



**Peer Review Group Report for Professional Support Areas**

Faculty of Science & Health

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# 1 Introduction and Context

The broad approach to quality assurance and enhancement DCU aims to promote and develop a culture of quality throughout all aspects of the University. The framework derives from the spirit of Quality Assurance and Quality Improvement enshrined in the Universities Act (1997), which is the legislative basis for quality throughout the Irish University sector, and the Qualifications and Quality Assurance (Education and Training) Act 2012.

The DCU processes for quality reviews at DCU are further aligned to the standards and guidelines for quality assurance in the European Higher Education Area (ESG) and the published guidelines of Qualifications and Quality Ireland (QQI).

This Report presents the findings of a quality review of **the Faculty of Science and Health** following a visit by the Peer Review Group undertaken between **May 17<sup>th</sup>** and **May 20<sup>th</sup> 2022**.

## 1.1 Overview of the Area under Review

The Faculty of Science and Health is one of the largest of the five faculties at DCU and has a dual focus on science and health, reflecting its evolution since it was first established in the 1980s as the Faculty of Science and Paramedical Studies. Originally the Faculty comprised the Schools of Chemical, Physical Sciences, and Biotechnology. In 2003, the School of Mathematical Sciences moved to the Faculty and the Schools of Health and Human Performance (SHHP) and Nursing and Human Sciences were established. Following the recommendation in the School Quality Review in 2017, the School of Nursing and Human Sciences (SNHS) was split into two, resulting in the establishment of the School of Psychology, and restructuring and renaming of the School of Nursing, Psychotherapy and Community Health.

The Faculty of Science and Health is a large and diverse faculty with just over 3,700 students and 242 staff and comprises seven schools and 10 associated research centres (see Figure 2.1). The Faculty also benefits from the Nano Research Facility (NRF) and staff in the Faculty contribute to the work of research centres in other faculties including ADAPT, INSIGHT and iForm.

The Faculty is responsible for 27 undergraduate and 17 taught postgraduate programmes and two professional (taught) doctoral programmes. Most education programmes are based within a school. However, there are a small number of programmes that are shared by schools and overall responsibility rotates between schools. In addition, schools in the Faculty lead out on three undergraduate and one postgraduate teacher education programmes, in collaboration with the Institute of Education (IOE).

There are seven schools within the FSH: School of Biotechnology (SoBT), School of Chemical Sciences (SCS), School of Health and Human Performance (HHP), School of Mathematical Sciences (SMS), School of Nursing, Psychotherapy and Community Health (SNPCH), School of Physical Sciences (SPS), School of Psychology (PSY).

Heads of school are responsible for the direct management of all staff, resources and activities of each school. Heads provide a leadership role, ensuring that strategic developments are enacted through the practices of Unit staff in the context of Faculty, University and the wider community needs and contributions. Depending on the size and complexity of each school, schools have school executives or management teams to support the head in their role. Each school has convenors for teaching, research, international and marketing.

There are also 10 research centres within the Faculty, representing research areas where the Faculty has established a strong track record. These include areas such as Sensors (NCSR), Plasma (NCPST) and Cellular Biotechnology and Nanoscience (NICB). Other research centres established under various recent initiatives include the International Centre for Neurotherapeutics (ICNT), the Fraunhofer Project Centre (FPC), Centre for Advancement of Science, Technology, Engineering and Maths Teaching and Learning (CASTel), Centre for Astrophysics and Relativity (CfAR), Centre for eIntegrated Care (CeIC), Centre for Engaged Research (CER) and the Water Institute (WI). Most of these centres also include researchers from other faculties. The majority of the research centres have physical infrastructure (a building or part of) associated with them (NICB, NCPST, NCSR, WI, FPC, NRF, ICNT); however some of the centres exist virtually only (CeIC, CfAR, CASTel, CER). The centres with infrastructure have various support in place for operations and administration provided by the Research and Innovation Support (RIS) office and FSH.

The FSH has a broad and diverse portfolio of education programmes and research activities, from theoretical science to applied science to healthcare. These reflect both the disciplinary focus of each of the schools and multidisciplinary collaborations within and outside FSH.

There are 27 undergraduate programmes, with several new programmes introduced in areas of high societal interest in the past 2-3 years and some following recent structural changes which resulted in creation of more specific entry programmes. There are also 17 taught postgraduate programmes offered across FSH, along with research masters and PhD programmes in each school and two professional doctorate programmes. Many of these programmes were introduced in 2018 in psychology, teaching physics, astrophysics and relativity, elite sport performance, health and social inclusion, child and family health and wellbeing, advanced and specialist nursing, and athletic therapy and training and conditioning. A Professional Doctorate in Elite Performance was also introduced in 2020.

## 2 Approach to Self-Assessment

### 2.1 Quality Review Committee

The self-assessment phase of the Quality Review was led by an internal quality review committee. The Quality Review Committee (QRC) membership was as follows:

School / Unit	Representative
Executive Dean (Chair)	Prof Michelle Butler
Deputy Dean	Prof Brien Nolan
School of Biotechnology	Prof Anne Parle-McDermott
School of Chemical Sciences	Dr John Gallagher
School of Mathematical Sciences	Dr Eabhnat Ní Fhloinn
School of Nursing, Psychotherapy and Community Health	Dr Denise Proudfoot
School of Physical Sciences	Dr Jean Paul Mosnier
School of Health and Human Performance	Dr Brendan Egan
School of Psychology	Dr Sinéad Smyth
Research Centres, nominated by FRC	Dr Mary Pryce
Associate Dean for Research	Prof Christine Loscher
Associate Dean for Teaching and Learning	Dr Niamh O'Sullivan
Associate Dean for External and International	Dr Stella Vlachou
Postdoctoral Researcher	Dr Esen Efeoglu
Student Representative, nominated by Faculty undergraduate representative on the Students' Union	Emma Duffy
Taught Postgraduate Student Representative	Eoghan Rutherford
Postgraduate Research Student, nominated by FRC	Dearbhla Finnegan
Faculty Manager	Caitriona Brennan
Manager of Facilities and Associated Services	Michael Burke
Assistant Faculty Manager (Secretary)	Emma Theron
Faculty Administrative Officer	Siuin McManus

According to the SAR, QRC held its first meeting on 11<sup>th</sup> November 2021 and agreed the terms of reference and work plan (see SAR, p. 31). QRC met approximately every two weeks (on 10 occasions) and received training, templates and guidance, and ongoing advice and support from the Quality Promotion Office (QPO). The committee was chaired by the Executive Dean and the Deputy Dean took responsibility for the coordination of data collection. All QRC members were responsible for providing documents and reports, and checking the accuracy of system-produced data relating to their school, research centre or programme, and they acted as moderators at Faculty open days.

