Assessment Transformation Framework (ATF)
GMIT Programmatic Review Guide

GMIT
INSTITIÚID TEICNEOLAÍOCHTA NA GAILLIMHE-MAIGH EO
GALWAY-MAYO INSTITUTE OF TECHNOLOGY

Teaching
and Learning

GMIT
INSTITIÚID TEICNEOLAÍOCHTA NA GAILLIMHE-MAIGH EO
GALWAY-MAYO INSTITUTE OF TECHNOLOGY

Teaching and Learning

Assessment Transformation Framework

GMIT Programmatic Review Guide

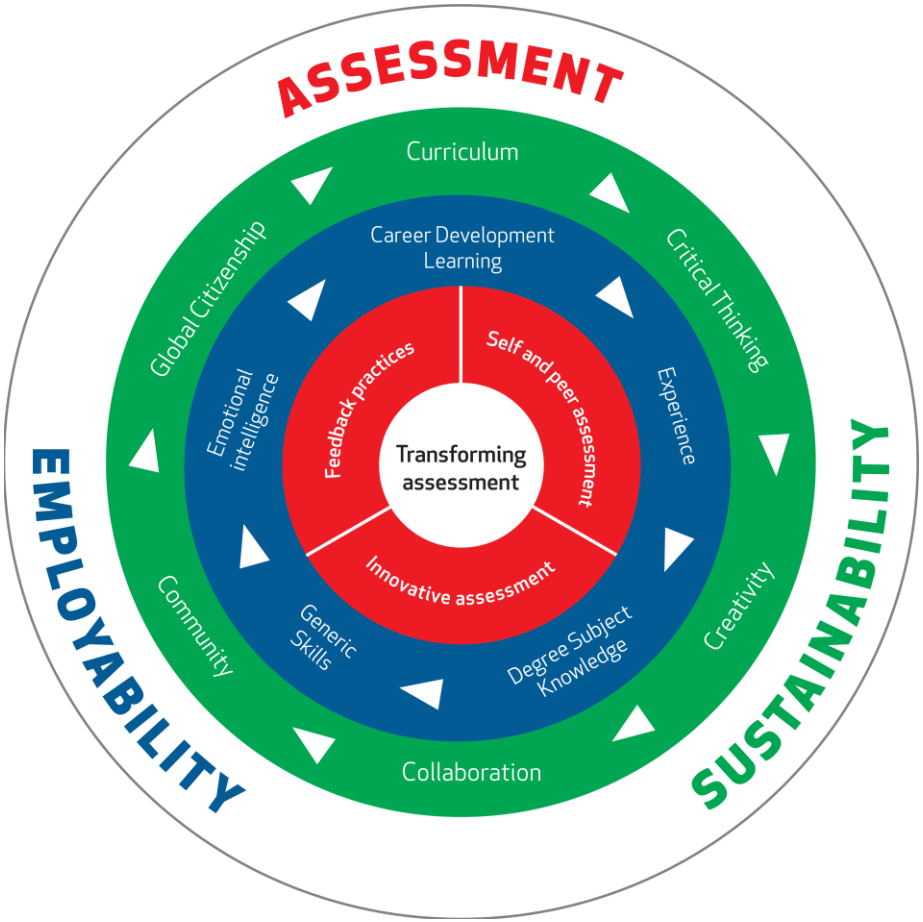


Figure 1: GMIT Programmatic Review Framework, Three Themes

Introduction

Assessment plays a vital role in Higher Education and it is essential for measuring the extent of student learning (assessment *of, for* and *as* learning). Assessment should be designed in ways that promote student learning and Advance HE (2018) and the National Forum (2017) explain that attention to the methods of assessment and feedback and the use of self-assessment and peer-assessment, coupled with principles, is fundamental to student learning.

Transforming assessment is a process that involves a wide range of stakeholders in a cycle of review, plan and action. Doing so has implications for the infrastructure, the dialogue required between staff and students about assessment, and for curriculum review and development. Transforming assessment can have a positive impact upon student learning and student satisfaction, as well as promoting greater confidence in academic standards. This guide will outline a range of assessment strategies to consider, key resources to aid the design process, academic integrity considerations, and a transformation framework to help guide the conversation among programme board teams.

Section 1: Understanding Assessment

1.1 Why do we assess?

Assessment is a key function of learning and teaching. Assessment tasks are developed through constructive alignment of learning outcomes, learning and teaching strategies and assessment (Biggs and Tang, 2011). **According to the QQI (2018), Advance HE (2018) and the National Forum (2017), we assess in higher education to:**

1. determine entitlement to a qualification (e.g., summative assessment).
2. determine that the intended learning outcomes of the course are being achieved.
3. provide feedback to students on their learning, enabling them to improve their performance.
4. motivate students to undertake appropriate work.
5. support and guide learning.
6. describe student attainment, informing decisions on progression and awards.
7. demonstrate that appropriate standards are being maintained.
8. evaluate the effectiveness of teaching.
9. confirm learning progress.
10. determine a learner's 'learning' competence.
11. identify gaps in learning (to, e.g., enable and inform the development of formative feedback to the learner or to adapt the learning strategy).
12. help determine special educational or training needs (e.g., diagnostic assessment).
13. provide a learning opportunity.
14. inform the evaluation of the quality of a programme of education and training.
15. recognise experiential learning.
16. support the learner to monitor their own progress.
17. determine eligibility to enrol or access a programme e.g., RPL assessment.

Key requirements in Higher Education:

