

Trinity Education ProjectClosure Report September 2020

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Foreword

Dr Patrick Prendergast Provost

The Trinity Education Project – or 'TEP' as it became known – is the most radical renewal of the undergraduate curriculum at Trinity College in more than a century.

Work began on TEP in April 2013 and it has continued unabated until the launch in October 2020. TEP stands out as one of the most important projects in this university in this decade. It has not always been easy but it has been invigorating.

For Trinity to be at the forefront of education we needed to think more about the curriculum. As a research university, we had to become more explicit about valuing the linkages between research and teaching as a crucial aspect of what makes a Trinity education distinctive. We also needed to reassert that extracurricular activities are integral to a Trinity Education.

By 2013, when we instigated TEP, the need for change was pressing. It has become even more pressing with time. Disciplinary boundaries are increasingly seen as impediments to solving the many challenges we face globally and yet disciplines are seen as important pedagogically by academics. We have to educate students for the future that they will face, not for the past that we knew.

In preparation for TEP, we consulted with key stakeholders, including with the Students Union, graduates, guidance counsellors, corporate partners, and employers. It was decided early on to agree the graduate attributes. Consensus on the graduate attributes was important because they set the goal that we wish students to achieve in their undergraduate degree. From the graduate attributes came the 'Seven Features of a Trinity Education' which, collectively, create a curriculum with breadth while maintaining depth in learning. We were clear that depth could not be sacrificed because it is through deep study of a discipline that students see the frontiers of research and scholarship in their discipline. Sometimes it may only be a fleeting glimpse but perhaps one that will stay with students all their lives.

In Trinity we like our traditions, and some of them are good. And I like to think that Trinity, at its best, has a tradition of embracing change. Nonetheless some things do not change: with TEP,

- we strengthen Trinity's traditional focus on independent, critical thinking through the capstone project for every student; and
- we embed flexibility, entrepreneurship and innovation. With the workplace in flux, an adaptive and self-starting mindset, is essential.

TEP was a seven-year project involving many people. At its helm have been the current and former Vice-Provost/Chief Academic Officers: Linda Hogan (2013-2016), Chris Morash (2016-2019), and Jürgen Barkhoff (2019-2020). Also, Senior Lecturers/Dean of Undergraduate Studies, Patrick Geoghegan, Gillian Martin and Kevin Mitchell, and Project Managers, Sheena Brown and Fedelma McNamara. Also, of course, all the academic and professional staff without whose commitment and engagement, the delivery of TEP would not have been possible. Members of the TEP Plenary which met quarterly were: Patrick Prendergast (Chair), Jürgen Barkhoff, Orla Bannon, Andrew Bowie, Geoff Bradley, Sheena Brown, Niamh Burke, Victoria Butler, Patricia Callaghan, Veronica Campbell, Mike Clark, Leona Coady, Beibhinn Coman, Martine Cuypers, Olive Donnelly, Daniel Faas, Daniel Ferrick, Sally-Anne Fisher, Joe Harbison, Maura Horan, Muireann Kane, Áine Kelly, Patrick Magee, Niamh McCay, Mary McMahon, Marie McPeak, Kevin Mitchell, Paula Murphy, Laurent Muzellec, Ciara O'Farrell, Declan O'Sullivan, Jennifer Pepper, Ciaran Simms, Michael Slevin, Phil Suffield. I thank you all.

The palpable results of TEP will be the deep engagement of Trinity students during their time in college, and their contribution to making the world a better place when they leave. The changes we have made will help to prepare our graduates for the changes that they, in turn, must make – for themselves and for the world.

01

Introduction

The Trinity Education Project (TEP) has been an ambitious project, articulated as one of the goals of the University's *Strategic Plan 2014-2019*: to renew the Trinity Education¹. This Project Closure Report follows on from the Interim Reports provided to Council in June 2016 and September 2018. It sets out the background and original definition of TEP; its performance and outcomes; any unrealised or outstanding outputs; and the lessons that have been learned from delivering TEP.

Trinity belongs to us, its students and staff, but it also belongs to its alumni, and to Dublin and indeed to Ireland. It brings together people from many different backgrounds; it also merges its long tradition and history with cutting-edge research and innovation. Our strength lies in pushing the frontiers of knowledge while remaining cognisant of our past. In delivering TEP, we have built on our strong tradition of research and scholarship, while rising to the challenges of the future, so that our students will have both the solid foundation and the mental flexibility to live fully their responsibilities and potential as global citizens.

TEP has involved all of us; in bringing it to fruition we have met to review and discuss how we teach and what we teach our undergraduate students; undergraduate students have looked at how they learn and what they learn; we have looked at the undergraduate student experience both inside and outside the classroom and have thought about what we could do better. We have listened to our alumni and to our students and have been guided by our staff. The result is the Trinity Education, designed uniquely for our university.

Before we move forward, it is important to reflect on the long journey we have taken since the start of this project in 2013, to take stock of what has been delivered, and to look at the lessons that have been learned that will feed into future projects.

02

Project Background and Definition

2.1 Project Summary Details

The Trinity Education Project (TEP) details may be summarised as follows:

PROJECT TITLE	Trinity Education Project (TEP)
PROJECT CHAIR	Provost
PROJECT SPONSOR	Vice-Provost/Chief Academic Officer ²
APPROVAL BODY	TEP Steering Committee, reporting to University Council
APPROVED BUDGET	TEP was delivered within existing resources
PROJECT MANAGER(S)	Fedelma McNamara (2015-2017)
	Sheena Brown (2018-2020)
START DATE	April 2013
FINISH DATE	September 2020

2.2 Project Governance

Over the course of the project, TEP Governance has been designed to meet the needs of each project phase. It has consisted of:

- an overarching Steering Committee established by University Council, which had overall responsibility for the sponsorship, planning and delivery of the project;
- strands/subgroups/workstreams that reported into the Steering Committee.

The project was divided into four phases, as follows:



Phase 1: Research and Analysis

During Phase 1: Research and Analysis, a review was conducted of the current range of programme offerings at Trinity, the international and national context, and curriculum reform projects internationally. There was also consultation on the graduate attributes and a benchmarking exercise was completed to provide the evidence base for further discussion and to inform the project scope subsequently approved by University Council. The project management governance structures were implemented from Phase 2 onwards.

There have been three Vice-Provost/Chief Academic Officers over the course of TEP: Professor Linda Hogan, Professor Chris Morash and the current incumbent, Professor Jürgen Barkhoff.

Phase 2: Design

Phase 2: Design was governed by a Steering Committee reporting to University Council, chaired by the Provost, with the Vice-Provost/CAO as Project Sponsor. Seven strands, each with its own Chair reported into the Steering Committee as illustrated in Figure 1.

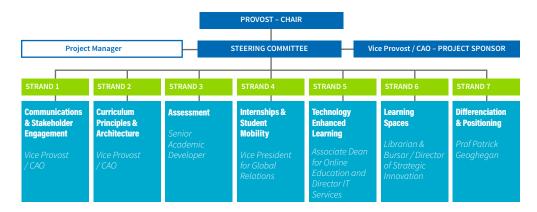


Figure 1: Phase 2 TEP Governance Structures

Phase 3: Planning for Implementation

Phase 3: Planning for Implementation was governed by a Steering Committee reporting to University Council, chaired by the Provost, with the Vice-Provost/CAO as Project Sponsor. Six Subgroups, each with its own Chair reported into the Steering Committee as set out in Figure 2.

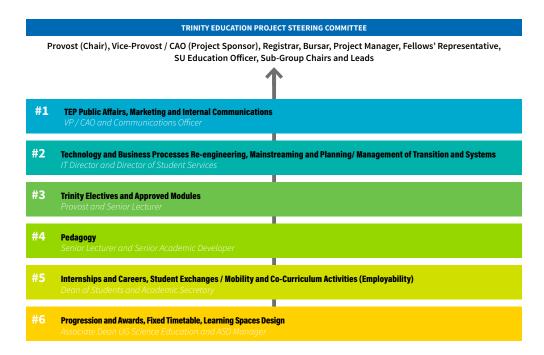


Figure 2: Phase 3 TEP Governance Structures

Phase 4: Implementation and Mainstreaming

Phase 4: Implementation and Mainstreaming was governed by a Steering Committee reporting to University Council, chaired by the Vice-Provost/CAO as Project Sponsor. Four Workstreams, each with its own Chair and Lead reported into the Steering Committee. TEP Plenary, chaired by the Provost as Project Chair, maintained an overview of the progress of TEP Steering and the Workstreams in delivering the project plan. Figure 3 illustrates these governance structures.

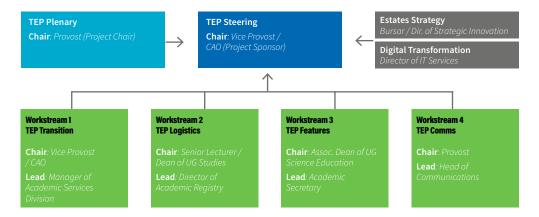


Figure 3: Phase 4 TEP Governance Structures

Any elements that required a change to existing policies or structures, or that required the approval of new policies were brought through the University's relevant governance structures as appropriate, e.g., Undergraduate Studies Committee, Student Life Committee, Council and Board.

2.3 Project Purpose

The purpose of the Trinity Education Project (TEP) was articulated as one of the goals of the *Strategic Plan 2014-2019*: to renew the Trinity Education and particularly to renew the undergraduate curriculum in which are embedded 21st century learning skills, with renewed attention to critical thinking; global citizenship; engagement with employers; and integrating co- and extra-curricular learning opportunities for all students.

It is against this backdrop that the University embarked on this project to re-articulate what a Trinity Education should be in the 21st century and to re-emphasise Trinity's role as a leader in education.

The Trinity education is rooted in a curriculum inspired by current research and scholarship, taught by academics with international reputations in their respective fields, who work together with professional staff to harness the excellence and diversity of the multidisciplinary university.

In this context, the Trinity Education Project sought to address that:

- the curriculum must continue to evolve in light of new discoveries in disciplinary knowledge, pedagogy, and also in the recognition that the society and workforce in which our graduates participate is ever-changing;
- transformational changes are occurring in education, some of which are the effect of developments in technology and globalisation, others of which are a result of the changing needs and expectations of students, employers, and of society at large.

In doing so, the Trinity Education Project aims were:

- to put forward a set of institutional Trinity graduate attributes and, using these attributes, agree curriculum principles and a programme architecture which support their development;
- to build on the strength and quality of our programmes, meet and seek to exceed the expectations of our current and future students.

The successful delivery of the Trinity Education Project across the institution has been achieved by an explicit commitment to the introduction of features and structures that informed curriculum renewal and review. This change initiative sought to build on the excellent work already done throughout the University in teaching and learning expertise, while looking to the future to meet new opportunities and challenges.

03

Project Performance and Outcome

3.1 Project Objectives Achieved

A set of high-level objectives were identified in the Strategic Plan and formed the framework for the Trinity Education Project:

- Promote a research-inspired curriculum where all students have the opportunity to complete a piece of independent research as part of their undergraduate programme
- Introduce flexibility in our programme patterns, while maintaining the disciplinary strengths on which our reputation for excellence is founded
- Develop the key skills of critical thinking, problem-recognition, problem-solving, adaptability and effective communication in the context of disciplinary and multidisciplinary programmes
- Ensure that our curricula and pedagogies are enhanced through the adoption of new technologies and new learning paradigms.

These were achieved through the delivery of:

- The creation of a university-wide set of **Graduate Attributes** which shape the kind of
 education Trinity offers. These are articulated as: to think independently, to communicate
 effectively, to develop continuously and to act responsibly.
- The introduction of a new Programme Architecture based on five curriculum principles, which supports the achievement of the graduate attributes; delivers depth and breadth in undergraduate programmes and examinations; and allows for flexibility in programme pathways.
- The delivery of seven key differentiating **features** for the undergraduate curriculum for which a Trinity Education will be known: (i) Co-curriculum Reflection, (ii) Partners in Learning, (iii) Trinity Electives, (iv) Open Modules, (v) Global Mobility, (vi) Employability and (vii) Capstone Project.
- The solving of the logistical and other operational challenges required to implement the changes to the undergraduate curriculum: (i) new academic year structure, (ii) solving the challenges of examinations in the new academic year structure; (iii) standardisation of progression and award regulations, (iv) change to nomenclature of awards; (v) standardisation of modules sizes to 5 or 10 ECTS, (vi) selection and allocation mechanisms to Pathways, New Minor Subjects and Open Modules; (vii) the delivery of a fixed timetable.
- The mainstreaming of all activities implemented under TEP to ensure they are maintained over the long term.

