Choice of Assessment Methods within a Module:
Students' Experiences and Staff Recommendations for Practice.

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Introduction and Literature review

Encouraging students to take some responsibility in how and what they learn is in keeping with good practices in student-centred learning (O'Neill & McMahon, 2005). By extending this decision-making to 'choice of assessment' methods, it allows students to take some control of their learning and to play to their strengths. This is often described as an inclusive assessment approach. An inclusive approach (e.g. a flexible range of assessment modes made available to all students) is capable of assessing the same learning outcomes in different ways (Waterfield &West, 2006). This inclusive approach can be very beneficial for staff and students when there are students with diverse learning needs within a particular module. This diversity may be known to module co-coordinators such: as mature students; international students; students with different prior learning; or students with disabilities. Alternatively the diversity may be less obvious, such as: anxious students; students with different learning styles; students with poor time-management skills; and students who have personal, work or other demands on the flexibility of their time commitment. An inclusive approach to assessment can address this issue of diversity by embedding the choice of assessment methods in a programme and/or a module, often reducing the need for special accommodations required for certain groups of students (Healey *et al,* 2008). *'Inclusion is conceptualised as a response to an increasingly diverse student population'* (Ashworth *et al*, 2010, p210).

Giving students experience and opportunity to be assessed in different ways across a programme is in keeping with best educational practice internationally. In the UK, Craddock and Mathias (2009, p128) maintain that *'offering a variety if assessment methods is often recommended as good practice….'* Fowell *et al* (1999), also in the UK, recommend that student should be exposed to variety of assessment modes. Nightingale *et al's* (1996) Australian publication, on different assessment methods for assessing different learning outcomes, has been a much referenced resource over the last decade. This approach is also strongly support from the widening participation literature (QAA, 2003; Healey *et al,* 2008; Hanafin *et al*, 2007) and is often described as a 'Universal Design' approach to assessment (Rose & Meyer, 2000). In addition to a programme approach to assessment diversity, recent case studies are emerging on developing this to within module choices, for example, in Nursing (Garside *et al,* 2009) and in Engineering (Easterbrook *et al,* 2005) modules. However, this approach is not without its challenges and academic staff and students have concerns about issues such as: perceived equity of assessment choices; maintaining standards; student comfort and receptivity to empowerment.

In developing an inclusive assessment approach, therefore, care must be taken to ensure equity in assessment methods and it is important that the assessment choices both have coherent alignment between learning outcomes, assessment criteria, marking procedures, and feedback mechanisms (Craddock & Mathias, 2009; Francis, 2008). There is a need to give students adequate information on the equity of effort required, the assessment criteria and, where possible, examples of the different assessment methods. Both Craddock & Mathias (2009) and Easterbrook *et al* (2005) highlighted the importance in their projects of considering the issue of parity between the assessment methods in the module.

There has been an ongoing perception among some academic staff that introducing alternative assessment for particular groups of students may lower academic standards, and potentially give unfair advantage to this group (Ashworth et al, 2010). Whereas, developing choice for all students could be less open to this perception, it still *'may not stand up to scrutiny'* on this issue of standards (Ashworth *et al,* 2010, p212). Some studies show that where assessment choice is given, students

perform better according to their first choice assessment format (Jackson & Williams, 2003; Entwistle & Tait, 1990; Cassidy, 2007)**.** Therefore, in developing assessment choices within a module, achievements and standards should be carefully monitored.

Francis (2008) explored the student receptivity to assessment empowerment. He describes that students' receptivity to empowerment related to students' perception of 1) the role of the lecturer and confidence in the lecture as assessor, 2) their personal understanding of the assessment process and criteria, 3) the potential for empowerment to take place at community rather than individual level. He also found that the 3rd year students were more open to choice in assessment methods than students in earlier years.

Our research carried out in University College Dublin, therefore, aimed to explore some of these issues for both students and staff, of 'within-module' choice of assessments. It also aimed to develop some guidelines for practice based on the staff and students' experiences. The project was carried out by UCD Teaching and Learning, under UCD's Registrar's Office, and was supported by HEA Training of Trainers funding (see O'Neill, 2010 for further details).

