

University College Dublin

Quality	Improvement	Plan
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UCD School of Biology and Environmental Science

December 2022

1. Introduction

Give a very brief introduction to the approach taken in the development of the Quality Improvement Plan, including the dates of the original review and the names of the Quality Improvement Committee.

The original quality review of the School of Biology and Environmental Science took place via zoom on March 21st – 24th 2022.

The report of the Review Group was circulated to all members of the School the School community (Academic staff, technical staff, administrative staff, research staff and graduate research community.

A Quality Improvement Committee (details below) with representatives from the key areas mentioned in the Quality Review Group's report was formed and a Quality Improvement Plan (QIP) based on the recommendations of the Review Group. The draft QIP was circulated to all members of the School community for comment prior to finalising the plan

Quality Improvement Committee

- Professor Evelyn Doyle (Head of School)
- Associate Professor Mary Kelly-Quinn (Head of Teaching and Learning)
- Dr Gavin Stewart (Stage 1 co-ordinator, former Head of T&L)
- Dr Jonathan Yearsley (Head of Research)
- Dr Sean Storey (Technical Staff representative)
- Ms Helen McCarthy (Administrative Staff representative)
- Ms Alannah Chalkley (Postgraduate student representative)

Abbreviations used

CFM	College Finance Manager
CoS	College of Science

CTO Chief Technical Officer

HoS Head of School RG Review Group

SGSC School Graduate Students Committee

SHGE School Head Global Engagement

SHRII School Head Research, Innovation and Impact

SRIIC School Research, Innovation and Impact Committee

STLC School Teaching and Learning Committee

SHTL School Head of Teaching and Learning

VPTL College of Science VP for Teaching and Learning

VPGE College of Science VP for Global Engagement

2. Recommendations for Improvements - Follow-Up Action Taken and/or Planned Categories

- 1. Recommendations concerning academic, organisational and other matters which are <u>entirely under the control of the unit</u>
- 2. Recommendations concerning shortcomings in services, procedures and facilities which are outside the control of the unit
- 3. Recommendations concerning inadequate staffing, and/or facilities which require additional recurrent or capital funding

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead* (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
2.17	The RG recommend the School develop a plan, with the College Finance Manager, to invest a portion of the reserves to leverage investment in equipment and staffing. It is also recommended that each future grant	1,2	The School will work with the College Finance Manager to develop an appropriate plan (which complies with UCD financial guidelines) to invest a portion of School financial reserves in equipment and staffing.	HoS SHRII CFM,UCD Research	Sept 2022	Sept 2027
	application should include a budget for a piece of equipment and, if funding bodies permit, a portion of staff to be allocated to a research administrator.		The School has already allocated funds from the School budget/reserves for the purchase of equipment which is managed by a committee chaired by the Head of Research, Innovation and Impact (SHRII)	SHRII	Sept 2022	Dec 2022
			The School is mindful of retaining sufficient reserves to allow for the purchase of new equipment for the Phase III development of the Science Centre and to protect the School against any sudden drop in student numbers.	School Exec	Ongoing	Ongoing

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead* (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completior Date
			The School will require all large and group	HoS, UCD	Sept 2022	Ongoing
			funding applications that typically require Head	Research,		
			of School approval to include funding for	All		
			equipment and/or a research administrator. The	academic		
			responsibility will lie with the named lead	staff		
			researcher on the application. For individual			
			grant applications that do not require HoS sign			
			off before submission, the School will advise staff			
			to include funding for equipment and/or a			
			research administrator if funding bodies allow.			
.16	Since the University Curriculum Review	1	The School has already commenced a full review	SHTL. STLC	Sept 2022	Dec 2023
	in 2016, the School has seen a		of module curricula. Once the data have been			
	significant change in its module		collated, the module portfolio will be reviewed in			
	portfolio (see 4.5, re: development of		consultation with Heads of subject and Directors			
	new modules). The diversity and		of taught graduate programmes. This will enable			
	number of modules offered,		us to identify where and if module numbers can			
	particularly at Level 4, is demanding on		be reduced and what gaps need to be addressed			
	staff time. Consideration should be		within existing modules to ensure that the			
	given to reducing the number of		teaching and learning activities, assessments,			
	modules, whilst enhancing quality, to		and content of the suites of modules in each			
	provide an adequate and attractive		programme are aligned with the programme			
	portfolio that can facilitate the strategy		outcomes, and at the same time provides an			
	for future growth in student numbers.		appropriate and attractive portfolio.			

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead* (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
			It should be noted that the diversity and number of Level 4 modules available provides our students with the opportunity to select topics that fit their interests and career goals, as well as providing a more interactive, small group, learning environment. The diversity of Level 4 modules specifically serves the BBNL programme as a key aspect of this programme's success is the module choice. The BBNL programme, and its diversity, is critical for the financial stability of the School.			
			The workload associated with Level 4 modules is not high compared to modules at Level 1, 2 or 3 and staff typically enjoy teaching them as they focus on their research interests. There is a concern that reducing the number of modules may negatively impact the student experience, without any significant reduction in staff workload. Balancing a lower number of Level 4 modules with quality enhancement and ensuring the portfolio remains attractive will be challenging and may not be possible.			

