



Doctoral Skills Training

Guidance for Doctoral Researchers and Supervisors - 2015-16

Context

All doctoral researchers (DRs) at Sheffield Hallam University will have the opportunity to develop a range of research, personal and professional skills during the course of their programme. Transferable skills training as a key component of undertaking a PhD or professional doctorate is required by the University regulator, expected by research funders, and promoted by the University as part of its commitment to 'education for employment'.

Sheffield Hallam's Approach

Sheffield Hallam recognises that all doctoral researchers arrive at the start of their programme with different experiences and career plans. Therefore doctoral skills training is, as far as possible, needs-based and individually-tailored. Rather than being required to complete a set training programme, each DR's development needs are identified and jointly agreed with their supervisory team at the start of the degree; and these are regularly reviewed and updated as appropriate.

The University's Requirements

There are three compulsory elements of doctoral skills training at Sheffield Hallam. These are for the DR to complete:

- 1) A development needs analysis, and agree this with their supervisory team
- 2) The required research ethics training (Epigeum online Research Ethics 1 all DRs, Epigeum Research Ethics 2 for those whose research is likely to involve human participants, personal data and/or human tissue; plus the follow-up workshop)
- 3) Any discipline-specific research methods courses requisite for the programme

Beyond these minimum requirements, DRs must also 'satisfactorily engage' in addressing the other needs identified in their development needs analysis. This may be virtually nothing, or a comprehensive development programme, depending on the previous experience and career plans of the DR. Essentially this involves addressing any significant gaps that were determined to exist between current skills level and the level required, to enable successful completion of the research project and equip the DR for their intended career pathway.

Development Needs Analysis

Development needs analysis (DNA) should be undertaken alongside a professional standards framework of the knowledge, behaviours and attributes of excellent practitioners. UK universities use Vitae's Researcher Development Framework (RDF)

(<http://shardprogramme.files.wordpress.com/2013/09/rdf.pdf>) to help researchers articulate their skills and provide a common language for understanding and communicating their capabilities.

To help make the RDF more practical and usable, the University has acquired licences for all DRs for an online system called the RDF Planner (<http://vimeo.com/53575801>). The RDF Planner helps DRs undertake a skills audit against 63 criteria, which capture the characteristics of excellent researchers. This enables identification of areas of strength and those in need of development.

In the RDF, each criterion (descriptor) has five levels (phases) of competence. As an approximate guide, phase 1 is the level new DRs should be looking to ensure they are at in all the key descriptors relevant to their research, phases 2-3 are where they should be progressing toward the end of their study and into postdocs, and phases 4-5 are more aspirational, describing senior academics.

For each descriptor, DRs should self-assess whether they have achieved a phase using the guidance provided; recording this using the 'No'/'Yes' button. If they have not, they can add the action(s) they think they need to undertake in order to feel they have achieved it. This will automatically transfer into their development plan. Once they have achieved it, they can add evidence. This area of the Planner is also where relevant training can be accessed (see the black boxes in the image below).

The screenshot shows the RDF Planner interface for the descriptor 'Academic literacy and numeracy'. The interface is divided into several sections:

- Descriptor Header:** 'Academic literacy and numeracy' with a sub-description: 'Has communication and numeracy abilities appropriate for research, advises others.'
- Phase 1 (Selected):** A blue box containing a list of competencies:
 - I am able to understand, interpret, create and communicate appropriately within an academic context.
 - I can prepare grammatically and syntactically correct content for presentations.
 - I have a writing style appropriate to the purpose and context for specialist and non-specialist audiences.
 - I am mathematically competent to undertake research in own discipline/research area.
 - I am able to understand and apply any statistics that may be used in my discipline/research area.
 - I am able to analyse data and use appropriate computer packages.
 - I am IT literate and competent in using information and digital technology.
- Phase Status:** 'Phase achieved?' with a dropdown menu set to 'No'. It also shows 'Evidence: Added(0)' and 'Actions: Added(0)'. A black button labeled 'Access training and support in this area' is visible.
- Actions and Evidence:** Two light blue buttons labeled 'Actions' and 'Evidence' are shown, each with a black button labeled 'Add new action' and 'Add new evidence' respectively.
- Phase 2:** A grey box containing the start of the next phase:
 - Phase 2: I regularly continue to develop academic literacy abilities within wider contexts.
 - I understand the literacy requirements for different communication media.

It is appreciated that, due to its size, the RDF Planner can initially appear overwhelming. It is therefore suggested that DRs attempt their DNA in bite-sized portions - focusing on a few areas at a time. As there are 63 in total, eight descriptors per week over an eight week period is recommended.

The following areas are suggested to attempt first (from the 'Getting Started in Research' lens):

- A1 - Subject knowledge; Information seeking
- A2 - Critical thinking; Problem solving
- A3 - Inquiring mind
- B1 - Perseverance; Self-reflection
- B2 - Preparation and prioritisation; Time management
- B3 - Career management
- C2 - Project planning and delivery
- D2 - Communication methods

Reports can be run on the skills audit to provide summaries, both for users and to inform discussions with supervisors (see example below).