Methodology

Deciding on the choice of assessment methods within the module was the first step for module co-ordinators who volunteered for this project (Table 1). This process was supported by UCD Teaching and Learning. The modules had different weightings for the assessment choice aspect of the module, as some still had a mandatory second assessment. One module had 100% weighting for the assessment choice aspect, i.e. Humans Rights, Law and Equality Module, whereas one had 20% weighting for the choice element in the module (Table 1). In addition to choice of assessment methods, some modules had a choice of timing of the assessments (Module 1 and 2), some had a choice of individually marked assessments (Module 2) or group-marked assessments (Module 1), whereas Module 3 had a choice of getting a 'group mark, which included a small individual mark' versus getting an 'individual essay mark' (Table 1).

The module co-ordinators completed the *'Student Information Template'* designed, by the project co-ordinator, for the purpose of this project (Appendix 1). This ensured that staff carefully considered the equity and diversity issues of the assessments as mentioned in the literature review and that students received adequate information to make an early informed choice. All students were given this template and had to choose their assessment choice early in the module (i.e. week 2-4). Following implementation of the three modules, the experience of assessment choice was evaluated using a student questionnaire and staff interviews.

Table 1: Description of Modules and Assessment Choices (2009/2010 only)

Modules & Schools	Student Level/ Numbers	Weighting of assessment **choice** element in the full module	Method Choices (Choose A *or* B)	Group v Individual Choices	Timing Choices: More **continuous** versus **end of semester** choice
Module 1. Development & Advanced Pharmacology	**Level : 3 UG Students: n=60**	**20%**	**A. Group poster** (N= 1 group)	**Group only**	**Both same time**
			B. Group oral (N= 10 groups)		
Module 2: Ecological and Environmental Microbiology	**Level : 3 UG Students: n=56**	**50%**	**A. Problem-solving** (N=42 students)	**Individual only**	More **continuous** versus **end of semester**
			B. Seen exam (N=14 students)		
Module 3. Human Rights Law and Equality	**Level : 4 (Masters) PG Students: n=33**	**100%**	**A. Group project/individual** (N=28 students)	**Group (with the individual aspect)** assignment versus **Individual**	More **continuous** versus **end of semester**
			B. Essay (N=5 students)		
A further role out, of an additional eight modules using assessment choice, is planned for 2010/2011 , See http://www.ucd.ie/teaching/projects/inclusiveassessment/					

Based on the literature, a student questionnaire was designed for the project. In the questionnaire, questions were designed to ask students' views on: reasons for choice of assessment; their satisfaction

with their choices. In addition, a 20 statement scale was designed to measure students' experience of the assessment methods choice. This included subscales that addressed: level of anxiety in choosing assessment; equity between assessment methods; the diversity of choice; sense of empowerment in choosing; and support given during the process. The total score is described as a scale that measures the '*Positive Experience of Assessment Methods Choice' (PEAMC)*. Factor analysis is currently being performed on this scale.

The Results: Students and Staff views

The student questionnaire was handed out at the end of the semester to the students on the three modules (n=149). 97 students returned the questionnaire, a response rate of 65%. 27 were male (27%) and 67 were female (68%). 17 identified themselves as mature students, i.e. over 23 years of age (17%).

The majority of student (82%) were glad with their choice and those students not satisfied (9%) with their choice noted that the workload on the assessment should be slightly reduced for that assessment. Those that were glad they picked the assessment had a higher score on the '*Positive Experience of Assessment Methods Choice' (PEAMC)* scale (See Figure 1).

