REC: 7.12.17 H/02/16/02

REC 17/18 2 D

The University of Edinburgh

Senatus Researcher Experience Committee

7 December 2017

Personal and Professional Development Record Task Group:

Recording PGR students' personal and professional development

Executive Summary

This paper sets out the case for a personal and professional development record for post-graduate students. The task group assessed the current provision of equivalent documents within the sector, and mapped this against the desire for such a document amongst employers and students. Consideration was given to: the purpose of the document (summative or formative); the scope (including verification) of the information included; the administrative burden (on students, supervisors and administrative staff); and, appropriate platforms for hosting the document (with a view to future-proofing). The group recommended adoption of an achievement record for post-graduate research students, to be called a Post-Graduate Research Higher Education Achievement Record (PGR HEAR) for consistency with similar documents for undergraduate (UG HEAR) and Post-Graduate Taught (PGT HEAR) students. This document will be mainly summative but, by integration within the Thesis Committee/ Annual Review process, will provide a stimulus for formative planning. It is essential that the information included in the PGR HEAR can be verified by the University of Edinburgh, that recording the information does not overburden administrators, and that an appropriate, future-proofed platform is used to host the information.

How does this align with the University / Committee's strategic plans and priorities?

This paper falls under the University's Excellence in Doctoral Education and Career Development Programme and aligns with the Strategic Objective of Leadership in Research. It also aligns with the Committee priority of discussing options for taking forward the postgraduate research enhancement work.

Action requested

For discussion of recommendations and to agree a plan proposed next steps. It is recommended that the REC set up a working group to take forward implementation of the PG HEAR.

How will any action agreed be implemented and communicated?

The paper contains proposals for adopting and implementing introduction of a Personal and Professional Development Record for Post Graduate students (PGR HEAR). The implementation of the proposed actions will be considered as part of the planned PGR lifecycle workstream within the Student Administration and Support strand of Service Excellence.

Resource / Risk / Compliance

1. Resource implications (including staffing)

The implementation of the proposed PGR HEAR will have significant systems development implications, as well as potential ongoing resource implications both

Student Systems and Administration and for Schools. The project lead will encourage Service Excellence to consider these resource implications when evaluating options for implementation.

2. Risk assessment

No major risks identified.

3. Equality and Diversity

Equality impact assessments will be undertaken as necessary.

4. Freedom of information

The paper is **open**

Key words

PGR HEAR, students, employers, quality assurance, IT Platform.

Originator of the paper

Dr Patrick Hadoke, Director of PGS/ ECR Experience (CMVM)

Excellence in Doctoral Education and Career Development Programme PERSONAL AND PROFESSIONAL DEVELOPMENT RECORD TASK GROUP Recording PGR students' personal and professional development.

Introduction & Background

This Task Group was established to address one of the three work streams proposed in the Excellence in Doctoral Research and Career Development Programme (REC Paper 16/17 3A). Its remit was to investigate the potential for introducing a Personal and Professional Record for Post-Graduate Students, similar to the Higher Education Achievement Record (HEAR) currently in place for Undergraduate and Post-graduate Taught students. It was agreed that a report would be provided for discussion at the meeting of REC in November 2017. Since this meeting was cancelled the paper was completed for the REC in December 2017.

Recommendations

The task group recommended that a Personal and Professional Record for Post-Graduate Research Students should be introduced and should be called a Post-graduate Research Higher Education Achievement Award (PG HEAR).

A list of "Essential" and "Desirable" information to be included in the PGR HEAR was produced (Appendix 1),

Table One: Summary of Recommendations made by the Task Group

	Recommendation	Responsibility	Next Steps
1	Enable the title of the PhD to be printed on	IS/ Academic Services?	This should be fairly
	the degree certificate.		straight-forward.
2	The university of Edinburgh should develop a PGR HEAR which is summative but linked to formative elements (Annual Review/Thesis Committee paperwork) and validated by the institution.	Task Group Convenor/ Head of Doctoral Education IAD / Head of Academic Services	Conclusions of the task group to be shared with Service Excellence. Updates to be shared with REC.
3	Strong consideration should be given to the use of existing platforms	Task Group Convenor/ Head of Doctoral Education IAD / Head of Academic Services	Conclusions of the task group to be shared with Service Excellence. Updates to be shared with REC.
4	Processes should be developed to ensure that all PhD students are completing a record of training and skills development and discussing this at annual review. The format for this could vary, with guidance to be written for schools.	Colleges and IAD	Guidance available for start of academic year 2018/19
5	Opportunities should be identified to incorporate reflection on the recording of training and skills development, and an awareness of the importance of the PGR HEAR (if developed).	IAD/ Careers Service/ Schools and Colleges	Ongoing

Task Group Members

Patrick Hadoke (Convenor)
Pippa Ward (Administrator)

Fiona Philippi (Head of Doctoral Education, IAD)

Gavin McCabe (Employability Consultant)
Tom Ward (Director of Academic Services)

Emily Gribbin (Head of Student Administration, School of Health in Social Science)
Konstantin Kamenev (Chair of Extreme Conditions Engineering, School of Engineering)

Gabriela Hajduk (PG Student Representative) Katherine Geoghehan (PG Student Representative)

Principles and Objectives

The Task Group defined a set of Principles and Objectives to underpin its work.

Principles

For a PGR HEAR to be beneficial it must:

- Principle 1. Provide a useful resource to help the student with Provide a useful resource to help the student with their career development (academic or nonacademic).
- **Principle 2.** Produce clear, concise, user friendly, down-loadable paperwork (certificate/ transcripts). This document should be comprehensible to outside readers, including employers, without extra information needed to allow interpretation.
- **Principle 3.** Provide a meaningful level of quality assurance. It is necessary to set a high benchmark: Registration for a course is not sufficient to assure either attendance or meaningful learning.
- **Principle 4.** Provide an opportunity for formative development. The PGR HEAR will be a purely summative document but will include supplementary guidance indicating how the student may use it, ideally in combination with Thesis Committee/ Annual Review reports, for formative development.
- **Principle 5.** Provide an overview of the student's activities during the period of their studies. This can include curricular and co-curricular activities provided they can be verified.
- **Principle 6.** Be future-proofed to avoid obsolescence.
- **Principle 7.** Not require excessive IS support or admin time (by the student, supervisor or the support team). For example, using automatic downloading of information into the transcript.
- **Principle 8.** If possible, use a reporting format (e.g. PURE) that will remain constant for those remaining in higher education.

Objectives

In order to address the principles outlined, the task group should:

- Objective 1. Identify student needs/ requirements/ demands for a transcript
- Objective 2. Clarify the intended use of the transcript.

- **Objective 3.** Determine the appropriate content of the transcript and suggest sign-off procedures for quality assurance.
- *Objective 4.* Identify current best practice in the sector.
- *Objective 5.* Determine requirements from employers.
- *Objective 6.* Consult with IT support for best use of platforms.
- *Objective 7.* Consult with Administrative teams on best approach to information management.
- Objective 8. Produce a report for consideration by REC in December 2017.

Methodology & Stakeholder Groups

The Task Group assessed current best practice in the sector. Information was obtained from a number of stakeholder groups (below) and examples of PG achievement certificate/reports were compared and evaluated. Feedback on student requirements for a PGR HEAR (**Appendix 2**) was obtained from focus groups (arranged and co-ordinated by FP) and from PG students on the Task Group.