### 2.2 The Self-Assessment Report

In relation to the process of collecting data and constructing the SAR, the group learned that since the process commenced, the QRC was chaired by the Dean. The QRC members reviewed previous reports and data and conducted meetings and faculty focus groups. They reviewed the findings and reported them to faculty focus groups. The QRC members included the results of the discussions in the SAR. The assessment process appears to have been inclusive and to integrate a wide variety of perspectives from across the faculty.

It is important to note that this self assessment of the Faculty of Science and Health took place during a time of significant change for higher education in Ireland and of change for society more generally. Specifically, the QRC was convened during a time of optimism regarding the likely imminent removal of public health restrictions, a pressure on all universities to start the new academic year ensuring that students received the traditional pre-covid college experience, with hopes dashed when restrictions were required to continue, and case numbers began rising over winter of 2021. It was only as this SAR was being finalised in March 2022 that public health restrictions were finally lifted.

The SAR and SWOC constitute evidence of a helpful and effective self-reflection process, which has supported the Peer Review Group in completing their work.

### **3 Approach Taken By Peer Review Group**

#### **3.1 Peer Review Group Members**

*Membership of the Peer Review Group for the Quality Review was:*

- Prof. Rachel Msetfi - Executive Dean of the Faculty of Education and Health Sciences, University of Limerick (Chair)
- Prof. John Derrick - Vice-President and Head of Faculty of Science, The University of Sheffield, UK
- Prof. Brian Fulton - Professor of Physics and Dean of Faculty of Sciences, Department of Physics, University of York
- Prof Sharon O'Brien - DCU Associate Dean for Research, Faculty of Humanities and Social Sciences
- Prof. Gabriel-Miro Muntean - Professor at the School of Electronic Engineering, Co-Director DCU Performance Engineering Laboratory and Quality Promotion Committee member. (Coordinating Reviewer)
- Ms. Hazel Byrne - Student Representative, DCU Business School

#### **3.2 Overview of Approach Taken by Peer Review Group**

The Peer Review Group were provided with the opportunity to review the SAR and document their initial impressions in advance of the review group visit. The Peer Review Group met at DCU for four days of meetings and discussion between 17-20 May, 2022. The group were invited to meet with the DCU Director of Quality Promotion and Institutional Research on day 1 of the visit. During that meeting, the Director briefed the group on the format for the visit, the various roles of key personnel, and advised that a chair should be selected. After this meeting, the group met privately and Professor Rachel Msetfi was selected to Chair the group.

The group further discussed their initial impressions of the SAR. The SAR was well presented and provided a helpful overview of the Faculty, and its constituent schools and research centres. The group also identified some key areas which they would like to discuss during the various meetings and some additional information and data that they would like to review. In addition, each member of the group was assigned an area of focus that was aligned to the sections of the SAR and the review group report.

The quality review team continued to be on hand for advice and support throughout the visit and responded promptly and helpfully to all requests made by the panel. In addition, a professional note taker was engaged to take notes during the Quality Review (QR) process.

The Peer Review Group recognises that these findings are a reflection of the changing times as well as long standing strengths and weaknesses.

## 4 Approach to Quality Assurance and Enhancement

The last quality review of the faculty took place in 2012. There were 17 recommendations made to the Faculty in this review. We acknowledge that the faculty has evidenced substantial commitment to the 2012 action plan and has made progress. However, there are synergies with the current and previous review recommendations. We recommend that the faculty continue to keep these matters on their agenda and work on these areas as they continue to be ongoing areas of concern.

	<b>Recommendation</b>	<b>Progress since 2013</b>
1	<p>Develop and establish a Faculty-wide strategy and process for the succession for the Head of School role including:</p> <ul style="list-style-type: none"> <li>• the process by which a successor is selected</li> <li>• clarity on the expectations of an individual in the role</li> <li>• the way in which the successor can be kept abreast of current and ongoing issues</li> <li>• the provision of adequate time and mentoring support prior to taking up appointment, to allow the new Head to start work in the role quickly and with no loss of impetus, when the previous incumbent steps down</li> </ul>	<p>A clear published process has been established across the University and is followed across the Faculty. However, the challenge remains in terms of staff willing to put themselves forward.</p>
6	<p>Develop and establish more effective communication processes to ensure the smooth flow of information between:</p> <ul style="list-style-type: none"> <li>• All administrative functions (internal and external to the Faculty)</li> <li>• The full gamut of postgraduate/postdoctoral communities across schools</li> <li>• Senior management and Faculty staff regarding university policy</li> </ul>	<p>Structures and administrative processes in the Faculty have been revised to ensure clarity in relation to roles and responsibilities and communication channels.</p>
8	<p>Embed an effective teaching evaluation mechanism, critical for quality improvement, into the operation and culture of the Faculty. It is further recommended that teaching evaluation within the Faculty be established in the context of University-wide activity in this area, and that the Faculty Management Board, along with the Faculty Committee for Teaching and Learning, take an active role in developing and monitoring the effectiveness of this mechanism.</p>	<p>The Student Survey of Teaching (SSOT) is the formal evaluation survey used at DCU for quality assurance and quality enhancement purposes. SSOT is a standard online questionnaire that is applied to taught modules at the end of the semester. School Teaching Committees select a list of modules to be surveyed each semester; one or two modules per programme each year is recommended. The SSOT is distributed to students through the Loop online learning platform. Aggregated quantitative data collected via SSOT is used institutionally by the QPO to monitor quality overall. The data can also be interrogated at programme and module levels and is reported to the Head of School.</p>
9	<p>Establish enterprise advisory boards (or equivalent) to elicit input into programme development, as well as refresh and strengthen the Faculty's engagement with industry. DCU has the track record and the potential to develop best practice in industry interaction across a wide range of areas including research, programme design, skills requirements and INtegrated TRaining (INTRA).</p>	<p>Schools and research centres have established advisory boards that include external representatives as appropriate (e.g. industry, non-governmental organisations (NGOs), healthcare providers, Government agencies, voluntary groups, accreditation bodies). Schools also engage industry partners in INTRA and other placements, curriculum development and research. The DCU Futures initiative explicitly focuses on the knowledge, skills and competencies required of students for industry and engages with industry partners in the design and delivery of programme content.</p>

