have easy access to all Placement information and for it to be all in one place." *3rd Year LLB student*

IMPACT:

- Improved communication channel between the Law Department and students
- Decrease in number of repeat queries from students
- Increased number of applications for placements, internships, conferences etc.
- A useful resource for new academic staff as well as for students
- Eliminates need for costly printing of numerous hardcopy handbooks, in keeping with the Green Campus initiative
- Permits instant update of information

Ireland's GLOBAL Law School
NUIM LAW

DevEd Week for PDE Students

NUI Maynooth

26th -28th November 2013

devedweek.wordpress.com

27 Years (1987 – 2014)

163 PDE Students

63 Staff

45 Sessions

625 Cups of Coffee/Tea

1 Video

6 **36** Schools / Pupils

3 Days

1 Keynote Speaker — Dr. Kamugisha Gozibert

Student evaluation of DevEd Week 2013

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Technology+

maynooth access programme

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Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Technology+ is a 1st year undergraduate digital literacy skills module for targetted equity groups delivered by MAP.
- Students have the opportunity to explore a vast range of the latest online and mobile educational technologies to assist them at third level.
- Students from all disciplines learn together in small groups with access to an assistive technology tutor and computers to highlight how to set up and use the tools effectively.

HOW IT WORKS:

- Technology+ works at each student's own pace to match technologies to the person and the tasks they want to achieve.
- The module runs over the course of both semesters, consisting of group classroom sessions of activities and tutor support, backed up with additional online resources.
- Technology+ classes are also accessible online by students who wish to participate remotely from home or from our Kilkenny campus. Drop-in 1-to-1 hours are also available for targetted enquiries and for those students who require more basic IT skills training.

"I didn't realise there were so many helpful tools available to use; it has broadened my mind and made me more confident using online resources and helped me to think about things more than one way."

"Easy, friendly access to expert advice on technology is invaluable when trying to find your feet in first year"

IMPACT:

- Third level skills such as collaboration across networks, critical thinking, problem solving, oral and written communication, examination preparation, agility and adaptability can all be enhanced with a solid technological knowledge base. "Real world" examples were solved by students in Technology+ using free technology solutions.
- Student feedback reported increased competency with new technology tools introduced , benefitting time management , note-taking, memory, researching, referencing, revision and presenting in particular.

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Teaching Information Literacy Skills with RADAR

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OVERVIEW:

RADAR (Mandalios, 2013) is a recent pedagogical approach used to teach students to evaluate the quality of online information resources. Designed for humanities students, it had not been previously applied to business classroom settings. This poster describes a successful intervention used with new business postgraduate students.

HOW IT WORKS:

- Mandalios utilises the metaphor of 'the ocean' to describe the breadth of online resources available to students She describes conducting a 'live' class-room based evaluation of potential online research resources by assessing them in terms of their:
  - Relevance (to a specific assignment);
  - Authority (the professional or corporate identity of the writer);
  - Date (timeliness of the research);
  - Appearance (the professionalism of the production of the online resource), and;
  - Reason for writing (the credibility of the research).
- The five elements constitute the acronym 'RADAR'.
- Studying business for the first time at university level typically requires students to engage with a range of different topics (e.g. organisational behaviour, finance, information management, operations management, IT, strategy, economics, marketing, etc.). This means that when students commence studying business, they are unlikely to be familiar with all its associated fields, and their associated citing and research traditions.
- This was the case in the introductory module on a taught postgraduate business module. It was decided to use the RADAR tool as a means of instructing students unfamiliar with business research resources on how to assess the quality of the material they resourced over the course of a three hour session.
- Students were asked to identify five pieces of research in groups to support a short assessment and an in-class 'live' review of the quality of each others results using RADAR.

IMPACT:

- Feedback from the cohort of 43 students was very positive with students finding RADAR to be easily comprehensible and memorable, readily applicable to the evaluation of online resources and served to improve student confidence about their future research activities.

FURTHER READING:

- Cullen, J.G. Applying RADAR with new business postgraduates' Journal of Information Science, Vol. 40, No. 1 (2014) 25-27.
- Mandalios J. RADAR: An approach for helping students evaluate Internet sources. *Journal of Information Science* 2013; 39: 470-478.

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Medieval Irish Literature and Landscapes

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OVERVIEW:

- The idea behind the project is to take students from Early Irish (Sean-Ghaeilge) to historic sites mentioned in the sources they study in class, and to visit the places where medieval Irish literature was originally written

- The interaction between medieval literary culture and the modern heritage landscape creates a live teaching experience and enables students to reflect on the physical environment in which literature was produced during the Middle Ages

HOW IT WORKS:

- The project consisted of a one-day field trip – we took a river boat from Shannonbridge so that we could approach the site of Clonmacnoise from the River Shannon as medieval traders and raiders would have done
- Camilla Pedersen (postgraduate student in Early Irish) had compiled a collection of historical and literary references to the sites, and Dr Eoin Grogan (archaeologist and lecturer in Early Irish) explicated the material culture of the landscape

> 'In class, it's easy just to file it under "A long time ago, really far away". By visiting, it forces you to take a step back and think "No, it was written here".'
>
> Jessica Albrecht (international student)

IMPACT:

- Students were able to rethink the modern landscape in terms of medieval cultural activity, and to consider places such as Clonmacnoise as sites of textual production

- 'The sheer scale and architectural brilliance of the buildings combined with the religious masonry depictions made me realise the high status of the monastery as a centre for ecclesiastical excellence.' – David O'Brien (1st year undergraduate)

- 'This is the actual site where these copies of the manuscripts were written. We can get a sense of how the writers lived, the place itself …' – Andrea O'Reilly (1st year undergraduate)

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(Photo credits: left: James Langton; right: Sonia Jedrysiak; both 1st year undergraduates)

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The Structured PhD: Lessons from 'The Crafts and Logics of Social Research'

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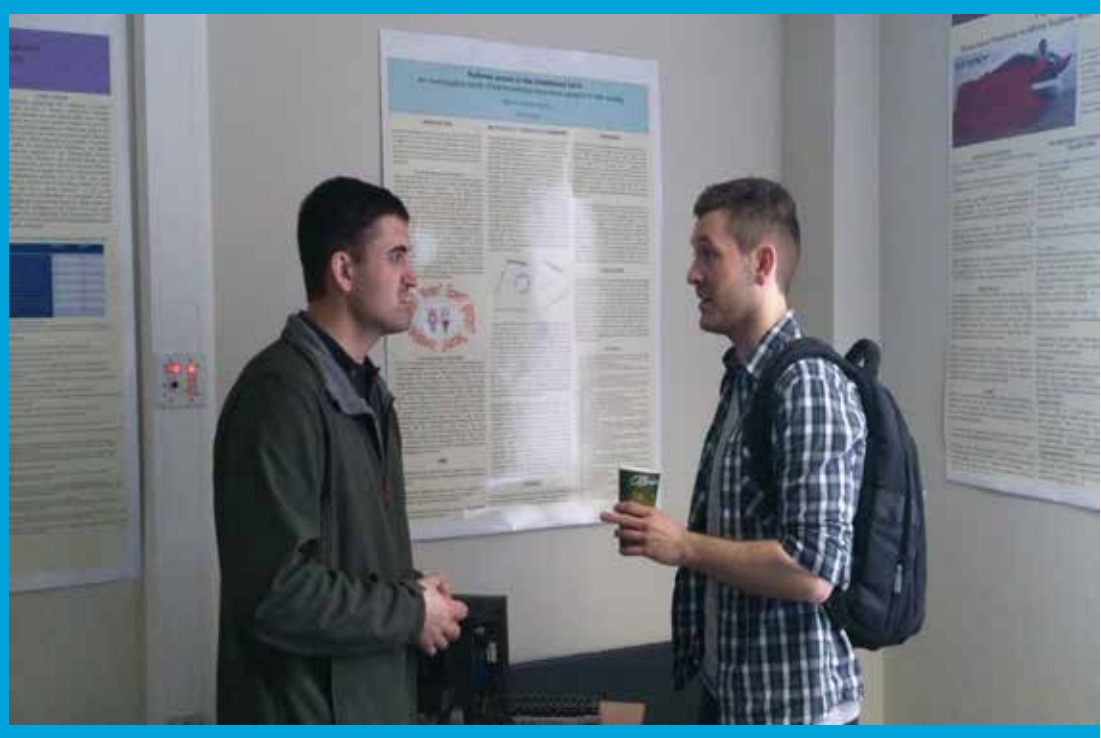
CONTEXT:

- Trend toward greater formal structure in PhD training, but without losing sight of discipline-specific requirements.
- Combining coursework and the "big book" dissertation.
- Overcoming "picket fence" approach to teaching of social science.



HOW IT WORKS:

- Year-long taught module, burst-format, inter-disciplinary.
- Focus on skill-set (bibliography, ethical approval, bibliometrics) and research design, linking data, theory and methods.
- Workshopping of student PhD proposals leading to presentation of professional poster and a grant application.

IMPACT:

- Enhanced knowledge of connections between data/theory/methods in PhD research.
- Enhanced knowledge of plurality of modes of inquiry in sociology and social science generally.
- Exposure to representative examples of different paradigms, disciplinary variation in PhD study, and to research and writing about doing a PhD.

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Integrating Twitter and Moodle as a Q&A tool for the classroom

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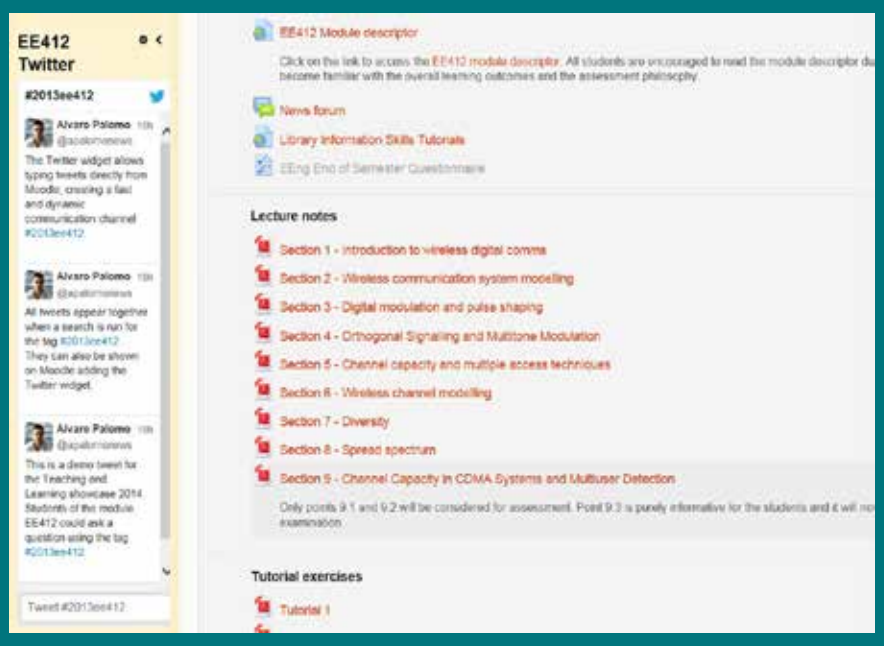
OVERVIEW:

- Traditionally students regard Moodle purely as a file repository and ignore communication features such as forums.
- Twitter is a widespread social network with people between 18 and 35 years old as its main users.
- Twitter and Moodle can be jointly used to enhance the communication link between the teacher and the students.
- The result is a dynamic Question and Answer (Q&A) tool which can be easily accessible from any smartphone, tablet or PC.

HOW IT WORKS:

- First, it is required that all participants own a Twitter account. However, it is not necessary that the participants "follow" each other.
- The teacher provides a Twitter "hashtag" which identifies all the messages or "tweets" in relation to the module, e.g. #2013ee412.
- A Twitter widget can be inserted in the Moodle site of a module displaying all the tweets in relation to that hasgtag, as shown in the figure:



> " The objective is to allow the students to post and answer questions outside the classroom in an easy and dynamic way"

IMPACT:

- This initiative was tested in small classes formed by 2nd, 3rd and 4th year students, with a significant presence of international students in 4th year.
- In the initial reaction from the students, hesitation about communicating with a lecturer using social networks was observed.
- The result was a poor acceptance and usage by the 3rd and 4th year students, and slightly better by the 2nd year students.
- The small class size led to more questions being asked during the lectures, reducing the necessity of asking questions after class. Thus, a similar study in a large group should be conducted.
- An active usage of Twitter by the lecturer was found completely necessary to motivate an interest and reaction from the students.
- Despite the low acceptance in its first implementation, it is believed that this joint application has the potential to create a dynamic Q&A tool. In addition, large classes could further apply it to in-class activities such as live debates.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Investigating Case Based Multiple Choice Questions for Assessing Large Group Teaching

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- The practice of assessments at Third Level is extremely important and rarely disputed.
- However, assessments do raise problems when class size tends to increase and the format/type of assessment required may need adaptation in order to assess student's knowledge and level of understanding.
- This research investigates the perceived level of learning and impact of case based multiple choice questions for assessing large groups.

"Assessment makes more difference to the way that students spend their time, focus their effort, and perform, than any other aspect of the course" (Gibbs, 2010).

HOW IT WORKS:

- The focus of the literature was on the role of assessments, challenges for lectures and the advantages and disadvantages of technology and MCQ's on large class assessment.
- Three stage Methodology was adopted using exploratory research:
  - Stage 1: Interviews with Undergraduate Lecturers within the School of Business
  - Stage 2: Questionnaires with Undergraduate Students
  - Stage 3: Focus groups with students.

IMPACT:

Practice

- Students: Deeper reflection and thinking required in completion of case based MCQ over listed MCQ.
- Lecturers: An efficient and resource benefiting form of assessment.

Theory

- Contribution to the Irish Journal of Academic Practice (June 2014).

OUTPUT:

- This research provides a Guide for lecturers who wish to use case based MCQs for large class assessment.

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Smartphones, Student Response Systems & Distributed Classrooms

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OVERVIEW:

- Smart phones can be used as a student response system that, in comparison with existing solutions (such as clickers), offers:
  - free form input, via sketches
  - improved portability, given that many students own smart phones
  - suitability for a distributed classroom, as long as Wifi is available.

HOW IT WORKS:

- Lecturer poses a question. Students use the app on their smart phones or tablets to sketch and submit a response. This is sent to a database stored on Google App Engine.
- Lecturer obtains and views all responses on their tablet, in real-time, and can select any response for further analysis. Lecturer may also send edited response to all students.
- This system was tested in a distributed classroom between DCU and NUIM.

