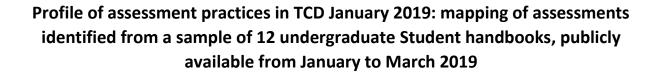


<u>Trinity Education Project (TEP): Assessment Subgroup</u> <u>WP3.2 Effect Cultural Change around Assessment</u>



Project team: Dr Cicely Roche, Nicola Byrne and Dr Ciara O Farrell

Acknowledgements: TEP: Assessment Subgroup 2018-2019, Trinity Assessment Fellows (TAFs) and Trinity Assessment Assistant (TAA) trainees, January to March 2019, Dr Eileen McEvoy (National Forum) and Dr Geraldine O Neill (UCD) [collaborator with Dr Ciara O Farrell and Dr Cicely Roche on Programme Focussed Assessment digital badge].



Introduction/ Background:

Programme-focussed assessment is a key component of the TEP assessment Framework (Figure 1). Programme-focussed assessment review establishes the full picture of assessments across a programme of learning. Modular systems are underpinned with a philosophy that learning can be broken down into quantifiable units with accompanying measurable learning outcomes, and that modules are discrete, independent units. This can result in fragmentation and incoherence of the educational experience. This is particularly true of assessment.

The literature recommends 'programme mapping' as a catalyst for reflection and collegial dialogue (e.g. Jessop et al, 2014; O'Neill, Donnelly, Fitzmaurice, 2013). A stepped approach commonly involves mapping assessments across a programme, or year of programme. This initial assessment mapping process supports a team-based approach to review existing assessments in the context of programme outcomes, in order to clearly identify what is currently going on in the programme. Development of a Digital badge in Programme Focussed assessment (NF, 2017-2018) was led by Dr Ciara O Farrell, Dr Cicely Roche TCD and Dr Geraldine O Neill UCD.

The National Forum for Teaching and Learning (National Forum) published a profile of assessment practices in Irish Higher Education' in 2016, derived from Module descriptors of three semesters (the first and last Semester and one mid-programme semester) across a sample of 30 undergraduate degree programmes in the Irish Higher education sector. A key finding, widely quoted, was that average assessment load increased with reduced module size across programmes.

The TEP Assessment subgroup recommended that a range of programmes should be mapped, and that Trinity Assessment Assistants (TAAs) be recruited and trained to support programme mapping in TCD (November 2018). Academic Staff applied to become Trinity Assessment Fellows (TAFs), and were advised that trained TAAs would be available to support them in programme-focussed approaches to assessment.

The design of the TAA's training and assessment process was influenced by the National Forum's <u>Profile of Assessment Practices in Irish Higher Education (2016).</u> Twelve (12) Programmes, 4 from each Faculty in Trinity, were chosen as follows:

- i) The list would include at least one joint programme and one language;
- ii) Disciplines of TAFs and subgroup members were prioritised;
- iii) Following i) and ii) disciplines of trainee TAAs were taken into account.

Twenty six (26) assistants were enrolled for training. They were paired to collaboratively map assessments across one of 12 undergraduate programmes offered in Trinity, using printed copies of publicly available student handbooks (provided by the project team) and, where TAAs deemed necessary, TAAs accessed additional information available on Trinity Schools' websites. Mapping templates, in the format of Excel spreadsheets with pre-agreed drop-down lists for e.g. Module size, assessment duration and weighting (summary of findings provided in Figure 2 and Appendix 2), enabled a consistent approach to mapping across programmes and supported amalgamation of data from across the 12 undergraduate programmes. The TEP resource/assessment list developed by Trinity Education Fellows (TEFs, 2016-2017) was extended according to subgroup member recommendations, and the extended list was incorporated into the mapping template (Appendix 1).

All modules undertaken by a 'typical student' progressing through each degree were mapped. Where a typical student would choose from amongst a range of optional modules, and the options aligned with varying numbers of assessments, choice of options was 'pro-rata' according to numbers of assessment in optional modules¹.