12	Undertake a review of the current workload allocation processes across the Faculty and follow this with a proposal from the Faculty Management Board on common workload principles to be implemented by the schools. This recommendation is being made as it is important that the Dean has oversight of clear and transparent workload allocation strategies within and across schools.	Each school has its own workload model, reflecting the diverse needs of each school. Each was reviewed/ revised in 2020/21 and a copy was provided to the Faculty Management Board. Each complies with principles agreed at University and Faculty level.
13	Routinely review Faculty-level administrative processes, including those that involve interfacing externally, to ensure they continue to be fit for purpose. Also develop and establish a regular review process involving relevant staff, with a focus on bringing forward innovative approaches to administrative tasks with the intention of saving time and resources.	Structures and administrative processes in the Faculty are reviewed and revised periodically to ensure clarity in relation to roles and responsibilities and communication channels.
14	Arrange for a small budget to be annually retained by the Dean during the process of allocating resources across the Faculty, to fund initiatives in support of the implementation of the University's Strategic Plan, particularly those that focus on improving the quality of the student experience.	The Dean does not have such a budget. However, small amounts of funding generated through research overheads in the Faculty are used to incentivise strategic research activities and budget lines are sought from the Finance Office to support particular initiatives through the annual funding cycle. Overheads generated through transnational education can also be set against Faculty priorities.
16	Faculty Research Committee: Coordinate the identification of a set of external (preferably external to Ireland) institutions/centres/schools against which the individual parts of the Faculty research community might be benchmarked.	Under the University citation action plan the current FRC are working with Research Innovation Support (RIS) and heads of schools to identify relevant aspirational peers both nationally and internationally for benchmarking purposes.

Many of the recommendations of the 2012 QR are described as fully completed. The faculty are to be commended for their work in this regard. Several of the recommendations were not completed. In these cases, a rationale was provided for the faculty position.

One such recommendation was that there should be a unified workload allocation model for the Faculty. The general view, as expressed in the SAR, was that this was not appropriate as the faculty is diverse in its disciplines, spanning lab based disciplines and applied disciplines. The external panel was of the view that a faculty wide framework could be developed, with every discipline having the opportunity to contribute unique components. Given descriptions of very high workload, with negative impact on research productivity, this could be a priority for the faculty. The faculty should also ensure that the workload model developed is aligned to the promotions criteria, and the faculty and DCU strategy.



## 5 Findings of the Peer Review Group

### Timing of the review

The Peer Review Group is aware that this review is taking place at a rather exceptional time, as the institution returns to normal operation after two extremely challenging years during the pandemic. It is aware that staff are exhausted after this exceptional time and that operational processes have been disrupted. Peer Review Group has tried to take this into account, but it is possible that some of the comments may reflect residual issues from the pandemic disruption.

### 5.1 Planning and Overall Strategic Direction of the Area

Overall, planning, strategy and the operation aspects of the Faculty are secure and built on the strong academic culture of the unit. Faculty leadership is visible and effective and the executive group, led by the Executive Dean, clearly exemplifies its core values. The Faculty team is committed to the agenda of excellence and that was visible with every group of staff or students that the Peer Review Group met.

There are opportunities to reflect, as we come out of the pandemic, on how the Faculty can move forward in some of its strategic endeavors. These issues include the following:

#### *Strategy and operational aspects*

Whilst there are well-defined and functioning organisational structures, there are opportunities to strengthen the strategic discussions at Faculty and School level, clearly delineating operational matters. There are clear opportunities for the Faculty to lead strategic discussions and to promote top-down thinking in addition to bottom up School initiatives. This theme ran through a number of our conversations with staff and could be seen at many levels, e.g., at FMB and at FTC. As an example of this, the FTC clearly has an excellent operational role, but its strategic functions were less developed and there is an opportunity to rectify this to some benefit to the Faculty.

There is potential for more work to be done at Faculty level to get increased efficiency instead of at School level, the combined Faculty research development officer role was praised repeatedly as an example of such Faculty level work that worked well for all Schools, with marketing being identified as another area that could work well at faculty level.

Time to have strategic focus was also raised as an issue with respect to the Head of School (HoS) role and a number of people noted that the role was not seen as attractive to senior staff. There was a feeling that the HoS is burdened with operational aspects, and some relief of administrative load on the HoS might well make the role easier to fill.

#### *Faculty and School leadership*

There is an opportunity to ensure that the Faculty and School leadership are equipped with the tools to do their job. In particular there is an opportunity to strengthen the leadership credentials within Schools so that the HoS role is seen as attractive, making it clear the agency they have in determining their School's future. There are some easy wins that could be built into such a role as a matter of course. For example, we would recommend that a period of study leave after the HoS has finished his/her term becomes the norm (or at least that this is understood by all staff). In a similar vein, increased administration and Postdoc support while taking the role was mentioned as being important, and these aspects should be considered for the other Faculty roles. A clear and standard HoS package could be developed and applied in a uniform fashion across all the Schools.

There is a clear need to develop functioning leadership pipelines within Schools where possible. As an example of this the Deputy HoS role was highlighted as an important role that might be beneficial to have in the Schools in a uniform way.