Figure 1: Box-plot of Satisfaction with Assessment Method and Score on the PEAMC
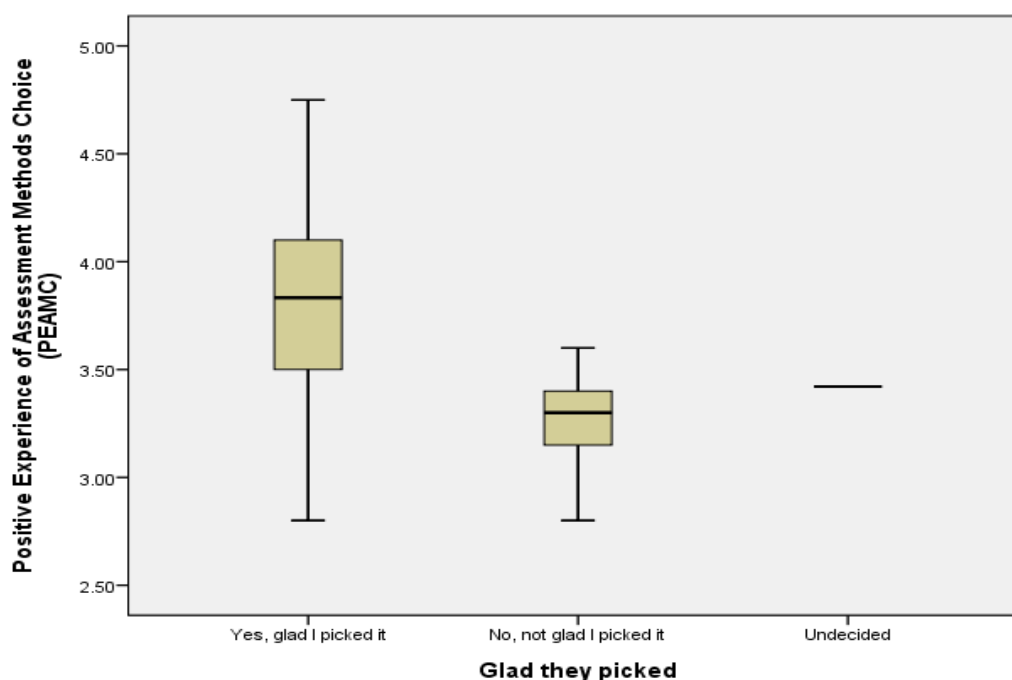
The mature students in the sample group were statistically significantly more positive towards the experience of assessment methods choice, as measure on the PEAMC scale (t=3.55, df=89, p<0.001).

All staff interviewed were very positive of the experience and said they would consider rolling it out to other modules.

*Reasons for choice of assessment*

It was interesting that the most frequent reason why students chose an assessment method was that they *'wanted to try a different type of assessment'.* This appeared to demonstrate a willingness on their part to undertake something a little different (See Figure 2). However, many also chose assessments that they knew '*they could do well on'.* Some of the modules had a choice of more continuous versus end of semester focus and these accounted for the frequently of students noting that *'the timing of it suited my organisational skills'.* For example, in the open-ended comments one student noted that:

> *'The choice was good to have, as some people don't do well with just one final exam and are better suited to continuous assessment (S20).*

In addition, some students used the choice of continuous versus end of semester assessment to plan their overall approach to study in the semester, particularly in relation to the assessment of other parallel modules:

> *'..it allowed me to look at my other modules and workload and decide if I had more time during the term or at the end of the term, in which to do work for this module'. (S6)*

Figure 2: The eight most popular reasons for choice of assessment methods.

Reasons for Choice of Assessment (N= 3 modules, 97 students)
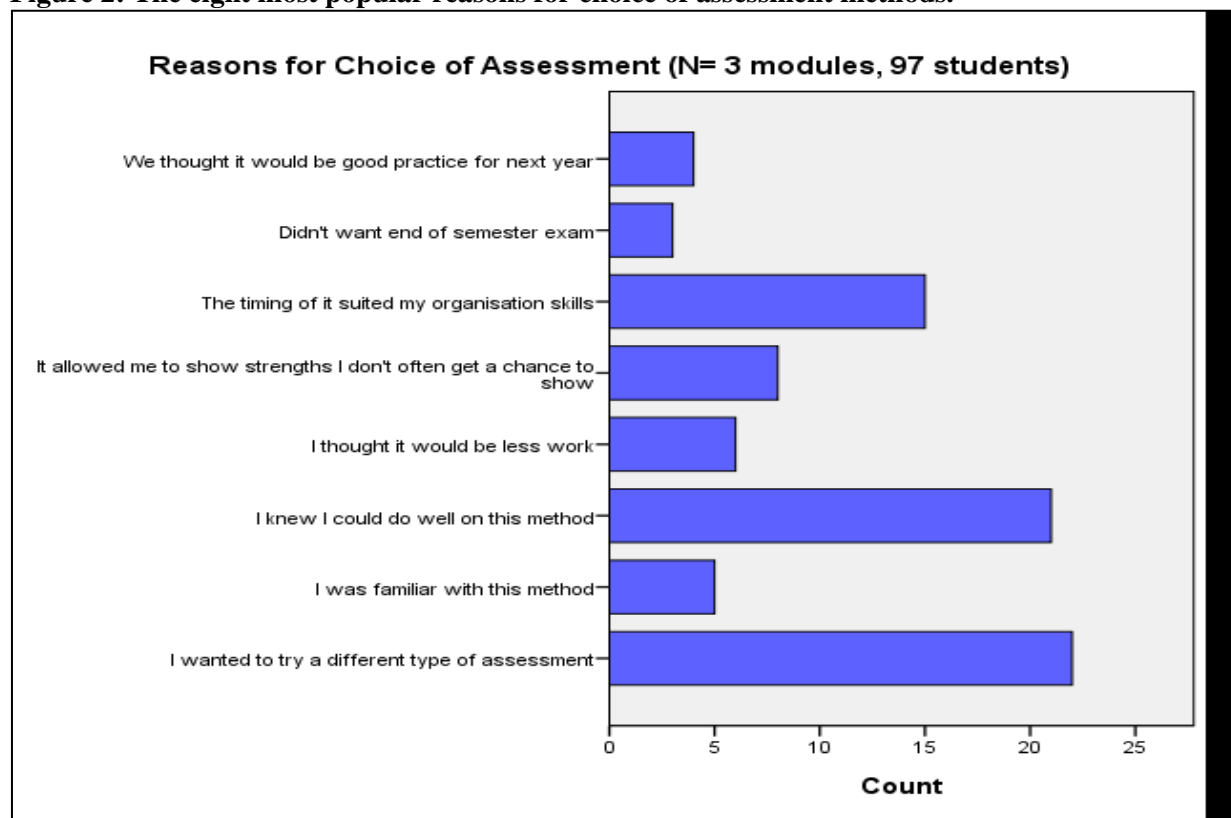
Perception of Empowerment