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead* (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
4.17	Assessment maps suggest that many programme learning outcomes are being assessed up to six times. The RG recommends that the School reevaluates its assessment strategy, focusing on programme, rather than module-level requirements.	1	The School has already commenced a full review of the amount and type of assessment in all modules and programmes in the School. Once the data have been collated, assessment strategies will be reviewed in consultation with Heads of subject and Directors of taught graduate programmes with a view to reducing the overall number of assessments and ensuring programme learning outcomes are assessed.	SHTL, STLC	Sept 2022	Jan 2024
6.12	All academic staff should aim to secure external funding for research. This is the funding that makes research projects happen and provides extra resources for explorative research. The quality of research should also follow an upward trajectory.	1,2	90% of SBES faculty have secured external funding for research in the last 3 years. The School will continue to support staff in securing external funding through local initiatives (e.g. school equipment fund, a school sabbatical policy, researcher's away day) and through engagement with research institutes such as UCD Earth Institute and UCD Conway Institute.	HoS, SHRII, UCD Research	Sept 2022	Ongoing
			The School plans to recruit local research administrative support and will use the workload model and sabbatical policy to encourage staff to lead more strategic applications that involve more staff in the School.	HoS	Jan 2023	Jan 2025

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead* (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
6.13	The RG recommend that (a) the Research Committee establish a system to identify areas of critical mass where SBES scientists could form a small number of competitive clusters for strategic grant applications. The clusters in crops and plant science prove this can deliver considerable competitive funds to the School. (b) The Research Committee should nominate a leader for these potential research clusters, and funds should be allocated, or acquired via UCD Seed Funding, to buy out the lead individual's teaching and administration for a defined period, which would be used to (c) develop a research strategy to produce a series of strategic grant applications.	1,2	We acknowledge that developing strategic grant applications would be a benefit to SBES researchers. The UCD Earth Institute has an existing Strategic Priorities support mechanism that has had some success (https://www.ucd.ie/earth/whatwedo/strategic priorities/). The RII committee will put out a call to SBES researchers asking for strategic cluster proposals, each requiring a named lead researcher. The school's researcher's away day will be used to develop a school wide consensus on priority clusters and possible school supports. The RII committee will draw up proposals for school support of a strategic cluster and the selected cluster proposal. This will be presented at the School Executive for approval. If this approach is successful (evidence of winning	SRIIC, UCD Research, CoS	Nov 2022	Nov 2025

RG (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Sta ff/ Group)	Start Date	Planned Completion Date
2.14	The RG recommends a review of School organisational structures, with the appointment of a School Head of Global Engagement or International	1, 2	The School has appointed a School Head of Global Engagement who is now a member of the School Executive committee.	HoS	Sept 2022	Sept 2022
	Study, as a leadership role to develop the School's strategy for global impact and international partnerships in line with the College and University priorities. It would also welcome undergraduate student representation on School committees.		The School Head of Global Engagement will work with the College VP for Global Engagement and UCD Global to develop the School's strategy for global impact and international partnerships in line with the College and University priorities.	SHGE VPGE	Sept 2022	Sept 2024
			The School already has an UG representative on the EDI committee and will appoint UG representatives to other appropriate School committees (T&L, H&S, SAB). See also 8.9 & 8.10 below	HoS School Executive	Sept 2022	Jan 2023
2.15	The RG recommends the creation of role descriptors for School leadership roles, for example SHTL or SHRII, along with SOPs to document the key functions of the School Office. It is also recommended that the School works to implement its policy of fixed terms	1,2	The School will generate role descriptors for all School leadership roles. The School has just appointed an additional administrative team member and they will draw up SOPs for all the key functions of the School Office. Most academic leadership roles in the School now rotate every 3-5 years and the School will work	School Executive	Jan 2023	Jan 2024

RG (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Sta ff/ Group)	Start Date	Planned Completion Date
2.16	and rotation for academic leadership roles.	1 2	to ensure all roles have fixed terms and rotate. It should be noted that >30% of the current academic staff have been appointed since 2020 and 3 senior staff have been seconded to University roles (Director of Graduate Studies, College Principal, Director of Earth Institute). While every effort will be made to ensure new staff get relevant leadership experience and roles rotate, it would not be fair to burden new staff with roles such as SHTL or SHGS which carry a heavy workload. Thus the pool of candidates for some roles is quite small.		Jan 2022	Inn 2024
2.16	Workload is a concern for the academic staff, and the RG recommends that the School works towards the reduction of third-trimester teaching and the introduction of a regular system of research sabbaticals. There is also scope to reduce the number of School committees.	1, 2	It is not possible to reduce third trimester teaching given the School, College and University dependence on income from taught MSc students. However, the School will look at ways of providing staff with a least one trimester free of teaching every 3-5 years. This will be challenging as taught MSc students typically do projects during the summer trimester and given the breadth of research across the School and the nature of the MSc programmes it is not always possible to exclude an academic staff member while	HoS, School Executive	Jan 2023	Jan 2024