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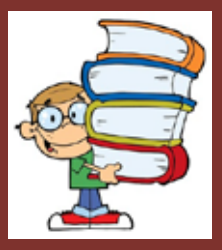
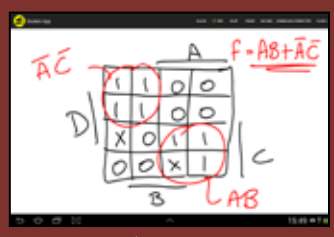
"a nice way of learning"
"makes lectures more enjoyable"
"liked the freedom of drawing"
"less worried about answer being wrong"

IMPACT:

- Students rated smart phone based system very positively. They noted that the anonymity offered by the system allows them to answer questions without the fear of getting it wrong.
- System worked well in the distributed setup with no issues regarding delays, etc. reported.
- DCU lecturer noted that this system provided a great way to break up the conventional lecture and captured the interest of the students almost instantly.





NUIM & DCU students

cloud service

DCU lecturer

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"The Social Construction of Identity in the Primary School" B Ed Year 2

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STUDENTS LEARN:

- **To** recognise the multi-storied, fluid nature of identity and the impact of the teacher pupil relationship on children's identities.
- **To critically reflect on how language and discourse shape the identity of children.**
- **To recount actions they have taken in the classrooms to re- author children's stories guided by Narrative Practice [White 2007].**

QUESTIONS TO EXPLORE:

- **Who am I? Who is this child? Which stories do we speak about and which stories are hidden and why?**
- **What are the normalizing discourses in this school and what are their effects? Who do they serve? How do they operate and where is the resistance?**
- **How can I create learning contexts, documents and performances to support preferred identities? How do I involve parents in this?**

"Every time we ask a question we generate a version of a life"
David Epston

IMPACT:

- **"I will be extremely conscious of how easily a child's reputation can be put into disrepute through the words of a single teacher"** ***SInead***
- **As a future teacher I want to develop a Queer Eye."** ***Louise***
- **He started believing that he did belong sitting in the group and that he could do his work just like other children. Watching this child grow as a result of the "new stories" was truly inspirational."** ***Meghan***

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Building Mathematical Knowledge for Teaching (MKT)

for Pre-Service Mathematics Teachers — 3U funded research project with second year BSc Mathematics Education students

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OVERVIEW:

- To what extent are pre-service teachers aware of the variety of mathematical tasks involved in mathematics teaching?
- Can pre-service teachers' levels of MKT be raised through a taught unit that focuses on the reflective study of classroom practice?

HOW IT WORKS:

- Pre and post test of MKT using items from *learning mathematics for teaching project*, University of Michigan
- Content knowledge workshops
- Critical reflection on maths teaching and learning using video analysis
- MKT development workshops
  - Analysing maths problems using levels of cognitive demand framework
  - Writing maths tasks for higher levels of cognitive demand
  - Using design research to explore conceptual understanding

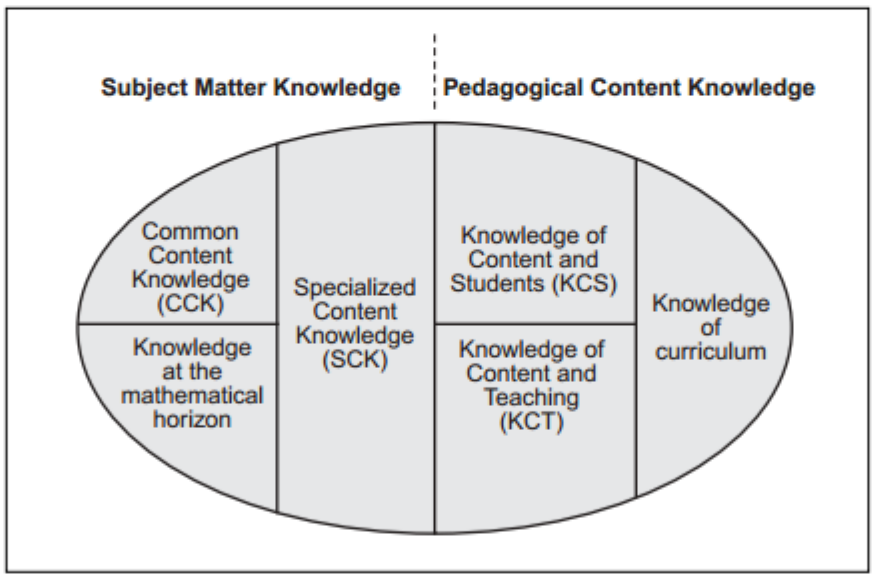

Figure 1. Domain map for mathematical knowledge for teaching.

How I was taught: *The teacher just put an example up on the board and then we were all given questions similar to that to do and then we got a couple for homework and we just kept repeating it like that.*

IMPACT:

Change in view of maths teaching

Being able to strip the problem down to the core difficulty and slowly build up and work with student math levels

Need to allow students to come up with the solution themselves rather than the teacher saying the answer

Increase in Maths Knowledge for Teaching

We need to be able to explain tasks and actions that we 'just know'

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MAYNOOTH EDUCATIONAL TECHNOLOGY SHOWCASE

"Carnival breaks us out of coded roles... it ***sets free*** our ***spontaneity*** and ***creativity***.
It allows ***free reign*** to the ***imagination***."

Charles Taylor *A Secular Age* (2007)

The Maynooth Ed Tech Showcase (METS) Carnival of Creative Learning is an initiative of the Education Department and the Centre for Teaching Learning (CTL) in NUI Maynooth and is supported by the Professional Development Service for Teachers (PDST).

Inaugurated in 2011, and aimed at student teachers, METS CARNIVAL takes place during Reading Week of second semester. This Spring-time 'Festival of Misrule' allows us escape the routine and constraints of regular class timetables and ushers us into a new imaginative space.

Creative, colourful and slightly chaotic, METS enables student teachers to integrate technology into teaching and learning in innovative, engaging ways, to share ideas and to link with other educators and Ed Tech entrepreneurs. Most of all it is about combining learning and fun.

Techno Carousel

Where groups of students listen to a series of presentations outlining various creative uses of technology in the classroom.

Shooting Gallery

Ten parallel hands-on workshops focusing on multi-media production (animation, digital video, photography etc.) and game-based learning across the curriculum.

Games Arcade

Invited EdTech companies and entrepreneurs showcase apps and publications in the informal atmosphere of a technology fair.

High Wire

Ten parallel workshops focusing on cloud computing, with hands-on practice using online collaborative tools, web applications and social networking for teaching and learning.

Hall of Mirrors

No student teacher experience would be complete without an opportunity for reflection!
In the final session of the day we evaluate METS and listen to a keynote presentation from a leading EdTech educator.

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Virtual Helpdesk for Organic Chemistry(VHOC).

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Ollscoil na hÉireann Má Nuad

OVERVIEW:

The principle aims of the virtual helpdesk for organic chemistry are:

- To provide support for 2nd year undergraduate chemistry students in a friendly , relaxed and informal manner.
- To respond to student queries within 24 hours.
- To create a sense of community within the 2nd year group.

HOW IT WORKS:

- A virtual email helpdesk was established for the 2nd year organic chemistry module CH201.
- An email query is received from one CH201 student .
- A reply to the query is sent to all students taking CH201. The identity of the student who sent the original email is withheld.
- The reply to all CH201 students is sent within 24 hours.

> "Found this particularly helpful, especially when the exams were near. Think it would be an excellent idea to have in other modules. Many Thanks."

IMPACT:

- Feedback was sought from CH201 students after completion of CH201.
- All respondents felt VHOC helped their understanding of the material.
- All respondents felt VHOC helped their preparation for the written examination.
- Some, but not all, felt VHOC helped create a sense of community within the 2nd year group.
- All respondents would like to see VHOC used in other modules.

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Exploring learning expectations and experiences on taught Masters programmes.

Using the psychological contract lens.

NUI MAYNOOTH
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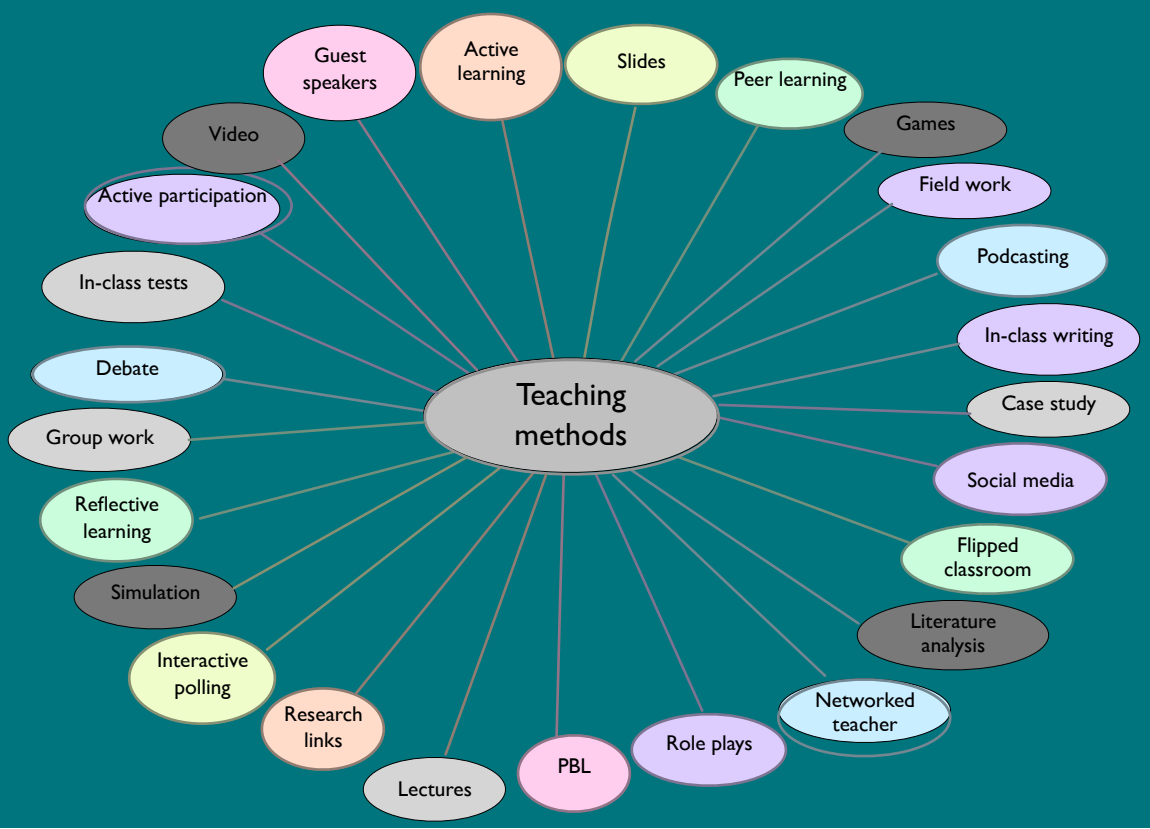
OVERVIEW:

- Psychological contract: the tacit assumptions that are held on the part of members of an organisation (Cornelius, 2001)
- Application to teaching & learning context
- Expectations of students :
  - On application
  - On commencement
  - Throughout learning experience
- Experiences of students:
  - During academic year
  - Multi-method data collection
    - Focus groups
    - Surveys
    - Interviews
    - Expert input (professional body)
    - Teachers/facilitators (lecturers)
    - Programme director
    - Reflections
- Analysis of themes via MAXQDA

HOW IT WORKS:

- MAXQDA: mixed method data analysis tool
- Ability to code and link data elements
- To build sub and meta-themes
- Giving importance to each method
- Able to trace dynamic factors influencing learning experiences
  - Learning styles, Teaching methods, Learning environment (time & space), Internal supports, External context



RECOMMENDATION:

- Variety of teaching methods essential in full day block teaching

> 'There was that room to discover things for ourselves. We were able to see where a lot of the activities fed into real life, the real world approach of HR, where it's not just regurgitating something from a stand from a single speaker for 8 hours. The variety, the different approaches has been fantastic…, definitely engaging.

IMPACT:

- Sharing variety of teaching methods & best practice
- Multiple factors impacting on learning expectations and experiences
  - Macro (e.g. employment prospects, accreditation, competitive courses)
  - Meso (e.g. university facilities, supports)
  - Micro (e.g. individual learning styles, teaching methods…)
- Evolving psychological contract
  - Ongoing maintenance essential for expectation – experience alignment

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Inquiry Based Biology Teaching And Learning

NUI MAYNOOTH
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OVERVIEW:

- This is a new module introduced in 2013/2014 for B.Sc. Education students.
- The aim of the module is to explore best practice for teaching experimental Biology in secondary schools - with a specific focus on the prescribed Leaving Cert. Senior Cycle Biology Experiments.

HOW IT WORKED:

- Lecture-based sessions led by Biology and Education Department personnel.
- Students (2-3 in a group) prepared a curriculum plan for teaching one major Biology topic over 10 class periods.
- Students (2-3 in a group) prepared and peer-taught one major Biology experiment from the LC syllabus.
- Each group assembled a comprehensive portfolio relating to their taught experiment - including a risk assessment, a list of required equipment and reagents, a lab preparation plan and a teaching plan.
- Each group made a 10 minute presentation that reviewed and assessed their lab-based teaching experience.

Teaching in front of my peers was an extremely daunting experience, however I felt my confidence soared greatly.

During this module I made so many new friendships. I also have learned so much with respect to Leaving Certificate Biology. I now feel much more confident going in and teaching any of the practicals to a class.

OUTCOMES:

The students gained the skills and the confidence they required to go out and teach Biology experiments in their schools.

Student feedback indicated they spent too much time on curriculum plans.

The "new improved" module next year will place more emphasis on content knowledge relating more directly to the labs and encouraging students to think "beyond the experiment".

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Development of Lab. Based Practical Teaching For Sci. Ed. Students

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Fourth year Science Ed. students were not previously taught the Leaving Certificate Chemistry practical curriculum.
- In excess of 40% of the Leaving Certificate exam is practical based.
- Our Science Ed. Students are now fully trained and have resources on the entire practical component of both Junior and Leaving Certificate Chemistry, a skill no other teacher training course offers.

HOW IT WORKS:

- Each group of Students were allocated several practicals, which they studied, planned and researched.
- Each group spent a day in the lab preparing and trouble shooting these practicals. They then developed innovative ways of teaching the principles and processes.
- Over two day long sessions, each group demonstrated their allocated practicals to their peers and invited guests.

"This was easily the most valuable module I have completed in my four years in Maynooth" "I learned loads" "Brilliant"

IMPACT:

- Fourth year Science Ed. students are now fully versed in all of the Junior and Leaving Certificate Chemistry practicals.
- Students have a complete and permanent record of lab preparation plans and reviews for every experiment on Junior and Leaving Certificate Chemistry practical courses.
- Potential of Junior Certificate outreach Chemistry laboratory program was successfully trialed.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Using Multimodal Technology to Bilingually and Critically Explore Literature for Children

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW *FORLÉARGAS*

Dual-language pedagogy, assessment and content in a final-year elective module.