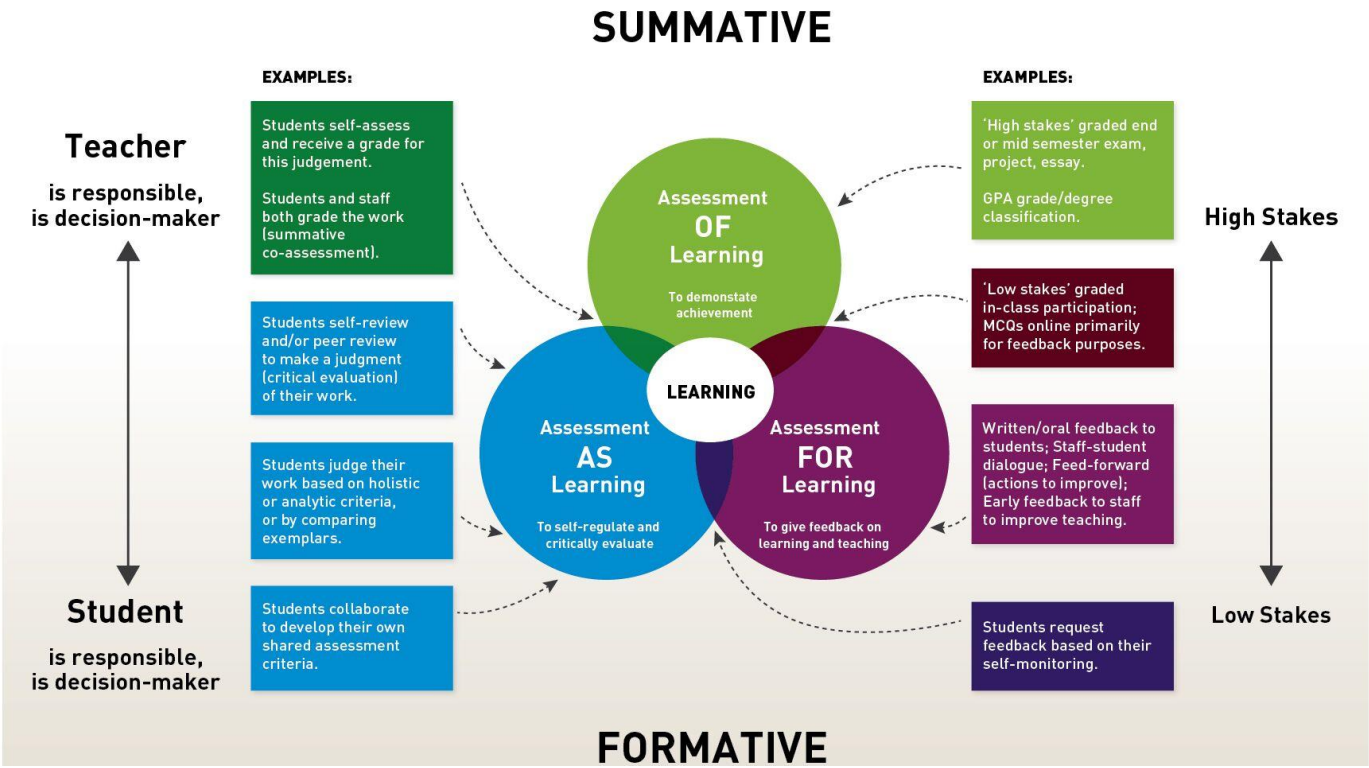
- Assessment procedures are fair, consistent and fit for purpose, and subject to regular review.
- Assessment tasks are clear, accompanied by grading schemes and assessment rubrics, and are communicated to students appropriately.
- Assessment procedures are flexible to meet individual circumstances within the limits of the Institute's assessment policies i.e., they are capable of reasonable accommodation.

1.2 Assessment Terms - the vocabulary of assessment

Assessment is any process that aims to judge the extent of students' learning.
Feedback is any information that a learner receives as a result of assessment, it may be written or oral, stated or implied.
The following list of terms provide an explanation for the vocabulary used in assessment.

- **Learning outcome** - a description of the learning to be achieved.
- **Continuous assessment** - assessment that takes place at more than one point in a course.
- **Final assessment** - assessment that takes place at the end of a course.
- **Validity** - a valid assessment is one that measures what it claims to measure (and what is important to measure).
- **Reliability** - reliable assessments are ones where the same marker reaches the same conclusion on different occasions and different markers reach the same conclusion when presented with similar evidence.
- **Formative assessment** - assessment designed to provide information (feedback) to students so that they can improve their work.
- **Summative assessment** - assessment that counts towards or constitutes a final grade or qualification.
- **Norm-referenced** - assessment that measures learner performance against the standard of the group rather than against a pre-determined standard.
- **Criterion referenced** - assessment that assesses how far students meet or match criteria.
- **Peer assessment** – learners make judgements about one another's work. This requires them to give and/or receive feedback.
- **Self-assessment –** assessment where the student makes judgements on their own learning.
- **Assessment literacy -** assessment literacy consists of an individual's (student and educator) understanding of the fundamental assessment concepts and procedures deemed likely to influence educational decisions.

Figure 2: Understanding formative and summative assessment and the interrelationship between assessment and feedback (National Forum, 2017).



In addition to the interrelationship between assessment and feedback, there is also overlap between each of the **assessment *of, for* and *as* learning (see Figure 2)** and, as a result, other assessment terms exist to help distinguish them, among these are the terms **'summative' and 'formative' assessment:**

Summative assessment (National Forum, 2016):

a) is also termed 'Assessment of learning' and this emphasises the assessment of an activity that **has** occurred [i.e., after a period of learning].
b) the term also emphasises a numeral aspect and it is often associated with a number or letter grade.
c) where this number or grade gets high weighting, or has significant consequences for progression, it can be termed 'high stakes assessment'.

Formative Assessment (National Forum, 2016)

a) Is related to the concept of 'feedback' on learning. The importance of learning as a result of feedback to students has led to the use in some contexts of the term Assessment FOR learning, which emphasises the **'learning'** aspect.
b) Many authors stress that it should be **referred to as feedback only if it has an impact on student learning** (Winstone & Carless, 2019) and the dialogue between students and teachers is an important part of this process (Nicol, 2006).

It is important to note that the teacher/lecturer is most responsible in summative assessment for which he/she is the key decision-maker whereas in formative assessment, especially in Assessment AS learning, it is the student who becomes more empowered, is more responsible and can become the key decision-maker.

The concept that binds these three terms (assessment of, for and as learning, see Figure 3) together, their shared overlap (see Figure 2), is **that they are all facilitating students in their learning.** Each of these terms therefore has a key role to play in learning, with different emphases required at different times for different purposes. Having a greater understanding of these terms should allow for a more effective and efficient design of assessment and the learning experiences.

Figure 3: Understanding Assessment *of, for and as* Learning

Key purposes of assessment:
Assessment *of* learning is the assessment that is associated with completing assessment to demonstrate learning, usually graded assessment that has high stakes.

Assessment *for* learning is assessment [graded and ungraded] that is concerned with giving feedback on teaching and student learning

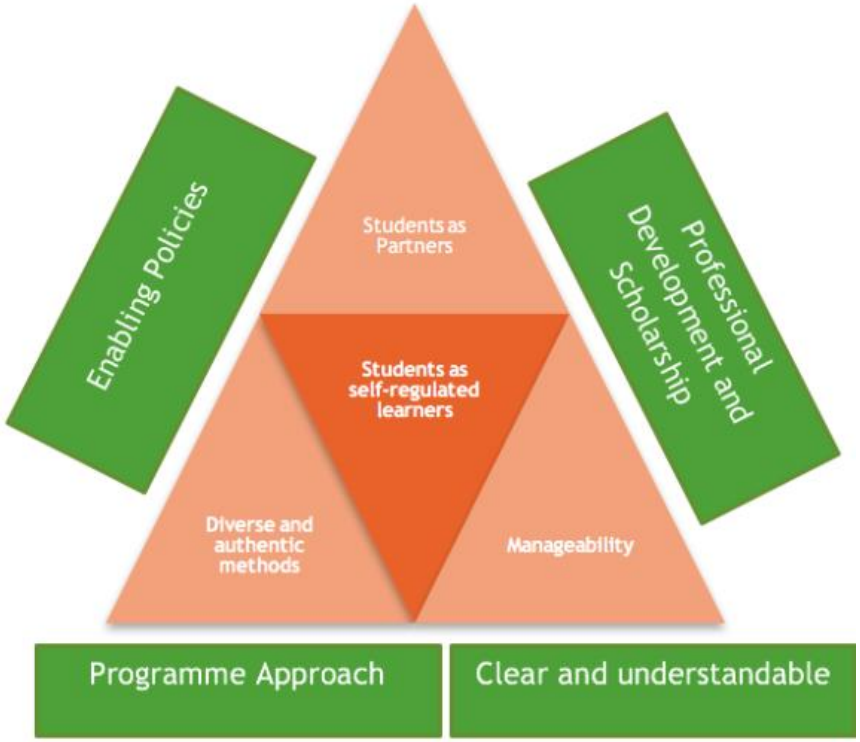
Assessment *as* learning is assessment and activities that facilitate students' empowerment and engagement to become better learners.