3.2 Benefits of the Project

The benefits of TEP may be summarised as follows:

- A Trinity Education that will meet the challenges of changes which result from developments in technology and globalisation, the changing needs and expectations of students, employers, and of society at large.
- A Trinity Education that will provide our students with a solid disciplinary foundation and with the mental flexibility that will prepare them for living and working in this rapidly changing world and for living fully their responsibilities and potential as global citizens.

3.3 Project Deliverables in Detail

The work carried out to achieve the key deliverables listed in Section 3.1 was spread over several phases of TEP and is described in more detail in this section.

3.3.1 Trinity Graduate Attributes

The Trinity Graduate Attributes were developed following wide consultation with staff, students and other key stakeholders such as employers, and provide the basis on which the curriculum principles, programme architecture, and seven Features have been developed. Attributes are defined as qualities, skills and understandings that students develop during their time at university, and that shape the contribution they make to their profession and to society.

The four Trinity Graduate Attributes were approved by University Council on 8 June 2016. Each Attribute is defined in more detail by a list of descriptors, set out in Figure 4 below.



Figure 4: The Trinity Graduate Attributes

Throughout their time at Trinity, our students will be provided with opportunities to develop and evidence achievement of a range of graduate attributes that can support their academic growth. They can be achieved through academic and co- and extra-curricular activities. The Graduate Attributes inform the design of learning outcomes at programme and module level.

3.3.2 Programme Architecture

The Programme Architecture was a term coined to refer to the restructuring of all programmes so that they would both support the achievement of the Trinity Graduate Attributes and meet the five curriculum principles which were introduced to apply to all undergraduate programmes, namely:

- 1. provide structured but flexible pathways that support the achievement of the programmelevel outcomes and the development of the graduate attributes;
- are programme-focussed;
- 3. are research-centred; and employ
- 4. a range of teaching, learning and assessment strategies; and
- 5. are supported by appropriate technology-enhanced approaches.

In other words, the new architecture delivers depth and breadth in undergraduate programmes and allows for flexibility in programme pathways. Different programme architectures were designed for different programme types, set out below.

i. **Common Architecture** is based around the following principles:

- Depth/breadth: The architecture ensures a balance between depth and breadth within
 the subject and some breadth outside the subject area through Open Modules, Trinity
 Electives or taking up a New Minor Subject. The option to take up a New Minor Subject
 is currently only available to those on Single Honours programmes. The list of New
 Minor Subjects being offered in 2020/21 is included in Appendix 1.
- Flexibility in pathway choice: The architecture presents students with a number of
 opportunities to navigate a structured, but flexible pathway towards their final degree
 and decouples the entry from the exit route. The award of the final degree is governed
 by completion of foundation modules and by the amount of accumulated credit in the
 sophister years at the appropriate academic level.
- It is a common, shared architecture which allows new subject combinations to emerge within a structured framework. Progress through the structure is governed by one set of shared/agreed regulations.
- ii. Professional Architecture applies to Single Honours degree programmes which are subject to external professional accreditation or whose curricula are necessarily shaped by the content requirements of professional bodies. Examples include Engineering and Computer Science. Transfer to a different pathway is not possible within the professional architecture. Breadth is provided through Open Modules and Trinity Electives.

iii. Science Architecture:

- The current undergraduate Science (TR071) course was restructured into four distinct entry routes and, at the same time, incorporated the existing denominated entry courses into the revised structure as separate moderatorship streams. The four streams at the point of entry are:
 - Biological and Biomedical Sciences
 - Chemical Sciences (Chemistry, Medicinal Chemistry and Nanoscience)
 - Geography and Geoscience
 - Physical Sciences (Physics, Physics with Astrophysics and Nanoscience)
- Streaming allows for the delivery of a core curriculum specific to each stream
 while providing a certain level of flexibility to students in relation to moderatorship
 preferences. It also provides clearer pathways from first year through to the sophister
 years.

iv. Clinical Architecture

- Each programme must ensure:
 - that the agreed curriculum principles are aligned with the programme architecture;
 - that the programme architecture enables the delivery of the Graduate Attributes, while meeting the requirements of the accrediting and statutory bodies.

All programmes are now aligned with the Programme Architecture. This has involved creating space in curricula for new breadth components such as Trinity Electives and Open Modules and meeting the requirement for all taught modules to be re-sized to either 5 or 10 ECTS by 2019/20, with a 20 ECTS Capstone Project in the final year. There are some permitted exceptions to this where constraints are imposed by external accrediting or professional bodies, in particular under the Clinical Architecture. Programmes under the Common Architecture had to structure their programme offerings to fit the credit requirements of the different pathway options available to students to choose from. In addition, the academic requirements of the particular degree pathway had to be met. This was a complex body of work driven by the Directors of Undergraduate Teaching and Learning, supported by the TEP

team and School Administrative Managers. Work was completed in the main by the end of the 2018/19 academic year but was completed fully in 2019/20.

The structure of each of the Programme Architecture types are set out at https://www.tcd.ie/courses/undergraduate/your-trinity-pathways/assets/all-pathways.pdf.

3.3.3 The Seven Features of a Trinity Education

Under Phase 4 of TEP, the work that had been completed to date was re-framed into subprojects to deliver seven key differentiating features for the undergraduate curriculum for which a Trinity Education will be known: (i) Co-curriculum Reflection, (ii) Partners in Learning, (iii) Trinity Electives, (iv) Open Modules, (v) Global Mobility, (vi) Trinity employability and leadership awards/scholarships and (vii) Capstone Project.

Our students will progress through these seven features over the course of their undergraduate degree and through them will be enabled to broaden their experience and their perspective beyond their core discipline, and also to deepen their understanding of their subject. These features will help our students to develop the qualities, skills and behaviours which are encompassed by the four Trinity Graduate Attributes.

A graphic was developed that illustrates the journey that our students will take over the four years of their degree, and the stages at which they will encounter the seven Features, culminating in the Capstone Project, see Figure 5. A significant body of work was required to deliver each of the seven Features, detailed below.

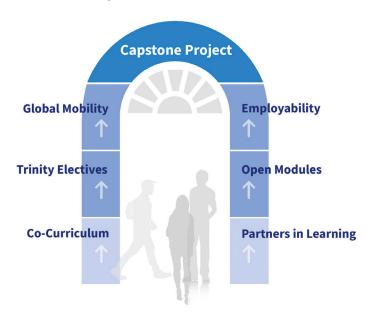


Figure 5: Trinity Features Graphic

Co-Curriculum Reflection: The approach taken to maximise the learning from co- and extracurricular activity was to facilitate the opportunity for co- and extra-curriculum reflection that shows where the <u>Trinity Graduate Attributes</u> are attained 'outside the classroom', for all students. This was achieved by developing <u>Trinity's Guided Reflection Tool</u>, an online, downloadable, <u>interactive pdf</u> developed to support students in capturing the learnings they achieve through co- and extra-curricular activities, specifically in reflecting on the achievement of the Graduate Attributes. It is housed on a dedicated reflection website: <u>www.tcd.ie/students/reflection</u> and guides the student through a reflection on a co-curricular activity (e.g. a summer job, internship, or engagement with clubs and societies). It is aimed at both the beginner and more advanced levels, with resources provided on the website for those students that want to

learn more about reflective practice. Enticements to make it attractive for the student to use and therefore to benefit from, and to embed its use, include increasing visibility at Orientation; providing feedback through face-to-face clinics; issuing Certificates at different levels for completion of a number of reflections; building use of the tool into mentoring and other processes; and using the tool to prepare for taught modules, for-credit internships and study abroad that incorporate reflection as part of the curriculum. Certain awards have built in use of the Tool as a requirement, such as the Dean of Students Awards, Trinity Employability Awards and Sports Awards (see https://www.tcd.ie/students/reflection/awards/). Use of the Tool will develop the skill of critical thinking, a valuable part of a student's personal development through their time at Trinity, in their careers and beyond. It will contribute also to building resilience and confidence.

The proposal for facilitating Co- and Extra-Curriculum Reflection was approved by Student Life Committee on 17 September 2019 and by University Council on 2 October 2019.

Partners in Learning: The Partners in Learning feature evolved from 'Culture Change – Assessment' and recognises that a shift in culture and attitude is necessary for students to become partners in their learning. The initial focus was on creating an assessment framework that reflected the curriculum principles, and was coherent at programme level, introduced diversity into teaching, learning and assessment strategies as well as instigating a move away from the traditional performance of examinations which is an ongoing focus.

In May 2016, the University Council approved the Assessment Framework developed under TEP which had as its aims to:

- embed Graduate Attributes in the curriculum
- be coherent at programme level
- provide opportunities for students to be actively engaged in the assessment processes
- reflect the Curriculum Principles
- be informed by international best practice.

The Assessment Framework is set out in Appendix 2.

The framework for assessment does not advocate replacing exams with a similar amount of continuous assessment. Rather, it advocates fewer, more varied assessments across the academic curriculum. Much work was carried out to ignite a cultural change required for this to happen, with resources and videos produced on workload and assessment mapping; a mapping tool for graduate attributes; and assessment resources for staff produced by Academic Practice and eLearning (CAPSL), Student Learning Development (SLD), and Schools. Teach-Meets (informal meetings of teaching staff to share good practices) were held by academics within Schools to encourage colleagues to consider a broader range of both formative and summative assessment practices, which reappraise the importance attributed to assessment of, as and for learning and seek to engage students in more integrative learning within and across the academic year(s).

The concept of Partners in Learning emerged in Phase 4 of TEP and grew from consideration of the student-academic experience at Trinity, as well as issues such as assessment load, workload, and feedback. Underpinning the changes introduced by TEP is a renewed focus on the student-academic relationship, as well as the active role that will be played by the student in shaping their own education while at Trinity. At the core of Partners in Learning is that students are active independent agents in their own education. It places responsibility on students to own their educational experience, which is starkly different to their secondary educational experience, and manifests itself in multiple ways: through the increased flexibility in the programme pathways that students can choose when they enter the University; the wide choice of modules that students can take outside of their own disciplines (Trinity Electives

and Open Modules), culminating in the Capstone Project where they have the opportunity to become active agents of their own discipline, pushing the frontiers of knowledge.

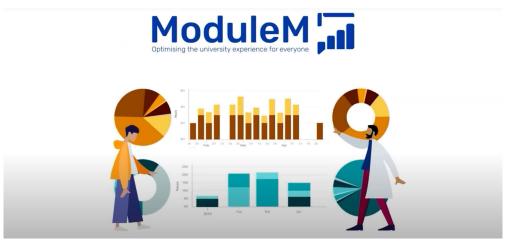
In practical terms, a tangible output from this Feature is the assessment mapping tool, completed as a final year project by engineering Masters students under the supervision of Professor Kevin Kelly, School of Engineering, called *ModuleM*. *ModuleM*, funded by Trinity Teaching and Learning, is a planning and communication tool that allows easy management of information regarding classes, assignments and all aspects of student learning. Fully deployed, the tool will help strengthen the academic-student partnership and will optimise the university experience for everyone. The range of features ensure that academics can:

- Visualise students' workloads at the individual, cohort or subgroup level.
- Discern the level of effort required by students on their assignments.
- Improve their teaching by receiving rapid feedback on their classes and assignments.
- Understand better what is reasonable to expect from their students.
- Be assisted in making informed decisions in planning their teaching before the semester begins.

The tool will help students to:

- Be prepared and know what their expected workload will be ahead of time.
- Understand their learning process and track the time spent on their work.
- Have their voice heard by giving feedback to help improve lectures and assignments.
- Be clear on what is required to succeed in their studies.
- Take control of their daily schedule and reduce stress.

See https://youtu.be/jl08DQijGdc for further information.