The Faculty has a great technical team, led by the CTOs in the Schools. The Peer Review Group was impressed by the skill and dedication of this team and learned of the key role they had played in getting research and teaching facilities operating again after the first lockdown. The technical officers network well together to provide mutual support and sharing of experience, but do not have a direct link into the Faculty management. Given the key support this technical group provides, and the extensive skills and knowledge they have, it is unfortunate that this is not tapped into when consideration of operational and strategic issues are being discussed. The Peer Review Group recommends that the Faculty establishes a formal Faculty committee/group where these colleagues can provide input to the Faculty Management Group and Executive Group. It may be that this could be through the Faculty Technical Manager.

#### *Inter-school collaboration*

In academia, Schools often work in silos, tackling issues on their own, developing solutions to issues in isolation. In this instance DCU is not unique. However, there are notable instances of where strengthened inter-Faculty collaboration would benefit all, developing common solutions, working together and becoming more cohesive and efficient. These could be either strategic opportunities or operational ones. An example of the latter is student evaluation which could be done more effectively and more efficiently if performed in a uniform way across the Faculty. At the moment it is done in an unstructured fashion where, e.g., some module conveners are making their own evaluation form. This is inefficient and inconsistent, and would benefit from some Faculty coordination. The Faculty leadership should be looking for such opportunities which have operational and performance enhancements, and in this example such a drive towards better inter-School collaboration should be owned and driven forward by the FTC.

#### *Promotion and Staff development*

Issues of leadership, and by implication staff training and development, occur in a number of places in the SAR and were noted in our conversations. One aspect of this is the issue of promotion, whereby a quota system seems to disadvantage many who deserve promotion. The targeted promotions policy was also highlighted as an area of confusion, whereby staff did not seem clear on how this process functioned and what the decision-making criteria were. These issues might be a DCU wide rather than a specific Faculty issue, however, it is an issue which clearly negatively affects staff development, reward and progression, potentially creating issues of retention within the Faculty.

Other aspects of staff development that could be considered include building a well functioning pipeline of potential leaders for research centres, research groups and, crucially, school executive and HoS positions. Such a pipeline and staff development will help with the effectiveness of the school executive teams and help create a pool of potential leaders within the Faculty. Leadership training should be considered here as a priority and could be implemented before a staff member has to undertake a leadership role.

## **5.2 Effective Management of Resources**

#### *Resource allocation and support for strategic direction*

Resources and how they are allocated are often the key to the delivery of strategic goals. Universities are no different in this respect. The resource allocation within the University / Faculty seemed to many, we spoke to, to be opaque, lacking both a strategic element as well as an element to incentives behaviours (such as research income generation). The Faculty should consider a model of resource allocation within the Faculty whereby the budget is held

by the Faculty and strategically allocated to Schools. This would ensure that funding is used to explicitly support the priority areas, rather than according to historical principles.

One aspect of this is when considering staff replacement. At the moment the SAR describes the process as: *“Financial planning tends to be incremental and staff requests tend to be based on what was required the previous year.”* We would recommend that the Faculty moves away from this principle to make these into opportunities to implement aspects of the strategy. This might mean that the subsequent staffing is placed into a different area or department in order to meet operational or strategic needs.

#### *Support for EDI and human resource*

We commend the gender diversity at all levels in the Faculty, particularly in leadership positions. Successful use of human resources depends on a supportive environment that implements as a matter of course some of the best EDI practices. Whilst there was a wide commitment to the EDI agenda and widespread informal support, the Peer Review Group was concerned that this was happening at an informal level and not embedded structurally in the Faculty as a matter of policy and established practice. An example of this is the lack of maternity backfill for anything other than teaching hours. The Peer Review Group would recommend that the Faculty reviews and redefines the support for EDI across the Faculty and Schools, including, e.g., support for maternity backfill for full positions not just teaching hours. In general the Faculty and University would do well to explore how to embed strategically aligned policies into operational practice.

#### *Maternity Leave*

The Peer Review Group heard mixed messages over this issue. It is recognised that the university has a clear written policy in this regard which also recognises the need for a period of teaching relief on return to get research activities back up to speed. However it is clear that there is both misunderstanding of, and lack of knowledge of, these processes at the level of individual staff, as well as at the level of School and Faculty management. It is recommended that the Faculty commit to ensuring there is a widespread understanding of the process and the various measures of support that are available. There remains one aspect of the process that troubles the Peer Review Group, as despite asking more than a dozen people we could get no clear answer as to where the funds for backfill come from, whether from the School/Faculty budget, or from a central pot. We recommend that clarity be provided on this issue and would hope that the answer is from a central pot. If the cost falls on the School/Faculty budget then this has two unfortunate consequences. Firstly, the HoS may be tempted to skimp on the extent of the backfill and so put additional load on other staff (we heard of an occasion when this seemed to have happened). Second, the colleague taking maternity leave can feel embarrassed that they are causing problems for the School and their colleagues.

### **5.3 Overall Approach to Teaching and Learning**

The Faculty has multiple avenues for the measurement of teaching and learning efficiency. For instance, there are national level surveys, five-year programme reviews, annual reviews, external examiner reports, student feedback via the Class Rep system, direct communication via membership of the Teaching Committees, as well as individual lecturers' surveys of modules. To some extent, students felt that they were being 'over surveyed'. The students we spoke to were barely aware of the practice of embedding student surveys of teaching (SSOT) into the virtual learning environment (Loop) and staff could not articulate well how this process works, what the student engagement figures were, who sees that data or how the data is then worked on. The Peer Review Group would recommend that the SSOT process be reexamined for effectiveness, e.g., the process for selecting modules is reviewed to ensure all modules in a programme are reviewed over a period of two to three years and results are communicated to module coordinators.

External stakeholders, while being very satisfied with the INTRA students, mentioned that they were not always 'industry ready' or aware of what types of tasks they might engage in during internships and after graduation. As mentioned in section 5.5, this could be tackled by increasing formal relationships between the Faculty and industry stakeholders and leveraging the latter's expertise via guest lectures and other initiatives for undergraduate students.

## **5.4 Research and Scholarship**

### *Governance of research centres*

The Peer Review Group is supportive of the ongoing review of Research Centres currently being undertaken by the University. The current situation whereby some research centres do not effectively evolve, and where there is no clear mechanism to close Centres that no longer add value, ossifies research structures in an unfortunate way. It will be important for the Faculty to review and refresh its research centres as an outcome of this process. Allayed to this will be a need to review and redefine how governance of research centres is undertaken particularly to understand how best to govern research centres in the context of the governance provided by Schools, as well as to ensure effective lines of communication between Schools, Centres and Faculty.

