



# Online Assessment in UCD

## Outcomes of Consultation with Schools



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# Outcomes of Consultation with Schools

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## Introduction

Much innovative practice exists in relation to assessment across different schools and colleges in UCD which highlights different approaches in ensuring assessment retains its integrity and supports students' learning. At UCD, we want all our students to experience a variety of assessment approaches during their educational journey so that they can learn in ways that are appropriate and relevant both now and for future learning contexts.

Online assessment is part of the suite of assessment approaches that we wish to offer all of our students at different points in their academic journey. Covid-19 has demonstrated the advantages and challenges that online assessment presents and recent trends indicate that there is an increased demand for scheduling, and support for, online assessments. Through wide consultation and careful planning, we need to ensure that online assessment, as one element of our assessment approach, is allocated the appropriate supports and resources to ensure success. This will require close collaboration between UCD Teaching and Learning, UCD Assessment, UCD IT Services, UCD University Secretariat, UCD Estates, UCD Faculty and UCD Students. It will also require the ongoing commitment of UCD management to this approach.

## Methodology

This report presents the findings from a consultation held with each school's Teaching and Learning Committee across 37 schools in UCD. Each school was sent a submission form which explored different aspects of online assessment. The areas explored included the extent to which online assessment is currently being used; the elements of online assessment prioritised since Covid-19; elements of online assessment that are considered challenging and the potential benefits of online assessment. Schools were also asked to consider the changes that they had implemented to facilitate online assessment, the ways in which UCD could enhance/improve the online assessment experience and what is required to deal with issues of academic integrity and ethical practice. Submissions were received from 36 of the 37 schools.

On receipt of submissions, a semi-structured interview was organised with each school's Teaching and Learning Committee. These interviews took place over Zoom during the period October to December 2022 where members were asked to expand upon the answers in their submissions to better understand the context in which they operated online assessment in their schools. The interviews were recorded over Zoom for transcription purposes with the permission of the participants.

The emergent major themes from the submissions and interviews were examined for consistency in meaning and context (Fereday and Muir-Chochrane, 2006). The analysis also employed a semantic approach where key words were identified from the submissions which could be clearly linked to the different dimensions of online assessment. The themes were iteratively refined using the constant comparison method (Krippendorff, 2004) until a relatively comprehensive set of themes was developed for analysis.

The findings from this consultation are very important as they provide insights into the lived experience of faculty using online assessment during Covid-19, their analysis of that experience and dimensions of online assessment which they found both challenging and beneficial. Many useful insights emerged in relation to areas for further development, additional resources and training necessary to support a successful approach to online assessment. Members of the school's Teaching and Learning Committees expressed serious concerns in relation to the issue of academic integrity and ethical process which forms a very important part of any analysis of online assessment approaches.

Chapter one explores the ways in which schools interpreted the UCD definition of online assessment and the extent of online assessment as an approach within the schools. Chapter two explores the challenges faced by faculty, while chapter three focuses on the beneficial aspects of online assessment. Chapter four considers whether and how faculty adapted their teaching to facilitate online assessment. Chapter five presents the institutional actions viewed by faculty as necessary to improve the online assessment experience. Chapter six concludes with an analysis of faculty views about academic integrity and ethical practice in the assessment processes.

Finally, we would like to thank participating staff from each of the Teaching and Learning Committees who contributed to this research and its findings. The insights shared will contribute to the development of an informed, long-term approach to assessment, academic integrity and online learning at UCD.

# Chapter 1

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## Online Assessment: Definitions and Practice

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## 1.1 Introduction

The consultation with schools sought perspectives on the current definition of online assessment, the rationales employed for continuing with online assessment and the reasons for reverting to face-to-face assessment scenarios. A range of viewpoints emerged in relation to all three and these are set out below.

## 1.2 Definitions

UCD defines online assessment as *approaches that are enabled by a variety of digital technologies to include online exams, online assignments and activities, online submissions and technology-enabled feedback* (UCD Teaching and Learning). This definition was in place throughout the pandemic when teaching, learning and assessment were delivered online.

It emerged during the consultation that some schools find this definition to be nebulous and have questions regarding the scope of its applicability in practice. The following comments are illustrative:

*Does this refer only to activities that are undertaken by students in a defined timeframe, i.e., online quizzes or timed assessment uploads? Or does this refer to all assessment activities that students are expected to complete that have an element of online interaction (e.g., is a recorded presentation considered as online assessment?). If the definition refers to very defined online activities, then there is a sizable number of online assessments deployed in school. If this definition relates to all online activities, then all credit bearing modules have online assessment requirements* **(School: College of Business)**.

*The label “online assessment” can alienate colleagues, as it is not really inclusive and not encompassing of types of formative assessment and online engagement online like class dynamics, self-assessment, etc.* **(School: College of Social Sciences and Law)**.

Schools described the variety of ways in which online assessment is used in their modules, concluding that it is now almost ubiquitous. The following comment is representative:

*What we found when discussing this is that when we look at this definition of online assessment (OA), we’re using OA in pretty much every module but in different ways. In studio modules, we are using OA in that the formative project submissions and all of the summative portfolios are submitted online. In some [cases], they also submit [in] hard copy, but in some cases all submissions are entirely online. In some modules then, there are a variety of interfaces - Brightspace or Google Drive, or Miro and Zoom. What we found in modules across the school, especially lecture-based modules, is that because of Covid there is now much more continuous assessment across the school, and that’s being conducted online (submission and feedback online). In studio/project [assessment?], feedback is still primarily face-to-face. Lot[s] of different things going on. Google Drive and Miro allow peer-to-peer sharing between students also so everybody can see everybody’s work (which is sometimes what we want!).* **(School: College of Engineering and Architecture)**.

Some schools discussed online assessment in the context of specific assessment activities within formative assessment. In this discussion, it was apparent that varying interpretations of the official definition of online learning are in place:

[An]other association is that it only related to MCQs [multiple choice quizzes]. When talking to them, I knew my colleagues are doing online assessment, posters, presentations, using Cahoot, Poll Everywhere. They don't think of formative assessment as online assessment. That was [the] first big learning of this consultation. [There is a] Misconception of what it means  
**(School: College Social Sciences and Law).**

Other schools made a distinction between online assessment and the electronic submission of assignments:

[I] Would also like to mention there are different interpretations of online assessment. One thing that has come back, where students used to submit in person, [they] now submit online. But this [is] not really online assessment. [It] Does work well. Digitised rather than online. [It] Has benefits for module coordinators **(School: College of Science).**

One school had worked out a very clear local approach to online assessment, clarifying that it refers to assessment supported by technology, real-time online assessments and submission of assessments through video:

We will define online assessment in three ways:

**Managing assessment through supported technology:** The school has aimed to standardise digital submission via the VLE of all assessments where feasible. Many traditional pieces of coursework (in written format) only rely on the VLE for upload, assessor review, integrity check and provision of feedback. This practice, however, positions the school to rely on a functioning IT/VLE system for assessment management. It also depends on an internet connection and a computer device. This was evidenced at one point last year during grading when Brightspace was not accessible for a few hours during a short turnaround grading period. Take-home exams have become increasingly popular during Covid and remain across some modules. The reliance on technology for the student is in downloading and uploading assessments at specified dates/times.

**Online assessments (i.e., where the assessment takes place in real time on an IT device):**

Across most modules, there are low-stake assessments utilising real-time online assessment. The majority are embedded in Brightspace, but some utilise external platforms. Brightspace quizzes (mainly objective tests) are utilised across many modules for continuous low-stake assessment. Some MCQs conducted in real time on Brightspace have a higher weighting, i.e., 40-60% weighting lending more to higher-stake assessment. These are mainly across taught graduate programmes. Most of these modules have another different form of assessment strategy. Popular other low-stake assessments utilise peerScholar and discussion forums. External platforms embedded in Brightspace are utilised, taking the form of real-time online assessments. These assessments are good quality learning resources with multimodal learning involving interaction, formative assessment, and feedback mechanisms. Examples include HSeLanD, education and training programmes, McGraw Hill Anatomy & Physiology Smartbook, anatomy dissection, and physiology tutorials).



Completion is increasingly monitored through uploading certification and issuing a digital badge in Brightspace (low-stake assessment). Some low-stake formative assessment uses locally developed reusable objects (using H5P or other software such as Articulate). These local resources allow an assessment to be tailored to align closely with content/learning outcomes. The school had been part of the H5P pilot and led by our TEL team in partnership with various faculty. The Zoom licence has facilitated online assessment, particularly for taught graduate programmes, with increasing usage of Zoom classroom for classroom debate/ discussions/ group/individual presentations. Zoom also facilitates group/cooperative learning and enables groups to meet virtually.

**Submission of assessment in video form** is becoming increasingly common i.e., individual/group presentations and simulation/clinical skill practice conducted in the home environment (School College of Health and Agricultural Sciences).

A number of schools referenced the fact that the online submission of assignments is now much more frequent than prior to Covid-19, as is the grading of assessment online:

Since Covid, the online submission of PDF versions of completed assignments, including tutorials and practical write ups, is used across all stages. This is also graded online and has replaced the paper submission across many modules (School: College of Science).

Online submission of offline assessments – such as essays, lab reports, group assignments, etc. – has been widely embraced and is viewed as a simpler, more efficient system than hard-copy submission (School: College of Engineering and Architecture).

A number of schools discussed online assessment in the context of continuous or formative assessment and the challenges it poses in the context of shared modules:

There is a lot of online assessment used for continuous assessment in our school. We've had some discussion about the level of continuous assessment, and about the scheduling of same, timetabling. It's very challenging, scheduling, because the programmes often incorporate modules from outside our schools, so getting engagement from those can be challenging. And many of our modules [are] used by other programmes, so alignment on assessment timing is hard (School: College of Architecture and Engineering).

### 1.3 Reasons for Using Online Assessment

Online assessment was considered an important part of students' learning, with schools demonstrating that they had carefully considered the most appropriate form of online assessment to enable students to adequately evidence the achievement of learning outcomes. For one school, this was very important:

Online assessment is extensively implemented across all stages of the [ ] programmes. The assessment strategies for these programmes consider three domains of competency: knowledge, psychomotor skills and professional attributes. Several methods to assess student learning that are appropriate for the domain of competency being tested are

*implemented across all stages of our programmes, for example: knowledge: multiple choice questions/single best answer; short written answer; essay; poster; presentation; projects (some assessments are submitted individually or by a group). Psychomotor skills: Objective Structured Clinical Examinations (OSCE); Direct Observation of Procedural Skills (DOPS). Professional Attributes: Workplace Based Assessments (WBAs); Communication Simulation; Projects; ePortfolio. Where practical, online tools are used to deliver these varying methods of assessments. The school primarily relies on Brightspace functionality for knowledge-based assessments and for some professional attributes assessments. A third-party workplace-based assessment e-portfolio tool (MyProgress) was acquired to assist in the delivery and management of WBAs and DOPS. PhysioEx has been acquired to support the teaching and assessments of physiology* **(School: College of Health and Agricultural Sciences).**

*Staff concentrated on trying to pick online assessments that are fit for purpose while ensuring the learning outcomes of the modules were being met. Not all content lends itself to an online MCQ* **(School: College of Health and Agricultural Sciences).**

Another school saw the value of online assessment in supporting the development of fieldwork skills amongst students:

**Fieldwork.** *Used as an online tool for collating data for multiple students. Might be 280 in different groups collecting data - they collaborate, and all have access to it. Used across different field trips. Sense is that they do a lot of continuous assessment in GIS, but they do have pinch points showcasing their ability to use different GIS tools. They set them a problem that requires GIS. Requires access to computing and online resources. Used to do them in moderated class environment. But couldn't have this during Covid. They also do tests to ensure they understand the principles behind what they're doing. They want them to have depth* **(School: College of Social Science and Law).**

One school moved away from in-person examinations for both pedagogical and practical reasons:

*All assessments are uploaded online. We do not have any in-person terminal exams. For [\_\_\_\_\_], they have performance projects and they also have to submit reflective pieces, so there is still an online component with this. Our fear is that if we are returning to in-person exams, we have to offer online alternatives also* **(School: College of Arts and Humanities).**

Other schools have continued with online assessment for very practical and resource-oriented reasons. Reference was made to the administrative burden arising from responding to extenuating circumstances as a reason for employing online assessment:

*We have prioritised online exams for reasons relating to student and staff safety, and to lessen the administrative and academic work of dealing with complicated issues arising from extenuating circumstances and absences* **(School: College of Arts and Humanities).**

Large class size was a factor for some schools in opting for online assessment approaches which are linked primarily to continuous assessment rather than terminal exams. Even if not always the preferred option for assessment, it is considered a necessary and practical one, although concerns around academic integrity were also raised:

*Online testing is extensively used as a method of continuous assessment. It is particularly popular as a form of assessment for very large class sizes. It is perhaps less popular for terminal exams due to the limitations of the current online testing tool to meet the needs of the exam hall style test (School: College of Business).*

*Most of our modules have a few hundred students, so a mid-term assessment with the final exam is preferred. With 550 students an online quiz is really the only way to assess, even if it's not the preferred way it is necessary. A lot of midterms are still online, but some have reverted back to in-person due to academic integrity concerns (School: College of Social Science and Law).*

The programme stage was also a consideration for a number of schools in relation to using online assessment. In general, there was a tendency to use online assessment approaches in the earlier stages of the degree, both due to the nature of the learning being assessed, and also due to concerns with safeguarding the integrity of assessment in later stages of a programme where assessment contributes to award outcomes. This was reflected across both STEM and social sciences disciplines:

*The level of answers and the depth of knowledge, and the importance of the weighting [at different stages and the contribution of the assessment]. At Stage 3 and 4, it [assessment] contributes to their final degree. At Stage 1 and 2, we have two general classifications of modules. There are some that lead directly to the [\_\_\_\_\_] degree programme. And then a large number of modules in Stage 1 and 2 that are going toward degrees outside [\_\_\_\_\_]. Common to Stage 1 and 2 modules is incremental knowledge that can be readily assessed in the form of quizzes etc. Typically, we're addressing pockets of information that can be built on. So, the decision is driven by content but also wanting to protect integrity at Stage 3 and 4. Simply put, Stage 1 and 2 are conducive to simple online assessment. The kinds of questions we can ask to probe learning outcomes at Stage 1 and 2 are relatively straightforward ... do you know this question, can you do this calculation? But at 3 and 4, we're looking for synthesis of parts of the course, that you can draw structures etc. And while there could well be mechanisms to do that online, you come back to the integrity issue. You're never sure who is doing the online exam (School: College of Science).*

*Mostly only in first year modules. They contribute 10% of students' final grade. (School: College of Social Science and Law).*

Regular online assessment in the early stages of a programme was viewed by one school to be a useful way to promote student engagement and provide regular feedback on progress, whilst also easing the transition from school to university. This regular online assessment in the early weeks of Stage 1 was viewed as enabling the school to identify students who may be struggling and intervene as appropriate. Whilst the use of online quizzes was associated with inflated grades, this was considered a worthwhile trade-off in terms of the aforementioned benefits, though the burden of so much early online assessment on both faculty and students is an ongoing factor to be considered:

*Fortnightly MCQs. Always the same day per week, they have three days to complete and two attempts to do it. We implemented this for a number of reasons. So, students could get feedback on their progress, transitioning from school to university. [It] promotes ongoing continuous engagement. Also, we want to be able to track our students, and not wait until week six to find out how they're doing. With the quiz, by week four we can see who is struggling. Allows us to contact them. At a board level, exam board, we do notice the quiz has a slightly inflationary effect. But we're prepared to accept that on the basis that benefits outweigh. Have had some feedback about over assessment. Five assessments (MCQs) plus two other larger assessments. We need to keep this in mind. It is also an administrative extra burden to chase up students* **(School: College of Social Science and Law).**

The challenging contexts faced by students were also referred to as a reason for using online assessment, which was considered to better enable and encourage student engagement with learning:

*Due to attendance and engagement issues related to Covid-19 and the housing crisis, we have prioritised those forms of online assessment that increase student participation and engagement, such as online quizzes, discussion boards, recorded presentations from students, journal submissions, pass/fail assessments, creative assessments, and practical portfolio-based assessments. These assessments were selected in accordance with Universal Design for Learning principles to increase student engagement and to diversify assessments so that they are more inclusive of all types of learning (and are not always text-based)* **(School: College of Arts and Humanities).**

## 1.4 Reverting to Face-to-Face Assessment

Schools offered a number of reasons as to why they discontinued the use of online assessment after Covid-19, referencing the nature of the subject, an inability to evidence critical learning outcomes by other means, issues around grade inflation, lack of confidence in results and concerns around academic integrity more broadly.

*More of an emphasis on final exams in more technical subjects. Great deal of value placed on them. They can't be substituted for demonstrating skills that students need to graduate. Feel we don't have the same scope for essay type submissions, for full module assessment. When new regulations came in, discussion was on [the use of] open book [exams]. Very against this on science side, but obviously this happened anyway with Covid-19. We learned a lot, but we were quite keen in the main to return to invigilated, proctored exams. We learned what was possible, but we also learned that there are academic integrity issues. Increased suspicions. Widespread increase in grades, partly because people were accommodating of situations. But we did consider whether we were being taken advantage of. It's a question of whether MCs can stand over their grades, and be happy that [the] student has learned the skill which they can pass on to a career. We want to be able to have confidence in our results, and online doesn't give this. We did learn that we can adjust exams and ask in different ways that satisfy learning outcomes. So in theory OA are fine, it's the confidence in the results. Academic integrity issues* **(School: College of Science).**

*Since the welcome return of in-person teaching, more tutors are returning to pen and paper language exams, as the availability of online dictionaries was skewing results in some cases, and in others was potentially daunting (School: College of Arts and Humanities).*

Some schools decided to revert to supervised examinations due to these concerns about academic integrity:

*Integrity and plagiarism and that we couldn't be sure that students were not collaborating. This is the main reason we have reverted. Students can text each other and use WhatsApp groups. It is the cheating. If you are asking people an essay type question, there is always the concern about access to the internet. I know that with MCQs you can randomise the questions, but students can still text their friends. The only way to guard against this is invigilation (School: College of Social Science and Law).*

*In terms of exams it seems the vast majority of faculty have gone back to in-person. Faculty are concerned about plagiarism ... Yes, cheating and the integrity of the exam process are the biggest challenges. A lot of tools are being used to try to protect integrity, but we know that misconduct was widespread during Covid (School: College of Health and Agricultural Sciences).*

One school indicated that senior academics were more likely to adopt face-to-face approaches over online assessment due to concerns around academic integrity and practical issues related to the discipline in question:

*In terms of face-to-face vs online, it's the more senior academics that have tended to revert to face-to-face. It's mostly related to concerns about integrity. If you want the student to draw diagrams, do equations, think it is easy for students to do it physically on paper (School: College of Science).*

One school offered students workshops that focussed on in-person examinations to build an understanding of the in-person exam process:

*On returning to campus and face-to-face examinations, students were anxious about how examinations worked, this emerged through staff/student committee meetings. In response, one school delivered workshops about face-to-face examinations. Staff members in question put on sessions to explain how exams work. Given worries about plagiarism, that is generally the reason. Little bit of diversity is good too. Also UDL, diversity of assessment. Still think that exams have a place, and students can see the assessment option before they select modules. If they want to avoid exams they can (School: College of Arts and Humanities).*

Some schools discussed a reluctance to engage with online assessment due to technical and resource constraints in UCD and related concerns around student equity of access to the necessary technology.

*Post Covid, many MCs wished to continue the delivery of their assessments (typically MCQs/SBA) online in an invigilated setting on campus. However, due to venue constraints and reliability of UCD computer hardware several examinations could not proceed as envisaged (School: College of Health and Agricultural Science).*

*In some respects online in-class tests for modules would perhaps be easier than in-person in-class tests both for staff and students in terms of devising, answering, assessing, and communicating feedback, but the difficulty of the logistics involved (e.g. where will a large cohort of students sit to do their timed online in-class test? How will computers be monitored? How to accommodate students with various kinds of disability? How to handle students who lack equipment of the appropriate quality?) (School: College of Arts and Humanities).*

*It's more to be fair to the students so everyone is getting the same treatment. We can't guarantee they have access to what they need, computers, broadband, typing (School: College of Social Science and Law).*

Concerns were also expressed about the efficacy of online exams in demonstrating the achievement of relevant skills and competencies in programmes leading to professional practice:

*Many of these assessments have returned to the more traditional methods due to issues with technology and the limitations of online assessment of skills and competencies for professional programmes (School: College of Health and Agricultural Sciences).*

Another school referenced the implications for assessment of learning outcomes within their discipline of continuing with online assessment:

*Our main stumbling block is how to measure a student's level of language when they're on their own. Oral exams [are] good for this, because they're right in front of you. There is nothing else that can replace the RDS for the "on their own" experience, consolidation of grammar and vocabulary in their heads. We have realised the value of other kinds of written assessment, we've had to rethink what it means to cheat in language. In real life, they do have access to Google Translate. But there is an art of how all [is] used together. We've had to think about what this means for [the] discipline... Is it two types of assessment that's needed? One on their own and one with [a digital] tool (School: College of Arts and Humanities).*

One school lacked confidence that the range of skills such as critical thinking etc. required at postgraduate level can be evidenced through online assessment:

*I think for most students, especially at a graduate level, assessments need to demonstrate critical thinking, ability to discriminate, process, synthesise and this does not appear to occur with online assessments as currently constructed and as evidenced by the grade inflation observed (School: College of Health and Agricultural Sciences).*

## 1.5 Conclusions

Schools defined online assessment in a number of different ways. In general, the continued use of online assessment was linked to formative and continuous assessment approaches rather than terminal exams. A number of schools saw value in having online assessment especially when it came to evidencing the achievement of learning outcomes and developing skills within a discipline. Managing the assessment requirements of larger class sizes also influenced the use of online assessment. The programme stage also played a role in determining whether online assessment was used and tended to be deployed in the initial stages of the degree programmes, where concerns around academic integrity were less prominent.

Where schools reverted to face-to-face examinations, a number of reasons were offered which included concerns around grade inflation, lack of confidence in results, concerns around academic integrity more broadly and practical issues such as lack of resources and the additional time investment required in relation to designing and facilitating online assessments.

# Chapter 2

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## Aspects of Online Assessment which are Found to be Challenging

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## 2.1 Introduction

It is clear from the contributions made across the six colleges that there has been a widespread adoption of online assessment. Whilst there have been many successes and benefits identified in that regard, an array of challenges were also highlighted. Some of the difficulties experienced by faculty appear to be related to the rapidity of the move online in response to Covid-19 and the fact that systems are not yet fully in place to maximise the efficacy and consistency of the online assessment experience for faculty or students.

*We were told at short notice that exams couldn't be held face-to-face, and exams needed to be adapted to online, but we actually weren't allowed much time to convert the exams. They exams were conceived based on face-to-face* **(School: College of Arts and Humanities).**

*It is also less easy to coordinate them because there is no university-wide timetable for online exams* **(School: College of Arts and Humanities).**

Schools pointed out that online assessment is not suitable for every discipline or for aspects of learning within some disciplines:

*I think that the shift to online has an effect. The modalities change what is possible. We might want to assess in a particular way, but due to circumstances might not be able to. We already talked about translation, but not only one. Even with oral exams, we want to test spontaneous ability to produce [\_\_\_\_\_], and to do so in circumstances that they're thrown off what they want to recite to us. In a live oral format, we can interrupt and make them improvise. When we switched to recorded orals this is no longer possible. It may be obvious they are reading a text. Not really the same thing. In that case can fix by saying we'll have the oral online live, but it's still different to having student in front of you* **(School: College of Arts and Humanities).**

The limitations of the VLE, Brightspace, and the range of challenges faced by faculty in implementing online assessment, including grading and providing feedback to students are discussed in this chapter.

## 2.2 Online Assessment and Brightspace

Contributors acknowledged that Brightspace is now widely used for online assessment, especially for larger class sizes and in the context of multiple-choice quizzes (MCQs), submission of assessment and for the provision of feedback:

*Most people now use Brightspace for submission and for feedback. The office staff are pushing back on any hard copy feedback. We are trying to promote timely feedback in line with the academic regulations* **(School: College of Social Sciences and Law).**

One school noted, however, that usage of the VLE by both faculty and students has diminished post pandemic and that there is a greater return to face-to-face activity:

*I think since we are more reverting to in-person, some of the colleagues this term haven't quite updated the Brightspace as much as they were during remote. They are less reliant on providing information on Brightspace. Students checking less frequently also* **(School: College of Arts and Humanities).**

Schools indicated varied use of online assessment methods based on programme stage and the appropriateness of the assessment method to the learning being assessed. The following example is illustrative:

*We have quite a mix of assessments. In the early stages, we have more MCQs. As students progress, more complex essays, theses, data interpretation. School develops a grade from first year to final. Needs are very different through stages* **(School: College of Science).**

Despite this widespread usage, many schools referred to the challenges in conducting online assessment through Brightspace, both in terms of the difficulties inherent in the platform itself and those related to faculty expertise and resources:

*[There] Are issues with it. Brightspace doesn't support large file sizes - [it is] clunky, non-intuitive. On our studio-based modules, you have teaching teams. So, [there are] multiple people trying to access things, and all with different levels of expertise. Also, [there is a] bigger admin load, because of limitations of Brightspace* **(School: College of Engineering and Architecture).**

*Brightspace is tedious and more difficult to use than it should (non-intuitive), especially for quizzes* **(School: College of Engineering and Architecture).**

*Many module coordinators [MCs] were unsure of the process for creating and setting exams* **(School: College of Health and Agricultural Sciences).**

Particular challenges were identified in relation to the use of MCQs in Brightspace:

*The Brightspace system for setting up and administering MCQs is clunky, cumbersome, and not intuitive* **(School: College of Social Sciences and Law).**

*Managing MCQ questions in Brightspace has raised challenges. Faculty expressed that it is very time-consuming to input each MCQ question and response into Brightspace when you have hundreds of questions across various Microsoft Word documents. It is difficult to download a pool of questions and responses from Brightspace into an easy-to-edit document* **(School: College of Health and Agricultural Sciences).**

One school cautioned that skill is required in designing appropriate questions for quizzes, concluding that MCQs are not appropriate in some contexts:

*One thing we have noticed is that there is an art to asking the questions which can be overlooked. We can see this in other schools too. There is a need to put a lot of work into the question side. Questions cannot be ambiguous and you need to be exact with the answers. If the module does not lend itself to this certainty, online should not be used. MCQs should not be used for the sake of it. There needs to be a science to the answer* **(School: College of Social Sciences and Law).**

Concern was raised with ensuring the appropriateness of online assessment:

*Setting exams questions for online assessments ensuring they are an accurate assessment of knowledge (or particular learning outcome/s) Preparing adequate content for online assessments* **(School: College of Health and Agricultural Sciences).**

These concerns extended to regulations (or the absence thereof) around students missing online exams and the additional workload and pressure that faculty experience as a result:

*Where students miss online exams, there should be an official application for an IX, and staff should not be expected to hold a second examining period, or rush through a second assessment within the exam period, regardless of the circumstances. In other words, staff should not be expected to run two simultaneous systems/modes of examination within a single exam period. Procedures for missed online exams should be consistent across the board to avoid individual staff being subjected to lobbying. Students should be required to provide documentation for missed online exams demonstrating that the student could not have attended the exam* **(School: College of Arts and Humanities).**

Challenges setting up and conducting timed exams and the additional administrative overhead associated with online assessment were raised by some schools. Particular logistical issues were identified in this regard, including a lack of on-campus venues with stable wifi to host online assessment:

*The most common challenges cited with online assessment were technical difficulty in setting up timed examinations on Brightspace; academic integrity issues and increased administrative overhead compared to traditional examinations. For example, one colleague reported that: "It seems to be impossible to have a timed exam with any kind of short timeframe because students raise all kinds of issues like internet connectivity, being abroad etc., the hassle involved for the module coordinator in dealing with these issues is far greater than in a straightforward RDS exam where the rules and expectations are clear and adhered to."* **(School: College of Social Sciences and Law).**

*There is also an issue of where students are supposed to do timed online MCQs if they are on campus. For example, they may not be able to find a quiet spot with adequate wifi. In general, it is difficult to strictly enforce time limits for timed tests, particularly if students have connection difficulties* **(School: College of Social Sciences and Law).**

Some faculty noted a preference for reading hard copy documents, in some instances because grading was found to be easier in that mode, but this also added to the workload of online assessment:

*Personal reading habits – I personally don't like reading from a laptop. So, I ended up printing out assignments and commenting on the margins. Extra work is needed to type in my comments* **(School: College of Engineering and Architecture).**

The challenges with online assessment identified by faculty across the six colleges can be broadly grouped into eight categories: technical issues; grading issues; feedback; limitations in Brightspace; lack of “distance” from students during assessment; academic integrity concerns; support and guidance for faculty; and assessment of students on international campuses. Each of these issues (with the exception of academic integrity which is discussed in Chapter 6) is dealt with in more detail in the sections below.