Within the Task Group, discussions also covered employer requirement/ appetite for a PGR HEAR, issues of quality assurance for the content of such a report, and integration with the Edinburgh Award.

The Task Group obtained feedback from:

- (1) Higher education institutions in the UK, Europe & New Zealand
- (2) PGR Students (PhD; MRes)
- (3) Funding bodies and Doctoral Training Centres
- (4) Administrative teams (including Principal Investigators and the careers service)
- (5) Information Services
- (6) Employers

Current Provision at Edinburgh

Undergraduate HEAR at the University of Edinburgh. The Undergraduate HEAR at Edinburgh was introduced in response to a recommendation made by a Universities UK committee (The Burgess group) in 2007. This group proposed that the development of a HEAR would assist in modernisation of the traditional degree classification system.

The Edinburgh HEAR provides a single, comprehensive record of achievements, whilst a matriculated student at the University of Edinburgh, for all UG (except MBChB) and PGT students. It is complementary to the degree certificate and a final electronic or paper copy of the HEAR can be provided after a degree has been awarded.

Current Provision at Other Institutions

A benchmarking exercise revealed a very mixed picture and interpretation was hampered as many of the institutions misunderstood the question and reported on UG HEAR provision. A far smaller number than those indicated in the following statistics were providing, or considering, a PGR HEAR. Of 27 HE Institutions that provided feedback 12 (44%) had a HEAR

(or equivalent), whilst 15 (56%) did not. Of the latter, 5 (18%) were introducing or actively considering one, whilst 7 (26%) had no plans to introduce one. A small number of institutions issue EDS (which European students find useful) and/ or have their own system for producing limited reports. The major reasons given for not producing a HEAR were that (i) students/ employers did not want them, (ii) there are limitations to HEAR and institutional verification. Of the HEIs that did have a HEAR, or equivalent, there was a mixture in provision between paper and electronic transcripts and varied feedback on the usefulness of these. A number emphasised the heavy administrative burden caused by these reports. Several indicated no plans to extend HEAR provision to postgraduate students.

Sample PG HEARs (from the University of Edinburgh, from Universities in the rest of the UK, and from the University of Aarhus) were assessed (Appendix 3). These provided a useful benchmark but the Task Group felt that neither provided a template that could be followed for use at the University of Edinburgh; it was felt that the examples from Swansea and St Andrews were rather cumbersome and contained a considerable volume of unnecessary text. Current practice for providing a PGR HEAR/ transcript was also surveyed in the COIMBRA group (Appendix 4). The Task Group also obtained information on the provision of a transcript by the University of Auckland (New Zealand). Since only a small proportion of institutions are issuing a PGR HEAR / transcript at all, and those that do are taking different approaches, there is no 'industry standard' to follow

It was clear from these evaluations that the PG HEAR, or equivalent, had two key purposes:

- (1) To provide an accurate, holistic and complete record of the student's achievements during their study period (focussing on the researcher, rather than the thesis alone, as being the product of the degree process); and,
- (2) To promote and support self-managed continued professional development by the student.

PGR PPDR by Funding bodies, UoE CDTs/ DTCs, and other areas of the University that currently provide some form of transcript or record. Feedback from Funding Bodies, CDTs and DCTs within the University of Edinburgh was obtained to better understand expectations around personal and professional development training for PGR students and how this is recorded by Centres in Edinburgh (Appendix 5). Key findings were that there was an expectation that both careers and transferable skills training should be provided and most schools require their students to undertake a Training Needs Analysis. There were identifiable differences in the amount and type of training and the way in which this was recognised (e.g. Centre-specific training credits. There was a common feeling from the DTC contacts that it would be complex to capture the many different types of training offered in a meaningful way using a standard template.

Requirement for a PGR HEAR

Nature of the PGR HEAR. The format of the PGR HEAR was considered, with a choice between provision of either a Certificate or a Transcript. These discussions also considered the role of the PGR HEAR — whether as a *summative* record of achievement whilst a student at the

University or as a *formative* document to promote self-evaluation and continued professional development by the student.

In considering the attitude of employers (feedback from GM) it was suggested that they did not consider a summative transcript particularly beneficial, except to allow verification of factual information. It was considered that a more formative document would be much more desirable. Staff on the task group with experience in interviewing post-doctoral applicants reported that transcripts provided by candidates were usually long and contained information that was difficult to interpret in the UK context. PGR Student feedback indicated that a summative transcript would be useful as an aide memoire but that this would be limited if it provided only a partial record. Therefore, the Task Group recommends that a PGR HEAR should be a summative document that can serve as a resource for the student to utilise for job applications. However, it was also felt that a document of this type would intrinsically contain a formative component, particularly if it was used in combination with other career development processes (Thesis Committees/ Annual Review), as it would emphasise the importance of continued professional development.

Content of the PGR HEAR. A list of *essential* and *desired* information (Appendix 1) for inclusion in the PGR HEAR was generated by the Task Group. It was felt essential that the information included needed to be verifiable by the University. Verification of some content (e.g. work performed for the Edinburgh Award or IAD courses attended) should be relatively straightforward. In contrast, other information (meetings attended, presentations given) may need verification by the student's supervisor; perhaps as a component of the Thesis Committee reports (this would fit well with the formative role of the PGR HEAR). However, the Task Group considered that verification by supervisors may also present practical problems and may add an unwanted additional burden on supervisors.

Administrative implications of offering a PGR HEAR

Introduction of a PGR HEAR that includes more information than is currently held on University systems would have considerable implications for School administrative teams. Information entered directly by Schools, or by students and then validated by Schools, would require significant administrative resources. It is difficult to estimate the scale of these implications. This may be compounded by the potentially significant implications for some Schools in getting 'credit-bearing' courses into EUCLID (if they are not already there) and for Student Administration in administrating the PGR HEAR, for example inputting data on student co-curriculum activities (eg EUSA society role-holders).

IT Support/ Provision

Members of the Task Group noted that the PGR experience was being considered for Phase 2 of the Service Excellence Programme (SEP), but that a degree of prioritisation was still required. The work of the group was likely to feed into SEP discussions in due course. The group, therefore, aimed to develop a set of requirements and recommendations based on consultation with relevant stakeholders. It would be essential to ensure that anything the group consulted on was deliverable.

For a PGR HEAR to be successful it is necessary for it to:

- (1) Not require extensive extra work by the student and/ or supervisor,
- (2) Not require excessive additional work for administrative staff,
- (3) Be future proofed (i.e. be guarded against platform obsolescence),
- (4) Ideally, link with systems used for reporting/ evaluation by academic staff.

Consideration should be given to the use of existing platforms (e.g. PURE) used for generation of UG HEARs or for post-doctoral reporting/ data management.