### *Redefining the strategic direction of the Faculty*

As part of this redefinition of research centres the Faculty should be proactive in defining its research strategy in the context of possibly new and evolved Research Centres. A redefinition of strategic direction should be driven by research metrics and the availability of external opportunities.

### *Support for PhD students*

The Peer Review Group found the PhD students we spoke to were very supportive and appreciative of the culture at DCU. Individually they were very motivated and enjoying their time at DCU. Collectively, thought could be given to how they could be supported further to reduce the perceived isolation in some schools, some of which might result from starting during the pandemic. Further consideration needs to be given in ensuring that PGR students are well integrated into both Schools and, where relevant, Research Centres, but not one or the other. Consideration should be given to how to spread the good practice amongst the Schools in these regards.

### *Benchmarking*

The Peer Review Group was disappointed that the benchmarking provided was internal, looking at the fraction of overall university research income and outputs from the Faculty. It is important that performance is benchmarked against external competitors. Each School should have a benchmark comparator group against which they should be monitoring research income and outputs (and SSR). This will need to involve Irish institutions as these operate within the same funding and legislative regime as DCU, but it would also be good for each School to have an aspirational group of international competitors.

### *Research support*

The Faculty has been operating with a Research Development Officer and there was widespread praise for the support this provided. It was felt to have raised the number of grant submissions. The panel encourages the Faculty to continue with this support as a way of building further research strength.

## 5.5 Communication and Provision of Information

### *Communication processes from Faculty Professional Services to Staff*

Staff were very complimentary about the support they receive in general from the Faculty Professional Services (PS) staff. Lines of communication are open between staff and Faculty PS staff. The Faculty PS staff were praised by multiple stakeholders, however it was noted that professional support at individual School level needed to be reviewed in light of new demands. This is a topic that the university in general could look at to ensure that the professional services offered at School level are indeed fit for purpose and for the future.

### *Communication from Central University Services to Faculty, Schools and individual staff*

Knowledge of strategic issues and decision-making processes at University level was not entirely complete. For instance, some staff were unaware of the policy for the replacement of Head of School, a topic that came up repeatedly. There was also limited knowledge regarding the University's strategy for (hybrid) delivery as we move out of the pandemic. The link between this strategy, the perceived lack of space, and the sustainability agenda of the university remained unclear. Staff were uncertain about how financial decisions were made, who exactly holds budgets and makes budgetary decisions, how incentivisation of programme development works etc. There was a strong sense of a lack of transparency of the financial management processes. For instance, if staff develop a new PGT programme, they did not know if any income from this new development flowed to the School(s), what proportion of it did, or who decided what would be done with this new income. The perceived lack of transparency risks de-incentivising staff to meet Faculty objectives. Regarding the Faculty's strategy to grow international student numbers, the restructuring of the International Office was alluded to as a current inhibitor since staff did not know who to contact and what the remit of the newly restructured office is. In general, the lack of transparency or communication about central roles, remits, financial processes etc. emerged as a considerable challenge that inhibited to some extent the realisation of the Faculty's objectives. This challenge is a relatively easy one to tackle.

### *Communication from Staff to Students*

Students commented very favourably on staff-to-student communication in general, stating that staff are very open to discussion with students. The staff-student relationships were described as being dynamic with staff being commended for providing valuable guidance and assistance for the students. A strong sense of loyalty to DCU came across from students who had taken their undergraduate programme at DCU and who subsequently decided to pursue PG education there too.

While the staff-to-student communication was complimented by the students, specific issues were also identified. Students complained of a "torrent of emails" from staff, via email or Loop, and from central units such as the Estates office. They find that it is difficult to triage the emails in order to focus on important ones. They noted a variation in how resources like Loop were being used across different lecturing staff. It was also noted that there was a lack of transparency about the scheduling of Continuous Assessment (CA) components at the start of a semester. A programme 'assessment map' would be desirable to ensure that students know when CA components are due and to avoid deadline clashes. On the topic of assessment feedback, the students stated that you have to ask for it, suggesting that if you did not it might not be forthcoming. The Faculty should develop a policy for staff-to-student communication that would consider assignment feedback, channels for communication to students, number of emails, development of a programme assessment map at the start of each semester, and so on.

### *Communication from Students to Staff*

Students were aware that the Class Rep system could be used to provide feedback directly to lecturers and to Programme Chairs. There are formal systems in place including programme boards and informal meetings such as pre-programme board meetings that aim to facilitate issues and communication between students and relevant staff. Students are invited to

participate in Teaching Committee meetings and student forums. For accredited programmes, student feedback is sought and incorporated into those programmes. However, the students were lacking awareness of the SSOT mechanism, whereby a survey is embedded into selected modules per semester (see Section 5.3 for more commentary on teaching and learning evaluation).

#### *Communication from Faculty to External Stakeholders*

The external stakeholders who met with the Peer Review Group were very satisfied with their interactions with specific individuals either within the Faculty or through the INTRA office. One of the stakeholders mentioned the high calibre of INTRA students and the strong relationship between the stakeholder and interns, many of whom are then offered Graduate Programme positions. Relationships and research collaborations are built on personal relationships primarily and are not initiated or developed via the Faculty *per se*. The stakeholders mentioned that they would be very open to more formal networking with the Faculty that might entail, for example, guest industry lecturers to explain to students what 'working as a scientist' means these days. A considerable opportunity exists for the Faculty to strengthen industry-academic relationships beyond personal research collaborations, which could be investigated and developed via the ADEI (Associate Dean for External Engagement and Internationalisation) role.

## **5.6 External Perspectives on Quality Enhancement**

#### *Addressing the recommendations of the previous quality review*

Most of the recommendations of the previous quality review have been fully completed and the staff needs to be commended for their efforts. Among the remaining aspects, there is still ongoing work regarding administrative support for the role of Head of School (R1), and in particular about introducing mechanisms for training and mentoring HoS candidates. There were concerns regarding the existence of a workload allocation model (R12); currently there are different models for various schools. Very good support for early career staff and their workload exists. The Research Office allocates a budget to each Faculty annually based on research performance. The Dean could use some of this budget for strategic purposes, including research (which would address R14). Only internal benchmarking has been done, whereas no external benchmarking is available (R16).