## 2.3 Technical Issues

A number of technical issues with the VLE were reported across the six colleges. The following examples are illustrative:

*Brightspace can change its settings with little notice, which causes issues. Quite a detailed set of steps that you need to take to get it right, so it can be tricky* **(School: College of Social Sciences and Law).**

*General standpoint is that Blackboard worked and Brightspace doesn't. Lot of good things, being able to use rubrics. But how it loads, times out, how it saves or doesn't save. You can lose grading when it times out. Issues with seeing grading progress. Multiple click-throughs to see what you're working on. Then need to refresh and lose where you're grading. It doesn't seem to be AI informed Brightspace* **(School: College of Social Sciences and Law).**

*Linking rubrics on Brightspace hard - very unintuitive. I write my rubric for the assessment criteria, go through with students, but can't seem to integrate fully with Brightspace* **(School: College of Engineering and Architecture).**

*Our subjects are not conducive to textbox or electronic entry so online submissions typically need to be scanned manuscripts* **(School: College of Science).**

Many technical issues identified related to the use of quizzes, both the challenges in setting them up and then in using them. The lack of stable internet connections for students was also raised in this regard:

*Some module coordinators felt that setting up a library of questions from which to choose for an individual assessment would take too long and therefore had to either reuse previous exams or create new exams each time. Some module coordinators felt that multiple choice questions (MCQ) quizzes were not appropriate for their subjects and tried to create other more creative options, which worked well for small classes. There were also issues reported around internet connections dropping during the exam time etc. A lot of module coordinators worried that students were trying to take advantage of the situation to get more time to complete the assessment, but when the process of reporting was followed it seemed to work very well* **(School: College of Health and Agricultural Sciences).**

*... internet issues, lot of needing to deal with accommodations, extra time, alternate dates. More about the burden of enabling the exam. In a way with the MCQ the burden is again the technical difficulties. You want students to get in touch with what they can't understand, but actually they get in touch much more readily about technical problems* **(School: College of Social Sciences and Law).**

Particular issues were raised in relation to the time required to set up MCQs and the ability to promote deeper learning through that format:

*Logistically, significant time is needed to set up the large pool of questions that is required to ensure integrity. Of course the benefit of this initial input is that the questions can be used again ... It is challenging to generate questions that drive deep learning and engagement*  
**(School: College of Science).**

Challenges arising from the absence of a negative marking function, as well as the submission of work by students, were also raised:

*There is also some technical juggling, with a lot of settings to remember each week to deliver the MCQs to specification. In general, Brightspace is seen as cumbersome for this task. Technical issues relating to students submitting were also mentioned by one colleague, while the absence of a negative marking function in Brightspace has also been perceived as a problem for colleagues who prefer this mode of assessment*  
**(School: College of Social Sciences and Law).**

One school identified the following issues in terms of designing a Brightspace quiz:

- *Implementing multi-step questions*
  - *Rigidity of marking rubric for individual questions*
  - *Managing uploaded workings from students – which impose an administrative workload during the quiz, come in a variety of formats, and can be very time-consuming to review*
- (School: College of Engineering and Architecture).**

Other technical issues identified in relation to the use of MCQs included limitations in accessing the student view of the quiz and in the types of questions that can be posed:

*It can be difficult to view quizzes from the student's perspective - how does it look to them? There is some functionality in Brightspace to enable the "student view" but it would be very useful to actually be able to enrol as a "test student" to run through everything, especially assessment*  
**(School: College of Social Sciences and Law).**

*Graphics which looked fine when MCQ set up were not visible properly to students*  
**(School: College of Health and Agricultural Sciences).**

*The Brightspace online question bank is a nightmare to use and does not support best practice. For example, I can't readily say "Answer 3 out of 5" without making marking really difficult (and students panic because Brightspace shows they got an artificially low mark because they got a 0 on the two questions they didn't answer). The question bank option is not easy to use ... I also feel I have to be "on call" in case Brightspace goes down or locks up (which has happened) since I let students take their tests anytime in a 12 hour period. Wish list: better testing system*  
**(School: College of Social Sciences and Law).**

The limitation of learning analytics in relation to MCQs was also raised as an issue:

*Analytics doesn't work if you use randomised questions, or question bank. You can't really see which questions were difficult for students or not. You don't have the percentiles either of how many in top percent etc. There is some use to it. But there are issues (School: College of Science).*

Limitations in addressing technical issues that arise during assessments or to see data when something goes wrong were also highlighted as challenges:

*There is also limited ability to see data when something "goes wrong" such as students claiming issues with a computer, the VLE, downloading content to answer a question (time, Excel files). I can see when their access is interrupted in a quiz and the start and end times, but not much more (School: College of Social Sciences and Law).*

*There needs to be an easier way to go in and offer a solution for a student who experienced "something going wrong". It's not easy for me to add time after a quiz has been attempted or swap in a new question (School: College of Social Sciences and Law).*

*IT issues with students' internet connection accessing exams and pressurised environment to troubleshoot (School: College of Health and Agricultural Sciences).*

The issue of verifying technical issues faced by students and how to address them was discussed in more detail by one school:

*There is a recurring problem of students missing online assessments and blaming technology issues (laptop, wifi) – many reasons for missing assessments might be genuine, but it is nearly impossible to verify. However, a blanket ban on retakes is not just and a blanket acceptance is impractical ... MCs ask students to provide hard evidence to back up claims of technology problems (School: College of Social Sciences and Law).*

A particular issue was identified in terms of settings "repeating each other" in relation to student access and timing:

*Works well but in some places there are settings which repeat each other. Special access and student timing are in one place on Brightspace, but if it is not confirmed or set in another place, the students get a message that their time has elapsed. Can cause different settings for the same group of people (School: College of Science).*

Other technical issues identified include:

- Browser incompatibilities for external learning packages, such as Articulate e-tutorials
  - Keeping materials up-to-date, which is time and resource intensive
  - Software update issues leading to technical glitches
- (School: College of Social Sciences and Law).**

## 2.4 Grading Issues

The limitations of Brightspace in terms of grading were also noted repeatedly, especially in some discipline areas, such as languages. It was considered that the mark-up tool is restrictive and slow with alternative software being preferred:

*Brightspace is clunky for grading certain aspects resulting in time being lost clicking in and out and waiting for pages to load (School: College of Social Sciences and Law).*

*Many feel that Brightspace mark-up is not easy for language collection. The workflow on Brightspace, how it organises the submissions etc., it is very hard to develop a workflow just online for correcting them. Sluggishness of [the] interface when marking-up text. Format issues with the ways submit (e.g. taking a photo and submitting is impossible to correct). A lot of us have worked out other workflows, e.g. download all, convert to PDF, use Apple pencil to scribble on. So I don't personally use Brightspace to input grade. They haven't thought through a workflow for rapid correction. Combined PDF much more useful. So unwieldy and burdensome. Yes, between Brightspace and Blackboard, think Brightspace more cumbersome. Tools more complicated especially for language assessment. Language corrections are very detailed. You need to keep clicking on same icons to correct. Issue not there on Blackboard. Still think paper and pen easiest. Mark-up tool on Brightspace conceived for essay marking only. In language we take in a lot of regular homework. You can set up a scheme where students in language modules submit to one folder, but after a while it stops collecting any more submissions. And need to keep updating every time (School: College of Arts and Humanities).*

*Marking via Brightspace is often more time-consuming than marking homework or paper exams. This is particularly true in relation to language papers, where multiple corrections may be needed in a single sentence. UCD could press for a more user-friendly interface, and perhaps provide more a general feedback on the annotation tools available on Brightspace (School: College of Arts and Humanities).*

Issues around the publication of grades, including student concerns if grades change were also highlighted:

*We cross moderated an awful lot of the assignments. The problem we have is that many students have a huge issue if their grades changed because they might be used to different practises from other universities. This becomes very problematic if we release provisional grades. There is push back and upset. This is hugely challenging and we have so many students ... Advice on managing expectations would be welcome (School: College of Social Sciences and Law).*

Lack of guidance and support on grading in Brightspace was flagged as a contributing factor to the challenges faced in this area:

*Note some Brightspace guides are broken. And the grading set up for assignment is very confusing. Entering grades [is] very challenging. No quick point of contact for support or troubleshooting (School: College of Social Sciences and Law).*

Transferring grades from Brightspace into Gradebook was also widely discussed with a mixture of positive and negative feedback provided. It was sometimes considered more straightforward for providing feedback, but faculty had concerns with the manual nature and time commitment associated with this activity.

*Setting up assignments, and transferring grades to Gradebook, can be confusing/frustrating. In large classes, assignments can take significantly more time to grade than exams, (including the provision of feedback). The main problematic aspect is that the classes can be very large and the amount of grading very time consuming. (School: College of Social Sciences and Law).*

*The Brightspace Gradebook link is an issue. Not easy to transfer grades, still transferring manually into Gradebook. Tech support for Gradebook and Brightspace not connected. Also Gradebook cannot deal with components (two out of three essays in final year paper), so we are summing components on a separate spreadsheet and again entering separately to Gradebook (School: College of Science).*

Concerns were expressed with the need to publish grades before being transferred to Gradebook. The importance of guidance for faculty to ensure the efficacy of the system was highlighted:

*To transfer grades to Gradebook, you have to publish them. Concern for academics that you have to publish even though it says they're [the grades] provisional. They are hesitant to transfer. Technical glitches also happen when you transfer, and when people are only doing it a few times a year, they worry about doing it correctly. Especially when it comes to grades (School: College of Arts and Humanities).*

*The inability to download annotated scripts was also highlighted: "... Annotations are not retained in bulk download of scripts" (School: College of Science).*

Maintaining consistency of grades, particularly in larger modules, was also flagged by schools as a concern:

*... one or two [issues around transferring grades to Gradebook]. We did resolve them manually by typing in. The grade items do not match what they should be in the grade book (School: College of Arts and Humanities).*

*Navigating the transition to the new Gradebook is fraught with errors. It creates huge amounts of effort for large modules. It is so hard to maintain consistency of grades. It takes huge time and data administration. We have to transfer grades, but that is doubling the work. We are drafting in one place and then transferring in another. Brightspace calculates grades differently also. The marks they see in Brightspace could be calculated different in the final system. To be able to publish the mark for them to see feedback in a timely fashion, but before the grades have been approved through the grade approvals process. Our educational technologist has written support documents advising that we need to keep saving grading material before transferring. We have noticed a fall-off in inquiries about grade transfer. There were so many problems in year one that a lot of people reverted to the way they used to do it. They're just doing it manually. Another issue is the pre-publishing upgrades at the end of the year. Which is the only way students can see feedback. It causes some distress among students (School: College of Arts and Humanities).*



Faculty raised concerns about the accuracy of grading schemes in Brightspace and the ability to change or amend grades. The different naming conventions used in the VLE versus those used in UCD grading schemes were also identified as a challenge:

*Regarding grading, it has happened a few times that faculty come afterwards and say they have published results, then suddenly realise they've made a mistake with an exam question. So they then need to unpublish and republish the quiz ... If you dock the grade for the incorrect question it causes issues. And then you end up fixing it manually. But there is always a risk that students have been given wrong results, and there are ethical implications here. If a question is removed, grades go up. Is that right? Faculty end up making spreadsheets manually. Grading becomes more and more complicated online and this puts people off. They revert to paper or the RDS format because errors can be easily fixed* **(School: College of Health and Agricultural Sciences).**

*Many module coordinators struggled with grading on Brightspace, especially using grading schemes, etc. There was a lack of confidence that automated grading would be accurate and also in working out percentage of grades, reporting, and transferring grades to Gradebook etc. The grades that you have to assign to MCQs and Brightspace have different names to those of UCD grade schemes, so when intending to use a grade scheme different to the conventional 40%, it is challenging to find which one to use as neither relate to each other* **(School: College of Health and Agricultural Sciences).**

*Another grading issue is that if you want to retrospectively change marks allocated to a question in Brightspace, if you've used negative marking, for certain question types in Brightspace it causes huge issues. With the analytics reports, you can run on how students have done per question, you can end up getting 100 combinations of answers per person. This is very cumbersome if you want to generate an Excel file. Can't work with them. Reports are dreadful. Setting up these reports is also very complicated* **(School: College of Health and Agricultural Sciences).**

Issues with the use of grading rubrics in Brightspace were also highlighted:

*You can write many sections of what should contain, but when you are assessing and you want to give a grade, it's prescriptive. Can find rubrics can over-grade (inflate results) and it becomes very tedious if you want to mark it to the level of precision you might need to. Can see value from students' perspective, of being clear on expectations. Useful for students, not so easy for marking. It seems to be possible on Brightspace, when grading, if the grade descriptors are used instead of actual letter grades that it can lead to more homogenous marking. When there is a second or third marker. What I mean is that there will be a plus minus x percent with second and third readers. I think it's better to include the grade descriptors rather than the mark, so as to not skew the marker. Important for grade inflation. Using the descriptor on the rubric may be beneficial* **(School: College of Engineering and Architecture).**

The burden on staff arising from large volumes of online grading was identified as an issue:

*Some staff face significant challenges with large volumes of online grading, leading to potential health and EDI concerns. To date, no policy is in place to support them or to mitigate the significant impact it has on their health and workloads* **(School: College of Arts and Humanities).**

One school described the process by which assessments are being submitted by learners and then graded. It was described how this can work well when faculty have access to the appropriate equipment (such as touchscreen computers). This is not always the case, however, which can reduce the quality of feedback provided to students:

*In general, the majority of papers are being scanned into PDF and uploaded which allows us to keep [a] record of upload time, grading done online, and box for feedback ... Some have gone to typed online submission and some are still recording in hard copy lab books and submitting that ... Is a bit cumbersome, they don't find it as easy to grade online. But in part due to the quality and format of submissions, so we've worked hard to address this with students. Re: synthetic labs - think the thing we want to make sure we're teaching is that people keep a lab note in real time, and record what they need. But in years 1 and 2, we are allowing some students to scan and upload. But [for] larger volumes, it is quite tedious for students to scan and upload. Also the level of technology that is available to the person grading is quite varied. If you have a touchscreen computer you can give great feedback on written submissions, circle things, do it in real time and in an efficient manner (like with a pen and paper). But if not, slower online, and might reduce quality of feedback. We don't have resources to give all tutors etc. [e.g.,] touchscreens. (School: College of Science).*

## 2.5 Feedback to Students

Schools indicated that there has been a push to provide feedback to students using the VLE, for example:

*With online feedback, we are trying to encourage faculty to use it ... If we could change one thing this year that is what we want to target. We are also promoting using the grading system in Brightspace, and the provision of timely feedback. We are also making students aware of the regulations and that they can be fluid (School: College of Social Sciences and Law).*

Not all schools, however, found this to be a straightforward process. Limitations in the software were identified as an obstacle to the effective and efficient provision of feedback:

*When you use a certain phrase, some allow you to save certain stock phrases to reuse in information to students e.g. something on referencing. It doesn't allow you to set/save feedback statements. That's down the list of issues - timing out is the most problematic, losing all feedback (School: College of Social Sciences and Law).*

*Have example where external examiner can do a search on our work from their institution, but we can't. Blackboard allowed quite detailed template feedback forms. So they were handy when co-marking with tutors. We all had a form and students could see very clearly how they had done, and what would've counted for an a/b/c/d mark. Was space for more qualitative comments. Allowed for more transparency among students because they could compare grades easily. Efficient and easier for staff and students. Cannot get this same system to work in Brightspace. There is a facility for setting up rubric but it doesn't allow for easy dedicated specific form (School: College of Social Sciences and Law).*

This has resulted in some schools moving away from the VLE for feedback purposes:

*For those who have detailed feedback rubrics and assessment forms it has proven too difficult to use Brightspace to copy this method of giving feedback and hence they stick to emailing the students the completed assessment forms (School: College of Social Sciences and Law).*

One school noted that the use of online quizzes has resulted in faculty no longer providing feedback to students on where they have gone wrong on individual questions due to the time implications and ability to reuse the quiz the following year:

*But one of the things we don't do is give them any feedback on where they've gone wrong on individual questions. The reason is the amount of work that goes into setting up the quiz and then giving answers to students means that it will be out in the open for next year and we wouldn't be able to reuse the question bank ... The problem is we cannot give feedback. Because this involves giving them the question sheet and the solution sheet. So the test would collapse very quickly (School: College of Engineering and Architecture).*

An inability to access the student view (see what the student sees) in terms of feedback in Brightspace was also identified as an issue:

*One issue about releasing grades and feedback is that there is no genuine student view. If we could see exactly what the student gets to see, but we're not always clear. Can complicate things. You can set up dummy accounts in your sandbox but that's not the same (School: College of Science).*

Faculty indicated that students also experience difficulty accessing feedback in the VLE, and some were unsure as to whether students are engaging with feedback provided:

*Students say they find Brightspace easy to use for assessments in uploading, but they have some difficulties in reading feedback. It seems to only work on laptops, not tablets or phones (School: College of Social Sciences and Law).*

*Two staff members worried about whether all the students read and properly engaged with the detailed feedback provided (School: College of Arts and Humanities).*

## 2.6 Limitations in Brightspace

Limitations in Brightspace itself were also identified as a challenge to online assessment. In particular, concerns were raised regarding academic integrity and lack of functionality in Brightspace to design and review exam questions:

*One of the difficulties is maintaining the integrity of the exam process. Our papers are approved by external examiners. There is a risk of perceived unfairness if some students are sitting the exam at home without supervision. There is also the issue of multiple sets of exam papers at once that need to go through externals. We have a concern about student understanding, about the importance of integrity. And their understanding of what an exam means ... One of the other issues is software. We use Brightspace to upload papers, but*

*the plagiarism software is not good. It does not catch a lot. We have a submission form for students to submit which includes an integrity declaration, but it is very difficult to catch plagiarism* **(School: College of Arts and Humanities).**

Concerns were expressed by one school around the functionality of online assessment tools:

*Brightspace has provided a wide range of functionality that facilitates online assessment to date in our programmes, however, some issues still exist for certain assessment methods. For example:*

- *Assessment blueprints are not possible to develop in Brightspace. These are important to ensure assessments are sampling learning outcomes appropriately.*
- *Greater functionality is required to support the design and review of examination questions. The ability to tag questions to learning outcomes, subjects, content, author, iteration over several academic years would be of benefit.*
- *The design of examination papers in Brightspace is limited to the sequential numbering of questions. The ability to renumber questions within sections and pages is required, particularly for papers that have multiple contributors, topics and clinical cases.*
- *The design and approval of online examination papers that are secure and version controlled would be of benefit. The ePortfolio tool in Brightspace is challenging to use and navigate. The product that requires an update and complete design reconsideration* **(School: College of Arts and Humanities).**

Another school expressed frustration with the limitations in assessment methodology in Brightspace and with the challenges faced in uploading essay marking templates. The challenges are complicated further by poor wifi in certain locations on campus:

*Staff have found it challenging to upload essay marking templates. Also staff have not been able to ascertain if the “audience” were listening to all the presentations when students present over Zoom. Staff also mentioned finding it hard to design participatory assessment, or peer-reviewed assessments ... Finally, In Roebuck poor wifi makes online assessment very difficult* **(School: College of Social Sciences and Law).**

It was noted that limitations in Brightspace impacted on the kinds of assessment that can be used or types of questions that can be posed in quizzes:

*The technologies that support quiz development are not always perfect. For example, I would urge anyone using quizzes to give fill-in-the-blank questions a miss. We have found that the blank can be tricky to organise so that an answer is entered to appease the quiz system - aka, answers with capitals may be treated differently from those without. And unfortunately, this sort of question format breaks down in the tech* **(School: College of Social Sciences and Law).**

*Quizzes that stick to true/false questions or multiple choice questions work well for undergraduate modules and e-tutorials ... For postgraduate, where we really do want to see some analysis in test responses, an essay response question is a possibility technologically. However, it really only gives students an opportunity to type up rather than write out responses long hand. I've experimented with this approach and I have moved away from it. For me, I can help students achieve more through continuous assessment in this case* **(School: College of Social Sciences and Law).**

General concerns about the effectiveness of Brightspace and the limitations inherent to the software were also raised. This included a gap between the information provided in Brightspace guidance materials and how the software functions in practice:

*Overall, it was found that the platform is really useful and good, but requires practical re-structuring. It was also noticed that improvements/changes in Brightspace (i.e. a different way to set up the assignments, visualization changes, changes in grade scheme names, additions/deletions of functions to name a few) do not often relate to the tutorials/guidelines provided to module coordinators, so an update in the platform should also include changes in the guidelines to help the coordinators to set up and catch up with the changes in real time, as most of these set ups are time sensitive for the coordinators and require immediate actions*  
**(School: College of Health and Agricultural Sciences).**

Some schools identified a need for alternative software to facilitate online assessment in some discipline areas and identified additional software that is currently being used beyond Brightspace:

*ExamSoft has also been adapted to use for grading [ ] in another [ ] school. ExamSoft not only enables an examiner to enter results in real-time electronically, the results are immediately available following the exam along with important statistics associated with the reliability of the exam and individual stations. There is a need to consider online assessment tools that are designed and built specifically for healthcare programmes as unfortunately Brightspace will not be fit-for-purpose for all assessment methods across all disciplines*  
**(School: College of Health and Agricultural Sciences).**

*peerScholar ... is good, but you do need training. Does lots of different things, allows commenting on others' work. Used as an assessment tool ... Not without its problems ... We do have people using peerScholar for essay-based submissions. But Miro is like a digital whiteboard. Developed use of this in Covid. Can get a free educational license. Allows you to post sketches, drawings, PDF, text, movies. Allows sticky notes, comments, and shows up when users are online. We found it good for peer learning and peer feedback which is important for [ ] and planning based modules where students working on a design together, or reviewing a design together. peerScholar doesn't allow this. Miro has been really great, continued after Covid*  
**(School: College of Engineering and Architecture).**

*Since [ ] is a professional clinical programme, there is a prerequisite engagement of educational clinical programmes, which are often a requirement prior to placement; as a consequence, the school has to engage in an external platform, for example, HSeLanD, so when students experience difficulties it can take some time to resolve. To address/eliminate difficulties, tips are disseminated to the students from experiences over numerous years*  
**(School: College of Health and Agricultural Sciences).**

Other schools have moved away from answer-type questions and more towards MCQs because of marking limitations in Brightspace within maths-based disciplines. Means of addressing this, e.g., by incorporating other software, such as MathLab, are being explored:

*One of the good things is that Brightspace will allow tolerance of answer (e.g. +/- 1%). But it doesn't pick up for example minor sign errors, marks it as totally wrong where I would be inclined to give good marks for effort etc. The single tolerance is very black and white on Brightspace. Or for example, getting the right answer but using the wrong unit (joules or KJ)*

*... But Brightspace will mark wrong. Need to manually go through and address [this]. Has led [them] to stop using answer-type questions on Brightspace and [using] MCQ only, because there was so much manual follow up ... Brightspace formula-type question, you can only put in one formula. Very difficult to do follow-up type questions ... can't make them very complex, e.g., a part a leading to b leading to c is not really possible. Having said that one colleague has discovered that MatLab has solved this problem for them, so he's checking out whether we can use that and integrate it into Brightspace. We have an institutional licence for MatLab and we could incorporate this* **(School: College of Engineering and Architecture).**

Concerns about the limitations of conducting quizzes in Brightspace were raised by some schools. For example, it was stated that “sometimes it is difficult to re-use previous MCQs or mix questions” (School: College of Arts and Humanities). One school has adopted the approach of running practice quizzes in advance of the real thing to reduce the number of issues faced by students, whilst another expressed concern about the inability to provide feedback on grades:

*Functionality of quizzes in Brightspace. Concerns about limitations ... The tech should be seamless. The focus should be on the assessment. The students should just be able to focus with the quiz, no login messing etc. So we run practice quizzes that the students take before they do their actual quiz ... Online assessment shouldn't ask more of the ... It's very important to provide as much guidance, scaffolding in advance that you can, so you don't deliberately put barrier in their way* **(School: College of Social Sciences and Law).**

Technical issues related to updates and the scheduling of these were also identified as an issue by one school, as was the lack of staff view of the experience of assessment in Brightspace:

*The update was to spacing in the HTML editor of the system, the update was released the night before a terminal exam for Stage 1 module in the COB and caused a question type to display incorrectly, an effect that was felt by all 550 students enrolled in the module. Colleagues find it challenging to understand what the student experience of online exams is due to the absence of true preview in the online testing environment. This means that end-to-end testing of the exams are currently impossible in a live module. Dummy accounts are allowed in sandbox modules, but a successful test in a sandbox doesn't provide confidence that a test run in a live module will also be successful* **(School: College of Business).**

Further issues were identified with Brightspace anonymising work submitted by students and with the rubrics functionality on the VLE:

*I've gotten caught out a couple of times with people submitting work and then Brightspace anonymises it. It's quite easy to get into a situation where you are unable to attach the work to the person because Brightspace gives no identification to you, the grader. Need students to put their number literally into the work itself. Have actually had to get students to identify their own work* **(School: College of Arts and Humanities).**

*The “rubrics” functionality on the Brightspace Assignment function is somewhat difficult to use, mainly because it is not at all intuitive. Not all staff members' eyes can cope with reading 100+ essays, or even 20+ essays, on a screen. The only alternative is to bulk download all submitted essays and then laboriously print them out one by one. In such cases on-page/on-screen annotations become wholly impractical* **(School: College of Arts and Humanities).**

A need for clearer definitions, regulations and guidance (or visibility and accessibility of guidance) and better technical support around the operation of online exams as a means of addressing the issues outlined above was identified. In the absence of these, practice and the learner experience are very varied:

*Faculty don't really know exactly who they should be going to for what. Need clearer guidance than who is responsible for what. Better technical support, better clarity on what do we mean by online assessment, who is going to deliver it, how? Some kind of road map covering what can go wrong and who can deal with it (for faculty) would be a necessary starting point. Suggest the option of making it feasible for students to only contact you for a short 10 minute period at the start of the exam. And then you're gone. Like the RDS. There is also varying practice. Some lecturers are letting things happen, others are not, so students are experiencing different ways of doing things. Face-to-face has the same experience for all students* **(School: College of Health and Agricultural Sciences).**

*I found it tedious initially, but once you find your way around it's much better. I did do Brightspace training but it feels like a long time ago. But don't think it's overtly impenetrable. And there was specific material during the pandemic that was created relating to delivering assessment on Brightspace. I think visibility of this for incoming colleagues, e.g. a module in Brightspace, if we are going to continue online assessment, would be worth emphasising it a little bit more in training materials. Better reference points for academics* **(School: College of Engineering and Architecture).**

Lack of consistency of approach towards missed online assessment by students was also raised as an issue:

*Where students miss online exams, there should be an official application for an IX, and staff should not be expected to hold a second examining period, or rush through a second assessment within the exam period, regardless of the circumstances. In other words, staff should not be expected to run two simultaneous systems/modes of examination within a single exam period. Procedures for missed online exams should be consistent across the board to avoid individual staff being subjected to lobbying. Students should be required to provide documentation for missed online exams demonstrating that the student could not have attended the exam* **(School: College of Arts and Humanities).**

Further issues around e-tutorials and the need to regularly update these were also identified:

*The e-tutorials we create pose issues. We use Articulate software, which is upgraded regularly. Some tutorials [were] created in an earlier version and then are incompatible. Also, in [the] early days, they used to use Flash, which is now not supported by any browser. So we need to upgrade the e-tutorials on a regular basis. Which is OK because content and environment changes, but it is something that has to be built in that it will take time, money, resources to keep all up-to-date ... Some years won't run in Chrome but will run in Firefox, which leads to the need for extensive guidelines for students. We get there in the end but it can be frustrating. Also, if students [are] using tablets, the tutorials won't run. All things you have to take into consideration... accept that there are things you'll need to deal with.* **(School: College of Social Sciences and Law).**

It was queried whether UCD is maximising the potential of Brightspace, particularly in the context of quizzes where particular challenges and the benefits of using learning analytics were identified:

*Features that are on Brightspace that maybe haven't been brought in by UCD? More advanced features for quizzes. Fill in the blank a nightmare on any platform. We had to just remove them, never worked. With quizzes in general, [they are a] blunt instrument. Need to make sure you're doing them for the right reasons. NB to add in critical thinking ... I find analytics good, can see the attempt log, when students entered and exited. Gives you a sense of the student experience. I find it most useful when I can understand what the students' experience has been doing the quiz. Learning analytics should be used for this, understanding if students struggling with something, what they liked etc* **(School: College of Social Sciences and Law).**

*I do find Brightspace better than Blackboard, but I often feel I've only using 10% of its potential. I feel like there is much more available, but I do not know how to use it. There is a lot of unused potential* **(School: College of Social Sciences and Law).**

## 2.7 Lack of "Distance"

Schools across the colleges noted that there is an increased burden on faculty to be "present" and available to address problems (including technical issues) encountered by students during online assessment:

*With online assessment (particularly exams and MCQs), the separation between faculty and students that exists with in-person RDS exams is absent. When something goes wrong in an online exam, the module coordinator (MC) is emailed and has to address the problem immediately. This can generate a lot of stress for MCs as students can apply a lot of pressure. All of the above has meant that while online quizzes/MCQs have their advantages, a number of MCs in the school have reverted to in person MCQs as it's "less stressful"* **(School: College of Health and Agricultural Sciences).**

*Colleagues feel the administrative burden of running an online exam falls on them. MCs not only have to provide the assessment/exam, but often end up advising about or resolving technical issues and interpreting extenuating circumstances relating to late or incorrect submissions* **(School: College of Science).**

*Online MCQs can generate stress for students and staff e.g., students having problems in submitting their tests, losing wifi connection, staff having to manually submit a test on the student's behalf, dealing with emails from students who have problems during the test etc.* **(School: College of Social Sciences and Law).**

Contributors confirmed that they receive emails from students once online exams start:

*E.g. students who can't get online to the system. We need to redirect questions onto the discussion forum on Brightspace so they're public. Questions like "I forgot to log in, please let me log in". They are much more personal questions. I suspect people have just given in. Where in the RDS, this is less of an issue. This is a difficult one because the line of demarcation is very clear with the RDS. It is less clear online. With [the] RDS set up, you turn up for the first five*



*minutes and then you're a phone call away, but the responsibility sits with UCD Assessment. When online, the entire responsibility sits with the module coordinator. Constant email flood and requirements for immediate action from module coordinators. Despite the class announcements, forums, discussion boards, in person details...most students still email module coordinators at any given time requiring immediate actions, without previous check to the platform or even to the class. Some coordinators started using a module query noticeboard for students post queries. However, overall, all module coordinators feel overwhelmed by the amount of emails received and lack of support to deal with these queries (School: College of Health and Agricultural Sciences).*

One school highlighted that this additional administrative and support burden extends to managing the increased volume of extension requests received for online assessment, and the confusion created by loss of clear distinctions between continuous and terminal assessment:

*The amount of extension requests relating to online assessment is having a seriously negative impact on both academic and administrative staff. In contrast with exams where students had to attend or apply for Extenuating Circumstances, support from the Assessment Unit - again in contrast with face-to-face exams, the matter of online assessment is mostly devolved to school level administrative staff, who have been decimated in recent years. The distinction between continuous and terminal assessment is no longer explicit and creates confusion. This impacts on budgets and time as staff claim incorrectly for grading. Again, all managed by school level admin (School: College of Social Sciences and Law).*

It was further noted that the pressure on faculty of operating online quizzes and responding to the ethical issues arising in the course of such assessments is stress inducing for faculty resulting in some returning to face-to-face assessment:

*For some, the actual stress of online quizzes has led faculty to return to face-to-face. When you're running online quizzes, you're the first port of call. It is all on you as module coordinator. The lack of distance during the exam puts people off - how students can and will bombard you with email. And again, you have to make the choice on whether it's ethical i.e., if they say the internet dropped, and you restart the quiz for them, is that ethical? (School: College of Health and Agricultural Sciences).*

## 2.8 Open Book Exams

The use of open-book exams within online assessment was also discussed, primarily in the context of the emergency response to Covid-19. Contributors highlighted the deficiencies in the rapid pivot to open-book exams and the implications for academic integrity. The view is that more work is required to ensure that online, open-book exams can be effective:

*Open-book was done as an emergency, faculty were faced with not being able to run normal exams. They made a choice between trying to stick with the exam scenario or trying to switch to some other form of assessment that got away from the exam altogether. Reflecting on this, part of why I didn't try to convert to open-book was that I would be concerned I didn't know how to ensure there wouldn't be plagiarism. We are not equipped to set online exams up to avoid plagiarism. It removes the stress when it is just essays (School: College of Health and Agricultural Sciences).*

Some schools posited that all online examinations should be considered “open-book” by their nature and this poses challenges in identifying appropriate assessment questions. This can be particularly challenging in some disciplinary areas and against a backdrop of preventing academic misconduct or in contexts where a closed-book exam is deemed more appropriate or necessary:

*If online assessment is to be used in examinations, it is necessary to consider that assessment as “open-book” and, hence, framing the relevant questions and assessment factors will become challenging. Therefore, the questions and assessment factors/thresholds need to look at the depth of knowledge level on the matter and the students’ own ability to be critical to what is often said and read about the subject at the ordinary level (beyond what is generally seen and heard as just positives!). They should be able to find new challenges in the state of the art. However, modules which require mathematical problem solving as a part of basic learning cannot take this high-end approach. That requires careful checks and controls to avoid malpractice with adequate software/platform support. Ensuring that the work is the student’s own work and that they are not completing it together (for MCQs) (School: College of Engineering and Architecture).*

*In a timed online environment with a four-hour window, exams become more like open-book exams when sometimes there is a need for closed-book exams (School: College of Social Sciences and Law).*

Another issue identified with open-book exams was students narrowly focusing their studies on topics included in the exam:

*Issues with students focussing studies on topics that were included in the open-book exam rather than a wider range of topics included in the module (School: College of Health and Agricultural Sciences).*

Notwithstanding these reservations, some support was expressed for proctored or invigilated online assessment, especially in disciplines where core learning outcomes are difficult to assess in open-book contexts:

*Everything has to be open-book really for home exams. But you don’t really have time to flick through things anyway. So maybe a move to open-book isn’t a bad idea ... think it’s helpful that people can be seen in house, on camera for full thing ... We did try proctoring, but it posed a lot of challenges. Some schools are reusing it, but others aren’t. It isn’t foolproof (School: College of Social Sciences and Law).*

*Certain aspects of assessment, such as providing definitions or previously seen proofs, have been de-emphasized. In many cases, this has been done reluctantly, as mastery of these was an important learning outcome. In any subject, you should have certain things that need to be in your head. Online open-book exams challenged this ... You couldn’t ask for definitions, which mathematicians rely heavily on accuracy of. Have learned a lot ... I ask questions differently now, e.g. present the proof and explain elements of it. Large body of traditional type assessment that can’t be done in non-proctored online, e.g. financial maths, they need to know very specific things. A lot of it is just actual knowledge (School: College of Science).*

*Online assessments have run but in a classroom style environment that allows for physical invigilation (School: College of Health and Agricultural Sciences).*

Conversely, one school expressed scepticism about the wider value of online exams and about the possible benefits of proctoring given the amount of work it places on the module coordinators:

*I heard about proctoring and that there was going to be huge changes, but I'm not really sure what happened. We heard about the pilot and then it went quiet. I think part of the issue was that there was so much work coming back on the module coordinator anyway that proctoring was too much work. I have yet to hear reasons why online assessment is good. I guess the only advantage is running programmes and modules online for overseas students and getting new students in **(School: College of Science)**.*

## 2.9 Internal Supports for Online Assessment

Schools also commented on the in-house supports provided by UCD to enable online assessment. Positive feedback was provided on the supports provided by UCD Assessment:

*Think they [UCD Assessment] were good in terms of instructions and step-by-step approaches for timed online assessment, how to set requirements from students etc. Also parallel timeline with set exams to ensure no clashes was very helpful. **(School: College of Social Sciences and Law)**.*

Challenges in the current system were also identified, centring on lack of access to (timely) technical support and the necessary technology itself:

*Moreover, there isn't really much support in setting up these assessments or technical support to students. Last time I used an online exam, which was scheduled in the late afternoon, support staff was not available anymore **(School: College of Social Sciences and Law)**.*

*We talk about students' access to tech, but staff access to tech can be limited too. In my previous university, every member of staff was given an iPad for grading. Need better SIRC considerations when faculty are being asked to be on computers so much. Need to question what staff need to grade online and what are we asking of staff when they're doing this **(School: College of Social Sciences and Law)**.*

A need for technical support to be available over weekends was identified by one school:

*Also, faculty stated it is necessary to have support personnel (computer assistants) for online assessment, especially over the weekend. Also, concern was expressed about addressing technological failures and digital disparities, such as literacy and access to technology **(School: College of Health and Agricultural Sciences)**.*

Lack of clarity on which unit in UCD has responsibility for dealing with issues when they arise was also raised as a concern:

*There are good videos from UCD Assessment, step-by-step. Very useful. But find it confusing that there are two units to contact. Grading is Assessment, but IT is Brightspace. UCD Assessment are quick to respond, but often we are redirected to IT. But they are slower to respond, not clear on integration **(School: College of Social Sciences and Law)**.*

A lack of infrastructure and logistical support within UCD was identified by schools as an obstacle to conducting online assessment and a source of extra pressure on module coordinators, which may persuade some to return to in-person exams:

*I would be put off doing end of trimester online assessments because UCD doesn't have infrastructure. No computer rooms, bad internet. End of trimester online assessment can't be supported here* **(School: College of Social Sciences and Law).**

*Online examinations do not receive the logistical support of the UCD Examinations office. MCs are required to book their own venues and source their own invigilators, even during examination periods. Greater support is required for MCs ... There are examples where faculty have reverted back to paper-based exams this year mainly due to the integrity issues but also in part due to the fact that the administration is centrally managed for paper-based exams, inclusive of space and invigilation which therefore incurs much less time for the MC and/or section administrators to organize* **(School: College of Health and Agricultural Sciences).**

*However, there is a significant workload at the time assessments are being designed in Brightspace and are being delivered to students to ensure that MCs and students have timely support. It is critical this support is provided for quality purposes to ensure assessments are created correctly and any technical issues are addressed quickly and effectively during delivery* **(School: College of Health and Agricultural Sciences).**

The lack of support provided during exams was highlighted:

*There is support during exam time from IT Services online. But never hear of anyone from UCD Assessment. It's up to the module coordinator and IT Services. UCD Assessment are not around for online assessment issues. During Covid, you could book yourself in with IT Services and you'd have a dedicated person on the phone who could possibly resolve issues remotely for you. That works really well. Also one member used to request that if computer freezes during an exam, students should take a screenshot and send it to the lecturer so you could see that they actually are having an issue* **(School: College of Health and Agricultural Sciences).**

The burden of online assessment on individual module coordinators (MCs) was stressed by one school and a possible larger role of UCD Assessment was queried:

*MCs felt a huge burden that they were organising the exams, fixing problems, sorting out all communications with students. Problem with asking UCD Assessment to take that back again is in the variety of online assessments that is possible ... Could be huge variation in what is being offered. Range of software packages, coding things. The MC is the person who is most familiar with what is being offered. In RDS, all dealt with in same way. Difficult to see how that would work with online assessment. So not sure what university can do* **(School: College of Science).**

Particular issues with the delivery of online assessment in terms of available venues and hardware at UCD were raised by schools:

a) *There are insufficient venues on campus that can accommodate online invigilated examinations that fulfil the needs of our programmes. Venues with larger capacities than the cohort are needed for examinations (to allow for students to be spaced and for their*

notes if open-book). In addition, several other smaller venues to accommodate students with special requirements are needed at the same time. Difficulties in securing appropriate room allocations impact MCs choice of assessment delivery.