Y4 B.Ed. students collaboratively created bilingual video footage to introduce, contextualise and analyse the set texts for the elective.

Students developed their digital literacy skills and critical engagement with primary and secondary sources through the leading and managing community of learning on the elective's bilingual electronic discussion forum.

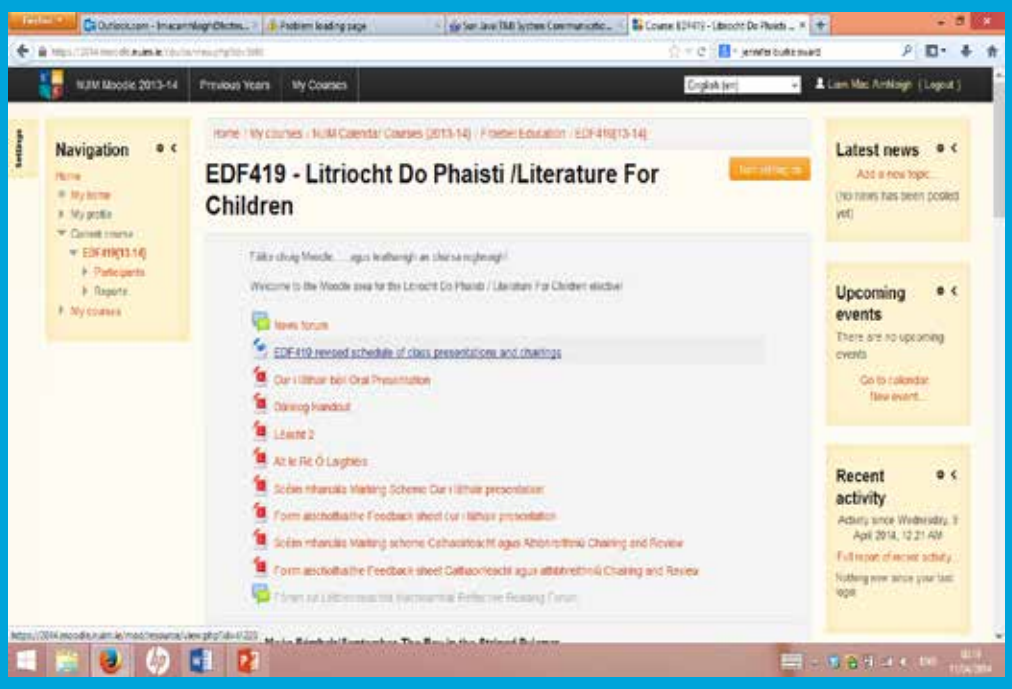
HOW IT WORKS *FEIDHM*

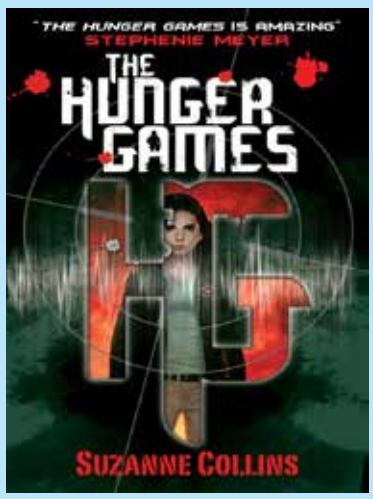
When? **16 sessions during 2013/14 academic year**

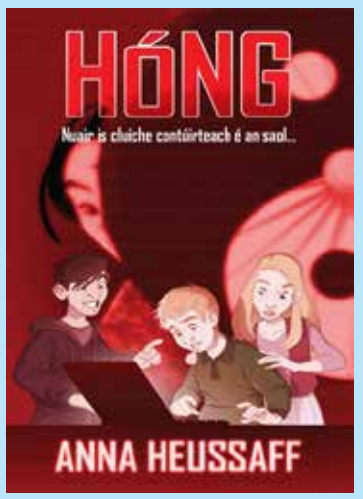
Who? **Elective group of 4th year B.Ed. students**

What? **Students read 5 texts for young readers in both the English and Irish languages and critically engage with a variety of secondary literature in order to explore their praxes and identities as advocates for children's literature**

How? **A multimodal and blended-learning approach to analysis and discussion of the texts via the creating of video commentary, student-led moderation & management of an online discussion board and in-class discussion**







IMPACT *TIONCHAR*

- **The elective's interactive, blended and enquiry-based approach both scaffolded and challenged students to draw upon their in-class and online critical conversations to inform and enrich their pedagogical philosophies around the potential of children's literature for teaching and learning**
- **Students saw a true bilingual approach in action, and experienced a thematic exploration of literature in both languages**
- **Guest speakers, and an off-site cultural visit to organisations supporting/promoting bilingual literature further enriched a deeper analysis**

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Colour-coding, Graphics & Focus Icons as engagement tools for harmonic language learning

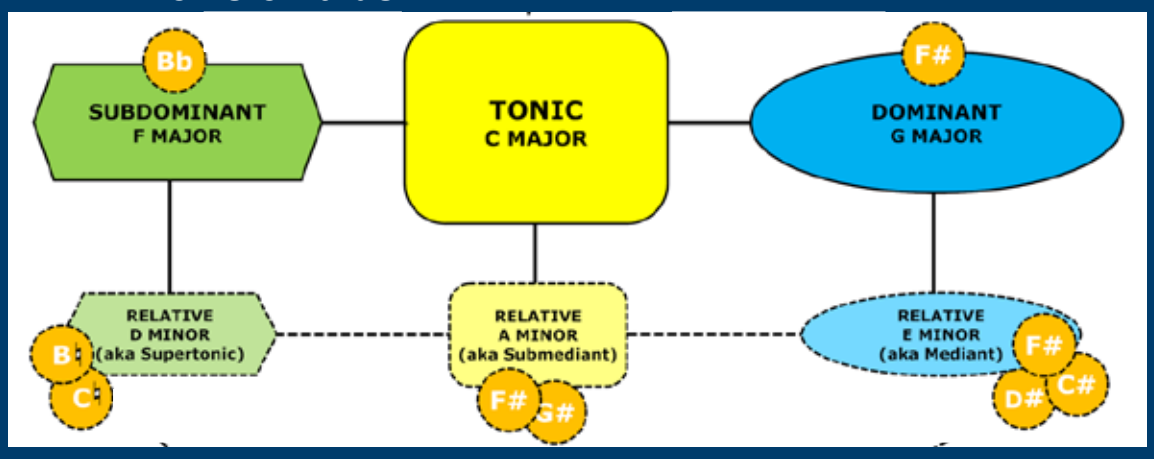
NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

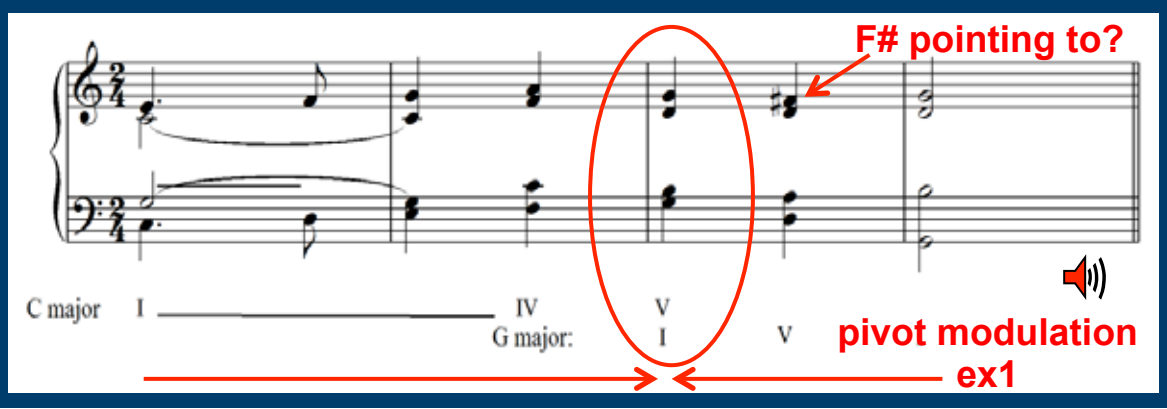
OVERVIEW:

- Harmonic language texts tend to consist of large volumes of information displayed in black & white text with very little graphics apart from musical score extracts
- This has a negative impact on student engagement with material & their overall learning experience
- I attempted to address this issue by introducing colour-coding, graphics & focus icons in a number of 1st & 2nd year harmony & technical modules

HOW IT WORKS:

- Colour-coded materials create visual & memory links between individual module content & material from year to year
- Graphics (e.g. tables, figures) are employed as instructional tools, memory aids & summaries
- Focus Icons point to common errors, tips for practical application, self-assessment & revision aids





Colour-coding, graphics & icons appeal most significantly to visual learners, but I have found they serve to enhance the learning experience for all students.

IMPACT:

Positive:

- Student engagement with harmonic language materials has increased
- Colour-coding, graphics & icons made materials more manageable to study & revise; students found they retained more information as a result
- Overall, students performed better in assessments & examinations

Negative:

- The design & preparation of materials was time-consuming but ultimately rewarding due to the success of the initiative

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TIP1: For a Modulation to occur, at least <u>one</u> accidental or new note must be included

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Inter-disciplinary field trip Kilkenny Campus

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Thirty five students went on an Inter-disciplinary field trip to the former site of the Kilkenny Union Workhouse which has been re-developed into a modern shopping plaza combining a mix of retail, residential business and leisure development.

. The visit was an opportunity to explore the applied nature of the disciplines and allowed students to appreciate the significance of the site in a local and global context.

HOW IT WORKS:

- Students given preparation work from a range of subjects prior to the trip

- On the day students given an presentation on the history and development of the site
- Students split into groups and conducted subject related field work assignments set out by lecturing staff

- The students applied concepts and theories to their completed field work and presented their findings at a follow-up seminar

> "I had never looked at a shopping centre like this before, it really put what we are learning into perspective" F. McDonnell(Student)

IMPACT:

- Students evaluated the field trip site through the lens of a variety of disciplines. They were able to transfer and apply key theories and concepts from their classroom based learning into a real world situation

- Students were able to examine and evaluate the similar and different approaches of each discipline to a specific subject matter

- Staff were able to apply the real world examples back into classroom learning which fostered greater debate and engagement

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Class research project: 4th year practical in animal behaviour

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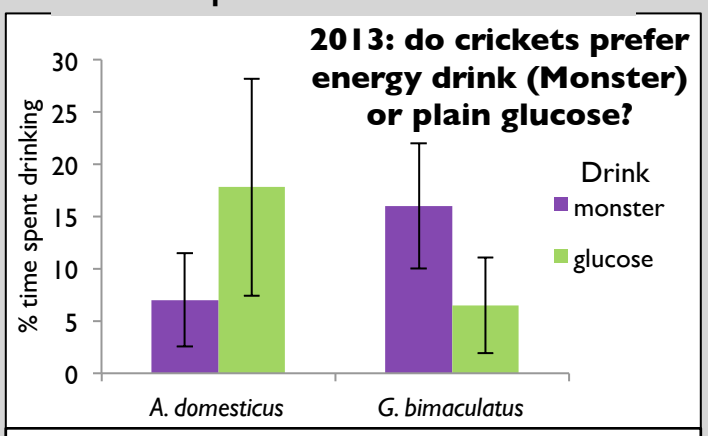
OVERVIEW:

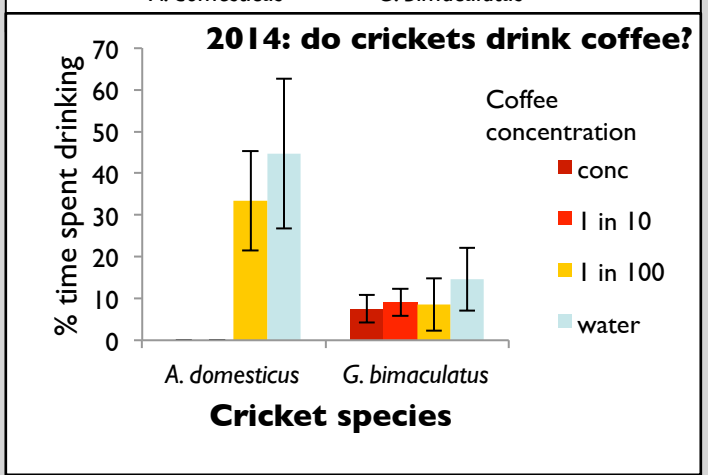
- As part of an Advanced Practical in Behavioural Observation, 4th year students (who are not doing individual research projects) get experience of planning and carrying out original research as a class
- Students suggest questions and the class decides which ones to address. In recent years, they have studied the behaviour of crickets with respect to alcohol (2012), energy drinks (2013) and coffee (2014)

HOW IT WORKS:

- Following training in generic techniques (session 1 of 3), students are familiarised with live insects, decide on a research question and plan 1-2 class experiments (session 2)
- In session 3, the class carry out the experiments in pairs (replications) ; class results are pooled (examples below) and posted on Moodle
- Each student writes a report incorporating their own pair's results in detail and class results in summary

Examples of class results





"Although I do not intend working in animal behaviour, learning how to design experiments will be useful in my future career" (2012 student)

IMPACT:

- Students learn generic skills associated with experimentation including replication, blocking, and use of appropriate controls, and are encouraged to think critically
- Students are engaged by working with live animals and coming up with their own questions. They have made some surprising findings, such as the acceptance by *Gryllus bimaculatus* (but not *Acheta dometicus*) of very strong coffee; this encourages critical evaluation, interpretation and discussion
- This practical shows how a class of 30+ students with one tutor can do original research in 9 hours practical time

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Video tutorials to teach *Introduction to Computer Systems*

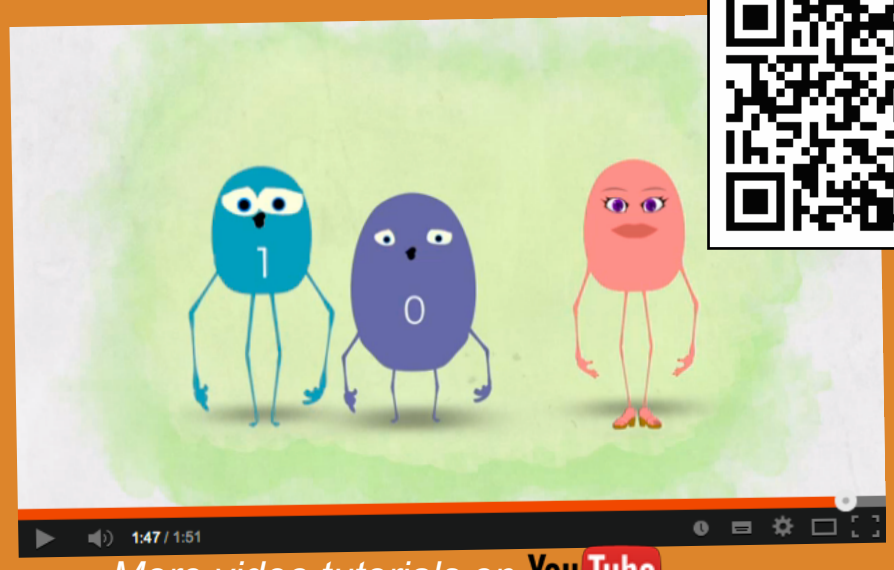
NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- This year, 353 first year students took *Introduction to Computer Systems*. One of the difficulties with such a large group was to find the right pace for the lectures, especially with students not yet accustomed to university course format.
- Students were eager for more tutorials which were difficult to organise due to timetable constraints.
- My solution consisted of augmenting the course material with video tutorials that reviewed the theory shown in the lectures along with exercices and their solutions.