Objectives addressed with Summaries

- Objective 1 Identify Student needs/ requirements/ demands for a transcript.
- It is clear that the direction of travel in the sector is for the development of a PGR HEAR. Current demand is mixed but expectations are increasing as HEARs are provided for UG and PGT students.
- Objective 2 Clarify the intended use of the transcript.
- It has been agreed that the transcript will be essentially summative but, by linking it
 to thesis committee/ Annual Review processes, it will provide a focus for formative
 development during the course of PGR study. Thesis committee/ Annual Review
 reports will provide more detailed information that will contextualise much of the
 information included in the PGR HEAR.
- Objective 3 Determine the appropriate content of the transcript and suggest signoff procedures for quality assurance.
- A range of essential and desirable information sets were considered for inclusion in the PGR HEAR (Appendix 1). Information included in the document must be verified by the University. In addition to the transcript, it is recommended that changes are made using current systems to enable the title of the PhD to be printed on the Degree Certificate (this should be feasible since information is entered into EUCLID after the thesis is submitted for examination). Direct confirmation of attendance/ contribution from meeting organisers (e.g. IAD) would be beneficial.
- Data Verification appears fairly straight-forward for data entered into EUCLID, and for confirming attendance at IAD-run courses and activities completed as part of the Edinburgh Award. Ensuring verification for additional activities is more challenging
- Objective 4 Identify current best practice in the sector.
- There is no current best practice model. Evaluation of transcripts used by other Universities suggests a number of approaches; it is not felt that there is a perfect model that the University of Edinburgh should adopt.
- The most desirable form of output would be a downloadable, electronic document that can be printed to produce a clear, aesthetically-pleasing document. It is not desirable for the University to produce printed transcripts other Institutions that have done this report piles of uncollected reports at the end of the academic year.
- Objective 5 Determine requirements from employers.
- The general feedback is that employers do not want detailed transcripts from applicants.
- Objective 6 Consult with IT support for best use of platforms.
- The platform used to produce the PGR HEAR should ideally use current technology to ensure ease of use, minimal administrator time, suitable down-loadable

transcripts, and future-proofing. It would be logical to align with existing platforms (EUCLID, PURE) to aid future-proofing and transferability. Identification of the optimal systems and business process solutions for the platform would need to be determined as part of the Service Excellence programme.

- <u>Objective 7</u> Consult with Administrative teams on best approach to information management.
- Production of PGR transcripts is currently seen as administratively demanding.
 Ideally a process would be devised in which the necessary information is recorded and validated automatically.
- Objective 8 Produce a report for consideration by REC in December.

Overall Recommendation

It is recommended that the University of Edinburgh proceeds with the development of a PGR HEAR. This is required to ensure that the University continues to provide sector-leading support for development of PGR students.

The PGR HEAR should cover the time that the student is matriculated at the University of Edinburgh and should only include information that can be verified by the University.

The PGR HEAR should be a summative document but should be linked to current formative processes (Thesis Committees/ Annual Review) that produce more detailed progress reports.

It will be necessary to identify a suitable platform that is future proofed and minimises the work required by the student, supervisors and administrative teams to maintain the HEAR.

In the short-term it is recommended that the project (PhD/ MSc) title is included on a student's degree certificate.

Appendices

Appendix 1: Information to be included in the PGR HEAR

Data	Need	Availability	Additional comments
Student name	Essential	Possible to	
		verify	
Date of birth	Essential	Possible to	
Name of Dogge a governded	Essential	verify	
Name of Degree awarded	Essentiai	Possible to verify	
Thesis title	Essential	Possible to	
THESIS LILE	Losertia	verify	
Period of Study	Essential	Possible to	Periods of interruption of
		verify	studies should also be
			included
Mode of study (eg on-	Desirable		Possible to verify?
campus or ODL) Mode of study (PT / FT)	Essential	Possible to	Including mayor between FT
Mode of Study (P1 / P1)	Essential	verify	Including moves between FT and PT.
Location of study / time	Essential	Possible to	Imagine some of this
spent studying outside	Loocitiai	verify	information is already
Edinburgh		10,	available, but some not?
Work placements /	Essential	Unaware	,
professional practice		what is	
undertaken as part of		already	
programme		recorded	
Scholarships awarded	Desirable	Possible to	
		verify	
Summary of research thesis	Desirable	Availability of this info?	
Subject area of study	Desirable	Complex to	But could be superseded by
	200	verify?	details of supervisory team,
			assuming this includes the
			host school(s)
Programme requirements	Desirable	Complex to verify?	
Supervisory team	Essential	Possible to	Including dates and changes
		verify	to team.
Assessors	Desirable	Possible to	Who were the examiners
		verify	
Language of instruction	Unimportant	Complex to	Will vary by supervisory team
(English)	F C . I	verify	and by location of study?
Credit-bearing courses	Essential	Possible to	
passes (with Grade and mark where relevant)		verify?	
Training undertaken –	Essential /	Complex to	Clarity whether student
centrally delivered (eg	Desirable	verify	whether 'passed' or simply
IAD, ISG)			attended

Training undertaken – locally delivered (eg Schools)	Desirable	Complex to verify	Could be part of records within Annual Review on personal development?
Publications	Essential / Desirable		Published or accepted but not yet published? By the notification of award or by graduation?
Prizes and awards	Essential	Possible to verify	Same as in HEAR for taught students
Additional information about activities during studies – include other defined co-curricula activities (eg Edinburgh Award, office-holders for EUSA activities)	Essential	Possible to verify	Use same agreed list as for the HEAR for taught students
Employment undertaken at the University during the course of studies (eg Tutor, Demonstrator, Intern etc)	Desirable / Unimportant (for this record)	Complex to verify	Possibly desirable, but superseded by personal / professional development notes for Annual Reviews. Also, restricting to employment within UoE only will give a very partial reminder for students.
Outreach Activities	Desirable	Complex to verify	E.g. Science Festival; Work Experience, Fund raising, etc.
Positions of Responsibility	Desirable	Possible to verify?	E.g. Supervising UG project students, memberships of committees (eg Post Doc groups).
Professional Memberships	Desirable	Complex to verify	

Appendix 2: PGR Focus Groups Feedback

Responses from focus groups with PhD students

In August and September 2017 two focus groups were organised by IAD with PhD students to discuss their experiences and suggestions for enhancement, with specific focus on the three work streams of the Excellence in Doctoral Education and Career Development Programme. This included discussion around personal and professional development records. A total of thirteen students attended the groups which were held in the central area and at King's Buildings. These students represented a mix of disciplines (all three Colleges represented) and stages (from a month in to 4th year).

The main conclusions on personal and professional development records were as follows:

- Students currently use a range of different ways to record their personal and professional development throughout the PhD (various forms/ Linkedin/ CVs etc.).
- The annual review forms and discussion were highlighted as a place to record and discuss personal and professional development but there is inconsistency in whether this is done.
- There was some support for a validated and official final transcript or record from the University, especially from students who are thinking of applying for positions overseas.
- There was a clear resistance to anything which would mean a greater administrative burden for supervisors as this was felt this takes away time from 'actual' supervision.

Appendix 3: Best Practice Examples

Example of Academic Statement Letter for PhD Student Health

Date

'To whom it may concern'

STUDENT XXXX

University of Edinburgh Student number: sxxxxxxx

Award: PhD

I confirm that the above named was a student at the University of Edinburgh.

XXXXXX was a full time PhD student with Clinical Psychology at the School of Health in Social Science, College of Arts, Humanities and Social Sciences. The PhD programme started on 1st September 2011 and XXXXX graduated from this programme of study in November 2016.