- b) If UCD IT computer laboratories are being phased out and not all UCD IT computers are fully operational in those venues, further consideration needs to be given to the delivery of online examinations on students' own devices. The expectation that students are required to have a device suitable for online continuous assessments and examinations can be a financial barrier to some, therefore this approach warrants discussion and consideration.
- c) UCD IT personnel expressed concern around the bandwidth available on campus. They expressed to an MC that it may not support a large number of students doing online exams simultaneously. Clarification on venues that are suitable for large class online examinations would be welcome
- d) If the online assessment is on campus, it has been difficult to find rooms that can accommodate the number of students that need computers. It has also been challenging to provide the additional space for any students that need additional supports **(School: College of Health and Agricultural Sciences)**.

Schools also noted that staff are not always knowledgeable about online assessment or the university requirements around it. It was expressed by some schools that there is a lack of guidance available on how to conduct online assessment or the administrative requirements that come post-assessment. In that regard, the need for a UCD-specific guide to using Brightspace was identified:

*Knowledge/lack of knowledge of university rules and regulations around online assessment. Unsure of their familiarity with/the possibility with education technology available for online assessment **(School: College of Social Sciences and Law)**.*

*In terms of training for MCQs and online assessment, I found there were very high learning costs in learning how to run a timed online MCQ. There was no comprehensive guide. I did as much training as I could and I figured out how to set it up. But most of the difficulties were after the exam was done, such as sorting grades. And the things I needed to do were not available in guides. I ended up googling it. There was no information on administration that comes after the assessment. I ended up looking up the guides of other universities. It seems like a no-brainer that there should be a comprehensive guide for our version of Brightspace **(School: College of Social Sciences and Law)**.*

*Schools had limited supports from UCD Assessments in terms of online approaches ... Issues related to question development: If questions are not sufficiently complex (not googleable) and students are given more time than is needed for an assessment students can look for the answer within the VLE or online. This is a difficulty for our programmes where baseline or foundational knowledge is key **(School: College of Health and Agricultural Sciences)**.*

The need for such guidance to be extended to include new and part-time staff was emphasised:

*Primarily, not all staff on the teaching team having access to the same training. A lot who teach in our school are part-time practitioners. Not the same time available. It is a familiarity thing. Easier to set up a new Google Drive for a lot of these people. Some of the ways of setting things up in Brightspace are difficult **(School: College of Engineering and Architecture)**.*

*New colleagues who come in need more guidance and ensure that students are marked in a similar way for the same modules where marking is shared* (School: College of Arts and Humanities).

The need to diversify support for the range of assessment practices in place was also highlighted:

*But now with continuous assessment, I think UCD Assessment could diversify the support they offer. Less and less are using end of trimester assessments, would be amazing if they could offer support on the wide variety of assessments in use* (School: College of Engineering and Architecture).

One school reported how it had taken the issue of guidance into its own hands and produced comprehensive guidance on a range of areas to support online assessment and facilitated peer learning in that regard:

*We have produced streamlined guidelines to facilitate setting up timed online exams, with the honesty code, instructions for submission of scanned copies of the scripts etc. Guidance was compiled for teaching staff on design of online assignments and assessments that would require students to apply, critique and evaluate the information available to them, rather than simply copying information ... We have promoted and benefited from sharing of best practice among staff in [\_\_\_\_\_]* (School: College of Science).

## 2.10 International Programmes

Schools with large international programmes, such as those based in China, described the tensions that exist between a desire to offer invigilated in-person examinations and having to offer online alternatives. It was described how module coordinators make their own decisions about this as opposed to following an agreed school policy position.

*The situation has changed in China with lockdowns, so we will be continuing online. This year we had intended to hold in-person proctored exams. The module descriptors will still say face-to-face proctored exams, but there will be a last minute change in the month ahead of final exams. Several module coordinators follow their own practices. In 2020, everything was online. Some of the module coordinators just did 100% continuous assessment using Brightspace quizzes or assignments. For 2021, I did an invigilated face-to-face exam. This year, I will do an online exam. Brightspace quizzes are used for online mid-term exams. It is hard to proctor because students are in different locations in BDIC* (School: College of Architecture and Engineering).

IT challenges impacting online assessment in China were also highlighted, including the lack of student access to Brightspace:

*Noted issues with students on overseas programmes - China students couldn't access Brightspace on time to do assessment. Lack of coordination between universities* (School: College of Engineering and Architecture).

*One place where online assessment is an immediate issue is the Joint China College. When you're asking the whole class to interact with the interface at the same time in a location*

*like China, they are much less useful and more problematic. We need to recognise there are thousands of students taking these exams in China and we need to know what systems are routinely working there. Delivering video content in China is still problematic. Brightspace doesn't seem to have the bandwidth ... also an issue with students uploading their assignments at the one time. We need more focus on IT infrastructure, especially for campuses outside Ireland. I believe [\_\_\_\_\_] used their own VLE, Moodle* **(School: College of Engineering and Architecture).**

Practical issues, such as operating in different time zones were also highlighted:

*Timed online assessments often lead to time zone issues* **(School: College of Science).**

## 2.11 The Important Role Played by Educational Technologists

The important role played by educational technologists in supporting faculty in the move to online assessment was highlighted by many schools. The following feedback is indicative:

*There is an educational technologist in College of Science and he was very helpful but we still had to do the actual set-up [of exams with IT] ourselves. He did come and do a workshop with the school* **(School: College of Science).**

*Centralised and locally maintained assessment spreadsheets were generated to coordinate support for online examinations by our school educational technologists* **(School: College of Health and Agricultural Sciences).**

*Faculty stated that they are very dependent on an educational technologist to lead out on the set-up. The support and knowledge of the two technologists are invaluable in the school* **(School: College of Health and Agricultural Sciences).**

*I do not think people understand the importance of putting the correct scheme into the module descriptor from the start. It needs to be supported from the get-go. It is a big operation but it has worked well ... we have an educational technologist there to support us, which helps a lot* **(School: College of Social Sciences and Law).**

One school highlighted the work it is doing in-house to support faculty in the use of Brightspace, but identified the benefits of having an educational technologist to further enhance and maximise use of the VLE:

*The school has a Brightspace expert ... who works in the office. [\_\_\_\_\_] has produced numerous "how-to" visual guides that are placed on the shared school drive to explain to staff how to accomplish certain tasks on Brightspace. One respondent wrote that having an educational technologist at hand would further improve staff's knowledge of how to use Brightspace to its full potential. Another staff member wrote along the same lines when stating "Brightspace works very well if very cloggy (with past offerings causing chaos). May be useful for someone well versed in all Brightspace has to offer periodically offering to review modules - especially large modules, showing what other features might be useful. Easy to get into a rut and simply transfer design and learning features year to year"* **(School: College of Arts and Humanities).**

## 2.12 Faculty Perspective on the Student Experience of Using Brightspace

The student experience of using Brightspace was noted by a number of schools. Referenced in this context was the volume of information continuously directed at students and the need for guidance, training and consistency of approach for students on using the VLE:

*Also with students, [there is] a lot of information being thrown at them via Brightspace. They feel overwhelmed, a lot of central emails being sent to them also (School: College of Arts and Humanities).*

*One of the things coming back to us was that faculty were putting up assessments on Brightspace, but not explaining to students how to access it, not showing students where assignments are. But now this is included in classes, pinpointed for students. Also this year, after a lot of conversation with staff who were receiving queries, we have suggested that everyone needs to follow the same format on Brightspace with the same titling, structure. Know there is a university level policy coming through ... but we've tried. Not sure how much it has been implemented (School: College of Social Sciences and Law).*

The need for adequate student access to IT services and appropriate guidance regarding online assessment was highlighted. Concerns were expressed about the current (inappropriate) role of faculty, especially module coordinators, in mediating between students and IT:

*I was horrified to get an email from [\_\_\_\_\_] to say that queries should be directed to the module coordinator who will direct them [students] to IT. Students should be able to contact IT directly. We are not tech experts. We don't have any clear understanding of how students should document their problems. Do we just take them on their word, or do we require certain types of documentation? How do we actually deal with these problems, such as poor internet connectivity? Official guidelines would be great that we could enforce. What we mean is, in terms of students missing exams, what should we do in this situation? What should happen if you miss an online exam? Reinforce the message that exams are important. But the perception is not there. Message doesn't seem to be getting through. It would also be helpful to have samples of how to get documentation to confirm your situation, for example proof of a power cut. Medical circumstances are given good guidelines, but other issues are not addressed as much. There are much more complicated, extenuating circumstances ... It has become a category that needs more guidance around it. We are concerned with economic quality issues and variable access to technology. We want to be able to make fair and equitable decisions (School: College of Arts and Humanities).*

The additional burden on staff of assisting students access the technology was raised as an issue:

*There is a practical side which involves extra labour for colleagues who may find themselves spending time working out issues with the technology and helping students access it (School: College of Social Sciences and Law).*

Ensuring equitable student access to technology was also identified as a concern:

*There is an unresolved tension within UDL – some students may not be comfortable with essays, and online assessment is a response to this, but some students may be unable to use technology or else struggle with it (School: College of Social Sciences and Law).*



The benefits of enabling students to undertake practice quizzes were highlighted:

*Students would benefit from an opportunity to practice using the VLE to take exams, which isn't always easily done. There are limited instructions for students provided here, but an easy to use (for lecturers) feature in Brightspace to create a practice quiz would lead to a lot less student anxiety and complaints. I will add that I think much of this is contextual, as many students would be accustomed to a lot of rigidity in the exam setting so there is confusion about how that rigidity translates to an online space* **(School: College of Social Sciences and Law).**

One school noted that the timing of student access to Brightspace can be problematic in some instances and even impact on the type of assessment that could be used:

*Module-specific Brightspace access is not available to students prior to the commencement of the trimester in which a module takes place. It would be beneficial to allow Brightspace access to a summer or spring module, for example, in the earlier trimesters ... Logistics - some of these students had no access to Brightspace in the first two weeks. This made it challenging to arrange group assignments because teaching was very intensively organised (two lectures per module per week)* **(School: College of Engineering and Architecture).**

Schools highlighted a number of challenges faced by students in undertaking online assessment, including poor internet connectivity, lack of equipment, space or resources, and adaption issues faced by certain cohorts, in particular mature students:

*Students have connection difficulties during the exam period—it is difficult to judge how to monitor this, and how students should document it ... Many students do not have a private place, or any place, to work for the duration of online exam. Some students may not have access to a computer or other equipment ... Some students have a different attitude towards online exams and treat them more like an essay (with large numbers of requests for extensions). The majority of students understand that they must attend an in-person exam at the time scheduled but this is not always the case with online exams* **(School: College of Arts and Humanities).**

*Broadband issues meant that students had problems completing the test at the designated time. More mature students had complications adapting to the technology and found it hard to type their answers within the allotted period* **(School: College of Arts and Humanities).**

Contributors indicated a concern with fairness and equity for students in online assessment, not all of whom will have access to adequate space and equipment to participate on an equal footing in online assessment:

*Ensuring fairness, especially when some students experience connectivity issues during a quiz - invigilating. I think the most challenging part is to come up with various questions with similar difficulty levels to assess the same learning outcome. Attribution of assessment components to students. Ensuring all students have appropriate infrastructure to undertake the online assessment, if not on-campus (i.e., students may not have good broadband or sufficiently quiet study space) - these challenges were identified during the pandemic and can still disadvantage students if online assessment is more generalised* **(School: College of Engineering and Architecture).**

*Not knowing what access to internet students have is a concern. It results in technical difficulties and requests for time extensions. It also raises questions about the impact of quality broadband access and academic performance. Beyond just broadband there is a concern over parity of treatment of students in timed online environment - no real sense of where they're having to do exams - do they have quiet, safe place? (School: College of Social Sciences and Law).*

*Concerns regarding students managing an online assessment that is timed immediately following a face-to-face lecture in terms of getting access to a space to complete it on campus (School: College of Social Sciences and Law).*

*Ensuring fairness is a challenging issue with this type of assessment, not only because of the difficulty in assessing authorship, but also taking into account that some students have disabilities or difficulties with online platforms (School: College of Social Sciences and Law).*

It was highlighted that students may need to make two different versions of their work for assessment as the upload criteria are different for online and in-person portfolios:

*Upload criteria are different for online and in-person portfolio, hence students have to make two different versions of work for assessment. For example, smaller PDF formats, collation of work into a virtual portfolio. This is quite different to in-person only assessment and does add to workload (School: College of Engineering and Architecture).*

One school indicated that faculty are conscious of the student perception and experience of different types of assessment:

*In terms of peer assessment ... I think it's something that's hard to do with the group who don't know each other from an early stage. Students can be sensitive when it is high stakes. It takes a couple of iterations of the methods before figuring out what works. So the students do a presentation but also upload a script or reflection on working in a group. I think module coordinators are not relying fully on presentations to assess. Students can be sensitive about being assessed by their peers or on the basis of group work, but again, the culture can change depending on what is needed. Students ... can question the reliability and validity of the assessment type. Even when we are doing things with universal design in mind, they would query it (School: College of Social Sciences and Law).*

Another school commented that whilst they are moving more towards typed exams because students don't write quickly anymore, typed online assessments also present challenges for students, particularly in some disciplines, such as maths:

*We have an expectation that all students are technology savvy, whereas a lot of students really are not. When running exams, we found that students expressed concern about typing and a preference for writing. Many ended up screenshotting handwritten sheets. For anything mathematical, typing is very challenging e.g. typing equations (School: College of Health and Agricultural Science).*

Contributors queried the wider, ethical implications of a move to typed assessment and the need to seek student feedback on this:

Also on the question of scanning or typing stuff in, what do access and lifelong learning think about this? Is it fair for students? Universal design? **(School: College of Health and Agricultural Sciences).**

There may also be other cognitive or learning burden on students in online assessment - it would be good to canvas students' experience on this question **(School: College of Engineering and Architecture).**

Some schools noted that the move online during Covid-19 had an overall negative impact on students and their ability to mature as autonomous learners. This was perceived as being evidenced through an inability to note-take and demand for all materials to be recorded; poorer skills and understandings of key concepts at later stages in a programme:

One colleague mentioned that ... that students are sitting in lectures and not taking notes. How are they remembering information? Habituated to receiving information online? Having lectures to look back on after? Will be interesting to see how students are expecting to learn differently. Taking notes needs to be re-practised. The value of simultaneous note-taking. Were issues when fully online in lower stages of [\_\_\_\_\_], because students always presenting digitally, they have a much lower understanding of scale and physical characteristics of buildings. Getting better at presentation and graphic presentation in terms of format, visually and verbally presenting. But when it came to their design and the spatial elements, their skills were far lower. Realised there are aspects of [\_\_\_\_\_] that cannot be replicated online **(School: College of Engineering and Architecture).**

Don't think the student desire for recordings is new - it's just increasing. No VLE years ago, and students were forced to write rather than listen. Lectures now becoming more of a "show", higher expectation on lecturers. The onus of getting info is pushed onto the lecturer. They want recordings, links, videos. If that is not available, students complain. In reality, people who do the extra stuff are going beyond the call of duty. Not good for lecturers or students, which gives the impression that everything is handed to them. Don't think students understand the benefit of the learning activities on-site. They got by during Covid, but I think they don't really understand the benefit, being with classmates, discussion informally. Used to notice a shift in students coming in Stage 1 with expectation that everything provided to them, through to Stage 4 where they were much more adept with autonomous learning, sources. But now see Stage 4 looking for recordings, easy ways of doing things. They're supposed to be scientists, thinking, working out problems. That's been lost a bit. Positive note... for third year running we did a computer simulated practical, flew through it this year. Students are becoming more used to the technology. Feel the students have split more. They are divided in terms of ability. Some students have really grown through Covid with independent work, but others are really not coping well with online and lost touch with how to learn. Some students are doing better, others are doing worse. Problem is that there is a large part of students who are not engaging, hard to recapture. Lots of emails of students who have been unwell, their expectation is "why haven't I been sent recordings?" But we have always been a campus university **(School: College of Science).**

Concerns that online assessment may reduce interaction between faculty and students were also raised by one school, while another was concerned at a potential tendency for students to take online exams less seriously than those which are held in-person or become disengaged by virtue of the online experience was also highlighted:

*Concerns that it may reduce interaction between students and academics (School: College of Social Sciences and Law).*

*Problem with online assessment is the tendency of students to engage less. Streaming caused attendance to drop. Everything online, afraid that some students barely visit campus, except for practical. Already seeing this. May be only 40% of class attending. Used to be 80-90%. Lectures haven't changed. On that note, staff/communication - Stage 4 students raised that students are now feeling anxious about online recordings not being available. Has become a central part of their learning. Students are asking for recordings all the time (School: College of Science).*

### 2.13 A Return to In-Person Assessment?

Some schools articulated that online assessment is “not for them”:

*The consensus among colleagues is that online assessment does not work for our discipline (School: College of Arts and Humanities).*

*I am not aware that any colleagues find any benefits to online assessment (School: College of Science).*

Such schools concluded that online assessment is not appropriate for a variety of reasons, including class size, concerns around academic integrity, equity of access to resources and facilities and the ability to adequately evidence the achievement of some learning outcomes through online assessment:

*The smaller class sizes in the MSc programmes for example (although postgraduate) allow for easier implementation of in-person assessments (School: College of Science).*

*Conducting language tests and exams for [\_\_\_\_\_] modules online is wholly unsuitable and impractical for a number of reasons: where will the students sit to do the test? How will computers be monitored (so that students cannot look up translations or use dictionaries online)? How to accommodate students with various kinds of disability? How to handle students who lack equipment of the appropriate quality? How can compliance with RDS-level exam regulations be ensured? (School: College of Arts and Humanities).*

*Challenges in determining appropriate timing for MCQs and how to gauge appropriate difficulty of questions in first trials. The MCQ systems now are very good and allow for a diverse set of questions that are very challenging. In large modules they are an effective way of assessing knowledge. But, they must be used alongside written assessments to evaluate understanding of materials, I think (School: College of Social Sciences and Law).*

For some, closed-book, in-person exams still represents the best method of determining student understanding of the subject matter:

*The only way to conduct such tests and exams successfully has proven to be in-person tests/exams in controlled conditions (School: College of Arts and Humanities).*

Concern was also expressed by one school that online assessment may not illicit the highest quality responses from students:

*For exam style components – the lack of an enforceable time limit (unless doing MCQs etc.) may encourage some students to prioritise length/volume over quality/conciseness* **(School: College of Social Sciences and Law).**

For some schools across colleges, the risks posed by academic misconduct outweigh any benefits offered by online assessment, with a strong preference for in-person exams being expressed. Particular issues were identified, such as the use of unauthorised materials in open-book exams; plagiarism, collusion, the limitations in terms of testing the relevant knowledge and the resource implications of investigating suspected incidents of academic misconduct.

*I would love to do all examinations face-to-face. I do not think anybody ever really saw an upside to online assessment. During Covid, we went a long way by trying to do face-to-face assessment online. For example, we got students to take photographs etc. and try to replicate exam conditions. But ultimately we were all happy to get back to face-to-face and use online only where it is essential. They are all outweighed by the possibility of cheating. You have no idea who is actually doing the exam. Perhaps people who have larger modules would prefer to have their MCQs online. I am not sure how much work that this would save them. I would like to know more about the advantages if it is going to be on campus anyway. I cannot see why students would not just do traditional examinations. Some of our exams are practical and need microscopes and materials. There is no alternative. We did our best, but it is hard to know how effective it was. There are tools such as virtual microscopes. But sometimes the technology just isn't up to it under exam conditions. Even in the conventional way of examining things the microscopes can be challenging but at least you can give students another one if needed* **(School: College of Science).**

*The overwhelming response of colleagues to this online experiment was negative and we feel that we cannot guarantee the integrity of these assessments if they were to be offered under the same conditions in the future. There was lots of evidence of cheating and plagiarism, largely the copying and pasting, or close paraphrasing, of material from websites. Identifying instances of cheating and plagiarism, and dealing with the perpetrators, was a time-consuming business and diverted attention from other grading activities. There were also other challenges* **(School: College of Arts and Humanities).**

*Most staff responded that they have an issue with the integrity of assessment especially in terms of avoiding student collusion and googling the questions. If a student just writes down the answer without showing how they arrived at that answer it is difficult to determine if that is the student's own work or the result of possible collusion. The mathematical nature of certain courses makes developing effective questions that test the technical knowledge a big challenge. Online assessment is of less relevance in class-based learning. It faces the same challenges in making sure that assessment is individual (when required) or in groups (when required) as there is no way to directly monitor it* **(School: College of Science School of Physics).**

*Notwithstanding cheating, another issue is that an online assessment is essentially open-book. Students interpret open-book to be different. We do not have control over the resources they are using. So you find students in the middle of an exam looking up YouTube clips for similar problem solutions. In this case, the parameters that were described by students in their answers were using notations that I would never have used as a lecturer. For example, ones that are used in the United States. So they are engaging with materials they should not be engaging with. So we ask that they use course resources only, but this is clearly not adhered to. I find the whole process was compromised. And I think when you look retrospectively at grade distribution and see some students performing well where they might not otherwise have done so. As a school we agreed centralised closed-book in-person exams are the best way of assessing students* **(School: College of Engineering and Architecture).**

For some schools, the risks posed by academic integrity mean that online assessment is viewed as an addition to in-person assessment, for which space must be maintained:

*Ensure we have a proportion of marks for onsite examinations to ensure there is some evidence the students are doing the work and not someone else (e.g. parents, private companies, etc.)* **(School: College of Social Sciences and Law).**

*In the context of online assessment, we suggest and ask that the university ... acknowledges that so-called "traditional" forms of assessment, such as examinations, are there for a reason and are appropriate assessment formats for certain sets of skills, such as those taught on language modules* **(School: College of Arts and Humanities).**

## 2.14 Conclusions

Significant and widespread challenges were identified with online assessment. Many of these were directly associated with the use of the VLE, Brightspace. Such concerns centred on issues with grading, the provision of feedback to students, technical issues and limitations with the software, including restricted functionality in devising and revising assessment questions. Frustration with a perceived lack of support and guidance from UCD in relation to online assessment was voiced by some schools, as was concern at the lack of facilities and wifi on campus to support online assessment. The increased burden on faculty, especially module coordinators, of facilitating and supporting online assessment was raised by schools across the six colleges. On a related note, many schools highlighted ethical issues associated with uneven student access to devices, stable wifi and appropriate space to engage in online assessment.

# Chapter 3

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## Aspects of Online Assessment which are Found to be Beneficial

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### 3.1 Introduction

Despite the significant challenges identified in relation to the operation of online assessment identified in Chapter 2, schools also highlighted a range of positives. One school, for example, provided the following comprehensive list of benefits, elements of which are discussed in more detail throughout this chapter:

- *Time saved marking/more efficient logistically/flexibility for staff in terms of where they grade*
- *Better for the environment*
- *Less GDPR issues with scripts/no fear of misplacing scripts*
- *Can have digital discussions of marks with the students*
- *Students find it easier/offers more flexibility*
- *Facilitating international students*
- *Use of rubrics makes grading more efficient and allows for more detailed feedback to be provided*
- *Easier to facilitate moderation and external examiner access*
- *Allow students to evaluate their level of knowledge before the final exam. Overall, I think that students are better served by these types of exams in certain types of modules. I do not generally use these exam types when students are asked to articulate on more complex issues*
- *Having a log of activity is excellent (School: College of Social Sciences and Law).*

Ultimately, one school determined that individual staff gravitate more towards one assessment type over another based on personal preferences and that many of the issues common in online assessment, such as concerns around academic integrity, also apply to in-person contexts:

*A balance between in-person and online assessment evolves almost naturally due to preferences of individual lecturers. A lot of the ethical and integrity implications also relate to other assessment types (e.g. how do we ensure that students write their own essays without help?) (School: College of Science).*

### 3.2 Benefits of Online Assessment

A range of benefits to online assessment were identified by schools, including a reduction in administrative burden; convenience; environmental benefits; greater innovation in assessment practice; role in formative assessment, ease of submission of assessment; ease of use in class and in quickly gauging student understanding of key topics:

*It allows formative assessments that benefit student learning. It makes submission of assessments easier ... Online assessment gives quick answers and was very useful for in-class questions during Covid, to gauge students learning and engagement with the material. A quick question with multiple answers was used to determine if students understood key topics during online learning (during Covid) (School: College of Science).*



Whilst an increase in administrative burden was a challenge associated with online assessment identified by many schools (discussed in Chapter 2), some schools experienced a reduction in administration, for example, in relation to repeat exams; to sharing information with other graders and external examiners; to the submission and correcting of assessments and to the provision of feedback to students. Additional benefits in the context of repeat exams are that students do not need to be in Dublin:

*In-person exams for repeats can be a lot of administration for a small number of students, but when it is online, you can decide where it is and when it is. I also do this for a summer reset. I run it online so the students do not have to be in Dublin at that time. Also, a resit is pass or fail. It is about determining a level of knowledge. The benefits of having them online outweigh the cost. It is harder to cheat at resets because less people are doing it* **(School of Social Sciences and Law).**

*Another aspect is easy admin - all assignments on Brightspace, no need to pass the physical copies of the scripts to second grader, etc. It is also very easy to release feedback to students - this is important! In terms of MCQ exams for large class sizes it is easier to collate the results - for example, no more checking 300+ MCQ answer sheets to look for the 10-15 students who have forgotten to put in their student number (on the EDPAC sheet)* **(School: College of Science).**

*Less administration, feedback provided in the same place and external examiners can access it all when given access to Brightspace. Ease of submission and access - can be faster to correct. MCQ marks are immediately available ... Online assessment is useful for the flexibility it gives, the opportunity for more dynamic forms of feedback both formative and summative* **(School: College of Health and Agricultural Sciences).**

One school, which found the set-up and management of online assessment to be more time-consuming, was impressed with the speed of grading it enables:

*An important advantage is the speed in obtaining results. While it does take considerable time to setup, run, and manage an online assessment the speed in marking these can be very fast* **(School: College of Health and Agricultural Sciences).**

The logistical benefits of online assessment were echoed by other schools and were described as including reduced travel and greater control over exams by the module coordinator:

*Significantly reduced travel/logistical issues for students; [and] logistical benefits for colleagues (compared to collection and distribution of scripts)* **(School: College of Social Sciences and Law).**

*Can be more efficient in terms of logistics - no room booking, invigilators etc. to deal with* **(School: College of Health and Agricultural Sciences).**

*Date and time can be set by the Module Coordinator - no reliance on booking for RDS exam hall - resits etc.* **(School: College of Health and Agricultural Sciences).**

These logistical benefits were essential in the context of online and international programmes:

*Essential for our online programmes ... and avoids the difficulty of finding suitable exams centres (abroad) and associated issues* **(School: College of Science).**

*Online assessment may be suitable in particular applications. For example, students that are taking programmes online that reside outside Ireland have to be facilitated with end-of-trimester examinations that require exam centres and invigilators to be found. It may be useful if these students could take exams online, but that would probably require a change in format of examination, for example, open-book examination* **(School: College of Engineering and Architecture).**

The convenience of online assessment was voiced by some schools and included the ability to keep records and share materials:

*Convenience; no need to schedule a room and appoint invigilators etc.* **(School: College of Business).**

*For online assessment, records can be kept, answers can be shared with other examiners (and external examiner)* **(School: College of Science).**

*Convenience, less pressure than exams. Efficiency, centralisation* **(School: College of Social Sciences and Law).**

*Convenience - online submissions can be graded at home without carrying boxes. Easier GDPR compliance when returning marks/feedback* **(School: College of Science).**

Schools across the colleges commented on not having to decipher student handwriting any longer. The following is indicative:

*Having scripts uploaded onto Brightspace, typed rather than handwritten - don't have to decipher handwriting* **(School: College of Health and Agricultural Sciences).**

The environmental benefits of online assessment were also mentioned by a number of schools, as exemplified in the following illustrative comment:

*Online assessments reduce paper submissions which has positive environmental consequences and reduces printing costs for students* **(School: College of Social Sciences and Law).**

These environmental advantages were also associated by one school with lower risk of misplacing assessments and breaching GDPR:

*Other factors considered to be the advantage of online assessment are less printing and paper generated and thus more environmentally friendly. Less paper has also been identified as an advantage as there is a lower risk of misplacing an assessment or breaching student GDPR* **(School: College of Health and Agricultural Sciences).**

An important advantage of online assessment described by many schools was the freedom it gives faculty to be more innovative and creative in their assessment practice. This was often reflected in a greater focus on formative assessment:

*Having the primary mode of assessment transition to online has had a positive related impact – it has given MCs a reason to rethink their assessment strategies more generally, and to devise more beneficial modes of assessment that better reflect the learning outcomes of our modules. For example, in a number of modules, assessment has changed from a series of different kinds of assessment (for example, quiz and written assignment and essay and presentation) to a more regular formative assessment (i.e. a learning journal) which forms the basis of a final summative assessment (i.e. a portfolio of polished pieces from the journal) (School: College of Arts and Humanities).*

*Faculty have found that online assessment has allowed them to be innovative in the use of assessment methods. Some examples of the use of video submissions for OSCEs were provided. Online assessment has allowed faculty to “experiment” with different question formats. There are also advantages in relation to image quality when providing the assessment online compared to on paper (School: College of Health and Agricultural Sciences).*

The benefits of these approaches to students were noted by one school:

*An exam-oriented learning behaviour will be edged out with such online assessment methods (School: College of Engineering and Architecture).*

This greater flexibility in assessment methods was described by some schools as enabling faculty to employ methods which better evidence the learning outcomes and nurture a stronger sense of student ownership of their learning and assessment:

*Less reliance on timed exams enables assessment to test other skills – facilitates deeper learning and less rote learning – improves quality of teaching and learning (School: College of Health and Agricultural Sciences).*

*Online assessment gives MCs the opportunity to task students with multiple types of assessment. For example, a video assessment, a recorded presentation, a data report etc., there is a creativity in assessment that is afforded by online dissemination and collection. This affordance helps us as a university to meet UDL needs, by providing easy mechanisms for multiple means of engagement and assessment. The use of integrated tools for peer assessment in the online context also gives students a means of ownership of their learning and assessment journey (School: College of Business).*

Online assessment was considered more effective for certain types of assessment, for example, formative assessment, including interactive group work and, in one instance, online quizzes:

*Some forms of interactive group formative assessment using online tools can be performed much more effectively in an online format/mode. This is not the case for all forms of assessment (School: College of Engineering and Architecture).*

*Moreover, online formative assessment (e.g. language quizzes) can be easily added to the module materials, and complement more structured and secure forms of summative assessment. They can give students skills that are later assessed in traditional exams* **(School: College of Arts and Humanities).**

*Assignments can yield more thoughtful responses than exams. If the plagiarism software worked properly, that would be the main benefit. Also, MCQs (which I use infrequently) are better online* **(School: College of Social Sciences and Law).**

In contrast to the feedback received from other schools, where online assessment was preferred for earlier stage and lower risk assessment, one school identified benefits for Stage 4 students where critical analysis, data interpretation and/or research is required. Grade inflation was deemed an issue in this context:

*Very suited to data driven exams where students are provided with figures from a research paper and required to critically appraise the data. Can work well for Stage 4 assessments where students need to critically analyse or conduct online research/tools to complete the assignment* **(School: College of Science).**

Online assessment was described by some schools as reducing risk by enabling faculty to better track student engagement and their own work:

*Online assessment makes it easier for us to see who has been submitting regularly, and to check what we have corrected. This just limits any uncertainties (like losing work) and the risk of controversy with students* **(School: College of Arts and Humanities).**

Online assessment was also described as being advantageous to students, particularly from the perspective of the flexibility it can give to accessing assessments and the fact that it can alleviate stress for students who find traditional exams “overwhelming”:

*It is much easier for students to have room to work (rather than crowding them like sardines into a lecture hall). Accommodations are much easier (don't have to find a separate space/ invigilator). Open notes/open-book assessments work more readily since students have room to work if they are taking a test remotely ... Delays for illness/etc. are also easy to accommodate as the MC can just open the test at a later date* **(School: College of Social Sciences and Law).**

### 3.3 Brightspace

Schools identified a range of benefits and advantages to working with the VLE, Brightspace. These have been categorised as follows: functionality; submission of assessments; facilitation of quizzes; and facilitation of oral and aural exams. Additional benefits in terms of grading, provision of feedback to students; and meeting of student needs are discussed later in the chapter.

