

# Inclusive Assessment & Feedback

**Universal Design Case Studies from  
IADT and UCD**

Editors: Lisa Padden, Julie Tonge, Therese Moylan  
and Geraldine O'Neill



## **Endorsements**

This book is a most welcome addition to the body of literature focusing on access and inclusion issues in higher education. Over a series of case studies, it reveals an array of good practice in inclusive assessment. The contributors provide valuable insights into the approaches used to apply an inclusion approach recognising diversity, differences and preferences. I have no doubt that the innovation, imagination and creativity demonstrated will both inspire and encourage.

**Dr Anna Kelly,**  
Director, UCD Access & Lifelong Learning

IADT is committed to equal access, increased participation and improved retention and progression rates for all our learners. To this end, we work hard to incorporate the principles of Universal Design into our teaching, learning and assessment practices. I am delighted to see the variety of approaches across so many diverse disciplines captured in this timely publication and I know that this will be of value to colleagues across the HEI sector.

**Denise McMorrow**  
Student Experience Manager IADT

The best form of assessment and feedback is that which is student led or where students play a central role. This ensures a level playing field and that students have a clear understanding of both what is required in their assessment and how to effectively utilise individually tailored feedback. Inclusive assessment and feedback practices should be a cornerstone of education

**Melissa Plunkett,**  
UCD Students' Union Welfare Officer 2018-19, UCD Access Leader



# Inclusive Assessment & Feedback

---

**Universal Design Case Studies from  
IADT and UCD**

**Editors:** Lisa Padden, Julie Tonge, Therese Moylan, Geraldine O'Neill

**Publisher:** Access and Lifelong Learning, University College Dublin

2019 Released under Creative Commons Attribution 4.0 licence

Attribution 4.0 International (CC BY 4.0)

This is a human-readable summary of (and not a substitute for) the license. Disclaimer.

**You are free to:**

- **Share** — copy and redistribute the material in any medium or format
- **Adapt** — remix, transform, and build upon the material
- for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

- **Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- **No additional restrictions** — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

**Notices:**

- You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.
- No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.

**ISBN:** 978-1-910963357

Publication No. 3 - University for All Publication Series

**Recommended Citation:** Padden, Lisa, Tonge, Julie, Moylan, Therese and O'Neill, Geraldine (Eds) (2019) Inclusive Assessment and Feedback: Universal Design Case Studies from IADT and UCD. Dublin: UCD Access and Lifelong Learning.

**This publication is part of the University for All publication series, published by UCD Access & Lifelong Learning. Our other publications include:**

Padden, Lisa, O'Connor, John and Barrett, Terry Eds. (2017) Universal Design for Curriculum Design: Case Studies from UCD. Dublin: UCD Access & Lifelong Learning  
Kelly, Anna and Padden, Lisa. (2018) Toolkit for Inclusive Higher Education Institutions: From Vision to Practice. Dublin: UCD Access & Lifelong Learning

---

# Acknowledgments

We would like to thank the authors from IADT and UCD for taking the time to share their practice. Their case studies demonstrate the significant amount of work being done across Higher Education Institutions in Ireland to embed inclusive practice and Universal Design. We are sure that the generosity of the authors will be greatly appreciated by all those who use their initiatives as inspiration for their own teaching and learning work. It has been a pleasure for us to work cross-institutionally to compile this volume of case studies. The diversity, creativity, motivation and engagement displayed by staff in both Institutions in developing meaningful and authentic assessment for students comes through in all the cases included in this volume.

This publication is the result of successful collaboration between IADT, UCD Access & Lifelong Learning, UCD Teaching & Learning, and the contributing authors. We would like to recognise the Teaching & Learning committee in IADT, the President Dr Annie Doona and Registrar Dr Andrew Power for their support for this project. We would also like to acknowledge the support we have received from Prof. Mark Rogers and Prof. Marie Clarke in UCD as well as our colleagues in UCD Access & Lifelong Learning and UCD Teaching & Learning. We would especially like to acknowledge Dr Anna Kelly, Director of UCD Access & Lifelong Learning for her funding of the design of this publication. Thanks also to those who have taken the time to read the publication and provide endorsement. A very special thank you goes to Eileen Dunne of Darling Design the book designer for her wonderful design, layout and application of the principles of Universal Design to this book.

---

# Contents

---

<b>Editors</b>	<b>1</b>
Lisa Padden, Julie Tonge, Therese Moylan and Geraldine O'Neill	
<b>Foreword</b>	<b>3</b>
Professor Marie Clarke	
<b>Inclusive Assessment and Feedback: an Introduction</b>	<b>5</b>
Lisa Padden, Julie Tonge, Therese Moylan and Geraldine O'Neill	
<b>Overview of the Case Studies</b>	<b>17</b>
<b>1</b> Authentic Assessment in Business Education – the Integrated Case Study (a Capstone Project).	<b>27</b>
Sharon McGreevy, Conor Heagney and Siobhan Gallagher	
<b>2</b> 'Outside Their Comfort Zone': Diverse and Engaging Approaches for Students Learning Through a Different Discipline.	<b>45</b>
Dr Jennifer Keenahan	
<b>3</b> An Exploration of Student Growth through Assessment: Modular Redesign to Incorporate Problem Based Learning, Self-Directed Assessment and Personal Reflection.	<b>61</b>
Dr Conor Buggy	
<b>4</b> Where Universal Design, Inclusive Assessment and Adult Education Principles Coincide: Professional Skills and Authentic Assessment.	<b>77</b>
Prof. Anne Drummond, David O'Dwyer	
<b>5</b> Student-led Learning: Utilising Inclusive Assessment and Group Work to Promote Autonomous Learning and Student Engagement.	<b>93</b>
Emma Mathias	

---

---

<b>6</b>	Student Engagement with an Assessment Lexicon; a Structured Self-assessment to Help Demystify the Assessment Process. Fiona Snow	<b>107</b>
<b>7</b>	Using Screencasts as a Means to Make Third Level Student Learning More Inclusive. Dr Catherine Rossiter	<b>117</b>
<b>8</b>	Inclusive Assessment of 'Live Brief' Undergraduate Projects. David Quin	<b>125</b>
<b>9</b>	Assessment as Learning – Measuring your own Success. Ger Clancy	<b>135</b>
<b>10</b>	A Scaffolded Approach to Teaching Design and Design Techniques to Reluctant Designers. Gráinne Carroll	<b>145</b>
<b>11</b>	Last Semester's Feedback... a Tool for this Semester. Dr Orna O'Brien	<b>161</b>
<b>12</b>	Group-work Presentations (Poster or Oral) to Enhance Variety and Choice of Assessment in a Programme. Dr Kathy O'Boyle	<b>169</b>
<b>13</b>	Podcasts can Assess Module Learning Outcomes as Effectively as Essays. Jeff Taylor	<b>181</b>
<b>14</b>	Moving Away from Solely MCQ-based Exams: Short Answer Questions for Enhancing the Variety of Assessment Methods in the Large Classroom. Dr Melinda Halasz	<b>189</b>
<b>15</b>	Adapting Assessments on a University Access course to Facilitate Great Reflection and Engagement. Dr Bairbre Fleming	<b>203</b>

---

---

# Editors



## **Dr Lisa Padden**

**Inclusive Education Coordinator, UCD**

Lisa Padden has worked in University College Dublin (UCD) since 2012 and her current role is as Inclusive Education Coordinator with UCD Access & Lifelong Learning. Lisa works directly with students, faculty and professional staff in UCD. Lisa provides supports for students with disabilities, as well as coordinating and teaching an academic skills development programme.

Lisa also works with faculty and professional services colleagues around the university to embed inclusive practice and Universal Design in all parts of the institution. In addition, Lisa collaborates with colleagues in other Universities and Colleges on the wider implementation of inclusivity in Higher Education. Lisa received her BA, MA and PhD from the National University of Ireland, Galway (NUIG), where she also taught in the English Department for five years before moving to UCD. Lisa's research interests include Universal Design in higher education, promoting independent learning, equal access to education, and assistive technologies.



## **Julie Tonge**

**Inclusive Education Coordinator, UCD**

Julie Tonge is passionate about mainstreaming and ensuring that students with disabilities can have full and equal access to all aspects of college life with the need for minimal individual adjustments. Julie works with students, faculty and staff across all University departments and provides advice and training on disability awareness and inclusive practices. Julie also works to develop local and national policy to ensure adequate and consistent supports for students with a disability across the higher education sector. Julie is the Disability Officer in UCD Access & Lifelong Learning,

a former member of the Board of Directors of AHEAD (Association for Higher Education Access & Disability) and is currently the chair of the Disability Advisers Working Network (DAWN), the professional organisation for disability officers who are primarily responsible for supporting learners with disabilities in Higher Education in Ireland.



**Dr Therese Moylan**  
Head of Department of Entrepreneurship, IADT

Therese Moylan is Head of Department of Entrepreneurship at IADT. She is the Chair of the Teaching and Learning Committee in IADT with responsibility for enhancing the quality of learning, teaching and assessment across the institute by providing academic leadership for the continued development of excellence and academic practice. She has several years' experience in curriculum design, programme development and academic management. Therese is particularly interested in ensuring that programmes incorporate authentic assessment practices that hone student skills and competencies. Her work history includes higher education management, teaching experience in the area of marketing, business planning and entrepreneurship coupled with private sector business management experience. Therese is research active in the area of entrepreneurship education and female entrepreneurship.



**Dr Geraldine O'Neill**  
Associate Professor

Geraldine O'Neill is an Associate Professor, Principal Fellow of the UK HEA and educational developer in UCD Teaching & Learning. In her time in UCD, she had supported and evaluated many institutional teaching, learning and assessment projects. She is current working on an institutional approach to support programme-focused assessment and feedback. In a 2-year secondment to the National Forum for the Enhancement of Teaching and Learning, she coordinated the national Assessment Enhancement theme. A key aspect of this national project was the shift towards empowering students in the assessment process. She has a track record of research dissemination, on professional development, curriculum design and assessment.

---

# Foreword



**Professor Marie Clarke**  
Dean of Undergraduate Studies, UCD

At a time of shifting attitudes to and expectations of higher education, and of contestation around what makes for quality in learning and teaching, it is timely that we have the opportunity to reflect on the relevance and significance of inclusive assessment and feedback. This publication offers a range of insights and perspectives that facilitate this type of reflection in an in-depth and meaningful way.

Students experience of assessment and feedback are impacted by decisions that are made by the institutions that they attend, the disciplines that they study, and the choices made by their lecturers. The evidence from the case studies in this report allows us to take a broad view of students' participation in a wide variety of inclusive assessment and feedback activities. It underlines the importance of assessment and feedback in an institutional context, where students have the opportunity to co-create assessment activities, design their own assessment, submit assessments in creative ways and through feedback develop life skills that are so important in our society.

The case studies contained in this publication explore practice and innovation in assessment and feedback presenting evidence of 'what works' in different practical contexts and disciplines. The innovative approaches used demonstrate clearly the ways in which partnership with students can take inclusive assessment and feedback in new, productive and exciting directions and also prepare them to succeed in a context, where the primacy of evidence-based judgment and expertise is currently being undermined.

It is wonderful to see students reporting on their positive experiences, building on international research that demonstrates the broader benefits of being exposed to a wide diversity of assessment and feedback approaches. The evidence from these case studies strengthens our knowledge base and will help us to plan effectively as we aim to make inclusive assessment and feedback meaningful and positive, where students can demonstrate and experience the joy of learning.

The editors are to be congratulated on publishing these case studies, making the work of deeply committed lecturers accessible to a wider audience, demonstrating the richness, the diversity and innovative approaches that they have developed to support inclusive assessment and feedback. It is my expectation that this publication will be an excellent resource for all who are committed to designing inclusive assessment and feedback approaches in their teaching and learning contexts.



PROFESSOR MARIE CLARKE

Dean of Undergraduate Studies,  
University College Dublin.

---

# Inclusive Assessment and Feedback: an Introduction

Lisa Padden, Julie Tonge, Therese Moylan and Geraldine O'Neill

## National Policy and Evolving Practice

As Higher Education Institutions (HEIs) continue to work towards diversifying the student profile, the design and delivery of teaching and learning must also evolve to ensure an inclusive educational environment for all students. Our student population now includes increasing numbers of students from backgrounds of socio-economic disadvantage, students with disabilities, mature students, international students and students from many diverse cultures with various educational experiences. This diversity has enriched the landscape of Higher Education nationally and globally. As Prof. Mark Rogers reminds us:

We can achieve much more, where diversity, in the broadest sense of the word, is seen as core business. It is not a goal for its own sake, rather it is a key enabler for a university to achieve excellence in what it does. Inclusion is not an add-on, and it should be at the heart of a university's mission in achieving excellence in education and scholarship (Kelly & Padden, 2018b, p. 5).

Widening participation and equality, diversity and inclusion work has traditionally been the job of designated individuals, offices or units in HEIs. The Higher Education Authority (HEA) recommends that ‘the next step is to integrate the principle of equity of access more fully into the everyday life of the HEIs so that it permeates all faculties and departments, and is not marginalized as the responsibility of the designated access office’ (HEA, 2015, p. 25). Many HEIs have developed policies and strategies in order to progress their work in widening participation and mainstreaming.

Learning, teaching and assessment is a core part of any HEI mission. In Dún Laoghaire Institute of Art, Design and Technology (IADT) policies are pursued in the area of learning and teaching which promote the increasingly international and culturally diverse nature of all students. IADT have a strong programme of continued professional development opportunities for staff with a specific focus on Universal Design for Learning. IADT supports student learning by reaching out in new and innovative ways to learners from all backgrounds, identities and abilities and celebrate equality and diversity through the curriculum, teaching and learning and assessment. A formalised programme for faculty and professional staff on UDL is at the core of the IADT strategic approach to embracing student diversity.

In UCD, policies are being put into action through the University for All initiative which seeks to mainstream access and widening participation, weaving it in to the fabric of the institution at every level (Kelly & Padden, 2018a; Padden & Kelly 2018). An Inclusive Higher Education Institution seeks to provide programmes, teaching, supports and campus facilities that can be accessed, understood and used to the greatest extent possible by all people. The University for All initiative is concerned with removing barriers, and ensuring that all students have equal opportunities to access, progress and succeed within their chosen programme of study, regardless of background, personal circumstances, age, disability, or pace of study.

Eliminating the concept of a supposed “average” student is an important change required for those designing teaching and learning in higher education. Universal Design is one framework which encourages a change in this mindset and provides practical guidance for those working in educational settings. In our previous collection of case studies, Universal Design for Curriculum Design, we noted, ‘At the core of Universal Design is a focus on variety and choice for students, a movement away from the traditional didactic, often solely text-based, classroom practices of the last century and the embracing of a more dynamic, active and evolving classroom’ (Padden, O’Connor & Barrett, 2017, p. 3).

The National Forum for the Enhancement of Teaching & Learning in Higher Education have established Assessment and Feedback as an Enhancement Theme resulting in a strong sectoral approach to development of this area (O'Neill & Maguire, 2019). UCD's strategic Assessment Enhancement Implementation Framework Project (2018-2020) supports the systematic use of a variety of assessment and feedback approaches throughout a programme (UCD, 2019). The principles developed from the project, in particular encourage faculty to use **varied, integrated** assessment, creating **space** for deeper learning and opportunities for feedback including technology enabled feedback (UCD T&L, 2019c, see Figure 1). These programme assessment and feedback principles support the Universal Design approach.

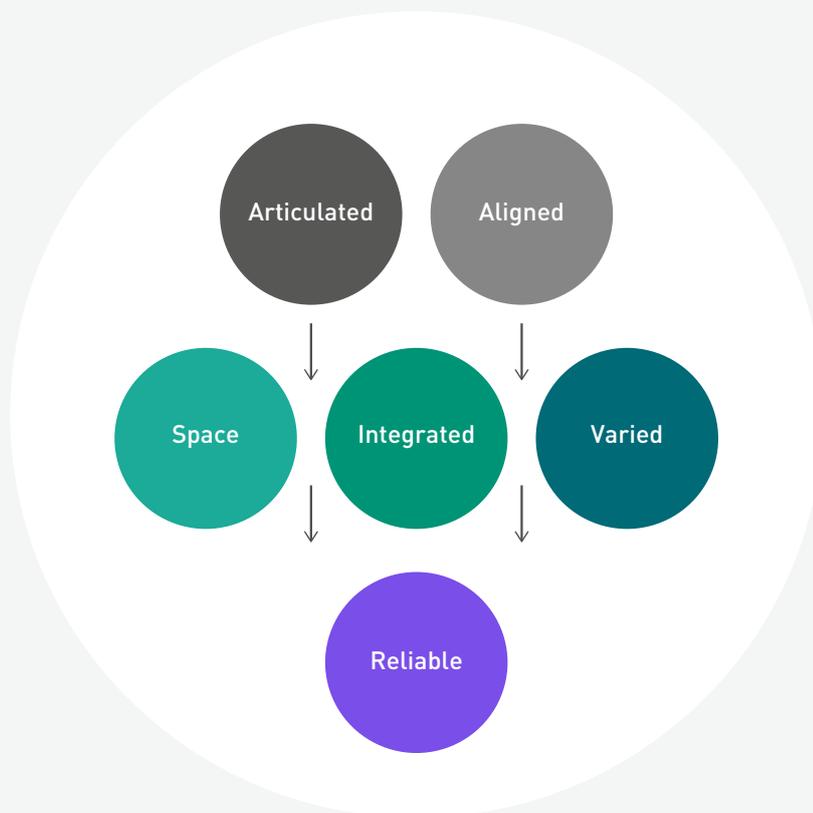


Figure 1. UCD's Programme Assessment & Feedback Principles

## Why Inclusive Assessment and Feedback?

Each student is unique.

They are unique not only from their own personal knowledge, skills and competencies but they also come from a diversity of social and cultural environments. However, when it comes to assessment we know that in Ireland, as in many other countries, although there is a range of assessment used, we are still very reliant on the end-of-semester written examination. In fact, research shows that, 'Examination is the most common assessment method, although its popularity and weighting differs between fields, programmes and stages of programme' (National Forum, 2016a, p10). Some students do well in examinations, but many more do not. In the same vein, the various feedback approaches, for example individual written feedback, may not suit all students and we need to explore how the different feedback approaches can be more inclusive for various student cohorts.

Higher education is increasingly supporting more diverse cohorts of students as outlined above. It is timely therefore to ask ourselves: Are my current practices fair? Do they assess the diverse cohort of students in my module/programme? One approach used to address this in recent years has been to give particular students some special arrangements or a different assessment than the rest of the class (often called 'contingency/alternative approach' or 'special/Reasonable Accommodation'. However, an Inclusive Assessment approach aims to support all students in the module/programme, not just those who may be in a position to request an alternative or special arrangement. Inclusive Assessment and Feedback removes the need for students to have a diagnosis or label in order to experience equity of treatment or opportunity.

**"Let's be clear,  
inclusive assessment is  
not about easier assessments,  
its aim is to assess students  
equitably, and for them to achieve  
and demonstrate all aspects of  
their learning with as limited a  
hindrance from their personal  
circumstances as practical."**

**- Kneale and Collings, 2015, p1**

## Reasonable Accommodations in Exams

The number of students with disabilities in Irish Higher education Institutions is increasing year on year. Many of these students are entitled to exam accommodations such as a smaller exam venue, additional time and/or Assistive Technologies. There will always be a requirement to provide Reasonable Accommodations in exams for some students. However, designing more inclusive assessments, and building in choice where possible, will reduce the need for special arrangements and accommodations for many of these students. This approach has additional benefits for students who have not disclosed a disability but may struggle with some modes of assessment, giving every student the opportunity to fulfil their potential.

When planning assessments, it is important to consider how you will provide Reasonable Accommodations for those who need them.

- Consider whether the assessment needs to be timed – giving all students enough time to complete a task will reduce the need for students to be provided with additional time.
- Similarly, if students are required to complete an online test/exam you must ensure that you know how to provide additional time to those who need it. This will not be necessary if you remove the time limit.
- Students with dyslexia are often provided with a reader for timed assessments. When setting an online test/exam consider how the students can use their own Assistive Technologies with the VLE to have the text read aloud.
- When planning in-semester exams ensure that you have additional spaces booked in case students require an alternative location.
- When using technology for quizzes or tests make sure that you have an alternative for those who are unable to use a device to complete the task e.g. a quiz on a platform like Cahoot can easily be replicated on a piece of paper for those who do not have a working smartphone or tablet.
- When asking students to complete a handwritten test/exam in class. Consider those students who find it difficult or impossible to handwrite and ensure that the option to type or use other technologies is available.

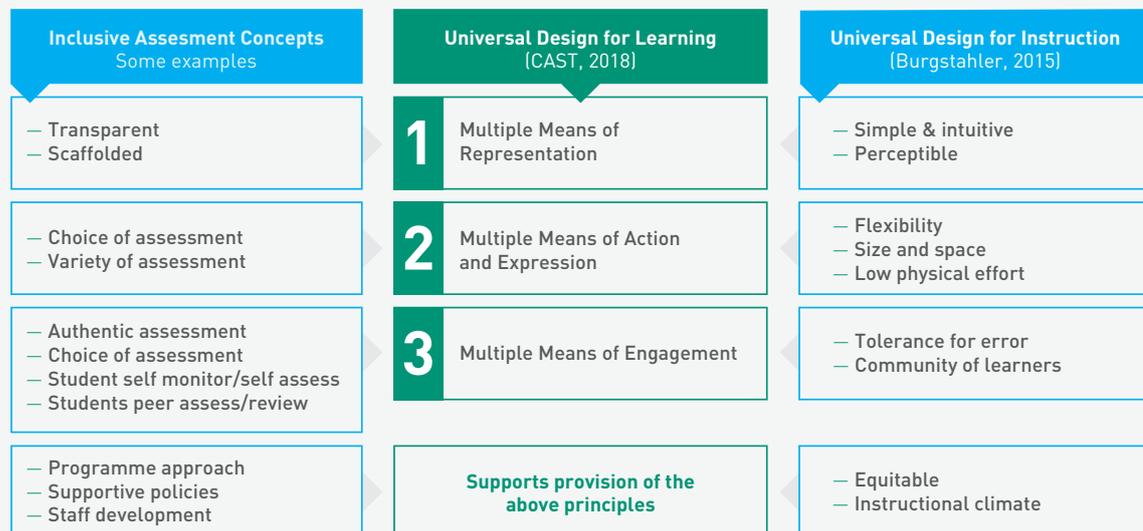
## Universal Design and Inclusive Assessment and Feedback

The idea of Inclusive Assessment has been strongly linked with the concept of Universal Design for Learning (UDL) (CAST, 2018; Burgstahler, 2015) but it also aligns with many of the good principles for assessment and feedback that are emerging from international and national practices and policies (National Forum, 2017; Nicol, 2014; O'Neill & Maguire, 2019). The UD approach has been described, by CAST (2018), using three overarching categories of Universal Design for Learning. It is also commonly described using the seven principles of Universal Design of Instruction (UDI) (Burgstahler, 2015).

Using the CAST definition as a starting point (see Figure 2), some ways to support this are through:

- Multiple Means of Representation (the 'What' of Learning), the aim here is to develop learners who are resourceful and knowledgeable;
- Multiple Means of Action and Expression (the 'How' of Learning). Its aim is to develop learners who are strategic and goal directed;
- Multiple Means of Engagement (the 'Why' of Learning). Its aim is to develop learners who are purposeful and motivated (CAST, 2018).

The teaching environment needs to be supportive of these approaches, for example, staff need to be educated on these approaches (this publication should assist in this regard), and institutional and local policies need to support them (National Forum, 2017; Burgstahler, 2015).



**Figure 2. The relationship between UDL and UDI Approaches and Inclusive Assessment Concepts.**

Some common approaches used to support **Inclusive Assessment** are:

- Use of a variety of assessment approaches – this can be done at module level, but care should be taken not to overload students. Students also need time to be introduced to unfamiliar assessment. It is best done at programme level, to support a systemic approach to introducing variety (UCD T&L, 2019c).
- Choice of assessment – all students have a choice from a pre-determined (or negotiated) choice of assessment methods within a module (O’Neill, 2011; 2017)
- Supporting ‘Students as Partners’ in assessment – student are given some control of the task, topics, design of rubrics, etc (National Forum, 2016b)
- Reducing assessment load – attention is given to student assessment workload and, where appropriate, assessment is reduced (UCD T&L, 2019c).
- Authentic assessments – students engage in assessments based on real-world tasks (National Forum, 2017)

- Scaffolded assessment – students are taught how to complete the assessment and this is built in to the curriculum e.g. how to write an essay, how to complete a group project, how to do a presentation etc. (Padden, O'Connor & Barrett, 2017).

Some common approaches used to support **Inclusive Feedback** are:

- Development of a variety of feedback approaches – For example, audio feedback, written feedback, online automated feedback, group feedback. This can be instigated at module level. Feedforward, giving actionable feedback for next assignment, is best designed at programme level, to support a systemic approach to this (UCD T&L, 2019a; UCD T&L, 2019c).
- Choice of Feedback – supporting students to ask for specific methods of feedback on their work (UCD T&L, 2019a)
- Self and Peer Review Activities – activities that encourage students to peer review, self-monitor and self-regulate (Nicol, 2014; UCD T&L, 2019a)
- Use of Rubrics – used to support staff in giving feedback and/or to encourage students to self-monitor their work (self-feedback) (UCD T&L, 2019b)

## Advice on creating inclusive assessments and feedback processes – from simple steps to programmatic review

Assessment and feedback are a fundamental cornerstone of the role of the lecturer and this is often the point of mobilisation for student activity and engagement. The thinking behind assessment is critical as it can determine the ‘quality and amount of learning achieved by students’ (Elkington and Evans, 2017). Increasingly, learner variability is a factor in all programmes across all disciplines and in all institutions (Rao and Meo, 2016). Therefore, if we want to embrace the learner variability and improve student learning we need to start with intentionality and incorporate good Universal Design principles into our assessment and feedback practice.

Considerations about the design of assessment and feedback occurs on a number of levels. For an individual lecturer the focus is normally on the particular modules one teaches; the starting point is to become conscious of UDL principles and to incorporate these principles into both the design of the curriculum and the associated assessments (the work of Ahead (2019) and CAST (2018) and the examples they have produced are very accessible and informative in this regard). You should work on understanding the underlying principles of UDL (multiple means of representation, multiple means of action and expression and multiple means of engagement) and consider how they can be embedded in your teaching and learning context. Identifying some basic actions that can be easily implemented will improve accessibility for all learners and can make a big difference. **Start with simple steps** -- use sans-serif fonts in a minimum of size twelve for documents and 24 for presentations, clear colour contrasts, accessible document formats, captions on videos and alternative text for images. These guidelines can be easily incorporated into assessment briefs and other materials from the outset, helping you to provide multiple means of representation.

A simple change which can have an enormous impact is ensuring you use a **variety of assessment types** within a module, helping you to provide multiple means of action and expression. For example, if there is a complete reliance on examination as the only form of assessment, it is likely to favour a particular type of learner to the exclusion of others. Broaden the options within modules to include essays, reports, video, audio or screencasts, oral presentation, poster presentation, performance etc. Diversity in assessment allows for students with differing learning preferences and needs to excel and also offers more opportunities for the development of students’ skills and competencies. In addition, offering choice within an assessment can be very empowering for students and encourages them to take responsibility for their own learning.

**Explore technology** and be open to the possibilities that it offers in terms of both assessment and feedback (multiple means of engagement). Use of multimedia and regulated social media can offer both multiple means of representation and of expression. Features on the VLE which offer opportunities for blogging, collaborating and creating quizzes should be explored. Instant response and learning game applications such as Kahoot can also be easily accessed and adapted for assessment use. These tools offer a low-effort, high-impact way to increase student engagement.

**Prepare students** for the work ahead – do not assume that students know what is meant when the assessment brief is issued. Spend some class time clearly articulating the end goals (Rao and Meo, 2016) and ensure that students understand the vocabulary used in the material you have provided or recommended. Combine the use of graphics / visuals with text where possible (multiple means of representation). In tandem with this, spend time developing rubrics that are issued with the assessment brief and work with students to ensure they understand the rubric and how it will be applied.

Take note of different types of **feedback mechanisms** - Use formative as well as summative assessments – some formative assessment techniques can incorporate immediate feedback. Here too consider variety - options could include using the VLE and other technologies. The provision of timely and meaningful feedback is vital in any assessment strategy and many mechanisms can be considered (UCD T&L, 2019a).

Programme teams need to collectively review assessment at programme level to develop a holistic view in order to understand how assessment impacts on the overall student learning as well as to ensure that there is no over reliance on any one form of assessment within the programme. The principles outlined above are all applicable but in addition consideration needs to be given to the timing, variety and overall assessment workload. It is also useful to explore how authentic the assessment tasks are - students are more likely to be engaged when the assessment tasks are **relevant and authentic** (Multiple means of engagement).

The case studies included in this book and summarised next offer insight across a range of disciplines as to how the authors designed their assessments using the principle of UDL.

A photograph of a graduate in a green cap and gown, seen from the side, looking out over a dark horizon. A large, semi-transparent green circle is overlaid on the image, containing white text. The background is a bright, hazy sky.

**"We need to start  
with intentionality and  
incorporate good Universal  
Design principles into our  
assessment & feedback  
practice"**

---

# Overview of the Case Studies

## Overview of the Case Studies

The following fifteen case studies were gathered from across disciplines in IADT and UCD. The case studies provide practical examples of inclusive assessment and feedback that you can adapt to suit your teaching contexts. Our hope is that these case studies will inspire you make positive changes to your practice and perhaps even develop new inclusive assessment and feedback initiatives which you in turn may share.

- 1 Case Study 1, Authentic Assessment in Business Education - the Integrated Case Study (a Capstone Project)**, outlines a final year business capstone project which is applied across several modules and is an example of shared assessment, which is authentic in the business environment. This approach reduces the assessment load for final year students as well as providing them with the opportunity to problem solve in a real-world context.
- 2 Case Study 2, 'Outside their Comfort Zone': Diverse and Engaging Approaches for Students Learning Through a Different Discipline**, outlines an innovative approach for helping students demonstrate their knowledge in an unfamiliar discipline by developing assessment methods which align with their prior knowledge base.
- 3 Case Study 3, An Exploration of Student Growth Through Assessment: Modular Redesign to Incorporate Problem Based Learning, Self-Directed Assessment and Personal Reflection**, outlines a re-designed assessment strategy involving Problem Based Learning that allows students to see the links between assessment, in-class experiences and the required learning outcomes. This approach has reduced assessment load and helped students to demonstrate the learning outcomes more effectively.
- 4 Case Study 4, Where Universal Design, Inclusive Assessment and Adult Education Principles Coincide: Professional Skills and Authentic Assessment**, demonstrates how to utilise a variety of authentic assessment and feedback methods to develop students' 'soft' professional skills such as professional reflection, teamwork, communications, time-management and ethics.

**5****Case Study 5, Student-led Learning: Utilising Inclusive Assessment and Group Work to Promote Autonomous Learning and Student Engagement,**

outlines how a more inclusive assessment involving choice and students learning from and supporting each other, led to better attendance, positive feedback, and increased student engagement in the lab environment.

**6****Case Study 6, Student Engagement with an Assessment Lexicon; a Structured Self-assessment to Demystify the Assessment Process,**

outlines how the assessment lexicon, or rubric, can be used to assist students in self-regulating and self-assessing their own work and progress.

**7****Case Study 7, Using Screencasts as a means to make third level student learning more inclusive,**

describes an assessment method with the flexibility to allow students who find presentations difficult to present their work in a less public way with an opportunity to rehearse until satisfied with their final submission. Students are given the opportunity to incorporate feedback and resubmit their assessment in order to maximise their learning and final grade.

**8****Case Study 8, Inclusive Assessment of 'Live Brief' Undergraduate Projects,**

outlines an approach to authentic assessment and feedback via live briefs with industry posing real-world problems to project teams within the college setting.

**9****Case Study 9, Assessment as Learning – Measuring your own Success,**

outlines an assessment method in which students create a rank ordering of their own work. This approach highlights the challenges inherent in assessing within creative and design disciplines when decisions may appear subjective. Students have a better understanding of how their work is assessed and are encouraged to develop a critical eye.

**10****Case Study 10, A Scaffolded Approach to Teaching Design and Design Techniques to Reluctant Designers,**

outlines an assessment method that affords students multiple opportunities to incorporate feedback. Students are assisted to develop skills in an area in which they are unfamiliar and lack confidence.

**11** **Case Study 11, Last Semester's Feedback... a Tool for this Semester,** outlines a programmatic approach to assessment that encourages students to build on meaningful feedback and identify the academic skills that need further development. This case study demonstrates how students might be encouraged to strategically consider how to develop their own learning across modules within a programme.

**12** **Case Study 12, Group-work Presentations (Poster or Oral) to Enhance Variety and Choice of Assessment in a Programme,** describes how to introduce choice of assessment while ensuring that the assessment methods are equitable. Students have been overwhelmingly positive about this approach which allows them to play to their strengths while also practicing new skills.

**13** **Case Study 13, Podcasts can Assess Module Learning Outcomes as Effectively as Essays,** is another excellent example of introducing choice of assessment in a module. This approach demonstrates how the principles of UDL can be applied to the design of assessment. Specifically, the approach demonstrated allows for multiple means of expression by providing learners with alternatives for demonstrating their knowledge and multiple means of engagement by affording students freedom within the syllabus to find a personal area of interest.

**14** **Case Study 14, Moving Away from Solely MCQ-based Exams: Short Answer Questions for Enhancing the Variety of Assessment Methods in the Large Classroom,** outlines how a move away from the MCQ format to a more authentic assessment can enhance student learning. In the context of the large volume of high stakes MCQs being used to assess students in some programme areas, this case study demonstrates how this type of assessment strategy might be redeveloped.

**15** **Case Study 15, Adapting Assessments on a University Access course to Facilitate Great Reflection and Engagement,** demonstrates the successful redesign of an assessment strategy on a university access course for mature students returning to education. This case study demonstrates engaging and efficient use of the VLE for rubrics and feedback to encourage reflective learning and skills development.

## What now?

We hope that this brief introduction has inspired you to take some simple steps on the journey towards inclusive assessment and feedback in your teaching and learning practice. Think about how you assess and provide feedback to your students? Is there variety in the methods of assessment you use? Are all your materials accessible to students? Do you provide feedback in a timely and meaningful way to students? Do your students know how their work is assessed? Are your students supported in developing the skills they need to succeed? As you read through the case studies in this publication, we invite you to reflect on these questions and on how you might incorporate the work demonstrated here in your own practice.

“

Our hope is that these case studies will inspire you make positive changes to your practice and perhaps even develop new inclusive assessment and feedback initiatives which you in turn may share

”

## References

- Ahead (2019) *Universal Design for Learning*. Available at: <https://www.ahead.ie/udl-practice> (Accessed 28 February 2019)
- Burgstahler, S. (2015) *Universal Design of Instruction (UDI): Definition, Principles, Guidelines, and Examples*. USA: University of Washington. Available at: [https://www.washington.edu/doit/sites/default/files/atoms/files/UD\\_Instruction\\_05\\_26\\_15.pdf](https://www.washington.edu/doit/sites/default/files/atoms/files/UD_Instruction_05_26_15.pdf) (Accessed 20th February, 2019)
- CAST (2018) 'Universal Design for Learning Guidelines' version 2.2. Available at: <http://udlguidelines.cast.org> (Accessed 20th February, 2019)
- Elkington, S., Evans, C (2017) *Transforming Assessment In Higher Education A Case Study Series*. Available at: <https://www.heacademy.ac.uk/knowledge-hub/transforming-assessment-higher-education> (Accessed 27 February 2019)
- HEA (2015) *National Plan for Equity of Access to Higher Education, 2015-2019*. Dublin: Higher Education Authority
- Kelly, A. & Padden, L. (2018a) University for All: embedding and mainstreaming equality of access, participation and success in higher education. *Studies in Health Technology and Informatics*. 256(Transforming our World Through Design, Diversity and Education) DOI10.3233/978-1-61499-923-2-483
- Kelly, A. & Padden, L. (2018b) *UCD University for All: Toolkit for Inclusive Higher Education Institutions – From Vision to Practice*. Dublin: UCD Access & Lifelong Learning. Available at [http://www.ucd.ie/t4cms/0274\\_UCD\\_TOOLKIT\\_1118\\_ONLINE\\_LR.pdf](http://www.ucd.ie/t4cms/0274_UCD_TOOLKIT_1118_ONLINE_LR.pdf) (Accessed 20 February 2019)
- Kneale, P. and Collings, J. (2015) *Developing and embedding inclusive assessment: issues and opportunities*. In Miller, W., Collings, J., & Kneale, P. (eds.) *Inclusive Assessment*. Plymouth: Pedagogic Research Institute and Observatory (PedRIO).
- National Forum (2016a) Profile of Assessment Practices in Irish Higher Education, Dublin: Author, Available at: <https://www.teachingandlearning.ie/publication/profile-of-assessment-practices-in-irish-higher-education/> (Accessed 20th February, 2019)
- National Forum (2016b) Assessment OF, FOR and AS Learning: Students as Partners in Assessment, National Forum for the Enhancement of Teaching and

Learning, Assessment Enhancement Theme Available at; <https://www.teachingandlearning.ie/publication/students-as-partners/>

(Accessed 20th February, 2019)

National Forum (2017) Authentic Assessment in Irish Higher Education. National Forum for the Enhancement of Teaching and Learning, Assessment Enhancement Theme Available at: <https://www.teachingandlearning.ie/publication/authentic-assessment-in-irish-higher-education/> (Accessed 20th February, 2019)

Nicol, D. (2014) 'Guiding principles for peer review: unlocking learners' evaluative skills', in McArthur, J & Kreber, C. (eds) *Advances and innovations in university assessment and feedback*, Edinburgh University Press, pp. 197-224.

O'Neill, G. & Maguire, T. (2019). *Developing Assessment and Feedback Approaches to Empower and Engage Students: A Sectoral Approach in Ireland*. pp 277-294. In, Bracken, S, & Novak, K. (eds) *Transforming Higher Education through Universal Design for Learning: An International Perspective*. London: Routledge: Taylor Francis Group .