In addition to being awarded the PhD, XXXXXX also achieved credits in the following courses:

CLPS11033 Evidence Based Psychological Interventions	SCQF Level 11	20 credits (10 ECTS credits)	Total Hours: 200 Mark: X
CLPS11044 Critical Psychology and Child Mental Health	SCQF Level 11	20 credits (10 ECTS credits)	Total Hours: 200 Mark: X
CLPS11032 Cognitive Behavioural Therapy for Children and Young People: Theory and Practice	SCQF Level 11	20 credits (10 ECTS credits)	Total Hours: 200 Mark: X

XXXX also audited (class only) the following courses:

CLPS11037 Applied Developmental Psychopathology

PGSP11110 Analysing Qualitative Data

PGSP11208 Research Design

CLPS11031 Interpersonal Psychotherapy Adolescent

Please note that this is not an official transcript. Please do not hesitate to contact me if you require any further information.

Yours faithfully

Head of Student Administration

School of Health in Social Science

Diploma Supplement Aarhus University

THE PHD DEGREE - LIST OF ACTIVITIES

[Click here - Enter your name]

Born on [Click here - Enter date (dd.mm.yyyy.)]

DISSERTATION TITLE

[Click here - Enter the dissertation title]

[Click here - Enter subtitle if any]

SUPERVISORS

[Click here - Enter name]	[Click here - Enter position]	[Click here - Enter department/university]
[Click here - Enter name]	[Click here - Enter position]	[Click here - Enter department/university]
[Click here - Enter name]	[Click here - Enter position]	[Click here - Enter department/university]
[Click here - Enter name]	[Click here - Enter position]	[Click here - Enter department/university]

PHD COURSES

Introduction to PhD supervision for PhD students at Arts Introduction to University Teaching for PhD Students

Course no. 3

Course no. 4

Etc.

CONFERENCES

YYYY

XXX

Etc.

RESEARCH STAY(S) DOMESTIC AND ABROAD

YYYY

XXX

Etc.

STAY(S) AT COOPERATING RESEARCH INSTITUTIONS

YYYY

XXX

Etc.

TEACHING

YYYY

XXX

Etc.

DISSEMINATION (such as publications)

YYYY

XXX

Etc.

OTHER ACTIVITIES (such as departmental work)

Swansea University HEAR



CONTEXTUAL INFORMATION

This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES.

The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

Swansea University's Diploma Supplement carries the title Higher Education Achievement Report (Diploma Supplement), conforming to both UK practices and those of the bodies listed above. It is produced in a digital format. Only HEARs accessed via gradintel.com can be considered valid and verified.

1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1 Family name Example
1.2 Given name(s) Another
1.3 Date of birth (day/month/year) 03/10/1985
1.4 Student identification number or code 882298

HESA identification number 1511808822989

HUSID (HESA Unique Student Identifier) is the unique national identifying number for students registered at a UK university. It is defined by HESA, the UK's Higher Education Statistics Agency.

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Name of qualification and (if Not yet awarded applicable) title conferred

2.2 Main field(s) of study for the

qualification

Biology

2.3 Name and status of awarding

institution

Swansea University (Established in 1920 it is a publicly funded, state recognised university, governed

by Royal Charter). The power to award degrees is

regulated by law in the UK.

2.4 Name and status of institution (if different from 2.3) administering

studies (in original language)

As awarding institution

2.5 Language(s) of instruction/examination English



3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

3.1 Level of qualification Doctorate Degree mainly by Research - FHEQ 8

3.2 Official length of programme 3 years

3.3 Access requirement(s) A candidate for a Doctorate degree must hold an

initial degree of a UK university or another university approved by Senate and normally hold, or be studying for, a Master's degree of a UK university or another

university approved by Senate.

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1 Mode of study

Enrolment History and Mode of Study by Academic Year

15/16 Full-time Satisfactory. Pass Probation

16/17 Full-time

4.2 Programme requirements

The degree of Doctor of Philosophy is awarded to candidates who:

- Have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field:
- Have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
- Have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which would merit national or international refereed publication;
- Are capable of critical analysis, evaluation and synthesis of new and complex ideas;
- Can communicate with their peers, the larger scholarly community and with society in general about the
 areas of expertise;
- Can be expected to be able to promote within academic and professional contexts, intellectual, technological, social or cultural advancements.

4.3 Programme details, and the individual grades/marks/credits obtained

Programme start date 01/10/2015

Programme end date 30/09/2019

Research Study 16/17

Year	Module Code	Title Attempt Mark Gra	ade Credits	ECTS Credits
16/17	BIOM25B	Science Skills and Research Methods 0	0	0.0
0,0	750,740	TOTAL YEAR 16/17 CREDITS	.d .95	0.0



4.3.1 Status of research candidate:

Postgraduate research student

4.3.2 Thesis title:

Pathways of Introduction and Spread of Invasive Alien Species (AIS) in freshwater ecosystems.

4.3.3 Summary of research thesis:

Pathways of Introduction and Spread of Invasive Alien Species (AIS) in freshwater ecosystems.

$$f(\chi) = a_0 \sum_{n=1}^{\alpha} \left(a_n \cos \frac{n\pi \chi}{L} b_n \sin \frac{n\pi \chi}{L} c \right)$$

4.3.4 Supervisory team:

Academic Supervisor 1 - Professor C Garcia De Leaniz

Academic Supervisor 2 - Dr EL Shepard

Academic Supervisor 2 - Professor S Consuegra del Olmo

4.4 Nature of the programme

Doctoral, mainly by research.

4.5 Grading scheme and, if available, grade distribution guidance

Students are awarded a mark for each module on their performance in the various assessment exercises. The following scales were used by the academic members of staff when determining marks:

0-39% Failure 40-49% Marginal 50-59% Pass

60-69% Pass at Merit level 70-100% Pass at Distinction level

Pass mark for credit 50% (core modules must be passed at 50%).

Upon completion of the taught element of the course, the student proceeds on to the research element, consisting of the production of a research thesis. The thesis is graded as a Pass or Fail only. Students who have successfully completed both elements will have satisfied the requirements of the degree.

4.6 Overall classification of the qualification (in original language)

Qualification is not classified



5. RESEARCH ACHIEVEMENT PROFILE

5.1 Publications:

Other A.N., Student E. (2016) Pathways of Introduction and Spread of Invasive Alien Species (AIS) in freshwater ecosystems.

Another publication

5.2 Conference presentations:

Poster short talk, Aquatic Macroecology/ British Ecological Society, 30/09/2016, London

Another presentation

5.3 Supplementary experiences (for example -Industry/Mobility/fieldwork/lab work/Summer schools):

Three months in Brazil.

5.4 Research grants and awards:

Not applicable

6. PERSONAL AND PROFESSIONAL DEVELOPMENT

6.1 Professional Development & Training; Candidate's Achievements

This section contains evidence of how candidates have acquired and demonstrated knowledge, skills and personal competencies. All claims have been verified by the University.

6.1.1 Training and skills

Training events: Research Induction

Training events: Training 2

Training events: Training 3

6.1.2 Teaching experiences

BIO252 Ecological Data Analysis 33 hours

BIO228 Parasitology 2 hours

Swansea University

6.1.3 Other qualifications

Teaching Skills for Post-Graduates

Including: General Teaching Skills, Lab Demonstration and Fieldwork

6.1.4 Other awards and prizes

The student completed the Silver level Swansea Employability Award, which comprises a self assessment exercise and an employability experience.