National Forum for the Enhancement of teaching and Learning in Higher Education. (2016). Enhancement theme: Assessment of, for and as learning: Students as partners in Assessment.

In 2017, the National Forum study on assessment in Higher Education in Ireland (see Figure 4) concluded that, in addition to assessment being valid, reliable and effective, the assessment design process should also consider the following principles. *(Note: each principle below links to a resource and a case study document).*

1. Assessment and feedback should empower students to become **self-regulated learners**
2. Assessment and feedback should **be clear and understandable** by staff and students
3. Decision on assessment and feedback should be guided by a **programme-level approach**
4. Assessment and feedback approaches should foster a **partnership between staff and students**
5. Student should experience a **diverse range of assessments methods**, including, where relevant, **authentic and work-based assessments**
6. Assessment and feedback should **be manageable** for staff and students
7. Assessment and feedback should be enhanced through staff engaging in related **professional development**, including engagement in **scholarship** in this area.
8. Assessment and feedback should be supported by **enabling policies**

Figure 4: Approach to Assessment Guide, National Forum (2017)



1.3 Learning categories and activities to consider building into a module delivered online/blended or in a traditional F2F classroom environment.

When designing module learning experiences there are six learning categories and a range of related learning engagement activities to consider. This learning design framework was originally designed by Diane Laurillard (2012 & 2020) (see https://www.researchcghe.org/about/profile/diana-laurillard/ and it is also known as the ABC method further developed by UCL in 2018 as part of an Erasmus+ project).

It is recommended when designing a module, the module team considers the following **six categories of learning: *Investigation; Acquisition; Discussion; Practice; Collaboration; and Production***. Selecting learning activities from any or all of the six learning categories, helps a lecturer map out the student learning experience journey over a semester or a full academic year and aids the selection of an assessment strategy and modes of assessment aligned to the learning outcomes. This learning design process also aids selecting appropriate times in the academic term, for both formative and summative assessment tasks and helps avoid 'over assessment' of learning outcomes on a module.

Each learning category (i.e., *Investigation; Acquisition; Discussion; Practice; Collaboration; and Production*) prompts you to consider the conventional teaching and learning classroom methods versus the digital alternative.

Note: *GMIT Teaching, and Learning Office run regular workshops on this design education method called 'Learning Design' and participants engage with a suite of Diana Laurillard's resources and the ABC Erasmus+ Project module story board tools.*

Figure 5: Design Education, Learning Categories (UCL, 2018)

Section 2: An Assessment Transformation Framework

Proposed by Advance HE (2018), there are three areas of focus in an assessment transformation framework. This framework (see Figure 6) highlights three interrelated areas of focus that can be used to transform assessment. This framework is a useful aid to guide an assessment transformation conversation among programme board teams. Key statements in the cyclical design, provides a structure to shape and evaluate policy and practice at an institutional, faculty/school, department and individual level. It can be used to inform continual professional development in teaching, learning and planning strategic conversations.

Area 1. Innovative assessment:

Assessment should be challenging, realistic and meaningful. New forms and methods of assessment can promote student learning. These may be considered innovative with regard to:

- a subject, discipline or professional field;
- being characterised as authentic or work relevant, involving employers or experts in the assessment process;
- using technology-enhanced learning;
- how students engage and participate (e.g., through devising assessment tasks and criteria);
- offering variety in the range of assessment approaches used.

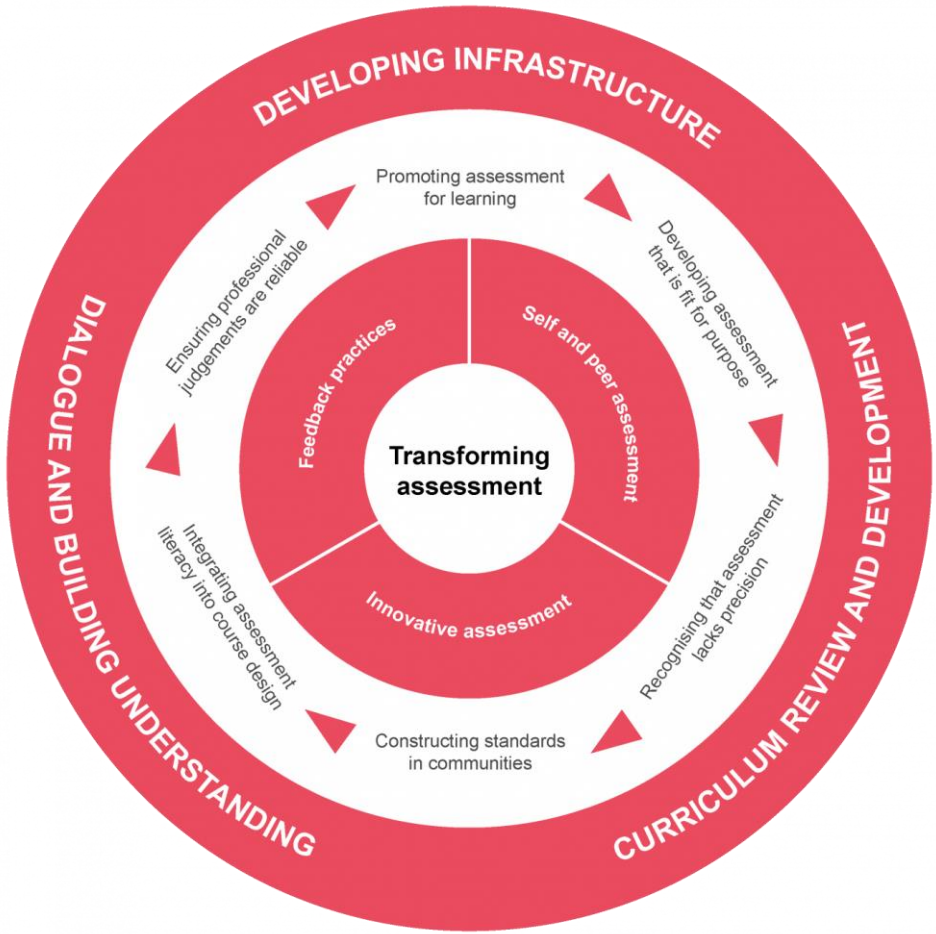
Area 2. Feedback practices:

Feedback is integral to assessment and a dialogic learning and teaching process. Practices should promote regular use of **formative assessments**, and dialogue between staff and students, and among students (rather than providing particular forms of feedback). Having a set of principles for effective feedback can be valuable to ensure consistent practice and help students use feedback as an aid to learning. The design of **assessment rubrics** is key to aiding assessment feedback practises.