O'Neill, G. (2017) 'It's not fair! Students and staff views on the equity of the procedures and outcomes of students'

choice of assessment methods', *Irish Educational Studies*, 36(2), pp. 221-236, DOI: 10.1080/03323315.2017.1324805

O'Neill, G. (ed) (2011) *A Practitioner's Guide to Choice of Assessment Methods within a Module*, Dublin: UCD Teaching and Learning, Available at: <http://www.ucd.ie/teaching/t4media/Practitioners%20Guide.pdf> (Accessed 20th February, 2019)

Padden, Lisa & Kelly, Anna M. (2018) 'University for All - moving forward through consultation, conversation and collaboration' in *UCD Access Symposium Proceedings 2018*, Dublin: UCD Access & Lifelong Learning. Available at: [https://www.ucd.ie/all/t4media/UCD\\_Symposium\\_Proceedings\\_2018\\_single.pdf](https://www.ucd.ie/all/t4media/UCD_Symposium_Proceedings_2018_single.pdf) (Accessed 20 February 2019)

Padden, L., O'Connor, J., & Barrett, T. (eds.) (2017) *Universal Design for Curriculum Design*. Dublin: UCD Access & Lifelong Learning. Available at: <http://www.ucd.ie/teaching/t4media/Universal%20Design%20for%20Curriculum%20Design.pdf> (Accessed 20th February 2019)

PASS (2011) *Programme Assessment Strategies* webpage, Available at: <http://www.pass.brad.ac.uk/> (Accessed 20th February, 2019)

Rao K., Meo G, (2016) 'Using Universal Design for Learning to Design Standards-Based', SAGE Open Special Issue: Student Diversity, Available at: <https://us.sagepub.com/en-us/nam/open-access-at-sage> (Accessed 27 February 2019)

UCD T&L (2019a) Feedback Strategies to Enhance Student Learning. Available at: <http://www.ucd.ie/teaching/t4media/UCDTLA0048.pdf>. (Accessed 20 February, 2019)

UCD T&L (2019b) Designing Grading & Feedback Rubrics. Available at: <http://www.ucd.ie/teaching/t4media/UCDTLA0046.pdf> (Accessed 20 February, 2019)

UCD T&L (2019c) Programme Design and Assessment, Dublin: UCD T&L Available at; <http://www.ucd.ie/teaching/resources/programmedesignassessment> (Accessed 1 March, 2019)

UCD (2019) Assessment Enhancement Implementation Framework Project (2018-2020), UCD Dublin Available at; <http://www.ucd.ie/teaching/projects/assessmentenhancementimplementationframework/#d.en.400304> (Accessed 1st March, 2019)



---

CASE STUDY 1

# Authentic Assessment in Business Education – the Integrated Case Study (a Capstone Project)

Discipline	Business and Entrepreneurship
Student Numbers	40 – 80



**Sharon McGreevy**



**Conor Heagney**



**Siobhan Gallagher**

## Introduction and Context

We are presenting a final year business case study which is applied across seven modules as an example of a shared assessment which is authentic in terms of the business environment. CIMA (Chartered Institute of Management Accountants) has given us permission to use and adapt their case study exams. The teaching team work collaboratively to assess each student's written report. Each student is also required to present and defend their recommendations to the team following submission. This approach reduces the assessment load for learners which is a frequently cited issue for final year students, and a Without this initiative, students would be facing, at minimum, an additional seven elements of assessment (Table 1) .

**Table 1: Weighting of the Assessment**

<b>Assessment Weighting</b>	<b>Module</b>	<b>Percentage</b>
Varies according to module but at least 20% of all participating modules	Strategic HRM (10 ECTS credits)	25%
	Taxation and Finance (10 ECTS credits)	20%
	International Entrepreneurship (5 ECTS credits)	50%
	Business Ethics (5 ECTS credits)	40%
	Strategy and Technology (10 ECTS credits)	25%
	Strategic Marketing (10 ECTS credits)	25%
	Strategic Entrepreneurship (10 ECTS credits)	25%
	<b>Assessment as % of final award</b>	<b>28%</b>

This case study requires students to problem solve in a real world context. It is a particularly appropriate teaching and assessment tool in business education as it gives the student the opportunity to:

- analyse real business situations,
- engage with complex problems in a time-pressured environment,
- draw on their accumulated knowledge across many modules to propose solutions to those problems and
- display their achievement of programme learning outcomes.

Authentic assessments are designed around tasks which require students to demonstrate skills and abilities which they will be required to practice in their careers (CAST, 2018; National Forum 2017). Using this integrated approach to assessment reinforces the relationship between teaching, learning and assessment. Feedback enhances the learning cycle through the encouragement of reflection. It reflects a move to assessment which is a more nuanced, complex and comprehensive assessment of knowledge and higher-order skills (Shepard, 2000; Birenbaum, 2003).

Authentic assessment is a model which enhances student employability through the promotion and development of skills and competencies which are required and valued in the workplace. It provides the opportunity for students to demonstrate problem solving (Wu, Heng, and Wang, 2015), autonomy (Swaffield, 2011), motivation (Gulikers, Bastiaens, Kirschner and Kester, 2008), self-regulation and metacognition (Wu, Heng and Wang, 2015). These approaches align with Universal Design for Learning (CAST, 2018). This is also reflective of an increasing emphasis on the learner's disposition-in-the-world that pushes assessment beyond formal attainment outcomes (Boud, 2014; Kreber, 2014)

## **Design and Implementation of the Assessment Strategy**

The Integrated Case Study is a capstone project where the programme learning outcomes are assessed on a cross modular basis. The relevant programme learning outcomes are:

- to write, present and defend material that articulates ideas, insights and analysis, using a variety of business media.
- to analyse entrepreneurial environments and scenarios and to advise on decision

- making in a business context.
- to apply problem solving and innovative thinking across management, technology, finance, tax and marketing.
  - to synthesise complex information, from an entrepreneurial context, and to draw out policy and ethical implications.

Individual module learning outcomes are also assessed through other module specific assessments. The principles of Universal Design for Learning have been applied to the design of this assessment (CAST, 2018). This assessment provides multiple means of both representation and engagement. It offers students the opportunity to demonstrate their learning in a structured context.

This authentic horizontal assessment reduces the assessment load for students. During the year, implementation of the integrated case study is a three stage approach. In stage one, students are given a practice case (November - formative). Students are provided with case study completion guidelines document to assist them in their approach to the process (See Appendix B). In stage two, they complete a minor case study (December - summative – 25% weighting). Stage three is the final case study in February (summative – 75% weighting).

The process operates as follows:

Background material on a fictional company is distributed seven days in advance of the assessment day. Students may work alone or in teams to research and consider the background of the company and its industry.

- At 9.00 a.m. on the assessment day, students are issued with a scenario (see Appendix A for a sample scenario) describing issues facing the company.
- Students have to individually prepare their own response to the scenario and to make recommendations to the company's board of directors.
- Students file a written report by 6.00 p.m. on the assessment day. (Maximum 2,500 words)
- Within one week each student is interviewed to allow them the opportunity to defend their recommendations to the lecturing team.



**Figure 1. The Interview Process in Action**

This scaffolding of the assessment process and combination of assessment techniques allows students to use combinations of skills (written assessment, presentation) to demonstrate their mastery of knowledge (Lombardi et al, 2011).

## Assessment marking sheet for MAJOR case study.

Student: \_\_\_\_\_ Lecturer: \_\_\_\_\_

CRITERION	'First' (75%)	'2:1' (65%)	'2:2' (55%)	'Pass' (45%)	'FAIL' (30%)
30% Analysis.	Can analyse new data and situations without guidance using a wide range of techniques appropriate to the topic	Can analyse a range of information with minimum guidance, can apply major theories and compare methods for obtaining data.	Can analyse with guidance using given classification / principles.	Can analyse a limited range of information with guidance using classification / principles.	Fails to analyse information.
20% Synthesis.	With minimum guidance can transform data and concepts towards a given purpose and can design novel solutions.	Can reformat a range of ideas / information towards a given purpose.	Can collect/collate and categorise ideas and information in a predictable and standard format.	Partially collects/collates and categorises information in a structured way.	No organisation of ideas and information.
30% Rationale / Imagination.	Uses high levels of imagination / entrepreneurial thinking and explores a variety of different perspectives. Clear criteria are applied to demonstrate reasons for final decision.	Uses imagination and data to go beyond boundaries and applies good creative / entrepreneurial techniques with skills in order to solve problems.	Uses data, imagination and a limited range of entrepreneurial / creative techniques in problem solving.	Presents benefits and disadvantages of some potential outcomes. Shows little imagination and entrepreneurialism. Aware of some creative techniques and uses, but relatively few included.	Lacks imagination & entrepreneurial thinking. Does not exercise creative skills. Little explanation of how the final outcome was made.
15% Interview.	Can engage effectively and debate in a professional business manner.	Can communicate effectively in a business setting and report practical procedures in a clear and concise manner.	Can communicate effectively in a business setting and report in a clear and concise manner.	Some communication is effective and in a business format. Can report practical procedures in a structured way.	Communication is unstructured and unfocused and/or in a format inappropriate to business.
5% Presentation of assignment / Referencing.	Shows a polished and imaginative approach to the topic.	Carefully and logically Organised Referencing is mainly accurate.	Shows organisation and coherence. Referencing is mainly accurate.	Shows some attempt to organise in a logical manner. Some attempt at referencing.	Disorganised/ Incoherent. Referencing is absent/ Unsystematic

Comments: \_\_\_\_\_

**Figure 2. Grading Rubric – Assessment Marking Sheet for the Major Case Study (Margaret Price and Chris Rust (2004), Oxford Brookes adapted).**

We had a number of specific purposes in undertaking this initiative. Firstly, we wanted to address the issue of students prioritising the next project deadline. Secondly, we wanted to address an identified difficulty in assessing the skill and competency programme learning outcomes. Through the use of the Integrated Case Study we hoped to achieve the following:

- to encourage students to draw on their learning across many modules to deal with authentic complex business scenarios
- to reduce the pressure of multiple assessment deadlines
- to facilitate the achievement of programme learning outcomes.

Student engagement and attendance has been enhanced through the Integrated Case Study process. Both anecdotally and through post case study questionnaire analysis, the process has been acknowledged as one that has supported and enhanced student achievement.

## Results and Evidence of Impact

The capstone Integrated Case Study is now a central feature of the final year assessment process. This authentic assessment approach has resulted in a number of key achievements for the final year teaching team. The approach results in a team of seven lecturers assessing student work from an integrated business perspective. This is only possible through the cooperation and collaboration of the lecturing team and their acknowledgment of the efficacy and impact of the assessment. Staff involvement and commitment has been at the core of the success of the process. As a teaching team, we are committed to on-going reflection and innovation in our teaching, learning and assessment approach in order to ensure that graduate attributes that mirror entrepreneurial competencies are achieved.

The reduction in the number of assessment deadlines has enabled students to work at a deeper level. The embedding of experiential learning as it pertains to entrepreneurship education at earlier stages of the programme has been hugely beneficial. Increased student tolerance for ambiguous or contradictory approaches from the teaching team on complex issues has been noted. The challenge in getting the teaching team and students into the same teaching space has been acknowledged.

The 2018/2019 Case Study is in the seventh year of implementation. From the outset, feedback from the student body has been an important element of the cycle. Each student cohort group from 2012/2013 onwards has been surveyed at the end of the process and we have acquired a substantial dataset. Feedback remains consistent (Figure 3). Students have responded favourably to this capstone project - they believe that it helps them to understand the relationships between different modules, that it simulates decision making in a real and meaningful way and that it assists them in developing their skillset in research, communication and time management.



**Figure 3: Feedback on the Capstone Assessment.**

As part of the assessment and feedback cycle, detailed feedback is provided following the minor case study. This is scheduled before the major case is circulated and in advance of grades being available. Here students engage actively in the feedback process which is a critical aspect of supporting and scaffolding their learning for the major case study. The feedback is both written and verbal and is provided by the team to all students collectively (Multiple means of representation, CAST, 2018). The focus is on constructive feedback which will enhance student performance and achievement in the major case. The feedback is structured around the marking criteria.

Extracts from the feedback are illustrated in the box below:

**Analysis 35%**

The analysis was often superficial and lacked detail. Consider if the analytic tools used are relevant and ensure their purpose is clear. Ensure that a justification for their use is provided. Generally, the application of the analytical tools to the case study was poor. Students must avoid simply repeating/ summarising the case study facts without providing additional analysis. Avoid any irrelevant analysis as this detracts from the quality of your work. Industry analysis - the Board would be familiar with the history of the industry and the company. The analysis should focus on areas that are likely to be part of the solution to the challenges. A key element of the company analysis was the collapse of operating profit from over 60 million to 3 million since 2013.

Students are surveyed for their feedback on the case study process through a written questionnaire which is circulated a week after completion of the case study (see Appendix C). Both closed and open questions are used in the questionnaire. Students are specifically asked to list the skills which they used during the case study process. Graduate attributes articulated by the students tended to focus around a combination of both soft and hard skills. Financial analysis, market research, problem solving and the ability to understand and synthesise information frequently featured in the feedback. In relation to the soft skills, organisation, leadership, teamwork and the capacity to adopt a holistic perspective to business issues were often highlighted in the feedback.

Finally, students are asked to comment on the case study process and to suggest improvements. A range of comments from the students is featured below:

'I enjoyed it!'

'I thought the case study was a better assessment than a thesis which suited me and I'd assume more students also'

'Very enjoyable project. I feel confident about similar going forward'

'Making minor adjustments during the case study would be tough on students but would be even more beneficial and realistic'

'I have added the skills used in this assignment to my LinkedIn profile'

This authentic assessment has improved the alignment between the intended programme learning outcomes and student employability skills. As can be noted from the feedback, students have reported favourably on an enhancement of both their soft and hard skillsets. Students are encouraged to develop a reflective approach to their learning and development. The student-centred and inclusive nature of this assessment is reflected in the mutuality of the learning process and the use by the teaching team of the feedback from students to modify and further enhance their learning.

## Advice to Others for Implementation

Feedback from students has led to adaptation and enhancement of the process. The minor case study was introduced in the academic cycle 2015/2016 as a response to student requests to have more than one opportunity to complete the case study. As previously highlighted the assessment weighting for the minor case study is 25%, which represents 7% of the overall marks available across the seven modules. Thus while the minor case is relatively low stakes marks wise it provides students with an opportunity to learn from their experience and prepare more effectively for the major case.

Student feedback will continue to advance and shape the quality and efficacy of the assessment going forward e.g. this year students received individual feedback on their minor case report. One possibility that is currently under active consideration is to introduce a change to the scenario on the assessment day at noon. This would mimic a real world business experience and further enhance the authenticity of the assessment process.

Finally, it should be noted that the success of this authentic assessment is wholly based on the collaboration and input of the teaching team. Furthermore, a senior member of the teaching team bears the considerable administrative and developmental workload involved in both co-ordinating the case study process and developing and adapting CIMA case study resources to meet our specific requirements. This represents a potential challenge to the implementation of the case study as changes in members of the teaching team may impact negatively on the process. The Integrated Case Study represents an assessment which creates a richer learning environment for the students and the capacity to develop a higher order skillset

which enhances their employability. This constructive alignment of curriculum and assessment where the activities integrate skill developments that students will require in the real world environment (Ashford-Rowe, Herrington, and Brown 2014) is at the core of the Integrated Case study approach.

## References

Ashford-Rowe, K., Herrington, J. and Brown. C. (2014) 'Establishing the Critical Elements that determine Authentic Assessment', *Assessment & Evaluation in Higher Education* 39(2), pp. 205-222.

Birenbaum, M. (2003). *New insights into learning and teaching and their implications for assessment*. in Segers, M., Dochy, F. & Cascallar, E. (Eds.). *Optimizing new methods of assessment: In search of qualities and standards*, pp.13-36. Boston, MA: Kluwer. (Accessed 20th February, 2019)

Boud, D. (2014) *Peer Learning in Higher Education: Learning from and with each other*. Routledge: London

CAST (2018) 'Universal Design for Learning Guidelines' version 2.2. Available at: <http://udlguidelines.cast.org> (Accessed 20th February, 2019)

James, L.T. and Casidy, R. (2018) *Authentic Assessment in Business Education: its effects on student satisfaction and promoting behaviour*, *Studies in Higher Education*, 43(3), pp. 401- 415.

Kreber, C. (2014) *Rationalising the nature of 'graduateness' through philosophical accounts of authenticity*, *Teaching in Higher Education*, Volume 19, Issue 1, Pages 90-100 (Accessed 20th February, 2019)

Lombardi, A.R., Murray, C. and Gerdes, H. (2011) 'College faculty and inclusive instruction: Self-reported attitudes and actions pertaining to Universal Design', *Journal of Diversity in Higher Education*, 4(4), p. 250.

National Forum (2017). *Authentic Assessment in Irish Higher Education*. National Forum for the Enhancement of Teaching and Learning, Assessment Enhancement Theme Available at: <https://www.teachingandlearning.ie/publication/authentic-assessment-in-irish-higher-education/> (Accessed 20th February, 2019)

Shepard, L.A. (2000) *The Role of Assessment in a Learning Culture*, *Educational Researcher*, Volume 29, No. 4, pp. 4 – 14, (Accessed 20th February 2019)

Swaffield, S. (2011) 'Getting to the Heart of Authentic Assessment for Learning', *Assessment in Education: Principles, Policy and Practice*. 18(4), pp. 433-499.

Wu, X., Heng, M., and Wang, W. (2015) 'Nursing Students' Experiences with the Use of Authentic Assessment Rubric and Case Approach in the Clinical Laboratories', *Nurse Education Today*, 35, pp. 549-555.

## Appendix A – Sample Scenario

### Major Case Study Scenario 2019 - Royals Gyms. (Adapted from the original CIMA case study)

Marco King, Chief Executive Officer, has just sent you the following email at 9.00 a.m. on February 12, 2019:

“I am sure you have seen in the news headlines recently that the Government is keen to improve the health and fitness of the people of Hylandia. I am sure that Royals could play an important role in this initiative.

Yesterday, the Financial Controller at the Ministry of Health emailed me the attached proposal document, outlining the key details of the Gym Access Programme. This is part of the ‘Make Hylandia Healthy’ initiative, of which Royals is now officially a partner. I would like your help in analysing it, as I am due to meet with our Board of Directors tomorrow to discuss this proposal. Please write a report which:

- Describes the key macro-environmental factors which impact on the fitness industry, highlighting within this any potential threats or opportunities to Royals of involvement in this initiative.
- Identifies the potential benefits and challenges for Royals of taking part in such a public/private sector collaboration.
- Evaluates the financial implications of our involvement in this Gym Access Programme.
- Addresses the impact of this proposal on Royals’ risk factors as identified by the Board.
- Advises Royals on the proposal changes it should request from the Ministry of Health.

**I need your report by 6.00 p.m. today.**

Kind regards,  
Marco King.

P.S. Our long term bank loans have a condition that if ‘interest cover’ goes under four times, the loans become repayable immediately.

Attachment 1.”

### **Proposal overview by the Ministry of Health in Hylandia.**

#### **Make Hylandia Healthy Initiative - Royals Gym Access Programme.**

The Hylandia government will authorise doctors within local health authorities to encourage suitable patients to become more active.

Doctors will be able to arrange with Royals for the chosen patients to have free access to Royals gyms following an induction session. All patients, recommended to the Royals Gym Access Programme, will participate on a voluntary basis. The programme will run for a trial period of 6 months (from March 2019) and patients will be expected to commit to the whole 6-month programme.

The forecast number of patients per gym within the trial period is about 300. These patients are expected to attend at least one gym session per week for the duration of the programme.

The Hylandia Government will pay Royals H\$3 million for this trial period.

#### **Requirements of Royals Gym:**

1. All patients recommended by doctors to the programme will be given a one-hour induction and familiarisation session by Royals.
2. Royals will take full responsibility for any accidents occurring to patients on Royals' premises.
3. Patients must be supervised at all times.
4. The gyms must be accessible 24 hours a day for use by patients on the programme.

#### **NOTES:**

1. The Ministry of Health expects its partners to focus on Value for Money principles at all times.
2. Any new Royals gym opened during the trial period will NOT be expected to participate in the programme.
3. In countries where similar gym access programmes have been encouraged by governments, an estimated 25% of patients joined the gym as permanent members following the completion of the programme.
4. A rumour is circulating in social media that the government is about to award a large contract to Royals Gyms because it is in a 'cozy relationship' with the ruling party.

**The end.**

## Appendix B - Case Study Guidelines

1. The word limit, including appendices, is 2,500 words. Submissions to be made via Turnitin. Financial appendices may be captured by screen shot. References are not included in the word count.
2. Referencing – it is not necessary to reference material from the company background material.
3. Collaboration – students may wish to collaborate for research purposes. Please note, in the report, the students you collaborated with. All other work on the report must be done on an individual basis.
4. The report should include:
  - Analysis of company using two tools – explain your rationale for choosing the two analytical tools. The company analysis should be at the beginning of your report i.e. not in the appendix.
  - Prioritisation of the scenario issues if applicable – include a concise explanation.
  - Ensure that you meet the requirements of your client i.e. answer the question.
  - Ethics – highlight any ethical issues facing the Board.
  - A conclusion is not required.
5. The mark, for each student's case study report, is an average of the lecturers' marks. Marking is weighted 25% on the minor case and 75% on the major case. The weighted average of the minor and major cases will be entered as your mark for the case study assignment for each module. Feedback will be provided to students in the form of provisional grades. Class feedback will also be provided on the minor case.
6. Please check the Blackboard version of this document for any updates.

**The end.**

## Appendix C - Case Study Guidelines

Live Case Study Questionnaire on 19 February 2019.

### 1. In your opinion:

Was the assignment realistic?	Yes	No
Should we run the assignment next year?	Yes	No
Should less modules be involved?	Yes	No
Were the preparation classes adequate?	Yes	No
Reduce minor case study preparation to 1 week?	Yes	No
Introduce changes during day of the major case?	Yes	No

### 2. How would you rate the 'case study experience' out of 100%:

%

### 3. List the skills which you used during the case study:

---

---

---

---

### 4. Have you added / will you add the skills at (3) above to your CV / LinkedIn profile?

Yes

No (delete as appropriate)

### 5. Any comments on the case study would be most welcome:

---

---

---

---

Thank you, Year 4 Lecturers.

19 February 2019.



---

## CASE STUDY 2

# ‘Outside Their Comfort Zone’: Diverse and Engaging Approaches for Students Learning Through a Different Discipline.

Discipline: | An Engineering module in an Architecture Program  
Student Numbers: | 40



**Dr Jennifer Keenahan**

## Introduction and Context

I am an engineer and typically engineering students are assessed using calculation-based exams and written laboratory reports. However, I teach a 5-credit third year module which typically contains 60 architecture students and is compulsory. Simultaneously, these students complete a 20-credit module in studio design involving approximately 30 contact hours per week.

The purpose of this module is to provide architecture students with the necessary training in engineering to fulfil requirements at both a professional and accreditation level.

Whereas calculation-based exams are commonplace in the assessment of engineering students, using them to assess architecture students does not promote effective learning. It was not uncommon for architecture students to fail the engineering-style exam which suited those with a strong background in maths and physics. They seemed relatively unfamiliar with exams as a form of assessment as most of their submissions are studio portfolios. Exams tend to focus student attention on 'reproductive thinking' (Boud and Dochy, 2010). Students often end up cramming last minute, engaging in surface learning rather than the deep learning associated with 'slow scholarship' when assessment tasks require substantial involvement over time (Gibbs and Simpson, 2005).

An alternative, more inclusive assessment approach was required for this module to improve engagement, to allow equal opportunity to demonstrate learning, to cater for the diversity of students and to reduce the need for individual adaptations for specific students.

While the content of this module remains unchanged, my objectives in overhauling the assessment were as follows:

- To promote deep, more effective learning than the surface learning that occurs in exams (Multiple means of representation, CAST, 2018)
- To be transparent in assessment by developing the rubric with students
- To provide greater choice in assessment tasks (Multiple means of engagement , CAST, 2018)
- To empower students to be self-regulated learners (Multiple means of engagement , CAST, 2018)
- To be more inclusive of architecture students in the discipline of engineering

The assessment strategy in this module were therefore overhauled to include the use of rubrics, group-work, peer-review and feedback activities to promote a more inclusive learning environment for all. This case study presents details on the activities that I introduced to students, as well as some feedback from students on their effectiveness.

## Design and Implementation of the Initiative

Rather than a final exam, students now complete an individual design report (60%), a group laboratory presentation (30%) and participation in classroom activities (10%).

### Individual Design Report.

This authentic assignment (National Forum, 2017) is given to students in Week 1 and is due in Week 11 (Table 1). Students prepare a design report including the engineering scheme, assumptions and calculations of some typical building elements using a variety of materials.

**Table 1: Individual Design Report**

You are the architect and lead designer on a big project

For this project, you must complete an individual design report, for your client, containing the following:

- A stable structural scheme design for the project
- Detailed design calculations for a range of beams and columns in timber, concrete and/or steel including
  - Cross-sectional sizes of members to resist bending stresses, by judging the significance of section modulus
  - Cross-sectional sizes of members subjected to either compressive stresses or combined compressive and bending stresses, by judging the effect of slenderness of the structural element
  - Calculations of the shear forces of structural elements and control them using appropriate cross-sectional dimensions
  - Evaluate the need to control deflection in members
- Calculations for foundations and/or retaining walls

The individual report must also contain

- A detailed description of your architectural design for the public building that gives the reader context

- A description of your understanding of the philosophy of safe design
- A note on assumptions you've made
- A discussion on the efficiency of your solution
- Supporting images and sketches
- State the correct units in all calculations
- High quality writing and organisational layout as per any professional report

Choice is given to students about whether to complete their report on a design from their current studio work (e.g. a library, school, residential complex etc), or studio work completed in a previous year (Figure 1) Choice is one of the approaches used in inclusive assessment (CAST, 2018; Burgstahler, 2015) . The advantages and disadvantages of each option were also presented.

### What project?

The public building you designed last semester in ARCT 20010 (Architectural Design IV)	OR	The public building you are currently designing this semester in ARCT 30010 (Architectural Design V)
<p><b>Advantages:</b> Can get started straight away as your architectural design is finished and you could finish early</p>		<p><b>Advantages:</b> The architectural and structural design will be completed simultaneously so one can inform the other</p>
<p><b>Disadvantages:</b> You may find some parts of your public building are very difficult to design structurally</p>		<p><b>Disadvantages:</b> You could end up doing a lot of work late in the semester when you have other deadlines</p>

**Figure 1: Choice in assessment provided to students**

During Weeks 1-8, content was delivered to students on design calculations and codes of practice in timber, steel and concrete, used in the competent design of any structure. Students brought a draft report to class in Week 9 to engage in the process of the two-stage assignments and peer feedback (Table 2). These activities promote the concept of 'feed forward' (Jackel et al., 2017) and offer an opportunity for self-

reflection, analysing a peer's work, exchange of peer feedback, and then revision of their own work before submitting a final assessment (Reinholz, 2016). While students are commenting on the drafts of peers, they will at the same time be reflecting back on the work they have produced themselves (Nicol, 2014). The use of peer and self-assessment increases students' responsibility for their own work and reduces the number of 'am I done yet' questions (Andrade, 1997).

### Table 2: Peer-Review Details

This is a two-stage assignment

- The first deadline is **9am Monday of Week 9, bring two copies of your draft report to class** for feedback. Participating in this feedback contributes to 10% of your grade for the module. This promotes the concept of feed-forward to help you prepare for your final submission.
- The second deadline is **3pm Friday of Week 11, submit your final report** including changes as a result of feedback to the school office G79. Include a cover sheet outlining how the feedback you received was taken into account. This report is worth 60% of your grade for this module.

### Group Laboratory Submission

Traditionally, engineering students complete laboratory reports (introduction, methodology, results, conclusion) for each lab they attend. In this module, students attend a laboratory on timber and concrete (Week 7) and prepare a group submission which is due in Week 10. To make the assessment more exciting, authentic, effective and relevant, students choose to prepare either a video or presentation based on their laboratory, rather than a report (Figure 2).

### **Group Laboratory Submission**

You will be on the team of technical experts involved in a court case

A building collapsed during construction and the client is suing the engineer. Samples of the concrete and timber used in the construction are being tested in your lab. Prepare the video evidence that will be shown in the courtroom.

Include the following:

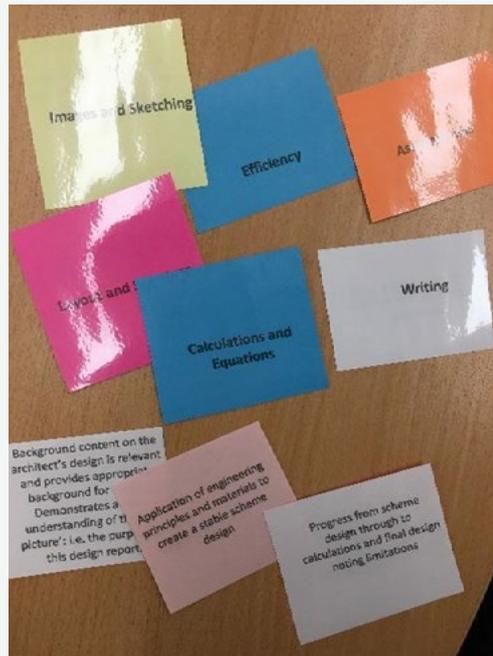
- Video footage of the lab tests
- Technical explanations of the theory
- Calculations based on your results
- Methodology, Results and Conclusions
- Students will work together in assigned groups to create the laboratory submission project.
- For your submission, you have a choice:  
Made a 3min Video to play in class OR Prepare a 7min presentation to deliver in class
- Both options should include appropriate photographs, video from the labs, music, graphs, and other visual aids.
- Make sure to include your group number and the names of the students who contributed.
- If making the video, it should be embedded in a single powerpoint slide

### **Figure 2: Group Laboratory Submission**

To support effective group-work, I engage students in activities ahead of their laboratory. I present them with an essay on hitchhikers (Oakley et al., 2004) and request a reflection from each student. This encourages students to think critically about group-work, and how they as individuals can contribute. A team policies statement (Oakley et al., 2004) is drafted by each group which sets expectations, provides guidance on effective group functioning, assigns roles and develops strategies for dealing with uncooperative group members. The signed agreement serves two purposes; it sets student-generated expectations that they agree to honour and serves as a 'quasi-legal document' so students can't claim they didn't know what they were supposed to do.

### **Interactive Rubric Development with Students**

I created the rubrics for both assessment tasks in class with students. Each group was given an envelope of cards. Each card contained an assessment criterion on one side and its definition on the reverse (Figure 3).



**Figure 3: Cards used with Students to Create Rubric**

Students spent time in groups deciding the criteria and respective weighting to be used in the rubric (Figures 4 and 5). This achieved buy-in from students in the assessment process, a greater understanding of the expectations for the assessment, as well as getting students started much earlier. This also supports students engaging in a discipline that is less familiar to them, i.e. architects experiencing more engineering types concepts and practices.

Furthermore, the activity achieves the objectives of being transparent, inclusive and empowering students to be self-regulated learners. The full rubrics used for each assessment can be found below in Appendix A.

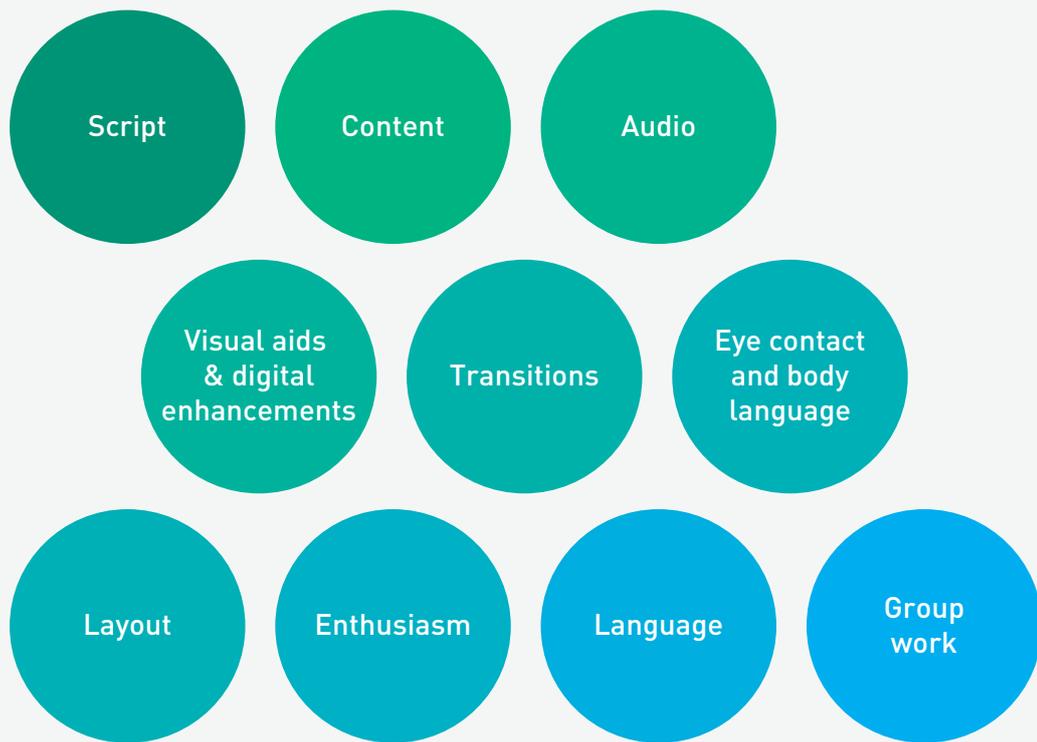


Figure 4: Criteria used in Group Laboratory Submission

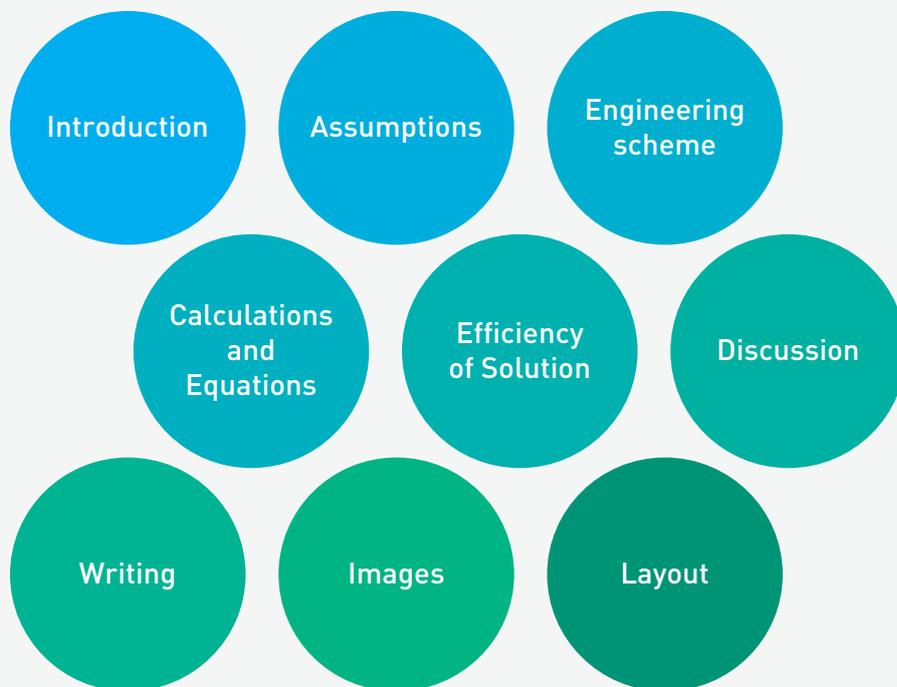


Figure 5: Criteria used in Rubric for Individual Design Report

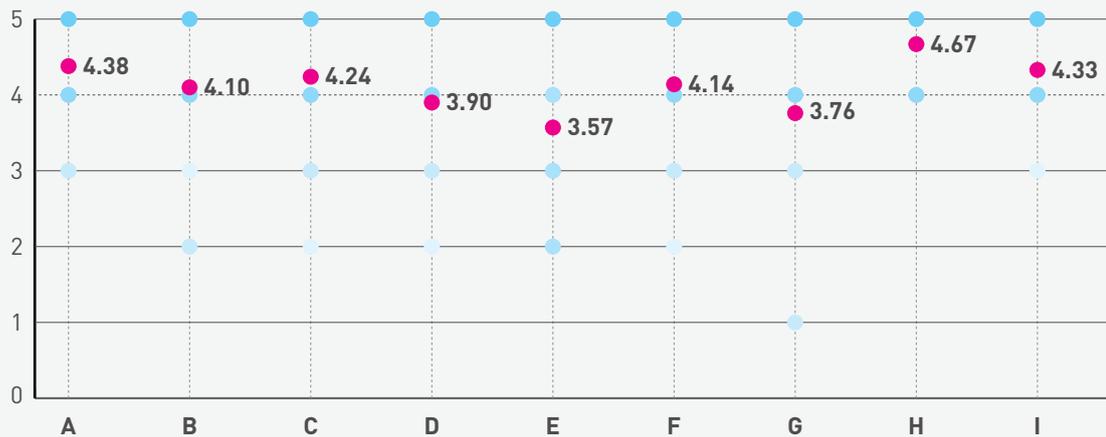
## Link to Universal Design (Inclusive Assessment)

The assessment tasks in this module were designed adhering to the principles of inclusive design:

- **Variety** – the assessment approach expands the variety of assessments students are exposed to as well as there being multiple methods of assessment: an individual design report using peer feedback and two-stage submissions as well as a group lab submission in either a video or presentation format (Multiple Means of Representation, CAST, 2018)
- **Transparent** – the rubric for both assessment tasks was developed in class with students and so students choose how they wish to be assessed. This empowers them to become partners in assessment and to become self-regulated learners. (Multiple Means of Representation and Multiple Means of Engagement, CAST, 2018)
- **Authentic** – the group laboratory submission sought a script from students that played out a likely scenario they will encounter in their careers – i.e. being involved in a court case associated with one of their designs. (Multiple Means of Engagement, CAST, 2018)
- **Choice** – students have choice in both of the assessment tasks which enables students become partners in assessment and select the method that best suits their strength. Allowing students choice is in line with Universal Design for Learning principles of multiple means of engagement. (Multiple Means of Action and Expression, CAST, 2018)
- **Scaffolded**– students are supported in the completion of their assessments using peer review of an early draft that promotes feed-forward for the final submission. This also empowers them to become self-regulated learners (Multiple Means of Representation and Multiple Means of Engagement, CAST, 2018)

## Results/Findings/Feedback

At the end of the semester, students provided feedback on the module. On a scale of 1 (poor) to 5 (excellent), students were asked to rate their response to the questions illustrated in Figure 6. It is clear that the goals of reforming the assessment practices to promote more effective learning, to offer choice and to implement feed-forward and peer-review activities have been achieved. Furthermore, having completed the assessment grading, no students failed the module this year and the average grade for the class was a B-. It is clear to me that their learning has been excellent as evidenced by their submissions.



**Total Students: 60**

- |   |   |
|---|---|
| <p><b>A.</b> I learned a lot about engineering, for the benefit of my architecture education</p> <p><b>B.</b> Do you have a greater understanding of structures now?</p> <p><b>C.</b> I understand more about the relationship between engineers and architects</p> <p><b>D.</b> Groupwork help develop working relationships</p> | <p><b>E.</b> Reviewing the hitchhiker essay a good idea</p> <p><b>F.</b> Have you learned from participating in the lab work?</p> <p><b>G.</b> Was the peer review of draft reports a good idea?</p> <p><b>H.</b> Did you learn more from having continuous assessment rather than exams?</p> <p><b>I.</b> Overall, I am satisfied with the quality of the module</p> |
|---|---|

**Figure 6: Results of feedback from students**

In addition, students made following additional comments, which are overwhelmingly positive:

- ‘Really super module. Clear, well run and super lecturer. Thank you!’
- ‘Teaching instructions very clear and enabled easier understanding of topics. All lectures were explained thoroughly. Lecturer was very understanding and was very happy to provide as much help as needed. Best teaching I’ve experienced in 3rd level’
- ‘couldn’t have imagined an exam in this module as the content is so vast and difficult’.

The results, therefore, have been extremely positive from students and I have been very happy with how much the students appear to have learned. I hope that my initiatives will inspire others to use some of these ideas in their own classroom.