7.2 Signature

HIGHER EDUCATION ACHIEVEMENT REPORT [RESEARCH] (Diploma Supplement)

6.2 Further information sources

Swansea University Academic Guide can be found at <u>Academic Guide</u> Swansea University Undergraduate Prospectus; Swansea University Prostgraduate Prospectus; <u>Swansea University Website</u>

7. CERTIFICATION OF THE HEAR (DIPLOMA SUPPLEMENT)

7.1 Date Not yet certified

Side of the state of the state

Adrian Novis

7.3 Capacity Director of Academic Services

7.4 Official stamp or seal



8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

Description of Higher Education in England, Wales and Northern Ireland

In England, Wales and Northern Ireland¹, higher education institutions are independent, self-governing bodies active in teaching, research and scholarship. They are established by Royal Charter or legislation and most are part-funded by government. Higher education (HE) is provided by many different types of institution. In addition to universities and university colleges, whose charters and statutes are made through the Privy Council which advises the Queen on the granting of Royal Charters and incorporation of universities, there are a number of publicly-designated and autonomous institutions within the higher education sector. Publicly funded higher education provision is available in some colleges of further education by the authority of another duly empowered institution. Teaching to prepare students for the award of higher education qualifications can be conducted in any higher education institution and in some further education colleges.

Degree awarding powers and the title 'university'

All universities and many higher education colleges have the legal power to develop their own courses and award their own degrees, as well as determine the conditions on which they are awarded. Some HE colleges and specialist institutions without these powers offer programmes, with varying extents of devolved authority, leading to the degrees of an institution which does have them. All universities in existence before 2005 have the power to award degrees on the basis of completion of taught courses and the power to award research degrees. From 2005, institutions in England and Wales that award only taught degrees ('first' and 'second cycle') and which meet certain numerical criteria, may also be permitted to use the title 'university'. Higher education institutions that award only taught degrees but which do not meet the numerical criteria may apply to use the title 'university college', although not all choose to do so. All of these institutions are subject to the same regulatory quality assurance and funding requirements as universities; and all institutions decide for themselves which students to admit and which staff to appoint. Degrees and other higher education qualifications are legally owned by the awarding institution, not by the state. The names of institutions with their own degree awarding powers ("Recognised Bodies") are available for download at: http://www.bis.gov.uk/policies/higher-education/ recognised-uk-degrees/recognised-bodies

Higher education institutions, further education colleges and other organisations able to offer courses leading to a degree of a Recognised Body are listed by the English, Welsh and Northern Irish authorities, and are known as "Listed Bodies". View the list at: http://www.bis.gov.uk/policies/higher-education/recognised-uk-degrees/listed-bodies

Qualifications

The types of qualifications awarded by higher education institutions at sub-degree and undergraduate (first cycle) and postgraduate level (second and third cycles) are described in the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (FHEQ). This also includes qualification descriptors that were developed with the HE sector by the Quality Assurance Agency for Higher Education (QAA established in 1997 as an independent UK-wide body to monitor the standard of higher education provision - www.gaa.ac.uk). The FHEQ was self-certified as compatible with the Framework for Qualifications of the European Higher Education Area, the qualifications framework adopted as part of the Bologna Process, in February 2009. Foundation degrees, designed to create intermediate awards strongly oriented towards specific employment opportunities, were introduced in 2001. In terms of the European Higher Education Area they are "short cycle" qualifications within the first cycle. The FHEQ is one component of the Credit and Qualifications Framework for Wales (CQFW). The Qualifications and Curriculum Authority (QCA), the Department for Children, Education, Lifelong Learning and Skills, Wales (DCELLS) and the Council for Curriculum Examination and Assessment, Northern Ireland (CCEA) have established the Qualifications and Credit Framework (to replace, in time, the National Qualifications Framework (NQF)). These authorities regulate

a number of professional, statutory and other awarding bodies which control VET and general qualifications at all levels. The QCF is also incorporated into the CQFW. There is a close association between the levels of the FHEQ and the NQF (as shown overleaf), and other frameworks of the UK and Ireland (see 'Qualifications can cross Boundaries' http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/qualifications-can-cross-boundaries.aspx

Quality Assurance

Academic standards are established and maintained by higher education institutions themselves using an extensive and sophisticated range of shared quality assurance approaches and structures. Standards and quality in institutions are underpinned by the universal use of external examiners, a standard set of indicators and other reports, by the activities of the QAA, and in professional areas by relevant professional, statutory and regulatory bodies. This ensures that institutions meet national expectations described in the FHEQ: subject benchmark statements, the Code of Practice and programme specifications. QAA conducts peer-review based audits and reviews of higher education institutions with the opportunity for subject-based review as the need arises. The accuracy and adequacy of quality-related information published by the higher education institutions is also reviewed. QAA also reviews publicly funded higher education provision in further education colleges.

Credit System

Most higher education institutions in England and Northern Ireland belong to one of several credit consortia and some operate local credit accumulation and transfer systems for students moving between programmes and/or institutions. A framework of national guidelines, the Higher Education Credit Framework for England, was launched in 2008. Credit is also an integral part of the CQFW and the QCF. It may be possible for credit awarded in one framework to be recognised by education providers whose qualifications sit within a different framework. HE credit systems in use in England, Wales and Northern Ireland are compatible with the European Credit Transfer System (ECTS) for accumulation and transfers within the European Higher Education Area, and are used to recognise learning gained by students in institutions elsewhere in Europe.

Admissions

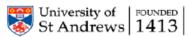
The most common qualification for entry to higher education is the General Certificate of Education at 'Advanced' (A) level. Other appropriate NQF level 3 qualifications and the kite-marked Access to HE Diploma may also provide entry to HE. Level 3 qualifications in the CQFW, including the Welsh Baccalaureate, also provide entry, as do Scottish Highers, Advanced Highers or qualifications at the same levels of the Scottish Credit and Qualifications Framework. Part-time and mature students may enter HE with these qualifications or alternatives with evidenced equivalent prior formal and/or experiential learning. Institutions will admit students whom they believe to have the potential to complete their programmes successfully.