RG Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Sta ff/ Group)	Start Date	Planned Completion Date
			maintaining the breadth of research projects required.			
			The School will review the workload model which has now been used for 3 years with a view to determining if it can be used more effectively to manage workloads across the School. It may be that the provision of trimester free teaching will have to be done on a case by case basis.			
			The School recently produced a sabbatical policy and will promote this more widely to staff.	SHRII	Sept 2022	Sept 2023
			With the exception of the School Advisory Board (recommended by the last Quality Review) and the Rosemount Management Committee all School committees are those required according to College and University structures. It is therefore not possible to reduce the number of School committees.	CoS	N/A	N/A

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2.17 The School should develop a plan, with the College Finance Manager, to invest a portion of the reserves to leverage investment in equipment and staffing. It is also recommended that each future grant application should include a budget for a piece of equipment and a portion of staff time on some applications to be allocated to a research administrator.	the College Finance Manager, to invest a portion of the reserves to leverage investment in equipment and staffing. It is also recommended that each	1,2	The School will work with the College Finance Manager to develop an appropriate plan (which complies with UCD financial guidelines) to invest a portion of School financial reserves in equipment and staffing.	HoS SHRII CFM,UCD Research	Sept 2022	Sept 2027
		The School has already allocated funds from the School budget/reserves for the purchase of equipment which is managed by a committee chaired by the Head of Research, Innovation and Impact (SHRII)	SHRII	Sept 2022	Dec 2022	
			The School is mindful of retaining sufficient reserves to allow for the purchase of new equipment for the Phase III development of the Science Centre and to protect the School against any sudden drop in student numbers.	School Exec	Ongoing	Ongoing
		The School will require all large and group funding applications that typically require Head of School approval to include funding for equipment and/or a research administrator. The responsibility will lie with the named lead researcher on the application. For individual grant applications that do not require HoS sign	HoS, UCD Research, All academic staff	Sept 2022	Ongoing	

2.ORGANI	2.ORGANISATION AND MANAGEMENT OF RESOURCES								
RG (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Sta ff/ Group)	Start Date	Planned Completion Date			
			off before submission, the School will advise staff to include funding for equipment and/or a research administrator if funding bodies allow.						

3. STAFF	AND FACILITIES					
RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff / Group)	Start Date	Planned Completion Date
3.16	Infrastructure is always ageing and needs constant replacement. There needs to be a strategy for developing the best scientific infrastructure that is worthy of the people who work in the School, and for resourcing technical support for the maintenance of pieces of equipment that require a dedicated technician.	1,2, 3	The School has recently established an Equipment group which will develop a plan for replacing old and purchasing new equipment. However, it will not be possible to fund the best scientific infrastructure that is worthy of the people who work in the School solely from the School budget. The School will work with the College of Science and the Science Phase III project team to identify appropriate infrastructure for the School and the new building.	HoS, School Executive, CoS	Sept 2022	Sept 2027

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff / Group)	Start Date	Planned Completion Date
			Cost recovery models are in place for most	СТО	Jan 2023	Jan 2024
			major pieces of equipment in the School and			
			these will be reviewed to ensure they include			
			costs for maintenance etc.			
			The School plans to recruit a technical officer			
			in 2023 and appoint a CTOII. We will review	HoS,	Nov 2022	Jan 2024
			technical support needs in the light of the	School		
			appointment of so many new staff and plan	Executive,		
			our recruitment around the outcome of this	STLC,		
			review.	SRIIC		
3.17	The RG recommends that a survey be	1, 3	The School has a list of current equipment but	CTO, HoS	Sept 2022	Jan 2023
	carried out to identify all key equipment		all staff may not be aware of how to access it.			
	in SBES, as well as items of equipment		The School will ensure the list is more visible.			
	that are required but not available. A					
	School-level strategy could then be		As stated above in 3.16 the School has recently	HoS,	Sept 2022	Sept 2027
	established to replace or purchase		established an Equipment group to develop a	School		
	equipment, e.g. with applications for		plan for replacing old and purchasing new	Executive,		
	equipment grants or the compulsory		equipment. This group has been provided with	SRIIC		
	inclusion of smaller pieces of equipment		a budget from research overheads and has			
	on all grant applications submitted by		recently put out its first call for applications for			
	SBES. This would allow the School to		equipment. Income from research overheads			
	build a complete, state-of-the-art set of		allowing, it is hoped that this approach will go			
	equipment over a three-to-five-year		some way to establishing state-of-the-art set			
	period.		of equipment over a three-to-five-year period.			