## Advice to others for implementation

If you are considering implementing some of my ideas, please find some suggestions below:

- Engaging students in developing the rubric for the assessment tasks worked really well. It achieved great buy-in from students and they had a much greater understanding of the expectations as a result. To prepare for this; it is a good idea to have the criteria prepared (Figure 3) ahead of time, and to guide students through the activity.
- It's a good idea for students to put their student number (and not their name) on their draft reports for peer review. The reports are then shuffled and anonymously handed out. Students really liked the peer-review process as it gave them a target to work towards as well as getting an appreciation for the level of work their colleagues were putting into their reports.
- I prepared a timetable for the semester (Figure 7) which helped me to make sure that all of the inter-linked activities were scheduled in an organised manner, which students liked.

Week	Topic
1	Lecture 0: Overview of module Lecture 1: Philosophy of safe design Introduce design report
2	Lecture 2: Timber
3	Lecture 3: Concrete
4	Class Trip
5	Lecture 4: Steel Lecture 5: Rubrics for Design Report
6	Lecture 6: Foundations Lecture 7: Retaining Structures Introduce Group Video assignment and lab-work Lecture 8: Groupwork
7	Labs
8	Bank Holiday
9	Lecture on Peer-Review Peer review of individual design reports
10	Peer Review of lab reports
11	Tutorial for submission of final report
12	Finish

Figure 7: Timetable for Semester

## References and Resources

- Andrade, H. G. (1997). *'Understanding rubrics'*. Educational leadership, 54, pp14-17.
- Boud, D. and Dochy, F. (2010). *'Assessment 2020. Seven propositions for assessment reform in higher education'*. Available at: [https://www.uts.edu.au/sites/default/files/Assessment-2020\\_propositions\\_final.pdf](https://www.uts.edu.au/sites/default/files/Assessment-2020_propositions_final.pdf) (Accessed 20th February, 2019)
- Burgstahler, S, (2015) *'Universal Design of Instruction (UDI): Definition, Principles, Guidelines, and Examples.'* USA: University of Washington. Available at: [https://www.washington.edu/doit/sites/default/files/atoms/files/UD\\_Instruction\\_05\\_26\\_15.pdf](https://www.washington.edu/doit/sites/default/files/atoms/files/UD_Instruction_05_26_15.pdf) (Accessed 20th February, 2019)
- CAST (2018). *'Universal Design for Learning Guidelines'* version 2.2. Available at: <http://udlguidelines.cast.org> (Accessed 20th February, 2019)
- Gibbs, G. & Simpson, C. (2005). *'Conditions under which assessment supports students' learning'*. Learning and teaching in higher education, pp 3-31.
- Jackel, Brad; Pearce, Jacob; Radloff, Ali; and Edwards, Daniel, (2017) *'Assessment and Feedback in Higher Education: A Review of Literature for the Higher Education Academy'* Available at: [https://research.acer.edu.au/higher\\_education/53](https://research.acer.edu.au/higher_education/53) (Accessed 20th February, 2019)
- National Forum (2017) *Authentic Assessment in Irish Higher Education. National Forum for the Enhancement of Teaching and Learning, Assessment Enhancement Theme* Available at: <https://www.teachingandlearning.ie/publication/authentic-assessment-in-irish-higher-education/> (Accessed 20th February, 2019)
- Nicol, D. (2014) *Guiding principles for peer review: unlocking learners' evaluative skills.* Advances and innovations in university assessment and feedback, pp 197-224.
- Oakley, B., Felder, R. M., Brent, R. & Elhajj, I. (2004). *Turning student groups into effective teams.* Journal of student centered learning, 2, pp9-34.
- Reinholz, D. (2016) *The assessment cycle: a model for learning through peer assessment.* Assessment & Evaluation in Higher Education, 41, pp 301-315.

# Appendix A

## Rubric – Design Report

Definition of Criteria	Excellent
<b>Introduction: Context and Relevance (10%)</b>  Background content on the architect's design is relevant and provides appropriate background for reader. Demonstrates a clear understanding of the 'big picture': i.e. the purpose of this design report.	Background information has the appropriate level of specificity to provide concise and useful context to the reader
<b>Suitability of Assumptions (5%)</b>  Clear, logical and justified assumptions for design decisions	Explicitly describes assumptions, provides compelling rationale for their appropriateness, and shows awareness that conclusions are limited by the accuracy of the assumptions
<b>Engineering Scheme (20%)</b>  Application of engineering principles and materials to create a stable scheme design	Critical selection and application of engineering principles ensuring a completely stable and efficient scheme design Complete understanding of material and design constraints
<b>Calculations and Equations (20%)</b>  Correct use of equations and units. Accurate calculations and numeracy	Skilfully converts relevant information into appropriate and accurate mathematical equations Calculations are presented clearly, concisely, correctly and are sufficiently comprehensive to solve the problem Accurate use of units Accurate numeracy throughout the report
<b>Efficient Solution (7.5%)</b>  Both the overall scheme design and the detailed design of elements should be efficient in their use of materials	Final design achieved after review of reasonable alternatives ensuring the most efficient design Effective implementation of resource conservation

<b>Good</b>	<b>Fair</b>	<b>Poor</b>
<p>Background information may contain minor omissions that do not detract from the report</p> <p>Background information has the appropriate level of specificity to provide relevant context</p>	<p>Background omits information which detracts from understanding the report</p> <p>Background information is only partially relevant</p>	<p>Background information is missing</p> <p>Background information is irrelevant or too disjointed to make relevance clear</p>
<p>Explicitly describes assumptions and provides rationale for why these assumptions are appropriate</p>	<p>Explicitly describes assumptions</p>	<p>Attempts to describe assumptions</p>
<p>Effective application of engineering principles resulting in a stable scheme design</p> <p>Reasonable understanding of material and design and constraints - does not significantly impair solution</p>	<p>Serious deficiencies in proper selection and use of engineering principles</p> <p>Stable scheme but without understanding why</p> <p>Poor understanding of material and design constraints</p>	<p>Erroneous application of engineering principles yielding unstable solution</p> <p>Little or no grasp of material and design constraints</p>
<p>Converts relevant information into appropriate and accurate mathematical equations</p> <p>Calculations attempted are essentially correct and sufficiently comprehensive to solve the problem</p> <p>Mostly accurate use of units</p> <p>Mostly accurate numeracy throughout the report</p>	<p>Completes conversion of information but resulting mathematical equations are only partially appropriate or accurate</p> <p>Calculations attempted are either incorrect or represent only a portion of the calculations required to solve the problem</p> <p>Infrequent and inaccurate use of units</p> <p>Numeracy inaccuracies are frequent</p>	<p>Completes conversion of information but resulting mathematical equations are inappropriate or inaccurate</p> <p>Calculations are attempted but are both incorrect and are not comprehensive</p> <p>No use of units</p> <p>Inaccurate numeracy</p>
<p>Alternative efficient designs identified or investigated to some degree</p> <p>Moderately effective utilisation of resource conservation</p>	<p>Little evidence of exploring and identifying alternative more efficient designs</p> <p>Minimal utilisation of resource conservation</p>	<p>Only one design presented with no evidence of exploring more efficient options</p> <p>No implementation of resource conservation</p>

Definition of Criteria	Excellent
<p data-bbox="180 282 564 311"><b>Discussion and Development (15%)</b></p> <p data-bbox="180 356 807 421">Progress from scheme design through to calculations and final design noting limitations</p>	<p data-bbox="837 282 1303 383">Final design is clearly and logically drawn from interpretation of results from calculations.</p> <p data-bbox="837 394 1246 495">A logical chain of reasoning and good judgement is clearly and persuasively explained.</p> <p data-bbox="837 506 1303 568">Discussion is comprehensive and takes the limitations of assumptions into account</p>
<p data-bbox="180 624 628 654"><b>Use of Images, Quality of Sketches (10%)</b></p> <p data-bbox="180 698 775 763">Appropriate use of high quality images and sketches to communicate to the reader</p>	<p data-bbox="837 624 1294 687">All images are appropriate for the content and target audience.</p> <p data-bbox="837 698 1311 728">Informative text is supplied for all graphics.</p> <p data-bbox="837 739 1289 801">All images are displayed with appropriate sizing and resolution</p> <p data-bbox="837 813 1158 842">Sketches are of a high quality</p> <p data-bbox="837 853 1294 911">All images and sketches are appropriately referred to and labelled</p>
<p data-bbox="180 1005 794 1034"><b>Layout, Organisational Structure and Typography (7.5%)</b></p> <p data-bbox="180 1079 799 1144">Organisation facilitates the reader's understanding of the report</p>	<p data-bbox="837 1005 1286 1106">A clear organisational strategy is present with a logical progression of content. The layout follows a consistent pattern.</p> <p data-bbox="837 1117 1286 1180">Informative subheadings significantly aid reader's understanding.</p> <p data-bbox="837 1191 1270 1328">Titles, subheadings, text and equations are displayed in sizes that reflect the content hierarchy. Excessive text blocks are avoided.</p> <p data-bbox="837 1339 1275 1440">There is evidence of an active planning for presenting information; this paper is easier to read than most.</p>
<p data-bbox="180 1496 400 1525"><b>Writing quality (5%)</b></p> <p data-bbox="180 1570 743 1635">Grammar, spelling, word usage and use of technical terminology</p>	<p data-bbox="837 1496 1270 1559">Correct grammar, spelling, punctuation and use of technical terminology.</p> <p data-bbox="837 1570 1174 1635">Word usage facilitates reader's understanding.</p>

Good	Fair	Poor
<p>A reasonable and clear chain of logic from scheme design to calculations and final design</p> <p>Some discussion on limitations of assumptions</p>	<p>Connection between scheme design, calculations and final design is present, but weak</p> <p>Limitations of assumptions are discussed in a trivial way</p>	<p>Final design does not take on board the results from calculations</p> <p>Connection between the scheme design, calculations and final design does not exist, is limited, vague or otherwise insufficient</p> <p>Limitations of assumptions are not discussed</p>
<p>All images are appropriate for the content and target audience.</p> <p>All images have some text.</p> <p>Images are displayed with appropriate sizing and resolution</p> <p>Sketches are of a good quality</p> <p>Most images and sketches are referred to and labelled correctly</p>	<p>Most of the images are appropriate and several have text.</p> <p>Not all images are displayed with appropriate sizing and resolution</p> <p>Sketches are of a poor quality</p> <p>Some images and sketches are referred to and labelled</p>	<p>Some images are appropriate for the content and have few if any text</p> <p>Poor use of sizing and resolution of images</p> <p>No use of sketches</p> <p>No referencing of images or labelling evident</p>
<p>A clear organisational strategy is present with logical progression of content. The layout follows a consistent pattern.</p> <p>Distinct sections of the paper are delineated by information subheadings.</p> <p>Most of the titles, subheadings, text and equations are displayed in sizes that reflect the content hierarchy. Very few large text blocks exist.</p>	<p>There is some evidence of an organizational strategy though it may have gaps or repetitions.</p> <p>Subheadings are used and aid the reader somewhat.</p> <p>Titles, subheadings, text and equations are displayed in the same size. Some large text blocks are utilize.</p>	<p>Information is presented in a haphazard way.</p> <p>Subheadings are not used or poorly used.</p> <p>Titles, subheadings, text and equations are displayed in various sizes that are inconsistent with the content hierarchy. Excessive blocks of text exist.</p>
<p>Grammar, spelling, punctuation and use of technical terminology have few mistakes.</p> <p>Word usage is accurate and aids the readers understanding</p>	<p>Grammar, spelling and punctuation mistakes do not hinder the meaning of the report.</p> <p>General word usage is appropriate, although use of technical terminology may have occasional mistakes</p>	<p>Grammar, spelling and punctuation errors detract from the meaning of the report.</p> <p>Word usage is frequently confused and incorrect</p>

---

CASE STUDY 3

# An Exploration of Student Growth through Assessment: Modular Redesign to Incorporate Problem Based Learning, Self-Directed Assessment and Personal Reflection

Discipline: Occupational Safety and Health (OSH)  
Student Numbers: ~20 Postgraduate (part-time adult professional students, full-time international students and elective full-time postgraduates from other programmes)



**Dr Conor Buggy**

## Introduction and Context

There were two specific reasons for the re-design of this module to become more self-directed. While student feedback on the module was good it was not brilliant and there was a distinct disconnect between how the students viewed the in-class experience and the assessment strategy. The students also could not see the links between the assessment strategy and the module learning outcomes.

The redevelopment of the part-time MSc in Occupational Safety and Health into a full-time MSc available to Irish and international students required a curriculum review and overall assessment strategy re-design for the programme. The internationalisation of the programme necessitated that this module would increase in size but now with a newly diverse cohort. It was also considered that this would be an opportunity for elective postgraduate students to take this module also and increase the diversity within the student cohort.

The assessment strategy for the module aimed to have a focus that is strongly linked to the practicalities of the subject of Human and Organisational Behaviour while also incorporating the principles of Universal Design. Providing a specific purpose to each form of assessment linked to the learning outcomes of the module added value for the students. Learning through action is far more effective than learning by simple instruction (Pryor and Crossouard, 2008). When approaching a curriculum design from the outset, irrespective of the delivery innovations i.e. blended learning and problem based learning (PBL), it is the assessment of students' learning which often proves most problematic (Schwartz et al., 2001). Ensuring the assessment strategy was aligned with the learning outcomes was considered to be essential.

Developing a new assessment strategy focusing on two phases of the module, each with a specific purpose but with self-direction at its core, became the basis of the assessment strategy that ensured student buy-in to the redesigned module (North, 2016). The overall objective was thus to redesign the module teaching strategy in partnership with its assessment strategy so that it would be appropriate for this new more diverse cohort while also delivering an enhanced student learning experience with decision making over their own assessment. The assessment strategy allowed them to demonstrate their learning more effectively than before.

# Initiative Design and Implementation

## Module Restructuring

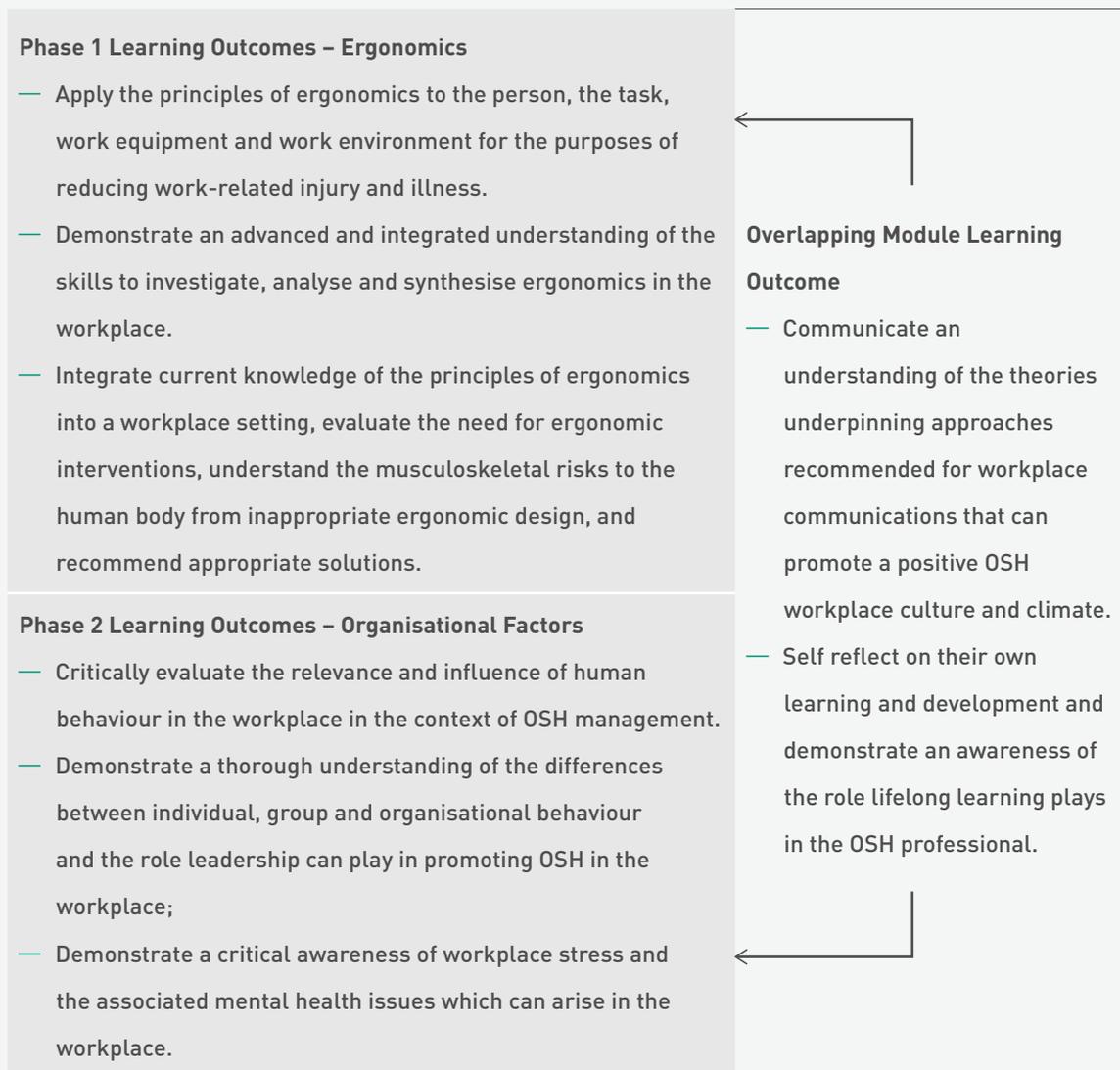
The module was re-designed in the summer of 2017 prior to its relaunch in Semester 1 of 2017-18. The re-design was successful and has continued into 2018-19 with successful student evaluations so will continue as it is.

The student cohort is approximately two thirds part-time second year professional adult students (approximately 23 to 60 in age range) and one third full-time international students (approximately 23 to 30 in age range). Less than five elective students have taken the module since it was redesigned.

The module examines human and organisational behaviour in the context of safety and health at work, and requires students to apply this knowledge to the improvement of the working environment and the promotion of safe work practices. As each student approaches this with differing levels of work experience and different work environments the assessment needs to be adaptable for each student to complete and link to the module learning outcomes.

The module was broken into two phases of learning:

- Phase 1 – How humans fit into their working environment (ergonomics); and
- Phase 2 – How humans interact with one another in their working environment (organisational management).



**Figure 1. Module Learning Outcomes by Phase.**

**Pedagogy Redesign – Active classrooms led by student participation**

The module was interspersed with three active class participation problem based learning workshops that delineated the phases:

- Week 1 Workshop 1 – Re-imagining your learning to become a lifelong learner;
- Weeks 2 to 5 Phase 1;
- Week 6 Workshop 2 – Becoming a Leader in your workplace;
- Weeks 7 to 11 Phase 2; and
- Week 12 Workshop 3 – Empathy and Empowerment in your workplace.

Week	Learning Phase	Assessment
1	PBL Workshop 1	
2	Learning Phase 1 - Ergonomics	Individual Workplace Ergonomic Risk Assessment
3		
4		
5		
6	PBL Workshop 2	
7	Learning Phase 2 – Organisational Psychology and Behaviour	Individual Learning Portfolio
8		
9		
10		
11		
12	PBL Workshop 3	

**Figure 2. Module Structure.**

The workshops were designed to engage the students in new ways of thinking about their learning, sharing their knowledge to encourage peer-to-peer learning, pushing them outside of their comfort zones and interacting with students outside of the classroom as well as confronting their own internal biases.

The workshops were supported by a flipped classroom format through the development of specific e-lectures for the students to watch on the Virtual Learning Environment (VLE) prior to attending the workshops. Each workshop was three hours long and held in an Active Learning Environment space (a room with round tables arranged to facilitate discussion and interaction) . Each workshop was framed at the start by using a cartoon relevant to the topic to inject humour into the classroom and engage with the students. Three ‘Calvin and Hobbes© by Bill Waterson’ cartoons were utilised.

Workshop 1 was designed to demonstrate innate individual learning abilities as well as group learning via two fast challenges including the ‘Lego Duck’ challenge (Figure 3) and the ‘Marshmallow Spaghetti Tower’ challenge (Figure 4). Both exercises were designed to engage the students with active learning and inject fun and creativity into the classroom. This then provided the context to the students that the module would be very focused on their individuality and how they directed their own learning.

Workshop 2 allowed the students to recognise their own leadership traits as well as how a workplace can develop its own leaders when an organisation's culture allows workers to flourish. The students created their own definition of leadership and then considered good and bad leadership traits (Figure 5). As part of this workshop students were encouraged to leave the confines of the classroom and interact with UCD community members to further their understanding of what leadership means to a wider cohort. By the end of the workshop the students in teams of five and six developed what they considered to be the ideal leader.

Workshop 3 focused on unconscious bias and discrimination in the working environment and how potential occupational health impacts could arise from workplace stress. The students progressed in teams through case studies provided by the Dublin Rape Crisis Centre on workplace bullying.



Figure 3. Lego Duck Challenge.

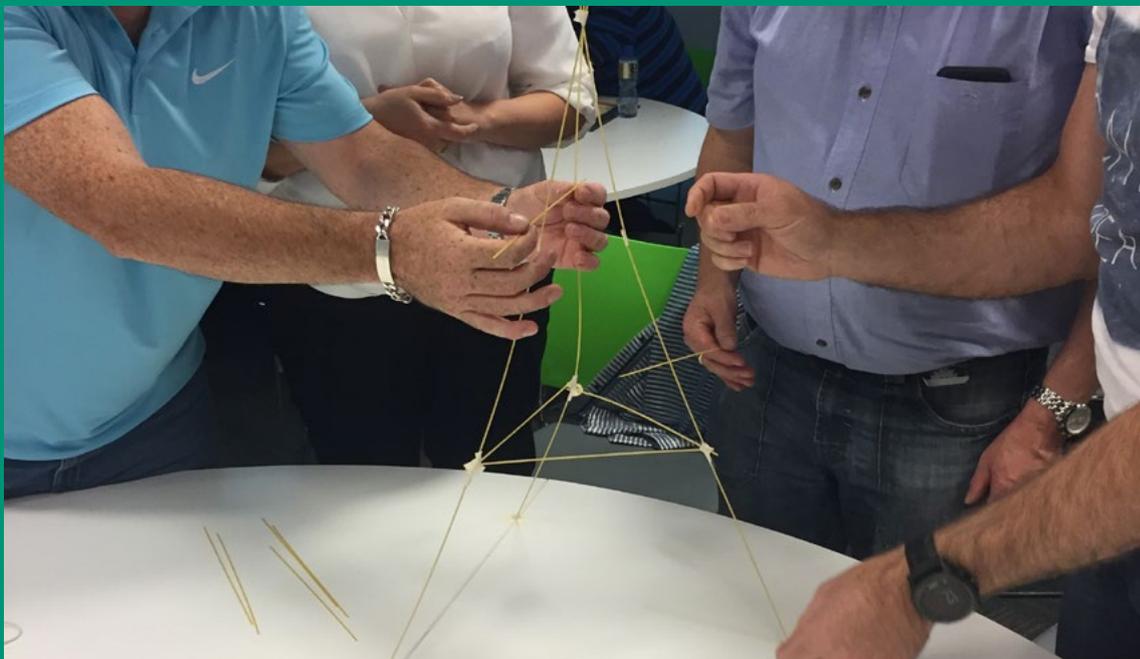


Figure 4. Marshmallow Spaghetti Tower Challenge.

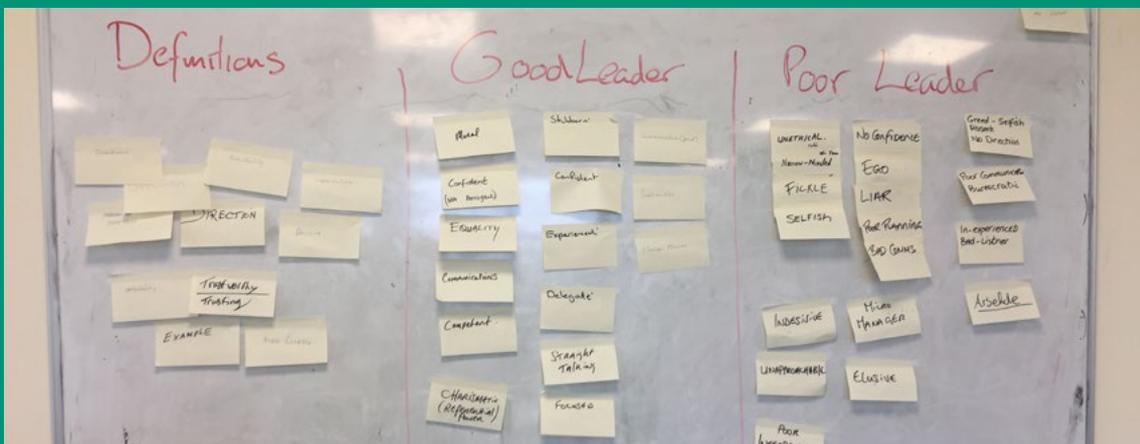


Figure 5. Leadership Traits.

## Self-Directed Assessment

The adage 'assessment drives learning' has been universally acknowledged as an essential aspect of postgraduate education, characterising assessments with the scope of educational tools almost as specified learning activities designed to contribute to the learning process rather than merely to evaluate a student's progress in meeting learning outcomes (Wood, 2009). Ensuring that the assessment strategy drove the students' individual learning was a core objective of the re-designed module. By dividing the written assessment into two components and eliminating the end of semester exam, the workload for students and the module coordinator became more manageable (REDUCTION of assessment). Both pieces of assessment require self-reflection (student EMPOWERMENT).

### **Your Learning, Your Choice.**

The most effective forms of learning are when we display a passion and interest in the topic we are studying. When given autonomy, students can become self-directed learners and develop their own research skills. It is thus imperative that all students be given the opportunity during their studies to self-direct their own assessment and demonstrate they are achieving their learning outcomes in a manner that allows them to become self-directed learners.

For the Human and Organisational Behaviour module the overriding focus of the assessment is for you to demonstrate you have achieved the learning outcomes yourselves, rather than being tested against specific criteria.

Each phase had a single piece of written assessment associated with it, linked to the module learning outcomes (VARIETY of assessment). In phase 1 the assessment focuses on a working environment chosen by the student within which to conduct an ergonomic risk assessment. (student CHOICE / AUTHENTIC assessment). Through online discussion students indicated their chosen workplace and their rationale for its use and then received initial thoughts and feedback from the Module Coordinator (Table 1). Formal written feedback was provided three weeks after the assignment was submitted (TRANSPARENT) so that it could be used to assist the student progressing through their second assignment.

In order to engage students with autonomous learning and exercise their self-direction, they were tasked with creating a learning portfolio for Phase 2 of this module (Table 2). This type of assessment focused on their personal growth and individual learning as they progressed through the module. A rubric was provided to the students in advance so that they could understand the expectations of what they should be able to achieve through a portfolio. Students could also discuss their ideas for demonstrating their learning innovatively via the online discussion forum. Snadden and Thomas (1998) derived the term 'portfolio learning': 'Portfolio learning is a method of encouraging adult and reflective learning for professionals. Derived from the graphic arts it is based on developing a collection of evidence that learning has taken place' (p. 192).

Portfolios have found their way into scientific and professional education, not only as tools for assessment of performance in education but also for professional practice in the workplace and in particular as tools to stimulate learning from experience (Van Tartwijk and Driessen, 2009). Ensuring that a learning portfolio achieves what it is meant to do in an educational setting depends on how much initiative and resources the students invest in them, and this is entirely dependent on if the portfolio is graded or not: essentially the assessment drives the learning (Driessen and van der Vleuten, 2000).

The decision to utilise a learning portfolio necessitates a good relationship and clear communications between the student and the module coordinator as it requires a continuous process of dialogue as the module progresses for the assessment to be invested in by the student. Thus the utilisation of online discussion is crucial. When students can see that their educators support and invest in these practical educational changes and value this type of learning approach, students are empowered to assume ownership of it in partnership with their educator. In order to ensure that the students 'buy-in' to the portfolio and that they can see that their educators are also investing in the process, an online briefing session was provided via e-lecture embedded into the VLE.

<b>Assessment Value</b>	45%
<b>Word Count</b>	Minimum of 1,500 words. Maximum of 2,500 words.
<b>Assessment Type</b>	Report
<b>Topic</b>	<p>This assignment is based on the ergonomic oriented learning outcomes as described in your module descriptor (Figure 1), please read them carefully. In order to successfully demonstrate you have achieved the learning outcomes of the module you must present the knowledge you gained over the course of the ergonomics phase of module in this report. When conducting your Ergonomic Risk Assessment (based on the demonstration of ergonomic toolkits in Week 4 and 5) consider the following statement in the context of your chosen workplace.</p> <p><b>‘Knowledge of hazards associated with ergonomic risk can lead to behavioural change in the workplace’.</b></p> <p>Consider how knowledge of ergonomic hazards, the principals of ergonomic design as a form of control measure and the associated musculoskeletal risks to the human body can influence worker behaviour, with reference to your own workplace. Discuss this concept with regard to the principals of ergonomics and a research evidence basis to support your argument.</p> <p>Please only utilise appropriate references from the year 2000 to present, with a minimum of fifteen and a maximum of thirty individual references. Also include an additional Personal Reflection (200 words not counted as part of the assignment word count) – this is a self-reflection on the process of learning rather than the content of what you learned.</p>
<b>Student Learning Objectives via Assessment</b>	<ul style="list-style-type: none"> <li>— Evaluate a workplace of your choice from an ergonomic perspective.</li> <li>— Conduct an ergonomic risk assessment of that workplace.</li> <li>— Develop a critical understanding of how the ergonomics of that workplace can influence individuals and their interaction with their working environment.</li> <li>— Become aware of the ergonomic stressors that an inappropriately managed environment can have on workers.</li> </ul>
<b>Associated Learning Outcomes</b>	<ul style="list-style-type: none"> <li>— Apply the principles of ergonomics to the person, the task, work equipment and work environment for the purposes of reducing work-related injury and illness.</li> <li>— Demonstrate an advanced and integrated understanding of the skills to investigate, analyse and synthesise ergonomics in the workplace.</li> <li>— Integrate current knowledge of the principles of ergonomics into a workplace setting, evaluate the need for ergonomic interventions, understand the musculoskeletal risks to the human body from inappropriate ergonomic design, and recommend appropriate solutions.</li> </ul>

**Table 1. Assignment 1 Instructions.**

<b>Assessment Value</b>	55%
<b>Word Count</b>	Minimum of 2,000 words. Maximum of 3,000 words.
<b>Assessment Type</b>	Learning Portfolio
<b>Topic</b>	<p>This assignment is based on your learning outcomes as described in your module descriptor (Figure 1), please read them carefully. In order to successfully demonstrate you have achieved the learning outcomes of the module you must present the knowledge you gained over the course of the module in a learning portfolio. A learning portfolio is a flexible, evidence-based process that combines reflection and documentation. It engages students in ongoing, reflective, and collaborative analysis of learning. It focuses on purposeful, selective outcomes for both improving and assessing learning. In essence you catalogue your learning and justify it with an evidence base as your progress through your learning. For this module a learning portfolio needs to demonstrate the learning outcomes of the module i.e. demonstrate to the reader that you understand what each of the learning outcomes is and document your knowledge as your progress on a week to week basis. In this regard an ideal learning portfolio for this module would document what you learned each week from the lectures and workshops and associated reading and research you conduct relating to the lectures or workshops. This would be supported by evidence from literature in the form of references and a personal reflection on which of the learning outcomes you consider that week's learning was linked to. As a guideline, you should do this each week to make steady progress over the twelve weeks of the module. If you leave it all to the end of the module you may have forgotten material you learned at the start. In considering a structure for your portfolio there is no specific way to document your progress, it is entirely up to you. However, a good example would be constructed as follows:</p> <ul style="list-style-type: none"> <li>— Introduction (200 words);</li> <li>— Summary of each week (Weeks 1 and 6 to 12 of the module only) linking to specific learning outcomes (between 300 to 400 words each week with between 3 to 5 references as supporting evidence); Personal Reflection (200 words) –this is a self-reflection on the process of learning rather than the content of what you learned; and</li> <li>— Bibliography.</li> </ul>

<b>Student Learning Objectives via Assessment</b>	<ul style="list-style-type: none"> <li>— Develop an understanding of how organisations can foster a culture of openness.</li> <li>— Consider your own leadership capabilities and how you can influence your workplace safety culture.</li> <li>— Become aware of workplace psychosocial stressors and their impact in terms of occupational health.</li> <li>— Self-reflect on how learning on this module is shaping you.</li> <li>— Effectively demonstrate your learning over the course of this module.</li> </ul>
<b>Associated Learning Outcomes</b>	<ul style="list-style-type: none"> <li>— Critically evaluate the relevance and influence of human behaviour in the workplace in the context of OSH management.</li> <li>— Demonstrate a thorough understanding of the differences between individual, group and organisational behaviour and the role leadership can play in promoting OSH in the workplace;</li> <li>— Demonstrate a critical awareness of workplace stress and the associated mental health issues which can arise in the workplace.</li> <li>— Communicate an understanding of the theories underpinning approaches recommended for workplace communications that can promote a positive OSH workplace culture and climate.</li> </ul>

**Table 2. Assignment 2 Instructions.**

## Results and Feedback

The module redesign managed to re-orientate students to the concept that assessment is learning. Most of the students at the outset of the module think assessment is merely a task that must be done to get a grade to achieve a qualification (expressed via a Hopes-Needs-Concerns in class exercise in Workshop 1). By explaining to the students on day one of the module that the assessment strategy was their journey and their chance to display their passion and interest in relation to the topics being taught, it created a different sense of purpose in the students. The line of questioning about the assessment was very different to other modules with very active engagement online in discussion fora. Instead of seeing the assessment as a task, the students saw this piece of assessment as an opportunity to demonstrate their growth and their capability for learning.

The students enjoyed the new assessment strategy more and the PBL workshops enhanced their learning experience so they could clearly see the links between assessment, classroom experience and the learning outcomes and ultimately how they can be lifelong learners.

The initial problem was to ensure buy-in from the students. Accustomed to being given explicit assignment instructions, they were now given much more choice and freedom to demonstrate their learning and this proved a daunting experience for many initially. Explaining the rationale to students at the outset of the module, and again half way through, allayed those fears.

Student feedback in class at the final workshops alongside the formal student evaluations online noted this positive impact. Figure 6 outlines a series of small quotes from the students that have participated in the module over the last two years. More detailed examples from student evaluations in terms of what they liked about the module are provided below:

'I enjoyed the course and found the workshops to be quite good as they were based on real life scenarios rather than abstract ones some were reinforced by lectures, the learning portfolio was worthwhile revision';

'Liked workshops and continuous open assessment'

'Workshops and group work were very good'

'Good idea, well executed, refreshing'

'That I learn better when making my own judgements on experience – then looking at actual learning'

'Workshops were deadly. Active participation was excellent. Group interaction worked well. Module deadly';

'Workshops organised by Dr Buggy, Ergonomic Assessment Assignment, Completing the Learning Portfolio helped keep me motivated';

“More Calvin and Hobbes!”

“It was good to have a new learning process. Got me thinking differently”

Workshops very important because of practical learning experience”

“Lego ducks were a brilliant example”

“Very relevant, worthwhile and thought provoking”  
“Good learning process.

‘I thought the case study was a better assessment than a thesis which suited me and I’d assume more students also’

Figure 6. End of semester student anonymous in-class quotations.

'The self-reflection assignment was very helpful to my learning as it allowed me freedom to research different aspects of the course without having to focus on passing an end of semester exam';

'Working in groups. The learning and reflecting. This module has helped me think about what I do now rather than not thinking before I leap. I really enjoyed the freedom of the learning portfolio. The variety of lecturers was good. The workshops worked well'; and

'The workshops are very beneficial. Being able to take risks and explore new avenues helped me develop a greater interest than if I just attended passive lectures'.

## Advice for Others

Securing an active learning environment room for the duration of the module is essential. Opening up to the students by injecting humour into the teaching as well as providing personal context to deliver authenticity was crucial in gaining the students' trust for this learning process – particularly for mature adult part-time learners. Being active on online discussion fora with students to encourage their ideas and guide them is technically more contact time but it does benefit the students and they greatly appreciate it.

## References

- Driessen, E.W., van der Vleuten, C.P.M. (2000) *'Matching student assessment to problem based learning: Lessons from experience in a law faculty'*, *Studies in Continuing Education*, 22, pp. 235–248.
- North, S. (2016) *'Examining self-regulated learning in an asynchronous, online course: A qualitative study'*, *E-Learn 2016 Conference Proceedings*, AACE, North Carolina.
- Pryor, J., Crossouard, B. (2008) *'A Socio-Cultural Theorisation of Formative Assessment'*, *Oxford Review of Education*, 34(1), pp. 1-20.
- Schwartz, P., Mennin, S., Webb, G. (2001) *Problem-based Learning: Case Studies, Experience, and Practice*. London: Kogan Page.
- Snadden, D., Thomas, M.L. (1998) *'The use of portfolio learning in medical education'* *Med Teach*, 2, pp. 192–199.
- Van Tartwijk, J., Driessen, E.W. (2009) *Portfolios for assessment and learning: AMEE Guide no. 45*. *Medical Teacher*, 31(9), pp. 790 - 801.
- Wood, T. (2009) *'Assessment not only drives learning, it may also help learning'*, *Medical Education*, 43, pp. 5-6.

---

CASE STUDY 4

# Where Universal Design, Inclusive Assessment and Adult Education Principles Coincide: Professional Skills and Authentic Assessment

Authors

Prof. Anne Drummond & David O'Dwyer

Discipline

Occupational Safety and Health

Student numbers

17-20



**Prof. Anne Drummond**



**David O'Dwyer**

## Introduction and Context

This case study describes how inclusive assessment strategies emerged from the process of introducing mixed-methods authentic assessment in a module, designed using adult education principles, for working adult students with a diverse range of qualifications, professional backgrounds and experience.

Most students on the Level-8 Higher Diploma in Occupational Safety and Health (OSH) in University College Dublin (UCD) are men (average 75%), with ages ranging from mid-20s to mid-50s, and almost all work full-time. Typically, students have substantial work experience and professional and domestic responsibilities. Highest previous educational levels are diverse and range between Levels 5 to 7 on the National Framework of Qualifications.

The module described in this paper was developed in response to two regulatory requirements:

- i An historic academic regulation that required elective module options for all undergraduate degree students, when the Higher Diploma comprised the early part of a Bachelors' degree; and
- ii a professional body requirement to develop specific professional skills.

The goal in developing this 'Professional Skills' module was to provide content that wasn't core to the curriculum, to allow for situations where a student might choose a non-OSH elective (theoretically possible, but practically impossible for most because of timetabling). Opportunities were therefore sought to create a module that facilitated students to acquire or further develop skills that, depending on their involvement/experience in OSH practice, were personally and professionally desirable, but not OSH-specific. Because of the wide variety of prior qualifications and experience among students, assessment needed to be flexible, to include choice for individuals, and to tolerate error so that less experienced students were not at a disadvantage. Authentic assessment was ideal because such students value collaborative, real-world and transferrable outcomes (Ashford-Rowe et al, 2014).