¹ The UK has a system of devolved government, including for higher education, to Scotland, to Wales and to Northern Ireland. This description is approved by the High Level Policy Forum which includes representatives of the Department for Business, Innovation and Skills, the Scotlish Government, the Welsh Assembly Government, the Higher Education Funding Councils for England, Scotland and Wales, the Quality Assurance Agency (QAA), Universities UK (UUK), GuildHE and the National Recognition Information Centre for the UK (UK NARIC)

Diagram of higher education qualification levels in England, Wales and Northern Ireland

Framework for Higher Education Qualifications (F	HEQ) ⁵	FQ-	Credit		Progression for selection of students	National Qualifications Framework for Engl	and,
		EHEA			(FHEQ levels)	Wales and Northern Ireland ⁶	
Typical Qualifications	Level	cycle	Typical UK	Typical ECTS credit ranges3		Typical Qualifications	Level
Doctoral Degrees (eg PhD, DPhil, EdD)	8	3 rd cycle	Typically not credit rated1	Typically not credit rated	↑ 8	Vocational Qualifications Level 8	8
Masters Degrees Integrated Masters Degrees Postgraduate Diplomas Postgraduate Certificate of Education Postgraduate Certificates	7	2 nd cycle	180	60-1202	7	Fellowships NVQ Level 5 Vocational Qualifications Level 7	7
Bachelors Degrees with Honours Bachelors Degrees Professional Graduate Certificate in Education Graduate Diplomas Graduate Certificates	6	1 ^{si} cycle	360	180-240		Vocational Qualifications Level 6	6
Foundation Degrees Diplomas of Higher Education Higher National Diplomas	5	Short cycle	240	120	5	NVQ Level 4 Higher National Diplomas (HND) Higher National Certificates (HNC) Vocational Qualifications Level 5	5
Higher National Certificates Certificates of Higher Education	4		120		4	Vocational Qualifications Level 4	4
Entry to HE via equ	ivalent expo	eriential or pri	or learning			National Vocational Qualification (NVQ) Level 3	3
¹ PhD and DPhil qualifications are typically not or doctoral degrees, such as the Professional Doct credit rated, typically 540 UK credits. ² A range of 90-120 ECTS is typical of most awar ³ 1 ECTS credit is typically worth 2 UK credits ⁴ The Welsh Baccalaureate Qualification is part of Qualifications Framework for Wales (CQFW)	orate, are s rds	ometimes	possible from the Education Qual These levels w	ne next lower level in t ifications. vill also apply to the Qu F will eventually repla	equisites, entry to each FHEQ level is he NQF or Framework for Higher ualifications and Credit Framework be the National Qualifications		els 2, 1 i entry

University of St Andrews HEAR



HIGHER EDUCATION ACHIEVEMENT REPORT (HEAR)

incorporating the Diploma Supplement

for Research Postgraduates

CONTEXTUAL INFORMATION

This Higher Education Achievement Report incorporates the model developed by the European Commission, Council of Europe and UNESCO/CEPES for the Diploma Supplement adapted for the needs of research students. The purpose of the Supplement is to provide sufficient recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context and status of the studies that were pursued and successfully completed by the individual named on the original qualifications. It should be free from any value judgements, equivalence statements or suggestions about recognition. The distinctive features of a UK doctorate are outlined in a Qualification Characteristics Statement published by the Quality Assurance Agency for Higher Education (QAA): https://www.qaa.ac.uk/en/Publications/Documents/Doctoral-Degree-Characteristics-15.pdf.

1. HOLDER OF THE QUALIFICATION

1.1 Family name	Smith	Information held on SITS
1.2 Given name(s)	Adam	Information held on SITS
1.3 Date of birth	22/03/1988	Information held on SITS
1.4 Student identification number	110100001	Information held on SITS
1.5 HESA identification number	0311805670401	Information held on SITS

2. QUALIFICATION ACHIEVED

2.1 Qualification achieved	Doctor of Philosophy (PhD)	Information held on SITS
2.2 Main field(s) of study	Chemistry	Information held on SITS
2.3 Name and status of awarding institution.	University of St Andrews	Information held on SITS
2.4 Institution administering studies	As awarding institution	Information held on SITS
2.5 Language(s) of instruction/examination	English	Information held on SITS

3. QUALIFICATION LEVEL

3.1 Level of qualification Doctorate Degree mainly by Research – SCQF 12
3.2 Official length of programme 4 years (amend as required) Information held on SITS

3.3 Access requirement(s) http://www.st-andrews.ac.uk/prospectus

4. QUALIFICATION: MODE OF STUDY, PROGRAMME REQUIREMENTS AND RESULTS GAINED

4.1 Mode of study

To be entered as appropriate: Full time, part-time. Information held on SITS

4.2 Programme requirements

Recommendation of working group: this section should contain subject-specific requirements and learning outcomes i.e. replicate the format used for UG HEAR which links to web descriptions. The content for this section should be written and approved by each Academic School/department.

4.3 Programme details, and the individual grades/marks/credits obtained

Programme start date Enter Date e.g. 27/09/2011 Information held on SITS

Status of Research Candidate: Postgraduate Research Student

Programme end date Enter Date Information held on SITS

Enrolment History and Mode of Study by Academic Year

11/12 Full time Research undertaken at University of St Andrews 12/13 Full time Research undertaken at University of St Andrews 13/14 Full time Research undertaken at University of St Andrews

14/15 Full time Write up period

Submission Date Enter Date e.g. 31/08/2015

This programme was based on solely on research work and did not incorporate a formal taught element.

Note: a full enrolment history for each student is stored on SITS. The history will include periods of fieldwork and extension periods.

4.3.1 Thesis Title

Enter title Information held on SITS

4.3.2 Supervisory Team

Primary Supervisor: Secondary Supervisor: External Supervisor: Information held on SITS

4.3.3 Summary of research thesis

Recommendation of working group: this section should contain the thesis abstract, which is stored in the Digital Repository, Research @StAndrews. Each PhD candidate has a unique URL on the Repository, which could be stored in a user-defined field in SITS, and published as a hyperlink on the HEAR. Alternatively, the full abstract could be published.

4.4 Overall classification of the qualification (in original language)

Pass - degree awarded on xxxx

Information held on SITS

5. RESEARCH ACHIEVEMENT PROFILE

Recommendation of working group: this section should include a generic institutional-level statement highlighting the achievement of obtaining a PhD degree from the University of St Andrews. Two to three sentences to capture the research achievement.

5.1 Publications *Recommendation of working group*: publications in peer-reviewed journals should be captured. PG students were consulted and also support this recommendation. Use PURE profiles - timing to be confirmed.

If 'None to Report' consider removing the sub-heading from the HEAR or state 'None to Report at time of graduation'.

5.2 Scholarships, Research grants and awards *Recommendation of working group*: link to FUND to capture if the PhD was funded by a Research Council, other external sponsor, or by a University Scholarship e.g. St Leonards College Scholarship.

6. PERSONAL AND PROFESSIONAL DEVELOPMENT

6.1 Professional Development & Training

- **6.1.1 Training and Skills:** Recommendation of working group: include information on modules that have been taken either for credit or audit. The Group also recommend capturing courses that are currently stored on MMS e.g. courses designed by School of Chemistry. Module codes for these MMS courses can be created and the information can be copied to SITS to enable extraction to the HEAR. The Registry Curriculum Officer is exploring options.
- 6.1.2 Placements (Industrial and Overseas) Recommendation of working group: include information on approved Study Abroad and Work Placements
- **6.1.3 Teaching Experience or qualifications.** Recommendation of working group: teaching activity is not currently stored electronically. An interim solution might be to ask schools to provide a statement outlining the type/extent of teaching that is usually undertaken by PGRs in their subject. In addition, it could be noted that research postgraduates complete mandatory training before engaging in teaching activities.
- **6.1.4** Other achievements (Prizes and Awards) Recommendation of working group: include information of achievements from approved list of prizes and awards (academic and extra-curricular achievements e.g. sabbatical posts such as the PG Convenor).

6.2 Further information sources

Recommendation of working group: Include reference to University of St Andrews website and Postgraduate Prospectus.