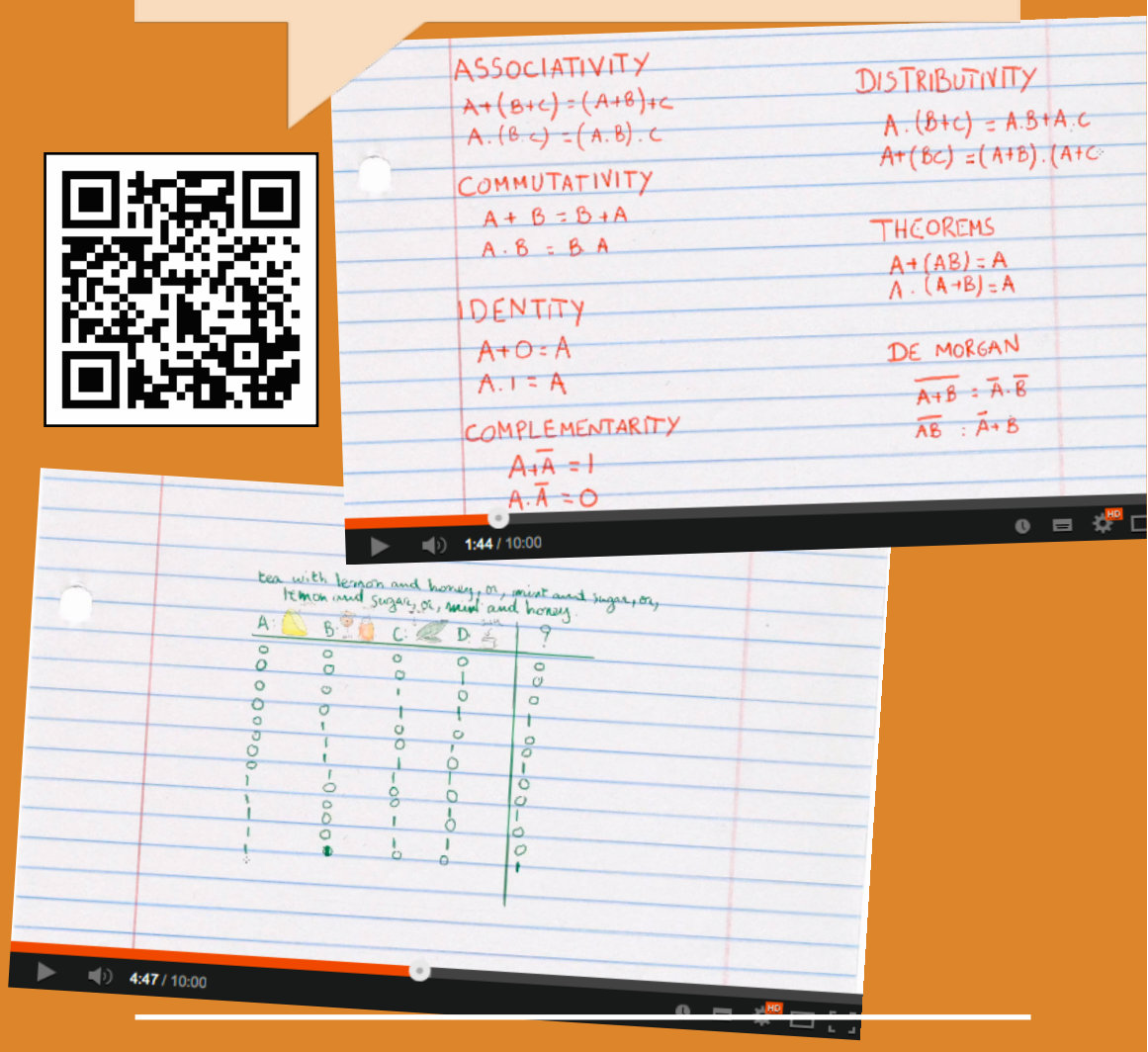
HOW IT WORKS:

- 6 videos posted on moodle, between 5 and 10 minutes each, for every component of the *computer architecture* part of the course content.
- In these videos, I start by reviewing the theory, I give an exercice and I show the solution. The students can pause and take notes at their own pace.
- As a bonus, I have also created 2 short cartoon animations to introduce the Internet TCP protocol.



More video tutorials on YouTube
https://www.youtube.com/channel/UCQO40-bKMkA_IAteY69wb-g

Scan the QR tags with your phone to watch the videos



IMPACT:

- The videos on the YouTube channel received more than 2000 views (between 200 and 400 per video) showing a real interest for this type of course material.
- Each year, new videos will be added to the collection with a strong focus to encourage student engagement.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Computer Science Programming Support Centre

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Ollscoil na hÉireann Má Nuad

OVERVIEW:

- The Programming Support Centre (PSC) was launched on the 5th February 2013. The goal of the centre is to provide support for ALL students participating in first year Computer Science modules. The PSC aims to provide support for students at all levels of learning through largely peer-based one-to-one and small group sessions.

HOW IT WORKS:

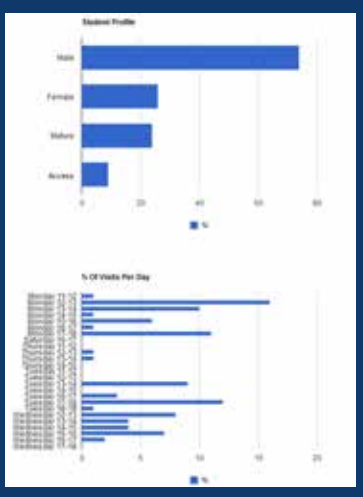
- The PSC runs for 10 weeks each semester – 8 hours / week. Additional hours may be added during exam times.
- The centre is coordinated by two staff members and two postgraduate run and manage it.
- Volunteer 2nd year tutors work in the centre. These tutors are selected based on their 1st year grades in CS. These tutors undertake training at the start of each semester. This training involves informing the tutors of their duties and watching role play videos of possible scenarios in the centre. These videos were created with the aid of CTL.
- A logging system is used to record all visits and visitors to the PSC. A learning path is created for students who are recommended to come back again.
- A bank of resources has been created for students to independently work in the PSC including self-paced and video tutorials.
- The PSC caters for stronger students as well as the weaker students. A number of competitions are run through the PSC, for example, Weekly challenge, Lego Mindstorms, Robocode and Programmathon competitions.

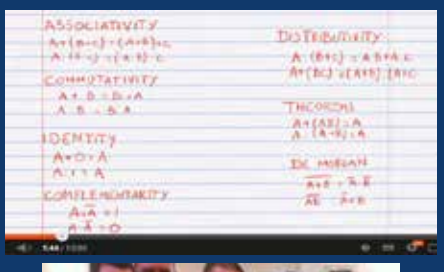
STUDENT FEEDBACK :

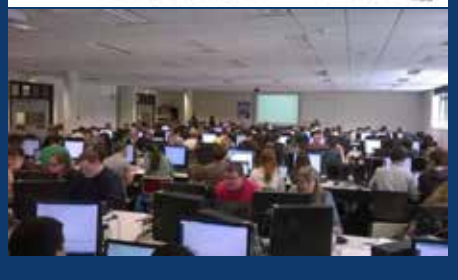
It gave me confidence.
I found out it was ok to struggle.
Helped me to realise I understood more than I thought I did and to try not to over think things.
It gave me a better understanding of what I was doing.
It helped me do things I wasn't able to do before I went in.
When I was ahead of the class I was more confident about upcoming labs.
You are able to ask any questions you want.
The help I received there was extremely good. Also, most of the time it was one to one teaching so I was able to get more time with the demonstrators.

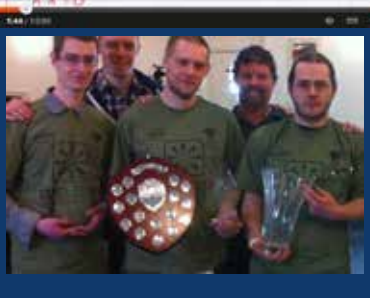
IMPACT:

- 186 students registered with the PSC. 618 visits were made up to May 9th – these do not include visits for the competitions.
- Very positive feedback.
- 2013 Robocode Ireland winners, 2014 Robocode Ireland semi-finalists.
- 141 students took part in the Programmathon run by the PSC.
- Tutors create guidelines to help tutors in future years.









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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Facilitating Transfer in the Writing Centre Setting

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

Writing transfer is the capacity to take writing processes, skills, knowledge and dispositions, which one uses in one context, and to successfully employ them in another.

The purpose of this project was to examine how we can promote transfer and thinking about transfer with students before and after one-to-one appointments in the Writing Centre.

We also hoped to assess the effectiveness of our efforts to promote good writing transfer in the Writing Centre setting.

HOW IT WORKS:

The research involved participants answering two questions - one at the start of the one-to-one appointment in the Writing Centre and one at the end of the appointment.

The questions were about writing transfer which we explained to students means the extent to which someone can draw on existing writing processes and experiences to help him/her with new writing projects.

‘What I am going to use from today’s session is that when I want to write something, it might help me if I speak it first …’

IMPACT:

We are still exploring our data but so far we can say that:

- Asking students about transfer helps them to connect their previous writing, in terms of audience, purpose and/or genre, to the writing they are working on in the one-to-one.
- Asking students about transfer helps them to build a vocabulary that they can use to talk about their writing.
- Conversations about writing transfer help students to explore their general writing behaviour as well as their specific approaches to writing.
- Emphasizing transfer reinforces the Writing Centre’s learner-centred pedagogy.

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INSTALL

Innovative Solutions To Acquire Learning to Learn

NUI MAYNOOTH

Ollscoil na hÉireann Má Nuad

OVERVIEW:

- **INSTALL (*Innovative Solutions to Acquire Learning to Learn*) promotes acquisition of the key competence 'Learning to Learn (L2L) in HE by developing and implementing an innovative group training process called Narrative Mediation Path (NMP), targeted at disadvantaged students. The NMP is based on the psychological concept of mentalisation (as the ability to understand oneself or someone else's mental state) to develop and enhance L2L.**

- **Mentalisation allows individuals to become aware of their, and others', mental state (thoughts, beliefs, emotions, wishes, motivations) and recognise, elaborate and modulate emotions throughout the learning process. A 'Reflective Competence' is developed as students increase their ability to Mentalise.**

- **The objective of this programme is to encourage learners to think about their own learning experiences in order to understand more about how they themselves learn and how they can improve their own learning in the future.**

HOW IT WORKS:

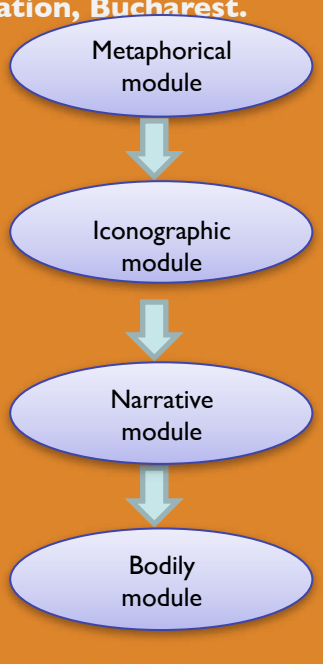
40 participating students from a mix of disciplines applied to attend a 6 week training programme designed to develop their Reflective Competence, using the NMP methodology.

This NMP methodology comprises 4 modules:

- ***Metaphorical***
- ***Iconographic***
- ***Narrative***
- ***Bodily***

The NMP methodology was tested and validated throughout the project by partners and associated partners (external).

Project details: EU funded, 30 month project, completed in March 2014. E.U. partners: University of Frederico II, Naples (lead partner), University of Seville, and the National School of Political Studies and Administration, Bucharest.



…A pilot study to promote the key competency 'Learn-to-Learn' among a group of 40 participating students…

IMPACT:

- **The students reported feeling more confident about their studies and indicated that they were likely to, or had already begun to use some of the strategies introduced in the NMP sessions in their own studies.**

- **Many of the students also liked how the sessions provided an opportunity to meet other students who had also experienced academic challenges (e.g., preparing for exams), and that they could share their experiences and what they had learnt from these experiences, with each other.**

- **A Reflective Functioning instrument developed by the lead partner (Italy) was administered at the beginning and end of this programme to measure 'Reflective Competence' among participating students as a result of attending this NMP training programme. Scoring is still with the lead partner, results are expected soon.**

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This project has been funded with support from the European Commission. The reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

NSTEP – Interdisciplinary Communication Skills

- facilitating students from different disciplines to learn with, from and about each other.

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OVERVIEW:

The initial goals of this project were to research and develop an interdisciplinary communication skills module template plus detailed guidelines on how to adapt and integrate such a module into existing higher education programmes. The target for the proposed initiative was existing undergraduate and postgraduate STEM programmes whose directors/coordinators recognize the value of such skills and who would be willing to adapt their existing content and delivery mechanisms in order to integrate such training..

HOW IT WORKS:

In order to learn more about this area we conducted a literature review, ran a survey with staff from our three institutions, and held two focus groups.

Our work has led us not to develop a template, as planned, but rather we have begun to draft guiding principles for the integration of communication skills including some 'critical literacy skills' into UG courses. These could be used in curriculum design or planning, in teaching, and/or as part of evaluation.

'I'm on the verge of a major breakthrough, but I'm also at the point where physics ends and chemistry begins, so I'll have to drop the whole thing.'

Sidney Harris.

IMPACT:

We are drafting guiding principles which we will use in a pilot module this summer. These include the following ideas: that UG students first need to develop discipline specific expertise; that communication is a key part of collaborative, peer learning; that all parties – teachers and students – need to recognize communication skills as valuable; that enquiry should be at the heart of interdisciplinary learning; that the teaching and learning of communication skills is a process that might well be phased throughout a programme and not confined to a specific module; that in contemporary society where 'wicked' problems need to be solved interdisciplinary communication is essential.