#### *Ensuring Quality via Programme Accreditation*

Most undergraduate programmes from all schools are accredited or in process of being accredited by relevant bodies such as Institute of Physics, Athletic Rehabilitation Therapy Ireland, Nursing and Midwifery Board of Ireland, Teaching Council, Psychological Society of Ireland, UK Institute and Faculty of Actuaries. These institutions have rigorous and regular accreditations and maintain high standards and by meeting them, the faculty/schools demonstrate an interest to ensure very high quality of their programmes. There is no possibility for accreditation of the Masters programmes, but may be possible for the upcoming integrated Masters programmes.

#### *Ensuring Quality in the Teaching and Learning Process*

There was feedback requested from students by each module coordinator via surveys, but in order to reduce student fatigue, it was decided to support centralised feedback via SSOT. The feedback is being used and evidence was found from both academics and students that this helps improve the teaching and learning process. There are also both the annual review and periodic review that contribute to maintaining high quality levels. This goes bottom up from the level of the programme via the programme board to the faculty teaching and learning committee and university education committee and top-down following feedback received at the level of these committees.

### *Ensuring Quality in the PhD Research Process*

The number of PhD students has decreased significantly. A seed funding scheme to support 2 PhD students per school is introduced to encourage applications to Irish Research Council postgraduate scholarship funding.

It is noted there exists a very good process for observing the quality of the research progress of Postgraduate Students via the annual review and mid-term transfer report and interview processes. The use of the supervisory panel composed of both supervisor(s) and an independent academic is useful. Positive is also the existence of support for young academics in terms of co-supervision.

### *Ensuring Quality in the Funded Research*

The size and quality of the research performed was affected by the loss of some research leaders following natural retirement. There have been fewer and less successful funding applications. Positive is that there was support for research funding applications, mostly via the faculty Research and Development Officer. The staff should be encouraged to take research leadership roles and research grant applications be considered in the workload model.

### *Quality in the INTRA Process*

Significant effort is put by both academics and admin to support the INTRA process, which is commendable, especially for its contribution to students' education and experience. There is evidence from the external stakeholders that the DCU Faculty of Science students are preferred during the selection process for their knowledge. Many of the INTRA students end up being offered employment positions with the companies they have trained with (i.e. one large relevant employer noted a conversion rate of about 50%). There was a suggestion to expose students more to regulatory aspects (very strict in some specific areas) before they go in their INTRA programme. In rare situations when students cannot be placed in industry, there is an effort to involve them in research performed by diverse research centres and meet similar learning outcomes.

### *Quality in the Digitalisation of Teaching Support*

Significant advancements have been made during the COVID period in terms of digitalisation of teaching and learning content. Commendations go to the university Teaching support unit for its input which enabled continuation of educational activity at high quality levels. It is recommended to retain and continue this trend.

## 6 SWOC Analysis and Plans for Improvement

### 6.1 SWOC Analysis for Faculty of Science and Health

The SAR included a proposed summary SWOC analysis of the area. As a result of the Peer Review Group's analysis of the self-assessment report and findings from the peer review visit, we propose the following to be a true reflection of the area capabilities and opportunities, and identified weakness and threats to future success.

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>● A collegial supportive staff community, who have a student centred approach to their work</li> <li>● Commitment to excellence in all aspects of research and teaching</li> <li>● The DCU/FSH graduates and INTRA students, who are prized in industry for their enthusiasm, confidence and fresh ideas</li> <li>● Availability of student data especially via the Guru system</li> <li>● Faculty administrators of programmes is a fantastic resource for academic staff</li> <li>● INTRA (internship) programme is seen as a fantastic programme by students, staff and stakeholders</li> <li>● The DCU identity and the loyalty and allegiance of alumni is a strength and a key opportunity</li> </ul>	<ul style="list-style-type: none"> <li>● Lack of systematisation of key processes, such as student feedback and stakeholder engagement</li> <li>● Lack of coordination across modules of programmes re assessment timing and student workload</li> <li>● Schools as independent entities which 'learn' from faculty level interactions (ie committees) but little achieved in terms of efficiencies</li> <li>● Equality and Diversity and Internationalisation are not central to the faculty work</li> <li>● Over reliance on individual relationships and knowledge</li> <li>● Lack of clear delineation between strategic and operational aspects</li> <li>● Lack of leadership pipelines for Schools and Research themes</li> <li>● Resource allocation model not being used strategically.</li> <li>● Communication of strategic operational processes (promotion, financial management etc.)</li> </ul>
Opportunities	Challenges
<ul style="list-style-type: none"> <li>● Industry and NGO stakeholders would like to interact with the Faculty more systematically and see mutually beneficial opportunities</li> <li>● Post-covid there are opportunities for more blended learning offerings and life long learning</li> <li>● Health as a growth discipline globally, with high levels of focus and funding as a result</li> <li>● Develop the Head of School model, in relation to succession, timeframe of appointment and term, support and training, incentivisation, in order to leverage this key role for FSH success</li> <li>● Work together more strategically and operationally at Faculty level rather than School level</li> <li>● Potential for developing stronger PhD community across students in Schools and across the Faculty</li> <li>● DCU alumni are strong advocates for DCU, their success is DCU's success</li> </ul>	<ul style="list-style-type: none"> <li>● Uncertainty about post covid working patterns and an un-reasoned approach to whether students and staff have on campus requirements - on campus activity should have added value</li> <li>● Housing crisis and inflation mean that students find it difficult to find housing/afford living with negative impact on student numbers, and international student numbers</li> <li>● Chronic underfunding in the sector nationally</li> <li>● Retention of staff in the context of high workloads and limited opportunities for promotion. Lack of clear staff development opportunities. Poor EDI practices.</li> <li>● Resource allocation model and practices embed historical structures and stop agile responses to emerging opportunities.</li> <li>● Embedded historical nature of some UDRC's means limited capacity for growth of new research priorities</li> </ul>



## 6.2 Plans for Improvement

In the SAR, the Faculty identified 8 areas for improvement:

1. The FSH is a diverse faculty with dual focus on science and health. Feedback generally is that this can provide interesting synergies but there are also concerns about the challenges of managing strategically such a diverse faculty, and the challenges for central units dealing with such a diverse portfolio.