Knowles et al (2015) describe Conti's Principles of Adult Learning Scale (1978), which identifies factors used in teaching adults, which include:

- a learner-centred activities, i.e. encouraging students to take responsibility for their own learning;
- b personalising instruction, i.e. supporting rather than lecturing;
- c relating to experience, i.e. planning learning so that its relatable to students' own activities;
- d climate building, i.e. eliminating learning barriers and encouraging interaction in a friendly informal setting; and
- e allowing students flexibility for personal development, i.e. facilitating learning rather than providing knowledge.

These teaching factors grounded in adult learning principles were at the core of module and assessment design. The module had formal OSH-related learning outcomes (table 1) and the OSH-related objectives sought to give students opportunities to use individual and team-based activities and peer-critique to:

- a collaborate and learn from one another;
- b review, assess and critique real OSH systems outside of their own experience;
- c prepare and deliver professional documentation;
- d learn to sell the OSH message and to market themselves professionally;
- e identify, recognise and acknowledge their professional strengths and weaknesses;
- f identify and develop a plan for continuing professional development; and
- g to do all the above in a safe instructional climate.

**Table 1: Module Learning Outcomes**

**At the end of the module students will be able to:**

- Identify work-based learning opportunities;
- Demonstrate work-based learning, which captures a range of activities that contribute to the student's development as an OSH professional, including, but not limited to:
  - a preparing an up-to-date professional CV
  - b delivering a professional presentation
  - c documenting and reflecting on continuing professional development activities
  - d reflecting on a multidisciplinary ethical dilemma.

In practice, the module uses a problem-based assessment approach to provide space for students to reflect on their personal skill-set and career aspirations, and to identify personal and professional growth and development needs and opportunities in the context of their individual experience and involvement in OSH. Because of the diverse student characteristics (age, work / life experience and responsibilities, professional qualifications and sector of industry) inclusivity was important. Assessment was designed using adult education principles to include a variety of assessment types, choice within assessment components, and where possible to grade students against self-set objectives (Knowles et al, 2015).

## Design and implementation

An assessment-driven elective module with minimal didactic content was designed and moved through iterations to reach its final format. Ultimately, students are assigned four assessment tasks and given multiple relevant online resources but few classes; the module schedule provides physical space and time-tabled opportunities to work together. In all activities, the instructional climate is supportive and flexible. Key personnel involved in module delivery include:

- i UCD Careers Office;
- ii Programme industry liaison manager;
- iii Experienced OSH alumni who host placement students and/or provide expertise for the job application processes; and
- iv OSH academics who facilitate role-play presentations.

The four key tasks comprise:

- a A short work placement (20%)  
Because students work full-time, they undertake a one-day work placement. They select a worksite from a menu of organisations (often hosted by UCD OSH alumni), ideally targeting an unfamiliar sector to maximise learning. They set personal learning objectives in advance of the visit. They learn through meeting with the OSH manager, and with other personnel holding senior OSH responsibility. Students write a critical review of the OSH arrangements, which is sent to the local OSH manager for information, and they reflect on the professional learning experience of the visit. Grading and feedback are equitable by taking account of the student's self-set objectives.

**b Job application process (20%)**

Students go through the process of applying, and being interviewed, for an OSH role, choosing one of two recently-advertised real-life job descriptions. They gain experience in:

- i** developing a CV (for many this is a first experience);
- ii** seeing the output of a (mock) application and short-listing process; and
- iii** being interviewed by a two-person panel, comprising an experienced senior practising OSH professional and academic staff with experience in OSH practice.

Students receive immediate and authentic verbal post-interview feedback, and a take-away rubric giving feedback on the CV, a blank copy of which is provided in advance (Figure 1). Students' presentations are judged on individual performance and not in relation to one another – i.e. multiple students could end up being eligible to be offered the same role.

**c Group and presentation skills applied to an OSH ethical dilemma (40%)**

Students self-allocate into teams and take part in a role-play presentation scenario that requires each team to propose a solution to a different work-based OSH ethical dilemma, based on published real-life case studies. Each team member takes on a different OSH role (e.g. employer, OSH manager, local manager, trade union or safety representative, employee or community representative) for both problem-solving and the presentation. All team members present (representing their allocated role) and are questioned on the rationale for their professional decisions by an audience of academic staff and peers (i.e. their fellow students, who are OSH professionals). An immediate and authentic feedback discussion takes place verbally between the audience and the team. Through the process, students learn how to give and receive feedback and students with limited presentation experience are supported by the team approach to design and delivery. Individual students later receive a completed presentation-related rubric from the judging panel (staff) (Figure 2).

CV criteria	Poor	Fair to Good	Very good	Excellent
Grammar and spelling	Writer makes numerous errors in grammar and/or spelling.	Writer makes some errors in grammar and/or spelling.	Writer makes virtually no errors in grammar and/or spelling.	Writer makes absolutely no errors in grammar or spelling.
Capitalization and punctuation	Writer makes numerous errors in capitalization and punctuation.	Writer makes a few errors in capitalization and punctuation.	Writer makes virtually no errors in capitalization and punctuation.	Writer makes absolutely no errors in capitalization and punctuation.
Neatness	CV and cover letter are typed but are very unprofessional in appearance. They look like they were done in a hurry or improperly proofed and formatted.	CV and cover letter is typed and but is somewhat unprofessional in presentation. They look like they were proofed and formatted with undue care and attention.	CV and cover letter is typed, professional in presentation, and is easy to read with no distracting error corrections. They appear to have been proofed and formatted with care.	CV and cover letter is typed, very professional in presentation, very easy to navigate and appears to have been proofed and formatted with great care and attention to detail.
Format	Complies with less than 75% of the requirements for a CV and cover letter.	Complies with more than half of the requirements for a CV and cover letter.	Complies with almost all the requirements for a CV and cover letter.	Complies with all the requirements for a CV and cover letter.
Content	The CV and cover letter seemed to be a collection of unrelated ideas. It was very difficult to figure out the chronology and/or qualifications, skills and experience of the applicant.	The ideas were somewhat organized, but were not very clear. It took more than one reading to figure out the chronology and or qualifications, skills and experience of the applicant.	The ideas were expressed in a pretty clear manner, but the organization could have been better.	The ideas were expressed in a clear and organized fashion. It was easy to figure out the chronology, qualifications, skills and experience of the applicant.
Application	The application was not submitted exactly as prescribed			The application was submitted exactly as prescribed

Figure 1: Rubric for CV

	Poor	Fair to Good	Very good	Excellent
Organisation	Audience might not understand presentation because there is no sequence of information.	Audience could have difficulty following the presentation because student jumps content around.	Student presents information in a logical sequence which audience should be able to follow.	Student presents information in a logical, interesting sequence which audience can easily follow.
Subject knowledge	Student displays only a very superficial or generic knowledge of subject and/or of the wider OSH context.	Student displays a surface knowledge of subject and/or of wider OSH context.	Student displays a reasonable knowledge of subject and/or of the wider OSH context	Student demonstrates a deep knowledge of subject and/or the wider OSH context.
Evidence base	Information is only partially complete and/or is inaccurate with limited, inadequate or no sources provided	Information is partially complete with some inaccuracies and limitations in sources	Information is mostly complete and accurate with some primary and some secondary sources	Information is complete and accurate and cites relevant and appropriate primary sources.
Visual aids	Student uses superfluous visual aids or inadequate visual aids. Presentation has numerous spelling and/or grammatical and/or technical errors.	Student uses visual aids that don't adequately support the presentation. Presentation has some grammatical and/or technical errors.	Student's visual aids are relevant to the presentation. Presentation has few or no spelling and/or grammatical and/or technical errors.	Student's visual aids explain and reinforce the presentation very professionally. Presentation has absolutely no spelling and/or grammatical and/or technical errors.
Eye contact	Student makes minimal eye contact and/or over-reads from notes and/or turns back on audience.	Student occasionally uses eye contact, and relies heavily on notes. Turns back on audience on a number of occasions.	Student maintains reasonable eye contact, and does not turn back on audience. Refers to notes in an appropriate way.	Student maintains eye contact across the audience, and does not need to rely on notes.
Verbal technique	Student mumbles and/or incorrectly pronounces terms, and/or speaks too quietly / quickly for audience to hear.	Student's voice is low and/or incorrectly pronounces terms. Audience members have difficulty hearing presentation.	Student's voice is clear. Most audience members can hear presentation.	Student uses a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation.

Figure 2: Rubric for Presentation

#### **d Professional Reflection (20%)**

A key design-feature of the module is that students are given space to reflect on their careers, and at the end of the module each student submits a professional portfolio that includes:

- i** An inventory of career trajectory and development to date;
- ii** An inventory of continuing professional development activities (with evidence) from the past three years;
- iii** a career plan for the forthcoming three years.

Items i) and ii) are a requirement for professional body membership, so students leave with either a personal gap analysis, or much of the work completed, for a membership application. The module coordinator grades the professional and career reflections. Students receive, about 6 months before graduating, bespoke individual confidential feedback and career advice, that takes account of their performance on the module and the personal professional information they risk providing.

While the grading process and the final grade are compliant with the University's grade descriptors, in the placement, job-application and reflection components students are assessed and given feedback against self-expressed goals and aspirations, which promotes confidence-building for less experienced students.

## **Evidence of impact**

Historically, this module solved the challenge of providing an elective non-OSH module in a packed curriculum for students with limited contact time; however, it has become established as an important core and popular module. Feedback indicates that it achieves the goal of providing students with authentic experiences for professional skills development in the safe environment of their own community of learners. Unstructured positive feedback from students is visible through good engagement in all activities, and unsolicited feedback (and gratitude) via email, sometimes long after a student completes the programme. Peer-learning emerges as a key feature; for example, many students did not know how to prepare slides while some were experts, and most students found an area where they excelled and could share a skill. Structured feedback is collected using data from the university's online feedback

system (a 5-point Likert scale from Disagree [1] to Agree [5]), which achieved mean response rates of 60% and mean scores  $\geq 4.0$  over a four-year period (Tables 2 and 3). Open comments are equally positive and/or constructive (Figure 3).

**Table 2: Evaluation statements**

<b>Q no.</b>	
<b>Q set by</b>	Statements (Response via 5-point Likert Scale from 1 – strongly disagree – to 5 – strongly agree)
<b>1. University</b>	I have a better understanding of the subject after completing this module
<b>2. University</b>	The assessments to date were relevant to the work of the module
<b>3. University</b>	I achieved the learning outcomes for this module
<b>4. University</b>	The teaching on this module supported my learning
<b>5. University</b>	Overall, I am satisfied with this module
<b>6. Programme</b>	Reflection: This module encouraged me to reflect on my professional career plans
<b>7. Programme</b>	Relevance: This module was relevant to my professional needs

**Table 3: Module Evaluation 2013-2017 Quantitative**

Year	Class N (Response %)	Q1	Q2	Q3	Q4	Q5	Q6	Q7
2013-14	13 (69%)	4.6	4.4	4.4	4.4	4.1	4.6	4.2
2014-15	17 (59%)	4.1	4.1	3.9	4.1	3.9	4.5	4.4
2015-16	16 (56%)	4.7	4.4	4.3	4.6	4.6	4.6	4.4
2016-17	18 (61%)	3.9	4.2	4.0	4.1	3.8	3.7	3.8
Mean	16 (61%)	4.3	4.3	4.2	4.0	4.1	4.3	4.2



**What  
helped your  
learning?**

Figure 3: Module evaluation qualitative (sample comments)

- The importance of documenting what you have experienced and achieved so far in your career when applying for a position. The importance of being professional and record keeping. I did find presenting the reasoning for a good safety and health culture in an organisation very helpful.
- Up to date and relevant learning. Variety to module which covered the variety of OSH sectors in which students worked or would like to work in. Very good and constructive feedback on each assignment.
- 1: The way the module built up step by step.  
2: Good communication and repetition by lecturer of core learnings.  
3: Presentation section was excellent for confidence and reflective writing was very thought-provoking.
- I liked being made do a presentation (out of my comfort zone and experience). I think it was a great idea for the work experience and completing the learning portfolio.
- Helped us prep CPD and CVs...always useful! Great to start thinking about chartered status of [professional body] in advance of course completion.
- The portfolio assessment has really helped me to understand the importance of CPD in OSH.
- At the start I thought this module was a waste of time, however I changed my mind and got benefit from it seeing as how I have not been interviewed in over 10 years, similarly my CV had not been updated during this period, likewise I knew nothing about CPD
- Academically I'm not the strongest, however making contacts and bringing people along with me is something I'm good at. The feedback I received has reassured me of this.

The comments from [tutor] were instructive and helpful. The discussions, disagreements, and compromises surrounding our debating really made the topic of ethics come alive. I not only saw ethics come alive but I also saw how the team players supported and adapted to my own learning difficulties

Initially students may be wary of exposing themselves by presenting in teams and being interviewed by potential employers; however, staff have witnessed most students increasing in confidence as they progress through the module. Occasionally, individual students provide feedback that the module was of limited value to them, and a waste of their time and fees.

## Discussion and conclusion

Staff, external examiner and student feedback confirm that this assessment-based module provides authentic learning, assessment and feedback for students, within a community of fellow-learners / OSH practitioners, in a supportive instructional climate that allows choice within each component, tolerates error (by being mostly process-driven), permits objective-setting where possible thus making grading equitable, and allows space for students to identify areas for personal professional development and receive bespoke career advice. Thus, in retrospect it is obvious that inclusive assessment was built-in from point of design (Keating et al., 2012), although it was not recognised or labelled as such during design.

The inclusive assessment principles, which are so visible in the module now, emerged over time from an instructional design that was based on the principles of adult education, which are compatible with the principles of Universal Design. Universal Design in higher education considers a wide range of characteristics of the non-average university student, including age and prior educational experience (Burgstahler, 2012); the premise is that design benefits all students, not just those that tick a 'minority box'. Appendix A shows the authors' retrospective application of the CAST Universal Design framework (CAST, 2018) to the learning activities / assessment components on this module. It confirms that module assessment addresses the domains of Multiple Means of Engagement and two domains of Multiple Means of Action and Expression, and that Expression and Communication is achieved more so at holistic (module) level than in individual components.

The main challenge in this module has been that almost every year, a student reports in anonymous feedback that some, or all, of the activities are a waste of their time. Further feedback through class small-group discussions suggested situation-specific reasons for very experienced individuals, but didn't pinpoint any single component or issue, so there was no obvious fix. Reviewing this issue now from the perspective of inclusive assessment principles, it may be feasible going forward to consider introducing an option for bespoke alternative assessment for professionally-senior students who can provide evidence that they don't need to develop the skills that most of the students' value, but that still meet the module learning outcomes.

Anyone who runs a module with a practical application, where students are, or shortly will be, working, should consider whether Universal Design principles are already embedded; and if not, it may not take much redesign of components of the module to meet the key criteria. In this case study, the complementary collective principles of adult education, Universal Design and inclusive assessment became evident over time. Together they provide students with professionally authentic assessments, that provide opportunities within assessments to address individual work and career needs, making the experience meaningful and authentic to students as learners and as professionals.

## References and Resources

1. Ashford-Rowe, K, Harrington, J. and Brown, C. (2014) *Establishing the critical elements that determine authentic assessment. Assessment and Evaluation in Higher Education*. 39:2. 205-222. DOI: 10.1080/02602938.2013.819566
2. Burgstahler, S. (2012) *Universal Design in Education: Principles and Applications: An approach to ensure that educational programs serve all students*. Retrieved from: <https://www.washington.edu/doit/sites/default/files/atoms/files/Universal-Design-Education-Principles-Applications.pdf>
3. CAST (2018). *Universal Design for Learning Guidelines version 2.2*. (graphic organiser). Wakefield, MA. Retrieved from: <http://udlguidelines.cast.org>
4. Conti, G.J. (1978) *Principles of Adult Learning Scale: An Instrument for Measuring Teacher Behaviour Related to Collaborative Learning – Learning Mode*. Retrieved from <http://robert-vroman.com/resources/pals.pdf>
5. Keating, N., Zybutz, T. & Rouse, K. (2012) *Inclusive assessment at point-of-design, Innovations in Education and Teaching International*, 49:3, 249-256, DOI: 10.1080/14703297.2012.703022
6. Knowles, M.S, Holton, E.F., and Swanson, R.A. (2015) *The adult learner: the definitive classic in adult education and human resource development*. 8th Ed. Routledge: London and New York.

## Appendix A:

### Application of CAST criteria to module assessment components

CAST Design principles	Recognition networks 1. Perception; 2. Language & Symbols; 3. Comprehension.			Strategic networks 4. Physical Action; 5. Expression & Communication; 6. Executive Functions.			Affective networks 7. Recruiting Interest; 8. Sustaining Effort & Persistence; 9. Self-Regulation.		
	1	2	3	4	5	6	7	8	9
	Provide Multiple Means of Representation			Provide Multiple Means of Engagement			Provide Multiple Means of Action & Expression		
Module level application					5.1	6.1	7.1	8.1	9.1
						6.2	7.2	8.2	9.2
						6.3	7.3	8.3	9.3
						6.4		8.4	
<b>Assessment component level application</b>									
Work Placement						6.1	7.1 7.2	8.1	
CV & Interview						6.2	7.1 7.2 7.3	8.3 8.4	9.3
Ethical prep (teamwork and roleplay)						6.2	7.2 7.3	8.3	
CPD and Career Development						6.3 6.4	7.1 7.2 7.3	8.1 8.4	9.1 9.3

**CAST Legend for Design Principle:** Numbers from 1 to 4 in coloured cells indicate the numbered checkpoints (e.g. 5.1, 5.2 and 5.3) from the CAST UDL Guidelines Graphic Organiser. (Universal Design for Learning, CAST v2.2, 2018)

5.1 Use multiple media for communication

8.1 Heighten salience of goals and objectives

6.1 Guide appropriate goal-setting

8.2 Vary demands and resources to optimise challenge

6.2 Support planning and strategy development

8.3 Foster collaboration and community

6.3 Facilitate managing information and resources

8.4 Increase mastery-orientated feedback

6.4 Enhance capacity for monitoring progress

7.1. Optimise individual choice and autonomy

9.1 Promote expectations and beliefs that optimise motivation

7.2 Optimise relevance, value and authenticity

9.2 Facilitate personal coping skills and strategies

7.3 Minimise threats and distractions

9.3 Develop self-assessment and reflection



---

## CASE STUDY 5

# Student-led Learning: Utilising Inclusive Assessment and Group Work to Promote Autonomous Learning and Student Engagement

Discipline: Psychology  
Student Numbers: 60 – divided into groups of 20 for each class



iadt  
INSTITUTE FOR  
INTEGRATED  
TECHNOLOGY  
DESIGN

**Emma Mathias**

## Introduction and Context

The aim of this inclusive initiative was to engage students more fully in a 2nd year undergraduate Cognitive Psychology module by adhering to principles of Universal Design for Learning (UDL). The Cognitive Psychology module (10 ECTS) was delivered over the period of one academic year and was split 50/50 between lectures (5 ECTS) and laboratories (5 ECTS). There were approximately 60 students enrolled in the module, divided into groups of 20 (x3) for the laboratory component, with students participating in a 2-hour lecture every week and a 2-hour laboratory every three weeks. An inclusive assessment initiative was implemented in the laboratory

component of the course with a view to empowering students to become more self-directed, self-motivated, independent learners.

Conducting research is a central part of a Psychology degree, and a large number of the research studies that students learn about in Cognitive Psychology involve experiments of some kind. The process of conducting experiments and writing them up as scientific articles is often demonstrated in psychology laboratory classes, and in general the responsibility for developing and delivering experiments in the laboratories lies with the lecturer. In this case there appeared to be a general lack of motivation for students to fully engage with the laboratories - with low participation and attendance rates - and many students presented as being relatively passive observers of their education. To remedy these issues and to give students the opportunity to explore more deeply an area that interested them, responsibility was handed over to them for the running of the cognitive laboratories. Students were given a choice of their preferred topic from a list of the main topics covered in the Cognitive Psychology lectures, and worked within a small group to research and present an experiment based on their chosen topic, along with peer tuition on how to write laboratory reports (see Table 1).

**Table 1. Topics & Laboratory Report Tuition Options**

Group	Requirement
1a 1b 1c	<ul style="list-style-type: none"> <li>— Delivery of experiment on the topic of <b>attention</b> to the lab group</li> <li>— Peer tutoring on <b>method</b> section of lab report</li> </ul>
2a 2b 2c	<ul style="list-style-type: none"> <li>— Delivery of experiment on the topic of <b>memory</b> to the lab group</li> <li>— -Peer tutoring on <b>introduction</b> section of lab report</li> </ul>
3a 3b 3c	<ul style="list-style-type: none"> <li>— Delivery of experiment on the topic of <b>problem solving</b> to the lab group</li> <li>— Peer tutoring on <b>results</b> section of lab report</li> </ul>
4a 4b 4c	<ul style="list-style-type: none"> <li>— Delivery of experiment on the topic of <b>judgement/decision making</b> to the lab</li> <li>— Peer tutoring on <b>discussion</b> section of lab report</li> </ul>
5a 5b 5c	<ul style="list-style-type: none"> <li>— Delivery of experiment on the topic of <b>language/reading</b> to the lab group</li> <li>— Peer tutoring on <b>abstract</b> section of lab report</li> </ul>

By carrying out their own experiments and utilising different ways of learning such as teaching others, implementing what they had learnt, and researching something that interests them, I envisioned that students would gain a deeper knowledge of different areas of Cognitive Psychology and of writing laboratory reports. This structure provided an instructional climate of inclusive assessment and feedback by engaging all students fully, giving multiple methods of assessment, encouraging students to learn from and support each other, and providing scaffolded assessment (Burgstahler, 2013, O’Neill and McMahon, 2005). This method adheres to several of the principles of Universal Design such as developing a community of learners (by students working together as a group and tutoring each other), flexibility in use (by having options for different methods of presentation and choices around topic preference), tolerance in error (by having a relatively low-stakes option for the presentation, which also encourages risk-taking and creativity) (Meyer, Rose and Gordon, 2014).

## Design and Implementation of the Initiative

The laboratory assessment brief was redesigned to incorporate assessment based on group work, independent research, and peer tutoring with a view to maximising student engagement, participation, and independent learning. Assessment grades were divided between group presentations, one group laboratory report, and three individual laboratory reports (see Table 2). The relatively low-stakes weighting for the presentation and the division of grades between multiple assignments was intended to encourage risk-taking and account for tolerance in error (Meyer et al., 2014).

**Table 2. Assessment Weighting**

Assessment Type	Weighting*
Group presentations – to include conducting experiment with peers & peer laboratory report tutoring (in group & on one-to-one basis)	10%
Major lab report (x1) – 2,000 words (to be written with group)	10%
Minor lab report (x3) – 800 words	30% (10% per report)
<b>TOTAL</b>	<b>50%</b>

\*Note: the other 50% of the grade for the entire Cognitive Psychology module was assigned to an end-of-year exam

## Structure of the Classes

Each week a different group presented some information on one of the topics relevant to the module (to coincide with the topic being covered in the lecture that week) and then led the rest of the group through an experiment based on the allocated topic, utilising class members as experiment participants. Once the experiment had been conducted, a debrief was provided by the presenting group for their participating classmates, and time was assigned for questions and answers. The presenting group then gave a tutorial to the class on the section of the laboratory report that was assigned to them. The rest of the class time was allocated to writing up the laboratory report based on the experiment, during which time the presenting group engaged in one-to-one peer tutoring on their assigned section of the report. Each week the lecturer also provided the class with a short presentation on different important aspects of writing laboratory reports, including: types of experimental design, American Psychological Association (APA) referencing, and how to label tables and figures (see Figure 1). These mini-tutorials were intended to give students a more in-depth understanding of the intricacies of the APA style and of aspects of psychology research that they found challenging. Time was also allocated throughout the year for peer review sessions where students could give each other feedback on their laboratory reports.



Figure 1. Mini-tutorials provided by the Lecturer

## Presentations & Experiments

Students chose three to four of their peers to work with in a group for the year in order to allow them to become partners in assessment (Centre for Applied Special Technology (CAST), 2018), and were encouraged to choose their team mates based on their topics of interests. Students made their selection from the main topics covered in detail during the corresponding Cognitive Psychology lectures - attention, memory, problem solving, decision making, and language (see Table 1), ensuring flexibility in use by having a choice of topic to work on (Meyer et al., 2014). Each group was required to work together to research their topic of choice, develop an experiment based on this topic, and deliver it to their peers along with background information on the topic during the allocated laboratory class (see Figure 2). Students were required to provide enough information in their presentations to enable their peers to write up a laboratory report based on the information provided.

1	Present the class with some background information on your chosen topic (e.g. memory)
2	Lead the class through the experiment you have chosen and conduct experiment with peers as participants
3	Debrief / wrap up the experiment / answer questions from peers
4	Provide the class with some information on the section of the lab report that has been assigned to you (e.g. method section)
5	Email the results of your experiment and your slides to the lecturer after your presentation so that they can be distributed to the rest of the class via Blackboard
6	Engage in tutoring your classmates on your assigned lab report section

**Figure 2. Step-by-Step Instructions for Students in Presenting Groups**

The majority of students had received training in presentation skills during the first year of their degree, so the focus of presentation training in this module was on taking a creative approach and experimenting with alternative presentation formats. To further ensure flexibility in use (Meyer et al., 2014), students were given the

opportunity to choose an alternative presentation method, and were encouraged to be creative in how they delivered their presentation and experiment. The options suggested were: poetry, music, theatrical performance, dance, artwork, or posters. Students were also given the option of using a PowerPoint presentation, but were required to use some sort of prop to enhance their presentations. Team building exercises and ice breakers were carried out in the initial classes and were intended to create an atmosphere of ease between peers that would enable them to feel confident enough to step out of their comfort zone, take a creative approach to presenting, and create a community of learners.

### **Peer Tuition**

Students were required to tutor their peers on one aspect of the laboratory report write-up (e.g. 'method' section) (see Table 1). This tuition took place after the students had made their experiment presentation. Again, students were encouraged to think creatively when choosing their method of communicating the required information, and were given the freedom to choose the form of their presentation for this aspect of the class. They were also required to be 'peer tutors' for the remainder of the class, and engaged in one-to-one tuition when required.

### **Laboratory Reports**

Students were required to write up one major laboratory report with their group members on the experiment that they developed and delivered, and three minor laboratory reports (written individually) based on experiments presented by their peers. Each report was required to adhere to the APA format (see Figure 3) and include APA referencing throughout. This exercise was intended to provide students with in-depth practice of writing scientific research reports, and also of understanding the different components of APA journal articles and laboratory reports. The word count for the major laboratory report that students wrote with their group members was guided at 2,000 words, where the minor reports that were written individually were guided at 800 words. Each report was assigned 10% of the overall grade for the module (see Table 2).

<b>Title</b>	10-12 words Informative but not too lengthy Can be question or statement
<b>Abstract</b>	Brief overview of the report Describe small part of each section of report
<b>Introduction</b>	Background information What theory are you testing? State RQ & hypothesis
<b>Method</b>	Design Participants Materials Procedure
<b>Results</b>	Descriptive & preliminary Include a simple bar chart / pie chart / table
<b>Discussion</b>	Re-state hypothesis What do the results tell you? Support for theory?
<b>References</b>	List of references in APA style Use in-text references throughout

**Figure 3. Laboratory Report Structure Guidelines**

### **Group Work**

Group work guidance was given to students at the start of term to encourage tolerance for error (Meyer et al., 2014) and consisted of tips on how to address any issues that might be encountered, team building exercises, and ice breakers. This assisted the group members to work together more effectively and to feel comfortable expressing themselves. Structured brainstorming sessions were also held during the first two classes, and students were given the space and time to work together on their project during each class throughout the year. Students were also encouraged to provide each other with feedback at the end of each class on their experience of working with their group on that day. These methods aimed to create a community of learners amongst the class (Burgstahler, 2018).

## Results and Evidence of Impact

This initiative solved many of the problems identified as it ensured that all students were engaged with at least some, and in many cases all, aspects of the laboratories. They were required to work consistently across the academic year, to work with their peers to achieve their academic goals, and to pursue their passions and discover new interests in different topics covered on the module. There was an increase in independent learning amongst students, improved attendance, and improved student engagement, thus demonstrating Universal Design for Learning in action (CAST, 2018).

The success of this initiative was illustrated through increased attendance at the laboratories, positive feedback, and an increase in engagement within the class. Feedback was obtained via a feedback form at the end of the year, and during class time on a regular basis by speaking with students and through observing their interactions, levels of motivation, and energy in the classroom. Feedback was generally very positive and I noticed an increase in student enjoyment in the lectures as well as an improved rapport and improved depth of understanding of the subject material, as demonstrated by the quality of the assignments submitted. Students expressed how they enjoyed being able to engage more with a subject they were interested in and receiving tuition from their peers (see Table 3).

**“I really enjoyed these labs. I liked doing the lab write-ups – they’re good practice for 4<sup>th</sup> year, and it’s good to get presentation experience”**

Table 3. Examples of Student Feedback

### **What was your overall experience of the Cognitive Psychology laboratories?**

- “I found them very interesting and each one was quite different. Easy to follow and overall enjoyable”
- “Fun, enjoyable – walked out each time knowing I had actually learnt something”
- “I thought there was a lot of feedback and help throughout. I enjoyed these labs and the CA [continuous assessment] a lot.
- “I enjoyed being taught by my peers and working with my friends”
- “I thought it was an interesting approach to learning”

### **What was the most enjoyable part of the laboratories?**

- “The way that an experiment was held in each lab made it easier to understand the topic”
- “Interacting with the class and learning by teaching each other”
- “Participating in experiments that were peer organised”
- “They were all very different and interesting, and I liked that they were quite casual and made fun”
- “My favourite lab was the lab I presented myself. I liked it because it was a topic I’m particularly interested in”

There was a real sense of achievement from students after they delivered their experiments and made their presentations as they were able to feel proud of having developed their own experiment and sharing it with their peers. They also gained a deeper understanding of the process of writing a laboratory report through the peer tuition system, as it required that they fully understand their assigned section in order to be able to tutor their peers in it. Although the success of the classes was largely dependent on attendance, surprisingly this was generally not an issue and attendance rates were high. Once students realised that they were responsible for running the laboratories, they were generally extremely reliable and took their role seriously, with marked improvements in attitude towards to the labs in general and a genuine desire to participate more fully. The atmosphere in the class was markedly improved, and students appeared to work well together and encounter relatively little difficulties working as a group.

## Advice to others for Implementation

Overall, I found that by handing over a certain amount of responsibility and freedom and enabling students to take more control over their learning, students engaged in deeper research on their chosen topics, became more self-directed, and developed a desire and passion to learn more about the subject. Although there was a lot of planning involved in drastically changing the structure of the laboratories, I found that the time invested was efficacious in relation to the benefits for students.

### Future Planning

I would highly recommend to those who wish to implement this practice that they allocate enough time to plan accordingly. Some things that I would take additional time to plan for include:

- Building in time for additional teambuilding/ice-breaking exercises in week two to accommodate students who missed week one.
- Having a set of step-by-step instructions of the structure of the laboratories available in week one so as to better address any confusion about exactly what was required.
- Allocating a grade weighting towards the peer assessment element, as many students did not participate in this and thus did not obtain peer feedback on their reports.

- In future years I also plan to bring in some of the students from previous years to demonstrate their presentations so as to provide a physical demonstration for incoming students.

## Clarity

Some students missed the first class and hence missed the induction to the laboratories that was designed to set them up for the year. It was difficult to remedy this effectively, as there was a lot of team building and ice-breaking during the first class. In future I plan to remedy this by sending an email to all students prior to the first class, emphasising the importance of attending. I also plan to send out an overview of the first class to students who were absent and to encourage them to speak to their peers or lecturer about the content and context of the laboratories before attending the next one. Some students also seemed a little confused and apprehensive about the alternative layout of the laboratories initially, and had many questions and queries about what exactly was expected of them. It was difficult at first to encourage them to take risks with their learning and to convince them to try something new. To remedy this confusion and apprehension, I set out a step-by-step list of instructions about what they had to do, and ran a 'sample laboratory' so that they had an idea of what was expected of them. I also developed additional instruction in creativity and ran additional team building exercises to help build confidence within the class. It did take some time for students to feel comfortable with the format, but I found that staying patient and believing in the process paid off eventually, and the majority of students got on board and enjoyed the alternative format.

## Space Considerations

The space in which the laboratories took place had a great effect on the quality of the classes - a room that is too large, for example, makes it difficult for less confident students to be heard when presenting. The large computer room that I started the classes in was unsuitable for teambuilding and group work activities, which required a space free of the distraction of computers, with suitable room for students to move freely and engage in ice-breakers and team building activities. For the presentations, a small computer room was required so that students (a) had access to computers for computerised experiments, and (b) had access to computers for writing their laboratory reports. Ideally, a 'breakout' room would also be available for groups to work in together. This is not something I had fully considered before implementing this initiative, and in future years I plan to secure more suitable rooms.

## References and Resources

Burgstahler, S. (2013) *Introduction to universal design in higher education*, in Burgstahler, S. (ed.) *Universal design in higher education: Promising practices*. Seattle: University of Washington.

Available at: [www.uw.edu/doi/UDHE-promising-practices/part1.html](http://www.uw.edu/doi/UDHE-promising-practices/part1.html)

Centre for Applied Special Technology (CAST) (2018) *About Universal Design for Learning*. Available at: <http://www.cast.org/our-work/about-udl.html#.W-Gakdv7Tcf>

Mandernach, B.J. (2015) *Assessment of Student Engagement in Higher Education: A Synthesis of Literature and Assessment Tools*, *International Journal of Learning, Teaching and Educational Research*, Vol. 12, No. 2, pp. 1-14.

Meyer, A. Rose, D.H. and Gordon, D. (2014) *Universal Design for Learning: Theory and Practice*. Wakefield: CAST Professional Publishing.

O'Neill, G. (ed.) (2011) *A Practitioner's Guide to Choice of Assessment Methods Within a Module*. Dublin: UCD Teaching and Learning. Available at: <https://www.ucd.ie/t4cms/Practitioners%20Guide.pdf>

O'Neill, G. and McMahon, T. (2005) *'Student Centred Learning: What does it mean for students and lecturers?'* Dublin: UCD Centre for Teaching and Learning. Available at: <https://www.ucd.ie/t4cms/Student%20Centered%20Learning%20Article.pdf>

## Acknowledgements

I would like to thank the staff at UCD Innovation Academy - especially Colman Farrell and Suzi Jarvis - for giving me the confidence, space, and encouragement to develop and implement this inclusive initiative. I would also like to thank my colleagues at IADT for their support, and the students for participating and allowing these ideas come to fruition.



---

## CASE STUDY 6

# Student Engagement with an Assessment Lexicon; a Structured Self-assessment to Help Demystify the Assessment Process

Discipline: Art & Design  
Student Numbers: 24



iadt  
DUN LAOGHAIRE

**Fiona Snow**

## Introduction and Context

I am a studio-based Art & Design lecturer and I primarily teach 4th year students. One of the most commonly-received requests from my students is for more feedback during modules. I have often found this request confusing - I meet with every student multiple times per week for one-to-one tutorials specifically about their work, the quality of their work and their progress. Clearly this is not the kind of feedback they are looking for when they request more; I've come to understand that many of my students are really hoping for an indicative grade at interim parts of their project - they are looking for a benchmark. As they are entering the terminal phase of their undergraduate degree, a time when they should be exercising large amounts of

autonomy, self-direction and acting on coherent critical reflection of their work, they are also looking for multiple points of external validation and assessment during a module.

Speaking to my students over the years I know that they enter 4th year with a confusion about where grades 'come from' as well as a drive to maximise their academic and creative potential during an important year of study. However, I do not believe that interim indicative alpha grades are really of any help and I tell them this directly. Work in progress rarely relates in a linear way to the final piece and I do not want to give false assurance or criticism of unfinished work by assigning potentially inaccurate and misleading alpha grades as part of an interim assessment.

As an alternative I planned an interim assessment exercise that gives students two key opportunities:

- 1 to build their own language of achievement for their work.
- 2 insight into the grading process.

Of key importance to this exercise was briefing the group beforehand on the rationale and purpose, as well as providing a responsive individual discussion with each student so they had a chance to discuss the exercise. As a result of this exercise I hoped to achieve a few small things that can be built on as the year progresses:

- 1 put student's minds at ease during the module - this was an opportunity to discuss their successes and failures to date in an open, and dialogic manner that had no associated credit weighting but still afforded them a benchmark.
- 2 to test the language in a theoretical 'assessment lexicon'
- 3 encourage them to start thinking about developing their own language of achievement so that they can critically assess their work and motivate themselves during a difficult year of study.
- 4 introduce the idea of assessment-specific language so that they can participate meaningfully in a 'build your own rubric' exercise later in the academic year.
- 5 to satisfy their legitimate and understandable desires for 'more feedback'.

## Applying the principles of Universal Design/Inclusive Assessment.

As studio-based learners my students all benefit from diverse modes of assessment throughout their four years of study. This exercise aligns well with inclusive assessment and Universal Design strategies in the following ways:

- 1 it is designed to provide transparency in assessment and feedback.
- 2 it is a scaffolded method of assessment, affording students prompt guidance and discussion about their engagement with the exercise.
- 3 it reduced the assessment load by replacing what could otherwise have been a formal interim presentation.
- 4 it gives the students voice and agency with regard to assessment and an opportunity to discuss their progress openly.

## Design and implementation of the initiative

The first module of 4th year for my students is called the 'Initial Project'. This 8 week-long studio module is their first fully self-directed project. The students are required to propose, design and make an original piece of work. The work is broad and typically ranges in any year from museum display work, original stop motion puppets, game character design, props for film and tv, silicone work and animatronics. It is assessed via a summative panel assessment after 8 weeks. During the module each student meets with at least two members of the lecturing team twice a week to discuss their progress.

Four weeks into the module I convened the group and explained my reservations about alpha grades in interim assessments and told them I hoped to give them a useful interim assessment. I introduced them briefly to a suite of assessment theory and explained the relationship between the QQI L8 Art & Design standards, the programme document and their module. I showed them an 'assessment lexicon' that has been developed by colleagues within my department (Figure 1).

