

Case Study A: An Institutional Approach to Programme Mapping (UCD)

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As part of a strategic university-wide [Curriculum Review and Enhancement Project](#), a curriculum mapping exercise was undertaken with respect to all taught programmes (circa 600). The purpose of mapping was to ensure that the teaching and learning activities, assessments, and content of each programme aligned with the programme outcomes.

In advance of mapping, programme teams came together to discuss and agree (i) a vision and values statement for their programme and (ii) programme outcomes. Programme teams were strongly encouraged to consult with key stakeholders, particularly students and recent alumni, to ensure the relevance and transparency of the programme's vision, values and outcomes. These outputs were captured in a central online repository, linked to the institution's curriculum management system.

An online mapping tool was developed in-house by the Management Services Unit (UCD IT Services) to support the curriculum mapping process. The tool was based on the Programme Outcomes Mapping Matrix – a tool researched and designed by UCD Teaching and Learning (O'Neill & Noonan, 2013). The intention was to provide programme teams with a simple synoptic tool to map the relationship between programme outcomes and the extent to which they are addressed and assessed in modules. The output from the process - the curriculum map - comprises a series of summary tables, which provide a visual representation using simple scoring and a colour-coded pattern, of the degree to which programme outcomes appear to be addressed and assessed (see Table 1). The extent of summative and 'formative only' assessment of programme outcomes was also captured (Table 2). Summative assessment was defined as assessment that is primarily for the purpose of certification, i.e., it counts towards the overall module grade. Formative assessment was defined as assessment designed to provide feedback on students' learning, which is often not graded.

Once individual module coordinators had mapped their modules, the programme director convened the programme team to review and interpret the map, facilitating a critical opportunity for collegial dialogue about the programme as a whole. Programme teams were asked to comment on the following assessment issues:

- Programme outcomes which appear to be over or under-assessed
- Opportunities for programme-level or stage-level outcome assessment, across multiple modules
- Variety of assessment methods and the extent to which they are balanced within and across modules and stages
- Opportunities for formative assessment and students' self-monitoring of their own learning
- The extent to which the assessment methods utilised meet the needs of diverse learners
- Opportunities for technology-enhanced assessment

Table 1 Extent to which programme outcomes are addressed by the modules

Module Title	Programme Outcomes (K = Knowledge; S = Skills; A = Attitudes)							
	Demonstrate a systematic understanding of teaching and learning issues in higher education (KS)	Critically differentiate a range of teaching and learning approaches (KS)	Adapt creatively teaching and learning strategies to specific disciplinary requirements (KSA)	Take a leadership role in designing and organising curriculum initiatives collaboratively (KSA)	Integrate a range of teaching and learning technologies to enhance teaching and learning app (KS)	Synthesise teaching evaluations to devise implement and reflect on future actions (KSA)	Disseminate new teaching and learning case studies (KSA)	Develop scholarship and research in the area of teaching and learning (KSA)
A	Achievement	Achievement	Achievement	Introduced	Further Developed	Introduced	Further Developed	Introduced
B	Further Developed	Achievement	Further Developed	Introduced	Introduced	Introduced	Further Developed	Further Developed
C	Further Developed	Further Developed	Achievement	Further Developed	Achievement	Introduced	Achievement	Further Developed
D	Further Developed	Further Developed	Achievement	Achievement	Further Developed	Further Developed	Further Developed	Further Developed

<i>Introduced – to indicate that students are introduced to this outcome by this module</i>	<i>Further Developed – to indicate that the outcome is further developed by this module</i>	<i>Achievement – to indicate that student have now demonstrated achievement of this outcome by this module</i>	<i>Blank – to indicate that the outcome is not addressed by this module.</i>
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Table 2 Number of times that each programme outcomes is assessment and purpose of that assessment

Module Title	Programme Outcomes (K = Knowledge; S = Skills; A = Attitudes)							
	Demonstrate a systematic understanding of teaching and learning issues in higher education (KS)	Critically differentiate a range of teaching and learning approaches (KS)	Adapt creatively teaching and learning strategies to specific disciplinary requirements (KSA)	Take a leadership role in designing and organising curriculum initiatives collaboratively (KSA)	Integrate a range of teaching and learning technologies to enhance teaching and learning app (KS)	Synthesise teaching evaluations to devise implement and reflect on future actions (KSA)	Disseminate new teaching and learning case studies (KSA)	Develop scholarship and research in the area of teaching and learning (KSA)
A	Summatively Assessed	Summatively Assessed	Summatively Assessed	Summatively Assessed	Summatively Assessed	Summatively Assessed	Summatively Assessed	Summatively Assessed
B	Summatively Assessed	Summatively Assessed	Summatively Assessed		Formatively Assessed Only	Formatively Assessed Only	Formatively Assessed Only	Formatively Assessed Only
C	Formatively Assessed Only	Formatively Assessed Only	Summatively Assessed	Formatively Assessed Only	Summatively Assessed		Summatively Assessed	
D	Summatively Assessed	Summatively Assessed	Summatively Assessed	Summatively Assessed	Formatively Assessed Only	Summatively Assessed	Formatively Assessed Only	Formatively Assessed Only

Summatively Assessed - assessment which is primarily for the purpose of certification. This includes all assessment that receives a grade contributing to the overall module grade	Formatively Assessed Only - assessment designed to provide feedback on students' learning and overall progress towards the achievement of learning outcomes. Formative assessment is often not graded	Blank – the outcome is not assessed in this module
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Some of the key enablers of this approach

- The appointment of local Project Champions to support and guide programme directors through the process – clear guidelines and workshop resources were made available by the T&L unit.
- The simplicity of the mapping tool, combined with a visual output, ensured that the process was not overly onerous for individual module coordinators, and patterns of assessment were quickly apparent.
- Mapping at this scale was made feasible through the development of an online mapping tool which integrated with the university's curriculum management system. Mapping data on all programmes university-wide was captured, collated and reported via this system.
- The most important aspect was the collegial dialogue and collaborative decision-making that arose from the mapping process.

Some of the key challenges and suggestions

- The risk that the mapping exercise would be regarded as bureaucracy. This is best countered by a clear statement of purpose, an emphasis on team dialogue and a focus on specific areas for enhancement.
- Our mapping tool was deliberately 'light touch', providing a synoptic view of the extent to which programme outcomes were addressed and assessed by the contributing modules. To get a detailed picture of assessment across the programme, a follow-up audit would be required.
- The definitions of summative and formative assessment that were adopted in the mapping exercise were contested by some faculty. In some cases, this led to debate and discussion about different assessment strategies, which was welcomed. However, in other cases it caused a level of unhelpful distraction from the core objective of the initiative.

Impact on students, programme and institution

- The mapping process, and follow-up discussions with programme teams, led to the articulation of evidence-based action plans for programme enhancement. Programme Boards have been charged with oversight of action plan implementation, leading to enhanced educational experience for students.
- Engagement with process was very high (approximately 90% of programmes completed the process).
- Programme-level assessment and feedback emerged as a persistent challenge university-wide, which has led to a further institutional project on changing the culture of assessment and feedback at the university.

Reference

O'Neill, G. & Noonan, E. (2013). *Programme Outcomes Mapping Matrix: User guide*. Retrieved from <http://www.ucd.ie/t4cms/UCDTLP0067.pdf>.