Area 3. Self and peer-assessment:

Self and peer-assessment can be employed in a variety of ways as part of learning and teaching, whether in class-based activities, group work or through online forums. Self-assessment and peer-assessment within the curriculum helps students to develop as autonomous learners, with reflective and evaluative skills, and capabilities for working collaboratively. Through being involved in assessing and giving feedback to others, students can build confidence, assessment literacy and fully appreciate what is required of them. The attributes and skills developed through the process, such as self-reflection or communication, are all **important features of a student's employability** and will be invaluable to them throughout their lives, whether in employment or self-employed, undertaking further study or voluntary/community activities.

Figure 6: A framework for transforming assessment in higher education ©Advance HE



Section 3: Assessment Strategies

Assessments evaluate students using multiple instruments across multiple domains of learning. There are many assessment strategies, each offering its own unique strengths and weaknesses, that educators can use to assess their student. Modes of assessment can include reports, quizzes, essays, performances, exhibitions, portfolios, websites, blogs and many more examples **(see Appendix 2 and Section 1.3).** Through assessment, students demonstrate their knowledge and skills. A valuable addition to an assessment strategy is well-designed assessment rubrics, that outline the assessment criteria and define the various levels of successful performance. A well-designed rubric supports the educators or peer evaluation of the candidates work. It also serves as a feedback tool and directs the student on further enhancements.

Section 4: Engaging Students as Partners

Student-faculty partnerships is an innovation that is gaining traction on campuses across higher education institutes. Bovill and Cook-Sather (2014) in *Engaging Students as Partners in Learning and Teaching: A Guide for Faculty*, offer administrators, faculty and students both the theoretical grounding and practical guidelines needed to develop student-faculty partnerships, that affirm and improve teaching and learning in higher education. A copy of the latest resource and webinar on engaging students as partners in assessment is presented in Section 6 under assessment resources and a recording of this webinar is available on GMIT TLO channel at this link. Bovill (2021), provides an insight on theory and evidence to support efforts in student-faculty partnerships and describes various models for creating and supporting such partnerships.

There are many opportunities to engage students as partners in assessment design including: negotiating the assessment criteria; co-designing assessment rubrics; peer assessment tools; co-creation of course content; co-creation of quizzes and more. Further resources on co-creation of the curriculum with students is available in DCU under the 'Students as Partners in Assessment (SaPiA) Initiative' (see https://www.dcu.ie/teu/sapia). A literature scoping review was completed in December 2020 and is available at https://zenodo.org/record/4270579#.YIwuU-hKjD4. This literature scoping review aims to demystify the ways in which those who teach can partner students by exploring initiatives such as involving them as self or peer assessors, as co-creators of assessment activities and marking criteria, and the use of collaborative opportunities to co-own the assessment process (Ní Bheoláin, Lowney & O'Riordan, 2020).

Section 5: Recommendations for Consideration

1. Constructive Alignment

For any module **align 'the mode of assessment' to the learning outcomes and be careful of over assessment.** Too much assessment can lead to surface learning, not deep learning. Choose from a variety of assessment options presented in Appendix 2 and Section 1.3, of this guide. It is recommended in various assessment guide publications (National Forum 2016 and 2017) to aim for two assessment strategies in a 5 ECTS module and four assessment strategies in a 10 ECTS module. Note, a 30 ECTS special purpose award may also have four assessment strategies. We are always led by the learning outcomes and it is not a case of increasing the assessment load as the credits increase, but planning strategically what competencies the learners need to possess, on completion of 'the module'.

Example Student A	Example Student B
	
A 5-ECTS single-semester module	**A 10-ECTS module**
2 assessment load	**4** assessment load

2. Integrated Assessment

As a programme board, review opportunities for **an integrated assessment approach** across modules on your programme. For example, an ePortfolio, where selected outputs from each module and year of a programme feed into the development of **a student learning digital Portfolio** and this may be assessed as a capstone learning object in the award year. Integrated assessment strategies and technology enhanced learning solutions can be explored through facilitated workshops with the GMIT Teaching and Learning Office.

3. Joint Assessment

Consider opportunities where you **can partner with another lecturer and joint assess through the co-design of an assessment rubric**. You may have a similar assessment strategy and to save on assessment overload and to enrich the learner experience on the programme, collaborate on a joint assessment, that meets the learning outcomes of both or multiple modules. Well-designed assessment rubrics are a powerful tool to aid deep learning, assessment literacy, assessment evaluation, peer evaluation and the student feedback process.

4. Value of Assessment

Assessment should be challenging, realistic and meaningful. All forms and methods of assessment promote student learning. Assessment may be considered innovative with regard to:

- a subject, discipline or professional field;
- being characterised as authentic or work relevant, involving employers or experts in the assessment process;

- using technology-enhanced learning;
- how students engage and participate (e.g. through devising assessment tasks and criteria);
- offering variety in the range of assessment approaches used.

5. Fair, Consistent and Reliable

As a general guide, consider the following:

- Ensure assessment procedures are fair, consistent and fit for purpose, and subject to regular review.
- Ensure the assessment tasks are clear, accompanied by grading schemes and assessment rubrics, and are communicated to students appropriately.
- Ensure assessment procedures are flexible to meet individual circumstances within the limits of the Institute's assessment policies i.e., they are capable of reasonable accommodation.

6. Engaging Students as Partners

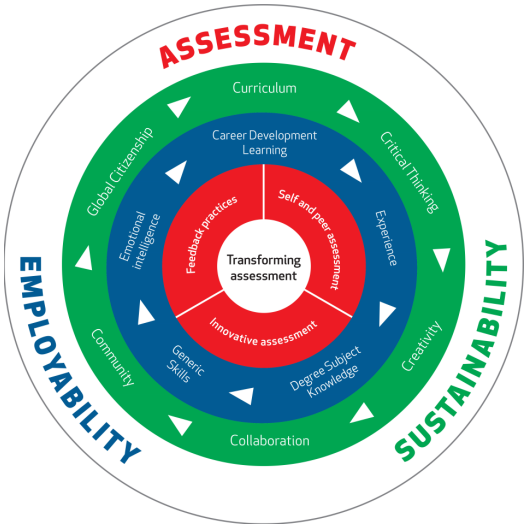
Explore opportunities to partner with students (i.e., at the current or higher level of the programme of study). This may involve the students being self or peer assessors, co-creators of assessment activities and marking criteria, and the use of collaborative opportunities to co-own the assessment process. Further ideas and case studies on these approaches can be explored with the Teaching and Learning Office in GMIT.

7. Universal Design for Learning (UDL)

Universal Design for Learning (UDL) is a set of principles for curriculum development that give **ALL students equal opportunities to learn.** UDL aims to improve the educational experience of all students through the introduction of **more flexible methods** of teaching, assessment and service provision to cater for the diversity of learners in our classrooms. This approach is underpinned by research in the field of neuroscience and is designed to improve the learning experience and outcomes for all students. The UDL guidelines and principles in practice are available at https://www.ahead.ie/udl-practice

8. Blending the Three Themes in the GMIT Programmatic Review Framework

The GMIT Programmatic Review Framework presents three themes (see Figure 1. p. 1 and right) including Assessment, Employability and Sustainability. A checklist has been prepared by the theme leads and this is presented on page 4. This will provide guidance to programme board members, on the key considerations when re-designing a module or programme.