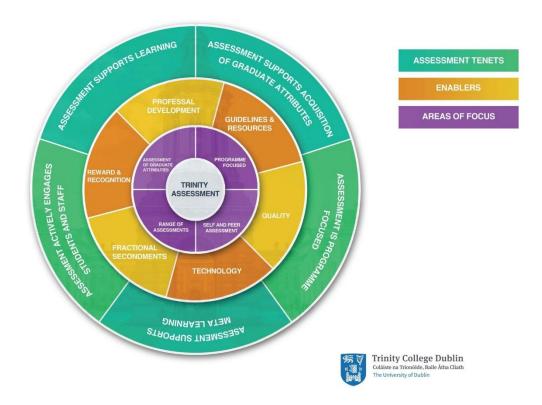
¹ All records, with reviewer/ project team notations, have been retained by CAPSL.



Figure 1: Trinity Education project, Assessment framework

TRINITY EDUCATION PROJECT

ASSESSMENT FRAMEWORK



Assessment Framework for Undergraduate students:

- a. supports the acquisition of graduate attributes;
- b. supports learning;
- c. is programme-focused;
- d. supports meta-learning;
- e. and actively engages students and staff



Key Findings:

- The amount of information 'publicly'² available about programme modules, and the assessment within them, differs within and across Faculties in TCD (January to March 2019).
- There are no common patterns in programme design with regard to module size i.e. programmes do not follow set patterns such as having all 5 credit modules or changing from 5 credit modules in the first year, to larger modules in later years³.
- Module sizes vary. Module sizes of 5, 10, 15, 20 and 30 credits were identified. Of a total of 383 modules across 12 undergraduate programmes, 225 (59%) are 5 credit modules and 133 (35%) are 10 credit modules.
- The number of assessment per ECTS credit completed by a student differs between Faculties and between programmes. Of a total of 855 assessments across 12 undergraduate programmes, 5 ECTS modules have an average of 2.05 assessments, and 10 ECTS modules have an average of 2.5 assessments.
- 'Examination: written' is the most common assessment method, although its popularity (i.e. number or frequency of assessments) ranges from 25% to 49% of total number of assessments in the programme.
- 'Not identified' was the second most common listed in the assessment method category. It appeared in 10 of the 12 programmes. Its popularity ranges from 9% to 38% of total number of assessments in the programme.
- There is a range of assessment methods in all programmes, but the types of assessments differ across programmes i.e. the number of assessment methods from amongst the 20 categories ranged from 6 to 14 across the programmes studied (Appendix 2.).

Preparation of the 'profile of assessment practices' from the data collected by TAAs:

- For analysis and reporting purposes, the programmes are pseudo-anonymised by coding as 'Programme 1' to 'Programme 12' respectively. Programmes 1 to 4 are in the Faculty of AHSS, programmes 5 to 8 are in Faculty of EMS and programmes 9 to 12 are in the Faculty of HS.
- Planning for collation of data and representation of findings were informed by a meeting with Dr Eileen McEvoy from the National Forum (11th July 2019). The meeting aimed to compare TCD's proposed approach to data 'analysis' with that used by the National Forum (2016) with the objective of identifying whether minor adjustments, or additions to the proposed process, might optimise the ability to compare and contrast outcomes/outputs.

² Refers to e.g. publicly available student handbooks and material/information on School websites.

³ 20 credit modules were identified in year 4 of 9 of the 12 undergraduate programmes – likely aligned with 'Capstone'.



Key comparisons between data from the Trinity Mapping Process and the National Forum Study are summarised in Table 1.

	National Forum study 2016	TCD mapping process 2019 (Jan to March)
Source of data	Desktop review of publicly available online material, with occasional direct contact to HEI (researcher)	Desktop review of publicly available student handbooks/online material (TAAs)
Selection of programmes for inclusion	Pseudo-randomised selection of a range of 3 and 4 year programmes ³ ,	4 Degree programmes ⁴ selected from each Faculty (convenience sample – total of 12)
Number of semesters included in study	90 ¹	96 ²
Number of modules included in study	487	383
Number of assessments included in study	1260	855
Average number of assessments in 5 ECTS Credit Modules	2.6	2.05
Average number of assessments in 10 ECTS Credit Modules	2.8	2.5

^{1.} The NF (2016) study reviewed modules in three semesters from each programme, first and last Semester and one mid-programme semester