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			However, depending on the needs of staff and the fact that 9 new staff will have joined the School between Jan 2022 and Mar 2023 and the School will hopefully be located in a new building (Phase III of Science) with associated equipment needs, research overheads alone will probably not be sufficient to cover the cost of equipment needed. As stated in 2.17, grant applications will be expected to include funding for equipment and/or research administration			
3.18	The technician pool should be increased in size to expand the collective skill set and alleviate workload pressure on individuals. New academic staff should be made aware that there are limitations to the technician support they can appropriately request.	1,2	The School plans to recruit a technical officer and appoint a CTOII in 2023. We will review technical support needs in the light of the appointment of so many new staff and plan recruitment around the outcome of this review. Any further expansion of the technical pool is dependent on income but will be considered a priority by the School.	HoS, School Executive	Nov 2022	Dec 2024

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff / Group)	Start Date	Planned Completion Date
3.19	Existing School practice around induction should be further developed and formalised for all new academic, research, technical, and administrative staff. The induction process should be conducted by the Head of School or designated manager in line with the UCD Probation Periods Policy.	1	The School will review its current induction practice and document and develop it further to ensure a formal process conducted by the Head of School or designated manager exists in line with the UCD Probation Periods Policy for all staff in the School.	HoS, CTO and School EDI committe e	Sept 2022	Jan 2024

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staf f/ Group)	Start Date	Planned Completion Date
4.14	The Review Group recommends that the School explores better ways of hearing the student voice. We believe this is an issue of visibility and would encourage the School to identify ways in which class representatives are more visible and easier to contact, probably through digital means. In addition, we would like the undergraduate body to be represented on appropriate School committees (cf. 2.14).	1	A student representative will be included on the Teaching & Learning Committee and other appropriate committees.	SHTL & HoS	September 2022	September 2023
4.15	Degree outcomes have improved, notably during the COVID-19 pandemic, but it is unclear if the School fully understands the basis for the higher degree classifications. The balance of assessment changed during the pandemic from examinations in favour of coursework. The School should reflect on whether such changed weightings should continue in the future, and the likely impact on programme outcomes (see 7.19, on authentic assessment).	1	The School is undertaking a review of assessment types, including the balance between exams and assignments (taking on board learning from the pandemic practices), across all undergraduate modules to develop an assessment strategy.	SHTL	September 2022	January 2024

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staf f/ Group)	Start Date	Planned Completion Date
4.16	Since the University Curriculum Review in 2016, the School has seen a significant change in its module portfolio (see 4.5, re: development of new modules). The diversity and number of modules offered, particularly at Level 4, is demanding on staff time. Consideration should be given to reducing the number of modules, whilst enhancing quality, to provide an adequate and attractive portfolio that can facilitate the strategy for future growth in student numbers.	1	The School has already commenced a full review of module curricula. Once the data have been collated, the module portfolio will be reviewed in consultation with Heads of subject and Directors of taught graduate programmes. This will enable us to identify where, and if module numbers can be reduced and what gaps need to be addressed within existing modules to ensure that the teaching and learning activities, assessments, and content of the suite of modules in each programme are aligned with programme outcomes, and at the same time provide an appropriate and attractive portfolio. It should be noted that the diversity and	SHTL STLC	September 2022	December 2023
			number of Level 4 modules available provides our students the opportunity to select topics that fit their interests and career goals, as well as providing a more interactive, small group, learning environment. The diversity of Level 4 modules specifically serves the BBNL programme as a key aspect of this programme's success is the module choice.			

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			The BBNL programme, and its diversity, is critical for the financial stability of the School.			
			The workload associated with Level 4 modules is not high compared to modules at Level 1, 2 or 3 and staff typically enjoy teaching them as they focus on their research interests. There is the concern that reducing the number of modules may negatively impact the student experience, without any significant reduction in staff workload. Balancing a lower number of Level 4 modules with quality enhancement and ensuring the portfolio remains attractive will be challenging and may not be possible.			
4.17	Assessment maps suggest that many programme learning outcomes are being assessed up to six times. The RG recommends that the School reevaluates its assessment strategy, focusing on programme- rather than module-level requirements.	1	As noted under 4.15 the School is undertaking a review of assessment types across all undergraduate and taught graduate modules to develop an assessment strategy that identifies where the number of assessment points can be reduced and that is cognisant of programme rather than module or lecturer-level requirements.	STLC	Sept 2022	Jan 2024