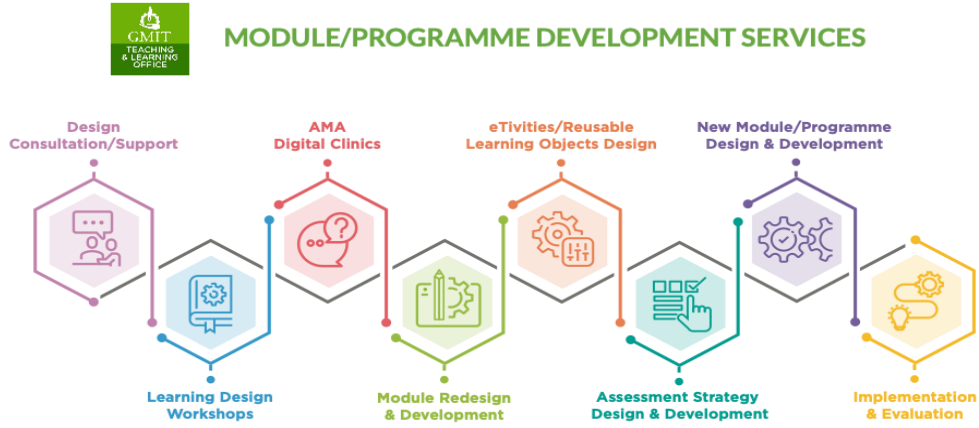


Section 6: Assessment Resources

Table 1 presents a variety of resources that will provide guidance and structure on the design and implementation of several strategies presented in Appendix 2.

Table 1: Key assessment resources to support the design process and develop robust assessment criteria.

Resource title and link	Resource Description
GMIT (2019) Assessment Guidelines	An assessment workgroup in GMIT developed this assessment guide in 2019 to support the programmatic review process. Available at this link.
National Forum (2017) Enhancing Programme Approaches to Assessment and Feedback in Irish Higher Education: Case Studies, Commentaries and Tools is available here.	This resource contains case studies, commentaries and tools supporting the enhancement of assessment and feedback in Irish higher education programmes. The collection showcases the contribution of 31 staff and two students, from 14 national and five international institutions.
DCU TEU (2020) Technology-Supported Assessment Exemplars: Published version 2 November 2020. Available here.	Faculty who have employed traditional assessment methods for some time often have difficulty conceptualising the possibilities that digital technologies can afford. Discussions with DCU faculty have highlighted the need for a bank of technology-supported assessment exemplars across a range of disciplines. These exemplars can offer inspiration and guidance for those academics who lack experience in using digital assessments. This is an OER, Open Education Resource.
Brown, S. & Sambell, K (2021), A compendium of examples of authentic assessment in practice from diverse disciplines. Available at this link.	This detailed resource is designed to demonstrate steps towards designing more authentic assessment by using six components: *Context, Learning outcomes, Verbs, Object, Outcomes/ Evidence of achievement, Modifiers/ developments.* https://galwaymayoinstitute.sharepoint.com/sites/GMITTeachingLearningOffice/Resources/Authentic-assessment-examples-compendium-Part1&2.pdf
GMIT Module Design OSCQR Scorecard. Download here.	The rubric includes 50 instructional design and accessibility standards to cross-check against your course design in order to aid you to identify and target aspects of online courses for improvement including assessment. GMIT Teaching and Learning Office produced a customised version of the OSCQR score card (originally developed by SUNY). It is packaged as an interactive traffic light checklist and includes embedded links to video explanations and tips for each standard within the rubric. Download here.
Ginty, C. (2021) Writing Learning Outcomes and Developing Assessment Rubrics and more. Guide available on GMIT, TLO SharePoint at this link.	The guide explores four key areas in developing and aligning your assessment strategy to achieve student success. The sections include: Introduction to Assessment Section 1 Aligning Assessments with the Learning Outcomes Section 2: Designing the Assessment Rubric and Sample Rubrics Section 3: Writing Learning Outcomes & the Assessment Strategy Section 4: Marking Scheme Guide
Advance HE (2021), Engaging Students as Partners in Assessment with Dr Cathy Bovill	Engaging Students as Partners in Assessment. A one-hour webinar delivered by Dr Cathy Bovill, University of Edinburgh, April 2021. The plenary session consisted of thought leadership on engaging students as

	partners in assessment, providing the introduction, examples of practice and a provocation. A recording of this webinar is available on GMIT TLO channel at this link. A useful resource to guide this process is available at https://mulpress.mcmaster.ca/ijsap/article/view/3953 covering **'A co-creation of learning and teaching typology: What kind of co-creation are you planning or doing?'**
TLO Assessment design resources on GMIT Learnonline	A range of assessment resources are available in GMIT TLO Learnonline courses at this link https://learnonline.gmit.ie/course/view.php?id=903
GMIT TLO (2020) Academic Integrity Guide for Students. Available at this link.	A GMIT student guide on Academic Integrity (AI). Share with all students as part of assessment literacy sessions and on the Moodle course pages. It is a 2-pager packed with tips, media, quiz and useful links to help educate learners on AI.
An Academic Integrity Self-Assessment tools for staff to aid assessment design. Self-Assessment Checklist: Assessment Design to Promote Academic Integrity (Task 3a). Self-Assessment Checklist: Assessment Design to Promote Academic Integrity (Task 3a) Quiz	This Academic Integrity Hub, developed by DCU TEU as part of an Erasmus+ project, it is aimed at academic staff involved in designing assessment and who are interested in embedding good academic integrity practices therein. It contains multiple self-paced resources that academic staff can engage with in their own time, and revisit as often as they wish. The complete resource is available to access on GMIT Learnonline TLO resources at this link.
GMIT Teaching and Learning Office Resources and Design Support Services – check out the TLO SharePoint site at this link **Book a workshop/design development service at TLO@GMIT.ie**	A one-stop-shop for all resources, supports and services in teaching, learning, assessment and student engagement visit GMIT TLO site at this link. A suite of course design and learning technology services are available through the T&L Office and the can be booked by contacting TLO@gmit.ie. This chart maps out the range of options available to the academic community in GMIT. 