Table 1: Comparisons between Trinity Programme mapping and National Forum study (2016)

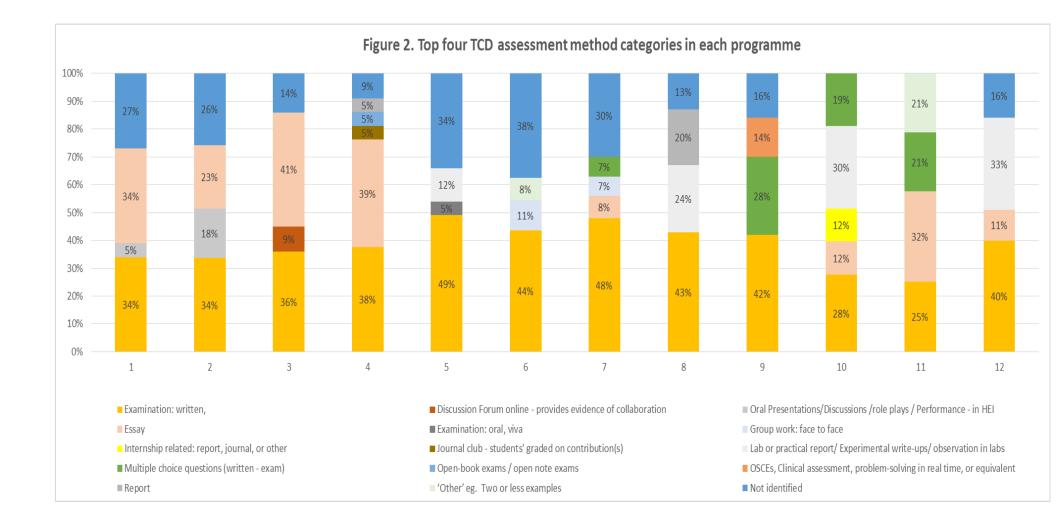
Top Four Assessment Method Categories:

The top four assessment method categories in each Programme by popularity (number or frequency of assessments) are summarised in Figure 2 and the percentage of each of the top four assessment method categories are provided in Table 2 below.

^{2.} The TCD study reviewed all modules in all semesters of the 12 undergraduate programmes

^{3.} The NF study included a range of 3 and 4 year programmes, pseudorandomised selection across HEIs, according to ISCED categorisations (NF, 2016)

^{4.} The TCD study included ten 4 year programmes and two 5 year programmes (MPharm & Medicine). Modules related to year 5 of these two programmes were excluded from subsequent analysis.