Some schools enthusiastically welcomed Brightspace, having moved all module assessment into the VLE. One school stated that the set-up investment was worth it, whilst another expressed that its use should be mandatory, so that the originality checker is also being used:

*Online assessment takes effort to set up, but it is worth it – the tools and metrics available on Brightspace provide insight into student commitment to learning and effort (School: College of Engineering and Architecture).*

*It shouldn't be optional to use Brightspace because if they're not using it, they are also not using the originality checker. I think this year will be different because we have moved all our module assessment onto Brightspace ... Nearly every single module now in the methods has a rubric on Brightspace. We will see how it goes, but we are pushing so that all of the feedback will be on Brightspace (School: College of Social Sciences and Law).*

Two schools provided comprehensive summaries of the overall benefits of working with Brightspace, which included greater efficiency; grade dissemination and recording; feedback functions; plagiarism checker; facilitation of quizzes; greater access for students requiring additional supports; and less paper:

*Online assessment offers several benefits not limited to: delivery efficiency; features to support grades dissemination and recording; features to support feedback; ease of reading typed scripts for marking; ease of use of high quality photographs; paper free (School: College of Health and Agricultural Sciences).*

*The ability to directly provide feedback to students in Brightspace either via the textbook or using the rubrics [and] the ability to easily check for plagiarism ... Regular online MCQs and online homework help the students learn as it forces them to study on a regular basis – continuous assessment keeps them up-to-date with coursework which has resulted in lower failure rates (School: College of Social Sciences and Law).*

### 3.3.1 Functionality

A range of benefits intrinsic to Brightspace were identified by schools, with some schools comparing Brightspace favourably to its predecessor Blackboard in terms of questions in assessment and student accommodations:

*It's great. There is a whole heap of stuff that we would have found very difficult to do in Blackboard. Things like randomising questions, pools of questions, are more user friendly in Brightspace. We can dig far beyond standard multiple choice in Brightspace that was difficult in Blackboard. Things like students with exam accommodations, or broader based exams that aren't within a two hour window are all very straightforward (School: College of Science).*

This includes the ability to identify and respond to students needing additional time in assessments:

*Clarity regarding those with extra needs - easy to set extra time in online exams etc. So that was easier to manage (School: College of Health and Agricultural Sciences).*

In contrast to the increased administrative burdens introduced by Brightspace identified in Chapter 2, some schools described Brightspace as reducing the administrative burden, particularly in terms of submission of assessment and feedback, which is also GDPR compliant and in terms of organising resit and repeat exams:

*Brightspace is a definite positive. It reduces the load on the school office and provides an essentially fool-proof system of checking student submissions. Also, student feedback is very efficient and compliant with GDPR requirements* **(School: College of Engineering and Architecture).**

*One school described Brightspace as “reliable” and “dependable” enabling flexible assessment: Reliable, ease of management, and dependable ... Online upload and assessment for components in Brightspace has been useful to allow all module teaching staff to assess work flexibly* **(School: College of Engineering and Architecture).**

The Brightspace interface was described as “user-friendly” for writing and assessing, and also for tracking student work:

*The Brightspace interface is also user-friendly both for writing and for assessing learning journals. It is easy to see who has submitted what and when, so late submissions or missing work is easy to track down* **(School: College of Arts and Humanities).**

*I find Brightspace a very useful tool for correcting, for written assignments, videos, and getting students to upload. You can tell immediately if students are late, where they're at with the assessment* **(School: College of Arts and Humanities).**

The benefits of Brightspace in terms of record-keeping, both for student work and faculty's own work, were identified by some schools. This was considered especially useful in the context of professionally accredited programmes. For example:

*Being able to access and store all content in one digital bank is wonderful - no storing paper copies, no gathering together reports/drawings. This is especially useful for archiving student work for professional accreditation - most of the subjects in the school are professionally accredited* **(School: College of Engineering and Architecture).**

It was reported that Brightspace enables a greater range of assessment approaches beyond MCQs:

*We could move beyond the multiple choice. But it takes considerable effort at the beginning, putting it all in, question development. But then can expand year-on-year* **(School: College of Science).**

*peerScholar was found to be time-consuming to learn, but beneficial to those who did engage with it. Other interactive testing proved useful, such as discussion groups, projects, using Google apps for presenting, embedding software into Brightspace etc. Creativity and imagination was developed by both students and teaching staff* **(School: College of Health and Agricultural Sciences).**

Some schools described that the ability to build up a question bank in Brightspace is very helpful as it enables faculty to create innovative exams and to see where students might be having difficulty. One school discovered over time that student problems were typically related to the questions posed rather than with Brightspace:

*Think it's useful as you're building up a question bank to see what ones are problematic and what answers students are giving (e.g. want to know why 50% class getting it wrong). Also want to make sure it's not a technical glitch. Learning curve at start. Very hard to anticipate what students might type in. Most of the problems I've seen when we delve in show that there's a problem with a question rather than a problem with understanding the interface* **(School: College of Science).**

*For some MCs, the advantages of conducting these online via Brightspace outweigh the challenges ... Those who took advantage of the question library, and other features seemed to realise how easy it was to create unique exams for students and many kept up the practice after the Covid period* **(School: College of Health and Agricultural Sciences).**

*Other schools noted that Brightspace is especially useful in the context of large classes, as marking short-answer questions is straightforward in Brightspace, feedback can be provided and there are perceived improvements in terms of transparency and equity of grading: Did big [\_\_\_\_\_] modules, 260 students, for marking short answer questions was so straightforward, you can allocate easily one marker to one question, and you have the rubric and then the possibility to randomise answers and questions. I'm sure all softwares can do this but I found it super clear and easy* **(School: College of Health and Agricultural Sciences).**

*Excellent for continuous assessment and feedback and very useful for large classes. Improvement in transparency (grades are immediate and automatic) and equity (grading is non-subjective)* **(School: College of Social Sciences and Law).**

One school identified how Brightspace enabled it to quality assure online assessment processes through the generation of multiple reports and the location of all relevant materials in one place for external examiners:

*When using online quizzes, the assessor can generate multiple reports which can be reviewed. This assists with curriculum review and development. In the [\_\_\_\_\_] online assessment has provided ease of moderation for grading. When utilising Brightspace for all teaching and learning activities, including assessment, this is available all in one place for the external examiner. Both elements are very important for ensuring quality control in our modules* **(School: College of Health and Agricultural Sciences).**

Additional beneficial functions within Brightspace, such as ease of storing and marking assessments; access to peerScholar and plagiarism detection software, as well as ease of provision of feedback to students were identified:

- Ease of creation, curation of question library, digital storage of all responses, ease of marking
- Data analysis (data distribution is automatic)
- Use of tools such as peerScholar and plagiarism review tools
- Self-assessment and formative assessments **(School: College of Health and Agricultural Sciences).**

*Moreover, assignment functionalities such as MCQs, peerScholar as well as feedback are currently well valued by the coordinators (School: College of Health and Agricultural Sciences).*

### 3.3.2 Submission of Assessments

The benefits of Brightspace in facilitating the submission of assessments were identified by a number of schools. Particular advantages include reduction in administrative burden; lack of paper; reduced time-commitment and greater flexibility on the part of students; and the ability to track large volumes of data:

*Online submission ensures that the faculty member can keep track of submissions and reduce the administrative burden in many ways (School: College of Health and Agricultural Sciences). Online essay submission is seen to be very good and effective for a variety of reasons, including the elimination of paper and the flexibility it gives students for submission (i.e. alleviated pressure to be on campus for the deadline) (School: College of Social Sciences and Law).*

*Online submissions were generally seen (by respondents) as a useful way of keeping track of large volumes of marking, date stamps, plagiarism, and student engagement through login data (School: College of Arts and Humanities).*

One school highlighted the benefits of tying submissions to deadlines:

*Would just say with regard to Brightspace, another advantage of it is that submissions can be tied to a deadline clearly. Can easily identify if they have any issues, can help with feedback. Google Drive obviously doesn't allow this (School: College of Engineering and Architecture).*

The online repository was identified as useful in terms of retaining examples of work for future years:

*The uploads act as repositories for work and this is very useful to access in subsequent years to share examples of previous students work, drawings, methodologies etc. (School: College of Engineering and Architecture).*

One school also reported that online submissions was more inclusive of students without accessing to printing facilities and was also less burdensome on the school:

*One respondent noted that it was "more accessible and inclusive for students to submit at home without requiring printing" and that there was less of a burden on the School office because of the lack of physical copies. Another felt that it was beneficial to be able to release feedback on Brightspace (School: College of Arts and Humanities).*

### 3.3.3 Quizzes

The benefits of using open-book quizzes versus written exams were noted by many schools. These included:

*No issues with students' handwriting; faster to grade; [and] anonymous grading (School: College of Engineering and Architecture).*



*MCQ through Brightspace is easy once set up. It takes time to set up the online assessment, but it is worth it because: (i) Randomisation and shuffling of questions assists in minimising working as groups on individual questions and the risk of plagiarism; (ii) Automated grading of MCQs, students get instant feedback; (iii) Ability to limit attempts and enforce time limits, assists with structured student learning and focus in completing the assessment tasks (School: College of Engineering and Architecture).*

*I thought the quizzes worked reasonably well, although they are a bit clunky. We used multiple choice quizzes. The data was helpful on this. I also like that you can see students' progress in real time. I gauge whether the exam was too short or too long (School: College of Science). Lot of time and energy invested in question banks, so would need to be good reason not to keep using these. Every now and then we add more questions to bank, so online assessment becomes more attractive to use. Also true to say that external providers can provide question banks e.g. Pearson, Wiley. They're very much supported, and a lot of things can be offloaded especially with MCQ. Downside is that we're paying external company, GDPR implications as well (School: College of Science).*

*Coordinating marking between tutors is easier - and VLE can offer automatic quiz grading. Quizzes in the VLE can serve a very useful purpose in formative and summative assessment. In online Brightspace quizzes, students receive immediate grades/feedback for their efforts (School: College of Social Sciences and Law).*

*I think that the MCQ online system is quite good although parts of it can be confusing especially as you cannot really lock the preferences for a module so that you have to ensure that the same setup is applied each time. The means of setting up questions is fairly good, although I would prefer more options for using graphics. In the previous software, the student could use "cross-hairs" to identify features on an image but this is not the case with Brightspace, meaning that the questions have to be redesigned (School: College of Social Sciences and Law).*

A particular benefit is the variety of question styles afforded:

*The Brightspace quizzes are highly effective thanks to the variety of question styles - although more could be incorporated (School: College of Science).*

*Ability to create "individual" numerical questions using randomised values; ability to shuffle questions for each user; ability to create question pools, to generate "individual" assessments; the "multi-select" question type has proven to be quite a powerful tool for discriminating high-order learning achievements. Incorporation of Question Library is very useful (School: College of Engineering and Architecture).*

One school highlighted that MCQs give students time to think about their response:

*For MCQs and quizzes, the big advantage is giving students the time to think about the questions and how to answer. The ability to check plagiarism is seen as a big benefit (School: College of Social Sciences and Law).*

The benefits of quizzes in formative assessment, or their use to encourage formative assessment, were also identified:

*Formative assessment quizzes provided by the Brightspace VLE interface are useful: Brightspace has easy-to-use quiz components and the students like getting feedback this way (School: College of Arts and Humanities).*

Some schools view MCQs as working well online and have identified them as useful motivators for students in low-stakes, continuous assessment, though they were not considered appropriate for higher-stakes assessment:

*We are fine with Brightspace quizzes. I have kept one for midterms with a large class. Personally, that kind of assessment works well online. Some programmes have a Brightspace quiz every week. I do not think there are any issues with them. I think the main problem with MCQs on short-answer questions is that for some of the MCQs we cannot see their rough work. If students get the answer wrong or right, we cannot see their process. The standard deviation can be quite large. Students who didn't get it quite right, but couldn't show their process did quite badly. Students who got the answer and we couldn't see their process excelled. Quizzes are good for low stakes continuous assessment to motivate students. But when you move to assessing a higher learner you can't put open-ended questions into an online exam, but this is the best way to assess (School: College of Engineering and Architecture).*

One school expressed that it would be beneficial to pilot MCQs in advance in a non-graded way to support formative assessment; however, this is not always practical:

*Ideally, MCQs would be piloted before being used for the first time, but that is not practical. The way around this would be to offer at the MCQ as a non-graded assignment to assess formative learning. Then following that, it could be used for summative learning. We had 1000 students doing MCQs, all professionals. They are equipped to probe the answers, for example, when the questions are not clear enough. You cannot have it that all questions are easy enough so everyone gets them right (School: College of Social Sciences and Law).*

#### 3.3.4 Oral and Aural Exams

Some schools commented on the benefits of using Brightspace for aural exams:

*The capacity to add sound files to tests and quizzes makes it very easy to create online listening exams. We also like the flexibility of creating either self-correcting quizzes or MC/ tutor-corrected tests (School: College of Arts and Humanities).*

Other schools commented on the range of technologies used to support oral online assessment, including presentations:

*Many find oral exams via Zoom beneficial: much easier to administer logistically, allows all participants to be in different places, and the recordings are easy to archive. Doing up the marksheet via Google doc is also convenient. Students tend to prefer it as they get less stressed, being in their own space. However the downside ... is that it can be harder to test spontaneous production, and then there can be outage issues. E-posters mean less time taken up by presentations, which was becoming a problem in larger classes. Narrated PowerPoints*

*work very well, as do video or audio notes – these have encouraged us to train and emphasise diction/accent etc. more than hitherto; presentations on Zoom can also work well – using Padlet or PowerPoint – and a plus here is being able to keep to time more stringently (School: College of Arts and Humanities).*

*Online capability for presentations is very useful for [\_\_\_\_\_] students as much of the work takes place on industry placement and in-person assessment is not practical. Use of online resources such as the AIChE safety modules is useful in ensuring the students receive high quality material with minimal workload (School: College of Engineering and Architecture).*

### 3.4 Grading

Many schools commented on the advantages to grading in the VLE. These include immediate access to exam papers and increased speed of marking, thereby improving the overall efficiency of the process:

*Ready access to exam papers online rather than waiting for them to be delivered speeded up the process of grading for some MCs (School: College of Health and Agricultural Sciences). Immediate and automatic grading (available to students once completed) (School: College of Engineering and Architecture).*

*Auto-grading is the single biggest advantage, particularly for the large cohorts as it saves enormous time and allows for the module coordinators' time to be better spent on developing the course (School: College of Science).*

*This was identified as especially important in the context of overseas assessments: For overseas locations, the logistics of grading work quickly is great. The return to shipping scripts across the globe is not of benefit to students or staff ... Online assessment can also drive efficiencies for MCs teaching in larger modules making grading more streamlined or the setting and marking of group assignments easier (School: College of Business).*

The ability to identify non-standard grade distributions and students who are struggling was identified as a benefit by one school:

*I download grade distributions. I use a non-standard grade distribution in my modulus and it's good for that. Also identified which questions students are struggling with (School: College of Engineering and Architecture).*

The benefits to students of highlighting progress and accruing grades throughout the trimester or year were highlighted:

*Some modules have introduced component assessment and grading in Brightspace which has been beneficial to students in modules with large credits and formerly terminal summative assessment. This gives them clearer indication of progress throughout the trimester (School: College of Engineering and Architecture).*

*We've also started using components in Brightspace where you can break down large modules into components, not one long terminal assessment. Component uploads being used. Students incrementally gathering grades, which reduces anxiety* **(School: College of Engineering and Architecture).**

The benefits of rubrics in online assessment, particularly for large cohorts or with multiple graders and in terms of the quality and transparency of feedback to students, were highlighted, as was the ability to grade anonymously:

*Online testing allows colleagues to quickly develop, collect and grade assessment and give timely feedback (all part of the academic regulations!). Rubrics can be used to standardise and optimise marking for assessment where there is a large cohort or grading teams. Assessments can be reused, with rubrics, question libraries, quizzes and pools, all having modular qualities, that can be reused across programmes and subject areas. Anonymous grading is only available via online assessment tools* **(School: College of Business).**

*The addition of rubrics helps with grading and provides an additional layer of feedback for students* **(School: College of Engineering and Architecture).**

*The use of editable rubrics in "evaluation and feedback" of submitted assignments is useful for both summative and formative assessment* **(School: College of Science).**

*The provision of the rubrics in advance to students was noted as being particularly beneficial: With two notable exceptions, rubrics and mark-up functions work very well as a feedback delivery mechanism. Students are provided with the rubrics in advance of submission and seem to understand what we are looking for a bit better as a result. When working with tutors, rubrics really help us to ensure fairness in the assessment. They also arguably save time* **(School: College of Arts and Humanities).**

Another school expressed the view that grading in Brightspace is more accurate and fairer, by removing the grader's "flexibility" to assign marks:

*... the distribution of grades I got back, was distributed. When I graded by hand, I might have been too generous. But when done online it might be a more accurate reflection of achievement. For example, in recent calculation, one option was plus 10 and one was minus 10. And if you get sign wrong online, you get nothing. Avoids the tendency to flexibility* **(School: College of Science).**

*The immediate transfer of grades to Gradebook and of grades to students was also highlighted: The ability to transfer grades directly from Brightspace to Gradebook is a great advantage. The calculation of weighting has reduced error and reduced the time burden on graders* **(School: College of Health and Agricultural Sciences)**

*Feedback boxes for coursework submitted online and grade synchronisation with the UCD online Gradebook are very useful features of the Brightspace VLE* **(School: College of Arts and Humanities).**

### 3.5 Feedback to Students

The immediacy of feedback to students in Brightspace was widely identified as a benefit of the VLE:

*Where software tools are used for summative assessments, feedback is typically immediate*  
**(School: College of Science).**

The benefits of automating feedback were identified as being especially important in the context of larger cohorts. It was also expressed that early-stage students are happier to receive feedback online rather than in-person:

*The size of the class affects the amount or level of assessment, but actually really more the level of individual feedback we can give. In some ways, Brightspace is good for this. Automates feedback to students. It's at least possible to show them their answer, and what the correct answer is, which if you're correcting manually 350 scripts that's very different. Early years students more happy to get feedback online, they don't come to you anyway in person.*  
**(School: College of Engineering and Architecture).**

One school stated that analytics can support larger feedback sessions where individual feedback is not practical:

*If you have a big class and can't do individual feedback, can use analytics to do big feedback session with full class on problematic questions*  
**(School: College of Engineering and Architecture).**

Schools complimented the variety of mechanisms available to provide feedback to students, which in turn enables greater student engagement:

*Having a number of ways to feedback is great - marking up drawings, recorded audio/video/ written feedback for the learner to revisit*  
**(School: College of Engineering and Architecture).**

*The opportunities provided for feedback are a great advantage of an online assessment. Online assessment allows for speed of grading and feedback. It also allows multiple formats for providing feedback. Many faculty now utilise the audio feedback available through Brightspace. We find that feedback mechanisms enable greater student engagement and feed-forward. One of our undergraduate modules has an embedded smartbook that provides detailed feedback, which is much greater than possible for a lecturer to provide*  
**(School: College of Health and Agricultural Sciences).**

One school cautioned that, while the feedback mechanism is very useful, it is unclear whether students are fully engaging with the feedback received:

*The process of giving feedback is very good. But the problem is I'm not sure that they're reading it fully. I still encourage them to see me and would continue to use this ... Uploading essays to Brightspace and providing feedback is very useful. It is a lot more clear-cut and you have a record*  
**(School: College of Arts and Humanities).**

### 3.6 The Student Experience

Some schools commented on the ways in which online assessment benefits and enables students. Key factors identified in that regard include greater accessibility and flexibility for students, especially those based outside of Dublin or with additional caring or other needs that make in-person attendance difficult:

*Flexibility in the assessment; students can participate from anywhere and do not have to be present in Dublin. This benefits particularly international students, or students who cannot be based in Dublin at the moment* **(School: College of Social Sciences and Law).**

*Faculty reported that online assessment suits students no matter what their circumstances are as it provides for flexibility. It also reduces the need for students to be on campus. Many of our students have additional caring responsibilities, and this flexibility is greatly advantageous for these students. For students with recognised specific learning needs, the required accommodations can be easily made when online assessment is undertaken. Online assessment has also been reported to be easy to navigate for students and for faculty* **(School: College of Health and Agricultural Sciences).**

It was reported that this enhanced flexibility and accessibility for students may not always be to the benefit of faculty, however:

*It caters for students who cannot attend the in-person exams, especially those who are sick or the international students who tend to travel home earlier than the RDS exams to avoid the Christmas ticket hike. But at the same time, designing and implementing online assessments are time consuming and difficult which may offset these benefits* **(School: College of Arts and Humanities).**

Some schools stated that students have reported their preference for online assessment and that it is enabling progress with their learning and better engagement with assessment, whilst also helping students get to know each other:

*Several colleagues mentioned that online group assessments are particularly beneficial and students gave positive feedback, particularly because they get to know each other quite well (some students mentioned “this is particularly positive in large classes because they get to know their classmates’ names”). Some colleagues like the opportunities that online assessment offers as it allows students to have more space and time to reflect on an educational activity that they might find interesting. During Covid-19, students seemed to respond well to the online exam. Grades were good and completion rate was high. Additionally, graders do not need to be concerned about comprehension due to handwriting. For a number of students the lack of time pressure associated with a traditional exam is likely to allow them to consider their answers in more detail* **(School: College of Social Sciences and Law).**

*Brightspace functions very well with this [MCQs]. The students liked it when we surveyed them and said it was their favourite mode of assessment. Our school is very essay focused generally ... They find the MCQ a relief* **(School: College of Social Sciences and Law).**

*Feedback I have received from the students is that having short online exams each week is helping them to be on top of the material* (School: College of Engineering and Architecture).

### 3.7 Conclusions

Schools identified a range of benefits and advantages to online assessment and the use of Brightspace in particular. These centred on increased efficiency and time-saving functions, such as online grading and automated feedback; greater flexibility and accessibility for both faculty and students; ability to innovate and be creative with assessment methods; clarity (no deciphering student handwriting) and the environmental benefits of going “paper-less”.

# Chapter 4

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## Changes in Teaching to Facilitate Online Assessment

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## 4.1 Introduction

The consultation sought to understand what, if any, changes have taken place in teaching to facilitate online assessment. Responses were limited and typically indicated that changes were few and centred predominantly on the use of quizzes as part of or to support online assessment. Changes to assessment practice were also described.

## 4.2 Changes to Teaching Practice

Some schools described steps taken to enhance teaching methods on foot of the move to online assessment. These changes were often directly related to assessment, most typically continuous online assessment used as part of low-stakes formative assessment and the provision of instructions and guidance to students on assessment. As such, it was noted by one school, that not all teaching is now classroom based:

*Teaching methods are being enhanced at several levels, but in terms of facilitating online, the following are pertinent:*

- *Teaching is going beyond what is “delivered” in the classroom. Lecturers now have an online presence through continuous online assessment mechanisms that are purposefully set for low-stake formative assessment.*
- *The Ask a question feature has continued across several modules in our programmes. This is often a mechanism to address a one-to-one content query (formative feedback to a question) with a student.*
- *Teaching to facilitate online assessment (mainly formative assessment) means building some instruction into resources/formative assessment. Not all teaching is traditionally delivered in a classroom-based setting.*
- *Low-stake formative assessment directs more active teaching methodology and provides a mechanism for a more flipped teaching pedagogy for the classroom.*
- *Teaching methods are increasingly embedding formative assessment through mechanisms such as ‘mentimeter’ or ‘poll everywhere’, although it is reported these can be challenging in some lecture theatres (School: College of Health and Agricultural Sciences).*

*More continuous and informal assessment used as a pedagogical tool for self-reflection and improvement (School: College of Social Sciences and Law).*

Other schools described using Brightspace to facilitate in-person teaching and the adoption of flipped classroom pedagogies:

*We have created some basic standards for Brightspace that encourage the provision of online learning materials to be relatively similar across [\_\_\_\_\_] modules. Nearly all MCs (with the exception of one person) now use Brightspace in a fully integrated way, using the VLE to facilitate in-person learning, but also bringing it into the classroom. At least three MCs have used a flipped classroom approach to allow students to reflect upon, process, and summarise online components through in-person practical or critical workshops and discussions (School: College of Arts and Humanities).*

Even in the absence of this approach, there has been an increased emphasis on discussion rather than the provision of content. To that end, schools described the use of discussion boards, quizzes, presentations, videos etc. to increase student engagement and participation at a time when student attendance is reducing and emphasise the focus on analysis and synthesis of information. This was considered to better equip students for assessment, as illustrated in the following examples:

*Where MCs are not using flipped classrooms per se, there is still more of an emphasis, in face-to-face teaching, on discussion rather than on the provision of content* **(School: College of Arts and Humanities).**

*Given that much of our teaching over the last two to three years has been via Zoom, online assessments have been used to increase student engagement and participation. In order to encourage seminar-style conversation on Zoom, the school increased its use of discussion boards, pass/fail assessments, short online quizzes, pre-recorded student presentations, and other assessments that increase student engagement and participation. Some module coordinators have retained these methods of online assessment during face-to-face classes to encourage student engagement in a period of declining student attendance* **(School: College of Arts and Humanities).**

*One strategy as part of the ongoing conversation is to re-envisage the classroom where possible to shift emphasis of face-to-face activity to analysis, synthesis etc. and the use of pre-recordings, videos and associated online collateral (e.g. voice over PowerPoint) to deal with knowledge, understanding etc. Students can then be expected in their assessment to be better equipped to deal with unstructured questions where solutions are more likely to be idiosyncratic to the student and less likely to be plagiarized* **(School: College of Business).**

*Many colleagues typically use online assessment as a complement to their teaching, both face-to-face and online. They usually offer a space at the start of each lecture to reflect on each contribution, and complement the author on what they posted, looking for connections between the posts and the didactic content for previous or upcoming lectures* **(School: College of Social Sciences and Law).**

One school highlighted the increased use of case-based learning to move away from rote learning amongst students:

*One module has explored the continued role of open-book in online examinations. For some timed exams the student is allowed access to printed notes, while access to the internet is not allowed. Examination questions have been redesigned and teaching incorporated more case-based learning to encourage deep learning and reduce rote learning* **(School: College of Health and Agricultural Sciences).**

A number of schools across the colleges highlighted the use of quizzes and practice MCQs to support teaching and prepare students for assessment:

*A majority (54%) had changed their teaching to facilitate online assessment, typically by providing more quizzes and incorporating practice MCQs* **(School: College of Social Sciences and Law).**

*Practice quizzes have been made available to help students become familiar with the mode of assessment, and different question types that will be used (School: College of Science).*

One school noted that while teaching has not changed per se, it has been enhanced through the use of online assessment. Quizzes designed during the pandemic are now offered as practice or revision tools in Brightspace:

*We have not changed our teaching, but online assessment has probably enhanced it. We use problem sets on a more frequent basis. This allows students more opportunities to learn and to progress faster through materials. It has had no negative impact on our teaching. Now that we are all back to end of term exams, I had all these quizzes prepared from the pandemic. So when students have finished a topic, they can use them on Brightspace as practice quizzes. They can use the test as a revision tool and do it as many times as they like (School: College of Social Sciences and Law).*

Additional information about, preparation for, and discussion after, assessment was also identified by schools as part of changes made to teaching. The following comment is illustrative:

*Leaving time for discussion about assessment submission; more explanation of where to find the assessment; more explanation of how assessments will be marked, talking through rubrics more clearly; allowing access to rubrics in advance; practical video tutorials (School: College of Social Sciences and Law).*

A stronger focus on the provision of feedback to students and the use of a range of modalities to provide feedback was highlighted by one school:

*Sometimes [use audio feedback]. I've seen it and dabbled. We have used on occasion template feedback, rough grades where you've got a component. So, say an assessment is in a certain type of batch grading, where there would be batch feedback sent. But in [\_\_\_\_\_], it is normally individual one-to-one feedback. It's the culture of the school. It's part of what we do. Working through with students how they're doing. Ongoing, formative continuous assessment. We didn't traditionally view this as formative feedback, but we do make this clear to students now - that they are getting feedback. Describe the difference between formative and summative (School: College of Engineering and Architecture).*

Another school noted that changes to teaching happened rapidly in response to Covid-19; that the changes have greatly increased faculty workload and that faculty dedication and commitment to students needs to be more fully acknowledged:

*In reflecting on the question of the shift to online assessment, I would say we have partly made what is a significant teaching and learning change, somewhat by stealth. Covid-19 definitely hastened this, but it is worth pausing to reflect on the benefits to students, pedagogically, but also in terms of workload, work practice, sociability, feedback modes, and the broader educational experience. I would be interested to know whether students prefer this mode to fully in-person assessment for example. Staff are expected to continuously absorb change, and to adapt their practice and pedagogy. The massive shift to online teaching and assessment happened almost overnight, and while that demonstrates the agility and application of teachers, it is also important to not take continued absorption of change for granted. Hopefully this study might note and mark the dedication of teachers to prioritise their students'*

*education, experience and well-being during the last number of years, but also perhaps allow a pause to reflect on what is best for both learners and teachers (School: College of Engineering and Architecture).*

The most significant change reported was a full move online for some modules:

*Some modules have now gone online following on from the experience gained during Covid-19 (School: College of Science).*