Graphic illustrating the *Module M* **Assessment Mapping Tool**

User testing took place over the summer. Some additional work to interface the tool with existing College systems will be required before the tool can be rolled out on a pilot basis to selected Schools in the 2020/21 academic year. Interfacing with the appropriate student administration systems is a necessary requirement for the functioning of the tool and this will be progressed by the Senior Lecturer/Dean of Undergraduate Studies and Professor Kevin Kelly in consultation with the Director of IT Services.

Funding received by Trinity Teaching and Learning from the National Forum for the Enhancement of Teaching and Learning for the Assessment Literacy Project led by Dr Ciara O'Farrell, Head of Academic Practice, has ensured that the assessment work begun under TEP will continue post-TEP. The project was paused during the early stages of the Covid-19 pandemic but has re-commenced with a changed focus. The initial focus was on first year students transitioning to higher education but this has been broadened to cover all undergraduate and postgraduate students in Trinity with a focus on hybrid assessment.

Early evidence from the pivot to online assessment during 2020 showed that both staff and students found this change to online assessment to be a successful assessment experience. To continue to enhance cultural change in the assessment practices as recommended by the Trinity Assessment Framework, the focus is now on remote assessment practices (including open book assessment) as these require different skills for both staff and students to master. While the project will still focus on assessment literacy for staff and students it will narrow in scope to online assessment and broaden in scope to all students/assessors.

Research from the project has been informed by both international best practice and consultation with staff and student stakeholders. Inspired by this research, a suite of resources has been developed to support this transition to a hybrid teaching and learning environment. Design of the resources have centred around staff and students adapting to online learning, fostering student engagement, building assessment literacy, and expectations in a hybrid context. The resources developed are available through two Blackboard modules 'Adapting our Teaching and Learning Online' (staff) and 'Learning to Learning Online in Trinity' (students).

Additional information on outstanding work from Partners in Learning is set out in section 4.3 Partners in Learning.

Trinity Electives were developed to build on Trinity's tradition of research and scholarship and strengths in interdisciplinary investigation and to link research and teaching in an innovative way. They are integral to the objectives of the Trinity Education. Their purpose is to add breadth to the undergraduate curriculum by providing students with meaningful and distinctive learning experiences beyond their main discipline(s)/subject(s) and with opportunities to develop the Trinity Graduate Attributes. A number of the Trinity Electives are linked specifically to the interdisciplinary Trinity research themes, while others address key societal challenges from a contemporary and/or historical perspective, or link with languages and cultures. All seek to connect student learning with our research activity and enable students to engage with the societal impact of research.

Trinity Electives are stand-alone modules, with no pre-requisites, which may be taken by undergraduate students from across the University in their 2nd and 3rd years. They are weighted at 5 ECTS and are taught and assessed within one semester.

Ideally, Trinity Electives enable multidisciplinary exploration and must adhere to the following principles that were approved by University Council in April 2017:

- examine current and/or past critical issues using techniques and approaches from multiple disciplines;
- expose students to new domains of knowledge, methods of enquiry and epistemologies,
 and the wider implications/consequences of the challenge/topic;
- foster reflection, inquisitiveness, skills of analysis and critical thinking;
- engage students in learning opportunities in diverse/heterogeneous groups;
- provide students with opportunities to develop the Trinity Graduate Attributes.

Trinity Electives are designed to take account of the following:

- The need to ensure meaningful engagement of students from multiple disciplines with the content at the appropriate intellectual level;
- The need for the Trinity Elective to be thematically coherent, i.e., not a series of 'show and tell' lectures or a sequence of multidisciplinary topics.

The delivery of Trinity Electives ensures that students:

- are exposed to a range of teaching, learning and assessment methods including innovative methods:
- take an active and self-regulated approach to their own learning.

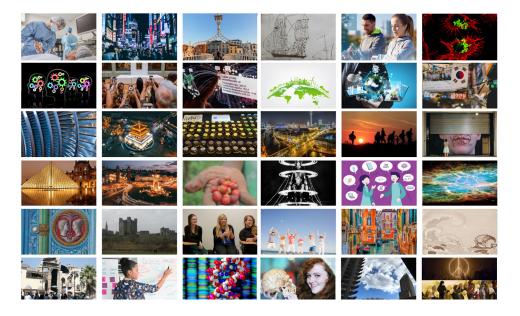
All Trinity Electives incorporate blended delivery or are fully online.

Trinity's Research Theme leads were approached and almost all either produced or became involved in running a Trinity Elective. Over the course of 2018/19 and 2019/20, calls for proposals were issued to all Schools, Trinity Research Institutes and Trinity-led National Research Centres which led to further proposals coming forward that are linked to research and/or address key societal challenges. A suite of Language and Culture Electives was also brought forward. The Trinity Electives Subgroup vetted all proposals to ensure they met the Council-approved principles, before recommending them for approval to Undergraduate Studies Committee.

Capacity projections were monitored closely by the Trinity Electives Subgroup to ensure sufficient places on Trinity Electives would be available to all eligible students. A complicating factor was the phasing out of the Broad Curriculum programme, with students on this programme eligible to take Trinity Electives instead. However, these students were successfully facilitated alongside students on the new programme architecture. The last year of Broad Curriculum students will be in 2020/21, with only a small number of programmes involved. A website was built, with a page for each Trinity Elective that provides a pitch video, general information and more detailed information for those that wish to explore further. See www.tcd.ie/trinity-electives.

In 2019/20, the first set of 26 Trinity Electives was rolled out for the first time to students. Students used an online system accessible via my.tcd.ie to apply for Trinity Electives by listing their preferred modules in a rank order of preference. The online selection and allocation system was built under a separate project, Digital Trinity 1 (DT1), in consultation with the Trinity Electives Subgroup. The academic lead for the Trinity Electives under TEP, Prof Declan O'Sullivan, and the Chair of the Trinity Electives Subgroup, Prof Áine Kelly fed in the academic requirements to DT1 and signed off on the allocation algorithm. Places were allocated using this algorithm and the allocation was reviewed and signed off by Profs O'Sullivan and Kelly before being communicated to students. Visiting students had an opportunity to select from the remaining places before the beginning of the Semester.

In 2020/21, a total of 39 Trinity Electives are on offer to students, including an Elective run by the National College of Art and Design. The inclusion of Electives run by external bodies is a welcome development.



A number of procedures were put in place to safeguard the Trinity Electives offering:

- No change of mind policy, approved by USC in April 2019 (students cannot change their mind once they have been allocated to a Trinity Elective except in exceptional circumstances as it would risk adding in additional instability/uncertainty to the allocation process in the first years of implementation).
- Cessation policy that will feed into the revised Programme Suspension and Cessation
 Policy currently under review (commitment to be given by the School to running
 the Elective for 4 years, and one year's notice to be given to withdraw an Elective in
 exceptional circumstances).
- A Full Report available for all Courts of Examiners, approved by USC in April 2019. This
 procedure involves a number of steps to ensure marks are scrutinised and reviewed, as
 follows:
 - i. the scrutinising of marks by a marks review panel consisting of a minimum of 3 academics including the Module Coordinator before inputting to SITS,
 - ii. the review of marks by a Trinity Electives Review Committee, consisting of academic representatives currently sitting on the Trinity Electives Subgroup and chaired by the Associate Dean of Undergraduate Science Education and
 - iii. the provision of anonymised results data from the TE Review committee will be made available to Courts of Examiners in each programme so that they have sight of overall student performance in Electives that students within their courses have taken).

The full list of Trinity Electives for 2020/21 is set out in Table 1 below:

Ancient Culture Lab: Homer's Experience and the Greek Language The Art of the Megacity
The Art of the Megacity
Becoming Human: The Science of Us
Cancer: The Patient Journey
The Chemistry of Periodic Elements
Chinese Language and Culture (Beginners)
Contemporary Art Angles
Cultures and Societies of the Middle East and North Africa
Decoding Genetics: The building blocks of life
Design Thinking
Displacement: exploring the human experience of forced migration
Emergence of Technologies
Energy in the 21st Century
Engaging in the Digital World: Today and Tomorrow
The Ethics Lab: Responsible Action in the Real World
French Language and Culture (Beginners and Advanced)
From Planets to the Cosmos
German Language and Culture (Beginners and Advanced)
Hacking your health: the science of exercise and fitness
How to live long and prosper – A lifespan approach
Idea Translation Lab
Irish Landscapes: Interdisciplinary Perspectives
Irish language and Culture (Beginners and Advanced)
Irish Sign Language
Italian Language and Culture (Beginners and Advanced)
Japanese Language and Culture (Beginners)

Korean Language and Culture (Beginners)

Language and Communication in the Digital Age

Latin: One Language, Many Cultures

The Politics of Peace and Conflict in a Globalised World

Social Innovation - Tools for Social Change

Spanish Language and Culture (Beginners and Advanced)

Sustainable Development Goals and Policy Evaluation: Global Development One Target at a Time

Thinking Digitally and Culturally

Toolkit for a Smart & Sustainable World

Travel and English Literature

Vaccines - Friend or Foe

What is the Internet doing to me? (Security and Privacy for people in a connected world)

A World to Discover: Travel Memoirs and Memorabilia at Trinity

Table 1: Full list of Trinity Electives for 2020/21

The total uptake of Trinity Electives by students in 2019/20 was 723 in Semester 1 and 682 in Semester 2, totalling 1,405. The uptake per Elective per Semester is set out in Tables 2 and 3 below. A separate report on the Trinity Electives 2019/20 went to Undergraduate Studies Committee on 15th September 2020. This report will be produced annually to USC.

Module Name	Capacity	Minimum Quote	Enrolled Students	% Capacity	Remaining Spaces
Irish Language and Culture (Beginners)	34	16	29	85	5
Japanese Language and Culture (Beginners)	68	16	57	84	11
Displacement: exploring the human experience of forced migration	60	15	49	82	11
Idea Translation Lab	40	9	32	80	8
Cancer: The Patient Journey	50	20	33	66	17
Design Thinking	100	42	62	62	38
Chinese Language and Culture (Beginners)	35	16	20	57	15
Spanish Language and Culture (Beginners)	70	16	39	58	31
French Language and Culture (Advanced)	70	16	38	54	32
Spanish Language and Culture (Advanced)	70	16	37	53	33
What is the Internet doing to me? (Security and privacy for people in a connected world)	80	20	41	51	39
Korean Language and Culture (Beginners)	35	16	17	49	18
Cultures and Societies of the Middle East and North Africa (MENA)	125	15	60	43	65
French Language and Culture (Beginners)	69	16	29	42	40
Irish Landscapes: Inderdisciplinary Perspectives	40	3	16	40	24
Irish Language and Culture (Advanced)	70	16	28	40	42
Emergence of Technologies	100	15	37	37	63
German Language and Culture (Beginners)	70	16	22	31	48
Vaccines – Friend or Foe	100	40	30	30	70
German Language and Culture (Advanced)	70	16	20	29	50
A World to Discover: Travel Memoirs and Memorabilia at Trinity	100	30	27	27	73
	1456	385	723	50	733

Table 2 - Uptake of Trinity Electives in 2019/20, Semester 1

Module Name	Capacity	Minimum Quote	Enrolled Students	% Capacity	Remaining Spaces
Irish Language and Culture (Beginners)	16	16	16	100	0
From Planets to the Cosmos	120	40	116	97	4
The Art of the Megacity	40	20	38	95	2
German Language and Culture (Advanced)	25	16	19	76	6
Irish Language and Culture (Advanced)	35	16	23	66	12
French Language and Culture (Beginners)	35	16	22	63	13
Japanese Language and Culture (Beginners)	35	16	22	63	13
The EthicsLab: Responsible Action in the Real World	72	36	44	61	28
Displacement: exploring the human experience of forced migration	60	15	31	52	29
German Language and Culture (Beginners)	28	16	14	50	14
Spanish Language and Culture (Advanced)	69	16	34	49	35
Travel and English Literature	100	20	47	47	53
Spanish Language and Culture (Beginners)	70	16	31	44	39
French Language and Culture (Advanced)	70	16	30	43	40
Cancer: The Patient Journey	50	20	21	42	29
Energy in the 21st Century	60	15	24	40	36
Chinese Language and Culture (Beginners)	35	16	14	40	21
Engaging in the Digital World: Today and Tomorrow	100	15	36	36	64
Korean Language and Culture (Beginners)	35	16	12	34	23
Social Innovation Tools for Social Change	50	25	15	30	35
Toolkit for a Smart & Sustainable World	150	40	36	24	114
Cultures and Societies of the Middle East and North Africa (MENA)	125	15	12	10	113
Impact Evaluation for Global Development	300	100	25	8	275
	1680	537	682	41	998

Table 3 – Uptake of Trinity Electives in 2019/20, Semester 2

Open Modules: As approved by University Council in June 2016, Open Modules are defined as

"New or existing modules that enable a student to step outside their core curriculum (totality of modules available, i.e., mandatory and optional) and expose them to relevant aspects of closely related disciplines or to disciplines which are deemed relevant to or are considered to enrich the student's core curriculum".