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staf f/ Group)	Start Date	Planned Completion Date
4.18	Undergraduate students highlighted the need for improved information and advice on entry to the common entry DN200 Science programme about potential constraints on module and pathway choice in Stages 3 and 4, as a consequence of module choice in Stages 1 and 2. We recommend the School reviews its advice, and through student consultation, develops better guidance for future student cohorts.	1,2	Recruitment to DN200 is managed at College of Science level. We will continue to work with the College of Science to ensure that students are well informed on module and pathway choices starting at Stage 1. An online tool (https://major-pathways.ucd.ie) has recently been produced to help students see the module requirements for all programmes. We regularly review the advice and information we provide at student Advisory Sessions, on the School website and other resources. To facilitate better engagement with students we will involve postgraduate students in advisory sessions. We will also survey graduates for their feedback on the advice given.	CoS, STLC	Sept 2022	Sept 2027

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5.9	SBES has indicated that it will retain the elements of online delivery that worked well during the pandemic, but there is no apparent trajectory for moving further into a digital delivery model. As we emerge from the pandemic, we encourage SBES to consider a holistic strategy for teaching and learning: to consider the need for increased student numbers, the balance of in-person and online provision, consortial provision with other schools, and the balance of on- and off-shore delivery to enable attractive programmes to be delivered in an effective and efficient manner, whilst enabling staff to deliver on their research ambitions.	1, 2	We will engage in the University Review of Online Assessment. The output of this exercise will help inform the School's assessment strategy (4.17). We will work with the College and University Teaching & Learning Committees and the educational technologist to enhance the School's teaching and learning strategy, cognisant of the need to achieve a balance between online and inperson teaching. Options to include active learning approaches in on-campus sessions will be considered. A session on active learning was given by Prof. Prem Kumar, an advocate for active learning in the University of Birmingham, at the SBES Teaching & Learning Away Day in June 2022. We will work with the CoS VPTL, UCD T&L and educational technologist to continue to develop and enhance our online taught graduate programmes.	STLC, UCD Centre for T&L, CoS, VPTL	Sept 2022	Sept 20 27

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
The RG recommends that SBES undertake a review to better understand the causes behind the differential incompletion rates between male and female PhD students and then develop a strategy to support all PhD students to complete their studies in a timely and successful manner.	The RG recommends that SBES	1	We are developing a student survey with	VPTL	January	December
		We aim to survey all PhD students twice - at stage transfer (12-18 months) and completion (4 years). We will also instigate a series of regular postgraduate workshops with invited guests, where students will decide the precise topics				
			(e.g. career advice), to foster a greater sense of community. Finally, we will continue to monitor the incompletion rates over the next 3 years and endeavour to compare these to those in other schools across the College of Science.			

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
6.12	All academic staff should aim to secure external funding for research. This is the funding that makes research projects happen and provides extra resources for explorative research. The quality of research should also follow an upward trajectory.	1, 2	90% of SBES faculty have secured external funding for research in the last 3 years. The School will continue to support staff in securing external funding through local initiatives (e.g. school equipment fund, a school sabbatical policy, researcher's away day) and through engagement with research institutes such as UCD Earth Institute and UCD Conway Institute.	SHRII, SRIIC, UCD Research	Sept 2022	ongoing
			The School plans to recruit local research administrative support and will use the workload model and sabbatical policy to encourage staff to lead more strategic applications that involve more staff in the School.	HoS	Jan 2023	Jan 2025

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
6.13	The RG recommend that (a) the Research Committee establish a system to identify areas of critical mass where SBES scientists could form a small number of competitive clusters for strategic grant applications. The clusters in crops and plant science prove this can deliver considerable competitive funds to the School. (b) The Research Committee should nominate a leader for these potential research clusters, and funds should be allocated, or acquired via UCD Seed Funding, to buy out the lead individual's teaching and administration for a defined period, which would be used to (c) develop a research strategy to produce a series of strategic grant applications.	1, 2	We agree that developing strategic grant applications would be a benefit to SBES researchers. The UCD Earth Institute has an existing Strategic Priorities support mechanism that has had some success (https://www.ucd.ie/earth/whatwedo/strategicpriorities/). The RII committee will put out a call to SBES researchers asking for strategic cluster proposals, each requiring a named lead researcher. The school's researcher's away day will be used to develop a school wide consensus on priority clusters and possible school supports. The RII committee will draw up proposals for school support of a strategic cluster and the selected cluster proposal. This will be presented at the school Exec for approval. If this approach is successful (evidence of winning research funding) it will form the basis of an ongoing process.	SRIIC, UCD Research, CoS	Nov 2022	Nov 2025

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
6.14	The RG recommends that the University should continue to increase the proportion of grant overhead that returns to the School. We hope this can return to pre-pandemic levels as soon as possible.	2, 3	We welcome this recommendation and will bring to the attention of university management. The school has several initiatives (e.g. equipment fund, graduate support scheme, support for open access publication) that use the overheads to support SBES researchers. Increasing the proportion of grant overheads that returns to the school will allow school initiatives to be grown.	UCD, CoS	Jan 2023	Jan 2026
6.15	There is a need for the School to develop an implicit innovation/impact/commercialization strategy along with supporting processes to deliver the strategy. This should align with a College strategy.	1, 2	The school will work with UCD Nova, SBES researchers with commercialisation experience and alumni to develop an innovation/impact/commercialization strategy that aligns with the UCD "Shaping the Future" strategy.	SRIIC, UCD Nova, UCD Research, CoS	Jan 2023	Jan 2025