*Not all changes to teaching arising from online assessment were considered positive. One school highlighted particular issues faced with teaching an international online programme: Some courses ... are taught jointly with a university in China, entirely online. I think the thing about reading habits on screen has come up a bit ... When trying to teach [\_\_\_\_\_] it is very hard to do this online. You need to print things out all of the time - big sheets printed out. Student work needs to be seen on large A0 sheets. So they have to submit virtual and then print out. Heavy admin burden. We hadn't taken time to realise how radical a jump we'd made in Covid. Enormous shift to hybrid or online assessment. It didn't just disappear. Changed the way we teach and assess fundamentally (School: College of Engineering and Architecture).*

### 4.3 Limited or No Change to Teaching Practice

A number of schools across the colleges reported that there has been no or very limited change to teaching practice on foot of online assessment. The following comments are illustrative:

*None at all, beyond including details of any online assessment in the syllabus. Online assessment in this respect is seen as an add-on that changes nothing about teaching (School: College of Social Sciences and Law).*

*Very few, if any, apart from the incorporation of dummy quizzes in some modules (School: College of Engineering and Architecture).*

*All people interviewed already used different functionalities of Brightspace for assessment online, so not many changes were necessary (School: College of Health and Agricultural Sciences).*

*The school has not seen any major change in teaching practices to facilitate online assessment. Indeed, online assessment has been used to facilitate our teaching (School: College of Social Sciences and Law).*

*Not sure, other than to provide greater guidance in my instructions. I had already designed my modules with online assessments (before Covid), which means that I did not have to make changes to my teaching to facilitate online assessment (School: College of Social Sciences and Law).*

*We can do the same things online as we can face-to-face teaching wise. The digital whiteboard on Zoom was great once we got accustomed to the tools available. The only change was with museum visits. And something roughly similar was done digitally (School: College of Arts and Humanities).*

One school noted that whilst teaching hasn't changed, there is still an additional burden on faculty through the production of extra material. It was noted that they need training, and sometimes, additional apps:

*Several colleagues mentioned that they need to seek training and in some cases purchase applications such as Padlet and Kahoot (the free versions have limited capacity). Even though the main content of lectures and seminars have not needed to be changed during the pandemic, colleagues have produced extra material and support to face the challenges brought by the pandemic (School: College of Social Sciences and Law).*

Some schools reported changes to programme structure to accommodate online assessment, but no change to teaching itself:

*At the school level, none. We have just adapted ... Many staff have redesigned modules, very substantially in some cases, to assist with online assessment. Removed the in-person exams and instead used online open-book quizzes and larger weighting of other assignments. Removed hardcopy submission of individual and group assignments. Provided templates or tools for individual or group assignment (e.g. poster templates or links to Padlet and Miro websites (School: College of Engineering and Architecture).*

*In-class paper-based exercises have been moved online in some language modules. These are still completed in class but the advantage over paper is two-fold:*

- 1. Once the student submits their answers, they receive the correct answers immediately, which ensures no student is not embarrassed to give the wrong answer when elicited in class but rather encouraged to consider why the correct answer is correct, thus deepening the thinking and learning process;*
- 2. Once the answers are submitted, the instructor can view the results to get an overview of student performance across the module. They can use this to see where intervention is necessary to help students to better understand the subject (School: College of Arts and Humanities).*

One contributor stated that their content and delivery has not changed, but went on to describe a number of changes, such as increased use of worked examples and computer-based calculations, perhaps signifying that not all faculty or schools consider changes made to be "changes" per se:

*My content/delivery has not changed as a result of using online assessment. More use of worked examples included in learning materials. I teach and train them to be extremely critical and analytical to what is taught in the class. I encourage students to raise questions, and I prompt them to find answers to my "puzzles" thrown during lectures (giving clues one after another in progression), often through a short debate. The classroom thus is a bit conversational at times. I have included more use of computer-based calculations to encourage students to use their computers when carrying out the assessment (School: College of Engineering and Architecture).*

## 4.4 Changes to Assessment Practice

Whilst limited changes to teaching practice were identified, some schools commented on changes to assessment practice, particularly in relation to the types of questions posed:

*Back to trad, but changed the assessment. Realised the more open question was more helpful. Even where we've returned to traditional settings, we have changed question types. Chosen questions that work in both environments (School: College of Science).*

*Question development has become more complex. A greater level of thought is being put into what should be assessed and how. There is also an understanding that this as an activity can be very top heavy with activity however the investment in time at the early stages will pay dividends once the assessment has been run (School: College of Health and Agricultural Sciences).*

One school described a move away from end-of-trimester exams as a result of learning arising from the experience of Covid-19:

*I think for most other assessment components, most aspects can be transferred between in-person and online. An in-person test could be transferred to an online test without too much trouble. Same thing for learning journals and essays ... Also colleagues are moving away from formal end-of-trimester assessment and this was encouraged. This helps us to think about whether the end-of-trimester exam was a good way of assessing students and we decided no. Covid pushed us to move away from end-of-trimester exams (School: College of Arts and Humanities).*

Another school described how accommodations that were necessary in a Covid-19 context had the positive result of enhancing digital skills:

*If this question also encompasses changes in assessment strategy because of Covid off-campus teaching conditions, the module coordinator of [\_\_\_\_\_] had to remove the exhibition review element and replace it with making a digital story (movie!). Similarly for [\_\_\_\_\_], making a real exhibition in the museum was replaced by just designing an exhibition (although this module has not run since 2020). Both of these enforced changes would seem to have driven material-culture-based assessments towards more digital skills: such assessments can now complement the hands-on stuff when possible (School: College of Arts and Humanities).*

## 4.5 Blended Models

Two schools commented on the possibilities arising from migrating to a blended learning model, including increased flexibility for faculty and students:

*Currently, the possibilities of blended models are also gaining popularity in that module coordinators that are adapting their contents for a blended delivery and assessment. Blended learning and assessment offer better flexibility to both students and coordinators.*

*The combination of online assessments done in person was also really well valued by some coordinators, offering the opportunity to reduce plagiarism while facilitating submission/grading of assignments* (School: College of Health and Agricultural Sciences).

## 4.6 Conclusions

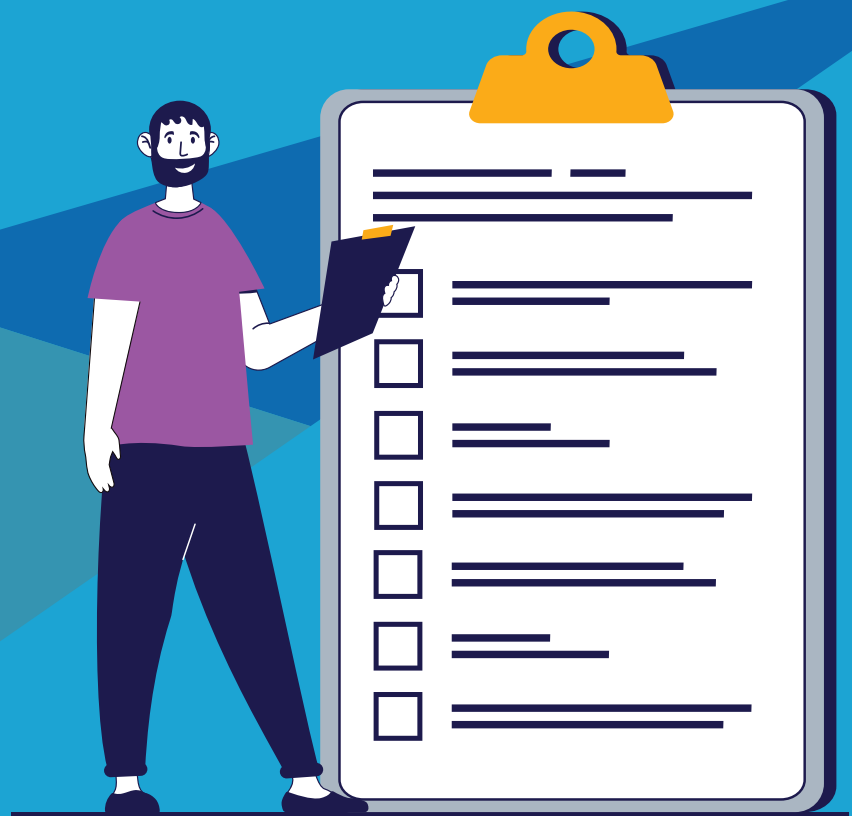
In the main, schools reported that limited if any changes have been made to teaching to facilitate online assessment. Where changes have been made, they have largely centred on the use of quizzes, as part of or to support formative assessment. The move to online assessment has, however, motivated a wider look at approaches to assessment in general.

# Chapter 5

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## Institutional Actions to Improve Online Assessment

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## 5.1 Introduction

Despite the reservations which have been noted in this report, there were also many proponents of continuing with online assessment and building on the investment made to date:

*UCD [\_\_\_\_\_] staff have invested time and energy into developing technology- enhanced learning strategies during Covid-19; UCD should formally take this opportunity to advance the online assessment agenda. The feedback in our survey identified strong motivation and appetite among staff to advance further in this area* **(School: College of Health and Agricultural Sciences).**

Whilst different perspectives were voiced by schools on the challenges faced and benefits arising from online assessment, there was greater consensus in terms of the steps that UCD might take to improve online assessment in the university. These actions are identified in the sections below.

## 5.2 Standardised Policy and Approach

A number of schools across colleges identified a need for UCD to further develop and standardise online assessment policies and procedures to ensure consistency of practice and experience, whilst allowing for flexibility in relation to discipline-specific requirements and needs:

*An institutional strategy/framework for online assessment should be developed, which could be adapted to meet the needs of each school/programme. There needs to be a clear delineation between online low-stakes assessment for learning versus graded, high weighting, where the primary purpose for providing certification. For example, the UCD Code of Assessment (excellent document) currently has only two dedicated pages (3.5.2 Conduct of online assessment) to online assessment)* **(School: College of Health and Agricultural Sciences).**

*A set of common guidelines/expectations for online exams could be useful, so that students can expect the same frameworks in different modules. However, some module assessments may need more flexibility, so guidelines should probably not implement too rigid a framework* **(School: College of Social Sciences and Law).**

*A standard code of practice for online as for the more traditional assessment environments* **(School: College of Health and Agricultural Sciences).**

One school confirmed that it is translating university policy locally rather than developing discipline-specific approaches:

*... we try to communicate to students early in the module by putting in links in Brightspace, templates etc. but it takes colleagues a while to adjust to practices. Have been some changes to policy e.g., late submission of coursework. We're reviewing throughout to harmonise how grades and local extensions are given. No [specific disciplinary policy], we translate university one* **(School: College of Arts and Humanities).**

It was noted that enforcement of policies and procedures will also be critical to quality:

*A greater focus on rigorously enforced policies around setting online assessments for academics (similar to those for in-person assessments) would also ensure that we achieve a more consistent quality of online assessment across the institution. Criteria such as minimum size of question banks, cut-off times for changes, etc. could be looked at* **(School: College of Business).**

One school proposed that any policy approach developed should prohibit the exclusive use of online exams:

*Create recommended protocol and policy for online assessments, integrating students' responsibilities in terms of upholding academic integrity and ethical practice ... A protocol given to module coordinators, that prohibits assessment by online exam exclusively* **(School: College of Health and Agricultural Sciences).**

The need to ensure that policies are adequately resourced and can be implemented was also flagged:

*Ensure policies can be implemented and practised by providing the necessary resources (IT, human etc.)* **(School: College of Health and Agricultural Sciences).**

One school called for guidelines around assessments, including MCQs:

*Improve the usability of the system, especially for MCQs. There are very high learning costs for staff. Create a UCD-specific user guide that is comprehensive. Create a FAQ (specific for UCD) for common problems encountered when setting up online assessments, especially MCQs* **(School: College of Social Sciences and Law).**

The need for a standardised approach in the area of academic integrity was also raised, as was the need to regularly review the plagiarism policy:

*We're trying to get them [students] to check plagiarism reports. A lot of them coming to meetings didn't realise they could look at their plagiarism reports. We've standardised this, but something that university should consider. Are we supposed to put checker on and can every student see the percentage of plagiarism? Think it would be good if this message came from the top, a university position. Seems like it would be helpful to stop people putting in plagiarized work, if they could check themselves* **(School: College of Social Sciences and Law).**

*The UCD Plagiarism Policy and its impact should be evaluated regularly to ensure the policy is being standardised* **(School: College of Health and Agricultural Sciences).**

Other areas identified where a common approach and policy are needed include missed exams and student laptop requirements:

*Centralised guidelines and support for missed online exams, including documentation requirements* **(School: College of Arts and Humanities).**

*Financial support and policy regarding student laptop requirements (School: College of Health and Agricultural Science).*

One school identified a need to consult with students on their experience of online assessment, particularly in relation to accessibility issues:

*Students could probably be consulted (if this hasn't already happened) on accessibility issues for online exams or other forms of new forms of assessment. This consultation most probably is not needed for MCQs as most students are already accustomed to them ... It would be important to gather information about our students' experiences on assessments (School: College of Social Sciences and Law).*

Some schools also noted a need for UCD to explain the rationale and benefits of online assessment to both faculty and students to ensure it is fully understood and embraced, as this remains a challenge for some currently.

*UCD should explain the rationale and advantages of online assessment. Having this rationale described and made clear could help colleagues embrace it more. This rationale should also be shared to students, so they also understand the advantages of using formative and online assessment to their education and learning process. A colleague mentioned the example of students asking if a particular dynamic was "compulsory" ... Pedagogical rationale for online assessment is important. Key ideas and research around online pedagogies can help people feel more open to the value of online learning and assessment ... Some colleagues are "online sceptics" and struggle to see the value in online assessment (School: College of Social Sciences and Law).*

The increased time commitment required from faculty to implement online assessment was highlighted in Chapter 2. In light of this, one school suggested that this additional time should be recognised in workload models:

*Consider faculty incentives to develop and advance online assessment. Such developments are time-consuming and should be recognised within academic workload models (School: College of Health and Agricultural Sciences).*

### 5.3 Logistical and IT Support

Whilst the current support for online assessment was acknowledged, schools identified a range of additional logistical and IT supports that are needed to support, or enhance, online assessment (further discussed in Chapter 2). A university-wide approach and an expansion of existing IT supports were called for by some schools to ensure all types of provision and assessment are adequately supported:

*At the moment the students use a variety of phone-based apps to scan and upload answers and there can often be technical issues. A university wide standard/support might help (School: College of Science).*

*The level of support that is provided by the university needs to have a less restrictive window of activity* **(School: College of Health and Agricultural Sciences).**

*Consistent IT support and training on diverse forms and formats for online assessments for small, medium and large size modules* **(School: College of Social Sciences and Law).**

*Full IT support; resolution of software issues* **(School: College of Arts and Humanities).**

One school also noted a need for additional teaching and learning support, while another requested additional supports from the Examinations Office:

*Brightspace being overloaded when more people using it became a major issue and that needs to be improved during exam periods ... Need more online teaching and learning support in general - better technical support to capture more info about student engagement, dedicated helplines and helpdesks for staff and students* **(School: College of Health and Agricultural Sciences).**

*The general feeling is more support from Examinations Office as many of the staff feel little engagement from this office* **(School: College of Science).**

The gap in support, resources and training between low-stakes continuous assessment and high-stakes assessment was noted by one school:

*With the advent of Covid-19, the past three years have seen several positive institutional-level resources, education, and training in online low-stakes assessment via the VLE. There is now a gap in institutional support for online high-stakes assessment, particularly those "timed exams". Currently, the Module Coordinator has responsibility for all aspects of the process for an online assessment, including BYOD (3.5.2 Conduct of online assessment). This is not sustainable (as experienced during Covid). There should be the same level of support for online assessment as for RDS exams* **(School: College of Health and Agricultural Sciences).**

Some schools called for enhanced technology, including tablets for faculty, to support online assessment in addition to enhanced IT support:

*A couple of colleagues suggested provision of more tablets to faculty* **(School: College of Social Sciences and Law).**

*Technical support and technology for more reliable online assessment (e.g., Proctorio). Perhaps some help with the technical side of online assessment experience. More supports/training for Brightspace* **(School: College of Social Sciences and Law).**

The need for logistical support for exam set-up and meeting student-specific exam requirements was identified by a number of schools:

*Logistical support for MCs from UCD Assessment. Support beyond traditional paper-based type examinations. Greater support from UCD Access aiding MCs who must source specific-student exam requirements e.g. rooms with natural light, soft chairs etc.* **(School: College of Health and Agricultural Science).**

Particular issues were identified with timetabling:

*Timetabling, for example, if the online assessment remains essential part of the module, as if other modules are face-to-face, it would be extremely difficult for students to join the module online just for the assessment (School: College of Social Sciences and Law).*

*There should be more flexibility with timing for online assessments (e.g. setting up a 2.5 hour exam for a data analysis assessment at Stage 4 this year I couldn't without a derogation) (School: College of Science).*

Schools suggested amendments in InfoHub to better enable the inclusion of online assessments in timetabling:

*The university could provide online final assessments and incorporate it into the exam timetable, as they currently do for the RDS. It might be nice to also have a dedicated option for this in the drop-down menu in the curriculum planning tool in InfoHub (School: College of Science).*

## 5.4 VLE and Software

Challenges faced by faculty in using Brightspace were described in detail in Chapter 2. Some specific suggestions for how the VLE might be improved are included below, including streamlining the submission interface and better managing the timing of updates to Brightspace and ensuring synchronisation within the IT infrastructure:

*Streamlining of the online submission interface: e.g. ... clarifying the "rubrics" part of Brightspace (School: College of Arts and Humanities)*

*There can be Brightspace updates which are timed for Asian working hours which is unhelpful for overseas operations. While our own Business eLearning team are very proactive in this regard, the overall IT infrastructure is not (School: College of Business).*

Some schools identified a need for access to additional or different software to support online assessment, including assessment and e-portfolio tools:

*Software appropriate/bespoke for assessment methods required for health sciences specifically (communication skills, OSCEs, DOPS, competency based ePortfolios, WBA) (School: College of Health and Agricultural Science).*

*One thing I would like UCD to look at is a portfolio tool that is university supported like peerScholar or Padlet. There is a lot of talk about the digital portfolio, but it just ends up being submitted as a PDF without any of the interactions that you would expect. The link can be added after you have submitted and some module coordinators rightly worry about this. It says on the teaching and learning page the students can submit a link for the digital portfolio, but we need university support to make sure this is secure and remove these concerns about editing. We need regulations that will address the fact that web pages can be edited after, for example, maybe submit a timestamped page. Portfolio tools always come up as a great idea, but we need to make them more robust. You are relying on the support of staff getting back to you (School: College of Social Sciences and Law).*

*We also need more sophisticated and user-friendly online tools that allow the student to input mathematical symbols and operators e.g. differentiation and integration symbols etc. that are regularly used in derivations. The current tools are very cumbersome and time-consuming to implement and therefore not ideal for a time-limited exam (School: College of Science).*

This request for access to additional/different software included plagiarism detection software and e-proctoring tools (academic integrity is discussed in more detail in Chapter 6). The following comments are indicative:

*Buy a site-wide license for Turnitin (detect long-question answer cheating). Many people have been crying out for this for years. This also goes for buying a site-wide license for iThenticate (PhD and major ME theses). Limiting attempts, time-limiting assessments, generating large question banks that facilitate randomisation and shuffling helps in minimising the risk of plagiarism (School of Engineering and Architecture).*

*Improved plagiarism software that is applied/turned on automatically that provides better guidance on how to interpret scores; that highlights phrases and gives an overall score and proctoring software for online exams/security features that would enable proctoring of examinations if online and monitor students not to access online material and “copy and paste” content or follow video tutorials (School: College of Social Sciences and Law).*

*Develop or invest in biometric and proctoring instruments (School: College of Health and Agricultural Sciences).*

Some schools identified improvements that could be made to the VLE, Brightspace, to make it more user-friendly, including the provision of hotline support:

*Making Brightspace and Urkund more user friendly. And also making support available on a hotline basis to some degree for Brightspace. Something to reduce cheating, plagiarism and otherwise, though there is a deflationary sense that not much more can be done than we do now on this point. Why is that? (School: College of Social Sciences and Law).*

Specific enhancements to Brightspace that were suggested include enabling the bulk download of graded scripts; releasing feedback to students without grades; archiving MCQ results; the inclusion of an assignment page and improvement of the Brightspace Quiz:

*Enable bulk download of graded scripts with all annotations but ideally externs should be required to access material via Brightspace. An option to release feedback to students but not grades (School: College of Science).*

*Find a way to support the archiving of MCQ results of individual students i.e. it should be possible to download student's MCQ tests for archiving purposes (School: College of Social Sciences and Law).*

*Other improvements could include the automatic inclusion of the assignment page in Brightspace with details of the student number, module and assignment name to facilitate online submissions even further (School: College of Health and Agricultural Sciences).*

*An “Assessment Submission Form” should be developed specific to online assessments. The Brightspace Quiz tool should be significantly improved to make it easier for question development, randomizing questions, and tools to comparatively analyse student performance (not only grades but also how long it takes to finish the quiz for each student) (School: College of Engineering and Architecture).*

One school noted the need to update Brightspace guidance material before changes are made to facilitate better use of the VLE and the lack of a common language between Brightspace and UCD grading schemes:

*Improvement/updating guidelines before even changes in the Brightspace platform are executed will facilitate the use of new tools and improvements. Brightspace is experiencing constant changes and the guidelines are not updated at all, so the coordinators need to ask other faculty staff and spend considerable time and effort to set up the system as desired as most of these actions are time sensitive and IT support is really slow and limited. Moreover, the use of a common language between all UCD platforms (Brightspace, UCD grading schemes) or even within different tools inside the same platform (i.e. intelligent agents and announcements) will be beneficial for coordinators i.e. setting up personalised messages using the same codes in all platforms, grade schemes with the same name and abbreviations all over UCD (School: College of Health and Agricultural Sciences).*

The need to better coordinate Brightspace with other programmes or software was also identified:

*Coordination of Brightspace and Google Drive so that it is easier to archive student work for accreditation (School: College of Engineering and Architecture).*

*Most of us feel that Brightspace has a lot of features that work very well. There are two suggestions that we have: one of the biggest problems that exists is the interface between Brightspace grades and My Module Grades, which is problematic and cumbersome. Most negative feedback had to do with this, and with My Module Grades in general. If UCD could devote some resources to improving this interface it would help greatly (School: College of Arts and Humanities).*

*Some schools proposed a move away from Brightspace entirely to a VLE with greater capacity: Invest in proper online assessment tools as they are built to test a host of different skills and application of knowledge. For example coding, Excel etc. Companies like Test Reach have 50+ question types to choose from, Brightspace has 11 (School: College of Business).*

*Several colleagues mentioned how unfriendly and difficult to navigate Brightspace is, so they need to seek other platforms to complement their teaching (School: College of Social Sciences and Law).*

*Engage with Brightspace developers – or with some other provider of Online Assessment software – to enable more complex questions, and more sophisticated grading rubrics, to be included in auto-graded quizzes (School: College of Engineering and Architecture).*

## 5.5 Additional Guidance and Training

As highlighted in Chapter 2, schools indicated that (some) faculty would greatly benefit from, or would like, additional training and guidance on online assessment, especially in regard to technology:

*While there is a Teaching and Learning module in the UCD Professional Certificate/Diploma, the module is about the philosophy of technology and not about the actual practical application of these tools. Many colleagues expressed their eagerness to learn more about technology* **(School: College of Social Sciences and Law).**

Guidance and training in assessment design and set-up, academic integrity, as well as using Brightspace, for example, in relation to using rubrics and/or providing feedback to students were also requested:

*Training - set up assessments, link to rubrics, giving feedback* **(School: College of Engineering and Architecture).**

*Further guidance and training for teaching staff on design of online assessments* **(School: College of Science).**

*Training for staff in online assessment, UCD regulations on online assessment, new methods available and training in academic integrity* **(School: College of Social Sciences and Law).**

*UCD-level training and support (we know there is training for staff to set up quizzes, but more is needed). We are grateful to have an Ed Tech for our school. A suite of information/resources for students and staff, so that individual staff spend less time doing this sort of thing* **(School: College of Social Sciences and Law).**

Guidance and training around secure assessment/question design was identified as a particular need:

*Specific support for developing and designing questions* **(School: College of Health and Agricultural Sciences).**

Drop-in clinics were identified by one school as being a particularly useful means of providing training to staff and worked well during the pandemic:

*The drop-in clinics were very good during the grading period, as they had changed the grade entry during Covid. The training sessions were good, you could go back to them. Can get trained in one session and then go back. But the reports that we get are not as useful as we used to get. The Heads of Subject find this challenging. In moving from infoview to hub, they took out a pre-exam board report which showed us grades for students across all modules in trimester. Now only get reports of grades within our school. We can't look at their overall grade profile. We've raised this repeatedly* **(School: College of Science).**

Some schools provided additional suggestions for how training and guidance might be provided (including to external examiners), and/or which unit in UCD might provide this service:



*IT Services could run central training courses that would focus on exam security on Brightspace or there could be an Explore module on Brightspace to train MCs (School: College of Health and Agricultural Science).*

*Short video clips to explain how to set up assessments and manage grading on Brightspace (e.g. when assessments consist of differently weighted components) (School of Engineering and Architecture).*

*Clearer instructions for external examiners accessing Brightspace, e.g. detailed but concise videos to guide them through Brightspace functions. These would also be very useful for new faculty too (School: College of Science).*

Facilitation of peer learning was also identified as beneficial:

*Continue to have opportunities to share practices across the university, i.e., much like TEL talks and follow-up series. The advent of their online delivery gives much more flexibility to staff to engage in more training as they are not limited to time for attendance (School: College of Health and Agricultural Sciences).*

*Staff suggested more sharing of experience between colleagues, i.e., the teaching and learning lunchtime fora, and more university-wide support for learning Brightspace (i.e., IT support that you can telephone for help) as the school heavily rely on one staff member to support them (School: College of Social Sciences and Law).*

The benefits of having a key contact person to assist with the use of Brightspace or other IT issues was identified by two schools:

*More practical support for graded online assessment design in Brightspace. A known key contact who can sit with a module co-ordinator and help them to implement graded online assessments in Brightspace (School: College of Social Sciences and Law).*

*Some colleagues mentioned their illiteracy and limitations with technology, so they would appreciate more technical support from IT and the university. Some mentioned that a dedicated IT person should be allocated to each school (School: College of Social Sciences and Law).*

### 5.5.1 Educational Technologists

The benefits to faculty of having local access to an educational technologist to help support and enable staff to effectively engage with online assessment were voiced repeatedly and this is reflected in many of the chapters in this report. The following comments are indicative:

*We would benefit from more Ed Tech support to colleagues, not so much via workshops (these are good, but can be quite technical, and they don't fit everyone's timetable), but via drop-in sessions, also by more simple video-tutorials. [\_\_\_\_\_] was extremely lucky to have a dedicated Ed Tech staff member when the pandemic broke out, and who trained us all over the break so that online delivery and assessment were hugely facilitated. However we only had her for three years (School: College of Arts and Humanities).*

One school expressed that the full potential of online assessment is not being realised in the absence of the support of educational technologists:

*Relatedly, Brightspace does have a number of features that take a little while to figure out when setting up assessment. We find that older faculty members in particular struggle the most with this, and as a result also resist using the VLE to its full potential. We feel strongly that schools should be supported by Ed Techs to assist with the VLE setup, particularly where assessment is concerned. It is not enough to provide workshops and IT support; the fact of the matter is that many MCs are not fluent enough in the technology to produce what we are asking them to produce. Moreover, the amount of time that it takes to set these things up is directly at odds with the increased levels of pastoral care that we currently need to provide for our students. Smaller schools do not have the funding to hire an Ed Tech, and as a result we feel strongly that there should be institutional-level provision (School: College of Arts and Humanities).*

### 5.6 Bespoke Online Exam Centre and Enhanced Facilities

Many schools highlighted that online exams often take place on campus: online assessment doesn't always mean remote assessment:

*We have to separate out the online piece with the not being on campus piece. There is an assumption that if assessment is online then it's not on campus (School: College of Social Sciences and Law).*

However, a number of schools indicated that there is a current gap in the university's ability to accommodate online assessment on campus, particularly in relation to wifi strength, availability of ethernet ports and number of available computers/devices, which may have an impact on students' exam performance. There were widespread calls for these deficits to be addressed, for example:

*Serious consideration needs to be given to the network connection facilities we provide to students for accessing the internet if it is to become an essential component of the institution's assessment strategy. Without insufficient numbers of ethernet ports to support access in easily accessible locations for students, and with persistent wifi issues we create a situation wherein a student's performance in an assessment is highly contingent on the bandwidth available on a given day - an issue which becomes all the more pressing if the majority of examinations are crammed into the end of trimester periods (School: College of Business).*

*To enhance online assessment rooms should be better equipped for computers at each seat so that all students can be online and engage with the lecturer online (School: College of Science).*

To address this, there were widespread calls across schools and colleges for the creation of a bespoke online exam centre, where invigilated online assessments could be held. The following comment is indicative:

*A designated assessment hub/building would be ideal. Something that would allow for several hundred students to partake in assessments throughout the year. The network in this location could be restricted, and if need be, machines could be provided for students that do not have the required equipment (School: College of Health and Agricultural Sciences).*

The benefits of such a centre for maintaining academic integrity was highlighted by many schools. The following comment is illustrative:

*In order to ensure academic integrity across the board for the university, a testing tool/in-person facility with mechanisms to create a secure, proctored environment for testing should be identified (School: College of Business).*

In addition to the creation of a dedicated online exam centre(s) on campus, some schools indicated that bespoke exam computer labs would be beneficial. It was suggested that this would also enable the university to better control what materials students may have access to during exams in a way that is less feasible when students use their own devices:

*Provide examination/class test computer labs for students to take online class tests and examinations in controlled conditions. This would also take some pressure off the RDS in weeks 13-15 of each teaching trimester (School: College of Arts and Humanities).*

*Ideally you don't want them to use their own laptops. Opens up to abuse. Also data software issues, updates etc. Do schools then need to buy laptops and give to students for assessment purposes? AirDrop on iPads etc., will always be problematic. Hard to ensure all students working independently (School: College of Science).*

*We need to emphasise student integrity. We also need to focus on accommodating students with different needs. If we're talking about organising online assessment in rooms with an invigilator, it would be useful if computers could be set up so that students can only access the one application they need to do the exam. But if students bring their own laptop, this is not possible. Being able to guarantee integrity even when all students are present is important (School: College of Engineering and Architecture).*

One school noted that trained invigilators may still be necessary in such scenarios:

*Does the institution want to support remote exams and/or test centers on campus? Remote exam should require a lockdown browser tool and/or remote proctoring on a personal computer. Test Center Lab with UCD owned desktops - would require hardware that is supported and tested regularly. The network should be locally managed with the ability to enable a limited internet and/or specific network access to resources. This would still require invigilators but they would need to be skilled in the use of the online testing environment being used (School: College of Business).*

Some schools, however, were not averse to students using their own laptops in such facilities, though highlighted this would require a mandatory laptop policy for all UCD students:

*Online assessments in-house are very useful. UCD should provide either computer rooms or ALE-type rooms with lots of electric outlets plus IT support. Students could use their own laptops in these rooms and some back-up PCs should be made available in cases where students' PCs fail or have difficulty obtaining in the first place (School: College of Science).*

*Test Center Labs with student owned laptops - desk, power and network for a student to use their own personal laptop - this would require a way of limiting access to the internet and or applications by using a lockdown browser. This would also require onsite invigilators too. This would also require a mandatory laptop policy for all students in UCD* **(School: College of Business).**

## 5.7 Programme/Module Level Enhancements

Some schools suggested enhancements related to programme and/or module design to reduce the pressure on students:

*Finally encouragement of longer, less intensive programmes might be a key measure to make many of these pressures less, and overall improve the student experience. Especially considering the need among many students, to work part-time* **(School: College of Health and Agricultural Sciences).**

*Facilitation of cross-module assessments, reduction in the number of assessments per module, per trimester. Perhaps we need to relax the modularisation?* **(School: College of Health and Agricultural Sciences).**

*Ways of reducing the pressure on faculty and resources were also proposed, as was the appropriateness of certain forms of online assessment at different programme stages: Some of the reusable resources for assessment could be developed at a programme and subject area level to provide greater alignments with resources to programme outcomes* **(School: College of Business).**

*Determine whether MCQs can be made stage appropriate beyond Stage 1* **(School: College of Social Sciences and Law).**

## 5.8 Conclusions

Schools identified a number of ways in which UCD can support and improve the continued use of online assessment. These relate to the standardisation across the university of relevant policies, procedures and approaches to ensure consistency of practice and student experience; greater logistical and IT support for online assessment; provision of enhanced facilities for online assessment, including the creation of a bespoke online exam centre; and additional guidance and training for faculty, including increased access to local education technologists.