University of St Andrews: http://www.st-andrews.ac.uk/

Postgraduate Prospectus: http://www.st-andrews.ac.uk/study/pg/prospectus/research/

7. CERTIFICATION

7.1 Date 1 October 2016 7.2 Signature enter signature

7.3 Capacity Academic Registrar 7.4 Official stamp or seal -

Appendix 4: Summary of responses from the COIMBRA Group Doctoral Studies Working Group: Doctoral Transcripts.

It was reported that a presentation at the CDE-EUA in Delft (2016) recommended adopting a consistent approach to the delivery of an e-Diploma Supplement for Doctoral candidates. This presentation citted examples from Swansea University and King's College (http://www.eua.be/activities-services/events/event/2016/01/20/default-calendar/9th-eua-cde-workshop).

Members were asked whether their institution provided doctoral graduates with a transcript or equivalent and if so what this contained. A summary of responses is given below:

All activities for the student (including participation in 3MT) N/A	It is an official document done through an online app which the supervisor has to review annually. Currently seeking to embed functionality within existing systems to all
N/A	Currently seeking to embed functionality within existing systems to all
1	transcripts to be produced.
N/A	Currently in development, based on good practice across Europe.
To follow	
N/A	May consider this in the future
components on the path to a degree at the Graduate School: - Weekly research group meeting and journal clubs - Bi-weekly seminars of the respective doctoral program or institute - Annual retreat	The goal is to provide a concise overview all the diverse activities of a doctoral researcher besides doing research. This supplement is actually very popular among the graduates, not least because it spares a lot of paper in applications and it is also a self-awareness building document regarding the competencies of a graduate. The downside: It is A LOT OF WORK on the side of the administration, as no two
	N/A To follow N/A A few listed items are obligatory components on the path to a degree at the Graduate School: - Weekly research group meeting and journal clubs - Bi-weekly seminars of the respective doctoral program or institute - Annual retreat - Active participation in at least

		- 2 transferable skills workshops per year - Publication of at least one peer reviewed international paper. Any other activity can be documented, reaching from all kinds of workshops and courses taken voluntarily to research stays abroad, to teaching activities to activities of public outreach of science and many more.	
University of Padua, Italy	No	N/A	Every PhD student has to define his/her activities during the 3 years (didactic (soft skills and disciplinary), teaching, conferences, publications) in a style sheet that is uploaded together with the Doctoral thesis for the evaluation of the Final Exam Committee
Vilnius University, Lithuania	No	N/A	Keep a record of all activities undertaken by the student in a separate document but this does not accompany the official diploma.
NUI, Galway, Ireland	Yes, since the introductio n of the structured PhD	The transcript lists the 30 ECTS of structured training successfully completed by the PhD graduate.	Some administrative burden
Université Paul-Valéry Montpellier3, France	In developme nt	Courses undertaken, publications etc.	

Appendix 5: Overview of Funders' Expectations

Research Council /	Expectation (if stated)	Examples at Edinburgh
Body		
Research	Arts & Humanities Research Council (AHRC)	N/A
Councils UK	Biotechnology & Biological Sciences Research Council (BBSRC)	
(RCUK)	Engineering & Physical Sciences Research Council (EPSRC)	
	Economic & Social Research Council (ESRC)	
	Medical Research Council (MRC)	
	Natural Environment Research Council (NERC)	
	Science and Technology Facilities Council (STFC)	
	Statement of Expectations of Postgraduate Training	
	http://www.rcuk.ac.uk/documents/skills/statementofexpectation-pdf/	
	Expectations of the Training Environment	
	"Fundersexpect the provision of transferable skills to form a fundamental part of doctoral training"	
	"Research Organisations should use the Researcher Development Statement to underpin their professional development programmes for students".	
	professional development programmes for students.	
	The Training Grant includes a Research Training Support Grant (RTSG).	
	RCUK Training Grant Guide	
	http://www.rcuk.ac.uk/documents/publications/traininggrantguidance-pdf/	
	Careers and transferable skills training	
	RCUK Training Grant Condition 3	
	Must maintain availability of a broad range of career planning, training and development opportunities.	
	Researcher Development	
	All research students should receive appropriate training in research-related and personal skills. Use of	
	the Researcher Development Statement (RDS – Vitae) as basis for the knowledge, behaviours and	
	attributes of effective and highly skill researchers.	

Economic and Social Research Council (ESRC) ESRC: Postgraduate Training and Development Guidelines

(ESRC Postgraduate Training Strategy 2017-

2023 http://www.esrc.ac.uk/skills-and-careers/studentships/postgraduate-strategy/postgraduate-training-strategy-2017-23/)

http://www.esrc.ac.uk/files/skills-and-careers/studentships/postgraduate-training-and-development-guidelines-2015/

DTPs expected to demonstrate how the required training is provided during the accreditation process. Monitoring is through 'a start-up meeting, annual reports (September), a survey of ESRC-funded students and a site visit'.

Expectation that a 'rigorous training needs analysis (TNA)' is undertaken by all ESRC funded students to 'ensure a progressive training agenda'. There must be an auditable, robust and consistent approach to TNA for all students, and TNA must be reviewed on an annual basis. The ESRC will undertake a sample check of these annually.

Training should cover 'research skills, research methods (including principles of research design and data collection, analysis and management) and broader capabilities'. Training and skill development should be seen as an integral component of research.

General Research and Transferable Skills Training

Use of Researcher Development Statement (RDS).

General Research

Bibliographic and computing skills

Teaching and other work experience

Language Skills

Ethical and Legal issues

Research Impact

Exploitation of research and Intellectual Property Rights

Open Access

Transferable Skills

Communication and Networking

Leadership, Research Management and Relationship management

Personal and Career Development

Scottish Graduate School of Social Science (SGSSS) (Lead University, The University of Edinburgh, lead School Social and Political Science). http://www.socsciscotland.ac.uk/about sgsss

SGSSS training provision includes;

Advanced Training opportunities, Summer School, Internships and Experience-based Training, Data resources and training, Methods Resources.

Students required to complete a training needs analysis (annual review).

Each University involved with the SGSSS provides its own form of training needs analysis but which must be based on the Researcher Development Framework.

The SGSSS makes an annual request to participating institutions for a review of any training gaps that have been identified by the TNAs that are unable to be met internally. The identified gaps then become the training priorities for the SGSSS to be met through Advanced Training Workshops (summer school).

The SGSSS do not provide a transcript.