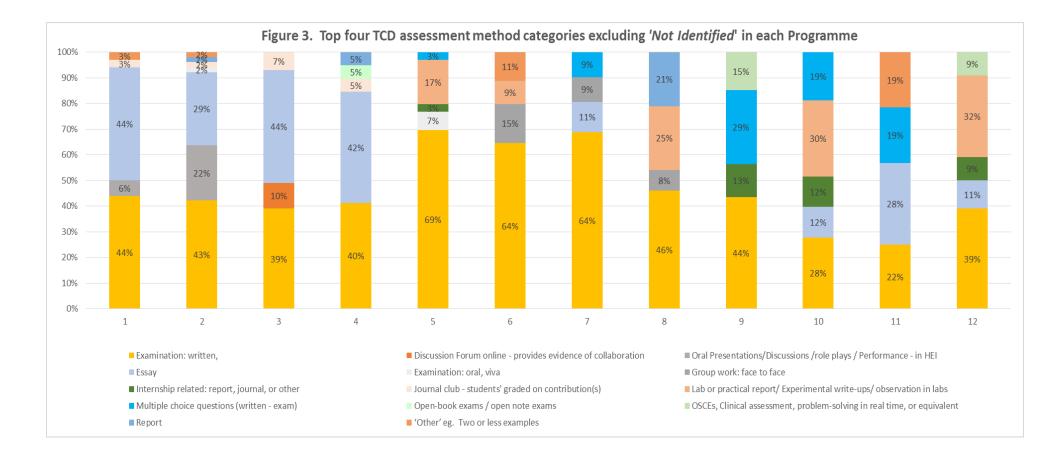


_	ŕ	Forum online - provides evidence of		-	,	work: face to face	related: report,	students' graded on contribution(s)	practical report/	(written - exam)	exams /	OSCEs, Clinical assessment, problem- solving in		'Other' eg. Two or less examples	
			in HEI						observation in labs			real time, or equivalent			
1	34%		5%	34%											27%
2	34%		18%	23%											26%
3	36%	9%		41%											14%
4	38%			39%				5%			5%		5%		9%
5	49%				5%				12%						34%
6	44%					11%								8%	38%
7	48%			8%		7%				7%					30%
8	43%								24%				20%		13%
9	42%									28%		14%			16%
10	28%			12%			12%		30%	19%					
11	25%			32%						21%				21%	
12	40%			11%					33%						16%

Table 2: Percentage of top four TCD assessment method categories in each programme

Key observations, further to review of Figure 2, Figure 3 and Table 2, included that:

- a) Five (5) of the 20 assessment methods included in Table 2 were not a top 4 for any of the 12 undergraduate programmes (Debate; Feedback Session led; Poster; Problem-based learning and Short answer questions
- b) A further 6 assessment methods were included in the top 4 of only one of the 12 undergraduate programmes (Online discussion forum; Examination (oral); Internship related; Journal club; Open-book exam and OSCEs
- c) Five (5) assessment types dominate the 'mapping' profile (Examination (written); Essay; Lab or practical report; Multiple choice questions and Not identified
- d) 'Examination: written' is the most common assessment method and appears in the top 2 assessment methods for all 12 undergraduate programmes
- e) 'Not identified' is one of the top 4 assessment methods by frequency in 10 of the 12 undergraduate programmes. As this had the potential to skew findings, presentation of the 'top 4 assessment types' was repeated excluding 'not identified' assessments (Figure 3).





Considerations for further review and analysis (for discussion):

- Would it be worthwhile to calculate relative weighting of assessment types (top 4) across 12 programmes, for 4 years and for JF/year 1 (TEP) with weighting introduced as [(module credits / 60) x actual assessment weight).
- Other as evolve from Q&A at TEP subgroup meeting 9th October.

References:

Jessop, T., Y. El Hakim, & G. Gibbs. (2014) 'The whole is greater than the sum of its parts: a largescale study of students' learning in response to different programme assessment patterns,' Assessment and Evaluation in Higher Education, 39:73–88.

National Forum. (2017) Enhancing Programme Approaches to Assessment and Feedback: CaseStudies, Tools and Commentaries. Available at: www.teachingandlearning.ie

O'Neill, G., Donnelly, R. & Fitzmaurice, M. (2013) 'Supporting Programme Teams to develop sequencing in higher education curricula.' The International Journal for Academic Development (IJAD) 19(4):268–81.

Transforming the Experience of Students through Assessment (TESTA) Resources. Available at: https://www.testa.ac.uk



Format of assessment method categorisation.