# Chapter 6

## Academic Integrity



## 6.1 Introduction

Academic integrity was the most widely discussed issue by faculty during the consultation process. Schools across the colleges expressed significant concerns around academic integrity in the context of online assessment. This includes the perceptions that online assessment affords more opportunities to engage in academic misconduct; that rates of misconduct have increased; that misconduct is not always being detected or is difficult to detect; concerns around the limitations identified with the plagiarism detection software, Urkund, and students' lack of understanding of what constitutes plagiarism. These concerns and challenges, as well as enhancement actions proposed by faculty to improve academic integrity in the context of online assessment are discussed in this chapter.

## 6.2 Challenges to Academic Integrity in Online Assessment

Ensuring academic integrity was identified by many schools as the most significant challenge arising in online assessment. The following comment is illustrative:

*Ensuring academic integrity is the most important item by far. Academic integrity can be breached in many ways (e.g. collusion, downloading material from the internet with minimal thought to paraphrasing, using an online essay mill, and related verification of the identity of the person submitting the assessment). In addition, AI can be used to produce a piece of work that may potentially bypass standard plagiarism checkers. Also, students can unwittingly be parties to plagiarism by sharing some of their material with colleagues without realising that that material can be used without their permission. Getting to the bottom of this is a laborious process for an academic integrity committee. The online quizzing tool in Brightspace is not a robust enough solution to host online tests. Ways for students to cheat in online tests exist despite the best efforts of MCs when using the online quizzing tool (School: College of Business).*

Even where no other challenges were identified in association with online assessment, concerns regarding the maintenance of academic integrity were expressed:

*No significant challenges with current online assessment, but ensuring integrity of the assessment was challenging when mid-semester and final exams were online during Covid (School: College of Engineering and Architecture).*

Amongst some staff, a sense of resignation was apparent that academic misconduct is a problem that must be lived with or which can't be adequately addressed in online assessment in some discipline areas. Whilst staff were positive about many aspects of online assessment (see Chapter 3 for further discussion), academic integrity was an area in which faculty expressed the strongest degree of pessimism in terms of viable working solutions, with some moving away from online assessment entirely as a result:

*There is no general consensus here. Most staff accept cheating is widespread in online exams and are forced to use face-to-face examination as the solution (School: College of Science).*

*Think this relates to online exams and MCQs, plagiarism. People recognise that Urkund is generally useful, but overarching sense that plagiarism is an uphill battle that will only get worse. Skillful plagiarism, essay mills. People didn't have concrete proposals about how to address, very difficult when students sitting exams from homes. So not clear how this can be addressed at institutional level **(School: College of Social Sciences and Law)**.*

*The university needs to stay on top of the multiple essay mills out there and how best to investigate these cases. Staff in the school feel that if there was a more rigid methodology around examining students online they would be interested in this. However there is no security around examining science material online to students who may or may not be alone **(School: College of Science)**.*

The difficulties in detecting academic misconduct were flagged by a number of schools, for example:

*Impossible to ensure work submitted is student's own work and that work hasn't been copied and pasted from other sources/prepared in advance **(School: College of Social Sciences and Law)**.*

*It's very hard to come up with something that we think we can suggest as a whole. We imagine the difficulties are similar across schools. I think AI, collusion (via online websites or between students) are quite hard to catch and prove. That is a challenge **(School: College of Arts and Humanities)**.*

*Several colleagues mentioned that it is sometimes difficult to know how much of the online work was the work of the student's, when they do not show up in the lectures/sessions **(School: College of Social Sciences and Law)**.*

*Very hard to detect with quizzes. After randomisation, [there is] no real way to detect. We use it [Urkund] for report assignments, essays. But it's not a super effective tool generally. Flags a lot of false positives and misses some obvious plagiarism. It's the computation of the references that causes issues. People are concerned **(School: College of Engineering and Architecture)**.*

The inability to determine the authenticity of student work was highlighted in some discipline areas:

*In maths, because the nature of symbolic notation, it's not typically possible to enter electronically when under time pressure. So most common way students hand up [work is] to create [a] manuscript of their submission, take photo and upload as PDF. So submission can't be scanned by plagiarism checker. Although all uploaded and electronic, it is still old fashioned. You don't [know if the work is their own]. Really impossible to identify, especially with large cohorts. Don't think there are any software checkers that could help. And if answers are correct, it's impossible to discern. Might spot a copied error across two students, but nothing in correct answers. But we have to allow this manuscript upload because the symbols nature of maths means can't use computer **(School: College of Science)**.*

The local, informal and, perhaps, unintentional nature of some misconduct was flagged by one school, which described the more lenient approach adopted in such circumstances:

*I heard about AI. In terms of detecting, we're reliant on individual colleagues ... In [\_\_\_\_\_], the problem is not human vs AI, but students asking friends and relatives to help them. So it is a bit easier to identify e.g. if their language skills improve dramatically. But in other subjects relying on colleagues' experience. We don't have many cases that we know. Probably more than we realise. We have a few odd cases and the plagiarism committee convene to look at them. Some cases very slight, gave some local remediation/grade reduction. We regard them as late submission in mild cases (School: College of Arts and Humanities).*

Schools also raised concerns about the current plagiarism policy and its ability to adequately support the investigation and sanctioning of cases of academic misconduct:

*In the last year we have had to deal with several plagiarism cases and I felt a bit unsupported by the plagiarism policy because of how it is written. It is not concisely written and could be open to interpretation. I felt a bit exposed (School: College of Arts and Humanities).*

The enhanced capacity for students to engage in academic misconduct in an online assessment context was noted:

*When moving away from supervised exams, students can access all module resources, YouTube videos, not the same as the kind of blind assessment we were doing pre-Covid (School: College of Social Sciences and Law).*

*Instances where online assessments were compromised in various ways. Very busy plagiarism committee during Covid, up 2000%+ (School: College of Science).*

Some schools commented that grades were higher in online assessment conducted during Covid-19:

*Translation exercises in an online circumstance is a disaster. We found average grades were far higher, lower failure rate (almost non-existent) which suggested that there was some level of cheating going on. We weren't in [\_\_\_\_\_] supported and it was less than ideal ... taking an offline exam and putting online should be avoided at all costs (School: College of Arts and Humanities).*

*Grades are certainly much higher with online assessment compared to the same exam being done in a classroom (School: College of Health and Agricultural Sciences).*

*There tends to be grade inflation with online assessments, as they are basically open-book (School: College of Social Sciences and Law).*

*Grades were higher. And when we went back to in-person they went down. Then there were instances of direct plagiarism. For MCQs, the first time we did them in Covid, the results were very high. But that's not proof of plagiarism necessarily. But we were learning as we went. We then reduced the time given for the exam and increased the question options. A relatively small number (School: College of Science).*

Concerns that breaches of academic integrity could threaten the professional accreditation or recognition of programmes were raised by two schools, one of whom has returned to face-to-face exams for that reason:



*We had to run repeat in-person sittings of clinical module assessments in [ ] in the 2020/21 academic session due to concerns over veracity of performance in core [ ] modules. Such issues have the capacity to threaten the professional accreditation of our programmes and undermine our assurance to the general public of the quality and competence of the UCD graduate in the school's clinical professional degrees (School: College of Health and Agricultural Sciences).*

*Exam integrity is a major concern with online examinations; some faculty have reverted to face-to-face examinations in the RDS due to the integrity of professional programmes and patient safety (School: College of Health and Agricultural Sciences).*

The challenge of maintaining academic integrity in the context of MCQs was raised by some schools:

*Academic integrity is a real concern with MCQs – we cannot ensure who is taking the test, whether students are using textbooks during the test, whether students are texting answers to each other or sending screenshots, or whether students are meeting up to do the tests in groups etc. (School: College of Social Sciences and Law).*

A variety of reasons were proposed for why students might engage in academic misconduct, including lack of understanding, over-assessment, time and other pressures, the short assessment window and different social norms:

*Can be misunderstanding – students don't realise this is plagiarism. In previous experience, have been clear-cut cases. But a lot of times it is unintentional (School: College of Social Sciences and Law).*

*A lot of students we meet on plagiarism committee, complex reasons. Overassessment, pressures (School: College of Science).*

*That glut we had last year. A lot were students who were facing an urgent crisis that they couldn't get out of. They see no other opportunity or way out. We'd hope they'd just ask for an extension if needed, but this wasn't happening last year (School: College of Social Sciences and Law).*

*Why students cheat:*

- *Pressure to pass and obtain their qualification (especially given the high fees, especially for international students)*
- *Rushed assessment completion due to poor time management*
- *Excessive assessment burden on students? (School: College of Health and Agricultural Sciences).*

*Academic workload and academic timetable were identified as potential influencing factors: Pressure on students coming through. There is pressure throughout the year (modularisation) rather than just final end of year (School: College of Social Sciences and Law).*

*The quantity rather than the quality is the issue we are asking more and more of students in a shorter space of time. Simply put, there is such a large quantity of things to be done to fulfil the requirements of an undergraduate degree. I wonder if the best way to address plagiarism is to look at the conditions that allow it to flourish. I think that is a big part of the problem here. Time pressures drive students to cut corners. Students believe we don't want them to learn, but that we want them to produce a piece of work* **(School: College of Arts and Humanities).**

*The timetable is problematic ... e.g. a student who has one lecture at 4 pm in a day. Why would they go? Especially if students are commuting or having accommodation issues. These are influencers that affect attendance and engagement and ultimately assessment* **(School: College of Health and Agricultural Sciences).**

*Have the impression that plagiarism is a tremendous temptation for a lot of students. Some will plagiarise to the extent that they can get away with it. Don't think UCD has a worse problem than elsewhere. But think that the internet and mobile internet has changed everything about student attitudes about what is appropriate to submit as work. Students have a more fluid idea about what it is to own an idea or an argument. The extent to which some of them think in meme-like ways, a unit of thinking that no one owns. Don't form an argument, just deal out of the cards that are available to you. Trying to get students away from [the] idea that the answer is out there for them. Students asking whether they should be facts or opinions. But it's neither, it's reasoned judgement but they don't see this. Feel like I'm increasingly out of touch with how students are thinking about these things. Everything is shared, public. Makes it harder for them to understand what we mean by plagiarism* **(School: College of Arts and Humanities).**

Different cultural norms and expectations were proposed by two schools as a possible contributing factor to academic misconduct:

*This is an increasing problem as some of our international students come from cultures or educational settings that don't emphasise attribution of cited text in the same way as is common in Western culture. We already require students to complete training in this area but the problem continues to grow* **(School: College of Social Sciences and Law).**

*Cultural differences an issue. Some Eastern cultures have completely different perspectives on plagiarism. It is acceptable to quote and copy and paste without acknowledgement that we don't understand as Westerners. You can see this in two ways - they're coming to Western universities so need to abide by customs, but on us to provide adequate training. Also, cultural competitiveness with US students* **(School: College of Social Sciences and Law).**

### 6.3 Types of Academic Misconduct Detected

Schools identified a range of academic misconduct engaged in by students undertaking online assessment, including copy and paste plagiarism, collusion in many forms and contract cheating, each of which is dealt with in more detail in the sub-sections below. Some illustrative examples include:

*Plagiarism is getting worse, seeing it more at graduate [level]. How to get ahead? Sometimes it's wilful, sometimes not, but often they struggle to make decisions about paraphrasing etc. ... In terms of essay mills, a good chunk of our work is practical. It's about making a task that's*

*difficult to do this. Moving parts in my assessments, which prevent, but collusion an issue on individual assignments ... WhatsApp a huge issue with students sharing information. What can we do with that? (School: College of Social Sciences and Law).*

*Online assignments provide far greater scope for plagiarism, and students often default to the many "learning" websites available (dictionary entries, wiki-like sites etc.), or display a poor understanding of the difference between appropriate online academic sources and other online sources (e.g., personal websites where individuals upload essays they may have written for the courses they took, or blogs which essentially are opinion pieces) (School: College of Social Sciences and Law).*

*My impression is that it [plagiarism] is not [an issue], but I really don't know for sure as I am aware of websites where students pay reasonably cheap prices to have work completed for them and there are impressive AI programmes also available (School: College of Arts and Humanities).*

### 6.3.1 Plagiarism

Plagiarism was identified as an especially serious and time-consuming issue, with some schools indicating that students don't fully grasp the full meaning and implications of the offence:

*It was something like 20-30% of the class that was plagiarising ... Regarding plagiarism around essay writing, it was quite acute at times ... It is a growing issue, the amount of time you spend following up on plagiarism cases. The problem is that a lot of students think that plagiarism is just taking something verbatim. They're slow to grasp the real meaning. There is lots of confusion because plagiarism is everywhere socially. Also, students are unfamiliar with the university environment at early stages. They could be a bit more conscious in what they're doing (School: College of Arts and Humanities).*

*The main issues are related to plagiarism and the use of online dictionaries such as Google Translate and DeepL ...In addition, online assessment provides no way of authenticating authorship and so invites impersonation (School: College of Arts and Humanities).*

*Most of us spot plagiarism the old fashioned way. The real egregious cut and paste stuff happens rarely and is caught in Urkund. Most of our issues occurs with Year 2 where they are doing reading widely, but they're not owning up to the fact that they getting perspectives from their research. They're putting it into their own words and we have to explain that that is still plagiarism. They're not crediting where ideas are coming from (School: College of Social Sciences and Law).*

Some schools described the steps they have taken to address plagiarism and its detection:

*A plagiarism committee was established and a Plagiarism Protocol and guidance on interpretation of Urkund reports were developed (School: College of Science).*

*For me, it's a first year problem. I would be familiar enough with literature to know if references don't exist etc. 30% project, part of their learning is that they have to do the reading. Leads to less issues with plagiarism (School: College of Arts and Humanities).*

*Plagiarism was the main challenge. Most module coordinators using MCQs or short answer questions “timed” these assignments as a measure to reduce plagiarism or conducting these assessments online but in the class, so the coordinators can monitor the process better. Plagiarism was also the main concern for bigger assignments (5,000-7,500 word reports) as the tools currently available in Brightspace offer poor results compared to other ones available elsewhere. i.e. the software computes references and headings of the assignments into the percentage plagiarism, so the module coordinators have to go through each assignment and delete those sections or go to the results one by one to really figure out the extent of plagiarism. Moreover, most students do not understand the results of the plagiarism checker, so they do not use this to check their work prior to submission (School: College of Arts and Humanities).*

One school noted that students caught plagiarising are aware that they have engaged in misconduct, indicating that lack of knowledge is not (always) the issue:

*Note that when we had our discussion with the suspected students, they knew they had done something wrong. Even without formal education on plagiarism, the reality is that students were sitting exams in the same room. Another tried to get in touch with Access but couldn't. So degree of leniency needed. But they do know what it is (School: College of Science).*

### 6.3.2 Collusion

Some schools also identified collusion as a concern in online exams:

*We have no control over whether students are working together to complete online assessment (e.g. exams) (School of Social Sciences and Law).*

*The major challenge, despite all the protections we can put in place, is the potential for collaboration (either within or outside the class) and impersonation. While proctoring is an option, the softwares used up to now have several problems, and I don't think an ideal version exists. General challenge of not being able to establish who is doing the test - general integrity problem (School: College of Science).*

Collusion was identified as a particular issue in the context of quizzes:

*Plagiarism and group work: remote online quizzes increase the possibility for students to collaborate on answers because it isn't possible to monitor students when they are completing quizzes remotely (School: College of Social Sciences and Law).*

*Collusion between students - not in principle a bad thing, but can potentially disadvantage students without a social network at UCD. MCs have not tried to address this challenge as he is not sure who to speak to (School: College of Social Sciences and Law).*

*The greater potential for collusion in online assessment was described by one school: We did have a bonanza of plagiarism. We had 12 cases last year, where we would normally have 3-4. One case where a student uploaded another student's assignments. Lot of sharing of work on email in a way they wouldn't have done before... not meeting or chatting like they used to. What we end up saying is “you could get into big trouble” in cases of passing on an essay ... Question of should they be sharing final drafts of work at all. Usually it's because students are in a panic. Not sharing would alleviate this. This is relevant to online assessment because*

*there seems to be more interaction over email, full assignment sharing. Also WhatsApp sharing answers in online MCQs. Then the other is where they try to in a group of three, split topics, and then sit assessment together so they can game which topics they're going to study. A small group of students sharing a workload in terms of topics isn't new, but we can't see them working on this together. But the MCQ cheating is new* **(School: College of Social Sciences and Law).**

The use of WhatsApp groups to facilitate collusion was noted by a number of schools, as illustrated in the following indicative comments:

*There are a few cases where students have used WhatsApp to share solutions. Some students are just copying solutions because of time pressure. There has been a lot of copying from external sources and a lot of sharing of solutions among students* **(School of Engineering and Architecture).**

*But that was one of the issues - actually detecting it. It is not so much plagiarism, but collusion that we're trying to find. Yes, there were WhatsApp groups. Lecturers were actually being asked to deal directly with class representatives, who would pass on messages to WhatsApp groups. Students were coming back with the same errors in their assessment, indicating collusion. Some students were pretty much explicit about it, which might suggest they didn't realise it wasn't allowed* **(School: College of Science).**

*Students still managed to beat the system, I think through WhatsApp. They can photo and share the question, so they have their own question bank [of] questions* **(School: College of Science).**

One school described instances where collusion was detected. The school speculated that confirmed cases were merely symptomatic of wider, undetected collusion amongst students.

*Well, in simple terms we had a lot of difficulty during Covid with online assessment. There were issues with student collaboration. We had a particular instance of five students in one module that worked together during the exam, and the only reason we spotted this is that they all made the same errors. We spoke to students and only one of the students admitted they had worked together. The other four denied it. They only got caught for one question, but likely they worked on more together. It is also likely they did this for other modules. The problem with this is that if there wasn't a consistent error, we wouldn't have caught this. It would have gone unnoticed. For that reason, it is fair to say most of the staff were quite happy to go back to normal RDS exams* **(School: College of Engineering and Architecture).**

*Large number in year one of Covid in one particular module. Loads of the class had a similar solution ... Someone did it right, but remaining who used it were questionable. Module Coordinator went into it in great detail. Found many cases of looking at Brightspace notes, which we had evidence for. Think it was about 20 out of 80 students. Similar happened in Stage 4 module. It happened before we moved to open-book. When the pandemic made us go into lockdown first, exam papers were already written and reviewed by extern, which did leave the question about the sharing of solutions. And that's much harder to catch* **(School: College of Science).**

The challenges with proving suspected collusion were affirmed by other schools:

*The burden of proof is still very difficult to meet. You have very slim grounds to go on. We have had one or two citations in report issues, but if it's online assessment it's hard to prove collusion etc. Think there is a light emphasis on plagiarism in UCD* **(School: College of Engineering and Architecture).**

Some schools described ways in which they have modified their approach to assessment in order to limit the risk of collusion:

*Online assessments are open for a short period with a strict time-limit once begun and questions appear in random order. This reduces the practicability of collusion* **(School: College of Social Sciences and Law).**

*I know Brightspace has been updated recently so just can talk about my experience so far. So in my case, give two hours with allowance for open-book, allow them to check grammar. Questions selected from larger repository. So each student has something that is slightly different from another. Try to update them from time to time so they can't refer to previous exams. Don't know how much this prevents students communicating with one another, but we try to avoid collusion as much as possible. Yes, weekly CA quizzes and MCQs, so not testing how much the student has learned, but a reflective tool to see if they've understood material, especially in language. Similarly to learning journals ... way to remind them to go over the content again and summarise it a bit* **(School: College of Arts and Humanities).**

*On the MCQ type tests, the only way to identify potential cheating is to examine whether the same computer is being used, or computers off the same network at the same time to establish if there is co-operation. However the software does randomise the question order and the answers and it is relatively easy to modify questions from year to year* **(School of Social Sciences and Law).**

Greater guidance for faculty on how to design exams to mitigate collusion was requested:

*The biggest challenge has been trying to mitigate against cheating/collaboration by students, particularly for MCQ exams. Very careful consideration has to be given to MCQ exams with regards to (i) How to randomize the questions, and (ii) How to ensure that enough time is given to the students ... While [\_\_\_\_\_] provided some guidance for teaching staff it was generally felt that we would have benefited from more guidance in this area* **(School: College of Science).**

Schools expressed concerns that methods which might reduce the risk of collusion, such as shorter assessment timelines, may unfairly disadvantage some students:

*Having very tight timelines to combat cheating typically leaves students unable to think through problems slowly, and this can be frustrating for some of our stronger students* **(School: College of Science).**

The positive deterrent impact of taking swift disciplinary action on collusion was noted by one school:

*Since then, two students in the following year were forced to redo the assessment. Haven't had any since then. Yes, I think the first year online had the most cases. Even though students*

*had been told that they shouldn't do certain things, they still did. Our plagiarism procedure went into effect, and then word spreads that action is being taken and there are consequences (School: College of Engineering and Architecture).*

### 6.3.3 Contract Cheating and AI

Schools also expressed concerns regarding contract cheating, especially essay mills and “assignment help” websites:

*Another problem is the online companies who offer to write essays, so it is at all angles. The latter is rising ... Have seen our own exam questions on these websites (School: College of Science).*

*Website - cheg.com - does generate answers, has our previous exams questions on it. But students paying €14 p/m to avail. Marketed as a revision aid. But the answers are often wrong. Hard to shut down because is marketed as a legit operation, but the cheating is a side bar thing for them (School: College of Engineering and Architecture).*

One school highlighted that contract cheating sometimes occurs between students and does not involve an essay mill. The challenges in addressing this form of academic misconduct were emphasised, especially lack of time:

*It's so hard to counteract this kind of thing. How can you know? We don't have the tools to deal with such cases of plagiarism. We had a case of a student who wrote an essay, lent it to another student, and the same essay appeared a couple of years later. That sort of thing does happen and Brightspace can pick this up. But it is very hard, we don't have the time. Huge modules, grading quickly to meet deadlines (School: College of Arts and Humanities).*

Steps taken by schools to address the threat posed by contract cheating were described by some schools, including the provision of relevant information and guidance to students, use of group work, presentations and interviews:

*Announcements about plagiarism about predatory assignment writing websites at the beginning of each module and in course handbooks. Definitely our students are more aware this year. We won't know until end of trimester if it results in change in behaviour (School: College of Social Sciences and Law).*

*We'd like to think we could recognise [use of essay mills]. But we haven't encountered it. We have encountered online essay mills that have had questions from other [\_\_\_\_\_] departments in Ireland. But we couldn't find a version of our assignment available online. I'd like to think that because of the specific nature of our assignments, group work elements, presentations etc., it would be quite hard for an essay mill to generate a response. Assessment is really integrated into our modules... students doing stuff in class that really closely links to their assessment. So it would be hard. Makes essay mills a much less attractive option, except for those students who haven't come to class (School: College of Arts and Humanities).*

*But risk that essay mills become more sophisticated. What alarms me about AI bots ... A lot of our year 1 modules, a lot of essays online that can be repurposed. But very specialised at Stages 3 and 4 so becomes more difficult to plagiarise. So the quality of the analysis, specific historiography, we thought would make it more difficult. Maybe not. Also re people being busy,*

*a version of an oral exam is possible. MCs have a right to interview students about their essay if needed. Opportunity to interview a random sample. Could be good for large modules. But adding to workload* **(School: College of Arts and Humanities).**

One school took the potential use of essay mills by students into account when setting questions for assignments:

*... definitely think the thing that helps students steer away from essay banks is the fact that we do a lot of assessment components which focus on specific resources like commentaries. But I think the essays do address high-level questions, but only through specific sources. Students may access essay mills, but the specific nature of our primary sources makes plagiarism more difficult. It would be glaringly obvious if they were mentioning sources that I had never told them about. Usually, I try to come up with questions that are not easily answerable with essay mills, and I think this is true of all colleagues* **(School: College of Arts and Humanities).**

Another school expressed that university policy around use of essay mills, especially sanctions for this form of academic misconduct, needs to be strengthened:

*Really for the predatory essay mills, think the current deterrents are quite appropriate. It's quite standardised. It is really hard to determine if someone used an essay mill. So think the penalty for this needs to be more significant. We found recently a number of assessments are now available on an essay mill. The guidelines are useless and have nothing to do with the course we've done ... shown to students as a warning. If you give over money and get nothing back, you have no one to turn to. If you catch it, the penalty is the deterrent, but it's catching it is the problem. This is a huge challenge* **(School: College of Social Sciences and Law).**

Unacknowledged use of paraphrasing tools was also flagged as a concern by one school:

*I have a subjective impression from the language of submitted remote/online open-book assignments, that students are using software to paraphrase without citation. I find their citation and critical appraisal skills are very poor* **(School: College of Health and Agricultural Sciences).**

Other schools highlighted concerns around the emerging threat posed by artificial intelligence generators:

*In our subjects, there are online and offline resources which can effectively answer many skills-based examination questions. This issue will only become greater (for all subjects) as AI algorithms grow in sophistication and availability* **(School: College of Science).**

One school highlighted that the definition of plagiarism needs to be expanded to include artificial intelligence:

*A clear definition of plagiarism is needed, one which includes AI* **(School: College of Science).**

*A resignation to the inevitability of AI and its use in education was in evidence in one school: The AI tools are probably good in writing existing knowledge, but don't know if they can write new knowledge, new intellectual contributions. So essay topics set in a way that you need to put new creative thought into it would be good. If an AI can write a really good essay about*



*a topic maybe this is what is going to happen anyway. In the case of non-English-language students, it might reach a point where they don't need to have as good a grasp of English as they previously have. But I think you're never going to prevent plagiarism (School: College of Science).*

Not all schools expressed concerns about contract cheating and/or AI generators, with some viewing these developments as less of a threat in their discipline areas:

*Fact that open-source artificial intelligence is not an issue for us because students are solving problems. If artificial intelligence tries to do it, it would be strange. There they are, quantitative problems with an English explanation thrown in. But AI could be an issue in project reports (School of Engineering and Architecture).*

*I think for [\_\_\_\_\_], it is hard for students to plagiarise. An awful lot of how a student constructs an essay relies on them arguing the strengths and weaknesses of primary and fragmented sources. Our subject is at a huge chronological remove from other subjects. We get students to assess sources for bias and for overlap. There is less material for artificial intelligence to train on in [\_\_\_\_\_] subjects. Artificial intelligence can't do anything, it can only mimic what it has seen already (School: College of Arts and Humanities).*

*In the context of the last point [contract cheating], the [\_\_\_\_\_] doesn't have a plagiarism problem on the same level that other schools seem to have. Our emphasis on comment questions and close reading skills across several modules has led us to design a set of assessments that demand students engage with specific texts, images, or artefacts, through which to address general and higher-order questions (instead of solely addressing general and higher-order questions). Such assessments don't lend themselves easily to plagiarising answers to questions set in a previous year (which would have addressed a different text or image) or drawing on essay banks (which usually deal with the higher-order questions) (School: College of Arts and Humanities).*

## 6.4 Plagiarism Detection Software

Much discussion centred on the extent to which the current plagiarism detection software used in UCD, Urkund, supported staff in maintaining academic integrity. Mixed views were expressed as to the software's ability to detect plagiarism successfully. Positive responses included:

*The real egregious cut and paste stuff happens rarely and is caught in Urkund (School: College of Social Science and Law).*

*Urkund does identify material submitted by students for the same modules: software does pick up where students submit [the] same [material] for two modules (School: College of Social Science and Law).*

*A functioning effective plagiarism detection tool is critical, and all online assessment, if submitted, has an originality report visible for graders. The current software has served our school well in detecting plagiarism related to a third party, purchasing/contract cheating, and identifying issues with paraphrasing and failing to cite (School: College of Health and Agricultural Sciences).*

Despite this positivity, it was noted that Urkund may be less effective at detecting plagiarism in images:

*I do not think we have a major problem with it. I think that Urkund does do the work for text, but if a student has equations as an image, that's the time that it cannot catch plagiarism. But otherwise it does the work it is supposed to* **(School: College of Engineering and Architecture).**

Other limitations of the current plagiarism detection software were highlighted by schools across the colleges, particularly as they relate to the identification of previous work submitted by students or work that has been submitted in other universities. The time-consuming nature of investigating such cases was flagged:

*Difficult to find the original source if submitted by peers - a past student. Online sources are easy to identify, but vertical plagiarism is very difficult. Sometimes the plagiarism committee is just bluffing. They can see that 40-50% came up in a previous essay, but they don't have access to that essay. It gives an amount and a submission ID, but not information on the person, when etc. It's also time consuming. A lot of time prepping for plagiarism committee meetings [is] spent trying to separate real plagiarism from not real. Problem with genuine quotes and citations showing up as plagiarism, especially if the student has tried to be clever. Could spend 40 minutes sifting through one essay. Software does pick up where students submit same for two modules* **(School: College of Social Sciences and Law).**

*The Brightspace originality checker (Urkund) does not have the easiest interface and sometimes spots overlaps with documents in other universities ... to which the marker does not have access and therefore cannot verify* **(School: College of Arts and Humanities).**

Schools identified challenges using the Urkund interface and with the range and type of plagiarism detection it offers:

*I do not find it [Urkund] particularly useful in the range and type of detection it offers. A lot of the time it throws up something that has been detected in another university. How are we supposed to deal with this?* **(School: College of Arts and Humanities).**

*Don't like the Urkund reporting on it though, it's a nightmare. Can't do this analysis in a straightforward one, e.g., seeing which questions are tricky, caused issues. Agree that this needs to be done manually. I couldn't get a proper report. Not sure if my lack of technical knowledge* **(School: College of Health and Agricultural Sciences).**

*I think Urkund was looked at a few years ago, and it seems generally people are not that happy with it though. It's the way it identifies plagiarism. It recognises everything, and then staff have to manually go through and remove the bits that are not plagiarism* **(School: College of Health and Agricultural Sciences).**

Some schools expressed that the tool does not accurately detect plagiarism or gives “false negatives”, thus undermining schools’ ability to determine the real level of plagiarism taking place:

*The tools for detection are very poor. I would be afraid to dig deeper to see what we unearth. Don't think we have enough information to say how we're getting on. I have no idea to what extent it is really happening because we don't have tools to detect. Think tools are sometimes worse than useless because they give false negatives. They say there is no plagiarism where there is, and we don't get many positives. Problem goes up to PhD levels. Don't think we have the tools to assess research integrity. Not to say it exists, but it's that we don't know. So important, because if money ever arises it's a question of how much we value our reputation. Huge risk with research (School: College of Science).*

One school stated that creative paraphrasing enables students to evade Urkund:

*Urkund is viewed as a positive tool, but with some concerted effort at paraphrasing, it seems that students can successfully pass the filter to not get caught (School: College of Social Sciences and Law).*

Other schools agreed, indicating that Urkund also gives “false positives”, whilst missing obvious plagiarism and that it is hard to extract information:

*We use it for report assignments, essays. But it's not a super effective tool generally. Flags a lot of false positives and misses some obvious plagiarism (School: College of Engineering and Architecture).*

*Plagiarism tool - working but hard to extract info (School: College of Science).*

It was pointed out that in reality it is the module coordinators who are making the final judgement as to the percentage of plagiarism that is present in the text and the references:

*We have interesting cases of plagiarism in school, we all learn there is no magic number that indicates a degree of plagiarism. 5% could be a full paragraph, whereas 40% could be tied to referencing etc. At the end of the day, module coordinators are the ones evaluating the software, it's their interpretation (School of Social Policy, Social Work and Social Justice).*

The lack of Irish material within the Urkund database was also identified as an issue:

*The plagiarism system requires a function to train it with Irish books and book chapters. These are usually not in plagiarism databases and would require a special upload function if they are used as core reading in modules (School: College of Social Science and Law).*

*Faculty in disciple areas that have a strong numerical orientation were of the view that the software does not work well. This was attributed to the type of submissions that are required: Because of the nature of symbolic notation, it's not typically possible to enter electronically when under time pressure. So most common way students hand up to create manuscript of their submission, take photo and upload as PDF. So a submission can't be scanned by plagiarism checker. Although all uploaded and electronic, it is still old fashioned. Don't think there are any software checkers that could help. And if answers are correct, it's impossible to discern. Might spot a copied error across two students, but nothing in correct answers. But we have to allow this manuscript upload because the symbols nature of [\_\_\_\_\_] means can't use computer (School: College of Science).*

For other schools, the nature of the subject itself makes it difficult for the software to detect plagiarism, especially in the areas of computer coding and design-based subjects:

*One of the things that is different, but also versus the humanities is that we deal with a lot of plagiarism of computer code e.g. MathLab, Python. Plagiarism software is effective for essays, but we do not assess a lot by essays. We would need plagiarism detection software that could handle computer code of different languages. Some colleagues in other [ ] disciplines talked about Ithenticate plagiarism platform (School: College of Engineering and Architecture).*