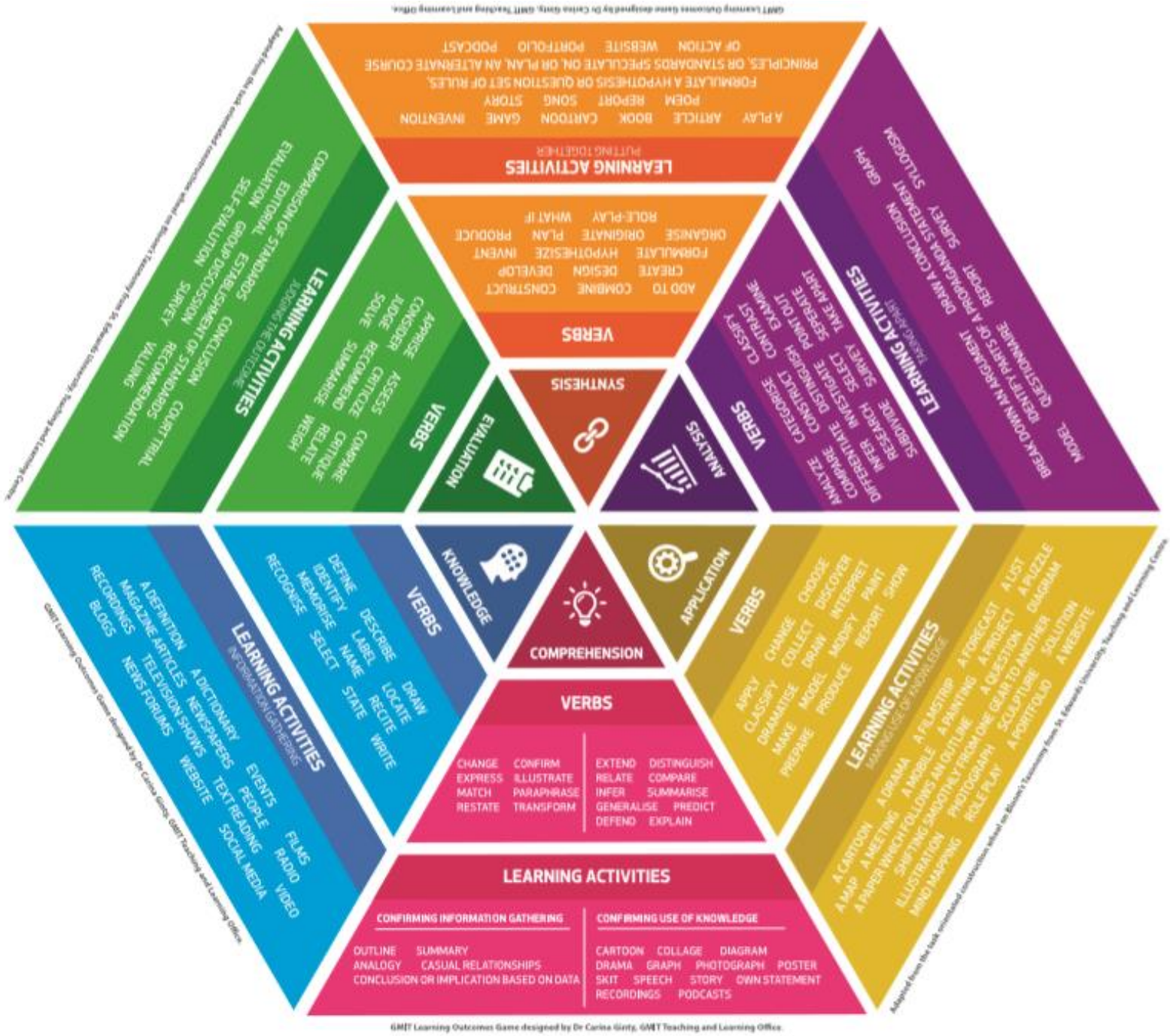


Figure 7: Learning Outcomes & Assessment Options Game Card (Ginty, 2019).

This resource is a desk tool, and it is designed in a hexagon shape to aid a TLO workshop on innovative course design and writing learning outcomes. This tool provides a selection of active verbs to choose from aligned to each learning domain from the original Bloom's Taxonomy. This resource also presents learning activities and a range of assessment approaches to consider relevant to each learning domain.

Note: Copies can be obtained from the T&L Office, contact TLO@GMIT.ie to order copies for programme board teams.

Appendices

Appendix 1. A checklist for designing or redesigning a module or programme that incorporates the three GMIT Programmatic Review themes

Assessment	**Yes/No**	**Action/Comments**
1. Are the learning outcomes (LOs) a description of the learning to be achieved and have you aligned the assessments to the LO's? *(Tip: Watch for too many assessments/over assessing of the LO's e.g. 5ECTS (2) 10 ECTS (4))*		
2. Has peer and/or self-assessment been considered? *(Note: learners making judgements about their own work and one another's work, requiring them to give and/or receive feedback)*		
3. Has the subject, discipline or professional field being considered in the assessment design process?		
4. Is the assessment characterised as innovative, authentic or work relevant, involving employers or experts in the process?		
5. Has the assessment tool considered technology-enhanced learning and digital tools available?		
6. Has 'assessment *as* learning' been considered, where students engage and participate in devising assessment tasks and criteria?		
7. Has UDL (Universal Design for Learning) been considered and a variety in the range of assessment submission options been offered?		
8. Has assessment *for* learning (formative assessment) and the feedback process been built into the assessment plans? *(Note: assessment for learning is assessment that is graded and ungraded that is concerned with giving FEEDBACK on teaching and student learning).*		
Employability		
1. Is there evidence of employability under the five categories considered both in curriculum content and Learning Outcomes? *(Degree Subject Knowledge, Experience, Career Development Learning, Generic Skills and Emotional Intelligence)*		
2. Has there been an analysis of assessment strategy to ensure that the range of employability skills, including Transversal Skills development and Emotional Intelligence are assessed?		
3. Is there evidence of Industry involvement in designing and validating programmes and careers education activities embedded into the curriculum?		
4. How is it ensured that students keep up to date with developments in professional specialisation/professional practice, meaningful work, placement, real life work experience?		
Sustainability		
1. Have you included sustainability-related competences i.e., critical, systems, strategic anticipatory thinking; and integrated collaborative problem-solving in your programme and module learning outcomes?		
2. Have you included sustainability-related topics i.e., environmental, social, political, cultural, economic, into your curriculum content?		
3. Does your assessment strategy address sustainability-related competences i.e., i.e., critical, systems, strategic anticipatory thinking; and integrated collaborative problem-solving?		
4. Do you utilise the synergies between the curriculum, campus, internal and external communities, and ongoing collaborative research, to encourage an integrated approach to sustainability?		

Checklist developed by Dr Carina Ginty, Bridie Killoran and Dr Mark Kelly for GMIT Programmatic Review, 2021-22.

Appendix 2: Assessment Strategy Options and Considerations

Table 2 presents a variety of assessment strategies to consider for a module and programme of study. Each option presented outlines a description to the approach, the digital tool and platform and set-up considerations.