	National Training provision (e.g. Vitae)	
	First employment destinations / Submission rate monitoring	
Arts and Humanities Research Council (AHRC)	AHRC Research Training Framework for Doctoral Students http://www.ahrc.ac.uk/documents/projects-programmes-and-initiatives/ahrc-research-training-framework-for-doctoral-students/ Use of Research Development Statement / Framework as basis for key areas in which students are expected to develop skills. Needs-based approach to the assessment of the development students should undertake, to recognise the diverse range of skills students bring to doctoral study. AHRC not prescriptive about types of development opportunities offered to students but offers examples of research skills that are relevant to doctoral students and careers within and outside academia. "AHRC considers training to be an ongoing process which takes place throughout a student's studies and is adapted as new needs arise. The student's needs should be monitored and assessed at regular intervals." First employment destinations / Submission rate monitoring	Scottish Graduate School for Arts and Humanities (SGSAH) http://www.sgsah.ac.uk/dtp/ (Lead University, University of Glasgow) Training Needs Analysis matched to an annual Skills Development Plan (Annual Progress Review) Doctoral Researchers required to submit a training log to their review panel, recording attendance at skills development workshops and courses. The log will allow for the identification of training needs and provision for the year ahead. Doctoral researchers should complete at least two weeks of skills development training per year. http://www.sgsah.ac.uk/heistaff/academics/policies&guidance/benchmarks/ Identification of absences or weaknesses in students' skills sets should play a key role in helping them strengthen and understand their skills and develop achievable aspirations and goals. This annual review also asks students to reflect on their engagement with SGSAH training. Students only formally record attendance at compulsory events. The SGSAH maintain records of student development fund (individual training) activities. The SGSAH do not provide transcripts (students do not request them)

Biotechnol ogy and Biological Sciences Research Council (BBSRC)	BBSRC expect Doctoral Training Partnerships to provide training in Core Bioscience Skills, Transferable Skills and New Ways of Working. DTPs are then asked to report on how they deliver this in relation to what they committed in their application for funding. They ask DTPs to report annually on uptake numbers for training events, and what training events were run, using a Key Survey document.	BBSRC EASTBIO Doctoral Training Partnership (lead School of Biological Sciences, University of Edinburgh; other students at UoE are registered across CMVM and in Chemistry; there are also external partners). Students collect EASTBIO credits in the first 18 months of the programme, and to attend some additional compulsory events in years 2-4. Students update a Google Doc Training each year; recording both EASTBIO and non-EASTBIO training. EASTBIO check against attendance lists to confirm what students have attended.
Natural Environme nt Research Council (NERC)	NERC expect Doctoral Training Partnerships to provide training in varied professional and technical skills and personal development training. DTPs are then asked to report on how they deliver this in relation to what they committed in their application for funding. They ask DTPs to send in Excel Training Logs along with their Annual DTP Review each year.	NERC E3 Doctoral Training Partnership (lead School of Geosciences, University of Edinburgh; other students at UoE are registered in Biological Sciences; there are also external partners). http://e3dtp.geos.ed.ac.uk/training.html The programme is structured into four components based around a postgraduate credit system. Training is focused in Years 1-3 and optional opportunities for professional development are available in Year 4. All students will obtain a minimum of 180 E³ DTP training credits (c.45 days). These credits are acquired through a mixture of compulsory and optional training activities. E3 ask students to collect E3 credits over the whole 3.5 year studentship duration. To record training E3 ask students to fill in an Excel Training Log and keep that updated each year; this records training and other
Medical Research Council (MRC)	Statement of Expectations for Postgraduate Training http://www.rcuk.ac.uk/documents/skills/statementofexpectation-pdf/	development (e.g. publications, placements prizes etc). Precision Medicine Doctoral Training Programme (DTP) PhD with Integrated Study funded by The University of Edinburgh and the University of Glasgow. Hosted by the University of Edinburgh in collaboration with the University of Glasgow and the Karolinska Institute.

Engineering and Physical Sciences Research Council (EPSRC)	Research Organisations should have mechanisms in place to assess and monitor individual student needs and put in place appropriate development opportunities. The provision of training should be kept as flexible as possible allowing customisation to suit the individual needs of students. The provision of transferable skills must form a fundamental part of doctoral training and the Researcher Development Statement should be used to underpin the professional development programmes for students. Student should receive training in experimental design and statistics appropriate to their disciplines. EPSRC asks their CDTs (Centres for Doctoral Training) to provide technical and transferrable skills training, with a focus on application to real world problems.	During the first three years of the 4 year programme students must complete 120 credits of courses taking at least one course from Quantitative Skills, Data and Life Sciences. The research project is worth 600 credits (programme total 720 credits). In addition there are Research Element Requirements in each year which include a 10 week report, annual reviews (thesis committee), poster presentation, and oral presentation. A training needs analysis form is completed at the start of the programme which focuses on research competency in the areas noted above. Additional training needs including opportunities for professional development and transferrable skills training are reviewed through the programme. The University leads or are partners on numerous EPSRC CDTs; one example is the CDT in Integrative Sensing and Measurement (CDT-ISM); a CDT run between Edinburgh and Glasgow, with students at Edinburgh registered on a programme code in Engineering but supervised by supervisors from various Schools. PhD with Integrated Study (EPSRC Centre for Doctoral Training in Integrative Sensing and Measurement (CDT-ISM). Year 1 of the Programme is spent completing taught modules at Glasgow and then Edinburgh, followed by a mini-project. In years 2-4, they are required to do various compulsory courses. To record training, students complete an annual review form and training needs analysis, both are Word Documents.
		- · · · · · · · · · · · · · · · · · · ·

		Wellcome Trust 4 year PhD programme Hosts, Pathogens and Global Health (School of Biological Sciences; SCE)
Hust		Currently in the process of developing a form which students will be asked to complete to capture additional transferrable skills training and career development activities.
		Participation on research centre's PhD training programme (including compulsory poster and oral presentations)
		Compulsory Discussion Group in first year (21 weekly 2 hour group sessions led by PIs)
		Compulsory core laboratory training (3 days) during first week of studies, and animal licence training modules
	Basic Science Career Tracker (BSCT)	school/tissue-repair-phd
Wellcome Trust	Wellcome Trust tracks students' career intentions and development https://wellcome.ac.uk/funding/managing-grant/wellcome-trust-basic-science-career-tracker	Wellcome Trust 4 year PhD programme in Tissue Repair http://www.ed.ac.uk/medicine-vet-medicine/edinburgh-medical-
		The CDT provides students with a transcript of these training activity credits as part of normal business.
		Three to four year programme which includes 90 credits of training activities such as attendance at seminars, working groups, generic skills events, summer schools and crash courses as well as research training. The credits are validated by the supervisor or the Cohort / Training Director.
		Maxwell Institute Graduate School in Analysis and its Applications (MIGSAA) (Centre for Doctoral Training) http://www.maxwell.ac.uk/MIGSAA
		180 credits of taught courses across the 4 years of the programme. Includes a 3 month Industrial placement, and other entrepreneurial activities.

http://www.eid.ed.ac.uk/wt-hpgh
Three compulsory taught courses (each 50 SCQF credits), compulsory Scientific Methodology course (10 SCQF credits) plus submitted research proposal (20 credits) (MSc by Research)
Transferable skills not compulsory but include project management and how to write a research paper
Wellcome Trust 4 year PhD programme Translational Neuroscience (Deanery of Biomedical Sciences; MVM) http://www.edinburghneuroscience.ed.ac.uk/node/870
Five compulsory taught courses (only open to students on this programme) Grant Application (10 credits) Key Methodologies x3 (15 credits, 15 credits and 40 credits) Research Training (100 credits)
Wellcome Trust 4 year PhD programme in Cell Biology
Three compulsory mini-projects. Weekly lecture course – 'taught course' on Method and Logic
Wellcome Trust Clinical PhD Programme (ECAT) http://www.ed.ac.uk/medicine-vet-medicine/research-support- development-commercialisation/edinburgh-clinical-academic- track/wellcome-trust-training-fellowships Two or three mini-projects Lab techniques training