Open Modules are weighted at 5 or 10 ECTS.

The Open Module principles were approved by University Council in April 2017. They provide the opportunity for students to pursue knowledge and to look at their core discipline from varying perspectives. Knowledge does not fit neatly into one discipline – Open Modules recognise this and allow students to explore and deepen their knowledge by moving across disciplinary levels, and into other groupings of their student peers. They benefit from the overlap and complementarity that exists between disciplines. Open Modules are deliberately chosen by the Programme, to complement the subject area and to advance the core programme for the student. Student choice is guided rather than free choice as happens with the Trinity Electives. Much of the work from 2018/19 onwards under TEP focussed on asking

programmes to open up modules on their programmes and sending out these Open Modules to programmes to approve for students on their programmes to take. Sufficient supply to meet demand is of course crucial and to mitigate the risk of insufficient supply, bespoke and designated Open Modules were introduced, approved by University Council in October 2019. Bespoke Open Modules are designed to offer an accessible introduction or overview of a subject or area for non-specialists, and proposals must be approved by Undergraduate Studies Committee. Designated Open Modules are Open Modules that are available within specific programmes for their students only to take, on Common Entry and Professional programmes such as BESS and Engineering. Designated Open Modules may also be offered that are only open to specific programmes or architecture types e.g. modules within Science or across Engineering disciplines. It is hoped that in future years, additional Open Modules outside of the programme will be offered to students on the Common Entry programmes.

Over 200 Open Modules are being rolled out for the first time from 2020/21 and 44 programmes have access to a subset of these (determined by the timetabling pillars). Based on capacity projections, there is sufficient supply to meet demand in 2020/21. For further information, see https://www.tcd.ie/TEP/open-modules/.

Global Mobility: Student mobility provides significant opportunities for students to attain the Trinity Graduate Attributes, the breadth of perspective that we desire for our students, and the ability to adapt to change which builds confidence and provides fresh perceptions and ways of thinking. The changes brought about by TEP, of semesterization (including the introduction of assessment of modules taught and completed within each semester), standardization of module sizes, as well as the introduction of breadth components of Trinity Electives and Open Modules will facilitate and enhance student mobility opportunities, both inbound and outbound. Student mobility ambitions form part of the new Global Relations Strategy (GRS) III and as part of Phase 4 of TEP, Global Relations reported directly to TEP Steering on progress on achieving these ambitions.

Items were brought for input from TEP and fed back to the Global Relations Committee such as the definition of Global Mobility, finally approved by University Council in December 2019 as:

Global Mobility is defined as any international experience to include but not limited to an exchange, internship, research placement, summer programme, that is closely aligned to a student's programme of study, approved as a formal mobility programme by the relevant School and normally at least four weeks in duration.*

*Some clinical placements within the Faculty of Health Sciences are of two weeks in duration but contribute to the student's programme of study to such an extent that they are included in this definition. Other such exceptions may also be considered following careful consideration by the School in consultation with the Vice President for Global Relations.

Other items included second year mobility (to Australian Partner Universities in particular) and the Global Mobility Bursaries Allocation.

One of the key targets of GRS III is that by 2024/25, 50% of graduating undergraduate students will have had an international experience as part of their programme. This goal was progressed significantly under TEP Phase 4, and by the end of 2019/20 just over 39% of students undertook an international experience during their degree programme, up from 34% in 2018/19. Larger numbers undertaking Erasmus have been key to this. Global Relations has worked systematically to expand the range of student mobility schemes and has put a dedicated Erasmus and European Partnerships Manager in place. Clearly Covid-19 has overtaken events but from a TEP perspective, Global Mobility is increasing for our students, and is a firmly embedded feature of a Trinity Education.

Trinity Employability Leadership Awards/Scholarships: One of the aims of TEP Phase 4 was to expand the existing Trinity Employability Award to other sectoral areas and to broaden the scope of undergraduate students involved in the Award. This Award, managed by the Careers Service, was brought in under the umbrella of TEP in 2018.

The Trinity Employability Award, run in partnership with key employers, was established in 2016 to give students learning experiences that enhance their career knowledge and readiness and that contribute to their development of the Trinity Graduate Attributes. It combines industry-led training in specific transferable skills with university-led workshops. Students are supported to reflect on and articulate their learning from their participation in the Award and are given the opportunity to compete for prizes.

Under TEP, several new Employability Award pathways were developed and rolled out by the Careers Service to complement the existing Employability Award run with Intel Ireland and the Professional Services Pathway Award involving partner employers Deloitte, EY, KPMG and PwC. These included:

- Pharmaceutical Pathway Award (rolled out in 2019/20)
- Digital Health Award (to be rolled out in 2020/21)
- Social Action Migration Award (to be rolled out in 2020/21)

Two additional strands of the Social Action Award will be developed in 2020/21 with a view to rolling out in 2021/22.

In addition to introducing new Award pathways, enhancements were made to existing Award processes. A common structure was introduced across all the Employability Award pathways, including a centralised application process, a standardised assessment structure, and aligned timelines. These changes have been received positively by students and employers who have cited the increased visibility of the benefits of the Award and clear guidelines for each stage of the process as key factors in their engagement.

The strengthened core elements and defined workshop learning objectives have seen an increase in the quality of submissions from students at each level of the Award, with students expressing a clear understanding of the benefits to their personal and professional development from participating.

The implementation of the Laidlaw Undergraduate Research and Leadership Programme at Trinity was approved by University Council on 17 January 2018. This scholarship is designed to assist and support self-motivated and ambitious undergraduate students to gain the knowledge and skills to become future leaders in their chosen fields. The numbers of Laidlaw Scholars since its inception in 2018 are set out in Table 4 below.

An additional 3 years of funding has been confirmed for 2021-2023. While our ambition is to introduce other such scholarship programmes at Trinity, with different models under consideration, significant funding will be required to support these.

Year starting Laidlaw Programme	No. of Laidlaw Scholars
2018	18
2019	22
2020	22
Total	62

Table 4: Number of Laidlaw Scholars 2018-2020

Funding was secured to establish a small Trinity Employability Bursary in 2019/20 of €10,000 with the aim of supporting undergraduate students who are looking for career-related work experience (e.g. internship, job shadowing) but finding it financially difficult to take up an opportunity they have secured. This could be an unpaid or a low paid role or where there are additional costs associated with taking up the opportunity. The work experience the student undertakes must help them to develop employability skills and attributes and prepare them for their career ahead. In light of Covid-19 and cancellation of the majority of summer internships for which the Trinity Employability Bursary was designed to support, it was redefined to broaden its scope, e.g. virtual/remote internships, and will remain open to students in 2020/21.

Capstone Project: Under TEP Phase 4, steps were taken to ensure that from 2019/20, all new entrant undergraduate students will have the opportunity to complete a 20 ECTS capstone project or equivalent during their undergraduate degree course. In 2018, an audit of current final year projects was conducted and its results showed that the majority of students already have an opportunity to complete a capstone project or equivalent during their undergraduate degree course. Any programmes identified that did not offer a 20 ECTS capstone project have put this in place in their final year for students entering from 2019/20. The only exceptions are those programmes that, due to professional accreditation constraints, are unable to offer a 20 ECTS capstone project. These confirmed that their students will have the opportunity to carry out a piece of independent work during their programme of study ³.

A definition and criteria were approved by University Council on 10 April 2019, that define what constitutes a 'high-quality' capstone of 20 ECTS, including the attainment of the graduate attributes. The following is the approved definition of what constitutes a high-quality Capstone Project:

The capstone project — though defined differently by different subjects — is the common element across all degree exit routes and is weighted at 20 ECTS. It requires a significant level of independent research by the student. It should be an integrative exercise that allows students to showcase skills and knowledge which they have developed across a range of subject areas and across their four years of study. It should result in the production of a significant piece of original work by the student. It should provide them with the opportunity to demonstrate their attainment of the graduate attributes.

The definition is deliberately broad to encompass the wide variety of types of current final year projects on offer across disciplines. It recognizes that there is not a 'one size fits all' approach to the type of Capstone Project offered by a programme. Examples of types of Capstone Projects that are currently offered are set out in Table 5.

- Research-informed dissertation
- Dissertation with practice (feature-length screenplay or video essay)
- Composition
- Recital
- Conduct research and use data to complete major case writing project in target language
- Desk-based research and/or research with human participants and presentation
- Original lab research project in a research laboratory resulting in thesis, oral and poster presentation
- Independent piece of work where field work or the analysis of original source material plays a primary role
- Field work-based mapping project with subsequent write-up (including production of geological map and accompanying short report, plus oral presentation)

Table 5: Examples of Types of Capstone Project Currently Offered

³ Dental Science, Medicine, Nursing, Midwifery, Occupational Therapy, Pharmacy

The following criteria were approved by University Council on 10 April 2019 and define what constitutes a high-quality capstone. These criteria should form the framework within which capstone projects are offered.

- All programmes are expected to enable students to complete a capstone project. For accredited professional courses such as in the Health Sciences where there may be some constraints on course content the expectation is still that students should undertake some independent research.
- 2. With regard to (1), in a Joint Honours programme, the choice of a capstone project in either subject should be offered. A joint capstone project shared by both subjects may be offered where feasible or appropriate, with the appropriate weighting of 20 ECTS and with the role of the supervisor(s) clearly defined (see (5)).
- 3. Where possible, students should have input into the choice of the specific topic of their capstone project.
- 4. Programmes determine which type/s of capstone are appropriate to their discipline that will fulfil the learning objectives of the capstone. The definition of 'independent research' and 'original work' will vary between different disciplines.
- 5. Programmes should outline in their handbooks the exact nature of involvement of a supervisor in the capstone so that students' expectations of this involvement will be clear.
- 6. The capstone project should be a standalone module of 20 ECTS in the final year, although in some programmes the project may need to extend over more than one year.
- 7. The capstone represents, and is assessed as, an individual student effort (with a weighting of 20 ECTS), although the process or product may involve other students (e.g., a performance which involves support at the level of stage management, or a composition which involves other performers).
- 8. Through the capstone project, the student is expected to produce a significant piece of original work.
- 9. Methods used to assess the capstone will vary depending on the nature of the capstone. This may include one or more of the following: written dissertation, poster presentation, oral presentation, assessment of technical ability, etc. Assessment may be undertaken by more than one staff member (e.g. in some disciplines capstones are routinely double marked), and, where appropriate, the external examiner. If several assessment methods are used they should map to specific learning outcomes and should link to the graduate attributes.
- 10. Capstone project marks should be moderated by External Examiners, who should have access to all projects or a sample of projects.

Measures were put in place to ensure that a high-quality Capstone Project continues to be offered to all undergraduate students in the long term. These included building in quality control through the External Examiner Report process and embedding it as a requirement in all new undergraduate course proposals. Ultimately, the responsibility of ensuring that all students have the opportunity to take a high-quality 20 ECTS Capstone or equivalent as part of their undergraduate degree lies with the Head of School, as the person having overall responsibility for the academic management of the School.

Research is at the heart of Trinity and the achievement of the objective that every undergraduate student will have the opportunity engage with research and to attain the Graduate Attributes through the Capstone Project is one of the key features of a Trinity Education.



3.3.4 Solving of Logistical and Operational Challenges

In order to implement the Trinity Education Features and the programme architecture, a number of complex logistical and operational challenges had to be met, set out in this section.