*The main issue we have is that the plagiarism is not in written word, but is in design. We struggled to deal with these - easier with essays, text etc. Can be very subjective from a design perspective whether something is plagiarised. Did have a case of a planning one that was copied from a previous year. Also had students who plagiarised the code to make something in a computational design module. Like plagiarising text from an essay, but the students didn't realise they had plagiarised it as it came from YouTube. It's the non-text based that is posing issues. Also in studio and design based there is an emphasis on taking and learning from others. But it is important to understand the nuances of this influence ... International benchmarks on how to deal would be useful. Templates that might be international for non-text-based plagiarism. Must exist somewhere, nothing in UCD on design or code based plagiarism. We can't set up a percentage like the UCD policy advises ... guidance on the difference between plagiarism and being inspired, taking reference from others (School: College of Engineering and Architecture).*

A particular issue identified with Urkund was in relation to students uploading drafts of their work, which the software subsequently identified as plagiarism:

*There are issues with the plagiarism software when students upload drafts and then the software picks up the drafts as plagiarism at a later stage. It causes confusion and we need to tell students not to worry. We need a stronger school approach with the originality checker. With our postgraduate programmes, it is more of a trust thing because of the nature of the programmes themselves (School: College of Social Sciences and Law).*

Reference was made to the fact that the Urkund score causes students unnecessary stress as it picks up bibliography:

*Urkund score can worry students, as it picks up bibliography etc. Need to help students understand what bits are okay and what aren't (School: College of Social Sciences and Law).*

Schools pointed to the importance of students having the facility to look at their plagiarism reports:

*A lot of them coming to meetings didn't realise they could look at their plagiarism reports. We've standardised this, but something that university should consider. Are we supposed to put checker on and can every student see the percentage of plagiarism? Think it would be good if this message came from the top, a university position. Seems like it would be helpful to stop people putting in plagiarised work, if they could check themselves (School: College of Social Sciences and Law).*

Reference was made to the fact that some faculty do not activate Urkund, or need to be reminded to do so, which results in problems later on in the process:

*Others referred to the fact that some faculty inadvertently forget to activate Urkund and that causes a number of challenges: there is a technical issue there. Some of them forget to activate the Urkund system on Brightspace, so is not automatic on Brightspace. This is a problem* **(School: College of Social Sciences and Law).**

*Getting people to use it and follow up is the issue there is completely inconsistent use* **(School: College of Social Sciences and Law).**

*Ensure plagiarism software is automatically on and fit-for-purpose/when submitting an online essay students should automatically be given a “plagiarism” warning and that the essay is simply not “submittable” if it crosses some threshold. Or that the submission has the plagiarism report automatically attached* **(School of Social Sciences and Law).**

Negative comparisons were made with the predecessor tool in Blackboard. The following comments are illustrative:

*Also the previous one was much better at picking out overlap across groups of students – collusion* **(School: College of Health and Agricultural Sciences).**

*The plagiarism tool is very time consuming. The Blackboard one was much easier, it just gave a percentage of plagiarism. The plagiarism software Urkund is less effective than the previous version used in Blackboard* **(School: College of Social Sciences and Law).**

*Plagiarism software is very poor compared to Blackboard and Moodle. Setting it up is so complicated. Even when it does work you’re left trying to guess what students are doing. Student to student work needs to be done very manually ... looking at comparable safe assignment scores across students’ essays. And then it’s just guesswork, we have very little to go on. Unnecessarily time consuming. The software isn’t giving enough proof. Students are being told why and how to fix. But in terms of a percentage on Urkund that determines plagiarism, this is not set* **(School: College of Social Sciences and Law).**

A number of schools called for investment by UCD in a different plagiarism detection tool (discussed further in Section 6.7):

*Better plagiarism tool was desired* **(School: College of Arts and Humanities).**

Schools advised that any new tool should cater for PhDs and not just smaller assignments and provide links to the source documents that have been plagiarised:

*Certainly if there’s a review of Urkund, it should be that the system we have can deal with PhDs, not just small pieces of work. Have example where external examiner can do a search on our work from their institution, but we can’t. Yes, Ithenticate is the preferred software for this. Think that Graduate Studies are looking at this. Have asked whether it can be used to capture undergraduate peer-to-peer work. Urkund have been bought by Turnitin. Turnitin used to identify the other students involved in collusion. Urkund doesn’t do this* **(School: College of Science).**

In addition to issues with Urkund, the reduced window within which faculty must grade work and check its integrity before returning to teaching was cited as a challenge:

*When dealing with Urkund, we should be putting the onus on them [Urkund] about how they're going to support. We pay them a licence. Service providers should be tackling also. The window for your grading between December and exam boards in January is so tight that I find it hard to think that graders can be on top of grading, go through Urkund, and plagiarism process. We used to have a window of no teaching, temps grades in, but now it's grades in and back to term. Those checks on integrity are very difficult to apply. Teaching term now starts the week of the exam boards. Faculty need time. On Infohub, can look at all assessments. But it doesn't indicate whether assessment are online or face-to-face. Might be very helpful to have this added in Infohub* **(School: College of Health and Agricultural Sciences).**

## 6.5 Current Actions to Deter and Detect Academic Misconduct

Changes in practice within schools, including changes in approach to assessment, to address the risk of academic misconduct were also described. These included the use of authentic assessment, changing assessment year-on-year and encouraging students to take ownership of their assessment:

*When the 2020 plagiarism policy came into place, we did some work ... developing assessments that avoid integrity issues, authentic assessment. Then changing your assessment year-on-year when possible. [Being] specific about what integrity means for your module* **(School: College of Health and Agricultural Sciences).**

*Yes, in some of the classes do formative things, like where students have to map out their assessment etc. to encourage them to take ownership of their assessment and get some feedback* **(School: College of Arts and Humanities).**

*One school stated that focusing on the joy of learning is an effective way to address plagiarism: We are trying to make the course about the students enjoying their learning, and this is a way to address plagiarism. They get absorbed by the activity rather than by the grade* **(School: College of Arts and Humanities).**

Other schools discussed the steps they have taken to advise students in relation to plagiarism and provide training in academic writing:

*I think at the outset of a module, the first lecture of all modules, we introduced students to the concept of plagiarism. We have a slide that does the rounds. We introduced university policies at this stage, but not sure it goes much further than this. The year head also introduces plagiarism concepts when they meet students at the beginning of the year. I'm not sure if that stuff is specific to the [\_\_\_\_\_]* **(School: College of Engineering and Architecture).**

*The school has incorporated online academic integrity training into its curriculum via the Explore module on Brightspace. This is a requirement for all first-year students taking the core "Reading World Literature" module. It would be helpful if more disciplines incorporated this training into their curriculum* **(School: College of Arts and Humanities).**

*In my second year class, the plagiarism quiz is mandatory. They do a wiki post, which we have set up that they cannot plagiarise, goes through checker, and we send it back, fix it. Part of the exercise is that you have to learn about writing your own content. It's to teach them what it means to write your own work. We give them the info first and then get them to make the decision **(School: College of Social Sciences and Law)**.*

*In terms of communication, we used to periodically make sure every module had a banner about plagiarism. This included a link to what is plagiarism, a link to the academic policy, and link to the library module. We might have fallen out of this habit. But it is a good way of proceeding. So no student can say they did not know about plagiarism **(School: College of Engineering and Architecture)**.*

The effectiveness of this short introductory training to amend ingrained or long-standing cultural practices was queried by one school:

*We do have courses on plagiarism which are required by postgraduates. But can be difficult to change outlook in a two-hour course for grad students, where someone has been brought up with a particular outlook for years ... also cultural responses to what you do when you've been found out for plagiarism. Some cultures encourage denial. That's why that wiki exercise is good. They can try again and again, train them, go through it with them. What we want them to do is know how to do a good job when they leave. We did have librarian come in as part of a module, who was talking about setting up an academic integrity programme in your academic library. So worked as real life example of what students doing **(School: College of Social Sciences and Law)**.*

One school described how good academic practice is encouraged through the appropriate use of precedence:

*Yes, when we teach we tell them to look to precedence. So think this is a key point. Build in the acceptance that it's OK to learn from what has come before. But need to clarify you can't just copy and make it look different. Think we've come a long way in teaching students how to credit images and sources (habit of doing it every time), that they always reference in presentations etc. Think we are working on some cultural shifts. Really in [\_\_\_\_\_], nothing is completely new. It is always iterative. But of course there is a clear line between copying and referencing. One of the strengths of our school is that it values precedence and would hate to lose this, or make students afraid. Embedding good habits, knowledge, communicating is very important. Rarely come across it in studio work. But the problem is that you can't put a model through a plagiarism checker **(School: College of Engineering and Architecture)**.*

The use of learning journals to support academic integrity in online assessment was described by one school:

*I think this is the attraction of the in-person exams - they avoid these issues [plagiarism]. But then this problematises the variety of assessment. A certain skill set won't be captured by doing exams. I've been using learning journals in recent years, and think this is working well. Students provide a weekly two page report where they analyse the lecture, a set piece of reading, and themes of the week. There is very little scope for plagiarism and they have to work consistently. I am finding this useful. I am trying to avoid traditional RDS exams, as they can be challenging for students who get very nervous about exams. Another plus of Covid was that*

*it liberated us from exams also. So we don't have to cover everything, and can focus in more on the assessment. I wouldn't go back to exams from that point of view. But again, some colleagues feel very strongly to retain them. Many are exasperated by plagiarism (School: College of Arts and Humanities).*

Other schools described using cases of academic misconduct as a “learning opportunity” focusing on why a student has not engaged with integrity and educating them on why they shouldn't behave in this way, rather than escalating the case through the formal system:

*We have been keen over the years to draw students' attention to it ... We provide them with lots of links, why academic integrity is important, but we still encounter it. There is a small proportion of students who try to find out ways of submitting their work but with less integrity. What we've found as a school is that that tends to be heavily symptomatic behaviour. Tradition in school is that when MC encounters plagiarism we ask students to meet with us. Focus on why student did this, what is going on for them. We tend not to use the word plagiarism - leads to a very specific set of procedures. But what we prefer is to make it about lower academic integrity, learning opportunities, teaching students about why they shouldn't do it. They can take assessment again, we do cap it sometimes. But we don't get the egregious plagiarism that you get in some schools. We see it as an alienation between MC and student. So trying to build personal relationships with students is a strong antidote to plagiarism. Think that some assessment strategies engender plagiarism, which we discourage. Focus on assignments as personal learning, reflection. Can't be copied and pasted. Practicality of this is challenging though. Yes, but still think we need to require the personal (School: College of Arts and Humanities).*

*Case with Stage 1 student last year, it was clear that student had rushed exercise, but wasn't clear on what plagiarism actually was. Used this as a teaching moment rather than using up the system. Good scope for judgement (School: College of Arts and Humanities).*

A number of schools discussed the randomisation of questions as an approach to preventing academic misconduct:

*The tricky part is designing questions that are not copy and paste answers. Not seeing major issues with this. Randomising questions used as a solution, so not everyone getting the same exams, reduces risk ... The key is putting the processes in place to offset the integrity issues. Then just trying to balance up the burden we're placing on ed techs and support staff, while being confident students are meeting the learning outcomes (School: College of Health and Agricultural Sciences).*

One school described the challenges and administrative burden involved in the development of multiple versions of an assessment for different groups of students, concluding that those teaching large classes will likely be deterred from this approach:

*Making multiple versions of assignments available to students (in order to ensure academic integrity in timed assignment uploads) is no easy task in Brightspace. An example of this is a class of 50, with the MC creating five versions of the exam paper. To release the version, they have to create groups in the module and restrict the different versions of the exam paper to each group. So, they create five groups of 10 people and restrict the different exam papers to those groups. Except, because of group visibility which the MC has no control over, each*



*student can see the other members of the group they are enrolled to. The only solution is to create groups of one to mitigate this issue. It is achievable but it is an administrative problem for MCs and those teaching large classes will generally not engage in this type of method because of this (School: College of Business).*

Another school highlighted issues associated with trying to tailor questions with different variables:

*Academic integrity is essential to everything in assessment. When you lose control, you open up a whole other set of risks, such as collusion and collaboration. We did try to tailor questions with different variables, which works to a degree, but only for some questions and not others. If we change the variables too much, you undermine the purpose of the question. The requirement for every set of parameters to give a viable solution is problematic (School: College of Engineering and Architecture).*

The advantages of MCQs in minimising the risk of academic misconduct were highlighted. One school noted, however, that once an MCQ has been published online, it can't be used again requiring new assessments and new questions which increases the workload on faculty:

*With MCQs the questions need to be more complex, so that students can't google. Have started putting images in, labelling etc. Also using same questions with different numbers is good. So if students are sharing the answers, they will get them wrong. Problem is that once MCQs online you can't use them again. Need to continually regenerate assessment. More work for faculty. Only so many questions you can ask e.g. if you have five classes with related questions (School: College of Science).*

Another school noted that whilst MCQs may be appropriate and help minimise the risk of academic misconduct in lower-stakes assessment, this approach doesn't always work in higher stakes assessment, where students may have more time to google answers:

*... we were quite burnt in the first lot of assessment where we can't really prove it, but evidence that students shared solutions of how to do problems. Some looked at notes for closed book. But also clear using something to communicate solutions among themselves ... For me, difference is MCQ based-exams work because questions can be shuffled. So plagiarism can't happen as much, and if you give less time, no time to google. But believe in Stage 4 modules in high level, it becomes much more difficult. Smaller number of questions in longer window, gives time to google, and there will always be some amount of information that Google gives you even if not the full answer. Very hard to see these types of exams online ... there is a worked solution that is the answer. Once people have this and can share there is an academic integrity issue. A significant portion of [\_\_\_\_] assessment is based on this kind of thing. Asking how they've worked it out doesn't fully solve it, only alleviates it (School: College of Science).*

Schools also identified reasons why the efforts made to improve assessment in high-stakes exams didn't always work well, including because of poor internet connectivity:

*... they [MCQs] are much better for low stakes. For high stakes, some of the anti-cheating measures I'd like to take didn't work well if there are connectivity issues (School: College of Engineering and Architecture).*

The ethical implications and fairness to students of some preventative approaches, such as time-locked questions were also highlighted. The following is illustrative:

*Think it is difficult to tackle the students who are determined to cheat. Attribution has been my biggest concern. If a student really wants to cheat the system they can. I think the university is behind the curve in terms of what students avail of. Brightspace does offer some opportunity to catch. Questions are randomised which does cause its own problems, but one question at a time and they can't go back, it means it is harder for students to collaborate, exchange answers. But one must always assume that students have full access to the internet. Using a laptop in class, I don't consider this online assessment - more a hybrid approach. Challenge to ensure integrity and level playing field. The main issue I have is that it severely disadvantages students when you employ tricks and tools to prevent plagiarism e.g. not being able to go back and change your answer. Is that fair? From looking at stuff abroad, the types of questions that typically insulate against plagiarism are written answers which if you're copying from somewhere, it's difficult - a personal type of answer. My sympathy is with students who need to do online assessment because I think they prefer in-person* **(School: College of Engineering and Architecture).**

Lack of support for staff in relation to following up on suspected breaches of academic integrity was highlighted by one school:

*There are limited support processes for MCs who suspect the honour code has not been observed* **(School: College of Science).**

The benefits of having a “plagiarism advisor” on hand to support and guide staff in investigating concerns around suspected academic misconduct were highlighted by another school:

*Plagiarism advisor in the school. Anyone who has concerns post-grading can have a meeting with the advisor (staff), e.g., a query about a referral or a piece of work. Yearly seminar session on guidance document. And then the referral process is outlined. We've outlined that the plagiarism advisor is always consulted before the referral ... Might seem we've had a good bit of plagiarism, but think this is because we make people investigate it* **(School: College of Health and Agricultural Sciences).**

These concerns around academic integrity and the impact on learning overall have caused some schools to revert to face-to-face assessment even where online teaching methodologies are employed:

*It is true that grades went up. But not everyone used [online dictionaries], convinced most people didn't. But reality is students didn't learn as much and their language competencies went down. You don't need to learn words as much in online environment. Spontaneous production has diminished ... In year two modules we've started electronic vocabulary flash card decks which is working well. It's not random vocabulary, it's words that we feel are essentials ... Not assessed online, we're assessing in live exams, but it is an online learning tool* **(School: College of Arts and Humanities).**

*The problem arises and arose during Covid when you are trying to run small class tests online and this created technical problems and problems around academic integrity. Students decided to cheat, and to use plagiarism, and faculty spent a lot of time pursuing these cases. Quite a significant portion of classes plagiarised, for example, cut and paste from websites, book sources. Chasing them down took time. Therefore the universal response from colleagues was a “no” for online tests. We’re happy this year to be back fully face-to-face and think that anything additional that’s done online detracts from the face-to-face experience. We have slide tests and presentations, and these benefit from being in-person. We run them in a classroom, frequently on the last day of teaching term ... Online works better for problem-solving disciplines. We are very happy with the upload, grading, learning journals etc. on Brightspace but anything beyond that in terms of in-class tests works better in one-to-one* **(School: College of Arts and Humanities).**

### 6.5.1 Honesty Statements

The use of honesty codes or statements was also discussed by schools with mixed responses in terms of their use:

*I have an honesty code but I cannot be sure it is being applied. We have had a couple of online sessions with students to explain and discuss expectations about academic honesty* **(School: College of Science).**

*The integrity statement isn’t widespread either, people adding it into their assignments not happening ... All programmes have statements about plagiarism in their handbooks* **(School: College of Health and Agricultural Sciences).**

One school expressed scepticism as to the effectiveness of the honesty statement, considering it a “tick-box” exercise:

*We use it [honesty statement] but do not think that it works. It just ticks a box. I do not think it is effective. I wonder does it make you more likely to cheat. It reminds students that there is an opportunity* **(School: College of Social Sciences and Law).**

### 6.5.2 Library Academic Integrity Module

Some schools confirmed the use of the library academic integrity module for students:

*Do refer to it [library plagiarism module] in some instances at the beginning of the year. Nudge them to take another look before exams. We do ask all MCs to remind students* **(School: College of Science).**

*Prerequisite for first years to complete the library Brightspace modules* **(School: College of Arts and Humanities).**

*We ask module coordinators to make sure all students complete the research integrity module, and ask them to talk to students about what plagiarism means in their module* **(School: College of Engineering and Architecture).**

*Yes, we use the library module and recommend it, put it into Brightspace* **(School: College of Arts and Humanities).**

One school was uncertain as to how widely used the module is, but suggested that students could upload a certificate of completion to evidence that they have completed it:

*Don't know how widely the module on academic integrity is being used. Don't think it's mandatory. Could be useful and then upload the certificate for completion to show they've done it* **(School: College of Health and Agricultural Sciences).**

Another school was unclear on the benefits of the module in changing student behaviour:

*This is probably a larger problem than can be answered here. Change needs to happen on several levels, perhaps most fundamentally within the teaching that we do in modules themselves. Students may take the library quiz on academic integrity, but in reality this has little to no impact on their understanding of what constitutes plagiarism, and when it does have an impact, it is still too tempting and easy for students to make unethical decisions about their work* **(School: College of Arts and Humanities).**

Not all schools use the module, however:

*Not that I am aware of [use the library module]* **(School: College of Engineering and Architecture).**

One school raised the issue of accessibility of academic integrity training for students who join the university at a later stage in the programme:

*We do have a lot of students who come in at 3rd/4th year also. It's time, location etc., that is an issue for this* **(School: College of Engineering and Architecture).**

## 6.6 Investigating and Sanctioning Academic Misconduct

Schools discussed approaches in place to investigate and sanction academic misconduct. Some schools indicated that university-level policies and procedures have replaced local approaches:

*We used to have a school policy, but then college level protocol replaced this. Now the university level policy trumps all. The university policy has become more detailed and that is the main one we use* **(School: College of Engineering and Architecture).**

Other schools indicated the use of local policies and plagiarism committees to take account of discipline-specific assessment issues, though concerns were raised about the security of the local policy in severe cases that needed to be escalated further:

*Yes [we have a plagiarism committee], we also have our own internal document and procedures that we use. A lot of our work is project work, and we like students to collaborate. But we also want students to have something that describes what cheating looks like with our own disciplinary norms. We want to make it clear to students how it works with our modules. The main concern was when we had to go outside the school policy in severe cases. There was a question over how tightly the policy document was written* **(School: College of Science).**

Not all schools supported the current university policy, with one school describing it as “burdensome”, preferring local solutions to cases:

*The plagiarism policy is burdensome. Example, a component worth 5% - to take it all the way through the whole plagiarism workflow is disproportionate. Might be in some senses easiest for module coordinator to make the decision there. Not every single case needs to reach the plagiarism committee (School: College of Engineering and Architecture).*

*Some schools expressed satisfaction with the current processes for investigating suspected misconduct, although acknowledged that it is time-consuming and requires rigour and caution: I am happy enough with the process. It is rigorous, it just takes time and you need to be cautious. It is important not to slip up in the steps that you take. But I think that everything that we do is necessary. We need to be fair with the students and we air on the side of caution. We give students the benefit of the doubt. I think that is well set out in the plagiarism documentation (School: College of Engineering and Architecture).*

One school was happy that the current process is robust, but expressed less satisfaction with the current sanctions in place, which were considered too lenient (see Section 6.7 for further discussion on this issue):

*I would say that the process is robust and transparent, but the sanction is inappropriate. It is probably on the lenient side. If the sanction is supposed to be the deterrent, I do not think it is appropriate. In the case of the five students who colluded, these students could have passed with little impunity ... the penalty is very mild. Basically all we can do is give zero for the part of the question they cheated on. If you did the same sort of thing in the Leaving Cert, the whole exam would be pulled. We don't do that here. It is a mild rap on the knuckles ... we ended up giving them zero on a part of a question that they had already gotten zero on because they got it wrong. There was no penalty other than the sense that the student knew they had not gotten away with the cheating. There is also the issue of students denying. The first student we spoke to was the only one who came clean. Four others denied, I am happy enough with the process. It is rigorous, it just takes time and you need to be cautious. It is important not to slip up in the steps that you take. But I think that everything that we do is necessary. We need to be fair with the students and we air on the side of caution. We give students the benefit of the doubt. I think that is well set out in the plagiarism documentation (School: College of Engineering and Architecture).*

Obstacles hindering the investigation of suspected misconduct were identified, including the increased focus placed on the faculty member concerned; lack of outcomes acting as a disincentive, the time investment required and the additional administrative burden involved. More “robust” discussion of this issue was called for within the university:

*Staff don't want to raise beyond school because focus becomes on staff member rather than person who has plagiarised. Outcomes don't always happen so people are dissuaded. What does this say about our own take on plagiarism as a university? Know we've moved to the traffic light system, but hard to know what to do. Can feel like lip service. Time-consuming nature of chasing plagiarism, administration. Business of dealing with it a full-time activity. Hard to know what to do. Don't think punishment is necessarily the answer. Would welcome some more robust discussion in university because it causes issues every year (School: College of Social Sciences and Law).*

The difficulty establishing proof was raised by schools:

*It is very hard to find a plagiarism proof of an assignment. It feels like we don't have much power, so many plagiarism cases end up as extenuating circumstances, but this just means it's bad plagiarism. The more cynical ones are the ones that are harder to catch. Suggestion of more holistic assignments that are less easy to plagiarise is one way (School: College of Arts and Humanities).*

*In that regard, the inability to access the original sources for plagiarised work, such as those produced by other students (discussed in Section 6.5) was highlighted as an obstacle: When Urkund picks up instances of plagiarism from the work of other students in UCD or their own work (perhaps from the same or from previous years), there is often no way to check this. Urkund just gives you an essay number but there is no way for the plagiarism committee to gain access to the original essay that is the source of plagiarism. This puts the committee in an awkward position, since they don't have the proof of plagiarism to hand when investigating the student. This contrasts with the situation where the source of plagiarism is an academic article or website to which the plagiarism committee has easy access. In short, there should be some straightforward way by which plagiarism committees can access or request access to a past student essay that shows up in Urkund (School: College of Social Sciences and Law).*

### 6.6.1 Local Plagiarism Committees

A number of schools across the colleges described the establishment and operation of local plagiarism committees.

*Some schools described the process by which suspected cases of academic misconduct are investigated and escalated for decision, setting out how less serious cases are dealt with locally: If a suspected plagiarism case comes from the tutor to the Module Coordinator and then to the committee, if the case is more serious, it proceeds to the committee. Otherwise it is dealt with locally. One thing that's being done in year one is to incorporate training into a module. This sets students up properly. But sometimes I wonder if we spend too much time and resources on plagiarism, are we really catching it? In my own modules I mandate some secondary sources that need to be used. I choose the sources so they have to use some of them in ways that make them engage with sources I know (School: College of Arts and Humanities).*

*First review takes place, and then it comes to committee if needed. We apply the UCD amber system but look for local solutions as far as possible. One person triages and then we convene a committee meeting for challenging cases. Often a case of going back to MC and asking where and when did you tell them that this type of behaviour is not acceptable. It seems a waste of time to hammer home the point within each type of module ... we then invite student for interview. Relatively rare, few times per trimester. Often student admits and says they were under a lot of pressure, and they resit etc. accordingly. But if plagiarism only clear in one question, we ask for that question only (School: College of Science).*

*[The Plagiarism] Committee had to meet with students few times last year. Students are often not aware of acceptable levels, and [the disciplinary process] can be learning for them. The Module Coordinator reviews the Urkund report, they make a recommendation to the chair of the plagiarism committee; chair reviews it, sees whether it amounts to potential offence. If so, invites the student with a rep, then the committee makes a decision and communicates to the student (School: College of Arts and Humanities).*

It was commonly reported, as indicated above, that schools are lenient in the sanctions imposed and there is a focus on discussing the issue with the student. The following is illustrative:

*Head of School and Head of Teaching and Learning are the plagiarism committee. For those we had deemed to access notes, we didn't give them credit for the part they'd obviously looked at, but we didn't negate the whole thing. We offered to discuss it with them, but few took it up. All that had shared the solution on that one module, we talked to and they had to redo. But they weren't academically penalised because of the pandemic* **(School: College of Science).**

Many schools confirmed the existence of local plagiarism committees, though not all have been active:

*We have our school plagiarism committee. But we have never had a clear-cut case of plagiarism since those guidelines came in. The plagiarism committee has never had to meet* **(School: College of Social Sciences and Law).**

Others described the onerous nature of plagiarism committee work and the challenges in staffing such committees as a result:

*But our plagiarism committee was inundated. Staff giving up weeks of their time to get involved in it* **(School: College of Arts and Humanities).**

The need to interview each student was identified as especially onerous:

*We have a plagiarism committee and follow UCD policy. The main issue with the policy is the requirement to interview each student. This is very onerous. Some cases are quite minor and we want to be able to apply a penalty. But it seems we cannot apply a penalty unless we have interviewed the student* **(School: College of Engineering and Architecture).**

*We have a plagiarism committee and follow this process. The norm is that the issue is referred by the module coordinator to the head of the plagiarism committee. So we meet and discuss the issue. We then usually email the student to get their views on where they are coming from. It usually then involves a meeting with the student to discuss. The committee reconvenes to make a decision and communicates with the student again. This takes a lot of time, especially when meeting with students individually. Also, you always need to document the rationale and put together your case. It's a time consuming process that needs to be done very carefully* **(School: College of Engineering and Architecture).**

## 6.7 Academic Integrity Enhancements

A need to review current mechanisms to maintain academic integrity was voiced by schools across the colleges. This was considered critical to decisions around longer-term engagement with online assessment, for example:

*We need to review the methods through which academic integrity and ethical practice can be upheld in the online assessment process, and decide if any of these are appropriate from a usability (including burden of staff), and financial perspective. If we can't address them, then we may need to reduce the use of online assessment until we can* **(School: College of Health and Agricultural Sciences).**

A need to better address plagiarism was highlighted by many schools. Schools suggested that UCD look at ways of working collaboratively with students on this issue as part of a “joint educational process”, emphasising the responsibilities of both parties:

*Also need to address academic integrity for exams ... Don't support proctoring, limited. Still a space where the high space exams and academic integrity needs to be looked at ... Think there needs to be focus on engaging students, helping them understand. Some university approaches, they take a piece that is plagiarized and have students assess it. A joint educational process between university and student that is ongoing, consistent. Issue of paraphrasing... faculty also need to better understand plagiarism, and how to support good academic writing. Less about how to paraphrase, but how to write academically. Lot of depth to what we need to address **(School: College of Health and Agricultural Science)**.*

*Build a culture where students understand and value ethical practice and academic integrity from their first day on campus. This is much more difficult to achieve in a virtual learning environment than in a real-life, living, thriving campus. Hence we are trying to emphasise to our students the value of working side by side, as peers, with support from their teachers, in an environment of enquiry and respectful engagement with learning **(School: College of Engineering and Architecture)**.*

*Create recommended protocol and policy for online assessments, integrating students' responsibilities in terms of upholding academic integrity and ethical practice **(School of Health and Agricultural Sciences)**.*

Some schools identified the need to better understand the factors that contribute to students engaging in academic misconduct:

*Understanding why students may engage in practices that are not compliant with UCD's academic integrity policies would be a good place to start. Are students aware that lack of correct citation may lead to their work being considered as breaching AI policy? Are there other pressures on students that may lead them to engage in unethical practices? E.g. are they overloaded and overwhelmed with assessment encouraging them to take an “easier” route? Are students required to complete the same type of assessment in each module, e.g. exam, group work etc.? Do programme directors examine the timing of assessment across programmes to understand when students are under the most pressure during the academic year? Are students fully aware of timetabling conflicts that may arise when choosing electives? If students are engaging in unethical practices, are they aware of the consequences of this? Do they care? **(School: College of Business)**.*

*I would like as much focus in UCD being put on the causes of plagiarism, rather than the dealing with the after effects of it. Much more needs to be put into the causes that make plagiarism attractive. Recognising that students are over assessed, housing crisis, cost of living, caring responsibilities, full-time jobs. UCD is set up to cater for an ideal kind of student, one who isn't necessarily having a hard time. That ideal student doesn't exist. No surprise that students then don't buy into the standards we've set **(School: College of Arts and Humanities)**.*

The benefits of conducting an ongoing conversation, both amongst faculty and with students, about plagiarism and the need to be “trustworthy” was highlighted by another school:



*Our conversations came about through issue of plagiarism among our bright ambitious second year groups ... for example, one of the students had gone through a book in German to come up with dazzling arguments for a Nietzsche essay. This was spotted by a lecturer who had read the book in German. So rather than that based citation approach we think it might be a statement on the importance of what we mean when we say integrity and how philosophers might never be able to say they're expert, but they have to be able to say they're trustworthy. We're looking to these longer conversations to think about this ourselves before we communicate to students. We're not just teaching them about fake arguments, and precision in language, we're also trying to get them to value what it is to be deliberately slow and trustworthy in your thinking. And to value those developments for themselves that they can be [a] trustworthy thinker. Part of being trustworthy is being open to being corrected. We're at the beginning of this conversation. Instead of warning against it, what is it like to develop the virtues, doing good academic work? (School: College of Social Sciences and Law).*

Poor academic writing skills on the part of students was highlighted by some schools as an issue, for example:

*Difficult to rely on enhanced penalties given the prevalence of inappropriate reliance on inappropriate sources. Not sure whether technical measures could be introduced i.e., essays simply not accepted if plagiarism score is above a particular level, or when particular types of websites are cited, or unless proper academic sources are included? (School: College of Social Sciences and Law).*

The need for more and regular compulsory training around academic integrity for students was universally highlighted, with a university-wide/library-centred campaign to educate students about academic integrity being suggested by a wide range of schools across the university. Some indicative comments include:

*We all use library tools, talk about plagiarism. But think it needs a concerted campaign. What it is, why it won't be tolerated (School: College of Arts and Humanities).*

*Mandatory plagiarism training in year one is advocated. This should include a clear account of the nature of self-plagiarism, which is something we have noticed to be on the rise in our school over the last few years (School: College of Social Sciences and Law).*

*Other improvements could include to add plagiarism/ethics inside the curriculum, as a transversal module or set of guidelines that will be explained to the students as they progress in UCD (School: College of Health and Agricultural Sciences).*

*Increased teaching and guidance to students regarding plagiarism and examination protocols in all programmes (core). Consultation with students on how best to deliver this - module integration or stand-alone approach, scope, level? (School: College of Health and Agricultural Sciences).*

*Academic integrity training around the digital environment for students. The library is ideally positioned to add this to their existing training which is focussed on written assessment, e.g., essays (School: College of Social Sciences and Law).*