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Dr Dermot Brabazon, Dublin City University
Dr Kevin Casey, Dublin City University
Dr Anne Jordan, Independent Researcher
Dr Judith Strawbridge, Royal College of Surgeons in Ireland

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Peer Teaching and Learning Evaluation of Threshold Techniques in Organic Chemistry

NUI MAYNOOTH
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OVERVIEW:

- We aimed to equip students with threshold skills in experimental chemistry by offering a guided peer teaching opportunity.
- Students achieved a deeper understanding of laboratory techniques, and improved their experimental skills.
- Students gained essential skills of team working and delivering an oral presentations.

STUDENT FEEDBACK

- ✓ Thoroughly enjoyed it!
- ✓ Brilliant early experience
- ✓ Will help in our careers
- ✓ More of the same
- ✓ Responsibility key to progressing
- ✓ Nerve wrecking
- ✓ Exactly what is needed
- ✓ Builds confidence
- ✓ Bit scary and stressful

HOW IT WORKED:

3rd Year Chemistry students were assigned to teams of 5.

Each team was asked:

1. To prepare a pre-lab talk for their peers on an allocated laboratory technique and experiment.
2. To write learning outcomes and design a set of MCQ to assess their teaching and learning.

Each team received:

1. Scheduled advisory sessions with academic mentors and fellowship supported tutors.
2. Literature guidance from technical facilitators.
3. Pre- and post delivery feedback on their presentation and MCQ design.
4. Assessment of their efforts.

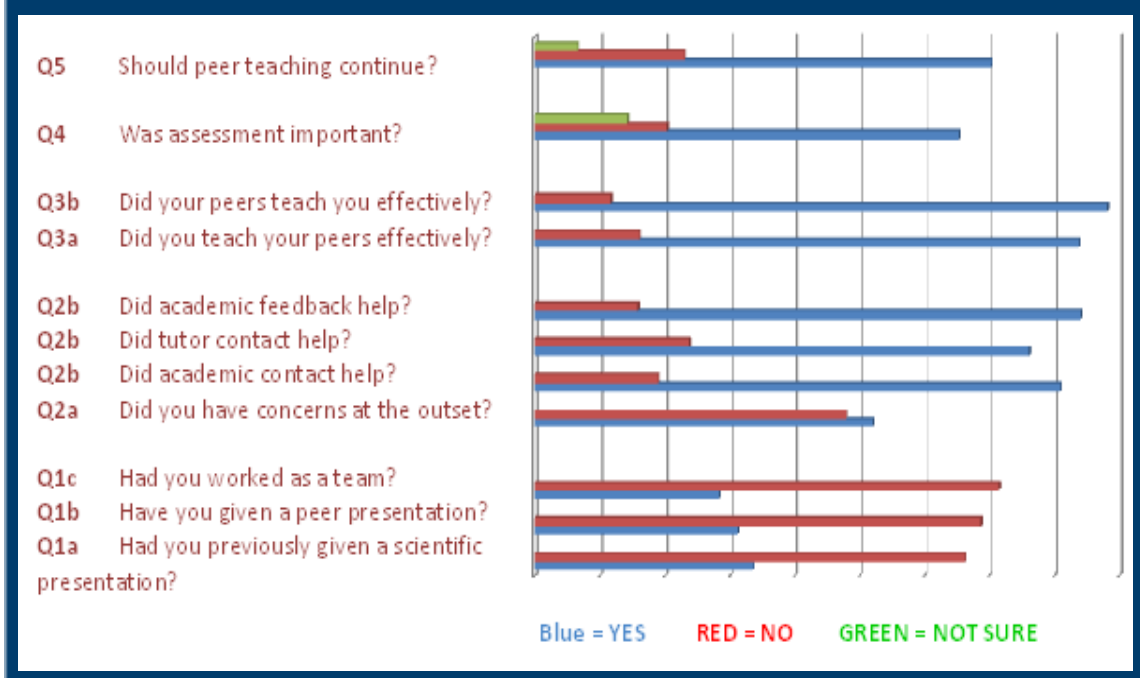

Figure 1. Analysis of student feedback

IMPACT:

Most students experienced an improved understanding of the topics and found the laboratory sessions more educational after the peer teaching exercise and MCQ design.

Students appreciated the opportunity to develop communication skills and to work as a team.

MCQ have been identified as a useful tool for assessment of experimental chemistry.

A " techniques portfolio" has been developed as a resource to be available *via* Moodle.

REFLECTION

Peer teaching offers both opportunities and challenges on a University, departmental and student level.

It is resource intensive and choices need to be made if such endeavours are to be appropriately implemented.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Professional Certificate in Teaching and Learning for Tutors and Demonstrators

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW

The Professional Certificate in Teaching and Learning has been developed by the Centre for Teaching and Learning to help tutors and demonstrators:

- Learn about various approaches, methods and strategies to support student learning.
- Feel more confident about their teaching.
- Share experiences, ideas and advice about learning and teaching with other tutors and demonstrators from different departments.
- Begin or continue their professional development as teachers through a process of reflection.

HOW IT WORKS

- Offered to all NUI Maynooth postgraduate tutors and demonstrators currently teaching.
- Participants attend a two-hour session each Friday throughout the semester.
- Discussion, group work, case studies and personal experience using the methods/ strategies (from a learner and teacher perspective) form the basis of the sessions.
- A departmental mentor is chosen to observe teaching practice and provide feedback.
- Five ECTS are awarded upon successful completion.

COURSE CONTENT

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Postgraduate Diploma in Higher Education

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW

- There is growing recognition that individuals engaged in planning, assessing and facilitating student learning in higher education should have the opportunity to achieve a qualification in teaching and academic practice.

- At NUI Maynooth, the Postgraduate Diploma in Higher Education (PGDHE) is a one-year, part-time course for current academic teaching staff, which is offered by the Centre for Teaching and Learning.

- Early career academics who are relatively new to higher education teaching and more experienced academics are all welcome to take part.

AIMS

The PGDHE is designed to help participants:

- Enhance their knowledge and skills concerning various methods and technologies to support student learning.

- Identify the range of factors impacting on learning and examine how they affect what happens inside and outside the classroom.

- Critically reflect on their teaching practice; identifying teaching strengths and areas for future development.

- Discuss general and subject-specific educational literature and consider how such evidence-based research might inform their own approach to teaching.

- Conduct their own research to explore innovative learning and teaching initiatives.

> "We will enhance our capacity for academic development, reflective practice, critical pedagogy and research into teaching and learning."
>
> **NUI Maynooth Strategic Plan 2012-2017, p. 19**

COURSE MODULES

Introduction to Learning, Teaching and Assessment in Higher Education

Topics include: Theories of learning; inquiry-based learning; large and small group teaching; creating learning environments; inclusive teaching; assessment issues (e.g. examination procedures and plagiarism); technology-enabled learning; reflective practice.

Theory and Practice: Developing Teaching and Learning I

Topics include: Module and course design; curriculum theory; group, peer and self assessment; blended learning; e-assessment and feedback.

Theory and Practice: Developing Teaching and Learning II

Teaching observations: peers; mentors; observer and observed.

Teaching and Learning Project

Individual action research project.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Student Plus

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

What is Student Plus?

- An initiative to support first-year students with their transition to higher education.
- Helps students to feel increasingly confident and prepared to undertake the types of learning activities typically encountered during their undergraduate careers.
- Piloted as a mainstream programme for first-year students in 2013/2014.
- Offered to students across subjects. Session content may be more relevant for Arts and Social Sciences students.

How does Student Plus work?

- 'Opt-in' – participation is voluntary.
- Students attend a weekly, one-hour, group-based session held in the Library, which is facilitated by a tutor.
- Group sizes of eight to ten students from various disciplines.
- Continued support in first year – sessions run throughout semesters one and two.

Session topics include:

What did students say about Student Plus?

"I look forward to the sessions because they give me a chance to ask about things that are bothering me."

"Explained college concepts in a more approachable manner."

"More specialisation towards different subject areas."

"I would really like to see this course continued into second year."

"The sessions are useful because they can point you towards relevant information and skills."

"Hearing how other students are handling their work, like essays, was beneficial."

"Some things I had already learnt along the way, yet these things helped reaffirm what I already knew."

"I liked how we addressed issues of our choice."

CONTACT

Student Plus is offered as a mainstream programme by the Centre for Teaching and Learning (Dr Úna Crowley, Dr Catherine Mahon, Mr David Martin) and the Access Office (Dr Rose Ryan, Mr Simon Ahern).

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Beyond Universal Design. A Social Model Approach

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Universal Design fills the Social model's approach for moving barriers .
- However it retains the medical model's expert led flaw ignoring those barriers identified by disabled peoples lived experience.
- By pursuing a radical access approach these less obvious barriers can be overcome.

HOW IT WORKS:

- Developed by combining a literature review with an autoethnography of both teaching practice and experience as a disabled person (dyspraxia)
- Develops on a Social Model Approach.
- Uses Universal design but continuously updates according to current student's changing needs. Rejects disablist terminology and addresses our social experience

On Universal Design: "The problem with this concept is that people and their needs change" (Withers 2012:118).

IMPACT:

- Democratising Universal Design through continuous feedback rejects a one side fits all approach to disability.
- Creates a disability safe space in the classroom by avoiding disableist terms such as crippled, e.g. the recession crippled Ireland's productivity.
- Draws on disabled people's experiences. Disabled people being used to reflect disability as a social relationship.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Innovative integrated learning

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- **The Centre offers programmes in Irish Cultural Heritage**
- **A feature of learning is integrated teaching across several disciplines**
- **Learning is focussed on field seminars with emphasis on student presentations**

On one trip we went to Cruachan, the seat of Medb and Ailill, and went into the "Cave of the Cats" which is also known as "The gateway to hell of Ireland". And it was amazing! Having the opportunity to visit those sites made the stories much more tangible for us and wakened our interest even more
Julia Osterreicher, Germany, 2014

HOW IT WORKS:

- **Each student prepares an aspect of the cultural heritage of a site or complex (such as Newgrange or the Hill of Tara)**
- **The field seminars involve interdisciplinary presentations by students, academics and invited experts, and extensive integrated discussion**
- **Further discussion and supervision is followed by formal written presentations**

IMPACT:

- **Students cement learning through independent study and direct interaction with the cultural heritage**
- **Across each programme several interconnected field seminars further anchor the integrated learning and provide a wider landscape context**
- **A unique learning environment is created with emphasis on independent study and on-site practical seminars which facilitate integrated discussion with peers and academic experts**

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Reading and Writing Sociology First Year Tutorial Programme

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

First year students attend small tutorial groups led by experienced tutors. Using active learning techniques tutors guide students towards critical engagement with texts . The focus is on the development of key fundamental skills for sociological reading and writing.

Tutorials provide the space for small group engagement with sociological materials and offer an opportunity to develop sociological awareness, to frame everyday experiences in sociological terms and allow students to be supported in their transition to third level education.

HOW IT WORKS: Tutorials are linked to core first year modules through a set of carefully selected readings designed to draw out specific skills. Tasks include asking students to use library technology to find sociological information and to reference and cite sources appropriately. Each student must play the role of discussion leader where they prepare written and oral presentations for the tutorial group. Students are offered an opportunity for self reflexive evaluation as participants in survey and focus group research on their experiences of the first year Sociology programme.

"Tutors help to personalise the subject and learning experience"

"First year tutors show great commitment and are the key point of contact with the teaching staff"

(Peer Review Report: November 2008)

IMPACT:

Through peer engagement and tutor support students identify strengths and weaknesses in their capacity to read and write sociology. They become familiar with sociological concepts and language . They learn the key techniques used to build an argument sociologically including referencing correctly. Students are supported in completing essay requirements and developing oral communication skills . Participation in tutorials is assessed in the final exams

CONTACT:

First Year Coordinator /Lecturer
Dr. Pauline Cullen
First Year Lecturers
Professor Mary Corcoran
Dr. Eamonn Slater
Dr . Aphra Kerr
Dr. Paul Ryan

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Interdisciplinary PBL Workshop At the Kilkenny Campus

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Students took part in an interdisciplinary workshop looking at the problems associated with the development of a community energy policy program.

- Different policy instruments were discussed and evaluated by drawing on cross disciplinary issues of equality, economics, culture, societal structures and governance.

HOW IT WORKS:

- Students were split into four types of community groups and given a detailed policy problem scenario to work on over two hours.

- Students discussed the scenario and types of policy approaches and were able to draw on the expertise of staff and invited guests

- Students had to evaluate the pros and cons associated with a range of possible policy options drawing on key themes and concepts of their subjects

- Students devised a practical policy solution and presented in poster format to the full group

"I found it an inspirational event, I was impressed by the level of awareness of students and the practical approach to finding community solutions"♪

♪ Cllr Malcolm Noonan, Kilkenny Co. Council♪

IMPACT:

- Students were introduced to an area of study outside their normal curriculum and encouraged to use key academic themes to solve a practical problem

- Students gained an awareness of how key concepts are applicable to real world problems and apply theory to practice.

- By trying to creating a practical policy response, students became aware of the complexity of the issues, the need for cross disciplinary approaches to social issues and the difficulties and benefits of collaboration

- Staff members were in a position to evaluate the students comprehension of key concepts.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

A Facebook Session : Answering Prospective Student Enquiries

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

Finding space to talk about an upcoming course and answer students questions is a continuous challenge. In an increasingly connected world Facebook offers us another medium that can be managed within very limited resources. With the help of the Communications and the Graduate Studies Office, the Department of Adult and Community Education were able to reach and interact with approx. 600 people to answer questions (see graphs). Two current students participated, making the session all the more real for prospective applicants.

• Examples of queries:

Vic Murphy "What is the idea of the course? Where does it lead"?

Nova Ni Dubhaigh "How is the course accredited"?

NIydon "I just read a current students comments …"

NOReilly "Hi, I'm looking at a H Dip in F Edu to boost my teaching skills …."