New Academic Year Structure

The new academic year structure was approved by University Council on 29 June 2016 and the required statutory changes were approved by Board in December 2016 and assented to by the Fellows in February 2017. It introduced a two-semester structure, with modules taught and assessed at the end of each semester, bringing Trinity in line with the international norm, thereby facilitating global mobility, both incoming and outgoing. The introduction of the new academic year structure was informed by the need to:

- Encourage a broader range of formative and summative assessments spread across the academic year/s;
- Encourage more varied approaches to assessment;
- Create space for:
 - reflection on learning;
 - independent project work, group work, field trips and other forms of individual and collaborative learning
 - reduce the intensity of teaching.

In practical terms it incorporated:

- an earlier start to orientation/teaching (2 weeks earlier)
- 12 teaching weeks (full days, Monday to Friday) in each semester
- one study/review week that occurs after 6 weeks teaching in each semester
- one week of formal assessment at the end of each semester
- the assumption that teaching occurs from 9am to 6pm (45 teaching hours per week) (this
 was later enshrined in the Timetabling Policy, see section on Fixed Timetable, pp. 26-27).

The aim of reducing the length of the teaching day by one hour, i.e., from 9 a.m. to 6 p.m. and extending the number of teaching and learning weeks to 12 weeks was to lessen the intensity of teaching for students and staff and create more space for students to engage in co-curricular activities. The aim of deeper learning is fostered through the inclusion of one

study/review week in each semester; these weeks create space for students to engage in independent project and research work, other forms of independent reflective learning practice, collaborative work, field trips etc. Fewer formal assessment weeks support the achievement of the different approach to assessment (integrative, programme-focused, spread over the academic year) elaborated in the assessment framework (see Appendix 2). Together, these principles support the development of the Trinity Graduate Attributes, which are, in turn, closely linked to the curriculum principles and programme architecture. The challenges presented by the shorter assessment weeks are outlined on p. 25.

The new Academic Year Structure was implemented for all students from 2018/19.

Progression and Awards

Progression and awards regulations enable the embedding of the curriculum principles and the assessment framework in addition to governing the way in which learning outcomes are achieved at module and programme levels. Over the course of the 2016/17 academic year, a set of shared regulations were developed that achieve the following: they

- are aligned with and support the achievement of the curriculum principles, assessment framework, programme architecture and academic year structure;
- are consistent and reduce substantially the complexity and diversity of current regulations,
 and minimise exceptions through the creation of standardised models of progression;
- are academically robust;
- are fair and equitable to students across the University;
- are transparent and clear for all stakeholders.

In May 2017, Council approved a set of nine recommendations on progression. The nine approved regulations are set out in Appendix 3. These Progression and Awards regulations came into effect for all undergraduate programmes in 2018/19, with any derogations approved by Council via the Senior Lecturer/Dean of Undergraduate Studies.

In 2017/18, other progression and awards regulations were considered, such as Gold Medals and Nomenclature of Awards in the new programme architecture.

Gold Medal Recommendations

In April 2018, Council approved new recommendations for the award of a Gold Medal, which were proposed by TEP following approval of the new Progression and Awards regulations. The criteria for the award of a Gold Medal have been standardised and simplified in line with the new progression regulations and seek to ensure fairness and transparency. The number of Gold Medal categories has been reduced from the existing eight categories.

At its meeting on 4 April 2018, Council approved that:

- Gold Medals are awarded on the basis of the final, overall degree award mark (which will be calculated on a 30/70 basis over the final two years).
- Gold Medals are awarded on the basis of the overall degree award mark only (with the overall degree mark set at 75% or above). Each undergraduate degree programme will be required to confirm the percentage threshold for the award of a Gold Medal. Additionally, for those programmes which award a joint honours degree or a major with minor award a minimum mark of 70% in each named component of the degree award is also required for the award of a Gold Medal.
- Gold Medals are awarded on the basis of a single annual attempt (to include Semester 1 and Semester 2 assessments). A deferral counts towards the single, annual attempt, but reassessment is not counted, i.e., Gold Medals are not awarded to students who have been re-assessed.

These new regulations come into effect for students who have entered the new programme architecture and reach their Senior Sophister year.

Nomenclature of Awards in the new Programme Architecture

TEP made a number of recommendations to USC and Council on the nomenclature of awards in the context of the new programme architecture. The recommendations aimed to:

- distinguish between award outcomes within the common architecture;
- add clarity with respect to subject specialisation in the Science architecture;
- clarify terminology.

In April 2018, University Council approved the recommendations as set out in Appendix 4. These changes came into effect from 2018/19.



Standardisation of module sizes to 5 or 10 ECTS

In order to enable the implementation of the programme architecture, the assessment framework, and the academic year structure, module sizes in relation to taught modules required greater standardisation. This also benefits outward and inward student mobility. Prior to standardisation, a wide variety of module sizes existed, with examples found of a 1 ECTS module and a 30 ECTS module. In May 2017, Council approved that:

- Module sizes are limited to 5 and 10 ECTS, with 20 ECTS reserved for the capstone module only.
- Modules of 5 ECTS are to be taught and assessed within one semester.
- Modules of 10 ECTS can be taught and assessed over one or two semesters.
- Students should have a balanced credit load across the two semesters, i.e., 30 ECTS in semester 1 and 30 ECTS in semester 2 (with a small margin of flexibility permitted up to 5 ECTS in exceptional circumstances).
- The 20 ECTS capstone may be taught and assessed over one or two semesters.
- Assessment should be commensurate with ECTS size and guidelines will be developed as part of the roll-out of the assessment framework.

This was implemented for all undergraduate taught modules from 2019/20.

Solving the Logistical Challenges of Examinations in the new Academic Year Structure

The academic year structure moved to a shorter assessment period, in principle comprising two assessment weeks and one reassessment week. This was introduced to support the assessment framework, approved by University Council in May 2016 (see Appendix 2), that advocates fewer, more varied assessments across the academic curriculum.

From a logistical perspective, the Academic Registry has successfully scheduled examinations into the assessment and reassessment sessions since Semester 1, 2018, largely within the scheduled assessment weeks, but having recourse to a contingency day or days where necessary.

The number of examination sittings scheduled by the Academic Registry in 2018/19 (85,023) represents an overall decrease of 7.4% on 2017/18 (91,207) examination sittings. The decrease in the number of examinations scheduled overall can be partially explained by the 57% decrease in the number of Term Tests scheduled by the Academic Registry.

While the overall number of examinations scheduled in the semesters of the 2018/19 academic year increased (68,403) compared to the annual examination session in previous years (62,430 in 2017/18), this increase can be explained by a number of factors. Firstly, the introduction of the new academic year structure resulted in the realignment of some Council- approved examinations ⁴ into the formal end of semester assessment periods (e.g., Engineering, Computer Science – which also provides a partial basis for the 53% reduction in the number of programmes seeking derogation to schedule examinations outside of the formal periods). Secondly, as part of TEP, all 15 and many 10-credit modules have been split into five-credit modules, replacing in many cases a single end-of-year exam with exams in both semesters.

In 2018/19, the average number of exam sittings per student was 6.3 (based on Semester 1 and 2 examinations only), compared to an average of 5.5 per student in 2017/18 (based on annual examinations only). The 2018/19 data includes those previous Council-approved examinations now realigned to the formal examination sessions.

The original in-person traditional semester 2 2019/20 assessment schedule prepared by the Academic Registry scheduled 35,771 sittings. As a result of Covid-19, this schedule was then revised to the alternative online assessment schedule, where 25,806 sittings were timetabled. This is a reduction of 28% in examination sittings from the original in-person assessment schedule.

The longer term aim of reducing traditional written examinations with alternative means of assessment effectively happened as a result of Covid-19. The pandemic meant that assessment for Semester 2, 2019/20 Academic Year was moved online or was replaced with alternative means of assessment, and this will continue for Semester 1, 2020 assessment. This experience has been largely positive, but further analysis is being conducted that will inform the longer-term strategy and decisions around online assessment from 2021/22 onwards. We will need to pursue the aim of reducing examinations more rigorously in future years, in line with the ongoing focus of Partners in Learning.

Selection and Allocation Mechanisms to Pathways, New Minor Subject and Open ModulesSelection and allocation mechanisms were devised for Pathways, New Minor Subjects and
Open Modules, that had a transparent academic basis. These were then fed into Digital Trinity 2 for the building of the online enrolment system. In summary:

⁴ Council-approved examinations are examinations that should have been sat at the formal examination session, but which for various reasons received a Council derogation to be sat at an alternative time. These examinations were numerous when there was only one examination session per year at the Annuals, for Schools that needed to have exams in the October to April time period. With the introduction of semesterised assessment, many of the Council-approved examinations (particularly those in December, January and February) were absorbed in to the Semester 1 examination session and on a smaller scale to the Semester 2 examination session.

New Minor Subject

- Allocation to New Minor Subjects is based on Junior Freshman final results, on a highest mark basis, descending until all places for a minor subject are filled.
- This allocation mechanism applies uniformly to all New Minor Subjects.
- If there is more than one New Minor Subject available to pick from, students select a minimum of 1 and up to a maximum of what is available, with ranked preference.

Open Modules

Open Modules to be allocated on a first come, first served basis.

Recommendations to facilitate the following categories of students in making their pathway and module selections at the end of their JF and SF years were approved by USC in January 2020 and Council in February 2020. The categories were as follows:

- Students who fail assessment or who are permitted to defer assessment and present at the re-assessment session;
- Deferring students (Off Books) and Students Off Books with Assessment;
- Repeat year Students (who have failed to satisfy the requirements of their year at the reassessment session);
- Students transferring courses;
- Visiting students.

Fixed Timetable

The Fixed Timetable is required to enable the Common Architecture and the Features of Open Modules and Trinity Electives. It was implemented for subjects associated with Joint Honours offerings, and to Years 1 and 2 of the new Common Architecture, which had its first entry in 2019/20. The Sophister Year principles which address the different challenges of the much greater degree of optionality in Years 3 and 4 were approved by Council in May 2020 and will enable the expansion of the Fixed Timetable for these years from 2021/22.

The Fixed Timetable approach was approved by Council in November 2018, for roll out in 2019/20 for JF students. It allowed the scheduling of all Joint Honours offerings for 2019/20, including those Two Subject Moderatorship (TSM) combinations that had been retained under the restructuring of TSM, as well as existing dedicated entry Joint Honours combinations. The approach will:

- Facilitate the Common Architecture, which decouples entry routes from exit routes.
- Allow a New Subject to be taken up as a Minor in Year 2.
- Allow Open Modules to be taken without clashes.
- Create dedicated time-slots for Trinity Electives (in place from 2019/20).
- Allow future addition of new subjects or new combinations with minimal disruption.
- Create a fixed timetable from year to year, allowing early publication and registration.
- Improve efficiency and suitability of space usage by centralising timetabling of core contact hours of all shared modules.

As part of the review of Joint Honours entry routes (undertaken outside of TEP), subjects in the new Joint Honours structure were grouped into four pillars. Subjects in any pillar can, in principle, be combined with a subject in any other pillar. In practice, only a subset of these combinations will be offered. The Joint Honours pillars (approved by Council in March 2018) have been used as the basis for the rotational timetable block structure of the fixed timetable. Non-pillar subjects (Business, Computer Science, Law, Political Science, and Linguistics) have been successfully fitted into the pillars (approved by Council on 3 June 2020. In summary, what has been achieved under TEP is:

- a timetable that accommodates core contact hours for all shared modules for the Joint Honours offerings at entry (for Years 1 and 2).
- rotating time slots for each pillar each year (to prevent modules from all years of any given

- subject having to be taught in the same block).
- the facilitation of a range of possible Open Modules and New Minor Subjects for any given student.
- dedicated timetable slots for the Trinity Electives which makes student choice possible.

The fixed timetable brings many benefits. It accommodates all of the requirements of the Common Architecture and features under a single general structure. New combinations of subjects across pillars require no additional timetabling – they are already enabled. New degree subjects can readily be accommodated without affecting any other subjects, by slotting new subjects into a pillar. It will also greatly enhance compatibility of modules for visiting students.