QUALITY	Excellent		Good		Satisfactory			Un satisfactory	
AWARD	1st		2:1	2:2		3rd		(Condoned Fail)	FAIL
GPV	4	3.5	3	2.75	2.5	2			0
ALPHA	A	B+	B	B-	C+	C		D	F
%	80-100	70-79	B 60-69	55-59	50-54	40-49		35-39	0-34
	sophisticated	refined	thoughtful	tested	established	unadventurous	derivative	partial	incomplete
	rigorous	finesse	accomplished	thorough	complete	proficient	competent	clumsy	deficient
	incisive	flair	skilful	accurate	conventional	capable	superficial	unclear	unable
	scrupulous	dynamic	assured	grounded	clear	inconsistent	initiated	inappropriate	absent
	penetrating	lucid	dextrous	consistent	appropriate	straight-forward	threshold	misconstrued	erroneous
	insightful	distinctive	analysed	coordinated	coherent	hesitant	sufficient	unconsidered	wrong
	astute	inventive	critical	imaginative	reliable	outline	adequate	careless	mistaken
	innovative	comprehensive	decisive	independent	cautious	charted	unimaginative	curtailed	formless
	perceptive	expert	convincing	synthesised	resolved	tentative	inaccurate	faltering	unstructured
	challenging	perceptive	developed	effective	evidenced	provisional	unresolved	basic	shapeless
	definitive	cogent	fluent	complete	summary	uncertain	indistinct	undisciplined	
	authoritative	systematic	confident	logical	solid	indicative	imprecise	disorderly	
	commanding		robust	proficient	reliable	interim	inexact	vague	

Figure 1. A locally devised ‘Assessment Lexicon’

This assessment lexicon isn’t used as a stand-alone and strict measure of student work, it is not a rubric. The lexicon theorises and proposes language that is appropriate to describe work at all stages of the alpha-grades we use in the department and is intended to be shared with students to afford them insight and to help them build their own language that addresses their ambitions and standards for their work. This lexicon is intended to be a living document that colleagues may

modify and adapt, it is intended to increase dialogue and prompt reflection on the standards that are relevant to discrete and diverse disciplines and modules of study. The lexicon can aide discussions between the lecturing team, help external examiners gain insight into programme priorities, to discuss standards and expectations with students and acts as a tool in students' own critical reflection and development.

I had prepared a document for each student which had four statements in areas related to the weightings and assessment outcomes for this module (research, fabrication & design). After each statement there were nine words, one from each alpha band on the proposed lexicon (Figure 2 and Appendix A). Each student was instructed to circle as many words as they felt described their work to date (Figure 3).

**Research**  
(this includes technical, material and contextual research)

The standard of my research work to date on this project has been:

- a Definitive
- b Comprehensive
- c Accomplished
- d Thorough
- e Reliable
- f Provisional
- g Superficial
- h Inappropriate
- i Unstructured

Figure 2. A sample statement and nine standards to choose from.

**Research**  
(this includes technical, material and contextual research)

The standard of my research work to date on this project has been:

- a) Definitive
- b) Comprehensive
- c) Accomplished
- d) Thorough
- e) Reliable
- f) Provisional
- g) Superficial
- h) Inappropriate
- i) Unstructured

Figure 3. A completed sample from a student of the first statement.

After giving them time to complete the document, I spent time with each student discussing the words they had chosen and I gave them my own impression of where their work sat in relation to the words on the page. This exercise was described as an opportunity for them to tell me how they were progressing (not for me to tell them). I would explain my perspective and give them insight into my opinion of the standard of their work and they were welcome to ask me why I held the opinions I did.

In order to test the appropriateness of the lexicon students were encouraged to tell me when words didn't make sense or if the hierarchy of words seems wrong or if my interpretation of their work seemed confusing or incorrect.

The total class size was 24 and 21 of these student participated in the self-assessment exercise and 12 of these students let me keep their forms for further analysis (see figure 5).

## Results/Finding/Feedback

The feedback from students was generally positive, with all who completed it declaring that it made sense and they felt as though they were confident about how to appraise their work at that stage in the project. A number immediately identified priorities and goals they could change as a result of considering their work in this way. Students also asked why this wasn't done earlier in their studies and felt that an exercise like this that explains the language of grading and standards would be very useful from first year on.

Few problems were encountered; however, it did expose how the language in the lexicon used is not perfect - students don't understand all the words and at times the hierarchy seems incorrect and inconsistent. Generally most students struggled with understanding how some of the words would be used in the context of their work. Words that were confusing to them are listed in Figure 4.

Words students found confusing in the context of their work		
Provisional	Established	Sophisticated
Perceptive	Confident	Reliable

Figure 4. Words students needed to clarify or didn't understand.

This feedback is useful for future development of the lexicon and I believe it demonstrates an opportunity to develop a separate lexicon that describes incomplete bodies of work such as those presented at an interim assessment.

It is difficult to measure the impact of a single event like this on such a small group of students, however one anecdotal measure could be the 'success' of summative feedback this year. Of a total of 24 students only 1 expressed surprised or upset with their final grades, and this student did not attend the interim assessment. After seven years of running this module, that is the highest rate of meeting expectations I have ever experienced. Historically 4 or 5 students typically articulate disappointment with a grade lower than they expected.

The exercise allowed students to select multiple words (Fig 3), and they expressed interest in this approach. Allowing multiple replies was intentional in order to afford students insight into the conflicts and difficulties inherent in adjudicating a single alpha grade for complex work. It allowed them to openly declare that work could be both 'thoughtful' and 'inexact' at the same time.

Figure 5 graphs the difference between the self-assessed interim grade and the final grades received by 12 students in the class.

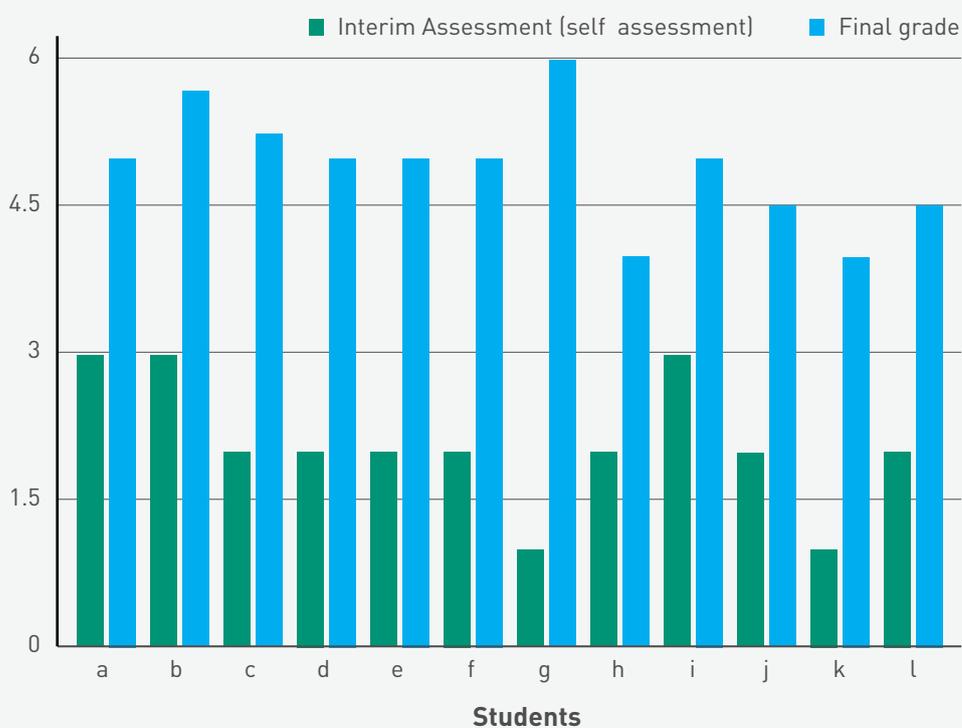


Figure 5. Comparing the standard adjudicated in the interim assessment with final grades.

A number of things are worth noting about this particular analysis of the self-assessment exercise. :

- Every student received a higher standard in the final assessment than the one they gave themselves in the self-assessment.
- The graphing was completed by assigning a number value to the 9 columns in the original lexicon document (A = 9, B+ = 8, etc...) and assigning the same number value to the final grades awarded to the students after formal panel assessment.
- It is clear that the group of 12 are among the better students in the class - all final grades in figure 5 are either a B, B+ or A. Weaker students may not have attended the self assessment, lacked the confidence to formally submit their self assessment after our discussion or perhaps they were unable to derive benefit from the exercise.
- It cannot and should not be concluded that participation in the interim assessment resulted in a higher final grade. Rather this data might illustrate well why alpha or fixed grades are of very little use at an interim assessment on many modules. Measuring a relationship between the work in progress is not clear.

## Advice to others for implementation

This exercise is only useful if done as a method of facilitating a conversation around grading. If there is no time for the follow up one-to-one sessions then it should not be attempted. There is value in taking time to describe the relationship between language, standards and assessment, but the core value here is in the resultant individual discussions. Discussion should focus on helping students identify good habits and focus on maintaining these and work towards any desired improvement of standards for the remainder of the module.

It is important to note that this exercise describes the self-assessment of the standards of work rather than of learning, however the structure could be used to assess learning. A focus on learning may be a useful exercise to perform at the beginning of each year of study as it would prompt students to reflect on learning to date and identify any gaps in learning they felt they may need to address in order to succeed during the upcoming year.

In this case I have worked from an existing document that is locally referred to as a 'lexicon'. It may make more sense in other disciplines to develop this as an informal rubric or a taxonomy. If no similar document exists that is useful within other disciplines it is possible to develop one by drawing on a number of resources. Resources like QQI standards, module and programme learning outcomes and rubrics are helpful. However, I believe it is most useful to become critically aware of the more informal language used when assessing work - what words are used in verbal feedback and when describing student work to academic peers? This more informal and dialogic language can be very useful to reflect on. I know that in my own case this language reveals a lot about my own expert but subjective opinion of work.

Sharing language with students and provoking them to engage with it allows them to build a language of competency and excellence that will hopefully guide them well during their studies and prepare them for the professional standards they will meet in the careers. By interrogating, refining and sharing the language used within disciplines it is possible to develop a suite of exercises that can allow students broader and more equal participation within their learning and assessment processes.

## References & Resources

Carlile, O. & Jordan, A. (2012) *Approaches to Creativity*. 1st ed. Maidenhead: Open University Press.

Davis, M. (2017) *Teaching Design: A Guide to Curriculum and Pedagogy for College Design Faculty and Teachers Who Use Design in Their Classrooms*. 1st ed. Simon and Schuster.

Learnhigher (2019) *Top 10 tips on Inclusive Assessment*. [online] Available at: <http://www.learnhigher.ac.uk/learning-at-university/assessment/top-10-tips-on-inclusive-assessment/> [Accessed 1 Mar. 2019].

QQI (2019) *Active NFQ Standards for Higher Education*. [online] Available at: <https://www.qqi.ie/Articles/Pages/Active-NFQ-Standards-for-HE.aspx> [Accessed 4 Mar. 2019].

# Appendix A

## The self-assessment exercise handout

**DL828- 3D Design**

**Initial Project**

**Self Assessment 1**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

This exercise is based on an Assessment Lexicon – a document that summarises words that can be used to describe and help assess work.

There are four statements below which you need to complete, do this by highlighting as many words as you think are applicable to your work to date on the Initial Project.

As you do this exercise carefully consider the meanings of the words below and critically consider your work to date on this module.

This is a self assessment and an interim assessment - the important outcome is to participate, reflect and use this exercise as a way to discuss your work with the lecturing team and as a way for you to set expectations and goals around the standard and quality of your work.

### Research

(this includes technical, material and contextual research)

The standard of my research work to date on this project has been:

- a Definitive
- b Comprehensive
- c Accomplished
- d Thorough
- e Reliable
- f Provisional
- g Superficial
- h Inappropriate
- i Unstructured

The collection, organisation and presentation of my research work to date is:

- a Rigorous
- b Expert
- c Thoughtful
- d Coordinated
- e Established
- f Inconsistent
- g Inexact
- h Vague
- i Absent

### Fabrication

(this includes armatures, rigging, maquettes, sketches, molds & samples)

The standard of my fabrication & modelling work to date on this project has been:

- a Sophisticated
- b Refined
- c Skilful
- d Reliable
- e Proficient
- f Inconsistent
- g Imprecise
- h Clumsy
- i Formless

### Design

(this includes your development of new work from diverse sources and your refinement of solutions and original work in response to the parameters of your self-directed project)

The standard of my design work to date has been:

- a Innovative
- b Perceptive
- c Confident
- d Imaginative
- e Conventional
- f Straightforward
- g Superficial
- h Unconsidered
- i Shapeless

---

## CASE STUDY 7

# Using Screencasts as a Means to Make Third Level Student Learning More Inclusive

Discipline: Business  
Student Numbers: 30 - 35



**Dr Catherine Rossiter**

## Introduction and Context

The increasing prominence of Universal Design approaches to learning and student engagement prompted a reevaluation of the assessment strategies for the Services Marketing module in year 3 of the Bachelor of Business in Applied Entrepreneurship in IADT. This module has a weighting of 10 ECTS in the final year of this level 7 QQI qualification, and is one of 7 modules that students take at this stage. The group is typically composed of students of mixed motivation levels, in the sense that some of the students wish to finish their studies and graduate with a level 7 qualification while others are considering doing the add on degree to obtain a level 8 qualification. Irrespective of the motivation, this module is an important stepping-stone to either the working world or further study.

## Design and Implementation

Universal Design for Learning (UDL) is defined as the preparation of curricula, materials and learning environments so that they are easily used and accessible by a wide variety of learners (CAST, 2018). Bowe (2000) felt UDL was of significant consideration when thinking about the redesign of the assessment mode. There is an interesting and mixed profile of students in this group. The class has a number of students who have complex learner need profiles and this can impact on their ability to demonstrate their learning using traditional assessment tools such as essays, reports, or literature review searches. The class group also has a group of French students who had come from France to study and join year 3 with a view to achieving a level 7 qualification. This group of students came from a very different learning environment and with different learning experience than that of their classmates in the Irish system. Finally, the class contained a few mature students and students who had transferred to the degree programme from other Higher Education Institutions and colleges of Further Education. Reflecting on the diversity of this group was an influential factor in deciding to change the mode of assessment.

Furthermore, research indicates that this generation of learners categorised as generation z or millennial learners have shorter concentration spans (Patel, 2017). They are also more comfortable than previous generations in using technology. In addition, this class group had studied entrepreneurship with an applied focus in year 1 and 2 and that potentially posed a challenge to studying a new, more theoretical module such as services marketing in the final, award year.

Thus, for all these reasons, it was decided to broaden the assessment tools and try a visual and audio assessment method that would challenge the students in terms of their thinking, reasoning, critical thinking, research and analysis skills. However, as the material to be assessed was a 17 minute TED talk it was hoped that students would develop the aforementioned transferable skills in a more interesting and interactive manner.

Students were given one TED talk to analyse. In addition, they were given several suggestions of areas of services marketing theory that they might use as a lens to critique the industry speaker on the theme of 'patient satisfaction versus patient experience'. Students could choose what format to use for their screencast. They

could either use PowerPoint slides as a basis for their key points and/or use clips from the talk as their structure. Allowing students to tailor the assessment structure to suit their own learner strengths is inclusive of those with diverse learning needs, including students with dyslexia and/or ADD/ADHD.

The TED talk was discussed with the class in October 2018 and the students' thoughts were elicited as to what they thought of this type of assessment. It was also established that they had not to date in their third level studies completed this type of assignment. Following a discussion with the class group they were keen to try the assessment format. This was the first time that the lecturer had used this type of assessment approach, so both the class and the lecturer were learning together.

It was also felt that a screencast allowed students who find presentations difficult, to present their work in a less public way. The method allowed them to rehearse their screencast until they were happy to submit the given version. Furthermore, as the screencasts can be recorded in advance, it was hoped that the students would watch one or two versions of their presentation, and thus learn in an iterative process – and as highlighted previously, by using audio and visual technology this iterative learning process would be more engaging for this diverse learning group.

For the second assessment of the module students were offered the opportunity to redo assessment one if they wished to. This was to allow students to go deeper with the material and to take on board learnings from the first assessment point. The second assessment was submitted in mid-February 2019. This assessment conforms to the principles of UDL on a number of levels – at the core of the process was a recognition of the levels of diversity in the classroom and by designing a mode of assessment with the learning needs of particular groups in mind, the overall assessment worked well for a significant majority of the cohort.

In keeping the CAST guidelines, there was a deliberate effort made to enable students as partners in the assessment set up by engaging them in discussion and in setting the expectations around how it might work. This was done with a view to creating an environment where students take responsibility for their own learning; it allowed for multiple tools for construction and composition in the assessment and marked a move away from the more traditional and common formats of exams, essays and written projects (CAST, 2018).

The assessment was graded within 2 weeks of the submission date and all students received written and detailed feedback on the assessments through blackboard. The students were also encouraged to speak with the lecturer in class time if they required any further feedback.

## Results, Findings and Feedback

An online survey was carried out with the class in the first week of March 2019 to assess the students' opinions on the assessment strategies in this module to date. The students were informed that the author was doing research on teaching and assessment methods and that their responses would contribute to the case study. This was in keeping with good ethical practice in research to encourage informed consent from respondents. The response rate was 13.3%. 20% of the class of 30 students choose to repeat the screencast assessment from assessment 1 in lieu of doing the essay assessment for assessment 2. One student actually achieved a lower score for the second version of the screencast when submitted as assessment 2, which was unexpected. 75% of the respondents were male and aged 18-24 years old.

75% of students surveyed felt that the choice to repeat the assessment 1 screencast in lieu of an essay in assessment 2 was positive. They felt that it allowed them to improve their learning as they had a second chance to do an assessment. The ability to get feedback through the VLE and in person was valued by 75% of the class. Overall the mandatory use of screencast technology for assessment was considered a good choice by 50% of the students, as they felt that it made the assessment more interesting. Surprisingly for a 'tech savvy' generation 25% found the screencast technology difficult to use and 25% did not enjoy using the technology for the assessment

On the issue of having students with diverse learning needs, 50% of the class reported that they had a learning difficulty but said that they had not had this need formally diagnosed to date. This was an interesting finding and one worthy of further attention in the future, as undiagnosed learning difficulties can have a significant impact on a student's learning experience and on their ability to meet learning outcomes.

One student gave some positive feedback on their assessment experience in this module in the final open question in the online survey.

“Very well structured assessment design with a content that is very relevant to either a potential future entrepreneur or a potential future employee. Impartial and balanced grading method and criteria. Clear and promptly feedback.”



Fred Lee Talk Link

<https://www.youtube.com/watch?v=tylvc9dY400> (Accessed on 04/04/2019)

## Advice for Implementation

Assessment strategies should be discussed with students, as it appeared with this class group, and others taught by the author, that students value knowing the logic and rationale for how and why they were being assessed in the manner in which they were. Secondly, the author would encourage discussing the idea of allowing students to repeat a previous assessment in lieu of a new assessment with the class at the outset of the assessment cycle. This is an integral part of allowing a flexible approach to learning and assessment, and also in getting students to agree to this novel form of assessment, which was very important. Getting such agreement allows students to feel more involved in their own learning and consider whether they feel such an assessment method is fair and equitable.

Furthermore, if using screencast technology in assessments it would be useful to provide students with a demonstration of how to use screencast technology. Academic

staff often assume that students are homogenous in their use of technology and their confidence with technology. However, anecdotally some students in the class were not familiar with such technology and lacked the confidence to learn how to use screencast technology. To help with this a link to a video clip on Youtube showing how to use screencast software was posted on the VLE.

Finally, many students struggled with the complete freedom that they were given to structure the screencast as they saw fit. Therefore, a final recommendation is that all students must provide at least one PowerPoint slide in their screencast, in order to give an overview of the presentation structure and/or references used.

## References and Resources

Bowe, F. G. (2000) *Universal Design in education*, Westport, CT: Bergin & Garvey

CAST (2018). *Universal Design for Learning Guidelines version 2.2*. Available at: <http://udlguidelines.cast.org>. (Accessed 15 March 2019)

Patel, D. (2017). '5 Differences between Marketing to Millennials Vs. Generation Z', Forbes, 27, Available at <https://www.forbes.com/sites/deeppatel/2017/11/27/5-differences-between-marketing-to-millennials-vs-generation-z/#7649cc552c9f>. (Accessed 15 March 2019)

# Appendix 1

## CA1 Screencast of Ted Talk Briefing Sheet

**Module Title:** Services Marketing  
**Assignment Title:** Critical Analysis of a Ted Talk on Service Experience Assessment  
**Lecturer's name:** Dr. Catherine Rossiter  
**Email:** catherine.rossiter@iadt.ie

**Submission deadline:** November 4th through blackboard  
**% of allocated marks:** 40%  
**Required Length:** 5.00- 10.00 minute screencast.

### Requirements

Critical Analysis of a Ted Talk on Service Experience

You will create a screencast of your critical analysis of a services marketing themed Ted Talk and it will be between 5 and 10 minutes in length.

- You should watch the selected TED talk a few times initially to get a feel for the overall point to it.
- Then watch it a few times with a more critical eye, perhaps taking notes about key points made and recording the time on the clip that these points were made (this will assist you later in preparing your screencast). <https://www.youtube.com/watch?v=tylvc9dY400>

This assessment will also be an opportunity for you to work on developing your presentation skills without having to present in front of a large class group. You can record your screencast as many times as you like until you are happy with the final version, which you will submit via blackboard

I will review your screencast presentations online and give you feedback in class and through blackboard.

### Continuous Assessment 1- Marking Scheme

Assessment criteria are in Appendix A. The allocation of marks follows:

Element	%
Analysis of the services marketing themed content of the Ted talk. (This is NOT a summary) <b>You can make linkages to any areas of the module theory that you deem appropriate</b>	40
Demonstration of skills to make an argument to argue for or against the relevance of the Ted talk's main point for small and medium businesses or large businesses.	40
Appropriate referencing of supporting information Presentation and delivery of presentation Speaking style, clarity of ideas and expression	20
<b>Total marks</b>	<b>100</b>

#### Re-Submission Policy.

Any student who does not pass this project at the first attempt may re-submit if her/his term 1 attendance exceeds 60%.

---

## CASE STUDY 8

# Inclusive Assessment of 'Live Brief' Undergraduate Projects

Discipline: | Art - Animation  
Student Numbers: | 24



**David Quin**

## Introduction and Context

Ours is a 4 year Level 8 BA programme in Animation, in IADT's Department of Film and Media, in our National Film School. Our 'Towards Professional Practice' module is a Stage 3, 15 credit, mandatory module. The module has been running (in modified versions) for over 10 years. Our student cohort is around 130 students, so Stage 3 of our programme (where our 'TPP' module sits), ranges from 30 to 40 students, very much small-group art, design and media education.

A key outcome from this module is that students get some real, authentic industry related experience. Whilst our DL832 Animation BA's 'Towards Professional Practice' module has, since its inception, envisaged work placement, internship and 'formal' links with industry, the reality has been that such formal links have proved to be difficult to establish and impossible to sustain.

We endeavoured to work with industry to ensure that our students get the industry experience that the programme requires but over time it became apparent that our programme's core problem was twofold. If students WERE to be 'formally' placed in industry, how could their learning be protected and enhanced and how could student learning be assessed and matched to module and programme learning outcomes? How might such assessment and feedback benefit and inform other students? Secondly, if students could not be 'placed in industry', how could 'real' projects be developed with external clients? How could student learning on such projects be assessed? If our students were working in project groups, surely this would complicate the assessment and feedback process further? Could individual learning in group projects be identified, assessed, guided and informed through feedback?

Our objective is to fairly, validly and reliably assess and provide feedback on our students' undergraduate learning, even in complex and challenging learning environments. In the process, we hoped to enhance our students' self-direction, their understanding of their own learning process, as well as their understanding of their assessment and our feedback. Every student's individual journey towards professional practice would be enhanced by such improvements to our process.

When placing undergraduate students in industry, we have used multiple methods to assess their learning on the placement experience including reflective journals and assessment 'in situ', whilst the industry placement is in progress. This has often been driven by industry, especially when there are sensitivities around Intellectual Property (IP) protection and non-disclosure. Animation and film studios are often working on other people's IP and they scrupulously protect such material.

In the past, we have asked students who have completed such placements to present to our broader student population. Such presentations are formally assessed by the programme team and formally matched to module and programme learning outcomes.

Whilst our DL832 Animation BA's 'Towards Professional Practice' module has always envisaged work placement, internship and 'formal' links with industry, the reality has been that such sustained formal linkages have proved to be almost impossible to establish and sustain. In particular issues around cost, IP protection, secrecy, non-disclosure and sustainability. This has led us to implementing 'live-briefs' as a solution to such industry placement challenges.

## Live briefs

A viable alternative to placement IN industry is what Professor Susan Orr calls ‘the live brief’. Our academic programme invites clients (often charities and Non-Governmental Organisations (NGOs)) into our programme, bringing their problems with them (often so-called ‘wicked problems’) and developing responses to these challenges with our students. Clients often bring in modest funding with their projects. Susan Orr says ‘through live briefs, the students often get access to much higher levels of industry – to the top people’ (briefing to IADT Film, Art and Creative Technology Faculty on staff Friday 8th June 2018). Not only do students get access to the clients, they also deal directly with other key stakeholders – especially patients and NGO service-users.

This is true Problem Based Learning, often working with very challenging and difficult subject matter. Students are encouraged to deal directly with the clients and with other stakeholders, to research, evolve, design, develop, present, manage and produce the project themselves, with guidance from the academic programme team where needed. With the clients, students decide on the subject matter, visual style, production solutions (hardware and software). Clients are encouraged to meet their student groups regularly, preferably face to face, in order to learn the development and communication process for themselves and, most importantly, in order to stay on top of project messaging.

Such work has learning for all sides, for the students, for the clients and for the academic programme. Such work is real research, because it takes challenging, ‘wicked’ problems and uses an interdisciplinary approach to evolve and develop real solutions. The solutions evolved can be practical and academic.

Our assessment and feedback of such ‘group industry’ projects began many years ago with a limited (but perfectly valid) ‘industry’ assessment model. The product (in our case the animation project produced with and for the client) was assessed. Each student group member was given the same grade for their work done on the project. However, we’ve long since moved to a more ‘educational’ grading and feedback model, very much based on guidance from IADT’s Rebecca Roper and on methods highlighted in Palloff and Pratt’s ‘Assessing the Online Learner’ (2008).

At two points in their project, (a formative point just over halfway through their project and a summative point just after the end of their project completion) students are encouraged to do individual Journal postings on the Virtual Learning Environment (VLE) where they self-assess and where they're allowed to suggest grades for their peers within their student project group. Students are asked to justify their grading choices (both self and peer) and are provided with our Faculty's 'Assessment Lexicon' (see Appendix below). At all times, an informal, measured and professional tone is encouraged in their Journal Postings.

As Palloff and Pratt (2008) note, any student self or peer assessment is 'carefully considered' by the programme team when developing each student's individual assessment and feedback. The student grading through Journals is crosschecked and collated with assessment information, formative and summative, from project presentations, weekly project meetings, client feedback and the assessment of the work itself (both process and product). Many times, the student observations (carefully anonymised) can be fed back to their peers.

## An example

Let's take one case study example. H. arrived to us from RCSI with research she'd already been gathering for two years as part of a PhD project. H. first met with one of our programme lecturers, described the material she'd gathered and her plans for project dissemination. H. had built a modest dissemination budget into her research funding – always a good sign (many research projects only think about dissemination and communication at the end of their project, when all funds are exhausted).

When our Professional Practice module commenced, H. presented short text versions of 8 scenarios. The scenarios were based on H's research priorities – our students would eventually select 5 from the 8 projects. We asked each student group (5 students in each group) to tentatively select one of the 8 subjects. Within one week, the student groups pitched ideas about how they might propose to visualise their selected project. From that point onwards, H. met with each group in our animation studio once a week for the 8 weeks of the project, guiding the development of the visuals and always mindful of the authenticity of the 'voice' and project messaging. Even when our module lead lecturer was abroad on an Erasmus mobility project, the students' weekly meetings continued with the client. At 8 weeks, we asked the groups

to 'deliver' their draft versions of their project. The clients, including H. were invited to then view the projects over a couple of weeks (Christmas period), to provide written feedback (if they so wished) and to suggest any final changes, fixups for the students to complete before 'final' delivery and the end of the module's 12-week run. Here is some of H's feedback to the groups...

- From a client perspective, this team worked very professionally and clearly. They had a really clear vision for the project from the outset and gave an extremely impressive pitching presentation at the outset. That set the tone for the duration of the project and what was particularly impressive was how closely the final animation kept to the initial vision for it. C. held the role of producer/director so was my main point of contact – always ready and available and always clear in where the project was at. The rest of the team were able to step in, proactively when their producer/director was not available and clearly worked very hard and efficiently to create such a polished and professional piece of work. I appreciated everyone's openness to my feedback, which is so important in a project like this where we are trying to capture a sense of something complex. Well done all. It has been a pleasure to work with each of you.
- I really enjoyed working with this team. It was one of the only teams that didn't have a designated producer/director (certainly, not one I was aware of) so it felt like a true collaborative team effort in developing the concept and creating the animations. As a team, I always knew where things were at and you were really good at communicating with me and letting me know when you just needed some time to work on the project and when was useful to meet me in person. That really helped me to feel confident about the project throughout. I also really appreciated your openness to hearing my thoughts and ideas as we worked together to try to make sure the final animation honoured the script.
- Yours was one of the teams I had a really good sense of who was doing what (not entirely but mainly), which was great as it meant I could acknowledge individual people's work. As a comment to all teams, I would have really loved if the full team could have been present on the last day I was meeting you all, to make sure each person's input and work could be highlighted and acknowledged.

See image below of sample from the work of two projects

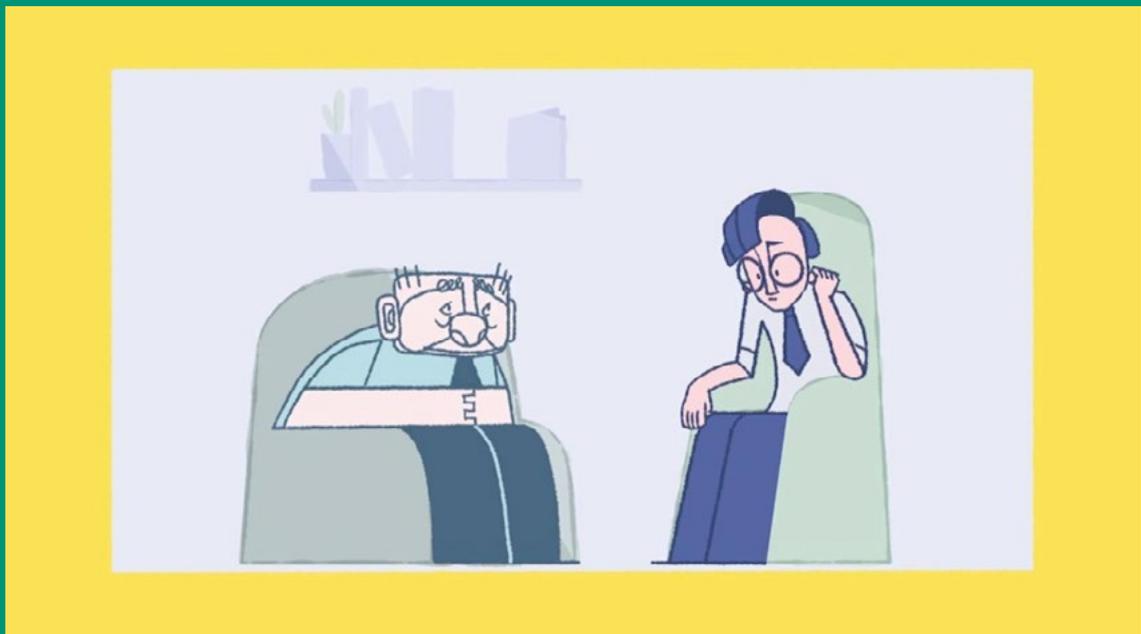


Figure 1. RCSI project – 2019 - ANXIETY

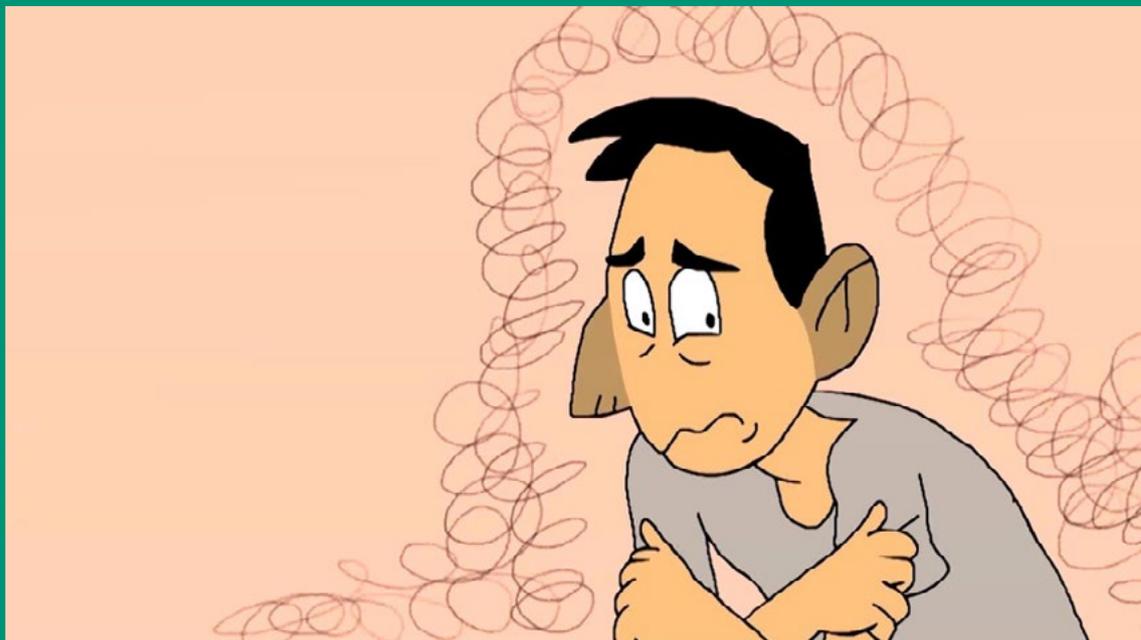


Figure 2. NRH project 2017 – FOCUS

## How does all of this adhere to Universal Design for Learning (UDL) principles?

This assessment approach reflects some of the many suggestions that are outlined in the CAST UDL guidelines and have been applied to the Live Brief.

- **Variety** - A variety of assessment and feedback is provided (group feedback (especially written, through VLE Announcements and email), individual feedback, verbal weekly formative feedback (from programme team and client), presentation feedback and final summative and collated written feedback.
- **Transparency** – there is clear use of rubrics and lexicons and expectations are set early on.
- **Authentic** – these are clearly authentic forms of workplace assessment, but the educational and individual learning is being clearly forefronted.
- **Choice of assessment** – whilst students are ‘encouraged’ to self and peer assess, it is left to them to choose (without penalty). Many do, some do not. Students with Specific Learning Difficulties are also offered appropriate alternative modes of assessment, especially if they struggle with aspects of group or written work.
- **Scaffolding** - The entire process is scaffolded for the students. While they are learning to complete their group projects, deal with clients and stakeholders and present their work, they are also learning (in a more structured and professional manner) how to self and peer assess. Students can only formally learn this through doing.

In addition, throughout the entire process, students are encouraged to support each other through the assessment process, crediting themselves and their peers for their efforts.

## Results

The problem of how to provide authentic ‘industry’ experience for our undergraduates and how to assess, feedback and enhance student learning through such placement requires continual engagement and innovative approaches. Our programme has no ‘one size fits all’ solution to this ongoing puzzle. We retain the flexibility to allow

our students to learn wherever the opportunity presents itself. We exercise careful judgement in selecting such opportunities, turning down many prospective industry and external 'partners'. Student learning is paramount in this relationship. As IADT's Dr. Marion Palmer would say 'industry are stakeholders in what we do but our students are our primary stakeholders'.

On impact, feedback from clients and other stakeholders tells us that our assessment models are having positive impact. Feedback from students and from graduates tells us that our module has great benefits in terms of confidence building and in preparing our students, not only for the workplace, but for the opportunities presented by the world of media outside the college environment.

One completely unanticipated outcome has been that our students, through working with challenging subject material, get early insights into ethical aspects and the real need for sensitivity in dealing with such subjects. As a result, some of our students have been better positioned to subsequently deal with difficult subjects (for example sexual consent and alcoholism) in their own undergraduate Major Project work. Dealing with challenging subjects has allowed our students to challenge their own medium and their own working approaches.

One last observation – this is complex assessment, with feedback from multiple lecturers, from clients and from the students themselves (self-assess and peer-assess). A lot of work still needs to be done in order to streamline the assessment pipeline and to shorten the time taken to deliver feedback to our students.

## Recommendations for Implementation

- Make sure that all members of your programme team are on board before initiating any 'live-brief' assessment initiatives.
- Do not aimlessly defer to industry! Stay focused on achieving the very best learning outcomes for your students! This is about the development of student process, not 'product' for industry!
- Start small and keep it simple! Consider internal projects first (for clients within your HEI) especially with 'worthwhile' partners who work with students - Student Welfare, Students Union, Writing, Research and Study Skills Unit, Counselling Services etc...

- Try to work with clients for two or three years, rather than for one year only – think long-term and strategically. Any project will grow and develop as your client learns (especially in relation to dealing with your students).
- Build assessment, feedback and Universal Design principles into the module design (instead of ‘bolting them onto’ a module design governed by creative conceptualisations).

## References

CAST (2018) *Universal Design for Learning Guidelines version 2.2*. Available at: <http://udlguidelines.cast.org>. (Accessed 15 March 2019)

Orr, S., Shreeve, A. (2017) *Art and Design Pedagogy in Higher Education: Knowledge, Values and Ambiguity in the Creative Curriculum*. Abington Oxon: Routledge

Pallof, R., Pratt, K. (2008) *Assessing the Online Learner – resources and strategies for Faculty*. Wiley.

Palmer, M (2017) ‘*Issues in Assessment and Evaluation*’ (Powerpoint), Certificate in Assessment in Evaluation, IADT, 16th May.

## Appendix A

### FACT Assessment Lexicon

Faculty of Film Art and Creative Technologies

Assessment Lexicon

QUALITY	Excellent		Good		Satisfactory			Un satisfactory	
AWARD	1st		2:1	2:2		3rd		(Condoned Fail)	FAIL
GPV	4	3.5	3	2.75	2.5	2			0
ALPHA	A	B+	B	B-	C+	C		D	F
%	80-100	70-79	B 60-69	55-59	50-54	40-49		35-39	0-34
	sophisticated	refined	thoughtful	tested	established	unadventurous	derivative	partial	incomplete
	rigorous	finesse	accomplished	thorough	complete	proficient	competent	clumsy	deficient
	incisive	flair	skilful	accurate	conventional	capable	superficial	unclear	unable
	scrupulous	dynamic	assured	grounded	clear	inconsistent	initiated	inappropriate	absent
	penetrating	lucid	dextrous	consistent	appropriate	straight-forward	threshold	misconstrued	erroneous
	insightful	distinctive	analysed	coordinated	coherent	hesitant	sufficient	unconsidered	wrong
	astute	inventive	critical	imaginative	reliable	outline	adequate	careless	mistaken
	innovative	comprehensive	decisive	independent	cautious	charted	unimaginative	curtailed	formless
	perceptive	expert	convincing	synthesised	resolved	tentative	inaccurate	faltering	unstructured
	challenging	perceptive	developed	effective	evidenced	provisional	unresolved	basic	shapeless
	definitive	cogent	fluent	complete	summary	uncertain	indistinct	undisciplined	
	authoritative	systematic	confident	logical	solid	indicative	imprecise	disorderly	
	commanding		robust	proficient	reliable	interim	inexact	vague	

---

## CASE STUDY 9

# Assessment as Learning – Measuring your own Success

Discipline: Anatomical studies/Advanced methods of sculpting  
Student Numbers: 30



iadt  
DUBLIN COLLEGE OF  
ARTS AND DESIGN

**Ger Clancy**

## Introduction and Context

The 3-Dimensional Design, Modelmaking and Digital Art course in IADT has been running for the past 25 years. Submission to gain entry on to the program is by a portfolio application and Leaving Certificate points. (The Leaving Certificate is the second level exit assessment in Ireland). There are approximately 30 students on the course each year.