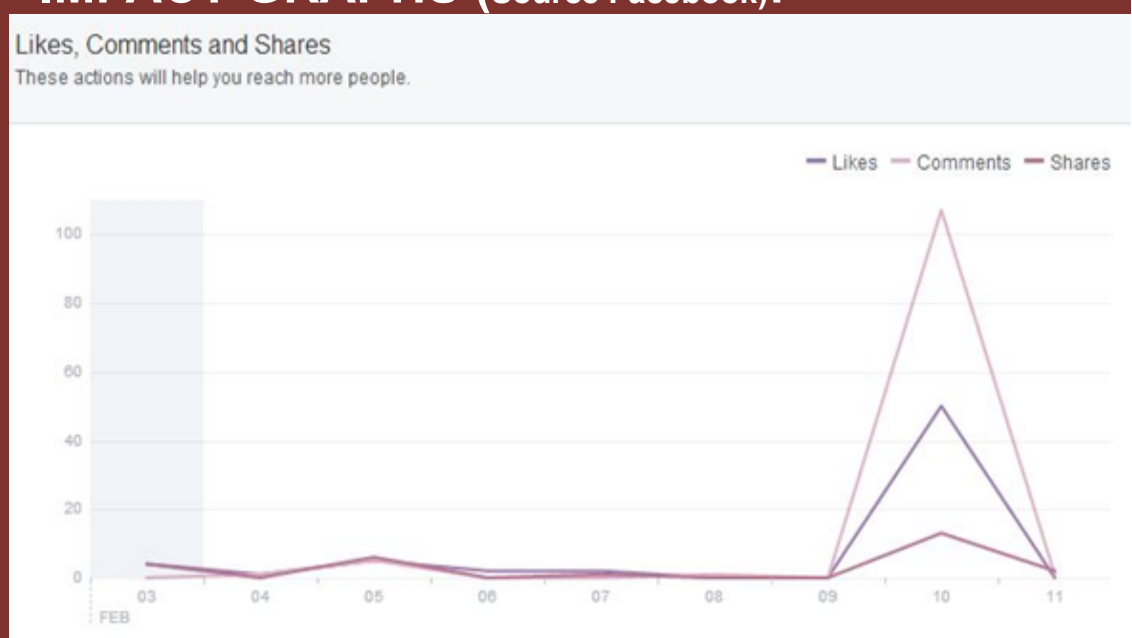
"it was great to be able to ask questions from current students."

"I could not make the face-to-face session so it was next best option."

HOW IT WORKS:

1. Plan session with the Graduate Studies and Communications Office.
2. Publicise information session on graduate studies website.
3. Convene on scheduled date at a computer to answer queries.
4. Follow-up on queries arising.
5. Have a face-to-face session planned to complement the facebook session.

IMPACT GRAPHS (Source Facebook):



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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Mathematics Support Centre

Department of Mathematics and Statistics

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- The MSC was established in 2007 in response to the significant numbers of students entering 3rd level without many basic mathematical skills.
- The main aim is to give students the opportunity to address their mathematical issues in an informal and non-judgmental atmosphere.
- The MSC is now one of the busiest in Ireland or the UK, with over 70000 visits since 2007.
- We are collaborating with and advising colleagues in Ireland, the UK, the USA and Australia who see NUIM's MSC as a highly successful and effective model to follow.

HOW IT WORKS:

- The MSC drop-in opens 22 hours per week during term. Students are encouraged to work in groups on problematic material, share ideas and methods which they have tried.
- Tutors go around the room and help students, but will not do their work for them.
- We have expanded to include free drop-in services for local secondary schools, on demand workshops for all (non-final year) students and study sessions for final years.
- We have received funding and developed online resources which are available from: http://supportcentre.maths.nuim.ie/resources

'I nearly failed LC maths and almost dropped out in my first week of college because maths terrified me. I am now definitely taking maths for 3rd year and I have been achieving brilliant results thanks to…support and encouragement of the MSC.' Science student, 2013-14.

IMPACT:

- Students who use the MSC regularly and appropriately do better on average than students (with similar mathematical backgrounds) who do not, and this is especially true for at-risk students.
- Evidence suggests that the MSC impacts positively on student retention and progression.
- Students who attend the MSC report a better attitude towards mathematics and they display more confidence in their own mathematical ability.
- Student interaction with the MSC has led to a number of research projects (on student behaviour and interventions to increase student engagement) and results have been published and presented at national and international conferences.

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Department of Mathematics and Statistics

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Using Library Metrics to Support Teaching and Learning in the Library

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

Overview

Knowall Enquire is an enquiry tracking software package which tracks all types of Library enquiries and generates statistics and reports *to improve the customer experience through self-directed learning*

Impact

? ? ? = A

The University community will have access to a very useful list of FAQs to assist them in their self-directed learning about the Library

Improvement of our Customer Service

***Enquire* allows ease of access to a wide range of Library staff**

***Enquire* will give the Library the ability to compare statistics nationally and internationally**

How it Works Using *Enquire*

- Student submits an enquiry face-to-face, online, email or via instant message
- The enquiry is then assigned to appropriate staff member

- Staff member replies to the student
- The answer is logged in Enquire

- The answer is automatically added to our FAQs
- This searchable online bank of answers supports self-directed learning about the Library

Contact

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Inclusive Learning Initiative (ILI) Peer Mentoring Programme

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

*The Inclusive Learning Initiative was set up in 2011 to provide learning opportunities and inclusive experience to students with intellectual disabilities in higher education. It is a collaborative programme with agencies that work with people with intellectual disabilities and NUI Maynooth. It ILI is about strengthening citizenship, recognition of student contribution to learning and the practical development of an inclusive university and society.

* In the same year the ILI Peer Mentoring Programme was established as a means of connecting students to their natural supports, fellow students, classmates , departments, campus support services in the university and wider community.

*The role of the student mentor is to work with staff and students to facilitate the implementation of the Inclusive Learning Initiative by providing support to enable students to feel safe, secure, confident and valued in the social and learning environment of the university campus.

t

I hope that someday in Irish society we will embrace every citizen based on their ability, not judged on their limitations. Individual potentiality is a gift we must utilise and apply to society for the common good.

Inclusive Learning goes beyond academic learning. It echoes self determination; selfhood, autonomy, hope and growth.

Barbara Barrett, ILI Mentor, Year 3, 2014

HOW IT WORKS:

Mentors undertake a variety of activities as a learning partner with the student in order to provide:

Subject and Learning
Supporting students to engage effectively in learning , assessment preparation, module learning .

Social Integration and Inclusion
Foster interpersonal interactions with peers and staff and support the integration of students into social activities on campus.

Systems Support
Development in navigating the campus environment and utilizing services, technical, personal and academic, available to students on campus.

Assistive Technology Support
Skills development through the use of assistive technology resources in conjunction with the student's learning goals.

Employment Support
Developing an individualized supported employment approach of working with the student, university staff and wider community representatives.

IMPACT OF THE INCLUSIVE LEARNING INITIATIVE IN NUI MAYNOOTH:

"In this project the student chooses the type of support that they want in their university life. The support is flexible so this allows the student to use supports when they want so then the student can be more happier in university". Ross Connolly, Student NUI Maynooth, 2014 .

- "For me the ILI is about recognition and collaboration - recognition that all individuals that join our campus community have the most wonderful contribution to make to that community which serves to enhance the university experience. Equally it serves to paint a picture of what an inclusive society truly can look like as both participants of the ILI and the peer mentors interact and collaborate within a social as well as an academic context and it is quite obvious that all involved are both earning and growing as individuals as a result". Ian Russell, Student Engagement Officer, NUI Maynooth.

- **"Universities must acknowledge diversity in order to educate citizens to live in an open and inclusive society. The Inclusive Learning Initiative is important because it challenges us to acknowledge diversity in our classrooms and beyond; it also changes the lives of those involved for the better." Dr Mark Maguire, Head of Department of Anthropology, NUI Maynooth.**

- "The ILI makes full inclusion and equality a reality for students with and without disabilities in NUI Maynooth". Christy Lynch, CEO , KARE Organisation and Founder IASE.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Cumas na Gaeilge don ábhar oide!

Irish language competency for the student teacher!

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

FORLÉARGAS/*OVERVIEW*:

- **An Fráma Tagartha Comónta Eorpach (FTCE) d'fhoghlaim teangacha a úsáid mar uirlis le féinfhoghlaim a chur chun tosaigh!**

- **Aischothú céimnitheach i bhfeidhm thar ceithre bliana .**

- **Dréimire de tháirsigh íosriachtanas cumais i labhairt agus léamh & scríobh na Gaeilge ó bhliain go bliain i dtiúin leis an bhFTCE.**

FEIDHM/*HOW IT WORKS*:

- **Déantar tástáil cumais labhartha agus i léamh & scríobh na Gaeilge i dtiúin le leibhéal B1 ar an bhFTCE nuair a thagann mic léinn chuig an Ollscoil ag tús na chéad bhliana den chúrsa B. Oid.**

- **Leagtar amach táirseach íosriachtanais ag deireadh bhliain 1 i dtiúin le leibhéal B1 agus ag deireadh bhliain 2, 3 agus 4 i dtiúin le leibhéal B2.**

- **Le céim B. Oid a bhaint amach, bíonn 70% de dhíth i dtiúin le leibhéal B2 sa labhairt agus i léamh & scríobh na teanga, ag deireadh bhliain 4.**

Fráma tagartha comónta Eorpach d'fhoghlaim teangacha	
A1	Bonnleibhéal 1
A2	Bonnleibhéal 2
B1	**Meánleibhéal 1**
B2	**Meánleibhéal 2**
C1	Ardleibhéal 1
C2	Ardleibhéal 2

An Mheitheal um Theagasc na Gaeilge ar an Triú Leibhéal

TIONCHAR/IMPACT:

- **Ábhar oidí agus múinteoirí níos cumasaí.**

- **Aitheantas i gcumas teanga na Gaeilge i dtiúin le scála Eorpach.**

- **Éascú ar fhoghlaim fhéinstiúrtha le sraith tascanna agus aischothú a chuireann ar chumas na mac léinn a scileanna féin a fheabhsú agus a mheas.**

I gcomhairle le hIonad na dTeangacha, OÉMN, a ritheadh an tionscnamh seo.

TEAGMHÁIL/CONTACT:

An Dr Liam Mac Amhlaigh
Léachtóir le litríocht agus teanga na Gaeilge, OÉMN
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Gabhaim buíochas le mo comhghleacaithe, An Dr Máire Nic an Bhaird, agus Fiona Nic Fhionnlaoich.

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

"Having a disability makes me a better teacher!" Experiences of disability and systems of support in initial teacher education

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- National data on participation rates in Higher Education suggests that students with disabilities (SWD) are underrepresented in the field of Education compared to other fields of study (AHEAD, 2012).

- As part of the Access Fellowship Award we explored stakeholders' experiences of disability in initial teacher education (ITE).

- We worked collaboratively to enhance the Education Department's support systems for student-teachers with disabilities.

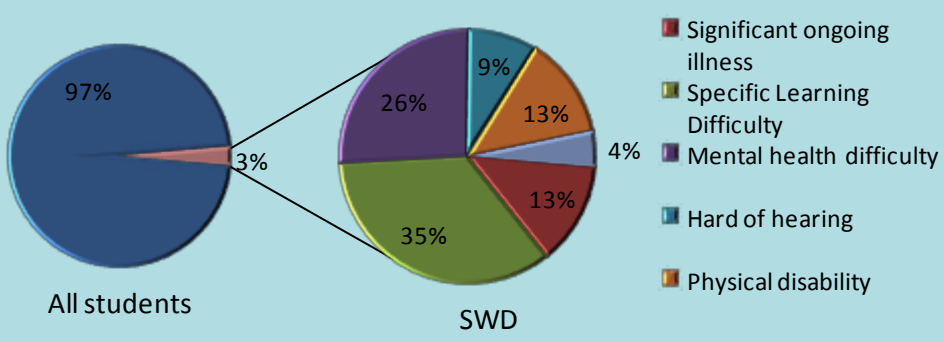
HOW IT WORKS:

- A national and international review on best practice support models for SWD was conducted.

- Semi-structured interviews were used to explore the experiences of stakeholders; including current and past students of the Education Department, school principals and school placement supervisors.

- Departmental documentation was reviewed, school placement job descriptions and self-assessment tools were developed to support the placement planning process for SWD.

Breakdown of % of students with disabilities in the Education Department's ITE programmes 2009-2014



*Figures only represent those who registered with the Access Office

'Parents say to me: "Your disability is getting my child points!" Because with me they have to project their voice and pronounce words properly'

(language teacher with hearing difficulty)

IMPACT:

- Ongoing awareness-raising of the value that individuals with disabilities can bring to the teaching profession.

- Development of Departmental guidelines for SWD and resources for school placement supervisors and tutors.

- Dissemination of findings nationally at conferences of the Educational Studies Association of Ireland (Apr. 2014) and the Psychological Society of Ireland (Nov.2014).

- Next steps include hosting a disability-awareness symposium and submitting our work for peer reviewed publication.

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Project Blue Book: Introducing a laboratory journal in to 1st year CS module CS142 Object Oriented Programming in Java

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Introduction and Purpose

The Blue Book CS laboratory practice journal was introduced in late in semester 2 during the CS module on Object Oriented programming in Java (CS142). The idea behind the Blue Book is to give students hand written exercises to move their learning away from directly inputting their programming assignment solutions straight into a computer.
In previous years we observed that the students were not able to heed advice about the best practice on how to first write programs on paper (develop algorithms and write code) before inputting it in to an editor.
This may be because student may feel that with the effort required by them to work with their computer software environment in order to get programs working that writing program code down first is an added unnecessary chore.
It was our conviction that by giving the students hand written assignments their learning would be enhanced in the following ways:

1 Provides time to reflect on the assignment question (instead of arriving at a solution through trial an error by inputting code into the Java IDE and receiving feedback through many cycles of compilation).
2 Gives opportunity to test their learning and understanding of the formal structures of the programming language.
3 Encourages the development of pseudo-code and diagrammatical representations of the data structure aspects of their programming assignments to support their learning.

This poster presents an example of a blue book exercises given to the students. It also presents interim feedback results from 130 out of 300 students who filled in a survey which asked them questions and for comment about the Blue Book exercise assignments.

Example Exercise

(2 a) Write the following in your blue book (Use 3/4 pages for this).

1. **Create a basic structure:**
   Write a basic class named **BlueTest2** with a class structure and a main method. Leave 2 pages of space for your main method as you will be adding to this.

2. **Add a method:**
   Note: You should add this method after 2 pages so that you have enough space to add code to your main method

   a. As well as having a main method, define one extra public static method with the following signature. **(See appendix D for a detailed explanation)**

   ```
   public static int toPowerOf(int a, int b)
   ```

   b. This method takes in two int values. Write some code to calculate the value of the first parameter raised to the power of the second parameter. **(Do not use the `Math.pow()` method!)**
   c. Store this in an int variable named **result**.
   d. The method should then have a return statement to return this result.
   E.g. **toPowerOf(5,2)** is 5^2 or 5 squared which will generate a result of 25.
   $5^1 = 5$, $5^2 = 25$, $5^3 = 125$ ...

   e. (Write the correct java doc for this **toPowerOf** method (don't worry about any other Javadoc, but you should have comments!)

3. **Use your toPowerOf method in your main method:**
   a. Make a call to the **toPowerOf** method from your main method and store the returned value into an appropriate variable.
   b. Your main method will then print out this value to the screen with a meaningful message to the user.