Table 2: Assessment Strategy Options and Considerations

Online Terminal Exam /Assessment Options	Description of the approach	Digital platform & tools	System set-up, academic integrity & quality assurance considerations
Case study, essays, worksheets, project work, exam paper question set, and maths problem sheets. (timed and submitted online via Moodle) **Set-up video resources:** Teaching Remotely training resources and Moodle guides on GMIT LearnOnLine link here. **GMIT Moodle T&L Assessment Tools Resource** **Moodle Demonstration Video – setting up the assignment activity on Moodle (Moodle resource).**	Final semester assignments usually associated to an answer sheet or a grading rubric guide, that matches the achievement of a learning outcome to certain criteria can be easily managed online. Grading and feedback can be provided through the rubric. Think about pedagogical considerations and ensure that the assessment tasks are aligned to the learning outcomes. Choose assessment tasks that allow students to demonstrate that they have achieved the learning outcomes. To this effect, assessment rubrics will need to be created to map the achievement of the learning outcomes. Check out the GMIT Teaching and Learning Office resources space for some rubric examples and this assessment guide. A useful set up video resource on the Assignment function is available here **Moodle – Setup Moodle General Assignment** and here **Assessment Tools on Moodle**	Live submission timed on Moodle, use of MS Lens to support upload. PDF or word file submission on Moodle - fixed time window and date. URKUND active on Moodle. 'Academic Integrity Declaration' signed off by student on Moodle in assignment setting.	Online exams should be set up to open at the times scheduled on the **institute exam timetable.** Set up submission area via the Assignment activity on Moodle. Activate 'cut-off date' in settings. Require students to click the 'submit' button and sign off on an 'Academic Integrity Declaration' (see section 3 for a sample Academic Integrity Declaration). Require students to 'accept' the submission statement/Academic Integrity Declaration. Check URKUND is activated. URKUND training resources are available here Note to students if they will work with MS Word or PDF creator etc. Share with students the GMIT Assessment Brief Template (if required). Provide students with **instructions for the online exams** and how to manage remotely. A sample guide is available here. Students may use **MS Lens** to scan hand-written work/problem sheet rough work notes (useful for all disciplines, including online Maths or essay exams). **Android download link**: https://play.google.com/store/apps/details?id=com.microsoft.office.officelens&hl=en_IE&gl=US

			Apple iOS download link: https://apps.apple.com/us/app/microsoft-office-lens-pdf-scan/id975925059 Share with students a link to download in advance and it is recommended **a trial assignment area** is set up, so that students can practise uploading a document via MS Lens. Module leader/lecturer should make explicit to students what is permitted and not permitted. For example ***Usually permitted:*** *• Internet • Books/Articles/other sources • Module Materials, students' own notes* ***Not Permitted*** *• Assessment-related conversations with family or others with relevant expertise • Assessment-related conversations with other students/classmates? • Assessment related collaboration with other students/ classmates?*
Open book online exam (timed or takeaway, use the assignment function on Moodle) **Open Book Exam Guide for staff** available at this link. **Set-up video resources:** Teaching Remotely training resources and Moodle guides on GMIT LearnOnLine link here. **GMIT Moodle** T&L Assessment Tools Resource **Moodle** Demonstration Video – setting up the assignment activity on Moodle (Moodle resource).	An open book exam is **based on understanding rather than recall and memorisation.** This can be enabled by the assignment function on Moodle. Options include submission of an essay, case study questions, reflective question set. It can be timed, and various conditions set, in the set-up area in Moodle. The settings of a test can limit/allow multiple attempts, set time limits, allow exceptions and control the level of feedback and grading a student receives from the system. A useful set up video resource on the Assignment function is available here **Moodle – Setup Moodle General Assignment** and here **Assessment Tools on Moodle**	Moodle – assignment. Download the exam and respond on the paper and save as pdf and upload. OR handwriting and use MS Lens and then upload under assignment activity.	To replicate the exam paper format, students can receive the exam paper via Moodle and submit their answers within a defined time period (e.g., same day/next day) via Moodle. CLEAR SIGNPOSTING for students on Moodle is required - on the LOCATION OF THE EXAM PAPER/ONLINE EXAM. Create and label a topic END OF TERM ASSESSMENT/EXAM AREA. Online exams should be set up to open at the times scheduled on the **institute exam timetable.** Students will be working remotely, unsupervised and will have access to resources/books in that time period. Ensure there is appropriate communication to students about instructions on how to complete the paper (well in advance of the online exam date). When preparing **open book exam questions review** this useful resource from the University of Newcastle (Australia) **at this link.** **The GMIT TLO Guide on Open Book Exams *is available here.***

Teaching and Learning Moodle Assessment Tool resource for how-to videos, tips, and examples.			**The GMIT Open Book Exams advice guide for Students is available here.** Where students are **required to scan/upload their answers** at the end of an exam, the total time allowed for the exam should include **a standard extra 30 minutes** to allow students to upload documents. This is designed to reduce the stress that might arise if students encounter a delay in uploading a paper and to provide clarity for students across modules. Feedback from the summer and autumn exam sessions suggests that students required time due to varying broadband speeds etc.
Online Quiz/MCQ **(online quiz exam on Moodle)** **Set-up video resources:** **Teaching Remotely training resources and Moodle guides on GMIT LearnOnLine link here.** **GMIT Moodle T&L Assessment Tools Resource** **GMIT Moodle Gradebook Set up – all you need to know here.**	Moodle quiz provides a range of question types including essay questions, case study questions, multiple-choice questions, fill the blank, matching pairs, true/false, numeric responses and a file submission upload. It can be timed, and various conditions set in the set-up. Quiz exams test a learner's understanding of a broad range of material, usually broader than essay style questions. The learner is expected to not only know basic definitions, but also intricate details of the subject area. **Useful demonstration resources** to help you build a quiz/MCQ are available at the following video links: **Moodle – MCQs** **Moodle – Quiz Question Bank Export/Import** **Moodle – Quiz Setup** **Assessment Tools on Moodle** In the case of 'reasonable accommodation' allowances in quiz set up. This resource will demonstrate how to set up extra time for 'specific students' on Moodle. Learn more at **Moodle – Set up 'Extra Time' on Quiz Function** Creating a robust well-designed MCQ requires careful preparation. Attend an assessment design session with	Quiz tool on Moodle	Online terminal quiz exam should be set up to open at the times scheduled on the **institute exam timetable.** When liaising with an **External Examiner (EE)** on *MCQ type Online Terminal Exams*, it is recommended either 1) the lecturer sets up a TEAMS call with the EE and 'shares their screen' of the quiz exam on Moodle or 2) set the EE up as 'an affiliate' of GMIT Moodle through your School/Dept. and then provide them with access to your module page on Moodle by enrolling the EE as a 'non-editing' teacher. This set-up can be explored further in the Teaching and Learning clinics planned. Always have **a variety** of question types. **Always 'test your quiz/assessment' in advance of the exam.** Enrol a colleague as a student and run a test and ensure the instructions are clear and the test runs as planned. This is critical. **Deferred feedback** is generally the preferred option to use for summative MCQ's/online assessment quizzes. **This allows the lecturer to review the marks before the student receives them.** Online quiz assessments should be a combination of 'short answer' **and** 'essay' type questions to allow learners to apply knowledge, reflective statements and distinguish themselves.