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
6.16	PhD students receive different stipends depending on their funding source. In the interest of equity, the RG feels it would be desirable for the School to top up	1	The school has increased the stipend it pays to School funded PhDs to €19000 per year, which is broadly in line with other PhD funding.	HoS	Sept 2022	Sept 2022
	lower stipends to ensure all students receive the same.		The School does not have sufficient budget nor does it feel it appropriate to top up stipends from external agencies such as DAFM and the China Scholarship but will advocate strongly for these agencies to increase the stipends			

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
7.12	The RG recommends that the School	1, 2	The School will conduct an audit of academic	HoS	Jan	Jan 2024
	conducts an audit of academic staff who		staff who have achieved a teaching qualification.		2023	
	have achieved a teaching qualification		Their success will be highlighted to the School via			
	and works with this group of people to		the monthly update.			
	facilitate engagement of staff in thinking					
	more about quality enhancement and		The School will work with the College VPTL and	STLC, VPTL	Jan	June
	innovation, with the aim of generating a		the College of Science new educational		2023	2024
	community of practice focused on		technologist to develop a community that will			
	scholarship of teaching and learning.		promote engagement of staff with quality			
			enhancement and innovation and focused on			
			scholarship of teaching and learning.			
			Publications on teaching and learning will be	HoS	Oct	Oct 2022
			promoted via the monthly update.		2022	
7.13	SBES has a Teaching and Learning Away	1, 2	This is already being done at UCD level led by	STLC, UCD	Sept	Sept 2025
	Day, yet there appears to be limited		UCD Centre for T&L (e.g UCD Teaching and	Centre for T&L	2023	
	opportunities to identify innovation, and		Learning Community). We will learn from broad			
	to highlight and share this information		University engagement to avoid duplication of			
	amongst staff. This could be remedied		effort and will highlight to staff what's available			
	by having an online space for staff to		and encourage engagement with existing			
	post working papers, blogs, and videos		resources (e.g.			
	about their teaching and learning		https://www.ucd.ie/teaching/showcase/)			
	development activities.					

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
7.14	Further sharing of good practice could	1, 2	Once the School has completed the curriculum	HoS, STLC,	Jan	Jan
	happen by introducing peer observation		content project and assessment review (4.15),	UCD Centre	2024	2025
	of teaching and a peer-review system for		information will be shared with staff delivering	for T&L		
	module structure and content.		the various degree programmes. Module			
			content and structure will be reviewed at			
			programme level and across programmes.			
			A system will be set up whereby interested staff	HoS, STLC,	Jan	Ongoing
			can avail of an in-house peer-review of their	UCD Centre	2023	
			teaching but this will be on a voluntary basis.	for T&L		
7.15	The graduate student voice is already	1	The School will include undergraduate	HoS	Sept	Sept 2023
	heard at School and College committees,		representatives on appropriate committees.		2022	
	and we would encourage SBES to					
	consider the introduction of					
	undergraduate student representation					
	on such committees as well (cf. 2.14).					
7.16	The School should reflect on the positive	1	As mentioned in action 5.9, we will continue to	HoS, STLC	Jan	Jan 2025
	contribution to student outcomes from		enhance our existing online programme and		2023	
	the move to online delivery during the		consider the possibility of some of them being			
	pandemic and develop a strategy for		offered as microcredentials. This may have			
	how to benefit from online or hybrid		resource implications in terms of recruitment of			
	delivery in the future, in particular to		additional teaching staff.			
	assess if the academic staff have the					
	required skills that would enable new					
	distance learning programmes to be					

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
	developed should the need or opportunity arise. This could offer a means of enabling student growth without requiring additional teaching spaces.					
7.17	The RG supports the School's suggestion that they will advocate for an increase in the level of support (advice and training) for staff at College and University level for online delivery, e.g. additional educational technologists as well as an adequate supply of equipment.	1, 2, 3	The School supports this recommendation and welcomes the recent appointment of an educational technologist by the College of Science and would welcome further expansion of this area at college level.	CoS	Sept 2022	Nov 2022
7.18	The RG found varying levels of background expertise and training of teaching assistants in some modules. This should be addressed by requiring a timely and appropriate induction to the materials to be taught, and if possible, have greater academic input in the assignment of teaching assistants to modules, to better match their disciplinary knowledge to the subject to be taught.	1, 3	The School has introduced new guidelines for practical classes which clearly indicate the roles and responsibilities of all cohorts (academic and technical staff and teaching assistants) involved in delivering these classes. We will review these after a year. While it may be possible to more closely align teaching assistant knowledge with subject matter for stage 3 and 4 modules, the large level 1 modules present significant operational issues for this. We will endeavour to ideally match TAs wherever possible, subject to the constraints presented by large classes and complex timetabling.	HoS	Aug 2022	Aug 2023