2. The FSH aims to raise its research profile nationally and internationally.

A range of preparatory actions have been taken in the Faculty to build research capacity but challenges remain in terms of funding for research infrastructure, ageing research centres, and the loss of senior research leaders.

The introduction of a Research Development Officer (RDO) to the Faculty had an important impact on research activity and was well received by staff. Building on that success, a second post is needed to provide the capacity required in the Faculty.

Building on the recent research mapping and prioritisation exercise, the Faculty needs to prepare a detailed strategy for the development of research around key thematic areas.

The needs of early career researchers and emerging research areas must be balanced with those of established and even long-established research centres.

3. This opportunity for reflection highlights the strengths of structures in the Faculty to support Governance and operational management, but the need to be more strategically and externally focused in order to best position the Faculty for the next decade.

4. The Head of School model is problematic and was one of the key issues identified in the SWOC analysis; although training is offered already, more training and mentoring for the person in this role seems to be required as well as the need to make the role more manageable and attractive to high-achieving academics.

5. The lack of promotion opportunities for both academic and professional staff, was identified as a major issue in the SWOC analysis.

6. A review is required of the administrative support requirements of schools with a particular focus on administrative activities and skills needs. One of the key issues identified in the SWOC analysis was the changing needs of schools over the last decade and the need for additional and new administrative support within schools.

7. A review is also required of the changing needs of schools in relation to technical and related support.

8. A review is required of the current processes used within the University to allocate, reassign and reconfigure space, along with the development of a standard space audit template by faculties and the Estates Office. The Faculty has outgrown its current allocated space and is constrained by the costs of repurposing underutilised space.

The Peer Review Group recommendations align with a number of the key areas identified in the SAR, particularly around the need to be more strategically and externally focussed in order to position the Faculty for the next decade.

## 7 Summary of Commendations and Recommendations

The Peer Review Group commends the Faculty on both their commitment to teaching and research given the challenges presented by both incorporation and funding constraints.

### Commendations

- Committed leadership and commitment to the people of the Faculty; Deputy Dean appointment to support ED; Commitment to the current SAR process and implementation of the previous process;
- The Faculty was successful in navigating the very difficult circumstances of COVID-19, in particular in relation to ensuring lab access;
- Strong culture of academic excellence: Your students are excellent, they are a credit to this university, they are motivated and confident, they impress employers, they are your strongest ambassadors;
- The Faculty of Science and Health has excellent and committed staff, they have ambition, loyalty and allegiance to DCU as an institution and we have seen evidence of going above and beyond, placing students at the centre of their work. There is a culture of collegiality and mutual support which staff value highly;
- You have areas of research strength, and emergent strength, your researchers are conducting excellent research, and you have the potential for a critical mass of world leading research;
- UG, PGT, PGR students' very positive views of the Faculty and Staff. Addition of ten new PGT programmes since 2018 and the introduction of PhD scholarships; Quality of the postgraduate researcher progress via the annual review and mid-term transfer report and interview processes is assessed well;
- The INTRA programme is highly valued by students, by staff and by employers;
- Academic staff highly value the support and advice provided to them by members of the faculty office team and the technical officers.

### Recommendations

The following recommendations are being made in the spirit of supporting the Faculty to further develop their reputation in terms of teaching and research excellence.

The following notation is used in the recommendations for enhancement.

P1: A recommendation that is important and requires urgent action.

P2: A recommendation that is important, but can (or perhaps must) be addressed on a more extended time scale.

P3: A recommendation which merits serious consideration but which is not considered to be critical to the quality of the ongoing activities in the Area.

Additionally, the Peer Review Group indicates the level(s) of the University where action is required:

A: Area under review

U: University Senior Management

No	Commendation/ Recommendation	P	Level	
<b>Planning and Effective Management of Resources</b>				
1	Commendation			There is general appreciation for the effectiveness of the RDO resource.
2	Recommendation	P1	A	Work together more effectively as a Faculty both strategically as well as operationally, leveraging collective strengths
3	Recommendation	P1	A	Strengthen the leadership development at Faculty and School level; Strengthen and make more transparent and standardise the incentives to take on Head of School and Deputy Head of School positions. Consider making the Head of School term 5-years to realise the strategic potential of this post.
4	Recommendation	P2	A/U	Prioritise sourcing of budget to deal with aging equipment
5	Recommendation	P2	U	Review promotion and staff development opportunities and practices for academic and professional support staff; make the 'targeted promotion' process and criteria transparent to all staff.
6	Recommendation	P2	A	Create a Faculty committee to bring the CTOs skills and experience into the operational and strategic planning of the Faculty; Consider whether one representative of UDRC Directors might suffice on the Faculty Management Board.
<b>Effectiveness of Activities and Processes</b>				
	Commendation			The Faculty Office staff are to be commended for the very valued support that they provide to academic units
	Commendation			The RDO role has been very effective in supporting the Faculty Research Agenda
	Recommendation	P1	A	Redefine the resource allocation model and practices to support the strategic priorities
	Recommendation	P1	A	Review and redefine the support for EDI across the Faculty and Schools, including, eg, support for maternity backfill. Most importantly, undertake an extensive communications programme to ensure that the practices are widely known and understood.
	Recommendation	P1	A/U	Prioritise external research benchmarking to inform and steer strategic initiatives
	Recommendation	P2	A/U	Reexamine the SSOT process for effectiveness, e.g., the process for selecting modules is reviewed to ensure all modules in a programme are reviewed over a period of two to three years and results are communicated to module coordinators. Ensure that all staff and students are informed of how this process works.