A significant aspect of this project was the concept of empowering students in having some control over how they were assessed. As in all the themes in the questionnaire, there were four statements that addressed this theme. One statement in this theme had the strongest level of agreement of all statements in the questionnaire with 93% either agreeing or strongly agreeing with the statement: *'I appreciated being given a choice of assessment methods'* (Median= Strongly Agree). The students agreed that they had both ownership and had felt empowered by being given this choice. They were all given a choice of two assessments to choose one, however as noted in the one of the statements they disagreed with having more control than the existing level of control given in these modules. Staff in the interviews, also noted the positive reaction of the students to the idea of being given choice. Staff described the students' reactions as *'very positive'* and that this had made the modules more enjoyable and students were, in general, more engaged with the module than they had been in previous years.

Level of anxiety in choosing

UCD students have some choices around what modules they choose, with the choice of elective modules built into the modularisation system. However, students are less familiar with having assessment choices within a module and this has potential to be stressful for students. To explore this further, four statements were also asked around this theme of anxiety. It appeared from the mixture of

positively and negatively worded statements that the students in these modules appeared not to have been stressed by the process of choosing assessment methods. In fact, it appeared to have reduced the stress they normally experienced with assessment, for example one student mentioned that: *'It was less pressure than a final exam with the same amount of learning'*.

Opportunity for assessment of diverse learning styles/approaches

The concept of inclusive assessment is that all students can play to their strengths and not solely those that may have been identified as needing some special accommodations, such as, students with disabilities. However, to what extent did these assessments allow students to play to their strengths? The median scores on the questionnaire demonstrated that the students 'agreed' that the modules had attempted to accommodate their learning styles and had allowed them to play to their strengths. However, similar to the issue of empowerment, there was a limit to their comfort with increased diversity and the students were 'undecided' about whether there should be more assessment diversity in the module. It may be that a choice of approximately two assessments is adequate and more choices are not necessarily beneficial. In the students' open-ended comments, the diversity of needs was apparent in students' preference. For example, their mixed preferences for the end of semester examination:

        -Personally, I prefer end of semester exams.(S35)
        -Don't do well under exam circumstances.(S15)

In addition, students had some opportunity to play to their strengths in relation to particular skills:

        -I struggle with calculations sometimes, so thought the essay would give me a better chance to show other strengths (S6)

Staff also described how the choice has accommodated a range of student diversity. One module co-ordinator described how the oral format had suited a range of excellent students who traditionally have not performed well in the written format. It challenged her to think about her pre-conceptions about: what is academic work?. She was now considering, that is it possible that: '*You can talk about theory..It doesn't have to be in the written format, all the time. We have exclusively assessed by written work'*. One module co-ordinator noted that one of her students, who usually required special accommodation did not require it within the module's assessment choices, as it used a more visual than written format. Another module co-ordinator highlighted that one of the students, who requires 'special accommodation' for an examination format, chose the continuous assessment option and reduced the need for organisation of this 'special accommodation'. The student herself also remarked on the benefits of not having to have this organised especially for her. For different reasons, another student, also in this module, chose the end of semester examination option as the continuous assessment option did not suit her home-life arrangements. Therefore, both of the assessment methods in this module allowed students to play to their strengths for different reasons.