RG Report Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
		1	We have hired a Teaching Fellow who will be reviewing large stage 1 and stage 2 labs. We will review the need for this post after 2 years	HoS	Nov 2022	Jan 2025
		1	The School will also have to plan for additional capacity for statistics and data analysis modules as the numbers we will need to accommodate will increase significantly, soon.			
			Increased student numbers in all our programmes requires increased numbers of research demonstrators. The School is dependent on research funded and a small number of School funded demonstrators to support lab and field based classes. Ideally the School would fund additional demonstrators but this cannot be supported from the School budget			

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
7.19	Feedback from employers, in particular	1	We will work with UCD Teaching & Learning and	SHTL & VPTL	Jan	Jan
	those hosting work placements,		review our assessment strategy. We will analyse		2023	2025
	suggests that while the subject specific		our current methods of assessing practical			
	knowledge of SBES students is excellent,		skills, field-based skills, group work, writing and			
	they sometimes lack the skills to apply		presentation skills. As our graduates enter a			
	this in a workplace setting. We		broad range of industries, in connection with			
	recommend that SBES reflects on the		this we will also establish an industry advisory			
	extent to which the use of examinations		panel for the School and ask them for advice			
	can be replaced by authentic		regarding which applied skills are missing. This			
	assessments that test students on the		"skills gap analysis" input will identify more			
	application of their knowledge.		authentic assessments that allow students to be			
			better tested in the application of their			
			knowledge. In addition, we will further expand			
			our students' engagement with the SCI30080			
			Internship module currently offered by UCD.			
			Finally, the process of seeking future			
			accreditation for some programmes that we are			
			undertaking will also naturally help us give			
			more authentic, applied skills to our students.			

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
8.9	The RG recommends the development of a School strategy for international partnerships and global impact, under the leadership of a School Head of Global Engagement or International	1,2	The School has appointed a School Head of Global Engagement (SHGE) who is a member of the School Executive and represents the School on the College Global Engagement Group.	HoS	June 2022	June 2022
	Study (see 2.14) to ensure that new collaborations focus not just on revenue but equally on the benefits for staff research and the UCD student experience.		We will review the School's strategy in association with the College GEG.	HoS, SHEG, CoS GEG	Oct 2022	Aug 2023
8.10	The School strategy for the next phase of international educational collaboration should also focus on sustainable student growth. In particular, SBES should reflect on its strategy for how to exploit its experience in online delivery to develop new distance learning programmes (cf. 7.16).	1, 2, 3	Student recruitment is managed at College of Science and UCD Global level. The School will work with the College of Science and University Global Engagement teams to identify an appropriate strategy for sustainable student growth.	HoS, STLC, CoS, UCD GEG	Jan 2023	Jan 2024

9.COLLAB	ABORATIVE EDUCATIONAL PROVISION					
RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
9.6	Continue the strong working relationships with support services and strengthen the level of communications between UCD Estate Services and the School in relation to the decant and refurbishment of the School's space.	1, 2	The School will continue our excellent working relationships with support services and strengthen these by inviting them to School meetings where appropriate and engaging in the Green campus and UCD Sustainable research initiative.	All	Sept 2022	Sept 2027
9.7	The RG recommends that SBES appoints a School Research Administrator to assist PIs in pre- and post-award grant management.	1	The School plans to appoint a School Research Administrator to assist PIs in pre- and post-award grant management. This post will be 50% funded from research overheads	HoS	Jan 2023	Jan 2024

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
10.8	There is a need for a concise strategy for external relations and a plan to deliver that strategy. It should be consistent with the College and University strategy.	1.2	The School has recently appointed an Alumni representative who is working with UCD Alumni to develop and grow a strategy for external relations.	SBES Alumni Rep, HoS, CoS	Sept 2022	Jan 2024
10.9	To give students the maximum benefit from the experience, SBES might consider how to help both graduate and undergraduate students prepare for internships. The School could also be more proactive in advertising external internships to students.	1,2	Internships for undergraduates and taught graduates are organised through the College of Science Programme Internship Managers. The School will work with them to advertise internship opportunities to the students at a local level and prepare them for the internship experience.	MSc Programme Directors, SHTL, College of Science Internship Managers	Sept 2022	Ongoing
			The School will run a short information session for students going on internships before they commence		Jan 2023	July 2023
10.10	The School might also consider engaging with a number of internship-providers to identify their needs. This would help manage the expectations of both external providers and student interns.	1, 2	With the exception of the MSc Global Change, internships for undergraduates and taught graduates are organised through the College of Science (CoS) Programme Internship Managers. Directors of taught graduate programmes and Heads of Subject (where appropriate) will work with the CoS internship managers to identify internship-providers' needs and manage their expectations and those of the students.	Heads of Subject, MSc Programme Directors, College of Science Internship Managers	Jan 2023	Sept 2026