Under TEP, the Timetabling Policy and Procedures were developed and approved by Council on 20 March 2019, see https://www.tcd.ie/about/policies/assets/pdf/Timetabling_Policy_Procedures_March_2020.pdf. The establishment of a Central Timetabling Unit was approved by Council on 11 March 2020 and has overall responsibility for the day-to-day management of the shared curriculum timetable and the central allocation of teaching space for shared curriculum timetable events. The Central Timetabling Unit, under the Senior Lecturer/Dean of Undergraduate Studies and Dean of Graduate Studies, will continue to roll out the fixed timetable to JS and SS years in 2021/22 and 2022/23 post-TEP.

3.4 Mainstreaming

The mainstreaming of all activities implemented under TEP to ensure they are maintained over the long term was a key part of the final Phase 4 of the project. The mainstreaming of all elements of TEP is summarised in Table 6 below.

In May 2020, a new Officership was established and approved by College Board, the Associate Dean of Undergraduate Common Architecture. The Associate Dean of Undergraduate Common Architecture will provide academic leadership to ensure the success and future development of the courses that fall under the Common Architecture supported by an administrative office reporting into Academic Services Division.

TEP Component/Feature	Where Mainstreamed To
Oversight of alignment of programmes with the programme architecture and pathways	 Senior Lecturer/Dean of Undergraduate Studies for Professional, Science and Clinical Architectures; Associate Dean of Undergraduate Common Architecture, supported by the Undergraduate Common Architecture Office for the Common Architecture.
Trinity Electives	 Academic Management: Trinity Electives Sub-Committee, supported by Trinity Teaching and Learning, reporting to Undergraduate Studies Committee; Operational management for the process enabling students to select and enrol on Trinity Electives: Academic Registry (2019/20)⁵
Open Modules	 Senior Lecturer/Dean of Undergraduate Studies; Associate Dean of Undergraduate Common Architecture, supported by the Undergraduate Common Architecture Office for Open Modules on Common Architecture Programmes.
Co-Curriculum Reflection	 Advisory Committee to Student Life Committee, chaired by the Dean of Students.

Operational mainstreaming from the Digital Trinity 1 and 2 projects has not yet happened. This will be essential for the mainstreaming of the ongoing operational management required for the online enrolment to Trinity Electives, Open Modules, New Minor Subjects and Programme Pathways.

Partners in Learning	 Working Group of Undergraduate Studies Committee, chaired by the Senior Lecturer/Dean of Undergraduate Studies.
Employability	 Careers Service.
Global Mobility	 Vice-President for Global Relations, supported by Global Relations Office (implementing GRS III).
Capstone Project	 Head of School will ensure that all students have the opportunity to take a high-quality 20 ECTS Capstone Project or equivalent as part of their undergraduate degree programme in accordance with the criteria approved by the University Council.
New Minor Subjects	 Associate Dean of Undergraduate Common Architecture, supported by the Undergraduate Common Architecture Office.
Fixed Timetable	 Senior Lecturer/Dean of Undergraduate Studies and Dean of Graduate Studies, supported by the Central Timetabling Unit, currently based in Academic Services Division, to be reviewed at the end of 2020/21.
Scheduling of Examinations and Publishing of Results	 Senior Lecturer/Dean of Undergraduate Studies (academic oversight), and the Academic Registry (operational and service responsibility).

Table 6: Mainstreaming of TEP Elements

3.5 Stakeholder Management and Communications

From the outset of TEP, there has been extensive consultation, discussion, and idea exchange with those involved in the undergraduate curriculum – our academic staff, students, professional staff, alumni, employers, guidance counsellors in secondary schools, and those involved in supporting student learning.

The implementation of the programme architecture and the fixed timetable has required extensive meetings with School Directors of Undergraduate Teaching and Learning and School Administrative Managers. It has always been understood that the implementation of TEP was only possible through a collaborative approach, and in that regard, the commitment and engagement shown by academic and professional staff, as well as student representatives has been exceptional. Collegiality at Trinity is often referred to; to successfully introduce such an extensive change project as TEP across the university is testament to it.

The TEP governance structures involved many academic and professional staff on its workstreams and subgroups, meaning that views were represented from across the university. Student representatives, and in particular the SU Education Officer, were key members of all groups under the governance structures. While the quarterly Plenary Committee sessions chaired by the Provost in Phase 4 were outside of the formal governance structures, they were well received as information sharing opportunities.

3.5.1 Academic Staff

The early phases, Phase 1: Research and Analysis, and Phase 2: Design, involved extensive consultation. A series of themed fora ran from December 2015 as part of the project's six month College-wide consultation on specific critical themes (Graduate attributes, assessment, technology enhanced learning, internships and study abroad, assessment framework and academic year structure). These sessions generated much discussion and valuable feedback. In addition, all of the Schools were visited as part of the consultation process.

Phase 3: Planning for Implementation and Phase 4: Implementation and Mainstreaming involved meetings with many individuals to work through and support Schools in implementing the progression and award regulations and the new programme architecture. In 2017, facilitated by the TEP Fellows (a number of academic staff members who provided support and produced resources for their academic colleagues) and CAPSL, a series of Assessment Ideas Exchanges were held that attracted academic staff, students, professional staff, and those involved in supporting student learning. The formats of these idea exchanges varied, including workshops, seminars, discussion groups and fora, and collectively they enabled the Trinity community to come together to discuss approaches to assessment in Trinity, and to explore how innovative approaches to assessment can make us better teachers. The Vice-Provost/CAO attended Faculty Executive Committees on a regular basis to keep them informed and provided updates to Council on a monthly basis.

An all-staff survey took place in November 2017 to gather information regarding the awareness levels of the various elements of TEP, colleagues' views, and how to improve communications surrounding TEP. With a 19% response rate, the results fed into the communications strategy.

3.5.2 Current Students

Student representatives have been present on all Committees, Workstreams and Subgroups of TEP from the outset. The Vice-Provost/CAO attended several meetings of the Students Union Council. As part of Phase 1: Research and Analysis, in 2013, a survey about some of the key issues was circulated to all undergraduates. 2,810 undergraduates completed that survey; the results were discussed at the Undergraduate Studies Committee in February 2014, following which a survey was sent in April 2014 to all academic members of staff. Student focus groups were held whenever student input was required, focusing on the areas of assessment, workload, online tools such as co-curriculum reflection and to negotiate the programme pathways.

In collaboration with the Students' Union, a series of 'Top TEP Facts' flyers were produced when new developments were implemented, such as the new academic year structure, the new progression and award regulations, and Trinity Electives. These were also included in the SU weekly emails. There was engagement throughout the project with the student publications, *The University Times* and *Trinity News*, including several interviews with the Vice-Provost/CAO and others involved in the project.

Fortnightly meetings were held between the SU Education Officer and the TEP Project Manager where they kept each other mutually informed of any issues affecting students.



3.5.3 Prospective Students

The 2018 Undergraduate Prospectus included a 2-page spread on the new features being introduced by TEP, and as much detail as was available on programmes pathways. The 2019 Prospectus included details about the programme architecture. Flyers were produced for Open Day and the Higher Options fair to promote features that would be attractive to prospective students, such as Trinity Electives and the taking up of a new minor subject.

A marketing campaign to fully promote the Trinity Education, as well as the Joint Honours programme, and Trinity's postgraduate offering will launch in January/February 2021. This will present what is distinctive about a Trinity Education to prospective students and parents.

3.5.4 Professional Staff

Professional staff were kept informed by the Project Manager who attended the monthly Academic Registry Fora and presented on the latest developments and approvals by USC and Council. Presentations and updates were made at the School Administrative Managers Forum as required or as requested.

3.5.5 Alumni

Some of the founding ideas of TEP emanated from the Trinity Global Graduate Forum, a two-day event held in November 2013 hosting more than 100 of the University's most successful alumni, that gathered views with the objective of formulating plans to tackle major challenges in modern higher education, including funding, reputation, growth, technology and education. The consensus at the Forum was that a Trinity Education was about educating active, global citizens, who have transferrable skills, prepared for contemporary and future challenges in life and work. Discussion focussed on issues such as "what are the kinds of generic skills that should define a Trinity education?" and "What is the balance of academic with the extracurricular in achieving a Trinity education?"

Alumni were kept informed by the Provost of developments under TEP when he addressed alumni gatherings around the world and at Trinity's annual Alumni reunion weekends.

3.5.6 Employers

A successful employers' forum took place in November 2015 to introduce the relevant components being developed under TEP of interest to employers, in particular the Graduate Attributes. This forum generated much discussion and valuable feedback. A number of employers also attended the Trinity Education Features Symposium in October 2019. The Director of Careers regularly updates those employers who recruit Trinity graduates on new developments introduced under TEP. The Trinity Employability Awards have helped employers to become directly involved in supporting students to develop the Graduate Attributes and to improve their career readiness.

3.5.7 Guidance Counsellors

The Trinity Guidance Counsellor Day was used annually to keep Guidance Counsellors informed of new developments that would be introduced to the undergraduate curriculum. The new changes were positively received, in particular the facilitation of choice for students after entrance to university on their degree pathway (and the possibility of taking up a new minor subject), and Elective modules. The President of Institute of Guidance Counsellors, Ms. Beatrice Dooley, participated in the Trinity Education Features Symposium in October 2019 and extolled the benefits of the introduction of choice to students and the Graduate Attributes, which mirror the top preferred transferable skills cited to prepare students for their future careers and the future of work which is a rapidly developing space in which the ability to adapt will be key. These elements were also promoted annually at Trinity's Open Day, with fact sheets being provided to staff working at Open Day to impart information to prospective students. Similarly, the Higher Options fair was used to showcase some of the new changes to the undergraduate curriculum to prospective students.

3.5.8 Means of Communicating

The means of communicating the changes to all key stakeholders to ensure maximum reach was a critical part of TEP. Distinctive graphics were developed for the Graduate Attributes and seven Features, as well as a 'house style' within the Trinity brand for newsletters, etc. to ensure a defined look and feel for TEP. The traditional means of communication – all-College emails to students and staff were employed. However, it was recognised that increasingly this is not the best means of reaching people, with students in particular considering emails to be a more archaic communications tool. In responses to this in the implementation Phase 4, social media was used to announce new changes as they were implemented in partnership with the central Trinity College and Students Union platforms – Facebook, Instagram and Twitter. TEP established its own Twitter account in May 2018 and has built up almost 600 followers.

With the support of Trinity Online Services, promotional videos for all of the new features and the pathways were made, and pitch videos for each of the new Trinity Electives. New websites were built to host these. The <u>Trinity Electives website</u> provides information to students to enable them to make informed preference choices when selecting their preferences. Each Elective has a page with general information, under a series of questions designed to appeal to students, such as 'Why should I take this Trinity Elective', plus a pitch video and for those who want more detailed information, a pdf providing this.

The <u>Your Trinity Education</u> site showcases each of the seven features, to prospective as well as current students. A graphic was designed to illustrate the student undergraduate journey and where the features occur over their four-year undergraduate degree (see Figure 5). The <u>Your Trinity Pathways</u> site provides information on the various pathway and elective options available for each programme. For the 'Your Trinity Pathways site, some 'find your pathways' interactive tools were built, to aid students to explore the pathway options open to them for <u>Single Honours</u>, <u>Joint Honours</u> and <u>Common Entry</u> programmes.

Over the course of TEP, many resources were produced to support both students and staff. <u>CAPSL</u> and <u>Student Learning Development</u> produced many of these, in collaboration with academic colleagues in Schools. Resources were produced in the area of assessment (including online assessment), the graduate attributes, workload and the capstone project. These resources were compiled into a <u>TEP Resource Toolkit</u>.

In order to promote the new features, a Trinity Education Features Symposium was held on 23rd October 2019. The purpose of the Symposium was two-fold: to raise awareness of the seven distinctive features of a Trinity Education externally; and to further embed the Trinity Education Features internally with an acknowledgement of the work completed to date by academics and professional staff in delivering TEP, and setting out Trinity's ambitions for the future. There were over one hundred attendees, and the presentations were filmed and podcasts available to view after the event – see https://www.tcd.ie/TEP/features.php.

The achievements of TEP will be showcased at the launch event which will formally mark the end of the project. The launch of the Trinity Education will take place on 21st October 2020 and will be simultaneously livestreamed. The EU Commissioner for Innovation, Research, Culture, Education and Youth, Mariya Gabriel has confirmed her participation at the event.