<b>Communication and Provision of Information</b>				
	<i>Commendation</i>			Students perceive staff to be very open and available to them.
	<i>Commendation</i>			Staff appreciate the communication and professional support services at Faculty level.
	<i>Recommendation</i>	P1	A/U	Assess reasons why communication of policy and practice is sometimes perceived as lacking transparency and create mechanisms to ensure that staff understand all policies and how they are implemented.
	<i>Recommendation</i>	P2	A	Develop a policy for staff-to-student communication that focuses on assignment feedback, channels for communication to students, number of emails sent to students, development of programme assessment maps at the start of each semester.
	<i>Recommendation</i>	P2	A	Strengthen the two-way communication and collaboration strategy with external stakeholders, especially alumni, to ensure a higher level of collaboration both in T&L and in research.
<b>Ongoing Quality Enhancement</b>				
	<i>Commendation</i>			Quality of the postgraduate researcher progress via the annual review and mid-term transfer report and interview processes is assessed well
	<i>Commendation</i>			INTRA programme very much valued by students, employers and staff
	<i>Recommendation</i>	P1	A	Introduce students more to regulatory aspects (very strict in some specific areas) and ethics before they go in their INTRA programme
	<i>Recommendation</i>	P2	A	Introduce a PhD induction programme across the Faculty for all incoming PhD students in addition to the GSO general induction programme to build a sense of community among this group e.g. coffee mornings, research conversations for PhD students, faculty research days
<b>Stakeholder Relationships</b>				
	<i>Commendation</i>			Stakeholders value DCU students within their organisation, they have a positive effect and are excellent ambassadors for DCU.
	<i>Recommendation</i>	P1	A	Investigate ways of systematising external stakeholder engagement in the Faculty using alumni and other stakeholders, to support and inform students at all levels and to enhance research collaborations.

# Appendices

## Outline Timetable Peer Review Group Visit

### Faculty of Science & Health

DATE: 17<sup>th</sup> – 20<sup>th</sup> May 2022

Time	Peer Review Group (PRG) Activity/Meeting	Venue	Room No.
<b>Tuesday 17<sup>th</sup> May - Briefing Dinner</b>			
1800-1900	Briefing by Director of Quality Promotion; guidelines provided to assist the PRG during the visit and in developing its report	<u>St Patrick's Campus Belvedere House</u>	Room C206
1900-2100	Peer Review Group Dinner	<u>Restaurant 104</u>	
<b>Day 1- Wednesday 18<sup>th</sup> May – Glasnevin Campus</b>			
0915-1015	Consideration of the SAR with the Dean and Faculty Management Board representatives <i>Will begin with a short presentation by the Dean, followed by discussion (Director, QPO to attend)</i>	Base Room Nursing Building	H3.06
1015-1030	PRG Private Meeting Time	Base Room	H3.06
1030-1130	Faculty Teaching & Learning Committee	1 Room	H3.06
1130-1230	<b>Parallel Session 1</b> Programme Chairs – Undergraduate (UG)	<b>Parallel Session 2</b> Programme Chairs – Postgraduate (PGT)	2 Rooms HG.06 HG.07
1230-1300	Peer Group Meeting Time		
1300-1400	Peer Review Group Lunch	Base Room	H3.06
1400-1445	<b>Parallel Session 1</b> Meeting with Students (UG)	<b>Parallel Session 2</b> Meeting with Students (PGT)	2 Rooms HG.06 HG.07
1445-1515	PRG private discussion time/ Coffee		
1515-1600	Meeting of academic staff involved in teaching	Base Room	H3.06
1600-1700	Meeting with external engagement stakeholders	Base Room	H3.06
1700-1730	PRG private discussion time	Base Room	H3.06
1800-1930	PRG Private Dinner and discussion	Skylon Hotel	

Time	Peer Review Group (PRG) Activity/Meeting	Venue	Room No.
<b>Day 2- Thursday 19<sup>th</sup> May - Glasnevin Campus</b>			
0915-1000	Faculty Research Committee	Base Room Nursing Building	H3.06
1000-1045	<b>Parallel Session 1</b> Academic Staff- focus on publication	<b>Parallel Session 2</b> Academic Staff: focus on research funded projects	2 Rooms HG.06 HG.07
10.45-11.00	PRG Private Meeting Time	Base Room	
1100 -1145	<b>Parallel Session 1</b> Academic Staff- focus on PhD Supervision	<b>Parallel Session 2</b> PhD students	2 Rooms HG.06 HG.07
1200-1230	Chief Technical Officers	Base Room	H3.06
1230-1300	<b>Campus Tour</b>		
1300-1400	Lunch/ PRG Private Meeting Time	Base Room	H3.06
1400-1445	Relevant Central Support Units (ISS, Library, SS&D, Estates, Finance, HR, OCOO etc.) and service teaching e.g. DCUBS, IoE	Base Room	H3.06
1445-1505	Faculty Administration – Part One Faculty Manager and Members of Administration Team	Base Room	H3.06
1505-1515	Faculty Administration – Part Two Facilities Manager & Faculty Biological and General Safety Officer	Base Room	H3.06
1515-1545	Staff Open Forum for any member of Area staff -	Base Room	TBC (HG20 or H3.06)
1545-1615	PRG Private Meeting Time/ Coffee	Base Room	H3.06
1615-1700	Faculty Executive Group	Base Room	H3.06
1700-1745	Meeting with Faculty Executive Dean	Base Room	H3.06
1830-2000	PRG Private Dinner and Meeting	Restaurant Skylon Hotel	

<b>Time</b>	<b>Peer Review Group (PRG) Activity/Meeting</b>	<b>Venue</b>	<b>Room No.</b>
<b>Day 3- Friday 20<sup>th</sup> May - Glasnevin Campus</b>			
0900-0955	PRG Meeting with SMG	Albert College Building	AG.01
1000-1025	Meeting with Area reporting head (relevant member of SMG) (Prof Anne Sinnott)	Albert College Building	AG.01
1030-1300	PRG Private Meeting Time- final discussion on recommendations	Base Room Nursing Building	H3.06
1300-1345	PRG working lunch and finalization of exit presentation	Base Room	H3.06
1345-1400	Briefing with Dean and Director of QPO on key recommendations	Base Room	H3.06
1400-1430	PRG Exit Presentation - All Faculty Staff	Nursing Building	HG.20