As a discipline, (Art and Design) decisions measuring success can appear subjective. A key objective of this assessment method was to encourage students to develop a critical faculty and an ability to assess their own progress. This is achieved by including students in the assessment process and getting them to grade their own work. Effectively, they become a part of a panel assessment team that analyses their creative endeavours. Including the students in a carefully managed assessment process helps them distinguish the critical analysis processes required to develop an objective opinion.

The driving principle is that if students are to achieve consistently high levels of performance, they need to develop a conceptualisation of what constitutes 'quality' as a generalised attribute (Sadler, 1983). They also need to be inducted into evaluating quality, without necessarily being bound by tightly specified criteria. This approach mirrors the way multi-criterion judgments are typically made by experienced teachers. It is also an authentic representation of the ways many appraisals are made in a host of everyday contexts by experts and non-experts alike. Equipping students with evaluative insights and skills therefore contributes an important graduate skill. Sadler (2009)

## Design and Implementation of the initiative

Within the BA, students conceive, design and create objects for the real and virtual world, oftentimes resulting in them designing characters, environments and props. They use a wide variety of materials during their studies. The course is delivered by a combination of one-to-one tutorials, demonstration and group discussions. A hands-on, practical experience is a core value of the programme.

Advanced Sculpting is a Year Two module, aimed primarily at furthering understanding of anatomy, scale, observation, sculpting methods, composition and weight. An Écorché approach to sculpting is used which involves sculpting the figure as a skeleton, gradually building up ligaments, musculature and finally skin. The module finesses sculpting prowess and anatomical understanding. The module takes place over 6 days, for 6 hours a day with regular breaks. There is a human model and scale Écorché model present in the room for students to observe and study.

There are 4 stages to the module as outlined below:

### **Stage 1 - Research**

I ask students to research figurative art. Results range anywhere from Greek classical statues, to Soviet Era Russian figurative monuments to characters in modern Computer Game Art. This research forms the body of a general discussion around representation of the figure in Art and the techniques involved in creating a figurative sculpture.

### **Stage 2 - Application**

Students begin by building an armature, composing it into the correct position and applying the clay. Tuition focusses on observing inaccuracies in the sculpture, discussing weight and composition, texturing and finish.

### **Stage 3 - Reflection**

Students are regularly encouraged to move back from their piece, to observe their work and consider what is wrong with it. Photographing their sculpture and then analysing the printed picture can give them fresh perspective on their work, helping the student to detect imperfections themselves. This approach coincides with Sadler's Proposition 1 (2009), which refers to students developing an ability, during the process of creating their work, to critically self-assess.

At a certain point, I ask students to stop the work they are doing and turn to their peer's work. They offer each other some critique of the form/anatomy and advice on how to correct inaccuracies. Students report that they are surprised at how easily this comes to them and that they enjoy giving guidance. This helps to develop a sense of community and cooperation within the class group.

### **Stage 4 - Critique**

When the sculpting days are complete, the students are invited to an assessment morning where they are active participants in the assessment process.

I begin by talking about the module progress - what has been achieved, how the work looks generally and I inform students that they are going to proceed with the assessment now. Typically, at this point students have a flurry of concerned questions. I tell the cohort they will be ordering the sculptures in order of excellent to 'less excellent'. Some believe this cannot be done, others furtively step forward excited to give it a go. I remind students of what their module guidelines were.



Figure 1: Image of Students at Stage 2 – Application. Nestor, S. (2019)



Figure 2: Image of Students at Stage 3 – Reflection. Nestor, S. (2019)

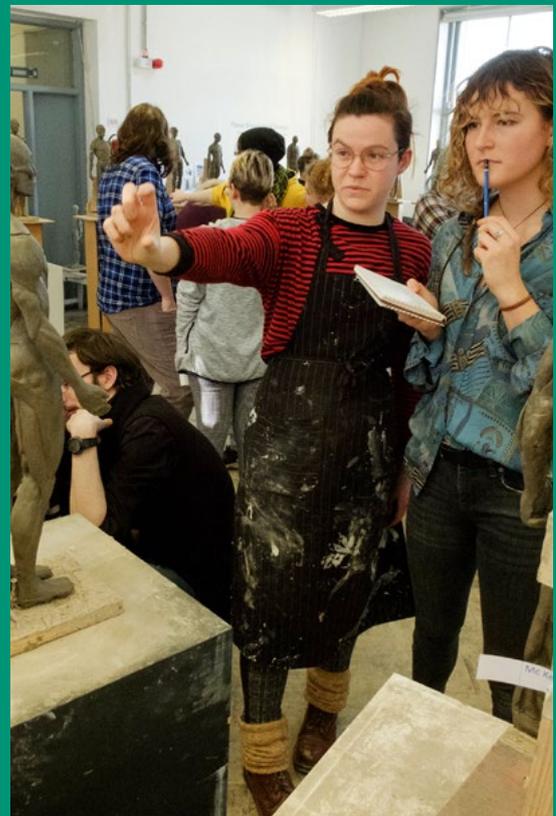


Figure 3: Image of Students at Stage 3 – Assessment. Nestor, S. (2019)

The students are given a choice of three roles in the assessment process:

- 1 Assistance** - Being part of the event by placing the sculptures in order but preferring to let others take responsibility for making decisions.
- 2 Audience** - Watching the assessment, talking amongst themselves but not directly becoming involved initially.
- 3 Assessors** - They engage with the task of assessment and decide the ranking order of the sculptures from excellent to less excellent.

It becomes apparent very quickly that being an assessor changes how the students view the process. The students may gravitate towards individuals they are comfortable to work with and form self-selected groups (panels). Some groups question how marks are assigned and for what while others begin to range the work in order of excellence without hesitation.

Once a hierarchy in the work is established, some of the audience will begin discussions amongst themselves, often disagreeing with decisions made. Emotions are often evident as all students, in their various roles as Assistant, Audience or Assessors, tend to be very vested in the process. The assessment is paused at this stage as this level of control over the assessment process can be a challenging activity for students.

I ask the students if it is obvious to them what work should sit at the top and the bottom of the class. They generally agree on this but are often surprised at the amount of work that sits in the middle and that it is not obvious how to order this. Participants tend to recognise that this is where the discussions will need to begin and so the assessment process continues.

Panels of individuals often disagree over the judgement of work and there is a lot of negotiation and compromises. Trying to separate the work in the middle is problematic but is helped by measuring the work against the assessment rubric.

<b>GRADE/ CRITERIA</b>	<b>Excellent 80-100%</b>  <b>A</b>	<b>Very Good 70-80%</b>  <b>B+</b>	<b>Good 60-70%</b>  <b>B</b>	<b>Above Average 55-60%</b>  <b>B-</b>	<b>Fair 50-55%</b>  <b>C+</b>	<b>Fail advisory 40-50%</b>  <b>C-</b>
<b>Reference</b>	Anatomy detailed correctly	Anatomy detail similar to model	Anatomy details marked out, but lacking 3d depth/detail	Anatomy missing minor elements of the body. Areas of body imagined	Anatomy missing major elements of the body	Anatomy entirely incorrect
<b>Proportional Accuracy</b>	Perfectly human like	Believably human	General human form present. However scale incorrect (+/big/small)	Scale distorted, sections of the body disproportionate to other areas	A cartoon-like looking human	Not a recognisable
<b>Weight &amp; Composition</b>	Figure is grounded, looks solid and as if it is standing	Figure is solid, but centre of gravity slightly off balance	Figure is believable, but centre of gravity is off balance	The figure looks stable from one point of view, but not from all other viewpoints	Figure looks like it's falling/ very off balance	Cannot stand up
<b>Quality &amp; Finish</b>	Clear sharp precise, fully finished showing variety of clay finishes	Believable and considered, fully finished showing variety of clay finishes	Competent, showing a range of textures and depth, but lacks finish/polish	Has rudimentary depth and texture, but lacks finish/polish	Lacks surface finish, looks plain and un-textured	No finesse or finish visible

**Table 1: Rubric for Assessment**

Using the assessment rubric helps the students to understand the following:

- Some grades have larger percentile bandwidth than others.
- Although some pieces of work meet all the criteria, the sum of the parts does not always make an entirely successful piece of work.
- Objectivity in grading is not difficult to achieve and favouritism is less of an issue than they thought it would be.
- Thinking of words (excellent/good/fair) to adjudicate the work is easier than applying grades or percentages.

When the student assessment has finished a small group of students from the year above are invited to quality assure the decisions our assessors have made.

### **Stage 5 - Feedback**

A feedback discussion takes place several days after the project is complete. This is a group discussion and is led largely by students who reflect on the project. They talk about the assessment, the overall results, their placement in the class and critical observation/possible improvements on the roll out of the module.

## **Results/Findings/Feedback**

The students have experienced the challenge of a panel assessment, learned to present an argument for/against a work and understand what we the lecturers do as regular assessors of their work. They are surprised how involved this manner of enquiry is and yet enjoy the pursuit. This technique relies on the student being committed to partake in a process, which they may not be comfortable with initially. The students are surprised at their ability to use their critical faculty in order to classify the work.

This module is about enhancing modelling competencies. However, the learning developed by the assessment method also facilitates the development of critical thinking skills and the ability to self-evaluate. I have noticed a maturity in the approach to the latter part of the module. Having to grade their own work and that of others has led to a marked improvement in how they proceed into the second component of the module. They get the fundamental elements of it right far quicker. Although I would expect students to be more confident in their approach to the second half of the module, by inducting students into the assessment process their enhanced skills contribute to their capability to evaluate the quality of their own work from inception to final execution.

The most notable change is that the students are not giving up as easily as in the past. It is evident that they are keen to push themselves harder. Standards improve, they finish earlier than expected, present more complete work and display an awareness of quality.

The reflection of one of the current 2019 Year Two Students bears out some of the observations I have made

‘Being aware of the fact that my work would be criticised by a group rather than just one or two people added a powerful dynamic to the learning process. It forced me to look at my work from the perspective of my peers and to imagine what inaccuracies - or accuracies - would be pointed out. This encouraged me to identify and address problem areas rather than accepting them and moving on.

Though uncomfortable at times, working towards self-assessment guided me to work with self-discipline and integrity. This ultimately produced a higher standard of work and a new respect and knowledge for implementing self-awareness and self-criticism throughout the work process and not only after the work is complete.’

This approach meets the criteria associated with Universal Design for Learning (CAST, 2018) principles in that it allows for the following:

- Fosters collaboration and community
- Promotes expectations and beliefs that optimise motivation
- Develops self-assessment and reflection

## Advice for Implementation

While the example here is connected to the act of sculpting the human form, the approach has applicability across a variety of disciplines. Many fields have practical elements that need teaching and assessment. Skills are necessary. At times, it can be challenging to ensure that higher level thinking can be accomplished through teaching technical process orientated modules. The approach I have taken has allowed me to “to induct students into the art of making appraisals in a substantive and comprehensive way” Sadler (2009) and hopefully has encouraged higher level thinking among the student cohort.

Reflective self-assessment of this manner and actively engaging students in the assessment process creates an opportunity for critical high-level thinking to happen in modules which are focussed on improving technical skills.

## Points to consider:

- Essays, presentations, posters etc. can all be ranked by students although the specific process and timings may differ.
- It is important to provide students with guidance and a rubric or lexicon when performing self and peer assessment.
- Some students may feel that this process makes them anxious and this should be taken in to consideration - the differing roles students can take on will help with this.
- The feedback discussion is crucial to allow students to 'debrief' on the process and continually develop each iteration of the assessment.

## References and Resources

CAST (2018). *Universal Design for Learning Guidelines version 2.2*. Retrieved from <http://udlguidelines.cast.org>, (7 March 2019)

Sadler R. (2009) '*Transforming Holistic Assessment and Grading into a Vehicle for Complex Learning*' in Joughin, G (ed.), *Assessment, Learning and Judgement in Higher Education*, Springer Science+Business Media B. V. Available at <https://cloudfront.ualberta.ca/-/media/centre-for-teaching-and-learning/symposium/less-teaching-more-learning-2009/royce-sadler/articles/symposiumltmlroyce-sadlertransforming-holistic-assessment-and-grading-into-a-vehicle-for-complex-learning.pdf>, (7 March, 2009)



---

## CASE STUDY 10

# A Scaffolded Approach to Teaching Design and Design Techniques to Reluctant Designers

Discipline: Psychology  
Student Numbers: 61



**Gráinne Carroll**

## Goal/Objective

As part fulfilment of a Certificate in Universal Design for Learning (UDL) in IADT I was required to redesign a module with specific emphasis on students with Autistic Spectrum Disorders (ASD). This felt like an ideal opportunity to utilise the structured scaffolded approach recommended when working with students with ASD and applying it to the general student population. Any student could struggle with the technical and creative skills required in the module and it was hoped that this would create a more inclusive environment.

There were several potential issues that could cause accessibility issues.

- Access to course material on the Virtual Learning Environment (VLE) Blackboard. There was insufficient information on the general course structure and related documents.
- Content was revealed to the students on the day of the class rather than in advance. Advance notice is essential not only for students with ASD but for those who are uncomfortable with the material and want advance preparation.
- Material available to students was varied. While there was multiple mean of representation (CAST, 2018) in some areas, it lacked consistency.
- Classes primarily consisted of lectures in parallel with demonstrations. The students then had to carry out related activities in class. This approach can be quite inaccessible for people who struggle with verbal instruction, and maintaining concentration for extended periods of time.
- The assessment structure was also problematic as it required significant organisational skills including research, planning, and time management.

**The objectives therefore were:**

- To create a more scaffolded approach towards the delivery of the module from course content to in-class tasks and project development.
- To enhance communication between the lecturer and students by providing timely feedback and encouragement.
- To provide greater transparency in the delivery of the module and in the module assessment and feedback.

## Description

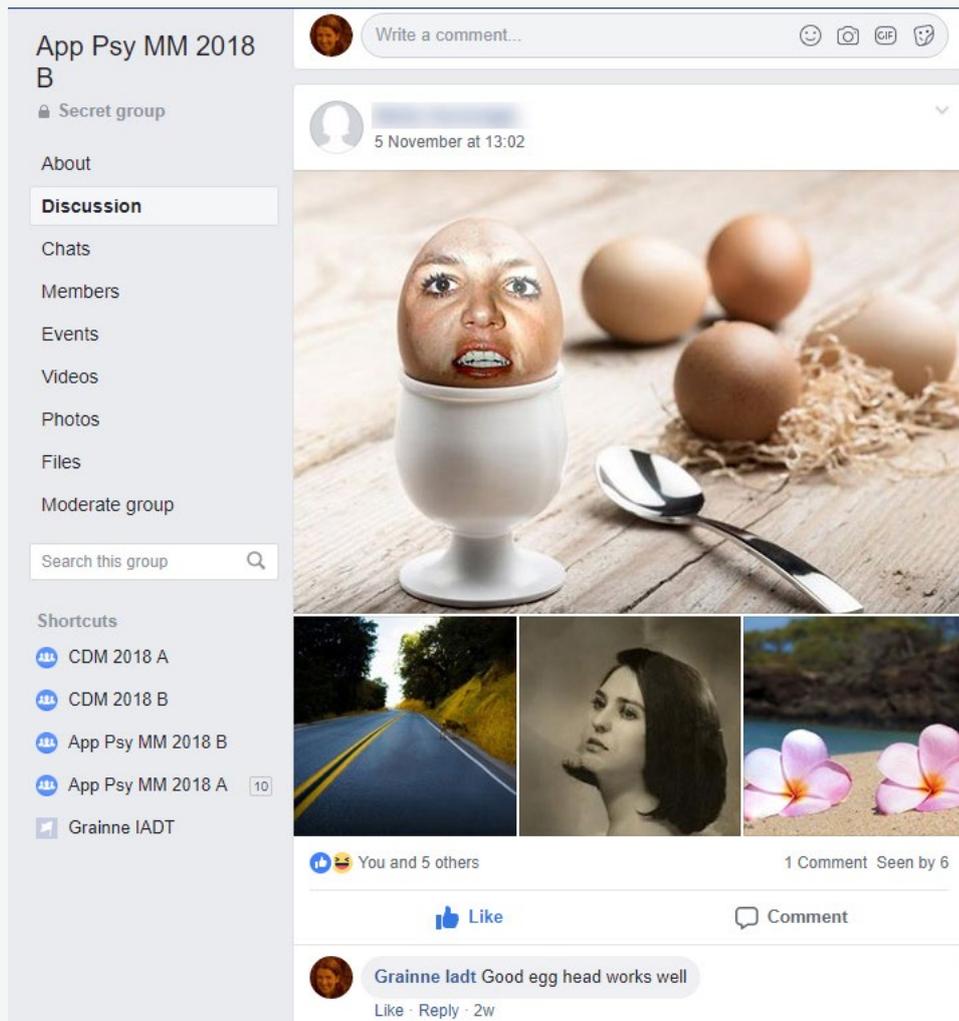
Multimedia Design is a 10 Credit Module on the Applied Psychology Degree. It is a little unusual in the sense that the students would generally consider their primary interest Psychology. Many are reluctant designers and claim to be technically incapable. More often than not they prove themselves wrong year on year, but it is important that the students are not overwhelmed initially and receive frequent and positive feedback. For the purpose of brevity one continuous assessment is covered in this case study, it normally consists of two continuous assessments and an exam.

The module is largely practical where concepts and techniques are demonstrated or discussed in class and students carry out in-class activities based on these. Also, as many students do not have the necessary software at home, time is allocated in class for students to work on their continuous assessments and receive individual guidance from the lecturer and classmates.

Communication is important for the classroom dynamic particularly in a creative subject. The students need a vehicle where they can provide and receive feedback readily. A number of tools were considered for this task. The VLE (Blackboard) was briefly considered; however, it had several drawbacks. The blog facility is very basic with no option to upload images and when there are updates, changes or comments there is no notification to users. Journals are also not feasible as only the user and instructor can view the contents and they do not sit comfortably with visually heavy content.

A leading Social Media Environment was chosen as the communication tool for this module; however, this is very much open to the lecturer. It was important that the tool used was free and readily available and had the option of closed groups, where only students who receive invites can participate. It was also essential that students could easily upload images, weblinks, videos and add comments. A search facility is also important so that individual submissions can easily be monitored.

This closed group was introduced at the start of the year and became the go to point for all class communication in relation to the module. It was also used as an interface where after each class the students uploaded the work completed in class. Rather than working in isolation this provided the students with an opportunity to see and comment on or like different students' work and for the lecturer to monitor the individual student's progress. As an added incentive the students are allocated a small percentage for in-class submissions.



**Figure 1: Closed Group Lecture Feedback**

Multiple means of representation (CAST, 2018) was carefully considered when it came to how the course was structured. Clarity is essential and can be particularly important for people with ASD.

With this in mind all content on Blackboard was completely redesigned to allow for greater clarity and ease of access.

- All course documentation where possible was provided from the outset.
- A module document was created to provide all essential information relating to the module including a course overview, module aims, learning outcomes, learning and teaching strategies and expected work that would be carried out throughout the year.

- The module document also provided details on all continuous assessments as well as a supporting rubric, a Project Schedule and Report Planner that would provide the student with greater structure.
- Work by students from previous years was also made available for students to review.
- Class presentations and notes were provided as PowerPoints rather than PDFs.
- Videos were made available as an alternative for students who struggle with verbal instruction and maintaining focus.

Multiple Means of Action and Expression (CAST, 2018) is key when it comes to classroom delivery to encourage deeper understanding. Aspects to be reviewed included how the classes were structured and presented, an awareness of the sensory environment, dealing with group work, and when assigning tasks ensuring that they were clear, easy to follow and also provided choice.

All of the above encourages deeper learning but to reach mastery more needs to be done and this is where Multiple Means of Engagement (CAST, 2018) can play a role. The assessment method needed careful consideration, particularly for students with ASD who may struggle with time management and planning.

A scaffolded approach was developed to ensure the students delivered projects on time and successfully met the learning outcomes.

- Students were provided with details of all continuous assessments and marking rubrics at the start of the year.
- Sample work of students from previous years was also made available.
- Choice was provided in the subject matter for each assessment.

This is also where task analysis becomes really important.

- A Project Schedule was introduced (see Appendix A) which broke the project up into clear stages and indicated targeted deliveries.
- A Report Planner was also provided (see Appendix B) outlining what should be covered in the report.
- The students were also required to write the report using Adobe Spark (see Figure 2), a cloud based, simple to use, online web page builder that required little to no instruction.

- In addition, to ensure the students were staying on schedule they were asked to publish their journal weekly to the closed group. This had a number of benefits, not only was it possible to monitor the individual student's progress but each student was also able to view and comment on the reports (figure 3) inspiring them but also motivating them, particularly those who may have been slow to start or have fallen behind.

The report is a particularly important part of the continuous assessment as it shows the reflective practice of the students and general evolution of the project.

Every effort was made to ensure transparency in the assessment process and that it was valid, reliable and effective. Making the assessment rubric available to students helped with this (See Appendix C).

Workload on providing feedback for this module has always been considerable so it was decided to introduce a tick box approach to reduce repetition in writing, and to provide a small amount of individual written feedback at the end.

A peer review was also introduced where three students, working with the same rubric as the lecturer, provided their own assessment of one student's work. This helped the students' understanding of the validity of the assessment process as well as providing a more considered review to assist the lecturer.

## Results

This is the first year of implementing these changes in the module but already there is a noticeable improvement in the overall student work rate and quality of delivery.

Based on feedback from the students there were a number of contributing factors.

As a result of the Project Schedule provided many students comfortably planned, executed and delivered the projects on time:

**'Helped me keep on top of the workload week to week rather than letting it all build-up'**

Figure 2: Spark Journal posted on closed group with Lecture comment

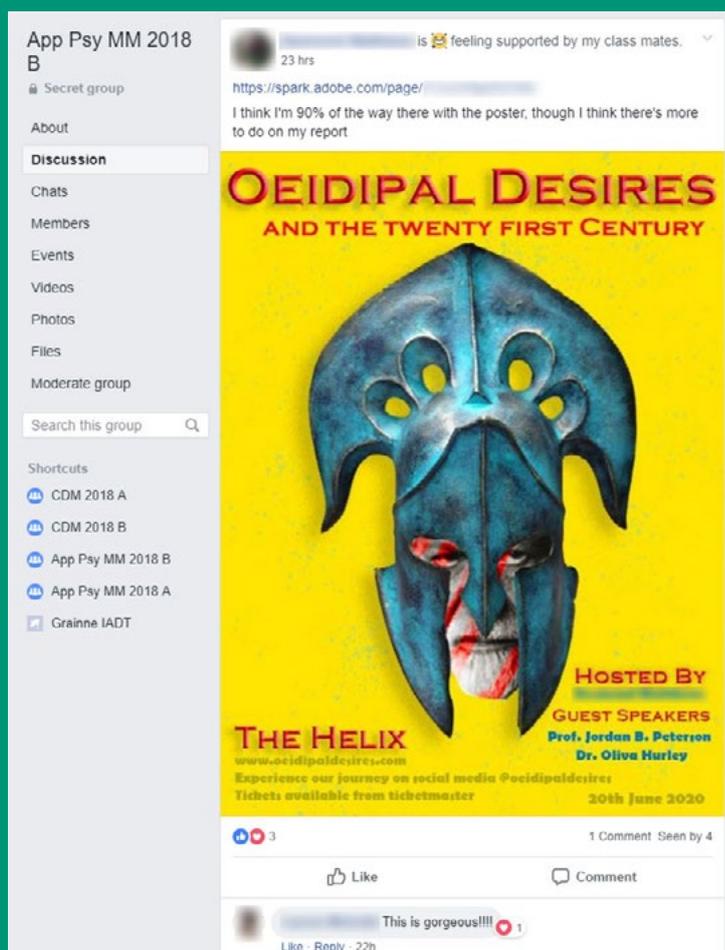
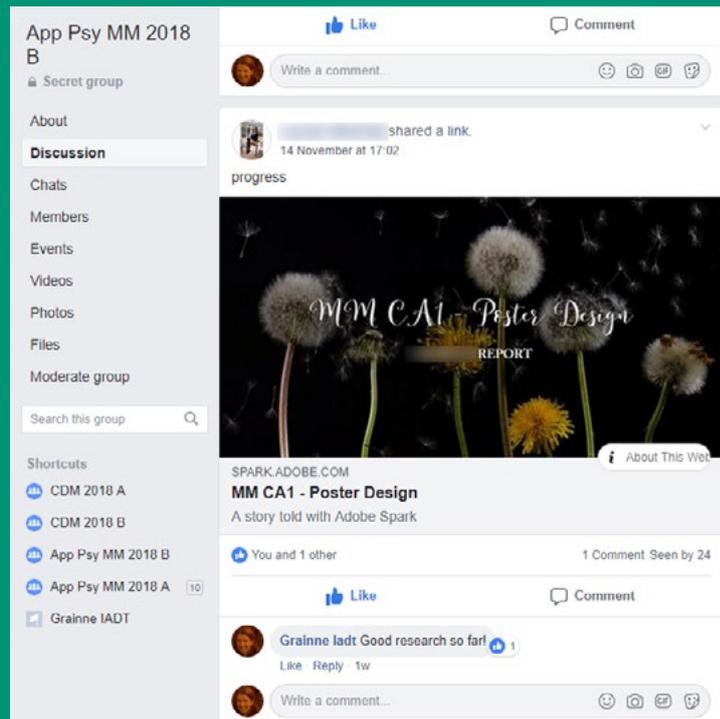


Figure 3: Student feedback on project (CA)

The Report Planner document was also of benefit and this was particularly evident in the Spark Reports with excellent evidence of research and project evolution:

**‘It helped knowing where my focus and attention should be directed’**

Both the Project Schedule and Report Planner are decidedly low tech but there is the option in future classes of utilising online calendar facilities as well as apps which may also prove effective in the area of project planning and student motivation.

Using a cloud based website approach like Spark produced reports of tremendous visual depth. In general, it proved easier to add content as you worked rather than retrospectively which would be the case with something like Microsoft Word. It was also instant and content was accessible to all from the start. As a tool however the Spark Journal had some limitations, particularly in terms of flexibility in layout. An alternative tool with perhaps greater flexibility but a slightly increased learning curve could be Google Sites. One student commented:

**‘It was a fun and useful way to my organise ideas and visualise the final concept for the continuous assessment.’**

From an assessment perspective the peer review proved helpful but time consuming to collate, a more streamlined approach using Blackboard peer assessment facility or even Google forms may be an option here. It was noted:

**‘I liked doing the peer feedback as it clarified things on my own project that I didn’t do so well, it also showed the areas I was very successful at.’**

The standard of work produced by the students has taken a noticeable leap in comparison to previous years and the overall communication and classroom dynamic has significantly improved.

One disadvantage of the new approach is the need for greater input on the lecturer’s part outside the classroom particularly on the closed group. However, the positives outweigh the negatives as a rapid assessment of the student’s general performance can be made simply by a quick search for a specific student and all their in-class contributions are immediately visible.

Student opinion is in general positive although there are reservations:

**'it is good to see everyone's work but not efficient in the sense that older posts get lost when the newer posts are added'**

In future a project communication tool like Slack may be considered as it has greater visibility and ease of control. It has also greater project management options particularly if group work is involved. Slack is also frequently used in industry which may hold greater long-term relevance for the students.

## Recommendations and Reflections

Module design is an on-going process, what has been outlined here continues to be reviewed and will no doubt change again in the future.

- A number of tools and approaches have been proposed in this case study. It may not be necessary to use all.
- Never assume anything and reflect on all aspects of your module from VLE presence, in class approach, and assessment practice.
- As is evident in the results section there is an element of trial and error when attempting to implement beneficial change, therefore frequent reassessment is essential.
- Consider aspects that currently cause confusion or frequent questions, can these be reduced/streamlined, is greater guidance needed and how can this be established?
- Create an online group, or similar, to establish a standard means of in-class communication.
- Encourage student contributions by actively contributing on the group, responding and commenting regularly.
- Remember a sense of humour is always beneficial.
- Student feedback is key, ask their opinion regularly and modify accordingly.

## References and Resources

CAST (2018). *'Universal Design for Learning Guidelines'* version 2.2. Available at: <http://udlguidelines.cast.org> (Accessed 20th February, 2019)

Boser, K., Goodwin, M. and Wayland, S. (2014) *Technology Tools for Students with Autism Innovations that Enhance Independence and Learning*. 1st ed. [ebook] Brookes Publishing, pp.1-27. Available at: <http://archive.brookespublishing.com/documents/boser-udl-for-students-with-autism.pdf> (Accessed 20 Apr. 2018).

Clince, M., Nolan, D. and Connolly, L. (2015) *UDL: A License to Learn*. 1st ed. [ebook] Dublin: Ahead, pp.69-73. Available at: <https://www.ahead.ie/userfiles/files/Conference/2015/Conference%202015%20Publication.pdf> (Accessed 20 Apr. 2018).

Education.qld.gov.au. (2018) *Barriers in accessing the curriculum for students with ASD*. [online] Available at: [http://education.qld.gov.au/asd-online-resource-kit/schools/curriculum\\_access/strengths\\_barriers/barriers.html](http://education.qld.gov.au/asd-online-resource-kit/schools/curriculum_access/strengths_barriers/barriers.html) (Accessed 20 Apr. 2018).

Myck-Wayne, J. and Ramirez, S. (2014). *Assistive Technology and Social Skills*. 1st ed. [ebook] Fullert: California State University, Fullert, pp.1-12. Available at: <https://pressto.amu.edu.pl/index.php/ikps/article/viewFile/1560/1533> (Accessed 20 Apr. 2018).

Rose, R. and Howley, M. (2003) *Structured approaches to the inclusion of pupils with autistic spectrum disorder in group work*. 1st ed. [ebook] Northampton: University College Northampton, UK, pp.1-18. Available at: <http://www.leeds.ac.uk/educol/documents/00003313.doc> (Accessed 20 Apr. 2018).

UDLL (2017) *Universal Design for Learning A Best Practice Guideline*, 2nd ed. [ebook] Dublin: AHEAD Educational Press. Available at: [https://www.maynoothuniversity.ie/sites/default/files/assets/document/Universal%20Design%20for%20Learning%20Guidelines%20-%20UDLL\\_0.pdf](https://www.maynoothuniversity.ie/sites/default/files/assets/document/Universal%20Design%20for%20Learning%20Guidelines%20-%20UDLL_0.pdf) (Accessed 20 Apr. 2018).

# Appendix A

## Project Schedule

Week	Deliverable
<b>Week 1</b>	<p>Start Report Adobe Spark Journal</p> <p>Choose your topic and finalise text that will go on the poster.</p> <p>Research relevant posters and design inspiration.</p> <p>Compile screenshots of posters/ designs and highlight/ indicate areas of interest</p> <p>Consider typography and font choice keep a record of typography and font choices of interest</p> <p>Publish journal progress on closed group</p>
<b>Week 2</b>	<p>Commence sketches of poster ideas.</p> <p>There should be a minimum of three ideas</p> <p>Ensure that all three are different solutions.</p> <p>Publish journal progress on closed group</p>
<b>Week 3</b>	<p>Explore design ideas in Photoshop.</p> <p>Attempt all three if necessary to see which design is most successful.</p> <p>Remember to use techniques learned in class.</p> <p>Naming layers and organising folders.</p> <p>Publish journal progress on closed group</p>
<b>Week 4</b>	<p>Refine poster solution. Pay particular attention to typography, balance, colour treatment and general attention to detail</p> <p>Record project development in report</p> <p>Publish journal progress on closed group</p>
<b>Week 5</b>	<p>Finalise website ensure all layers are properly titled and organised</p> <p>Complete report</p> <p>Submit CA on Blackboard.</p> <p>Ensure all content is zipped in a folder with your name on it.</p> <p>Publish journal progress on closed group</p>

## Appendix B

### Report Planner

Section	Details	Word count
<b>Introduction</b>	<p>Overview of Project</p> <p>Reference posters, visuals etc. that were relevant to your research, ideas/sources of inspiration. Include screen shots/ jpegs of features/styling that were of particular interest.</p> <p>Include all sketches of three ideas.</p> <p>Discuss your preferred approached identifying key features you wish to highlight e.g. typography graphic style, theme, colours etc.</p>	No min word count. Use images where necessary
<b>Description</b>	<p>Outline project development. Give details in relation to:</p> <ul style="list-style-type: none"><li>— Layout approach</li><li>— Typographic choice and treatment</li><li>— Graphic styling</li><li>— Overall design look and feel</li></ul>	No min word count. Use images where necessary
<b>Techniques</b>	<p>Outline Photoshop techniques used including:</p> <ul style="list-style-type: none"><li>— Adjustment layer styles</li><li>— Layer styles</li><li>— Masking</li><li>— Clipping masks</li><li>— Blend modes etc.</li></ul>	No min word count. Use images where necessary
<b>Reflection/conclusion</b>	<p>Critically reflect on your project.</p> <p>Are you happy with the finished product? Are there aspects that you would change? What did you find difficult/challenging?</p>	No min word count. Use images where necessary

# Appendix C

## CA Rubric

Excellent / Above Average + Excellent / Very Good (100-70) Alpha; A/B+ GPV 4.0 / 3.5	Above Average Good (69-60) Alpha; B GPV 3.0	Average + Satisfactory / Fair (59-50) Alpha; B-/C+ GPV 2.75 / 2.5	Average- Pass (49-40) Alpha; C GPV 2.0	Weak/ Unsatisfactory Poor / Fail (39-0) Alpha; D/F GPV 1.5 / 0
Visual Research – Report & Supporting Material				
A/B+	B	B-/C+	C	D/F
<p>Excellent report demonstrates an obvious developmental process as well as an awareness and understanding of contemporary design practice for poster design and print media in general. <input type="checkbox"/></p> <p>Very well written and clearly structured. <input type="checkbox"/></p> <p>Very good evidence of research carried out in relation to sources of inspiration, stylistic approaches, sketches and thumbnails. <input type="checkbox"/></p> <p>Numerous examples provided. <input type="checkbox"/></p>	<p>Good report clearly written. Shows evidence of developmental process as well as some awareness and understanding of contemporary design practice for poster design and print media in general. <input type="checkbox"/></p> <p>Good evidence of research carried out in relation to sources of inspiration, stylistic approaches, sketches and thumbnails. <input type="checkbox"/></p> <p>Some examples provided. <input type="checkbox"/></p>	<p>Adequate report content not presented clearly. <input type="checkbox"/></p> <p>Some supporting material information does not seem to fit the main approach appears as a disconnected series of random visuals. <input type="checkbox"/></p>	<p>A minimal report with limited indication of research. <input type="checkbox"/></p> <p>Little or no accompanying examples. <input type="checkbox"/></p>	<p>No report submitted. <input type="checkbox"/></p>

Design Treatment				
A/B+	B	B-/C+	C	D/F
<p>Excellent creative design solution. <input type="checkbox"/></p> <p>Very good awareness of design principles contrast, repetition, alignment, proximity, visual balance. <input type="checkbox"/></p> <p>Effective consistent use of typography and legibility. <input type="checkbox"/></p> <p>Design executed to a very high level with excellent attention to detail. <input type="checkbox"/></p>	<p>Good design solution. <input type="checkbox"/></p> <p>A good awareness of design principles contrast, repetition, alignment, proximity, visual balance. <input type="checkbox"/></p> <p>Good approach to typography and legibility. <input type="checkbox"/></p> <p>Design executed to a good level with evidence of attention to detail. <input type="checkbox"/></p>	<p>Adequate design solution. <input type="checkbox"/></p> <p>Inconsistent approach to design. <input type="checkbox"/></p> <p>Limited evidence of design principles and overall balance. <input type="checkbox"/></p> <p>The development of the idea was adequate but lacks attention to detail. <input type="checkbox"/></p>	<p>Very little evidence of design direction. <input type="checkbox"/></p> <p>Design poorly executed. <input type="checkbox"/></p> <p>Poor or limited demonstration of design principles. <input type="checkbox"/></p> <p>Inadequate realisation of visual ideas. <input type="checkbox"/></p>	<p>The student was not engaged with investigating an appropriate design solution. <input type="checkbox"/></p> <p>Inadequate awareness of content design treatment. <input type="checkbox"/></p>

Technical Proficiency				
A/B+	B	B-/C+	C	D/F
<p>Excellent and perceptive handling and development of all media and processes. <input type="checkbox"/></p> <p>Demonstrate an excellent ability to use Photoshop proficiently. Logical organised files evident. <input type="checkbox"/></p> <p>Utilised advanced non-destructive techniques including masks, adjustments layers, various methods for stylistic treatments etc. <input type="checkbox"/></p> <p>Excellent use of skills and experimentation. <input type="checkbox"/></p>	<p>Demonstrate a good ability to use Photoshop effectively. <input type="checkbox"/></p> <p>Photoshop file organised for the most part. <input type="checkbox"/></p> <p>Some advanced techniques utilised. <input type="checkbox"/></p> <p>Effective use of skills and experimentation. <input type="checkbox"/></p>	<p>Shows adequate ability to use Photoshop effectively. <input type="checkbox"/></p> <p>Photoshop partially organised. <input type="checkbox"/></p> <p>Limited use of skills and experimentation. <input type="checkbox"/></p>	<p>Demonstrates a basic handling of appropriate media and materials. <input type="checkbox"/></p> <p>Photoshop not organised. <input type="checkbox"/></p> <p>Lacking evidence of skills and experimentation. <input type="checkbox"/></p>	<p>Little more than a basic ability to employ skills in a meaningful way. <input type="checkbox"/></p> <p>Insufficient evidence of skills and experimentation. <input type="checkbox"/></p>

Supporting Material (In class tasks)				
A/B+	B	B-/C+	C	D/F
All in class material submitted. <input type="checkbox"/>	80% of in class material submitted. <input type="checkbox"/>	50% of in class tasks submitted. <input type="checkbox"/>	Small number of in class tasks submitted <input type="checkbox"/>	Little or no in class tasks submitted <input type="checkbox"/>
Total Grade				
Additional Comments				



---

## CASE STUDY 11

# Last Semester's Feedback... a Tool for this Semester

Discipline: Business  
Student Numbers: Approximately 60 students



**Dr Orna O'Brien**

**'Failure is instructive. The person who really thinks learns quite as much from his failures as from his successes' (Dewey, 1933, p. 206).**

This case study explores the assessment on the module 'SBUS1005D Development Academic Competencies' and how students can be incentivised in a structured fashion to harness previous feedback to assist learning in the subsequent semester. Often the feedback from one semester, one year or one stage, can provide a huge learning opportunity for students and help them address reoccurring gaps in learning or academic skill. This feedback is often overlooked and an opportunity is missed to actively engage with previous learning in order to improve academic skills. The 5 ECTS module discussed in this case is designed as a level 7 module for mature business students returning to education. The module provides students with a toolbox to develop their academic skills and the assessment is predicated on several of the principles of universal design and inclusive assessment. For example, self-regulation is provided with the opportunity to vary methods for assessment and developing

individual academic voice. The assessment is designed to produce learners who are purposeful and motivated to engage with their own development. Finally the assignment aimed to aid in the development of resourceful and goal directed learners, who could identify development areas for themselves and work to actively improve these areas, thus attaining goals.