04

Unrealised/Outstanding Outputs

The overall objectives of TEP remained unchanged throughout the project. There are no outstanding outputs that if not delivered will impact on the overall delivery of the project. There were two tasks that were included initially: Internships and creating a half day in the timetable for extra-curricular activities; these were explored and the decision taken not to proceed for reasons that are set out below in Sections 4.1 and 4.2. Work that falls under one of the Features, Partners in Learning, has not been completed since by its nature the work in this space is ongoing and evolves in line with changes in teaching, learning and assessment. Further detail on this is also set out below in Section 4.3.

4.1 Internships

Internships provide significant opportunities for attaining the graduate attributes and require the student to participate in teamwork, to take on responsibility, and often to deal with ambiguity. On 5 April 2017, Council approved ⁶ preliminary recommendations brought forward by the Vice-President for Global Relations as Chair of the Strand responsible for internships that would inform policy in this area and the next steps toward facilitating opportunities for academic internships.

In 2017/18, the Dean of Students and Academic Secretary met with all Schools to look at existing internships in the University, and the support structures already in place. Of all 24 Schools, 14 had some form of credit-bearing internship and 10 had none. Of the 11 student representatives who attended the consultations, all were strongly in favour of internship opportunities for credit across the programmes. Schools that currently do not offer internships as part of their programmes reported that, on the whole, they are open to the possibility. Schools considered that key issues like resourcing, quality of placements, and achieving equivalency in learning outcomes would need to be addressed before internships for credit could be introduced.

A business case was presented that covered internships and placements for credit that form part of an academic undergraduate programme of study at Trinity and any other internship or placement approved by a School. It set out order of magnitude cost estimates based on introducing internships to all programmes except Health Sciences. The cost estimates were considerable and it was not considered feasible to approve the business case, given that TEP had no budget and was to be delivered on that basis. Should a decision be taken in the future to introduce internships to all programmes, this body of work would be of benefit.

While many Schools were reluctant to introduce internships without an adequate College infrastructure and supports, some Schools either already offer internships or an equivalent and others were interested in exploring the possibility further. To aid Schools in the development of internships, an Internships and Placements Policy was developed under Phase 3 and completed by Trinity Teaching and Learning in consultation with the wider community, and was approved by the University Council in October 2019.

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4.2 Half day for co-/extra-curricular activities

In the context of creating a fixed timetable, the idea of setting aside a half day for co- or extracurricular activities was explored. However, the implementation of a timetabled half-day creates a number of challenges, for which ready solutions were not clearly in evidence. These challenges would have impacted programmes across the University and were reiterated in consultation with Heads of School. Prior to the introduction of the fixed timetable, and Timetabling Policy and Procedures, teaching took place across five days between 9 a.m. and 7 p.m. and was fairly evenly distributed over these days. Even taking into account the 12 teaching weeks in each semester, the removal of teaching for an afternoon would have had a detrimental effect on the scheduling of laboratory sessions and practicals in, for example, Science; the loss of a half day (equivalent to approximately 33 hours of laboratory scheduling over the semester) could not be accommodated without setting up and equipping additional teaching laboratories. In addition, the logical pattern of teaching (e.g., lectures followed by tutorials) would have been disrupted. Additionally, there would been a negative impact on available Electives and subject combinations within the context of a fixed timetable.

A solution was found to create space for students to use for co- and extra-curricular activities by shortening the teaching day by one hour, to 6pm, thereby providing 5 additional hours. This is referred to in the <u>Timetabling Policy</u>, see pp.26-27.

4.3 Partners in Learning

Partners in Learning was one of the Features that could not be completed within the lifetime of TEP because changes to teaching, learning and assessment practices are constantly evolving in line with new teaching and learning pedagogies, changing technologies, student expectations, and internal and external demands. Culture change in Schools and Disciplines is a continuous, ongoing process that will be supported by Trinity Teaching and Learning and CAPSL. In concrete terms, the assessment mapping tool *ModuleM* referred to in Section 3.3.3 has work outstanding before it can be rolled out to Schools. The tool needs to be integrated with College's systems to ensure accuracy and one source of truth (e.g. CMIS/SITS). This is being progressed by the Senior Lecturer/Dean of Undergraduate Studies and Professor Kevin Kelly in consultation with the Director of IT Services with an expectation that it will be included in the Digital Trinity 2 project.

A survey of all Schools was carried out in Michaelmas Term 2019 on approaches to teaching and learning for the purposes of identifying good practices that support student learning and could form the basis of recommendations that are policy related. Covid-19 has meant that the intended focus groups to discuss and delve into the findings of the survey could not take place. A Working Group of USC, chaired by the Senior Lecturer/Dean of Undergraduate Studies, will be established to progress this and to build on the work completed to date.

05

Lessons Learned

Given the size and scope of the Trinity Education Project, it is important to reflect on the lessons learned from it that may feed into future projects. These are set out in Tables 7 and 8 below.

Project Successes	
Project management structures ensured that the overall project objectives were delivered on time.	Describe contributing factor(s) or cause(s). After the first phase of Research and Analysis, a decision was taken to implement the objectives of the Strategic Plan by using project management structures, and a Project Manager was assigned, and a Steering Committee established.
	Describe the impact to the project. Project management structures have ensured that the objectives of the Strategic Plan to renew the undergraduate curriculum have been implemented systematically, and that the changes will be embedded due to the robust mainstreaming of all elements of the project.
	What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs? Project management has not traditionally been used at Trinity to deliver academic change projects. Given that project management can be applied to manage the delivery of anything, from the smallest event to the biggest capital project, it is recommended that it be used routinely for all future such projects. Its structures mean that Leads can be put in place to manage deliverables that would not normally fall under their remit. This increases the flexibility and capacity in the system to access a wide-range of skills and expertise that can be applied from across the university and cut across the normal organizational structures.
Project workstreams included wide representation from across the university.	Describe contributing factor(s) or cause(s). The governance structures and membership changed with each phase of the project. This ensured that many members of the College community were involved in informing the decisions that were brought for approval to Council and to Board.
	Describe the impact to the project. Wide representation of academic, professional and students in the membership of workstreams has meant that the approach to delivering the project has been collaborative. This avoided a 'top-down' approach, as members could bring their experience and represent the views of their colleagues to inform decision making.
	What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs? It is recommended that membership of longer-term projects be reviewed at the end of each phase and that as wide a representation of the staff and student body as possible, appropriate to the project, be included.

Project Successes	
Changes were implemented without the requirement for additional resources.	Describe contributing factor(s) or cause(s). It was stated from the outset of the project that TEP would be delivered within existing resources. Aside from a small budget for the development of the Trinity Electives provided to Schools, this was the case.
	Describe the impact to the project. The delivery of the project within existing resources meant that this was done efficiently and imaginatively. Information resources, such as the 'Find your pathway' tools, and the Co-Curriculum Reflection tool were built at no cost.
	What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs? Change projects should not assume that additional resources are required. The delivery of this project has shown that it is possible to deliver change by reconfiguring existing resources.
The phasing in of the new programme architecture and the phasing out of old programme structures has not devalued the programme offering of legacy students.	Describe contributing factor(s) or cause(s). There was a strong awareness of the need to recognize the value of the educational offering of legacy students who would not avail of all of the changes to the undergraduate curriculum as the new programme architecture was phased in. There was clear acknowledgment of the strengths of our current programmes, noting in particular that the changes to the undergraduate curriculum build on its current strength, i.e., a curriculum that is inspired by current research and scholarship, taught by academic experts in their fields.
	Describe the impact to the project. The phasing in of the new while maintaining the old meant that current students benefited from some of the changes, e.g. the implementation of the new Academic Year Structure and Semester 1 exams, and the rollout of the Trinity Electives. It did not impede the delivery of the new components of TEP.
	What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs? Where change projects involve the parallel introduction of the new and the phasing out of old, it is essential to recognize the value of the old, and not to present the new as superior to the original. In this case, the strengths of the original Trinity educational offering have been framed as the basis for developing the changes. Our deeply rooted tradition of research and scholarship has been the bedrock on which TEP has been built.
Students played a key role in informing decision making.	Describe contributing factor(s) or cause(s). Students were represented on all groups within the governance structures, in particular the SU Education Officer.
	Describe the impact to the project. Given that the changes implemented by TEP have the students at its core, it was vital for students to be key players in informing the decisions made.
	What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs? Student representation on any project that impacts the student experience should be incorporated into the governance structures. The benefits work both ways – students are kept informed and inform their peers; in turn they feed through the students' views to the other project stakeholders.

Project Successes	
A set of Trinity Electives was fully implemented and rolled out to students.	Describe contributing factor(s) or cause(s). An effective Trinity Electives Subgroup, supported by the Provost, was established which interacted with academic and professional staff to produce a set of Trinity Electives.
	Describe the impact to the project. The Trinity Electives are a key feature of the Trinity Education, as they link research with the undergraduate curriculum, introduce the students to breadth and new perspectives outside of their core subject and are multidisciplinary and innovative in their approach and delivery.
	What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs? Support from the top, by the Provost and Vice-Provost for new initiatives provides a particular impetus and significance that it would be difficult to achieve otherwise. A subgroup with committed members, in particular a strong Chair and Lead that work well together, are also key to delivering a new initiative.
All programmes are aligned to the new programme architecture.	Describe contributing factor(s) or cause(s). The alignment of all programmes to the programme architecture has been achieved through the work of academic staff in Schools, supported by the Senior Lecturer/Dean of UG Studies, the TEP team and School Administrative Managers in reviewing each programme and creating space for breadth modules and the Capstone project.
	Describe the impact to the project. The delivery of the project would not have been possible without the cooperation, dedication and commitment of academic staff, supported by professional staff, to make the changes necessary to align to the new programme architecture.
	What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs? The buy-in of staff, academic and professional, for change projects that involve the curriculum, is essential. They are experts in the field, and their knowledge about how best to introduce change to programmes is vital.

Table 7: Project Successes

Project Problems

The programme architecture originally envisaged became too difficult to implement in full. The offering of a three subject entry route presented logistical challenges too great to overcome. The taking of a new minor subject by Joint Honours students has been paused and will be re-considered once the first wave of changes have been embedded.

Describe contributing factor(s) or cause(s).

The programme architecture was designed with purely academic aspirations in mind, without fully exploring the logistical challenges of implementing it. Two aspects of it were not progressed, one of which has been 'paused' and will be reconsidered in the future.

Describe the impact to the project.

The pathways of three subject entry and taking up a new minor subject on any programme other than single honours are not currently being offered. This did not impede the delivery of the project – significant flexibility is offered to students through the other pathway options.

What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs?

Change should not be over complex to the extent that to introduce it would undermine the other changes being made by adding in insurmountable levels of logistical challenges. It is better to deliver principles by simpler means rather than over-complicating it with logistical complexity.

The move from viewing a programme as self-contained to having shared elements that are part of other programmes (via Open Modules and Trinity Electives) has not been fully adopted.

Describe contributing factor(s) or cause(s).

Insufficient understanding that the new curriculum means an effective end to 'ownership' of a programme and rather that a programme under the new programme architecture is now inextricably linked to other programmes; a student does not belong to a programme, but rather enters at one point, decides their degree pathway as they move through their undergraduate degree and exits at another point.

Describe the impact to the project.

This lack of understanding has the potential to weaken the Open Modules and Trinity Electives. If a programme that is offering their modules as Open Modules to another programme decides to withdraw these at short notice, then this will impact negatively on the programmes that have approved them for their students to take and will have implications also for the supply and extent of the offering to students. Similarly, if a School decides to withdraw a Trinity Elective at short notice, this would have implications for all programmes whose students are eligible to take Trinity Electives.

What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs?

Robust procedures need to be put in place to mitigate against the withdrawal of such modules. This has been recommended for Trinity Electives where a 4-year commitment to running one plus 1 year's notice if it has to cease in exceptional circumstances has been put in place and is to be incorporated into the revised Programme Suspension and Cessation Policy. Clear communication is key – not just to those at managerial level, but to ensure that it is cascaded down to all staff involved.

Written exams as a means of assessment did not decrease in any significant way with the introduction of the new Academic Year Structure which incorporates shorter assessment periods.