Assessment method category	Examples of wording of assessment in module descriptors
Debate	Student interaction; Oral communication; Class participation
Discussion Forum online - provides	Tutorial; Wiki production - group activity; provides evidence of collaboration
evidence of collaboration	
Oral Presentations/Discussions /role plays	Student presentation; Commentary on text passage; Contextual Commentary;
/ Performance - in HEI	Literary translation plus commentary; Reading Test, Classroom presentation
	and paper submission; Tutorial; Class contribution,; Package generated
	reports; Log files and oral presentations account for 75%; Clinical attachment -
	which includes a case presentation; Pharmacy practice practical test;
Essay	Student written work completed in unsupervised timefrome; Compulsary
	Research Project; Coursework; Case study; Research Project; Research project;
	Exercise review
Examination: written	Exercise; Translation exercise plus grammar notes; Written Exam; In-class exam
	written; SAQ; MEQ; Close reading exercise
Examination: oral, viva	Completed under examination condidtions; Aural Comprehension
Feedback Session led by student; Peer	Student led feedback; Peer Evaluation
feedback; peer assessment	
Group work: face to face	Group Research Report 60%; Joint Dissenting Judgment; Mooting Programme:
	applies to Private Law Remedies Mooting Assignment; group in-class exercises;
	5 projects, combination of group and individual work, attendance &
	participation; Communication skills participation and reflective report;
Internship related: report, journal, or other	Workplacements; Dispensing and patient care coursework; Family Case Study
	tutorials; visits and logbooks; Professional Placement related: report, journal,
	or other; Competency documentation completed and submitted
Journal club - students' graded on	Journal, Workbook, Single assessment of CCF Live 3 and reflective continuing
contribution(s)	professional development e-portfolio. Reflective Journal, Reflective writing,
	Comparative essay; Comparison exercise; Text Analysis Test; Reflective report;
	Communication skills participation and reflective report; Blog
Lab or practical report/ Experimental write-	Practical Exam; MATLAB Assignment; Station Based Practical exam;
ups/ observation in labs	Spectroscopy Assessment; Artefact
Multiple choice questions (written - exam)	Quizzes; In class clickers; EMQ
Open-book exams / open note exams	Book Review; Exercise (review); Gobbet week
OSCEs, Clinical assessment, problem-	
solving in real time, or equivalent	
Poster	
Problem-based learning	Problem solving
Report	Entire Year Project; Package generated reports; Dissertation
Short answer questions	
'Other' – i.e. not on list above (please	Bibliographic exercise; Continuous Assessment Optional module and
include comment in 'text' box)	mandatory assessment; Conference participation; Lexicon entry; Choice of BC
	module; Online course of lectures and tutorials; Comprises 3 x brief hand-ins;
	seminar attendance; Market Tutorials and workshops; Annotated
	bibliography and reflection; BLS certification; Mandatory clinical certificate
	Pass/Fail Week 8, submission of certificate of completion for each of the IHI
	modules; Create a Lesson Plan; Bioinformatics exercise; CAPA sign-off on
	level4 in behaviours in Domain2 and Domain 4 of the CCF by the end of the 8-
	month placement; Software writing/production, tutorials, Simulation
Not identified	Reading Report; Review; online case scenarios; Coursework; in class exam;
	continuous assessment; Pre-online assessment (30%); etest; Web based
	assessment; IPL exercise; Assignment; Other

Appendix 1 : Assessment method categories



Breakdown of E	Jis, Dura	tion of Ex	am, wor	acount/w	огкіоаа а	na weig	nting					
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15 minutes										15 mins		
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30 minutes											30 mins	
45 minutes									45 mins			
50 minutes								50 mins				
150 minutes												150 min
					Wordcou	int/Workl	oad					
150 words		150 words										
300 words		300 words	S									
1200 words							1200					
1500 words			1500	1500						1500	1500	
2450 words											2450	
3500 words												3500
3500-4000		3500-4000										
4000 words		4000	4000	4000								
4500 words											4500	4500
1	Ī			T	Wei	ghting %			1			T
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5		1	1		1	1		+	1			1
7		<u> </u>	<u> </u>	1	†	1	1	1		<u> </u>	1	7
8			<u> </u>	1	†	1	+	1	8	<u> </u>	†	8
11			<u> </u>	1	†	1	+	1	11	1	1	
11.33						1			111	11.33		
14				1	+		+	+	14	11.55	 	
46		 	 	1	+	+	-	+	16	 	+	+
			1	1	+	-	+	-	17	1	+	-
17	1		1	1	+	-	+	-	1,	22.33	+	-
		25	25	25	+	25	25	25	25	22.33	+	25
22.33			23	23	+	23	23	25	25	-	+	25
22.33 25		25	22		1	1	35	+	35	1	1	35
22.33 25 33		25	33			25			133			
22.33 25 33 35		25				35	33		33			33
16 17 22.33 25 33 35 45		25	33 45			35	33		33			
22.33 25 33 35 45 52.5		25				35						52.5
22.33 25 33 35 45 52.5									55			
22.33 25 33 35 45 52.5 55		25	45			65	65					52.5
22.33 25 33 35 45 52.5 55								75				
22.33 25 33 35 45 52.5 55 65 75			45		80	65	65					52.5 75
22.33 25 33 35 45 52.5 55			45		80	65	65	75 85				52.5