## Student Cohort

These students are Year 1 students on the Diploma in Business Studies programme at the UCD Lochlann Quinn School of Business. This programme is designed to target mature students working full-time who intend to complete a third level business qualification on a part-time basis. There are approximately 60 students in the class. Students on the programme come with a mixed previous educational profile. Some students have already attained certificates and diplomas and are looking to strengthen their experience and knowledge with a degree. Others will not have engaged in formal education or learning in an academic environment. The programme has a flexible entry route allowing students to commence the programme once aged 23 years or over having demonstrated a suitable consideration of the programme at interview. In reviewing the programme outcomes, it was intended that the assessment for this module should enable learners who were motivated (to learn about their learning), resourceful (in how they managed the resources to enable their learning) and goal-directed (to identify and achieve clear learning objectives and reflect upon future learning opportunities), as per the CAST guidelines (2019).

## Module Overview

A strength of this assessment is it can be used for any module on any programme as it encourages students to engage with assessment from their previous modules. As part of the assessment of this module, students are encouraged to review their assessment, the feedback and the grade which they received for three modules completed in the previous semester. The assignment is scheduled for the first three weeks of the semester, i.e. while last semester's curriculum is still fresh in students' minds. This early engagement also allows students to make the most of their learning and remedy past areas of weakness during the semester. Students will have undertaken a module entitled 'SBUS1003D Introducing Academic Competencies' in Semester 1 and this Semester 2 module SBUS1005D builds upon this student learning.

The SBUS1005D Developing Academic Competencies module learning outcomes were to:

- Reflect upon your learning experience to-date, assignment feedback received and areas where further development is needed.
- Identify your own learning style and its impact on your approach to learning.
- Locate, evaluate and critically assess relevant reading material on a wide variety of subject areas.
- Recognise the requirements of different types of continuous assessments.
- Apply analytical and critical thinking skills to your reading, academic writing and to your own study.

Students are introduced to the concept of reflective learning and the tools of academic writing as part of this module's content. This helps the students to understand the purpose and the theory behind the assessment exercise. Kolb's Learning Cycle (Kolb and Kolb 2005) and Honey and Mumford's Learner Typology(1986) are both addressed during the early sessions of this module so that students understand the need to 'review' a learning episode in order to learn. They are also introduced to reflective writing itself as part of the module and the work of Jenny Moon (2006). Students have the opportunity to strategically review their work and grades across their three Semester 1 modules, and attempt to establish a pattern across the work, in order to establish what skills might need to be improved or developed in Semester 2. Thus, an introduction to the concept of self-reflection underpins the assessment design.

## Module Description

Worth 50% of the module grade, students were requested to review each of the assignments across their three semester 1 modules. They also had to review the feedback and grade for each assignment selected. They then had to identify the commonalities across the submissions and more importantly, what was required of them to respond to the patterns of constructive criticism in their work in semester 2. In addition to Kolb's Learning Cycle, the Learner Styles and Reflective Writing, students were also oriented to the principles of good essay writing, as essays were the main mode of assessment in Semester 1, and these principles provided a structure for this particular semester 2 assessment. Students could pick which assignments they drew on for this submission but were best served in drawing on all

submissions in order to really identify patterns. Students received a formative grade and written individual feedback on this 50% assignment.

The Universal Design for Learning principles (CAST, 2019) are particularly important where you are working with an adult audience with significant experiential learning. The assessment is uncomplicated to use and is flexible in so far as it allows students to select which feedback, and which elements of this feedback, to focus on. It is available to all, as all students will have completed assessment in semester 1.

**ASSIGNMENT 1 (50%):**

**Improving Assignment Technique: Reflecting on Learning and Feedback Part A:  
Reflecting and Evaluating Feedback & Learning (Wordcount=1000 words)**

Review the assignment feedback you have received from each of the three Semester 1 modules, including both individual and general feedback. Take into consideration the additional materials and support you have received on researching and writing academic essays in the first block release weekend of Developing Academic Competencies as well as material from your Introduction to Academic Competencies module.

Write a review of the main strengths and weaknesses of your Semester 1 assignments. With these strengths and weaknesses in mind, identify three areas that you need to improve on and address how you aim to achieve these improvements in your future assignments. The following elements should be covered in Part A

**Principles of Good Essay Writing Include:**

- Have you answered the question asked?
- Does the structure of your assignments show evidence that you started with a clear essay plan?
- Have you drawn on relevant course material and referenced the source of material used?
- Have you gone beyond description?
- Have you used appropriate examples to illustrate key points made?
- Have you presented a coherent argument throughout the essay?

**Figure 1 Assignment Specification**



Figure 2: Sample of student profile photo

## Outcome of module assessment

By ensuring that students must complete the assessment for this module, using their previous work, it actively promotes ongoing engagement with their academic skills development. There is often a sense that students receive a grade and feedback but may not review the work assessed in light of the feedback. The assessment of this module encourages students to habitually review their work across modules and to strategically think about how to develop their learning. This assessment directly draws on the third principle of Universal Design for Instruction (Burgstahler, 2015), i.e. it is simple for all to use. All students will have received feedback, if not certainly a grade for previous work. This activity requires them to re-engage with their work and establish how it could be improved.

While this assessment encourages active self-reflection and many students report adopting a more strategic approach to their programme learning as a result of this semester, there can be some early resistance. Reviewing previous work is not something which comes naturally to students. For this activity to be successful, the tutor needs ensure that the assessment in semester 1 is suitable for identifying patterns across their work. It is optimised when students have a number of similar types of assessments such as essay style assignments or presentations.

An advantage of the assessment is that it can be scheduled at any point in the semester, though it is ideally scheduled early on for students to benefit most from the assessment in their other modules and overall learning. It also allows for a scaffolded learning experience where by students feel their semester 1 assessment is directly informing their learning in semester 2. A further tip to assist with the introduction of

reflective writing is to show the samples of past reflective pieces (with prior student consent of course!). This gives students a sense of the personal but rigorous nature of this style of writing. Reflective writing is an acquired skill and some orientation to the key elements of it supports the students as they develop this skill.

## Results

Approximately 60 students take this assignment each year. It forces learners to reengage with their prior work and question how it could be improved. From a learner's perspective, ensuring that students must complete the assessment for this module, using their previous work, it actively promotes ongoing engagement with their academic skills development. It can be perceived that learning across modules is unrelated and a missed opportunity to develop transferable skills. This module assessment encourages students to develop a model of learning which includes reflection on past work, focusing on continuous improvement and skill development. It helps prevent students making the same mistakes each semester by having to directly engage with the feedback process from the previous semester.

Those staff who might choose this approach as part of a module assessment, have an opportunity to present strong links across the different modules to allow for an integrative programme approach. It requires good planning by the team of module coordinators and programme staff. Choosing this assessment allows for useful conversations to happen between module coordinators and understanding modules, i.e. programme building blocks, to complement each other. This ultimately reinforces a programmatic approach and a greater synergy of assessment to facilitate students to attain programme goals and outcomes.

This exercise is a gentle introduction to the concept of reflective writing. At the degree stage of this programme, learning journals are used and students find the foundation of self-reflection from this module is very helpful at a later stage of the degree.

## Recommendations

A programmatic approach which ensures that students have the space to undertake such activities is necessary. The assessment encourages the programme team to review the assessment from the first semester and to design this assessment

based on previous learning. This helps to foster a more collaborative approach to assessment design on the programme. There is evidence from the programme Student Fora meetings and module evaluations that students find self-reflection is a useful practice. It is a practice which students realise is in their interests but often do not prioritise it. It takes time and if it is not associated with an assessment weighting reward, it can be overlooked by time-starved students. As this module draws upon weighted assessment for this submission, it incentivises the practice for students. Ideally, the practice would be reinforced at each stage of the programme in order for the skill of reflection to be practiced.

While this assessment encourages active, self-reflection and many students report adopting a more strategic approach to their programme learning as a result of this semester, there can be some early resistance from students. Reflection takes students out of their comfort zone. It can force them to review some of the 'uglier' parts of their previous work. It can be useful but it is difficult! Reviewing previous work is not a popular practice among students. Sensitising them to the fact that self-reflection is challenging can be helpful for them. The assessment also needs to ensure that the assessment in semester 1 is suitable for identifying patterns across their work, if there is too much variety in the assessment modes it can be challenging for students.

## Resources

- Burgstahler, S. (2015) *'Universal Design of Instruction (UDI): Definition, Principles, Guidelines, and Examples.'* USA: University of Washington. Available at: [https://www.washington.edu/doit/sites/default/files/atoms/files/UD\\_Instruction\\_05\\_26\\_15.pdf](https://www.washington.edu/doit/sites/default/files/atoms/files/UD_Instruction_05_26_15.pdf) (Accessed 20th February, 2019)
- Collins, K, Kendlin, V. and O'Brien, O. (2017) *'SBUS1005D Developing Academic Competencies Study Guide'*, UCD: UCD College of Business
- CAST (2019) *Universal Design for Learning Guidelines version 2.2.*, Retrieved from <http://udlguidelines.cast.org>
- Dewey, J. (1933) *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process.* Boston, MA: D.C. Heath & Co Publishers.
- Honey, P. and Mumford, A. (1986) *The Manual of Learning Styles*, Maidenhead: Peter Honey
- Kolb, A. and Kolb, D. (2005) *'Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education'*, *Academy of Management Learning and Education*, 4(2), pp. 193-212.
- Moon, J. (2006), *Learning Journal: A Handbook for Academics, Students and Professional Development*, New York, RoutledgeFalmer
- O'Brien, O. and Dowling-Hetherington, L. (2013) *'The 'Build-Up' Approach to Academic Writing Skills Development: The Case for a Discipline-Driven Collaborative Design'*, *The All Ireland Journal for Teaching and Learning in Higher Education*, Winter

---

## CASE STUDY 12

# Group-work Presentations (Poster or Oral) to Enhance Variety and Choice of Assessment in a Programme

Discipline: | Pharmacology  
Student Numbers: | 90



**Dr Kathy O'Boyle**

## Goal/Objectives

The main drivers for designing my assessment in this way was to achieve better alignment between our programme outcomes and assessment methods (Biggs, 2004; UCD Teaching & Learning, 2018) and to also encourage students' choice in assessment methods. The objectives therefore were:

- 1 To use an alternative assessment approaches to encourage student attainment of desirable graduate attributes, namely communication skills, innovation and creativity, and team work.**

- 2 To broaden the types of assessments used within the school.** Most of our assessments are very traditional: summative essay questions, MCQs and laboratory reports.
- 3 To introduce students to a choice in their assessment methods.** Groups could choose to present either an oral or a poster presentation which would be assessed. This would allow students to play to their strengths, supporting an inclusive assessment approach (UDLL, 2016).

## Description

An alternative assessment approach was required, in a Pharmacology undergraduate degree programme, to encourage student attainment of desirable graduate attributes, namely communication skills, innovation and creativity, and team work. Therefore, in my 3rd year module, 'Development and Advanced Pharmacology of the Nervous System' (n=90 students), the scientific literature review project and the assessment strategy were designed to promote team work. I was also keen to allow students some choice in the method of presentations on this group work, to allow them some ownership of the assessment process.

## Supporting the choice of assessment methods

In 2010, as part of a UCD Inclusive Assessment project, I introduced a choice of two assessments in this module for the first time (see Boyle, 2011). As part of this process, considerable effort went into ensuring that the assessment method choices were equitable or fair, a key principle of Universal Design for Learning (UDL) (CAST, 2018). To do this, I completed an equity template which was developed as part of this earlier UCD Inclusive Assessment project (see Table 1, see also O'Neill 2011 for full template). In this template I highlighted how I had designed in equity, regardless of whether the group chose to do a poster or an oral presentation methods, for example, equity in student workload, similar marking procedures. Developing equity in the assessment methods involved identifying assessment criteria that would align with relevant learning outcomes of the module and could be applied equally to either a poster presentation or an oral presentation. The equity template was given to students to make sure they made an informed choice and they were instructed on the difference between the two choices (See Table 1).

**Table 1. Completed Equity Template**

		Assessment 1: Poster	Assessment 2: Oral Presentation
	Details of assessment	Group poster: students also need to answer questions on the poster.	Oral presentation (based on groups' work) to include presentation aids (i.e.. powerpoint...)
Differences		<ul style="list-style-type: none"> <li>— More visual representation, less verbal</li> <li>— Informal discussion of topic</li> <li>— Give you skills to present a poster at a scientific meeting</li> </ul>	<ul style="list-style-type: none"> <li>— More weighting on verbal, less on visual</li> <li>— More formal</li> <li>— Give you skills to present a paper at a scientific meeting</li> </ul>
Same	Learning Outcomes to be assessed	'Demonstrate ability to work in groups and make a scientific presentation'.	'Demonstrate ability to work in groups and make a scientific presentation'.
	Assessment Criteria used	Same as used in other method (see handout)	Same as used in other method (see handout)
	Marking Procedures	Minimum two staff markers	Minimum two staff markers
	Feedback Mechanisms (how made equitable)	Verbal, based on written, formative student (peer) feedback during the assessment presentation time. (see Peer Feedback Template)	Verbal, based on written, formative student (peer) feedback during the assessment presentation time. (see Peer Feedback Template)
	Student Workload expectations	Poster design Group meetings Researching content Administrative tasks	Oral presentation Group meetings Researching content Administrative tasks

## Oral presentation



## Poster presentation

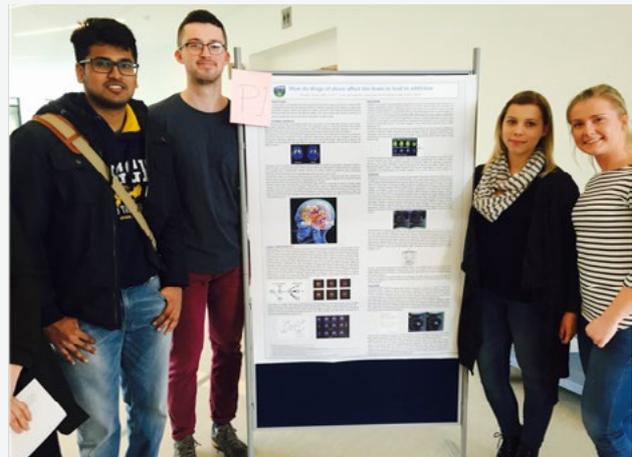


Figure 1. Differences between oral and poster presentations are explained

## Designing the group work activities, assessment and feedback

One of the learning outcomes for this module is that students should ‘demonstrate an ability to work in groups and make a scientific presentation’. To assess this learning outcome students were allocated to groups and given the task of working collaboratively to prepare and deliver a scientific presentation. The grading scheme and criteria for grading are indicated in Table 2. As evidence of an ability to work in groups,

- Groups submitted a reflection on their own performance as a group and agreed a peer review of presentations made by other groups.
- Students also submitted a personal individual reflection on the group process and their contribution to it.
- The group scientific presentations were assessed for advanced content/knowledge displayed and scientific presentation skills.

At an implementational level students are allocated into groups of 5. Each group is balanced for student subject major as well as for laboratory class assignment (to facilitate groups getting together for their project work). The module is co-delivered by 4 academic staff members who act as mentors to 4-5 different groups. Each mentor offers a choice of three project topics that fall within their area of expertise. Six group-

work sessions are embedded in the timetable. This circumvents a common problem that students often have in finding a time to meet that suits everyone.

The group sessions are held in active learning rooms (rooms with round tables which facilitate student discussion, group work and interaction) to facilitate and encourage interactions within groups. Two of these sessions are allocated to students getting to know each other, explaining the assessment choice (Figure 1) and coaching the students about working effectively in groups. Suitable reading material is supplied via the Virtual Learning Environment (VLE) Blackboard. Groups are encouraged to assign roles such as chair, scribe, designer to each other and to agree a set of ground rules. All students are expected to act as researchers. The remaining four group-work sessions are dedicated to a different aspect of the project: choosing a topic, preparing a poster/oral presentation, preparing a draft presentation, finalising the presentation. It was important to do this as students had a range of previous experience with making scientific presentations of various types, from none to some. Staff attend these sessions and meet with their groups to give feedback on how the project is progressing and guidance for the next stage of the project. Emphasis is placed on creating a positive, respectful atmosphere, where students feel free to suggest ideas and are open to accepting constructive feedback.

**Table 2. Grading scheme and criteria for assessing scientific presentations and group work**

Development and Advanced Pharmacology of the Nervous System 2017-2018		
ASSESSMENT CRITERIA FOR PRESENTATIONS AND GROUP WORK		
Module learning outcome to be assessed: 'Demonstrate an ability to work in groups and make a scientific presentation'		
Alignment to learning outcome	Assessment criteria	Weighting towards project grade <sup>1</sup> (%)
Make a scientific presentation	<b>Scientific presentation skills</b> Structure and organisation of poster/oral presentation Visual enhancement to assist in communication Verbal delivery: clarity and coherence	20
	<b>Knowledge</b> Evidence of appropriate depth and breadth of research onto topic Evidence of groups' comprehension of this topic.	40
Work in groups	<b>Suggestions for improvement of group work and group peer feedback</b> Group reflection on performance 'What ideas do you have for improving the ability of your group, next time round, to be a better team?' Ability of your group to give constructive (positive and ideas for improvement) feedback to other groups	20
	<b>Ability to reflect on personal experience of project and group work</b> What is your assessment of your learning? How well did your group perform and why? What was your particular contribution to the group?	20

<sup>1</sup> Note the full project contributes to 20% of module grade

Outside of the scheduled sessions, groups are free to contact their academic mentor but are expected to work largely in a self-directed manner. Groups make their scientific presentations in week 10 of the semester.

As well as delivering their own presentations groups are also tasked with reviewing the presentations of 3 other groups (See Table 3). Students listen differently to presentations when they are required to provide a review of it. By making peer review part of the assessment students have an opportunity to develop skills such as providing constructive feedback and critical review (Multiple means of engagement, CAST, 2018). They are also more likely to learn about presentation skills from each other if they are actively engaged in listening compared to sitting passively in the audience. The final assessment component for the class is for each student to write an **individual** personal reflection on their experiences, such as how well their group worked, and why and what was their particular contribution to the group.

PHAR30040 Development and advanced pharmacology of the nervous system				
Group work and peer feedback				
Section 1: Suggestions for improving group work		Section 2: Peer feedback		
'What ideas do you have for improving the ability of your group, next time round, to be a better team?'		N.B. This information will be shared with the other groups but will not contribute to their grades. Group providing feedback: _____		
		Group No.	Oral or poster	Positive comments
				Ideas for improvement
Group No:				
Signature 1: _____				
Signature 2: _____				
Signature 3: _____				
Signature 4: _____				
Signature 5: _____				

**Table 3: Group work and peer feedback forms**

## Link to Universal Design (Inclusive Assessment) Approach

This assessment approach expands the **variety** of assessments that students are exposed to during the programme (UCD Teaching & Learning, 2018; National Forum, 2017., CAST, 2018). Putting a high quality oral or a poster presentation together requires excellent research and strong organisation, creativity, communication and technology skills. This enables students with different strengths to contribute in different ways and allows students to excel in a way that is not encouraged by more traditional assessment methods (CAST 2018). Student engagement with the project is consistently very high, as these assessment options were chosen because they represent ‘real life’ choices - the standard way for scientists to communicate their results at conferences is via poster or oral presentations.

The groups **choose** how they want their projects to be assessed which empowers them to become more ‘partners in assessment’ (National Forum, 2017) and enables them to select the assessment method that best suits their strengths (UDLL, 2016).

The approach taken to the group work is quite structured; for example, specific classes are dedicated to coaching the class around working in teams and this helps build a **community of learners**. It also encourages students to think more critically about what makes an effective group, and how they as individuals can contribute to the process. Groups have regular, informal meetings with an academic supervisor who gives advice about how to prepare a scientific presentation, provides feedback on progress and prompts consideration of what to do next. This ensures an element of **scaffolding** to the project and helps build skills that will be further developed in the final year of the programme. It is also a simple way of fostering a partnership between staff and students which is enjoyed and valued by all. The provision of **timely feedback** helps students identify where they have gone wrong and what they need to do to improve (Brown, 2005).

## Results

Following its initial implementation in 2010:

'The students were overwhelmingly positive about being given a choice in how they were assessed. They felt empowered by having a choice and did not find it stressful to have to choose. They agreed that it allowed them to play to their strengths and that the choice gave them ownership of their learning experience' (Boyle, 2011, p 28)

When asked to list two positive things about group grades the most popular answers were:

- 'it's motivating – it encouraged me to do more for the group. I didn't want to let them down'
- 'it requires team building and encourages a collaborative approach'
- 'It shows how well the group worked and how all the work came together'

I was surprised to learn just how motivated students were to work hard for the good of the team. The social context of the project is, therefore, a strong driver for student effort. They also take great pride in the final product.

However, despite this, following more survey data from over the last few years, many indicated, they were unhappy with the original exclusively group mark. Some of their concerns had been that:

- 'your grade can be damaged by other people's lack of work'
- 'person who doesn't work as hard still gets the good group grade'

Following this feedback, I introduced an individual assessment to moderate the group grade. Although only contributing 20% of the project grade (see Table 2), the individual grade can separate grades for group members by as much as 4 grade points. When students were asked their opinion on having an individual component to moderate the group grade, 93% of students who responded (28/30) agreed or strongly agreed that it was important.

## Recommendations

In summary, the group work aspect of the project in this module has improved the alignment between the programme and the intended learning outcomes (Biggs, 2004). Using assessment as a driver, reflective practice and critical thinking (Colley et al, 2012) are promoted and students are encouraged to develop employability skills. Students also reported that their interpersonal and presentation skills improved as a result of the project and were very positive to the choice of assessment methods. If you are considering implementing either a choice of assessment or group work assessment in your module, I would suggest that you:

- Consider how you want to construct groups
- Schedule classes for team building and project overview
- Create a collaborative atmosphere in which students feel free to explore ideas without fear of ridicule or rejection
- Use clear assessment criteria for peer review
- Consider an individual and a group element to the reflective process.
- Use the established equity template and processes when introducing a choice of assessment (O'Neill, 2011)
- Obtain feedback from class regularly and modify as required

## References and Resources

- Biggs, J. (2004) *'Constructing learning by aligning teaching: constructive alignment'*, Teaching for Quality Learning at University, 2nd ed, Wiltshire: Open University Press.
- Bloxham S., Boyd, .P (2007) *Developing Effective Assessment in Higher Education, A Practical Guide* Open University Press: Berkshire.
- Brown S. (2005) *'Assessment for learning'*, Learning and Teaching in Higher Education, 1, pp. 81-89.
- Boyle, K. (2011) *'Case Study 3: Assessing scientific presentations'*, In. O'Neill, G. (Ed) *A Practitioner's Guide to Choice of Assessment Methods within a Module*, Dublin: UCD Teaching and Learning, pp 27-32.
- CAST (2018) *'Universal Design for Learning Guidelines'* version 2.2. Available at: <http://udlguidelines.cast.org> (Accessed 20th February, 2019)
- Colley B.M, Bilics A.R, Lerch, C.M. (2012) *'Reflection: a key component to thinking critically'*, The Canadian Journal for the Scholarship of Teaching and Learning, 3(1), <http://dx.doi.org/10.5206/cjsotl-rcacea.2012.1.2>
- National Forum (2017). *Principles of Assessment OF/FOR/AS Learning: National Forum Enhancement Theme*. Dublin: Author
- O'Neill, G. (Ed) (2011). *A Practitioner's Guide to Choice of Assessment Methods within a Module*, Dublin: UCD Teaching and Learning. pp. 27-32.
- Race P, Brown, S. Smith, B. (2005) *500 Tips on Assessment*, 2nd ed. Routledge: London.
- UCD Teaching & Learning (2018) *UCD Programme Assessment and Feedback Principles*. Dublin, UCD Teaching & Learning
- UDLL (2016). *A Universal Design for Learning: A Best Practice Guideline*. UDLL Partnership: HOWEST (SIHO), AHEAD and NTNU (Universell).



---

## CASE STUDY 13

# Podcasts can Assess Module Learning Outcomes as Effectively as Essays

Discipline: Business  
Student Numbers: 57



iadt  
DUN LOCHGALH

Jeff Taylor

## Introduction and Context:

The module discussed in this case study International Entrepreneurship with 57 students completing the assessment. The assessment is worth 50% of a 5 ECTS credit module during final year of a business undergraduate course. The principles of Universal Design for Learning (CAST, 2018) are applied to the design of the assessment. Specifically this assessment provides multiple means of expression by providing learners with alternatives for demonstrating what they know; and multiple means of engagement by affording students freedom within the syllabus to find a personal area of interest. Correctly implemented, students should be appropriately challenged and, importantly, motivated to learn (Edyburn, 2005). This is achieved by offering 14 subject specific topics from which students are encouraged to find their own assessment themes. Additionally, students could choose three submission formats; essay, podcast or video (Figure 1.).

**International Entrepreneurship**  
**Assessment 1: 50% Weighting toward the MAJOR CASE STUDY**  
**Assignment 2: Individual Project, 50% of module grade.**

**Task Description:**

On an individual basis students must submit ONE project method covering ONE project topic.

**Method:**

- 1 2500-3000 word written essay
- 2 4-5 minute video essay
- 3 7-8 minute podcast

**Topics:**

- 1 Brexit and Ireland
- 2 Traits of an International Entrepreneur
- 3 Barriers to International Trade
- 4 The Impact of Culture
- 5 Developing the Global Business Plan
- 6 Location Selection
- 7 Business Ethics in a Global Setting
- 8 Market Entry Strategies
- 9 Global Monetary Systems
- 10 The International Technological Environment
- 11 Designing a reward Structure for International Staff
- 12 Managing Globally
- 13 Social Entrepreneurship Across Borders
- 14 Failure Analysis

All projects must be professionally presented and academic references used as required.

*Important: I am not a photographer/videographer. All submissions are graded on quality of content, not style over substance.*

**Marking Scheme:**

Please see last pages of assessment document

**Submission Criteria:**

To be submitted in class Friday May 4th 2018.

Both hard copy and email submission is required.

**Figure 1: Overview of Assessment #2 for 50% 5 ECTS Module**

## **Design and Implementation of Assessment Strategy**

The module learning outcomes to be assessed with this assignment include:

- Investigating the political, economic, social and cultural environments within which international entrepreneurs operate.
- Analysing and understanding the nature of globalisation as it applies to international business and entrepreneurship.

To achieve this a student-centred approach to the indicative syllabus was considered. This sought to promote active rather than passive learning; increased responsibility and accountability on the part of the student; an increased sense of autonomy in the learner; and a mutual respect within the learner teacher relationship (Lea et al., 2003). There are 12 broad subjects of the indicative syllabus which were included in the assessment topic options (Figure 1. #2-13). Additionally, #1 Brexit and Ireland was added for contemporaneous reasons; and #14 Failure Analysis was added as discussions of entrepreneurial failures had been particularly lively with this cohort during lectures. Allowing students to pick their topic area from such a breadth of options is in line with the universal design for learning principles of multiple means of engagement. Dunn et al. (2003) advocate such flexible learning that provides opportunities for students to individually construct and negotiate meanings and learning to their projects.

Multiple means of expression was achieved by offering three types of assessment. The established essay submission, of 2500-3000 words was offered. Two additional means of expression were also offered. These were a 4-5 minute video and a 7-8 minute podcast. Two additional options were considered, namely a picture essay and in-class presentation. The picture essay option was removed as it is was felt that the depth of analysis required of a QQI Level 8 assessment would be difficult to communicate via this format; and the in-class presentation option was removed due to time constraints of a one-term module.

Sutton-Brady et al. (2009) investigated the value of using short-format podcasts to support assessment and found a majority of students believed they gained learning benefits from the podcasts and appreciated the flexibility of the medium to support their learning. Additionally, the lecturers felt the innovation helped diversify their pedagogical approach and support a diverse student population. This study gives credibility to the option of the podcast format. The video essay was offered as an extension of the podcast process but with the added visual medium.

It was important to establish from the outset that students were being marked on the quality of their work and not the style of it. When offering students multiple methods of engagement there is a worry that style over substance may hide some limitations in the learning process. To this end, the grading rubric afforded only 10% to presentation. The remainder of the marking scheme included 30% for analytical skills; 30% for breadth and range of subject knowledge; 20% for flexibility and appreciation of

multiple perspectives; and 10% for evidence of outside reading and/or referencing (Figure 2).

CRITERION	First A/B+ 70%+	2.1 B 60-69%	2.2 B- 55-59%	Pass C/C+ 40-55%	REFER/FAIL D/F 0-39%
1 Presentation of assignment 10%	Shows a polished and imaginative approach to the topic	Carefully and logically organised	Shows organisation and coherence	Shows some attempt to organise in a logical manner	Disorganised/incoherent
2 Analysis 30%	Can analyse new and/or abstract data and situations without guidance using a wide range of techniques appropriate to the topic	Can analyse a range of information with minimum guidance, can apply major theories and compare alternative methods/ techniques for obtaining data	Can analyse with guidance using given classification / principles	Can analyse a limited range of information with guidance using classification / principles	Fails to analyse information
3 Content and range 30%	Comprehensive/detailed knowledge of topic with areas of specialisation is depth and awareness of provisional nature of knowledge	Reasonable knowledge of topic and an awareness of a variety of ideas/ contexts/frame-works	Has given a factual and/ or conceptual knowledge base and appropriate terminology	Evidence of limited knowledge of topic and some use of appropriate terminology	Lacks evidence of knowledge relevant to the topic and/or significantly misuses terminology
4 Flexibility 20%	Independently takes and understands multiple perspectives and through these can develop/adjust personal point of view	Recognises multiple perspectives which may affect personal view point	Can recognise alternative perspectives	Limited ability to see alternative perspectives	Fails to recognise alternative perspectives
5 Referencing 10%	Referencing is consistently accurate	Referencing is mainly accurate	Referencing is mainly accurate	Some attempt at referencing	Referencing is absent or unsystematic

Figure 2. Grading Rubric of Assessment #2 for 50% 5 ECTS Module

It is important to note here that the 10% for evidence of outside reading and/or referencing originally included a minimum number of external academic references. However, following discussion with the students the minimum/maximum was removed which allowed students creating podcasts to engage in roundtable discussions on their subjects without the need for academic referencing, once evidence of research was clear. For example, one student explored #9 'Global Monetary Systems' by way of a roundtable discussion with his peers who had extensive experience trading cryptocurrencies and thus provided a very insightful, balanced and probing analysis, albeit absent of academic references.

In designing the assessment particular attention was paid to what Dunn et al. (2003) refer to as unintended outcomes. Considerable effort was given to mitigate against mismatches in learner-teacher expectations of the assessment. It is important to be wary of what students may consider to be inconsistencies between assessment methods. Reinforcing the value of the grading rubric and frequently ending classes with a quick assessment questions and answers session in audience of the entire cohort facilitated equity of assessment understanding.

## Results and Evidence of Impact

Of the 57 students who submitted 36 chose the essay format; 20 chose the podcast format; and one student chose the video format. The average grade achieved on the essays was 63%. The average grade achieved on the podcasts was 69%. Both of these averages are in the B grade band. This suggests that there is parity between the assessment methods chosen by the students. The sole video submission achieved an 80%, A grade and is considered as an outlier.

From the outset, a core goal of this assessment was to be as inclusive as possible. Inclusive assessment techniques are closely mapped to course objectives, and allow students to use combinations of writing, speaking, and other activities to demonstrate mastery of knowledge (Lombardi, et al. 2011). The goal was not to find an assessment method that was to replace the standard essay, but to find a means of student expression of equal merit that allowed them to demonstrate their knowledge in a manner of their choosing, and more appropriate to their skill set. The parity of results achieved by students submitting the essay and those attempting the podcast suggest a legitimacy of equivalence between the two assessment methods.

Interestingly, the student using the video format who achieved the 80% A grade had previous experience with video editing and as such did not have the burden of developing this skillset. Given the reluctance of other students to engage in this format it would suggest that the skills gap present in video production may render this format redundant for many. That being said, the video format still provides a varied means of expression for students who do have an existing skillset and affording these students an opportunity to communicate in a medium with which they are familiar is quite reasonable.

Overall the students reported positively on the breadth of options available; the freedom to select their own area of exploration; and the novelty of podcasts/videos for those who selected these. Students commented that podcasts were not necessarily easier, but provided an alternative to 'essay fatigue'. This suggests a validity in a call for variety of assessment methods to be provided to students throughout their studies.

A minority of students who opted for the essay spoke about the safety of a known method. Given that this assessment was at an Award stage in their studies they were reluctant to risk engaging with an assessment method with which they were not familiar. For students who were content to use the essay format with which they were well-versed, multiple means of engagement was still achieved by offering a breadth of subject areas and provided students autonomy over their chosen subject matter.

Following submissions, concerns were raised by a number of students who expressed worries as to whether fairness across methods could be achieved. Namely, they felt writing an essay with academic referencing was a harder task than discussing a topic amidst sound clips or engaging in a roundtable discussion with peers or conducting an interview with experts. While this had been addressed in class discussion prior to submission there was a small cohort that felt podcasts lacked academic rigour. This is addressed by identifying the elements of the marking scheme such as 'analytical skills' and their presence in the student submissions regardless of format. Additionally, considerable class time toward the end of the semester was devoted to assignment tutorials for all formats. The example given to students to mitigate against these concerns was the concept of a variety of perspectives on a given idea. It was posited that where an essay writer may need two or three quotes from academic sources to show multiple opinions - a podcaster can illuminate a debate with multiple opinions by having a roundtable discussion with a multitude of people. The goal - as per the marking scheme - was to consider multiple perspectives, not necessarily consider multiple academic perspectives.

Chiefly, the most significant observation from the duration of this assessment process was the legitimacy of the podcast method as a means of assessment for learning. Overwhelmingly the feedback from students who chose this method was positive. The common themes in their feedback were a positive impact on their motivation, due mostly to a new means of expression; the challenge and value of autonomy over the topic selection; and, importantly, agreement that the workload was no better or worse, longer or shorter than essays with which they were familiar.

## Advice for Implementation

To improve on this assessment going forward it will be important to open and sustain a dialogue with students from the outset and throughout the process; and to be open-minded to their suggestions for increasing the educational value of the assignment. Ultimately, students are partners with the lecturer in the process and should be able to influence the design of the assessment. This will ensure the student-centred nature of the assessment.

The grading rubric is of critical importance as it provides clear guidance to the students as to what is – and what is not – being assessed. As was evidenced with this iteration of the assessment wherein the language and expectations around referencing changed in consultation with students, it is hoped that student feedback will continue to shape and advance the quality of the assessment going forward. In consult with the class cohort it was agreed that no changes (unless in exceptional circumstances) would be made to the grading rubric and assessment deliverables as of four weeks prior to the assessment submission date.

From a lecturer's perspective one of the greatest challenges was to be open-minded to how students interpreted the very definition of a podcast. Even with only 20 submissions to consider, the breadth of meaning evidenced in the submission was significant. It would have been challenging and also counterproductive to set out expected parameters of podcast submissions. Affording students freedom in this regard reinforces the multiple means of expression maxim that was sought.

Finally, the most significant role the lecturer can play during this process is to allow multiple opportunities for pre-submission and to provide formative feedback upon which students can edit and improve their work prior to the final submission. While

this may place an extra workload on the lecturer, the learning opportunities for students – and, indeed, for the lecturer about the assessment – are invaluable. Being part of the learning process in a mutual manner benefited both student and lecturer.

## References

- CAST (2018). *'Universal Design for Learning Guidelines'* version 2.2. Available at <http://udlguidelines.cast.org> (Accessed 20th February, 2019)
- Edyburn, D.L. (2005) *'Universal design for learning'*, *Special Education Technology Practice*, 7(5), pp. 16-22.
- Lea, S. J., Stephenson, D., and Troy J. (2003) *'Higher Education Students' Attitudes to Student Centred Learning: Beyond 'educational bulimia'*, *Studies in Higher Education* 28(3), pp. 321–334
- Lombardi, A.R., Murray, C. and Gerdes, H. (2011) *'College faculty and inclusive instruction: Self-reported attitudes and actions pertaining to Universal Design'* *Journal of Diversity in Higher Education*, 4(4), p. 250.
- Morgan, C., Dunn, L., O'Reilly, M. and Parry, S. (2003) *The student assessment handbook: New directions in traditional and online assessment.*
- Sutton-Brady, C., Scott, K.M., Taylor, L., Carabetta, G. and Clark, S. (2009) *The value of using short-format podcasts to enhance learning and teaching.* *ALT-J*, 17(3), pp. 219-232.

---

## CASE STUDY 14

# Moving Away from Solely MCQ-based Exams: Short Answer Questions for Enhancing the Variety of Assessment Methods in the Large Classroom

Discipline:	Medicine
Student Numbers:	315
	Combined cohort of Stage 2 Graduate Entry Medicine and Stage IV Undergraduate Medicine Programmes



**Dr Melinda Halasz**

## Introduction and Context

PATH30030 Haematology/Immunosuppression is a UCD level 3 (NFQ level 8) Pathology module in Medicine worth 5.0 ECTS credits. The module is designed for the combined cohort of Stage 2 Graduate Entry Medicine (GEM) and Stage 4 Undergraduate Medicine (UgM) Programmes (including a group of Malaysian students) for the maximum number of 315 students, from all over the world. The students have diverse educational, cultural and ethnic backgrounds.

This module outlines the diseases of the peripheral blood, bone marrow and lymph nodes and their treatment. It includes the principles of transfusion, the study of infective agents seen in the immunocompromised patient, helminths and infections seen in the returned traveller and their treatment. Pathology, Medical Microbiology and Pharmacology contents are delivered in this module by academic staff and clinicians.

Previously, the assessment on this module was purely multiple-choice question (MCQ) based end-of-semester examination (N=90; 100% of module grade) (Table 1). In Medicine, MCQ based examinations are favoured because they enable assessment of large amounts of content/knowledge, and it is possible to grade them by computer (and generate associated statistics) (Epstein, 2007; Table 2). The latter is especially beneficial if large numbers of students are enrolled to the programme. However, MCQs cannot assess problem-solving ability and clinical reasoning skills which medical students need to develop. In addition, students might guess the correct answer reinforcing false knowledge.

Student feedback revealed that students do not like the pure MCQ based examinations, and suggested including some element of continuous assessment, and a written part to the exit exam. The student feedback also indicated that they would learn more if there was a written part to the exam.

Therefore, to develop an inclusive assessment approach which supports Universal Design principles (CAST 2015 & 2018), I changed the assessment strategy on this module by enhancing the variety of assessment methods. Instead of a high-stakes, MCQ-only end-of-semester examination which was worth 100% of the module grade, I introduced online tutorials as continuous assessment, and clinical vignettes based short answer questions (SAQ) accompanied with images (e.g., peripheral blood smear, techniques etc) as part of the summative assessment (see Table 1).