The equity of assessment choices

One barrier to assessment choice, elaborated on in the literature, is the effort required to ensure that assessments are relatively equal for students. In an attempt to address this, efforts such as the use of the *'Student Information Template'* (Appendix 1) were built into the module design. However, it was important to seek students' views on the success of this. It appeared that the explanation of both the assessment methods was equally communicated to the students ('Disagree' with negatively worded statement). The level of workload and amount of feedback was also equitable between the assessment methods. However, there was less agreement with equity of examples available for both assessment types. Less familiar assessments in some modules, such as, poster presentations, problem-solving assignments, or seen examinations, may need to have more examples developed for students to be able to make informed choices. However, these three modules now have the current set of student examples to use for the following year. Staff commented on the importance of building this equity into the design of the module and into communicating this early to students. All staff felt that the students had equity of achieving good grades in the two options, and this has been borne out by the similarity in grades between the two options across all three modules. The more traditional option choices (Options B, traditional, in Table 1) had a median grade of **B+,** while the less traditional options (Options A, less traditional, in Table 1) had a median grade of **B** (See Figure 3)**.**

Figure 3: Box-plot of Differences in Grades between Two Options Across 3 modules.
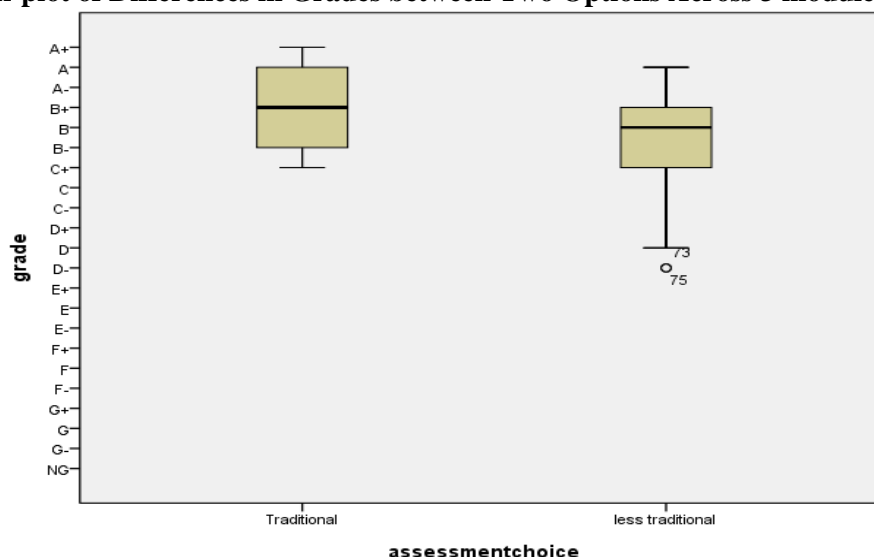
Discussion and Conclusion

Students' Experience

Similar to the study by Francis *et al* (2008), students were very receptive to being given a choice in assessment methods, with the more mature students being more positive than those under 23 years of age. Students felt that they had been empowered by this process and that having some control in relation to their assessment reduced their anxieties and allowed them to play to their strengths. They strongly agreed that they appreciated being given a choice of assessment methods and, surprisingly many chose assessments because they were a little different to the usual assessments. Therefore, although students were conscious of doing well, it appears they were open to exploring different types of assessments (Nightingale *et al,* 1996). It appears that the process of choosing did not adversely increase the level of anxiety for students; however there does seem to be a limit to how much choice students are prepared to deal with. The choice of two assessments seems to have been adequate and many disagreed with having any additional choice. In contrast, Easterbrook *et al's* (2005) case study in Engineering, students were satisfied with a choice of three assessments.

Giving students empowerment did not seem to affect the standards and/or students achievements, a concern discussed by Ashworth *et al* (2010). Students perceived the assessments to be equitable and their grades confirmed this perception. Some staff, however, did describe how students who would usually achieve poorer grades had gained higher grades than they would have normally achieved. However, the staff involved believed this was a valid outcome as these students were articulate, well-read and engaged students, who often under-achieve in a certain style of academic writing. The overemphasis in higher education on certain assessment methods, such as the written examination (QAA, 2003), has disadvantaged many groups of students.