4. **Describe what is happening:**
   Describe what happens when a method is called in terms of the run time stack frame that is created. (You can relate to the many examples provided in your notes to help you with this)
   In your answer talk about:
   a. The calling of the method (flow of execution)
   b. The creating of formal parameters
   c. Passing of information from actual to formal parameters
   d. Creation of local variables
   e. Returning of the result
   f. What happens to all of the above when the method is finished?

Blue Book task details

The blue book icon indicating that students must complete this program assignment as a hand written exercise.

Instruction is given as to the layout and page requirements of the solution to this exercise.

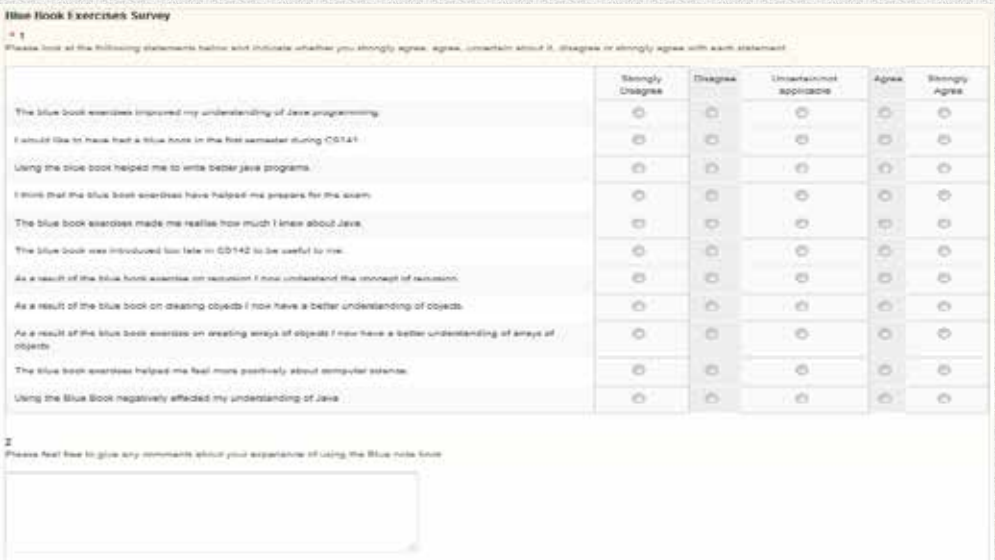
This extra information was included after students reported difficulties understanding the problem.

Overall step wise instructions are specified for the students to follow and this helps to *scaffold* their progress towards reaching the problem solution.

This sections requires the student to reflect on the overall assignment as well as focussing their attention to key programming language concepts which they need to make their own.

A note to point the students back to their module notes where the concepts examined in this question are described in detail and with many supporting examples.

Moodle survey on the Blue Book Exercises

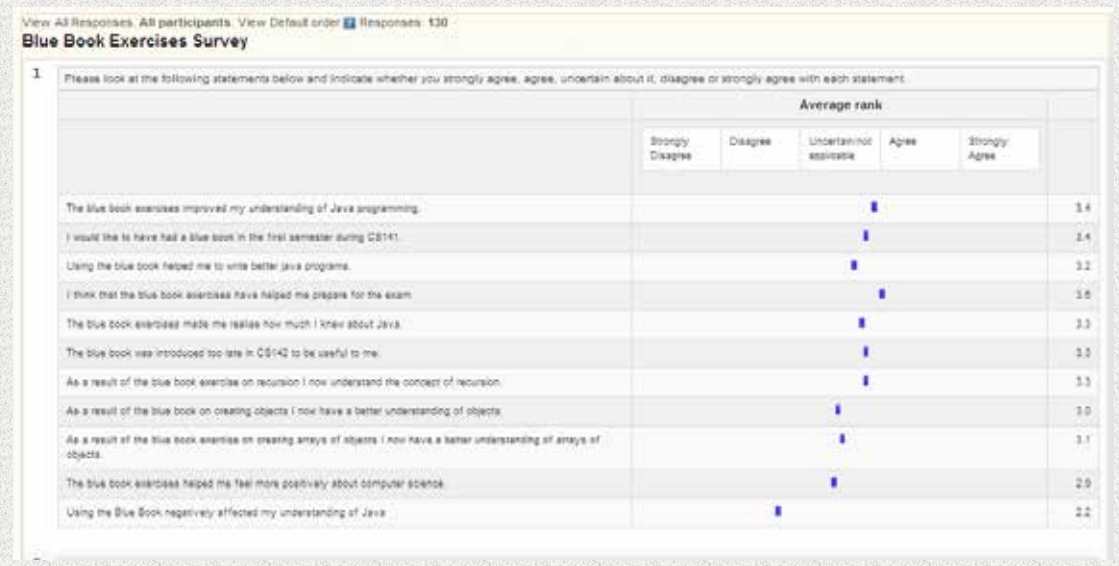

Blue Book Exercises Survey

* 1
Please look at the following statements below and indicate whether you strongly agree, agree, uncertain about it, disagree or strongly agree with each statement

	Strongly Disagree	Disagree	Uncertain/not applicable	Agree	Strongly Agree
The blue book exercises improved my understanding of Java programming.					
I would like to have had a blue book in the first semester during CS141					
Using the blue book helped me to write better java programs.					
I think that the blue book exercises have helped me prepare for the exam.					
The blue book exercises made me realise how much I knew about Java.					
The blue book was introduced too late in CS142 to be useful to me.					
As a result of the blue book exercise on recursion I now understand the concept of recursion.					
As a result of the blue book on creating objects I now have a better understanding of objects.					
As a result of the blue book exercise on creating arrays of objects I now have a better understanding of arrays of objects					
The blue book exercises helped me feel more positively about computer science.					
Using the Blue Book negatively effected my understanding of Java					

2
Please feel free to give any comments about your experience of using the Blue note book

Survey Results so far from 130 students


View All Responses. All participants. View Default order. Responses: 130

Blue Book Exercises Survey

1
Please look at the following statements below and indicate whether you strongly agree, agree, uncertain about it, disagree or strongly agree with each statement.

	Average rank
	Strongly Disagree / Disagree / Uncertain/not applicable / Agree / Strongly Agree
The blue book exercises improved my understanding of Java programming.	3.4
I would like to have had a blue book in the first semester during CS141.	3.4
Using the blue book helped me to write better java programs.	3.2
I think that the blue book exercises have helped me prepare for the exam.	3.6
The blue book exercises made me realise how much I knew about Java.	3.3
The blue book was introduced too late in CS142 to be useful to me.	3.3
As a result of the blue book exercise on recursion I now understand the concept of recursion.	3.3
As a result of the blue book on creating objects I now have a better understanding of objects.	3.0
As a result of the blue book exercise on creating arrays of objects I now have a better understanding of arrays of objects.	3.1
The blue book exercises helped me feel more positively about computer science.	2.9
Using the Blue Book negatively affected my understanding of Java.	2.2

Student comments

It is better exam practice than coding on the computer

I think the blue book was good preparation for writing out programs by hand as in the exam. I, however, feel that it was introduced too late in the semester to be of any real use in terms of understanding course content

It was introduced way too late for me anyway. I imagine it would have been a big help if it was introduced at the start of cs141.

it made me do work in the labs istead of doing everything at home

i found that i was rushed for time to complete the exercise before the last twenty minutes of the lab along with trying to get the bluej lab done. i found it useful but it should be used as homework altogther or the bluej lab should be shorter. it is too much trying to get everything done for the next lab

The blue book was very helpful as I got to practice what it will be like in the exam in May.

It was introduced into CS far too late and it was a massive workload as well as the other Lab questions

Too much work per week along with lab in BlueJ

there was too much in the lab before the blue book and when the blue book was introduced there was even more work to be done. this made it even harder to catch up with lab work as the blue book took up a lot of the lab time.

I remembered the structure of the programmes and everything about them better when I got to write with pen and paper.

The blue book was useful in that it was another way to practice java but introducing it also increased the work load coming up to exams without lessening the amount of work expected in other aspects of the course, so in that respect it caused unnecessary hassle

I feel the blue was really helpful in showing us exactly how code should be written and it was helpful in preparing us fro the written exam in may but if it had been introduced in September I think it would have been much more beneficial.

Very time consuming.

felt pointless, was just a hassle, and was marked on effort...

There was not enough time to complete the lab assignments once the blue book assignments were complete. I feel that there should be more marks going for the blue books as a result.

I enjoyed how the marks weren't just for if you got the right answer. Being able to write down what you know and getting marks for being able to understand what you're writing is a whole lot better than getting zero marks just because you got the answer wrong.

the exercises in the blue book and the exercises using blue j were too long. this made the labs more stressful.

they were introduced too late but were helpful with the questions we did do in them. I found it was a good way of revising material instead of going through all the previous labs in BlueJ

I think it's ridiculous that we have to do our CS142 exam written on paper. We can't do the exam on a computer. But the BlueBook helped me prepare for the exam, but still a solution to the problem would be to have an exam on a computer. Not make our labs on paper

I feel it was introduced too late into CS143, definitely. I still think it's a good idea and reinforced lecture material and also helped for the exam when we have to handwrite code and spot possible mistakes ourselves, rather than letting the computer do that

codingbat or practiselt were much more useful to my java coding ability than the blue book, as I could see where I went wrong straight away

It was added to an already busy lab. The lab became so long it caused me, and from what I can gather alot of people, to completely ignore both part Bs of the labs and also the CS143 lab.

it was a good idea. it let me practice writing code myself and forced me to check it manually rather then let the compilier tell me what was wrong.

The blue book is a great idea as it concretes what you think you know into what you know you know, being abl;e to write programs with ther compiler is one thing but being able to hand write a program with n errors is gold

they were the best thing about computer science all year without a doubt the only thing i enjoyed doing ever

i think there was far too much to do in the labs as you didnt get enough time to do the lab and the blue book.the blue book just hindered my programming as i didnt learn anything from it.

The bluebook is a good concept, my only complaint is that full marks are awarded to everybody for 'effort'. This doesnt make sense to me. I wish the summer exam worked like this :)

I liked the fact that the Blue Books were marked based on effort and not on accuracy, this made me feel less pressured and more relaxed when working through it. I think the Blue Book was an excellent idea, and I liked that we were given a week to complete it. However, I feel that it was introduced a little too late in the semester to be of a huge advantage to me.

The blue book was a good concept but was introduced far too late, it would have been so much better and beneficial to us to introduce them in CS141 rather than halfway through CS142. I also felt like there was far too much work involved in the labs, and you would never even get close to finish the lab as the blue book took up a lot of time and on top of that we had to do our programming on BlueJ afterwards. I would suggest cut down on both or alternate the labs so one week is purely the blue book and then the next week is purely Blue J.

It was too late to get the blue book. Would of been helpful from the start and the workload with the bluebook was a bit much. It would be extremly helpful if you could find a balance. It would also be nice to keep the blue books to help you study for the summer exams

We should get them back before the exams so we can refer to them when studying :)

Did not like concept at all. I feel that the best way to learn computer science is by writing code/programs, not on paper. Having to complete the blue book assignments left me with less spare time for actual coding, and so had a negative impact. I also feel some of the blue book questions weren't covering things we need to know for the exam.

I think overall it is a good idea to have the BlueBook - although I believe it should have lead to a little less in the way of the rest of the labs.

I would have liked to use the book earlier in the semester to help improve my java ability

The only problem I would have is that it was introduced late in the semester. It would have been good to have it throughout our studies. I always found in cs141 that the workload was too low and with the bluebook introduced in cs142, I found myself with a better workload. I wouldn't want this to make people in future have much more work, I just would have preferred much more practice in writing programs as I enjoyed it.

Using the blue book would have been helpful if labs were shortened accordingly. Labs remained the same length, the same workload, when only small parts of 2 labs end up being corrected at the end of the semester. The labs themselves should be worth a lot more marks, not the blue book.

Whilst I liked the idea of actually handwriting code (and doing what I felt were slightly more managble questions), I think it took up too much time (especially Mario). This meant that I fell very far behind on the BlueJ labs.

It made it easier to doubt myself. I preferred the longer labs. no better feeling then spending the time to do it and it runs. the book i feel was not a nice experience yet it was not difficult and hopefully will be useful in the exam

it needs work but could be a useful thing,

Just boring... I don't like handwriting.

I think the blue book is a good idea, however, it may have added too much work. If the lab length was decreased by a small amount and the length of the blue book exercises was kept constant I think it would be a better balance

It was a great way of making students work through the week on their own. Last semester I didn't do any work during the week unless their was lab corrections at the end of the week. Great help.

it helps you prepare for the written exams

It took too long to do as you were writing up the code on the computer to check if it worked and then had to write it up all again in the book

The time limit in the lab meant that i couldn't focus on learning what it was I was being asked, instead I rushed to get everything done so as to obtain optimal marks. ┬áthe work being corrected the following week was better, but since I had to use my work done in the lab, which was often rushed and very wrong, it meant I wasted a lot of time at home, and sometimes just gave up.

My personal preference is to carry around all the time and with that in mind the next size down might be better then again maybe it would turn out it would not be as useful.

The blue book was a bit helpful but I didn't know if what I was writing in the blue book was right or wrong. All the demonstrator did was give you a grade they didn't go over it. I was left totally confused by the blue book and I didn't help me understand it better because I never knew if I was doing the question wrong or what my mistakes were.

When I initially did labs without the blue book it felt more of a chore and impending doom in getting questions done. The blue book was elegant, clean, and simple. It reinforced my understanding of java and the labs appeared more structured and coherent.

I found that the blue book did not help as it took too much time for the little work involed in it. In order to check if I was right when writing code, I still had to go onto bluej and type it all in . My blue book was not checked thoroughly

It was a really useful learning/studying tool but I think it would have been better if we got the books back afterwards as I had some of my study notes done up in mine

It would be handy to have the bluebook at home to help at the end of semester exams as resource for the exam

Conclusions

The Blue Book was introduced into the laboratory assignments during the second half of module CS142.

We wanted to introduce similar note taking, documentation and reflection practices into CS laboratory work that were present in other science subjects such as general Biology, Physics and Chemistry both at 2nd and 3rd level.

Many of the comment in the student surveys were positive about the Blue Book experience and how the exercises helped the students gain an understanding of very challenging material.

There were comments about the lateness of the Blue Book initiative and the perceived extra work load and these will be addressed in future presentation of the CS142.The comments across are the unedited and were provided by the 130 respondents to date.

Feedback from the students is generally positive and the hand written blue book exercises seem to have facilitated learning and exam preparation.

We are examining introducing the Blue Book into the 1s Semester programming module CS141 as well as extending its use into the second year main programming modules titled Data Structures and Algorithms 1 and 2 (CS210 and CS211).

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

eTwinning and Twinning: education without borders

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- NUI Maynooth and the University of York graduate student teachers collaborate through eTwinning exchanges.

- NUI Maynooth and Université d'Orléans graduate student teachers collaborate through twinning school and university exchanges.