	the T&L Office learning technology team to learn about MCQ design set-up and considerations.		**Weight your questions in the Quiz:** careful consideration should be given to the marking scheme. For example, short answers (lower weighting) and essay/reflective statements (higher weighting). If you are using a time limit or closing the quiz at a certain time, be sure to set '***When time expires'*** to '***Open attempts are submitted automatically'***. This will save whatever the learner has answered so far and will prevent lost work. Make quizzes as **unique as possible** for each learner by inserting **random** questions from a question bank category and using 'short answer' and 'calculated' questions where variables are generated randomly. There is an option to prevent **Backward navigation (on Moodle quizzes).** If you are using this feature, make sure students are aware in advance. This feature **will reduce the chance of cheating and of lost work**. Provide students with **instructions for the online exams** and how to manage remotely. A sample guide is available here.
Recorded presentation/ Screencast (upload stream link to presentation to Moodle)	Students can record a PowerPoint presentation/ Screencast/a Podcast and submit the recording on Moodle assignment by a specific date and time. For the Podcast option, ask students to submit a short report or reflection on learnings with the podcast.	MS Stream and Teams	Submit the students **Stream link** via Assignment option in Moodle. Ensure a clear **rubric** is used for this assessment. Plan for an assessment literacy activity with students in advance of any final assessments planned. This can include a discussion on the assessment criteria and rubric.
Live Presentation (via MS Teams)	As an alternative to delivering a presentation in class, presentations can be delivered live during class time or take place on an end of term showcase/semester finale event on MS Teams.	MS Teams	This would **run on Teams and a set date and time.** Session can be recorded for internal examiners review.

Collection of e-tivities completed **e.g., Discussion Forums** **Set-up video resources:** **Teaching Remotely training resources and Moodle guides on GMIT LearnOnLine link here.** **GMIT Moodle T&L Assessment Tools Resource**	E-tivities provide a framework for enhancing active and participative online learning and can be graded. Learn more about e-tivities here. Forums allow students to do much more than discuss topics – they can upload and post project work and assignments for their peers to review and respond to. Lecturers can create forms for assessments/topics with rules for peer reviewed responses. The forum posts can be rated or linked with the Gradebook tool to allow the lecturer to provide grading. The advantage of forums over the Assignment tool, is that students can become involved in peer assessment. The forum also allows for self-assessment and reflection – students can take feedback onboard and revise their work at different stages through multiple submissions. The Discussion Forum can be a useful tool for assessment projects that requires distinct stages or tasks that build on each other. A project might require students to produce smaller pieces of work at different stages in the process. For example: a proposal, a methodology outline, a reading list/bibliography, sample questions for a survey, an outline of tools/techniques chosen – these can be revised and combined later to feed into a larger project or process.	Moodle tools to consider - Discussion Forums Database/ Journal activity	Questions/tasks set should require the learners to draw on their reflections/experiences/topic choices/literature sources etc. Be clear about expectations: don't set essay type questions for responses with a 300-word limit. Be explicit about any conditions, for example: due dates, word count, attachment limitations. If you want to allow multimedia responses, require students to link to their online video/screencast/podcast link on Stream.
ePortfolio **(web platform e.g., WordPress, Weebly, Pebble Pad etc.)**	Presenting evidence across a range of topics on achievement of learning outcomes and this includes a reflective commentary. ePortfolio assessment rubric guide – check out this link.	WordPress Weebly PebblePad	Explore the value of ePortfolio assessment through a T&L Office workshop (if interested, email TLO@gmit.ie to register your interest).

Proctored oral/written exam	In the event a student must take a proctored oral or written live exam, a lecturer or invigilator can arrange a live meeting link via MS Teams. In the live exam the student would share their screen and webcam. This is for a one to one, special case scenario.	MS Teams environment Or through a professional Proctoring Exam services organised with GMIT Exams Office (partner Proctor Exam).	This may be a requirement for some disciplines/courses associated with certification.

References

- Advance HE (2018). Transforming Assessment in Higher Education. Project resources and framework available at https://www.advance-he.ac.uk/guidance/teaching-and-learning/transforming-assessment
- Advance HE (2021). Engaging Students as Partners in Assessment with Dr Cathy Bovill. Available on GMIT TLO at this link.
- Brown, S. & Sambell, K (2021). A compendium of examples of authentic assessment in practice from diverse disciplines. Available on TLO SharePoint at this link https://galwaymayoinstitute.sharepoint.com/sites/GMITTeachingLearningOffice/SitePages/Resources.aspx
- Bovill and Cook-Sather (2014). in Engaging Students as Partners in Learning and Teaching: A Guide for Faculty. Wiley, ISBN: 978-1-118-83606-4.
- Biggs, J. & Tang, C. (2011). Teaching for Quality Learning at University, Maidenhead: Open University Press.
- DCU TEU (2020). Technology-Supported Assessment Exemplars: Published version 2 November 2020. Available at https://docs.google.com/document/d/18HRWYvx4ZXqv3okXo10UyXbmTN99B6u7JE_S7jMDRPU/edit
- Freeman, R. and Lewis, R. (1998). Planning and Implementing Assessment**.** Kogan Page, London, 1998, 318 pp. ISBN 0-7494-2087-1
- Ginty, C. (2021. Writing Learning Outcomes and Developing Assessment Rubrics and more. Guide available on GMIT, TLO SharePoint at this link https://galwaymayoinstitute.sharepoint.com/sites/GMITTeachingLearningOffice/Resources/Assessment&LOsDevelopGuideFeb2020%20(1).pdf
- GMIT (2019). Assessment Guidelines. Available on GMIT TLO SharePoint https://galwaymayoinstitute.sharepoint.com/sites/GMITTeachingLearningOffice/SitePages/Resources.aspx
- Laurillard, D. (2012). Teaching as a Design Science: Building Pedagogical Patterns for Learning and Technology. Routledge, ISBN 9780415803878.
- Ní Bheoláin, R., Lowney, R. & O'Riordan, F. (2020). Students as Partners in Assessment (SaPiA): A Literature Scoping Review. DCU, Teaching Enhancement Unit (TEU).
- National Forum (2017). Assessment OF, FOR and AS Learning: Continuing the Debate and Creating a Focus. Insight Paper. Available at https://www.teachingandlearning.ie/wp-content/uploads/NF-2016-Assessment-OFFOR-and-AS-Learning-Continuing-the-Debate-and-Creating-a-Focus.pdf
- National Forum (2016). Enhancing Programme Approaches to Assessment and Feedback in Irish Higher Education: Case Studies, Commentaries and Tools is available at www.teachingandlearning.ie
- Nicol, D. & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. Studies in Higher Education, 31:2, 199-218, DOI: 10.1080/03075070600572090. To link to this article: https://doi.org/10.1080/03075070600572090
- QQI (2018), Green Paper on Assessment of Learners and Learning: Stakeholder Feedback. Available at https://www.qqi.ie/Downloads/QQI%20Green%20Paper%20Report.pdf
- Winstone, N., & Carless, D (2019). Designing Effective Feedback Processes in Higher Education: A Learning-Focused Approach. 10.4324/9781351115940.
- Winstone, N., Nash., R., Parker, M., & Rowntree, J. (2017). Supporting learners' engagement with feedback: A systematic review and a taxonomy of recipience processes. Educational Psychologist, 52, 17-37.