Students with variety of learning needs and styles seem to have been supported in the process. Whereas, it was evident in some of the modules that the need for traditional special accommodations was reduced, the more 'hidden' students needs, such as, poor organisational skills, home-life arrangements or demands from parallel modules, were also accommodated. This view of assessment choice for all students needs is in keeping with the idea of universal design for assessment (Rose & Meyer, 2000; Waterfield *et al*, 2006; Hanafin, *et al*, 2007). It appears to be gaining support as a more efficient, student-centred approach to dealing with the huge diversity of students in higher education. It has a less labelling affect on certain groups of students; it removes 'the need for a sticker' and, in addition, as in other case studies, it appears to benefit the full student cohort (Garside *et al,* 2009; Easterbrook *et al,* 2005)*.*

Staff Recommendations for Practice

In this study, the staff involved to date were very positive of the approach, however as one staff highlighted '*it should be rolled out cautiously'.* All staff commented on the need for carrying out the process in a 'fair' and 'rigorous' manner. They gave some recommendations for others considering this approach to assessment:

- The staff recommended both a careful planning of the assessment choices and then articulating these choices clearly to the students. They advocated the use of the *'Student Information Template'* (appendix 1) which also doubled up as an assessment design guide for staff in the planning stage. In addition to such a guide, Easterbrook *et al* (2005) suggested students fill in a form to reflect on the assessment choice at the early stage, to help engage them with the informed choice.

- As in Easterbrook e*t al's* (2005) study, the choice of assessments in this project was introduced early to the students and they then had to sign off on this decision. Some of the staff suggested a 'cooling off period' to allow students to change options. However, this cooling off, or change of mind period, may vary depended on the assessment methods and their timing.

- The staff recommended that consideration be given to having quite diverse assessments, to maximise on student diversity.

- Some staff felt that their examples for some assessment methods could have been improved. For example, the format of communication in a poster is quite different to that of a traditional oral presentation (such as, PowerPoint™). They recommended getting examples for students on these less traditional approaches to improve their familiarity with these approaches.

- Whereas all staff advocated the choice of assessment within a module, they also recommended that choice and variety of assessment could also be considered at programme level.

The students' experiences and staff recommendations, to date, have been on three modules. Further, inferential statistics will be completed as the other modules are rolled out next semester.

In conclusion, both staff and students in these three modules were extremely positive to the experience of, what is often described as, inclusive assessment. This approach appeared to suit many different student circumstances and needs, both known and hidden. Given that this approach benefits such diversity, it might even challenge the use of the word 'inclusion'. Inclusion has connotations of including a 'minority' or 'excluded' group. In considering this debate, we have moved to the use of 'Assessment Choice within a Module' as a means of describing this approach, in our hope that academic staff might challenge their own preconceptions of what is 'academic work' and consider this an approach for all students.

Footnote:
For further details on this project/research, please contact the project co-ordinator: Dr Geraldine O'Neill (00-353-1-7162839, geraldine.m.oneill@ucd.) (See also *http://www.ucd.ie/teaching/projects/inclusiveassessment/*)

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Appendix 1: Student Information Template: Template for Designing and Communicating Equity

Student Information Template: Description of Choice of Your Assessment Methods and Equity of efforts, standards and support		
Module:		
Assessment Choice	**Assessment :**	**Assessment :**
Weighting toward Module Assessment		
Details of assessment		
Why this might suit you (i.e. more visual, more continuous, different style of writing, apply to practice…)		
Learning Outcomes to be assessed		
Assessment Criteria used		
Marking Procedures (examiners, etc…)		
Teaching and Learning activities to support the assessments		
Feedback Mechanisms (how made equitable)		
Student Workload expectations	Total Hours* *Should be relatively equal, but may be different in breakdown	Total Hours* *Should be relatively equal, but may be different in breakdown
Examples of assessment method available to student beforehand (if unfamiliar)		

Any additional comments for students on this choice or other relevant information: (for example, other assessments and their weighting to module..)

Date for decision and sign-off on assessment choice aspect: ……………………………………………………

For further queries on the assessment choices, please contact …………………………………………… ….

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