'I experienced the benefits for my pupils of setting up exchange and eTwinning programmes.'
PDE student teacher

HOW IT WORKS:

- NUIM student teachers eTwin with peers from the University of York, through ICT, to share resources and ideas for teaching and learning.

- Student teachers' pupils engage with one another through eTwinning to collaborate on school projects.

- NUIM student teachers twin with peers from Université d'Orléans to attend lectures in the partner education department and to team teach in exchange schools.

IMPACT:

- Student teachers facilitated and supported into sharing reources, team teaching and collaborative reflection.

- Pupils more motivated to learn through interaction and collaboration with pupils from another country through ICT.

- Opportunities provided to gain first hand experience of other education systems and school cultures and to develop intercultural competence.

- Student teachers motivated to set up eTwinning and exchange programmes with future classes.

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Demonstrate IT

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Demonstrate IT was a competition run by the Computer Science Programming Support Centre this year for students taking the Algorithms & Data Structures 1 module.
- The optional competition involved creating a demonstration that would encourage school students to pursue Computer Science at third level. These demonstrations will be used at events like the Open Days and University Days.
- By creating the demonstrations, the competition participants were given an opportunity to enhance their knowledge of computer science and gain valuable experience which they can add to their CV.

HOW IT WORKS:

- The competition ran for three months and participants consisted of individuals and pairs. Participants were given some guidance but they mostly worked on their demonstrations without much supervision.
- Posters were created to go with the demonstrations as well as documentation on how to set up and show the demonstrations. This will ensure that the demonstrations can be used in future open days, even when the participants have left the university.
- The demonstrations were shown during the Spring Open Day. The winner was selected using votes from Computer Science staff and prospective students as well as marks given for the posters and documentation.

"I learned material outside the coursework and this was very beneficial for me as it gave me confidence to seek new challenges outside of this project."

"I really enjoyed doing this project and I learned a lot that will be very helpful for future project work and in finding placement next year."

IMPACT:

- By showing the demonstrations at the spring open day, prospective students were given a chance to see what they can learn to do if they pursue Computer Science. Furthermore, the demonstrations gave them a reason to begin a conversation with the current students, giving them the opportunity to ask questions about the subject that only a student might know.
- Those that entered in the competition have had the opportunity to influence the next generation of Computer Scientists. As well as this they have gained valuable experience which they can add to their CV. All the participants have said that they learned something new by doing the competition, from technical abilities to personal skills.

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Online Student+

A Learning Skills Course for First Years via the Virtual Classroom

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

Overview

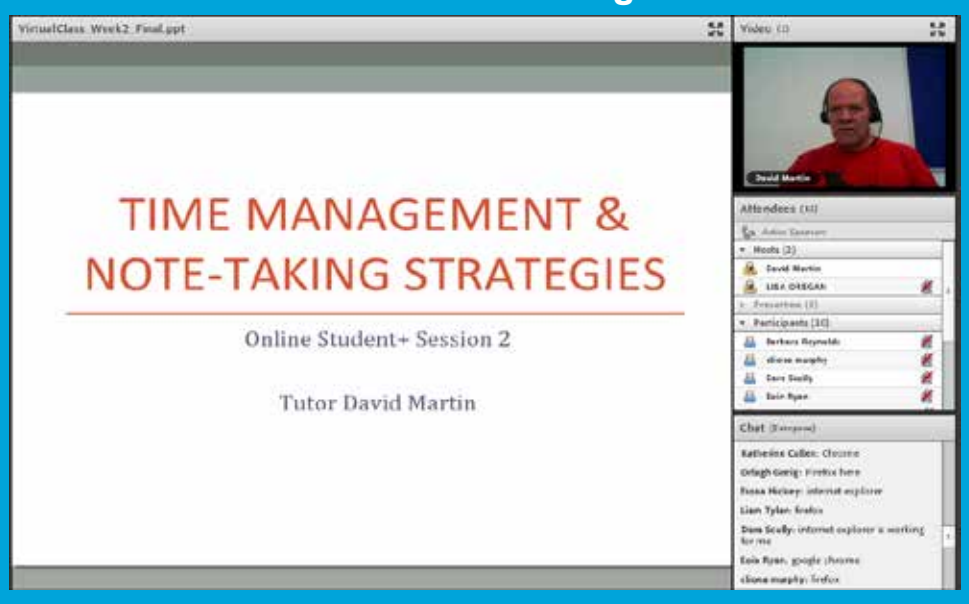
- Learning skills course delivered online to support first year students with their transition to higher education.
- Adapted from the Student Plus programme.
- Piloted in semester 2 2013-14
- Offered to Kilkenny First Arts students and a limited number of NUI Maynooth first years.
- Funded by The Ireland Fund.

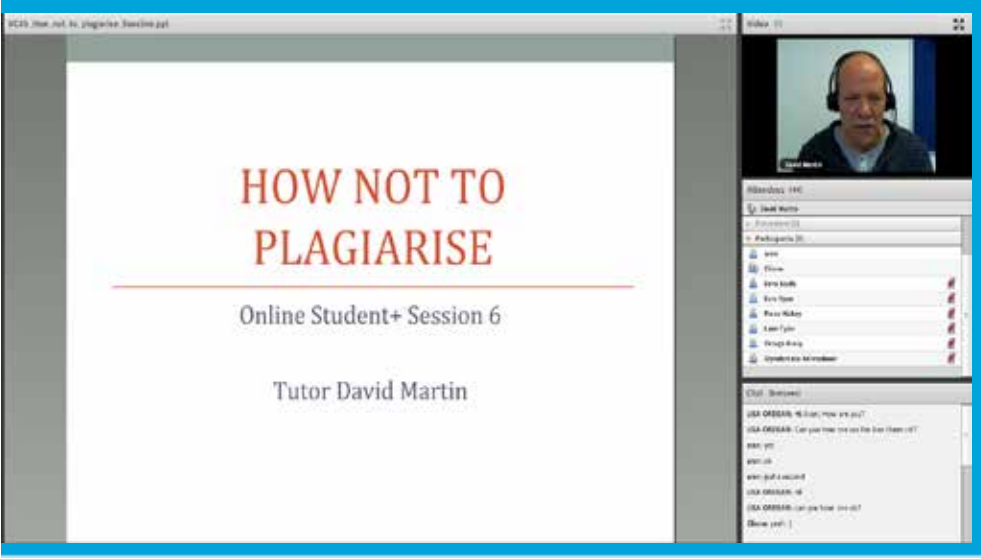
Course Structure

- Eight week online course
- Two hours face-to-face introduction
- Weekly one hour LIVE virtual classes (7)
  Weekly online task to apply learning
- Weekly LIVE online Q&A Chat with tutor

Live Virtual Classroom Delivery

- Delivered via Adobe Connect
- Audio & webcam capability
- Chat to support in class discussion
- Presentation, Screen, and Application share
- Audience polling
- Record sessions for later viewing





Some Online Student+ Participants

Student Feedback

- "I found this course a really fun way to learn new skills."
- "I was able to use what we learnt in assignments."
- "The best thing was the small groups."
- "My favorite class was on how to answer (essay) questions …Just that bit of knowledge can make a difference to your grades."
- "Would have loved to have this module in first semester."
- "I didn't have to travel, I could do it from home."
- "I was able to join the class even when I was in Prague!"
- "The real life examples and experiences of the tutors were great to help understand the topics."

CONTACT:

Online Student+ is offered by the
Centre for Teaching and Learning
Course Team: Lisa O'Regan, David Martin, Margaret Keane and Lynsey Kavanagh.

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Teaching Academics to Maximize the Visibility of their Research

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Offering guidance and training on increasing visibility of research
- Creating an awareness of Bibliometrics and providing training sessions
- Impact Factors, H Index, Institutional Rankings
- Providing information skills training to support researchers
- Offering one-to-one customized sessions
- Offering training on managing information e.g. EndNote Online

What are Bibliometrics ?
Citation analysis of books, articles, or other publications e.g. Article Citation analysis, Journal Impact Factors, Benchmarking, H Index, Institutional Rankings

"Really useful session thank you so much"

"Being able to identify potential research collaborations is invaluable"

HOW IT WORKS:

- Provision of one -to -one Research Consultation's for Researchers and Staff
- Provision of Bibliometrics training for Departments and Individuals
- Customised Research Skills training for Researchers on demand

IMPACT:

- Increased visibility of NUIM research
- Better awareness of Journal Impact Factor
- Increased knowledge of a range of Bibliometric tools
- More effective search strategies
- More efficient reference management
- Better use of available information resources
- Better understanding of the Research Impact of NUIM Academics
- Identification of existing and potential research collaboration opportunities

Google scholar Scopus ENDNOTE SciVal WEB OF SCIENCE

Here to help YOU with your Research !

Ciarán Quinn
Research Support Librarian
Ciaran.quinn@nuim.ie
Phone: (01) 7086151

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Developing Academic Writing Among Librarians

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

NUI Maynooth Library presents an annual *Writing for Academic Publishing* Workshop for librarians, which is open to all Irish library staff

HOW IT WORKS:

One-day workshop covering:

- Defining Audience and Purpose
- Selecting a journal
- Choosing a working title and keywords
- Writing an abstract
- Drafting a query e-mail to editor
- Drawing up an outline/structure
- Writing the article
- Drafting and redrafting
- Submission
- Understanding the peer-review process
- Revision and resubmission or rejection and re-evaluation
- Publication and Celebration
- Depositing in Institutional Archive
- Beginning your next article

"I have gained a lot of confidence in writing by attending the workshop. I have more understanding of the process of writing and that it is possible for me to be a writer. I just need to do it "

Participant in 2013 workshop

IMPACT:

- Over 100 librarians have attended the. workshops
- A number of participants have published
- Peer-Support Groups for academic writing among librarians have been….. established
- A culture of academic publishing among librarians is developing
- Resources on academic writing are made available via the blog *Academicwritinglibrarian.blogspot.ie* Over 60,000 hits to date
- Workshops presented nationally and internationally

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Innovative Partnerships in Teaching and Learning: A collaboration between the Library and the Department of History

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

- Library has long tradition of supporting and delivering teaching and learning
- MA in Historical Archives takes advantage of Library's unique and invaluable collections
- Students working on professional Masters have specific, boutique educational requirements

HOW IT WORKS:

- Librarians design, deliver and assess a module relating to book collections in archives
- Students complete 4 assignments combining practical and theoretical knowledge
- Module structured to accommodate different professional possibilities: - single site archive to larger institution

IMPACT:

- Students get expert professional instruction from experienced librarians in the following areas: exhibitions and promotion, resource description, incunabula, pamphlets, manuscripts, and curation
- Students get to work 'hands on' with rare and unique material in parallel with development of theoretical knowledge
- Library's role in supporting and enhancing teaching and learning is reinforced and developed

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NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Notebooks As Reflective Practice

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

This was an initiative by Kildare Arts Service whereby Artists created an artists notebook

HOW IT WORKS:

People were invited to participate and notebooks were subsequently exhibited in the Library

Opportunity for university community to view notebooks

Library now plans to contribute their own notebooks to the project from staff & students

IMPACT:

Fosters a collaboration between the library and Kildare Arts Service

Enhances reflective practice and shared experience

Notebooks useful in learning

Kildare County Council Arts Service

Susan Durack
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The Library NUIM

NUI Maynooth Teaching and Learning Showcase 2013 – 2014

Introduction to Irish Law and the Irish Legal System

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

OVERVIEW:

The aim of this module is to provide students with a colorful, interactive and accessible blended learning module which introduces them to the Irish legal system and law in Ireland.

HOW IT WORKS:

The course is set to run from September 2014 and will operate as a mainly online (blended learning) course with three 1 hour-long face to face lectures. On all other weeks, the lectures will last for half an hour and be recorded in advance.

Each week the following materials will be provided to students:

- a brief 3-5 minute podcast providing an overview of the lecture, materials and tasks.
- either a 30 minute pre-recorded lecture (using the programme Camtasia) or an hour long face to face lecture.
- short tasks (including short readings, quizzes and posts in online forums) which must be completed to: (i) gain access to the course materials for the following week and (ii) be awarded a *Certificate of Completion* at the end of the course.

Ireland's GLOBAL Law School
NUIM LAW

IMPACT:

This is the first time a module like this has been run in NUI Maynooth and so:

- The process of developing the module and the experiences learned following its launch will be documented and used to inform the development of similar modules across the law school and the broader curriculum.
- The lessons learned from student engagement with the materials provided and feedback on the module itself will be used to develop further innovative, technology-driven alternatives to the traditional classroom-based lecturing model.

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Researching Practice in Practice

Community Work and Youth Work Collaborative Research Project

NUI MAYNOOTH
Ollscoil na hÉireann Má Nuad

What did we set out to do?

- Develop the research skills capacity of MA in Community and Youth work students to provide them with a greater understanding of the relationship between the evidence-base and research practice in the field
- Resource small scale research projects in community work and youth work settings
- Contribute to the development of the knowledge base of the disciplines
- To develop an applied module in research practice for community and youth work

Why did we do it?

Youth work and community work are suffering serious cutbacks as a result of decreased Government funding. Projects are closing, provision being restricted across the country while demands for accountability and evidence of outcomes are increasing.

Now more than ever, graduates need to be able to be able to demonstrate their capacity to make a significant contribution to the organisations within which they work from the beginning.

How did we do it?

- Worked with 2nd year students of the MA in Community Work and Youth Work
- Brought three modules together (Research Methods for Community Work and Youth work Practice, Fieldwork Placement and the Final Year Research Project)

What the project involved

- Delivery of an module on applied research
- Before, during & after survey of students
- On site supervision of student practitioners
- Research diaries completed by students
- Research seminars during the fieldwork practice

" As a practitioner I was able to observe and reflect on what I believed was happening with the group but when conducting the research and talking to the participants it was only then that the true nature of what was happening became evident" Chris (Student)

"I wrote down a list of five things I'd be interested in doing and a timeline before we met. During the meet [with the placement organisation] I picked one topic. So it turns out there was a discussion before I arrived about what people in the organisation would like to see done and participation came up which is great because that's exactly what I had picked out." Sam (Student)

What we have learned so far

- A collaborative face to face relationship with community and youth work organisations is very important to support the development of skills in participative research underpinned by social justice values
- A creative blended learning approach is required to deliver competency-based module for research practice including enquiry-based learning, skill based workshops, lectures, student led sessions and tutorials, experiential learning, reflective diaries, recall days
- In the current context, research skills are regarded as highly valuable in the Community Work and Youth Work fields, by organisations and by student practitioners

Next Steps

- Elicit practitioner/organisational perspectives on the experience
- Host a Practitioner Seminar and Research Showcase
- Explore the potential to establish a Community and Youth Work Practice Research Network

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National University of Ireland Maynooth

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