The clinical vignettes based short-answer question worksheets developed for this module align well with the learning outcomes and relate to the teaching method on this module (Table 3). I introduced four clinical patient-related interactive review sessions where we discuss clinical patient-based problems that are similar to the SAQs on the exam, so the students are taught how to answer the SAQs ('scaffolded assessment'). These SAQs test not only factual knowledge but also clinical reasoning skills. The students are required to demonstrate that, by understanding

the underlying mechanisms of haematological disorders, they can evaluate clinical scenarios (symptoms, laboratory tests etc.) and formulate a rational approach to the diagnosis and management of the patient ('authentic assessment'). The students are informed about the expectations (i.e. depth of knowledge and skills required to solve the SAQs) in relation to the end-of-semester exam ('transparency in assessment'). The SAQ worksheets are simple and intuitive to complete; the students use the space provided in the worksheet. A small amount of writing is required from the students so the SAQs do not disadvantage students who write slowly, get tired easily ('low physical effort') or those from whom English is not their native language. Moreover, SAQs are more objective to grade than essays. In addition, it is more feasible to correct SAQs than essays in the large classroom setting.

With the new assessment strategy, my goals are to

- i utilise multiple methods of assessment ('variety in assessment');
- ii assess not only knowledge but also the problem-solving ability and clinical reasoning skills of our medical students; therefore,
- iii measure learning outcomes which are relevant to clinical practice ('authentic assessment'); and
- iv overall, improve constructive alignment.

## Design and implementation of the initiative

The new assessment strategy is outlined in Table 1; it incorporates a continuous assessment component; and as part of the exit exam, students need to complete clinical vignettes based SAQ worksheets in addition to the MCQ paper. The assessment strategy is clearly communicated to the students on multiple occasions throughout the semester (introductory lecture, formative assessment session & examination review session) and on Virtual Learning Environment (VLE) Blackboard ('transparency in assessment').

"Old" Assessment Strategy	End-of-semester Exam	Clinical vignette style MCQ (N=90; Single best answer)	100%
	Continuous Assessment	Completion of five online BMJ tutorials: Anaemia in old age: common presentations (2h) Chronic lymphocytic leukaemia (1h) Hospital presentations: bruising and spontaneous bleeding (1h) HIV infection: diagnostic picture tests (1h) Dengue fever (1h)	10%
New Assessment Strategy	End-of-semester Exam	Clinical vignette style MCQ (N=50; Single best answer)	45%
		Clinical vignette based short answer questions (N=10)	45%

**Table 1. Assessment strategy for Haematology/Immunosuppression**

**Continuous assessment.** Students are requested to complete five online tutorials during the semester. This is worth of 10% of their final grade. The tutorials are available on the British Medical Journal Learning website (<https://learning.bmj.com/>). BMJ Learning is a medical education resource not only for students but also for doctors and other healthcare professionals. Students are provided with clear instructions on how to access BMJ Learning (in class and on Blackboard). I cherry-picked five online modules that complement the lectures and they are in line with the learning objectives of this module. In total, the five online tutorials take about 6 hours to complete. The students can complete this task any time during the semester, providing an opportunity to self-regulate their learning. These tutorials are in line with the module content, and students are guided when to attempt the different tutorials. Students are asked to submit their Certificates of Completion by the end of week 12.

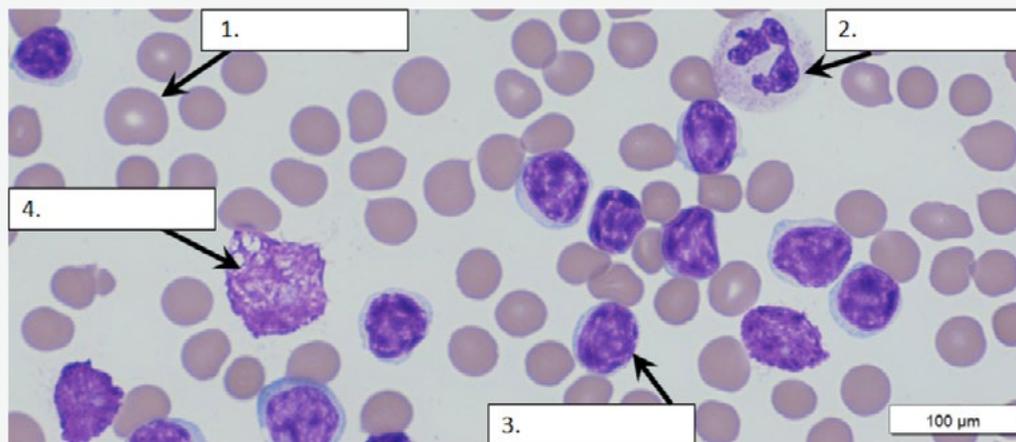
**End-of-semester examination.** The two-hour long exit exam is worth 90% of the final grade and has two components; an MCQ paper and clinical vignettes based SAQs. By applying different assessment methods, we can overcome the disadvantages of individual methods (Epstein, 2007; Table 2). In addition, this provides multiple opportunities to succeed and demonstrate learning.

Method	Advantages	Disadvantages
MCQ	<ul style="list-style-type: none"> <li>Assess application of knowledge in a clinical setting ('clinical vignette')</li> <li>Assess knowledge of large content areas in short time</li> <li>Can be graded by computer &amp; item analysis can be generated</li> <li>Reliability of marking</li> </ul>	<ul style="list-style-type: none"> <li>Does not assess problem solving ability and clinical reasoning skills</li> <li>Difficult to write good questions</li> <li>Can result in cueing</li> <li>Incorrect answers might influence subsequent false knowledge</li> </ul>
SAQ	<ul style="list-style-type: none"> <li>Assess problem solving ability and clinical reasoning skills (e.g. interpretation of histopathological images and lab tests etc.)</li> <li>Avoid cueing</li> </ul>	<ul style="list-style-type: none"> <li>Reliability depends on the grader à Model answers to be provided</li> <li>Time consuming to grade for large numbers of students</li> </ul>

**Table 2. Advantages and disadvantages of clinical vignettes based MCQs and SAQs**

The clinical vignettes style MCQs consisting of a clinical problem ('stem') and 5 options (1 best answer and 4 distractors) allow us to assess knowledge, comprehension and application of knowledge in the clinical setting (Collins, 2006). There are at least two MCQs from each lecture, which are also relevant to the learning outcomes.

In addition to the MCQ paper, students need to fill in ten clinical case-based SAQs (5 Haematopathology & 5 Medical Microbiology questions) which are suitable for assessing problem-solving ability and clinical reasoning skills. The SAQs also build on a clinical scenario, a patient-related case. The students are also provided with accompanying laboratory tests and a histopathological image (e.g., peripheral blood smear, bone marrow biopsy, etc.). There are a few questions associated with each case which can be answered by a few words or at most one sentence (Figure 1). Questions are related to setting up a diagnosis and deciding on patient management. The students need to synthesize the information learnt from the patient's presentation, laboratory results and accompanying images to answer the questions ('authentic assessment'). The use of case-based SAQs are in clear alignment with the learning outcomes and teaching methods (case-based review sessions, tutorials) (Table 3); and solving these problems require higher order thinking.



A 61-year-old man with a history of diabetes mellitus and hypertension visits his GP to adjust his medications. Results of his lab tests are shown below:

- WBC: 75,000/ul with 90% mature lymphocytes and 10% neutrophils
- Haemoglobin: 14.5 g/dL Haematocrit: 47%
- Platelet count: 244,000

His peripheral blood smear is shown on the right.

- a Identify the cells (1-4.) on the peripheral blood smear. (2 mark)
- b Evaluate the patients lab results and peripheral blood smear. What are the hematologic abnormalities present here? \_\_\_\_\_ (2 mark)
- c What is the most likely diagnosis? Which test would you order to confirm the diagnosis? \_\_\_\_\_ (2 mark)
- d What would be the treatment of choice for this patient at this stage? (1 mark)  
\_\_\_\_\_
- e What complications would you expect during the course of the disease? (3 mark)  
\_\_\_\_\_

**Figure 1. An example clinical vignette based short answer question worksheet. (Image courtesy of Dr Mark Coyne.)**

Despite having a written component, students are not required to write extensively, SAQs can be answered by only a few words ('low physical effort'). Since the students need to fill in the SAQ worksheets, the space provided is a guidance for the length of the expected answer. In addition, the marks associated with each question are also indicated on the worksheet ('transparency in assessment').

**Formative assessment.** A formative assessment session is scheduled for week 7. This is a golden opportunity for the students to test their knowledge and self-evaluate their readiness for the exam, since its format is the same as the end-of-semester exam ('transparency in assessment').

**Teaching methods supporting higher order thinking.** In addition to the lectures, students have four interactive clinical case-based sessions, tutorials, an examination review session and an additional review session on interpreting peripheral blood smears and diagnostic tests. All these teaching modalities aid to improve their clinical reasoning skills and problem-solving ability; therefore, facilitate their preparation for the SAQ component of the exam and their clinical years ('scaffolded assessment').

<b>Learning Outcomes</b> <b>On successful completion of the</b> <b>Haematology and Immunosuppression</b> <b>Module students should have:</b>	<b>Taught?</b> <b>(Y/N)</b>	<b>How?</b>	<b>Assessed?</b> <b>(Y/N)</b>	<b>How?</b>	<b>Relevance</b> <b>to Clinical</b> <b>Practice</b> <b>(+ / ++ /</b> <b>+++)</b>
<p>1. Improved their biomedical knowledge by being able to:</p> <ul style="list-style-type: none"> <li>— Describe the mechanisms causing anaemia;</li> <li>— Classify the haematologic malignancies, describe their natural histories and their effects on patients;</li> <li>— Describe the mechanisms underlying disorders of bleeding and clotting;</li> <li>— Describe the infections seen in the immunosuppressed patient and in patients who have recently travelled abroad;</li> <li>— Classify and describe the behaviour of common pathogenic helminths;</li> <li>— Outline the principles of transfusion of blood and blood products.</li> </ul>	Y	Lectures Tutorials Case-based review sessions	Y	BMJ MCQ SAQ	+++
<p>2. Improved their clinical skills by being able to:</p> <ul style="list-style-type: none"> <li>— Formulate a logical approach to diagnosing the cause of anaemia and apply this to the selection of appropriate treatments;</li> <li>— Explain and discuss the approach to treatment of haematologic malignancies and the agents used in their treatment;</li> <li>— Formulate a rational approach to the diagnosis and treatment of disorders of bleeding and clotting;</li> <li>— Formulate an approach to the diagnosis and treatment of infections seen in the immunosuppressed patient and in patients who have recently travelled abroad, and to infection with common pathogenic helminths.</li> </ul>	Y	Tutorials Case-based review sessions Multidisciplinary Team Meeting	Y	SAQ	+++
<p>3. Improved their Professional and Personal skills by:</p> <ul style="list-style-type: none"> <li>— Participating in group-based interactive tutorials;</li> <li>— Assimilating the professional approach that Haematologists, Medical Microbiologists and Infectious Disease Specialists demonstrate in their clinical illustrations in lectures and case-based tutorials.</li> </ul>	Y	Multidisciplinary Team Meeting Case-based review sessions Tutorials Lectures	Y	BMJ SAQ	+++

**Table 3. Outcome practice mapping for the Haematology/Immunosuppression module. (BMJ: BMJ Learning online tutorials)**

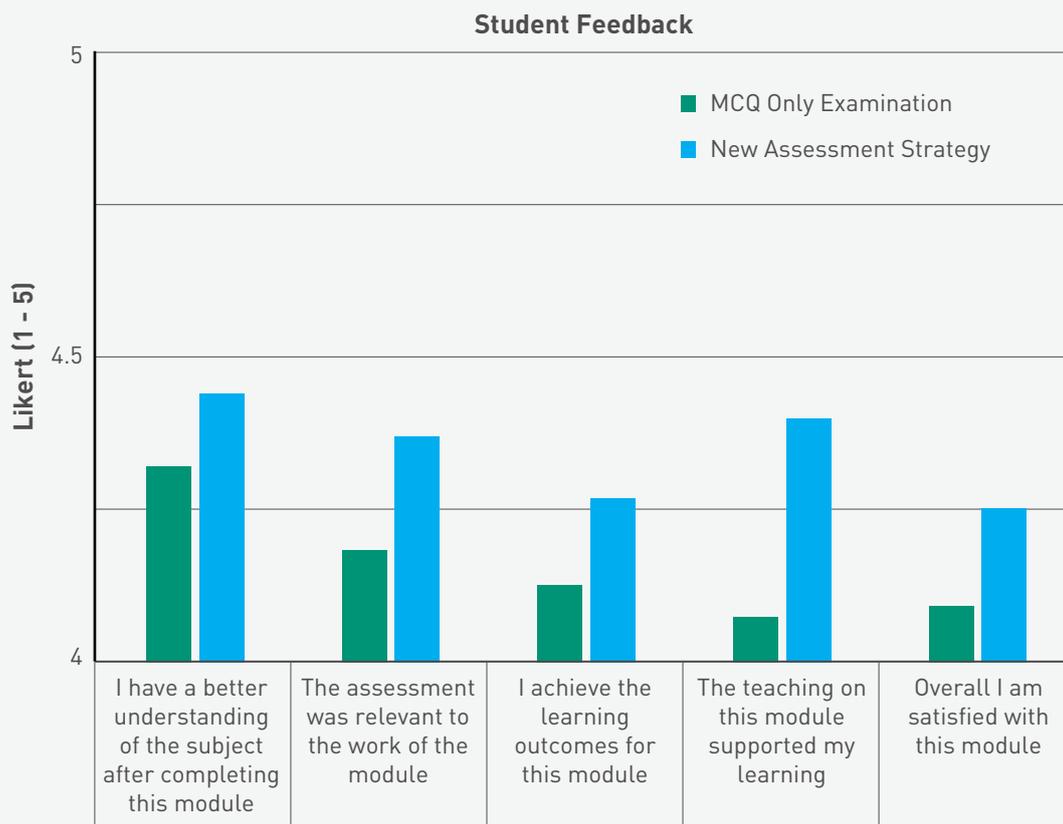
## Results/Finding/Feedback

Introducing the new inclusive assessment strategy resulted in improved constructive alignment (Table 3), and improved student feedback (Figure 2). The students found the assessment methods relevant to the course work (4.37 out of 5); they felt they achieved the learning outcomes on this module (4.27 out of 5); and have better understanding of the subject (4.44 out of 5).

**Continuous assessment.** The students liked 'having some continuous assessment' because 'it helps take the full pressure off at end of semester.' According to the students: 'The BMJ tutorials is by far the best continuous assessment. The overall GEM course is very heavy but this type of assessment actually contributed to learning. I'm still rereading them as study aids.' The students found the BMJ online tutorials helpful and enjoyable. 24% of the students who completed the survey named BMJs as one of three aspects of the module that most helped their learning. According to the students: 'I thought the BMJ's were a great way of navigating the course material in a clinical context.' 'BMJs were a good revision tool after completing a section of lectures.' 'Thought the BMJs were a great learning tool and I felt that I learned a lot from completing them.' Many students completed additional BMJ tutorials (beyond the five compulsory ones) relevant to the course content.

**End-of-semester examination.** Most students considered the exam fair; 'It was very clearly communicated what was necessary in terms of exam preparation (maybe almost too much, though in a busy semester this is surely appreciated). In any case, the exam was very fair, no bad surprises.' The new exam format clearly promotes the students' critical thinking and requires a deeper understanding of the content. 'I thought the exam layout was very good, it was different to any format we have had to date but I felt it tested understanding of the subject better than most other modules.'

Many students liked the SAQ format; 'Section 2 of the paper (short questions with pictures) was much preferable to case studies and I'd recommend this format continues' and they felt that SAQs are 'a lot better than having to do long essays'. However, few students indicated in their feedback that the exam was too difficult and too much for two hours.



**Figure 2. Improved student feedback on the module after introducing the new assessment strategy. (Response rates: 24% and 26%, respectively.)**

Teaching methods. According to the students: ‘The extra teaching sessions, formative assessments and exam preparation sessions she provides all play a role in ensuring that the needs of every student are met while being both challenged and encouraged’.

More than half of the students who completed the survey appraised the interactive case-based review sessions:

‘The review lectures for the haematology portion of the module after each lecture was a fantastic idea. Going through cases after we learned the material was a fantastic way to consolidate the concepts that had been taught in lectures.’

‘The case review sessions were amazing and really helped prepare for the exam and made it easy to keep up with material.’

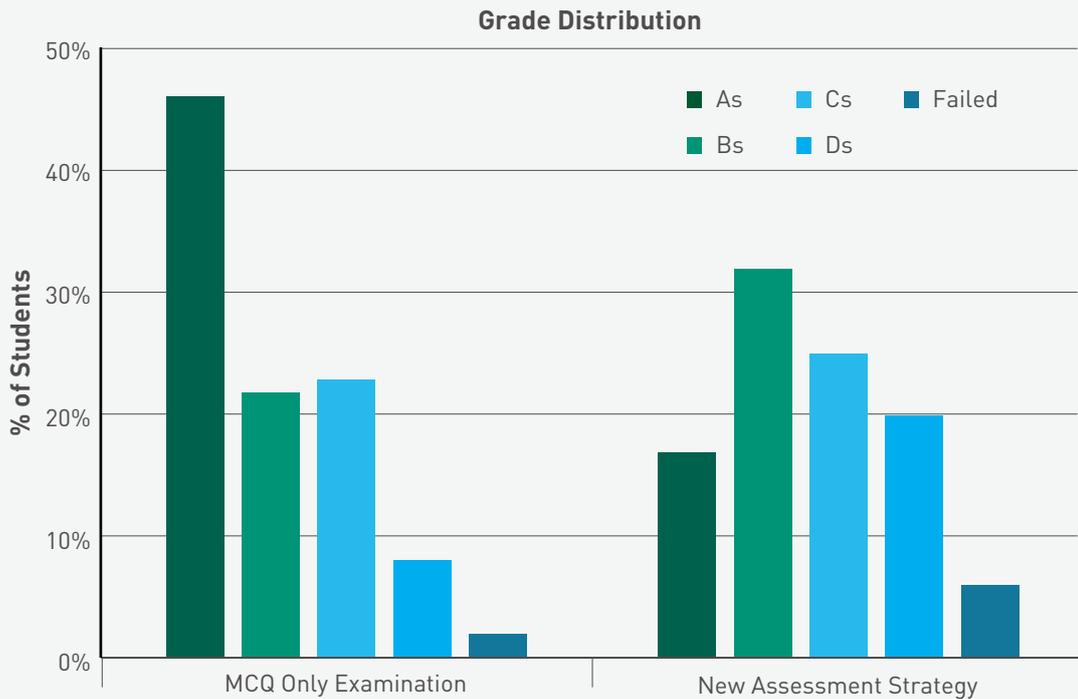
'Review lectures were really good - we were always armed with the ability to know what we were supposed to learn. Though the amount of content was large these allowed us to digest the information better as we were given more time to think about scenarios. The module was also really well run with the perfect balance between BMJs, tutorials and review lectures.'

'The 4 review lectures with cases to review the material covered in the haematology section of the module were so helpful: the material in this portion of the module was quite overwhelming so the case lectures were crucial and really helped me understand the material.'

'I very much enjoyed the Review cases, they reinforced the learnt content and put the material in a clinical context. It is very obvious that you care a lot that students understand the material.'

'The review lectures were excellent and really helped to make the content of the module clinically relevant.'

**Grade distribution.** Thanks to the new assessment strategy, the grade distribution is much better than in previous years, it follows a Gaussian distribution (Figure 3). Earlier, almost half of the class received a shade of A (MCQ only exam) resulting in skewed grade distribution. The new assessment strategy, introducing the clinical vignette based SAQs, helped to better identify the excellent students. Majority of the class received Bs (32%), and 6% of the class failed the exit paper. Interestingly, about two third of students with failing grades did not attend the Haematology tutorials.



**Figure 3. Improved grade distribution after introducing the new assessment strategy.**

Overall satisfaction. Overall, the students are extremely satisfied with the module as it is apparent from their feedback:

‘The lecture content and structure was really well thought out, which greatly helped me in understanding haematology. The review sessions were excellent for consolidating the learning to date and added appropriate additional information that was of interest. The tutorials for the haematology part of the module were very good, with enough cases to cover each major topic. Overall, an excellent, well-organised module with very relevant teaching throughout and a fair end-of-semester examination.’

‘This module was fantastic. The teaching was superb from every angle.’

‘I actually thought the module was pitched perfectly- I really enjoyed the module and felt the way it was delivered helped me to understand the material! I also thought the BMJ continuous assessment was really appreciated- it encouraged us to do some extra reading around this material to consolidate our understanding, and also took the pressure off a little bit for the end of semester exam.’

'I really enjoyed this module. The content was challenging but every single method of helping us understand the topic was done. There were tutorials, review lectures, overview lectures. I immensely enjoyed this module because I had the material to understand it. There are absolutely no negatives to give in this module. If this module could be used as a model module, I would use it! Amazing.'

'I think the entire haematology portion of the module was great I would not change a thing.'

## Advice to others for implementation

The clinical vignettes based SAQs could be utilised in other modules in Medicine (either to enhance the variety of assessment methods or to replace existing essays) because this format assesses not only knowledge but also the problem-solving ability and clinical reasoning skills of medical students. Patient-related scenarios can be tailored to the learning outcomes of the specific module. Real life based SAQs could also be developed in other disciplines.

If you are considering implementing clinical vignettes (or real life) based SAQs in your module, I would recommend that you:

- i** clearly communicate your expectations to the students (in Medicine this means that students are informed upfront if they are required to interpret histopathological images or laboratory tests as part of the exam);
- ii** tailor the teaching modalities on your module accordingly, so that you prepare the students for the new exam format;
- iii** include opportunities to evaluate clinical scenarios/real life examples throughout the semester;
- iv** include a formative assessment session with a structure similar to the format of the exit exam.

## References & Resources

CAST (2015) 'Top 10 UDL Tips for Assessment', <http://castprofessionallearning.org/project/top-10-udl-tips-for-assessment/> Retrieved on 6th March 2019

CAST (2018) 'Universal Design for Learning Guidelines version 2.2' <http://udlguidelines.cast.org/> Retrieved on 16th February 2019

Collins, J. (2006) *Writing Multiple-Choice Questions for Continuing Medical Education Activities and Self-Assessment Modules*, RadioGraphics, 26(2), pp. 543-551.

Epstein, R. M. (2007). *Assessment in Medical Education*, The New England Journal of Medicine, 356, pp. 387-396.

National Forum For The Enhancement of Teaching and Learning in Higher Education, (2017a), 'Expanding our Understanding of Assessment and Feedback in Irish Higher Education', <https://www.teachingandlearning.ie/wp-content/uploads/2017/03/Sectoral-insight-web-ready.pdf> Retrieved on 15th September 2018

National Forum For The Enhancement of Teaching and Learning in Higher Education, (2017b) 'Principles of Assessment OF/FOR/AS Learning', March <https://www.teachingandlearning.ie/principles-assessment-offoras-learning/> Retrieved on 15th September 2018

---

## CASE STUDY 15

# Adapting assessments on a university access course to facilitate great reflection and engagement

Discipline: Interdisciplinary  
Student numbers: 74 – 29 in group featured in this case study



**Dr Bairbre Fleming**

## Introduction and Context

The course featured in this case study is a University Access course. Access Courses are preparatory programmes designed for learners, who for social, economic or educational reasons have not yet realised their full educational potential, but who aspire to continue their education at Third Level. Access courses are primarily aimed at adults who have been away from formal education for a number of years and who aim to improve their skills, confidence and knowledge to access a third level programme. They also familiarise students with the structure and requirements of third level education. The mature students who participate in this process are a target of the Irish National Access Plan, as mature students are under-represented in Higher Education (Higher Education Authority, 2015).

The First Steps to Higher Education module introduces students to practices in higher education, including college life and activities. It aims to build confidence and self-esteem by encouraging students to reflect critically on their emerging student identity. The module in this case study is the first of three core modules which teach effective study skills and practices for higher education. It is consequently the first step towards engaging students with university culture and structures. Among the topics covered are managing student learning; reading skills; note-taking; memory techniques; essay writing; referencing; sourcing academic literature and preparing for examinations (McNaught, 2012). The module is delivered in a small group setting with an emphasis on student participation.

The key skill that the module addresses is the introduction of critical thinking and reflection (Morgan, 2012). This process is reinforced through the assessments. This case study describes changes that have been made to the module assessment to reinforce learning and facilitate greater reflection.

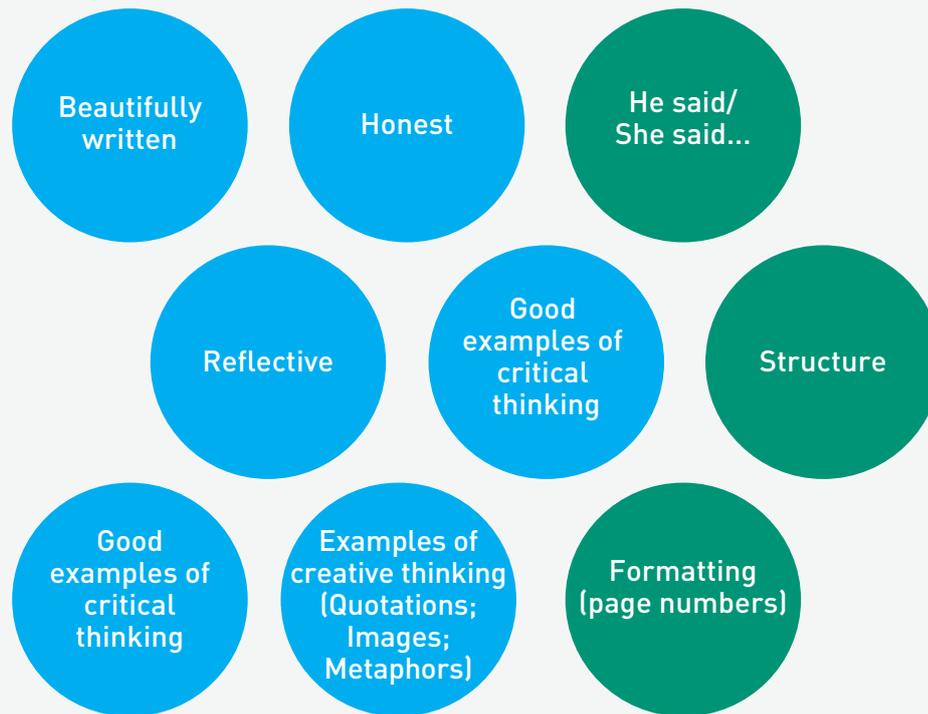


Figure 1: Three students on University Access course

## Redevelopment and Redesign

The university access course has been offered in UCD for over twenty-five years. It has been redesigned and mainstreamed in the last year and is now an interdisciplinary course across the Colleges of Social Sciences and Arts and Humanities. In the redesign of the course, there were several changes made to the teaching of study skills. One of the challenges in teaching Study Skills has been around the assessment. In the previous design, students were required to write a 1500 word essay at the end of each semester. The assignment was a summary of the key aspects of a journal they were prompted to keep throughout the semester. They were asked to re-read their journal entries and identify key themes and observations in them. The process required a level of reflection and capacity for distilling narrative.

The one essay submission for the Study Skills module was problematic on many levels. As there was just one submission, students tended to defer or delay engaging in the writing process. There was limited evidence of students journaling regularly and then summarising their key observations. Instead, students tended to delay writing the journal and recognised that it was only worth 10% of their semester's marks. Consequently, the submissions varied in effort and quality. Many of them were well written and persuasive pieces of writing. Some were imaginative and creative. However, too many students relied on the He said/She said method and regurgitated lecture notes – writing them like a Captain's Log. It was also evident that students did not spend enough time on the assignment or the process to allow them move from descriptive writing in to a more dialogic or critical reflection.



**Figure 2: General feedback to previous cohort on former version of learning journal assessment**

The redesign of the course included a redesign of the Study Skills modules. The redesign was a collaborative process and included colleagues from Arts, Social Science and Access & Lifelong Learning. The consensus was that Study Skills should be core modules, and that the assessments should be inclusive and engaging.

It was also felt that the assessments should be simple and intuitive and build incrementally. Four assignments of 500 words were incorporated in to the module design and were developed to reflect what students were covering in class. The redesign of the module coincided with the launch of the new Virtual Learning Environment (VLE) Brightspace in UCD. The access programme was an early adopter and therefore migrated to using Brightspace (from Blackboard) for this module. There were several features of the new VLE that facilitated inclusive assessment and feedback. One of these was the Rubric facility. For each of the assignments a Rubric was designed and posted. The Rubric can be designed for several criteria and levels. Advice on how to develop the criteria and how to capture the reflection was given by the UCD Teaching and Learning Centre. The Hatton and Smith types of reflection were adapted for the university access context (Rivera, 2017). These types of reflection were further defined as:

**Descriptive writing:** This is a description of events or literature reports. There is no discussion beyond description. The writing is considered not to show evidence of reflection

**Descriptive reflective:** There is basically description of events but shows some evidence of deeper consideration in relatively descriptive language. There is no real evidence of the notion of alternative viewpoints in use.

**Dialogic reflection:** This writing suggests there is a 'stepping back' from the events and actions which leads to different level of discourse. There is a sense of 'mulling about', discourse with self and an exploration of the role of self in events and actions. There is consideration of the qualities of judgements and possible alternatives for explaining and hypothesising. The reflection is analytical or integrative, linking factors and perspectives.

**Critical reflection:** This form of reflection, in addition, shows evidence that the learner is aware that actions and events may be 'located within and explicable by multiple perspectives, but are located in and influenced by multiple and socio-political contexts'

**Figure 3: Levels of Reflection, modified from Hatton & Smith 1995 (O'Neill, 2018)**

Descriptive reflection was set as a 'Pass' where students confine themselves to describing events without demonstrating evidence of reflection. A higher level of 'Excellent' was established to offer students an opportunity to receive more expansive feedback – and to reward them for their additional efforts.

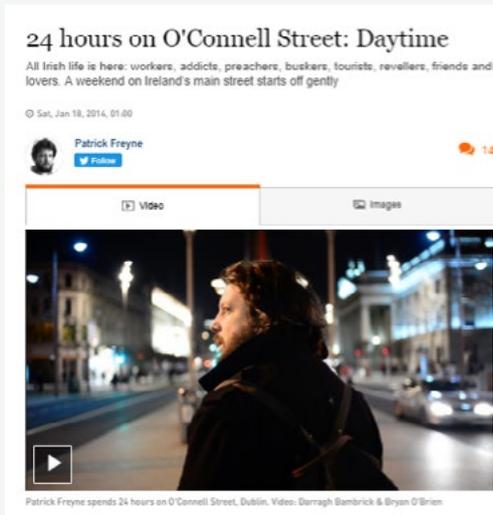
The first was an exercise in considering the student's learning approach at university. They were prompted to think about an effective learning experience they had in the past and to consider what they did that was effective in supporting this learning and they could adapt this skill to aid their learning in Higher Education. For this first assignment they were shown a sample submission and given a template to help them structure the assignment.

As an illustration, for the first assignment the criteria were identified as Presentation, Quality of Writing and Argument, Interpretation & Analysis. The rubric can be pre-populated with feedback comments that match the criteria outlined. Consequently,

feedback can be offered electronically and efficiently. Feedback comments can be adapted, or a selection of comments can be used in generating feedback. As the feedback is posted online, students can access it easily and promptly. The online feedback is also sustainable as no trees are sacrificed, and the administrative burden of collating, copying and storing feedback is eliminated.

<b>Assignment 1 (Week 2).</b>	
<b>Deadline:</b>	Friday 5th October at 5pm via Brightspace
<b>Title:</b>	My Learning Approach at University (500 words)
<p>Consider your learning approach at university. Think about an effective learning experience you had in the past. Consider what you did that was effective in supporting your learning and how you can use this skill to aid your learning in Higher Education. Structure this assignment by providing an introduction, two paragraphs and a conclusion.</p>	
<b>Introduction Paragraph</b>	<ul style="list-style-type: none"> <li>— A general statement about learning approaches.</li> <li>— Provide a definition of a learning approach and mention a learning model you are familiar with.</li> <li>— Say what you are going to discuss in the essay.</li> </ul>
<b>Paragraph 2: Learning Approach 1</b>	<ul style="list-style-type: none"> <li>— Explain how you came to understand your preferred leaning style</li> </ul>
<b>Paragraph 3: Learning approach 2</b>	<ul style="list-style-type: none"> <li>— Discuss how your chosen approach may be helpful when learning.</li> <li>— Provide examples.</li> </ul>
<b>Conclusion Paragraph</b>	<ul style="list-style-type: none"> <li>— Summarise the information in the two main paragraphs.</li> <li>— Conclude by saying how your approach to learning would best aid your learning in higher education.</li> </ul>

Figure 4: Template used for first assignment to prompt and guide Figure 5: Material for 2nd assignment



The second assignment was designed around students reading a piece and responding to it. An Irish Times newspaper article was used. Students were asked to focus on one aspect of the piece and write about what they would like to change, and the impact those changes would have. The second piece was therefore a move from Descriptive Writing on to more Descriptive reflective. The submissions for the second assignment demonstrated a move from narration to more critical engagement.

Students asked specific questions about their feedback and sought affirmation from their approach. The online feedback gave great confidence and students were reassured and positive about the process.

The subsequent two assignments were further enhancements, with students becoming increasingly reflective in their responses and autonomous in their execution of the assignment. They displayed little concern about completing the assignments and were positive about assessment in their feedback.

## Universally Designed Assessment & Feedback

This case study illustrates the benefits of being transparent in designing an assessment. The use of the rubric, and the ease of sharing the criteria and levels for the assignment facilitate students to prepare an appropriate submission. The online feedback available on the VLE based on the shared rubric worked well. The layout of the assignments were intuitive and simple and fostered early and full engagement. In the group of 29, every student submitted for every assignment on time. This level of submission was unprecedented

Criteria	Excellent
Presentation Add Feedback	<ul style="list-style-type: none"><li>— Well laid out</li><li>— Consistent format</li><li>— Adheres to presentation guidelines</li></ul>
Quality of Writing	<ul style="list-style-type: none"><li>— Writing is clear, fluent and accurate</li><li>— There is a subtle/ sophisticated use of appropriate language</li><li>— Good use of vocabulary</li><li>— Flowing style</li><li>— Appropriate use of language</li><li>— Easy to read</li></ul>

### Feedback

This was a well written assignment that conveys authority and conf You use language in an appropriate and clever style. Your use of vocabulary and expression is excellent. I like how your writing is fluent and easy to read.

Figure 6: Sample Rubric used to give feedback and indicates positive engagement with the process.



Figure 7: Group in University Access course



Figure 8: Students engaging in University Access course

## Student Feedback

Students were invited to give anonymised feedback on completion of the module. One of the questions related to the assessments. Of the smaller group in this case study, students gave a score of 4.89 (out of 5) when asked if the assessments were relevant to the work of the module. The modular feedback indicated that the change to assessment was viewed positively. The process was designed to be as non-threatening as possible, as students reacted positively to this.

‘The class was very informal which helped us to settle in and enjoy the experience. No question was deemed as stupid, which obviously helped to break down the barriers. Their [sic] was great interaction between the students and the facilitator/teacher’. [Student feedback]

The online feedback option clearly worked well. It was clear to see who had read their feedback and then it was easy to follow up with those who hadn't. Many of the students shared their positive comments and celebrated their achievements.

‘The positive reinforcement approach was, well and truly, used to incredible affect during the course of this module. The well paced and achievable assignments were also very helpful.’ [Student Feedback]

In the modular feedback at the end of the semester, students referred specifically to the feedback:

‘teaching was excellent ... The feedback on essays was amazing. Detailed, honest and really encouraged me to dig deeper. The pace of the lecture was perfect at a good pace, not too fast and not too slow. The assigned essays encouraged me to go back over aspects of the course that I might have missed the first time around. For example - writing an essay about essay writing encouraged me to go over the previous lectures to read over the process and points we discussed in class. I have retained more of that information as a result.’ [Student Feedback]

When asked what the three aspects of the module that most helped in their learning, it was noted: ‘The encouragement from [the lecturer]. The content have me great knowledge . The assignments helped me get used to writing. Really enjoyed this module. [The lecturer] is a credit to UCD.’ Another cited ‘The emphasis on reflection and appropriate planning’.

## Recommendations

The redesign of the assessment to develop simple and intuitive materials was a positive enhancement of the course. The use of plain English is an inclusive and positive step towards access and inclusion. In addition, the migration to the new VLE offers many new enhancements to feedback and engagement. The process is sustainable and user friendly and allows teaching staff to give feedback promptly, efficiently and to great effect.

## References

Higher Education Authority (2015) *National Plan for Equity of Access to Higher Education 2015-19*. Dublin: Higher Education Authority.

McNaught, K. (2012) *Improving the student experience: a practical guide for universities and colleges, edited by Michelle Morgan*, Higher Education Research & Development, 31, pp. 750-752.

Morgan, M. (2012) *The evolution of student services in the UK*, Perspectives: Policy and Practice in Higher Education, 16, pp. 77-84.

O'Neill, G. (2018) *Critical reflection on the development of your module(s)\* assessment strategy*. UCD: UCD Centre for Teaching and Learning. [unpublished]

Rivera, R. (2017) *The reflective writing continuum: Re-conceptualizing Hatton & Smith's types of reflective writing*, International Journal of Research Studies in Education, 6, pp. 49-67



## About this publication

Inclusive Assessment and Feedback: Universal Design Case Studies from IADT and UCD includes fifteen case studies showcasing some of the innovative work happening in this area. We also provide an introduction to this field, clear principles and easy to follow steps to improve inclusive practice in your teaching and learning work.

This publication is part of a series published by UCD Access & Lifelong Learning. Our other publications include:

Padden, Lisa, O'Connor, John and Barrett, Terry Eds. (2017) **Universal Design for Curriculum Design: Case Studies from UCD**. Dublin: UCD Access & Lifelong Learning

Kelly, Anna and Padden, Lisa. (2018) **Toolkit for Inclusive Higher Education Institutions: From Vision to Practice**. Dublin: UCD Access & Lifelong Learning



## Endorsements

As a University, we seek to diversify our student population, reducing the barriers for underrepresented populations and educating students from across the globe. We do this because diversity is a key enabler which allows us to be excellent in what we do. Such diversity translates to variety that must be recognised. Variety in learning styles; variety in cultural traditions and expectations; variety in how a student can best be given feedback or demonstrate their learning. Inclusive Assessment and Feedback: Universal Design Case Studies from IADT and UCD gives practical examples of how we can adapt and implement universal design principles for assessment and feedback, recognising that all students are different and designing our curriculum, assessment and approaches to reflect this reality.

### **Professor Mark Rogers**

Registrar & Deputy President, UCD

I welcome the publication of this book that highlights practices in both IADT and UCD that encompass a UDL approach to assessment. Teaching, learning and assessment is at the heart of what we do and our aspiration for our students is for all of them to reach their potential in a vibrant and challenging learning environment. The cases featured in this volume are a testament to the creativity, commitment and hard work of academic staff who are actively putting UDL principles at the core of their assessments in a way that facilitates students reach their potential.

### **Dr Andrew Power**

Registrar IADT

I really welcome this innovative and useful publication that focuses on Universal Design. One of the best ways of getting those who have not engaged with Universal Design to engage, is to learn from the experience of their colleagues across a range of disciplines about how UDL has made such a positive difference to their assessment practices and more importantly to the impact it has on student learning. The case studies in this publication give some valuable steps to initiating this approach.

### **Dr Terry Maguire**

Director, National Forum for the Enhancement of Teaching & Learning in Higher Education