*Developing a means to ensure that individual work submitted is authentically student's own work and not assisted or copied. There should be a mandatory online training course that every student who joins UCD should be doing. Similar to the "Research Integrity Epigeum Certificate"*  
**(School: College of Engineering and Architecture).**

*Also, compulsory training on how (and why) to search literature, read it, and cite it - for both lecturers and students* **(School: College of Health and Agricultural Sciences).**

The need for information to be provided to students regularly and not just as a one-off exercise was also widely highlighted, for example:

*Frequently remind students about what plagiarism is and how serious the university takes it*  
**(School: College of Social Sciences and Law).**

*In terms of communication, we used to periodically make sure every module had a banner about plagiarism. This included a link to what is plagiarism, a link to the academic policy, and link to the library module. We might have fallen out of this habit. But it is a good way of proceeding. So no student can say they did not know about plagiarism* **(School: College of Engineering and Architecture).**

One school expressed that this training should make explicit reference to the risks posed from engaging with essay mills:

*Academic integrity training is very positive. We've embedded this in our core Stage 1 module, it's the first thing we introduce them to. Positive innovation. Probably not all colleagues are aware of this. I did hear that there was some move toward educating students about essay mills? Not aware. Maybe though SU. Something institutional that could raise awareness and explain to students the danger of signing up to essay mills. Better communication on this to students, the bribery, the details you are sharing with third parties. Stronger messaging on plagiarism, referencing. Needs to hit home. Also, the long-term implications for students is something they don't know. NB to express the direct effect* **(School: College of Social Sciences and Law).**

It was proposed that student training should emphasise the wider significance and benefits of academic integrity:

*The first takeaway might seem slight but would involve a significant amount of attention to ongoing communication across the multiple fora we have within and external to the university: (i) Highlight clearly and often what academic integrity is and how maintaining a strict adherence to the protocols entailed in academic integrity not merely underpins all our credentials but also underpins the freedoms we claim as academics and student researchers and thinkers; (ii) For our second-year students we need to stress that plagiarism also involves recycling ideas, concepts and analyses from other thinkers without reference. It is not enough merely to paraphrase in the students' own words, they also have an obligation to give precise and due credit to those sources of the ideas, descriptions, analogies, concepts and critique that they have found in their reading* **(School: College of Social Sciences and Law).**

One school suggested that students could receive a badge for achievement of relevant skills:

*We should be educating students on critical thinking skills and academic integrity. These skills are very important and UCD should be looking at enabling badging for these core skills for students. Trimester 1, first month should be about focusing on these study skills ... Continue to highlight to students the importance of an “honour” code during assessment practices, and the upshot generally regarding the value of their qualification which can arise due to corruption in the assessment system (School: College of Business).*

Conversely, one school queried whether students are deluged with information to the extent that it becomes meaningless:

*There were numerous training modules and online resources” but pertinently asked whether students were “overwhelmed by the volume of information? Has the training become a “box ticking” exercise for students and lost meaning? We have research integrity champions but does UCD need to review their roles/impact? (School: College of Arts and Humanities).*

Schools across colleges considered how best to make use of the library tutorial on academic integrity, with many advocating for it to be made compulsory:

*Many colleagues have mentioned the comprehensive training that the UCD library has developed on academic integrity for students as part of their registration. There is a strong suggestion that this training should be mandatory (School: College of Social Sciences and Law).*

A concern with preventing academic misconduct was expressed across schools. To that end, one school proposed making assessment submission/authentication forms mandatory, noting that there was widespread support for this idea during the consultation for the current plagiarism policy:

*Students should have to confirm for each assignment submission to Brightspace that the work they submit is original and conforms to the plagiarism policy. This serves as a reminder that we take this seriously and serves as an additional barrier that makes them think twice before they submit something that may be deliberately plagiarised or just carelessly references ... When consultancy was being sought for the latest iteration of the plagiarism policy some years ago, the school thought that the above point was a very good idea and suggested a simple tick-box be added to Brightspace for assignments so that students had to directly acknowledge the originality of their work and be warned about plagiarism. At the consultation meeting, this suggestion was met with universal assent by all those present from other schools as a very good idea. However, despite further efforts to advance this by our committee, it never made it into the plagiarism policy nor was it raised with IT as a potential add-on for Brightspace. Reasons for this were never made clear to us. It seems like a very low-cost way of reinforcing an anti-plagiarism culture in the university and we would strongly recommend it (School: College of Social Sciences and Law).*

Schools discussed ways that the university could deter academic misconduct, including through strengthening the rules and increasing the sanctions for confirmed misconduct, for example, sharing or facilitating essay mills, which is currently not covered in the plagiarism policy:

*Need a strong statement that you cannot share work with your fellow students. Don't have a statement on severe consequences of sharing. Have situations where students share in good faith and then other students can upload as their own work. There isn't a penalty in sharing a final piece of work with another student, not in plagiarism policy. Best we can do is warn* **(School: College of Social Sciences and Law).**

*We could implement stricter rules as a deterrent for students (though having said that, it is often very hard to prove plagiarism in language papers)* **(School: College of Arts and Humanities).**

*Some schools questioned whether the current sanctions are appropriate or strong enough: Some think the university plagiarism policy is lenient Always the chance to resubmit* **(School: College of Arts and Humanities).**

*One commentator wrote that the university needed to have "more robust policies and processes to deal with infractions - the plagiarism policy at the moment (as it has always been at UCD) is a complete joke". This person noted that they had worked on the school plagiarism committee so knew this first hand!* **(School: College of Arts and Humanities).**

*A need for strict and immediate enforcement of disciplinary processes for those engaging in academic misconduct was identified, particularly for students in Stage 1 so that poor habits do not take hold. One school requested that sanctions for "repeat offenders" be increased: Immediate disciplinary process for students that take an approach to assessment that they have extensively and repeatedly been told is unacceptable* **(School of Health and Agricultural Sciences).**

*Strict enforcement of plagiarism and cheating standards during Stage 1, before students develop bad habits they can carry forward* **(School of Social Sciences and Law).**

*Steepen the penalty curve for repeat infringements* **(School of Engineering and Architecture).**

*Harsher penalties for plagiarism are suggested, as well as a more stern university culture around the practice from day one of first year where there can be no room for ambiguity concerning the wrongness and the seriousness of the consequences* **(School: College of Social Sciences and Law).**

Failure to enforce sanctions on students found to have engaged in academic misconduct in proctored exams was seen as undermining the process:

*No or limited invigilation during assessment times. With no monitoring, the students can work as groups to complete assessments or can pass this information on to others. Where digital invigilation took place as part of the proctoring pilot, it seemed that its scope was limited and decisions on integrity could not be made with any certainty. The use of proctoring as a deterrent was useful in the pilot, but without the "teeth" of enforcement, students would quickly surmise that no definitive action could be taken, and the deterrent aspect would be undermined* **(School: College of Health and Agricultural Sciences).**

Many schools felt that there would be benefits to better informing students about the consequences of academic misconduct so that they know that there are sanctions and these sanctions are enforced by the university:

*Better inform students of the various forms of plagiarism and the consequences of plagiarism and how they are enforced. This needs to be reinforced from Stage 1 onwards. Our students and graduates should be able to recognise bad/good practice. If not already done, clear instructions on what is acceptable during an online exam should be given to all Stage 1 students ... Leaving it to individual module coordinators across programmes may lead to a real mixture of some students hearing the message repeatedly, while others maybe not at all. More guidance in terms of consequences of academic misconduct would be useful. Some students find the language to be very vague around these in the policy documents (School: College of Science).*

*Engaging with the students and making sure that they know the consequences, especially of being involved with companies. Students need to know these things for their personal wellbeing. Don't think they're clear on the blackmail side of things (School: College of Engineering and Architecture).*

One school highlighted a need to be able to keep a record of “repeat offenders” that can be accessed across different schools:

*Some of the discussion is about repeat offenders; whether it's possible to access across different schools. A database of plagiarism? Would be helpful to know so that when committee membership changes, the knowledge can carry on (School: College of Arts and Humanities).*

The need for a common or standardised university approach to academic integrity was emphasised. This was considered especially important in the context of modules or programmes offered by more than one school and in ensuring that students receive a consistent message from the university about plagiarism and its seriousness:

*NB to have recommendations from the university, especially if you're in [ ] modules, where two schools are meeting, we need to make sure that all assessments are valid and reliable. What can't be happening is that you're not trusting, say for e.g., the MCQ that another area is offering (School: College of Health and Agricultural Sciences).*

*Some common template – beyond the technical specificity of the university plagiarism document – that provides lecturers across the university with a way of communicating about plagiarism is suggested. It is important that there is standardisation in plagiarism standards across schools. The anecdotal impression from our school is that we deal with plagiarism more seriously than perhaps others do and this sends mixed signals to students who may also take courses in other, more lenient schools (School: College of Social Sciences and Law).*

Schools highlighted a need for centralised university regulations, guidance and support, possibly from UCD Assessment and/or Teaching and Learning, for faculty in terms of robust, pedagogically sound assessment designed with academic integrity in mind:

*We do need to have a stronger regulation there for some of the topics, giving people an awareness as to what they can do. To make sure their exam is robust; using question library etc. Making sure people are aware of how they can make their assessment robust. Should come*

*from central university - UCD Assessment. How to ensure the integrity of process. It's the process, UCD Assessment giving strong guidance. But maybe also Teaching and Learning e.g., how do you write a good case study question that can't just be pasted in? That could be adapted to disciplines (School: College of Health and Agricultural Sciences).*

*Emphasis must be put on ensuring that standards in assessment are met. Guidance regarding what type of assessment is appropriate and how to ensure that academic integrity is met via grading, preventing plagiarism, critical analysis of subject areas, and levels of knowledge attained must be correctly evaluated. Sometimes the issue seems to be on technical availability, ease of methods, for grading etc. rather than looking beyond to the actual purpose of assessment. The issue is not whether assessment should be online or not, but what is appropriate to assess the quality and quantity of knowledge and analysis needed within a certain topic. Technology must serve the purpose, not the other way around. Comprehension of learning and assessment theory is needed by module coordinators to ensure that students are learning and developing as required in their modules. Time-starved module coordinators must have greater support in this regard. Some colleagues not particularly concerned about students cheating or mis-representing themselves. Should support academic staff to reflect on and design more authentic forms of assessment - engage with Teaching and Learning opportunities to support this (School: College of Health and Agricultural Sciences).*

This request extended to support with checking plagiarism reports:

*Support with double-checking plagiarism reports would be helpful given that the current software does not filter out bibliographies or citations that are properly marked vs those that are genuine cases of plagiarism (School: College of Social Sciences and Law).*

The need to take a programme-level approach to reduce the burden of over-assessment and improve assessment practice was highlighted by schools, as was the need to reconsider the balance of continuous versus terminal assessment:

*Greater coordination between MCs at a stage level to reduce over assessment and processes to aid the scheduling of continuous assessments and examinations throughout the trimester. Programme level approach (School: College of Health and Agricultural Sciences).*

*What can we do? Facilitation of cross-module assessments, reduction in the number of assessments per module, per trimester. Perhaps we need to relax the modularisation? Also, compulsory training on how (and why) to search literature, read it, and cite it - for both lecturers and students. Finally, encouragement of longer, less intensive programmes might be a key measure to make many of these pressures less, and overall improve the student experience. Especially considering the need among many students, to work part-time. How does this impact on them? I think for most students, especially at a graduate level, assessments need to demonstrate critical thinking, ability to discriminate, process, synthesise and this does not appear to occur with online assessments as currently constructed and as evidenced by the grade inflation observed (School of Health and Agricultural Sciences).*

*Tackling over assessment would help. Might mean getting rid of multiple five credit modules. More opportunities for staff and students to have closer relationships. Assessment arms race. Different module coordinators have to compete with each other for students' attention. Competing deadlines etc. This has made us deliberately move toward more 10-credit modules.*

*Students who are doing five credit modules are doing much more assessment, they're on a treadmill. No room for curiosity, it's about strategizing and maximising your time. Students only select classes that are relevant to their assignments ... they're gaming. Too much similarity in the way MCs assess in five credit modules (i.e. mid-term and final exam). So there's too much happening at the same time for students. We need students to buy in more to the idea of integrity. Make it meaningful for them. Awakening them to being in UCD and what that means, and approaching things with integrity. You create the culture **(School: College of Arts and Humanities)**.*

Some schools called for UCD to facilitate a variety of assessment methodologies that help deter academic misconduct:

*Continue to facilitate the design of assessments that are varied enough, or individual enough, that they can't really be answered by an essay bought from an essay mill or recycled from a previous year's class **(School: College of Arts and Humanities)**.*

*Institutional support and encouragement of authentic assessment at the highest level, with a whole school emphasis on higher order thinking in assessment design, could help to address issues of integrity and ethical practice **(School: College of Business)**.*

*This needs to be more transparent to ensure that both academics and students understand what is expected of them. There need to be consequences if someone is found not following the rules correctly. Prioritise the assessment for low stakes assessment. Indicate through policy documents how cheating can be minimised **(School of Health and Agricultural Sciences)**.*

*Perhaps a move to more authentic forms of assessment. Making cheating more difficult. In most cases, the positivity and authentic approach comes from the graduate sphere where students are much more reflective. But I think the mass undergraduate terminal assessment is the challenge. Better tools for communicating with students on online assessment **(School: College of Health and Agricultural Sciences)**.*

Some suggested approaches to more robust assessment design were also made, including ensuring all students take MCQs at the same time and regularly changing assessment questions and topics; using authentic assessment methods and time-restricting exams:

*Ensure all students take online MCQ exams at same time in the same place if possible, although we realise this is often not practical **(School: College of Social Sciences and Law)**.*

*Ensure staff regularly change topics/questions for essays/projects on an annual basis to minimise plagiarism **(School: College of Social Sciences and Law)**.*

*There are ways to encourage academic integrity even in MCQ (for example, open book MCQ accessible only within a certain time window, like an exam) **(School: College of Social Sciences and Law)**.*

*Online assessment needs to be either time restricted to avoid time to confer, or questions require a high degree of understanding to answer and be more discursive in nature. Project based work would also reduce some issues. For problem solving type questions and puzzles, the online methods are not foolproof. Malpractice is bound to happen. It requires special*

platforms and programmes to be ethically correct and a large pool of questions with random combinations will become a necessity to operate properly. However, student complaints may arise in the random question selection as some may receive a set which is too tough, and some other question sets that are perceived as easier. Therefore, the examiner will have to classify some questions as highly challenging, some fairly difficult, another set rated as average questions and a few very easy ones to make an even distribution! However, this is not easy. Getting students to produce something unique during the assessment can ensure that they are not working in groups. For larger written assignments, better plagiarism software would be useful and using video assignments where students give a presentation with their video on, ensures that they are producing the video. Creating the assignment with the knowledge that students have full access to the internet and all resources available online, allows for the creation of unique problems and questions, which test the students understanding in a limited time. Maybe students can provide Turnitin scores for similarity reports **(School of Engineering and Architecture)**.

One school suggested the benefits of a tool to identify unusual patterns in grades:

*It would be nice if there was an automated tool that identifies an unusual grade pattern for students, for example, if they're getting excellent results in all of one assessment type. But again, this could happen anyway. But it might just point us **(School: College of Science)**.*

*The need for guidance, time and administrative support, including peer learning amongst schools, was identified in relation to the management of academic misconduct cases and the operation of plagiarism committees, the admin burden of which was described as onerous: It is a compromise between trying to be cautious and fair on the one hand and not generate overwhelming admin load, but the admin load is still reasonably substantial. A lot of evidence gathering and cross checking, student communications, meeting with students. So, it would be nice to simplify the admin workflow. I'm not sure how that could be done. I do like the fact that there is a record retained of the student's plagiarism history. So if a subsequent case detected there is a record. But I think the time involved gives a strong incentive for MCs to resolve internally **(School: College of Engineering and Architecture)**.*

*Thinking about the way that our plagiarism committee is set up in the school, it would be helpful to have worked models of how other schools manage reporting on plagiarism. Or even something standardised that is less labour intensive for faculty. Staff will not engage otherwise - the systems need to work for a large number of students **(School: College of Social Sciences and Law)**.*

*With respect to online assessment, the university should provide clear guidelines on where the burden of proof of unethical behaviour resides **(School: College of Science)**.*

*A greater level of admin support is needed. There need to be ways of addressing problems with authenticity of work submitted, guarding against plagiarism and batch copying **(School of Engineering and Architecture)**.*

*The university could support MCs with online exam administration, paralleling the traditional examination supports for in-person exams in the RDS **(School: College of Science)**.*



The benefits of shared resources and peer learning were also emphasised, including the benefits of having school plagiarism advisors to help champion academic integrity:

*Create and share a few Brightspace elements that could be pulled into modules that would help MCs incorporate academic integrity issues into their teaching* **(School: College of Arts and Humanities).**

*Sponsor some workshops for MCs to help them bring academic integrity into their assessment – the problem here is that it is always the same few who put in the effort to attend these kinds of things – this is my reasoning for the above suggestion* **(School: College of Arts and Humanities).**

*School plagiarism advisors are recommended based on our experience to help champion academic integrity with students and faculty* **(School: College of Health and Agricultural Sciences).**

One school stated that examples of what constitutes plagiarism in different subject areas would be beneficial:

*Personally, I think that it's good that we have a universal university definition of plagiarism. It is more about the examples of what constitutes plagiarism in each discipline that is needed* **(School: College of Engineering and Architecture).**

It was pointed out that future practice should be informed by the lessons learned over the last two years:

*... want to know the lessons that have been learned over the last two years about academic integrity experiences. We're only doing very basic high-level things, but there has to be more that can be done in this space. Identity checking an issue* **(School: College of Health and Agricultural Sciences).**

The plagiarism detection software, Urkund, is discussed in detail in Section 6.5; however is it worth noting here that there was widespread dissatisfaction expressed with its effectiveness. A need for an alternative was identified, and, in one case, the need for a plagiarism officer was raised. The following comments are illustrative:

*The current software for plagiarism check[ing] needs to be improved or [an]other license for better systems should be purchased to avoid the issues of the current system* **(School: College of Health and Agricultural Sciences).**

*Greater attention to the issue of plagiarism. Improve the plagiarism software. Find suitable online proctoring. College appoints a plagiarism officer. Better plagiarism software* **(School: College of Social Sciences and Law).**

*Buy a site-wide license for Turnitin (detect long-question answer cheating). Many people have been crying out for this for years. This goes for buying a site-wide license for iThenticate (PhD and major ME theses)* **(School: College of Engineering and Architecture).**

Some schools urged UCD to further explore methods of ensuring the integrity of online exams:

*Investigate whether software can be used to e.g. disallow students to consult other digital documents, at least on the same device, during an assessment period* **(School: College of Business).**

A need for invigilation or proctoring for online exams was voiced by a number of schools across the colleges, with many raising concerns about the ability to maintain academic integrity in the absence of this measure:

*Well I would hope to continue my hybrid mode with me or an invigilator in the room. But if fully online, do not know how integrity can be guaranteed. I don't think it's possible where you can try and ensure integrity is kept at the same level as RDS.* **(School: College of Engineering and Architecture).**

*Develop proctoring in rooms in UCD; restructuring exams to suit online; more input from the Exams office* **(School: College of Science).**

*The main issue with online assessment (e.g. end-of-trimester examinations) is academic integrity. This would require, for example, proctoring of examinations. I am aware that some of the entrance exams to medicine e.g. HPAT, UCAT were delivered online during the pandemic and this required software and proctors* **(School: College of Engineering and Architecture).**

*Online assessment is not invigilated. It is acknowledged that proctoring has limitations, but UCD does need to address this issue if the online assessment is to be utilised more widely* **(School: College of Health and Agricultural Sciences).**

Some schools expressed that some form of proctoring is either necessary or would offer reassurance to faculty using or considering the use of online assessment. To that end, a role for UCD Assessment was envisaged by one school:

*While the school is open to alternative assessment methodologies, there is a strong feeling that many critical learning outcomes in the mathematical sciences demand an invigilated exam environment for accurate assessment* **(School: College of Science).**

*But I think proctoring thing needs to come through UCD Assessment. Certainly something we'd be looking for. Think plagiarism should be in their remit too. They should be the ones looking at recent practices and feeding back* **(School: College of Social Sciences and Law).**

*... it was very, very difficult to assess the language, specifically translation modules and grammar modules online. Impossible, really. Because if the student is doing the exam question on a computer, the computer needs to be monitored and not connected to the internet. There can be no application or document on the device with any connection to [\_\_\_\_\_] or [\_\_\_\_\_] or the language that is being tested. The student needs to be completely monitored to check that they cannot access the internet or any other online dictionaries. We need for students to be able to translate with fluency without online help ... In an invigilated exam scenario, they cannot refer to their notes or any texts. That scenario needs to be replicated online. The online alternative is writing on a computer in a proctored environment. Students need to be relying on their knowledge and understanding and skills that are in their head. They need to be in a*

*situation where they cannot look anything up in an intermediate language test. If students are doing it on a computer in timed conditions, they can just look at a document on the computer and copy and paste the translation. With an unseen translation they can look up things online answers can easily be found. So we are not testing knowledge in such a scenario because it is a language. There is a right and wrong answer* **(School: College of Arts and Humanities).**

Some schools were supportive of investment and the reintroduction of online proctoring, in addition to clearer guidance around the management of online exams:

*Online proctoring would help to support the integrity of the processes. Clearer procedures on the management of exam papers, acceptance of papers around time limits would be helpful* **(School: College of Business).**

*Consider if we are going to make online assessment a permanently allowed feature. If so, consider remote invigilation as done in other settings ... Investment in surveillance software* **(School: College of Health and Agricultural Sciences).**

*Investment in dedicated exam software (there is a need to lock down each student laptop with regard to internet access and electronic communication); remote proctoring may be required if students are to be required to take exams in a setting that is not invigilated* **(School: College of Health and Agricultural Sciences).**

Various models of invigilation of online exams were proposed, including the presence of an invigilator in a room while students conducted the exam on their laptops:

*I think it really depends on the material being assessed, and learning outcomes being assessed for. Our school is diverse, some science heavy modules. Others are more equations based, problem solving. A model whereby a competent invigilator in the room with students on laptops, that's likely to be fine. But internet access in these rooms is questionable. Wouldn't see the need to go this far* **(School: College of Engineering and Architecture).**

Training for invigilators was also flagged:

*Training for invigilators regarding online examination and tips for monitoring examinations of this type* **(School: College of Health and Agricultural Science).**

Not all schools, or indeed all faculty within schools, were agreed on the benefits of e-proctoring with some faculty also expressing reservations based on the potential to disadvantage some students:

*Differing views were expressed about this. Some considered that UCD needed to invest in e-proctoring for final exams or high value exams. Other coordinators note that this system de-humanise the students and assume the plagiarism from the get-go generating also distrust between all parties involved. Moreover, these techniques can increase stress of students, target people with special needs or unconventional circumstances (i.e. seasonal diseases [allergies], uncontrollable movements [Tourette syndrome], and other physical impairments), including those students making assignments in common spaces (i.e. most students share rooms in the city and are forced to do these tests in their own rooms or family houses in which noises, interruptions are unfortunately common)* **(School: College of Health and Agricultural Sciences).**

An alternative means of verifying the authenticity of students was proposed in the form of post exam oral interviews, while one school queried whether there is anything UCD can do to counter the development of student social network groups being used to undermine the integrity of assessment:

*It is difficult to foresee an online assessment regime that guarantees academic integrity to the level of traditional invigilated exams. The university could help to support verification of student work, for example in facilitating post exam oral interviews* **(School: College of Science).**

*Is there some way the university can address the increased number of social groups formed by students which are used in ways that undermine assessment?* **(School: College of Social Sciences and Law).**

One school urged UCD to work cross-sectorally to address the threat posed by essay mills:

*Work cross-sectorally on the issue of essay mills* **(School of Social Sciences and Law).**

Some schools considered that a cost-benefit analysis of the current mechanisms for maintaining academic integrity should be conducted and a decision on whether to continue with online assessment be informed by the outcomes:

*We need to review the methods through which academic integrity and ethical practice can be upheld in the online assessment process, and decide if any of these are appropriate from a usability (including burden of staff), and financial perspective. If we can't address them, then we may need to reduce the use of online assessment until we can* **(School of Health and Agricultural Sciences).**

### 6.8 Positive Impacts of Online Assessment on Academic Integrity

Schools across all colleges highlighted an array of concerns and challenges associated with a perceived greater risk of academic misconduct in online assessment. Notwithstanding these widespread issues, some schools did identify some positives to online assessment when it comes to academic integrity.

One school identified ways in which the data collected by Brightspace helped identify cases of academic misconduct, especially in conjunction with attempts to deter misconduct through the question functions in the VLE:

*Also during the pandemic, I found it useful that I could check IP addresses which are recorded on Brightspace and could identify cheating cases used this way. Calculated probability of both having same exam results (i.e. proved collusion)* **(School: College of Engineering and Architecture).**

*A lot of detail in the log that it keeps. IP addresses. Wonder could it do more to identify suspicious activity. Re: IP addresses, yes, but it was initially noted that the students gave wrong incorrect answer. So still manual. And you could still have students living together, it's not proof of anything. And that's where shuffling, questions pools, different numbers etc. can be*

*very powerful from Brightspace perspective. Ideally, would like this set up but in a supervised situation. So we can know they're not cooperating* **(School: College of Engineering and Architecture).**

Use of quizzes was also identified by some schools as a mechanism employed to reduce the opportunities for academic misconduct. This was supported by the use of randomised questions:

*But with large classes, I tend to base the whole thing on using the Brightspace quiz with formula-based questions with different parameters for each students, shuffling the questions etc. A decent sized test, 20-ish calculations. Happy enough that if we randomise the order, and if everyone has different numbers, it's a disincentive to copy because they don't have time to do it. Think it's the best way we have at the moment. I would also add there is an investment required in going to online quiz properly if someone is used to face-to-face. Setting up variations of question properly* **(School: College of Engineering and Architecture).**

*It is easier to guarantee integrity with these short quizzes. For example, you can use random questions* **(School: College of Engineering and Architecture).**

One school reported that online submission helps detects plagiarism, though did not elaborate on this point:

*Online submission is useful from the point of view of detecting plagiarism* **(School: College of Business).**

Another noted that online assessment demonstrates trust in the student:

*Also, online assessments indicate to students that we have confidence in them and will conduct honour-based assessments accordingly* **(School: College of Business).**

## 6.9 Conclusion

Issues pertaining to academic integrity in online assessment were all-pervasive in feedback provided by schools. Particular issues were identified with limitations in the current plagiarism detection software, Urkund, and challenges in proving misconduct more generally; the need for additional, more regular and mandatory academic integrity training for students; a need for stricter and more stringently imposed sanctions for academic misconduct; invigilation of online assessment, either through physical invigilation and tight control of UCD-owned devices in dedicated online assessment centre(s) on campus or through e-proctoring; and with the (lack of) supports and guidance for staff in this area.

# Conclusions

This university-wide consultation identified a range of challenges to the effective deployment of online assessment in UCD. It also highlighted strengths in current practice and elicited constructive feedback and suggestions for how the university can move its online assessment agenda forward in a robust and sustainable long-term manner.

A notable observation arising from the consultation is that, although strong common themes emerged, there was no unanimous consensus across schools and colleges regarding the experience of using online assessment. Diverse viewpoints were expressed within and across schools, leading to apparent contradictions where certain issues were seen as both challenges and advantages (for example online assessment as increasing/decreasing the administrative burden on faculty). This disparity likely arises from variations in how online assessment is implemented and perceived across different disciplinary areas, the varying levels of knowledge and expertise among individual faculty members, the availability of specific support and guidance, as well as pre-existing beliefs and preferences regarding online assessment and/or openness to innovative assessment practices. Despite these divergent perspectives, a prevailing sense of frustration with online assessment at UCD was evident.

Apart from a few instances, feedback received during the consultation suggests that online assessment has remained widely employed even after the Covid-19 pandemic. Generally, the ongoing use of online assessment was more commonly associated with assessment submission and formative and continuous evaluation methods rather than final exams. Several schools recognized the benefits of maintaining online assessment due to practical considerations or on account of resource-related factors. Faculty members reported a higher likelihood of utilizing online assessment for larger class sizes and in the initial stages of programmes where concerns regarding academic integrity were comparatively less prominent.

Several explanations were provided to explain a return to in-person assessment in certain schools. These reasons encompass the unique characteristics of discipline-specific learning outcomes, especially in professional domains, where faculty believed that online assessment lacks the ability to confidently demonstrate student achievement. Concerns regarding grade inflation, lack of confidence in the accuracy of results, broader concerns about academic integrity, ethical considerations regarding student access to essential equipment or stable wifi, as well as practical challenges such as resource limitations and increased time requirements for designing and facilitating online assessments, were also cited as contributing factors.

As outlined in Chapter 2, significant and widespread challenges were identified with the current online assessment practice in UCD. Many of the challenges described were directly associated with the use of the current VLE, Brightspace and the plagiarism detection software, Urkund. Challenges expressed centred on issues with grading, the provision of feedback to students, technical issues and limitations with the software, including restricted functionality in devising and revising assessment questions. It is probable, based on the totality of responses, that some of the challenges identified may result from incomplete knowledge and ineffective use of the relevant software. This is reflected throughout in repeated calls for additional, formal guidance and support for faculty engaging in online assessment.

Faculty reported a range of challenges and obstacles that seem to be connected to the swift transition to online learning in response to the Covid-19 pandemic and the fact that the necessary systems are still being developed and implemented to ensure that both faculty and students can have a consistently effective online assessment experience. Certain schools expressed their dissatisfaction with what they perceived as insufficient logistical support and guidance from UCD regarding online assessment. They also raised concerns about inadequate campus facilities and wifi infrastructure to support online assessment activities. Schools across all six colleges highlighted the additional workload placed on faculty members, particularly module coordinators, in facilitating and supporting online assessment. Moreover, many schools emphasized the ethical concerns stemming from unequal student access to devices, stable wifi, and suitable environments for participating in online assessment.

Despite these difficulties, faculty recognized several benefits associated with online assessment and the VLE, Brightspace. These advantages encompass enhanced efficiency and time-saving features like automated grading and feedback delivery, improved flexibility and accessibility for both educators and students, opportunities for innovative and creative assessment approaches, clarity in evaluating student work without the need to decipher handwriting, and the environmental advantages of reducing paper usage.

Significantly, schools reported minimal or no alterations to their teaching methods specifically aimed at facilitating online assessment. The few changes that have been implemented primarily revolve around incorporating quizzes as part of or in support of formative assessment. However, the shift to online assessment has prompted a broader examination of assessment approaches as a whole. Leveraging online assessment to enable and foster more innovative and creative assessment methods could be promoted by ensuring greater availability of educational technologists. It is worth noting that several schools throughout the university emphasized the significant role played by educational technologists in facilitating a successful transition to online assessment.

Schools further identified several additional measures through which UCD can enhance and bolster the ongoing utilization of online assessment. These encompass the need for standardization of policies, procedures, and approaches throughout the university to ensure uniformity in practice and student experience. There is also a call for increased logistical and IT support to facilitate online assessment effectively. Moreover, there is a suggestion to establish improved facilities specifically designed for on-campus online assessment, which may involve the creation of dedicated online exam centres.

Academic integrity in online assessment emerged as the most critical issue for schools and colleges. Concerns centred on the challenges faced in maintaining academic integrity in a rapidly evolving online assessment environment, in which some faculty felt under-equipped or supported to respond effectively. Schools reported increased rates of academic misconduct and increased time spent investigating and managing misconduct cases. Concern was voiced at the leniency of current sanctions for confirmed misconduct: a concomitant widespread call was made for stronger sanctions and for students to be better informed of such sanctions as a deterrent measure. Support was expressed across schools and colleges for invigilation of online assessment either in the form of physically invigilated on-campus online assessment (potentially using UCD-owned and monitored devices) and through e-proctoring.

## Conclusions

The message emerging from and across schools and colleges is that any long-term strategy for online assessment in UCD must be underpinned by appropriate support, guidance and resources for both faculty and students and by a commitment to supporting academic integrity.

In conclusion, the consultation revealed the complexity of online assessment in UCD, highlighting the need for a robust and sustainable long-term approach. Addressing the challenges identified, for example, by improving on-campus facilities, increasing the volume and flexibility of support resources and guidance provided, whilst investing in measures to protect academic integrity, will be crucial in shaping the future of online assessment at the university. By investing in appropriate measures, UCD can create an environment that supports both faculty and students in embracing the potential of online assessment while upholding academic standards.





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