Describe contributing factor(s) or cause(s).

One of the underlying principles of the new Academic Year Structure was to lead to less, more varied types of assessment but this change was not something that could be made that quickly and required more time.

Describe the impact to the project.

This led to negative connotations for the project, creating stress for students and staff, and to issues with the examination venue.

What change or improvement could prevent the same problem from occurring again or ensure that the success reoccurs?

The changes brought unintentionally by Covid-19 has meant that assessment was moved online in Semester 2 2019/20 and will remain so for Semester 1 2020/21. A decision has yet to be taken for Semester 2 2020/21. Covid-19 has accelerated in the short to medium term the longer-term cultural change that will be needed to resolve the issues raised in the initial implementation of the new Academic Year Structure.

06

Conclusion

A project of this scale reaches across the University and affects us all in one way or another. It could have divided us. However, in the true spirit of Trinity collegiality, rather than moving us apart, it brought us closer together. The interaction between staff and students within and across Schools, the discussions around pedagogy and assessment, and the debates about what can make a Trinity Education even better have led to the successful delivery of TEP. The collegiality that exists at Trinity should never be taken for granted. It has been the cornerstone of the delivery of TEP and has reinforced the strengths that make us distinctive as a University: we are committed together to providing a high-quality education that links our cutting-edge research with our undergraduate curriculum, and produces graduates who have developed to their full potential and are able to negotiate the challenges of our changing world with confidence.

The final words of this Report are words of thanks — thanks to everyone who has been involved in this project from its inception to its completion. It would not have been possible without each and every one of you.

Appendices

List of New Minor Subjects 2020/21 being offered to Single Honours students taking up a New Minor Subject in their Senior Freshman year in 2020/21.

Faculty	School	Programme / Subject	Pillar	Capacity
FEMS	Computer Science and Statistics	Statistics	NP	40
AHSS	Creative Arts	Drama	1	5
AHSS	Creative Arts	Film	3	5
AHSS	Creative Arts	Music	2	5
AHSS	English	English	2	15
AHSS	Histories & Humanities	History	1	5
AHSS	Histories & Humanities	History of Art & Architecture	3	5
AHSS	Languages, Literatures, & Cultural Studies	French	1	10
AHSS	Languages, Literatures, & Cultural Studies	German	3	15
AHSS	Languages, Literatures, & Cultural Studies	Italian	2	30
AHSS	Languages, Literatures, & Cultural Studies	Middle Eastern, Jewish & Islamic Civilisations	3	50
AHSS	Languages, Literatures, & Cultural Studies	Irish	4	10
AHSS	Languages, Literatures, & Cultural Studies	Russian	3	8
AHSS	Languages, Literatures, & Cultural Studies	Spanish	4	10
FEMS	Maths	Mathematics	1	10
FEMS	Natural Sciences	Geography	4	5
AHSS	Religion	Religion	4	40
			Total	268

The Trinity Education Assessment Framework



What aspect of TEP does this resource refer to?

This resource summarises key points of the Trinity Assessment Framework, approved by Council in May 2016.

Rationale for the Trinity Assessment Framework

The literature describes three main purposes of assessment: (a) Assessment OF learning (to demonstrate achievement); (b) Assessment FOR Learning (to give feedback on learning and teaching); and (c) assessment AS Learning (to self-regulate and critically evaluate). While summative assessment (assessment OF learning) is a necessary and important form of assessment, the traditional concept that assessment consists primarily of examinations and essays has been challenged over the last decade. It is acknowledged that the increased complexity of learning needed for the 21st Century graduate cannot be adequately assessed through examinations alone. The assessment framework advocates a programme approach to assessment to encourage fewer, more meaningful assessments across the academic curriculum.

What is a programme focus on assessment?

A programme approach to assessment (or where the programme is very large, a subject approach) establishes the full picture of assessments across a programme of learning and presents assessment and feedback 'as a linked series of learning opportunities across the whole programme'.⁸ A programme approach to assessment can facilitate a move from the current strong focus on assessment *of* learning towards assessment *for* and *as* learning as well as increase opportunities to assess graduate attributes. By spotlighting duplication

⁷ OECD, High level group on modernization of higher education. Report to the European Commission on new modes of learning and teaching in higher education.

⁸ Jessop, T., El Hakim, Y., & Gibbs, G. (2014). 'The whole is greater than the sum of its parts: a large-scale study of students' learning in response to different programme assessment patterns'. Assessment and Evaluation in Higher Education. 39:73-88.

and supporting integration of assessment(s), this approach also creates space for a range of assessment types e.g. reflection on learning, independent project work, group work, field trips and other forms of individual and collaborative learning. A programme focus on assessment thus enables: (a) a planned and coordinated approach to the design and inclusion of assessments across a programme, (b) an appropriate range and balance of assessments 'of', 'for' and 'as' learning, (c) evaluation of assessment(s) in an integrated and longitudinally oriented manner and (d) collaboration between various contributors to the programme.

What is represented in the Trinity Assessment Framework diagram?

The Trinity Assessment Framework recommends that Programmes in the Trinity Curriculum be designed to include a range of appropriate assessment strategies and tasks that support effective learning, provide students with opportunities to practice new forms of assessment, and enable achievement of the full spectrum of graduate attributes. The framework is cyclical and represents an institutional approach that encourages ownership and development of an effective and innovative assessment strategy. It has three interrelated layers: Tenets; Enablers; Areas of Focus.

The first layer (outside circle) shows the tenets, or underpinning principles that inform assessment in Trinity. The middle circle delineates institutional enablers of assessment change. The innermost circle represents the areas of current focus. Collectively, the framework depicts a structure for enabling transformation in assessment practices and policy in Trinity.

1. Assessment tenets

Assessment in Trinity will:

- i. Support the acquisition of graduate attributes;
- ii. Support learning;
- iii. Be programme-focused;
- iv. Support meta-learning;
- v. Actively engage students and staff.

Assessment supports the acquisition of graduate attributes

Graduate attributes are embedded and assessed incrementally and systematically throughout the programme, through a diverse and complementary range of assessments.

Assessment supports learning

Assessment is valid, reliable, transparent, relevant and conducive to effective learning, whilst protecting academic standards. It supports future as well as present learning.

Assessment is programme-focused

Assessment is an integral part of programme design and development. A range of purposeful assessment tasks are mapped and integrated throughout a programme. By shifting the focus away from end-of-year summative assessment, more integrative assessment practices are considered.

Assessment supports meta-learning

Assessment builds and rewards student ability to reflect on and critically evaluate their own learning, and to assess the quality of their performance against agreed standards. Assessment also builds student capacity to use these skills of judgment to influence future learning and practice.

Assessment actively engages students

Real world/authentic assessment tasks engage students in learning. Dialogue about the assessment process is encouraged amongst and between staff and students so that the purposes and standards of assessment are understood.

2. Assessment enablers

Constructive change in assessment practices/policy in Trinity is enabled by development of an infrastructure to support change. The following areas are considered essential enablers:

- 1. Professional Development
- 2. Fractional secondments/sabbaticals to Academic Practice
- 3. Quality (including curriculum review and development)
- 4. Technology
- 5. Guidelines and resources
- 6. Reward and recognition

3. Areas of focus

The following areas of focus are integral to the framework and to enhancing assessment in Trinity:

- i. Assessment of Graduate Attributes
- ii. Programme-focused assessment
- iii. Range of Assessment
- iv. Self &Peer assessment

Focused professional development and college wide discussion have accompanied these areas of focus in 2016 and 2017, which are likely to change over time.

Further information

For further information about the Trinity Assessment Framework please contact Dr. Ciara O'Farrell. Email: Ciara.ofarrell@tcd.ie

Council-approved Progression Regulations

Recommendation 1: Standardisation of Progression Regulations

Progression regulations should be standardised as much as possible across undergraduate programmes.

Recommendation 2: Annual Progression

- Progression will be on an annual basis.
- Students will be permitted to carry failed modules from semester to semester but not from year to year.
- Students will receive provisional results after Semester 1 assessment.
- Courts of Examiners will convene after Semester 2 and consider the results from both semesters.

Recommendation 3: Progression Threshold

- All undergraduate programmes will be required to provide clear grade descriptors representing a pass.
- Progression threshold will not be higher than the pass mark in 4-year UG programmes.
- There should be a standardised pass mark as far as possible across all UG programmes.

Recommendation 4: Minimum Credits to pass a year

- There should be a balanced credit-load across semesters.
- All modules and components of modules will be compensatable.
- The number of credits to pass a year will be 60.
- 10 ECTS may be accumulated at 'Qualified Pass' (i.e. marks between 35-39% where the pass mark is 40% or 45-49% where the pass mark is 50% for some professionally accredited courses).
- If a student has achieved both Fail and Qualified Pass grades in modules completed in semester 1 and semester 2, they will be required to present for reassessment in all failed components in all modules for which they obtained either a fail grade or Qualified Pass. The reassessment session usually occurs at the end of August to coincide with the start of Semester 1 of the next academic year.
- There is no aggregation.

Recommendation 5: Degree Award Calculations

- Students entering programmes with the new architecture will have their degree award calculated on their final two years' results, weighted at 30% and 70% respectively.
- This regulation will apply only to new entrants to the new programme architecture in 2018-19 (i.e. students
 entering in 2018 to study Science Engineering, Engineering with
- Management, Clinical Speech and Language Studies, Clinical programmes) and 2019-20 (i.e. students entering all other programmes in September 2019).
- Current award calculations will apply for students who are entering existing programmes in 2017 and 2018 and for continuing students.

Recommendation 6: Number of years to complete a degree

 No change from existing practice. The maximum number of years to complete an undergraduate degree will be 6 for a 4-year programme and 7 for a 5-year programme.

Recommendation 7: Repetition of a year

- Students are not permitted to repeat any academic year more than once and may not repeat more than two
 academic years within a programme.
- Students who are required to repeat should do so on a module-by-module basis.⁹
- A student's academic record on their transcript will show clearly the time lost through repetition of a year.

Subsequently revised by Board decision of 28 March 2018 (BD/17-18/178).

Recommendation 8: Reassessment

- Same progression regulations, including compensation, for assessments relating to semesters 1 & 2 and to reassessment.
- Automatic right to reassessment for a student who has achieved a fail grade in any of their modules and is not eligible for compensation.
- Students are not permitted to present for reassessment in any module for which they have achieved a pass grade, in order to improve their academic performance.
- Rescheduled exams within the session will no longer be permitted.
- Different reassessment modalities permitted.
- No capping of marks.

Recommendation 9: Special Examinations

Special Examinations will no longer be available from 2018/19.

Recommendations on Nomenclature of Awards

Recommendation 1

The pathways towards a Major with Minor and Single Honors with Minor award should be merged and are named **Major with Minor.**

Recommendation 2

A **Major with Minor** degree will be awarded where one subject at entry (major) is studied continuously over the course of the four years of the programme and a second subject (minor) is studied continuously over at least three years of the programme. A minimum of 60 ECTS in the minor subject (Subject 2) is required, with a minimum 20 ECTS at level 3 or above. The degree will be awarded as **Subject 1** and **Subject 2**. The transcript will indicate the major subject and the minor subject and clarify that the award is a major with minor award.

Recommendation 3

A **Joint Honors** degree will be awarded where the two subjects at entry are studied continuously over the four years of the programme. A minimum of 100 ECTS in Subject 1 and in Subject 2 (subjects at entry) is required; and a minimum of 50 ECTS in **Subject 1** and **Subject 2** in Sophister years at level 3/4. The degree will be awarded as Subject 1 and Subject 2. The transcript will indicate the two subjects and clarify that the award is a joint honors award.

Recommendation 4

Currently the subject area is not included on the degree parchment for the award of a B.A. in Science programmes. It is proposed that the named Science subject (e.g., Chemistry) is included on the degree parchment as is the case in programmes in the FAHSS in the following format: **B.A. in Science – {Subject}**.

Recommendation 5

Within the new programme architecture, the calculation of a degree award is based on the results from the JS year (30%) and the SS year (70%). It is proposed that the results from the JS year in Moderatorship programmes be referred to as **Moderatorship Part 1** and from the SS year as **Moderatorship Part 2**.