RG Report (Paragraph Reference)	RG Recommendation	Category (See above list)	Action Taken/Planned	Lead (E.g. Name of Faculty/Staff/ Group)	Start Date	Planned Completion Date
			Post-internship questionnaires are circulated to Global Change MSc students to help identify	MSc Global	Already	Ongoing
			whether the skill set of the student matched with	Change	commenc	Oligoling
			what the host required and identify where improvements can be made	Director	ed	
10.11	UCD has a long tradition of engaging with alumni. A defined and coherent strategy for how SBES might contribute	1,2	The School has recently appointed an Alumni representative who is working with UCD Alumni to engage more effectively with alumni. An	School Alumni rep, UCD Alumni Office	Jan 2022	Ongoing
	to this would be beneficial.		administrative officer has also been appointed to support this activity.			
			The School will generate of database of alumni of the degrees within science delivered by School.		May 2022	Jan 2024

3. Prioritised Resource Requirements

3. Prioritised Resource Requirements

This section should only contain a list, prioritised by the Quality Improvement Committee, of recommendations outlined in the Review Group Report, which require additional resources. The planned action to address each recommendation with an estimate of the cost involved should also be included:

Additional space as we have exceeded planned targets for 2025 in terms of student numbers and academic staff Increased demonstrators to support training of undergraduate laboratory and field-based classes Additional academic staff to support increased student numbers

Appropriate Career pathway for Teaching Fellows

Additional educational technical support at School / College level

No	Recommendation	Plan	Estimated cost
3.16	Infrastructure is always ageing and needs constant replacement.	SBES will work with the College Finance Officer and	€500,000
	There needs to be a strategy for developing the best scientific	the Science Phase 3 Project Team to develop a	
	infrastructure that is worthy of the people who work in the School,	strategy for funding of infrastructure. It is	
	and for resourcing technical support for the maintenance of pieces	particularly important to ensure that the	
	of equipment that require a dedicated technician.	infrastructure in the new building is appropriate	
		and it is likely that some existing key pieces of	
		equipment may not survive the decant process, It	
		will not be possible to fund this from the School	
		budget alone	
3.17	The RG recommends that a survey be carried out to identify all key	While the School will use research overheads and	Cost dependent on outcome of
	equipment in SBES, as well as items of equipment that are required	reserves to develop a School level strategy to build	survey
	but not available. A School-level strategy could then be established	a complete, state-of-the-art set of equipment over	
	to replace or purchase equipment, e.g. with applications for	a three-to-five-year period, School funds alone will	
	equipment grants or the compulsory inclusion of smaller pieces of	not cover the cost of this and we will need support	
	equipment on all grant applications submitted by SBES. This would	from the College of Science and/or UCD in	

	allow the School to build a complete, state-of-the-art set of	developing a complete, state-of-the-art set of	
	equipment over a three-to-five-year period.	equipment	
6.14	The RG recommends that the University should continue to	The school has several initiatives (e.g. equipment	Increase to 40%
	increase the proportion of grant overhead that returns to the	fund, graduate support scheme, support for open	
	School. We hope this can return to pre-pandemic levels as soon as	access publication) that use the overheads to	
	possible.	support SBES researchers. Increasing the	
		proportion of grant overheads that returns to the	
		school will allow school initiatives to be grown	
7.17	The RG supports the School's suggestion that they will advocate	The School welcomes the recent appointment of	~€50K per annum to employ an
	for an increase in the level of support (advice and training) for staff	an educational technologist by the College of	educational technologist
	at College and University level for online delivery, e.g. additional	Science and would welcome further expansion of	
	educational technologists as well as an adequate supply of equipment.	this area at college level.	
7.18	The RG found varying levels of background expertise and training	Increased student numbers in all our programmes	Funding of at least 4 additional
	of teaching assistants in some modules. This should be addressed	requires increased numbers of research	demonstrators at a cost of
	by requiring a timely and appropriate induction to the materials to	demonstrators. The School is dependent on	€19,000 per annum plus fees
	be taught, and if possible, have greater academic input in the	research funded and a small number of School	
	assignment of teaching assistants to modules, to better match	funded demonstrators to support lab and field	
	their disciplinary knowledge to the subject to be taught.	based classes. Ideally the School would fund	
		additional demonstrators but this cannot be	
		supported from the School budget	
8.10	The School strategy for the next phase of international educational	Development of new distance learning	~€50K per annum for admin
	collaboration should also focus on sustainable student growth. In	programmes comes with a cost in terms of	support
	particular, SBES should reflect on its strategy for how to exploit its	administrative and technology support	
	experience in online delivery to develop new distance learning		
	programmes (cf. 7.16).		

Note: The Quality Improvement Plan should be used to inform Unit and College level academic, support service and resource planning activities.