My action plan

1 of 2 100% Find | Next

RDF Planner Researcher Development Framework Planner

myRDF - Action plan

Your action plan provides an overview of the descriptors you have identified for development, and the current status of the phases you wish to progress within these descriptors. You may wish to share this report with your supervisor or another colleague to inform discussion about your professional development.

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Knowledge and intellectual abilities (A)					
Knowledge base (A1)					
Subject knowledge	Achieved	-	-	-	-
Research methods - theoretical knowledge	Achieved	-	-	-	-
Research methods - practical application	Achieved	-	-	-	-
Information seeking	Achieved	Achieved	-	-	-
Information literacy and management	Achieved	-	-	-	-
Languages	-	-	-	-	-
Academic literacy and numeracy	Achieved	-	-	-	-
Cognitive abilities (A2)					
Analysing	Achieved	-	-	-	-

Personal Development Planning

A DNA should be used to produce a bespoke personal development plan, and this happens automatically in the RDF Planner. In the DNA, the level DRs assess themselves to be at is not necessarily important. What is important is the gaps between where they are and where they need to be. An example of part of a development plan is shown below.

My actions

1 of 1 100% Find | Next

This report provides an overview of the actions you have input by descriptor and phase and gives the status of each action. It includes the dates the actions were created, the target for completion and actual completion. It highlights actions that are overdue.

Completed actions are in green Open actions are in Blue Overdue actions are in Red

	Date created	What are your objectives?	How will you measure progress and achievement?	Target date	Completed	Completion date
Knowledge and intellectual abilities (A)						
Knowledge base (A1)						
Subject knowledge						
Phase 1						
	05/11/13	Read John Watts' 'Henry VI' and Helen Castor's 'The King, the Crown, and the Duchy of Lancaster' books to get to grips with the Political Culture paradigm	Books read and able to frame my work within this paradigm	31/10/13	Completed	29/10/13
Research methods - theoretical knowledge						
Phase 1						
	05/11/13	Complete D&S Qualitative Research methods course	Course assignment	22/01/14	In progress	
Research governance and organisation (C)						
Professional conduct (C1)						
Ethics, principles and sustainability						
Phase 1						
	05/11/13	Complete Epigeum Ethics 1 online course	Successfully achieve pass rate	03/12/13	In progress	

Accessing Development

There are two main ways to access development. The first is through the Planner. Under each of the 63 descriptors there is a button to 'access training and support in this area'. The development provided by different parts of the University has been mapped into this, so all training related to the descriptor will be listed here for researchers to find the most appropriate (see example below).

Organisation resources ACES RefWorks Faculty-Based Research Methods http://shardprogramme.wordpress.com/shard/pgr/aces#ref Author: PGR Office Published: 22 Sep 2014	Vitae resources Information management Supporting information for this descriptor provided by Vitae in downloadable and printable PDF format http://resources.rdfplanner.net/descriptors/A1-inf.. Author: Vitae Published: 10 Aug 2012
ACES Introduction to bibliographic databases Faculty-Based Research Methods http://shardprogramme.wordpress.com/shard/pgr/aces#bibl Author: PGR Office Published: 22 Sep 2014	
ACES-MERI Advanced measurement techniques Faculty-Based Research Methods http://shardprogramme.wordpress.com/shard/pgr/aces#meas Author: PGR Office Published: 22 Sep 2014	
ACES-MERI MATLAB Faculty-Based Research Methods http://shardprogramme.wordpress.com/shard/pgr/aces#mat Author: PGR Office Published: 22 Sep 2014	
PGR Skills Statistics PGR Skills Workshops http://shardprogramme.wordpress.com/shard/pgr/pgr-skills#stats Author: PGR Office Published: 22 Sep 2014	
Introduction to the Library Library Researcher Sessions http://shardprogramme.wordpress.com/shard/pgr/library#intro Author: PGR Office Published: 22 Sep 2014	
Library Literature searching Library Researcher Sessions http://shardprogramme.wordpress.com/shard/pgr/library#lit Author: PGR Office Published: 22 Sep 2014	

While the Planner presents development in a needs-based way, an overview can also be found on the University's researcher development site: <http://shardprogramme.wordpress.com/shard/pgr/>

Development available for DRs includes:



- Doctoral Research Training Series (<https://shdoctoralschool.wordpress.com/current-drs/training-and-development/drts/>)
- Faculty-based research methods
- PGR Skills workshops
- Career Service's career management workshops
- Research and Innovation Office's researcher development programme (SHaRD)
- Library researcher sessions
- Courses in teaching and lecturing
- HR's personal effectiveness courses
- Online courses and resources covering: research skills, research integrity, research leadership, statistical methods and personal effectiveness (<http://shardprogramme.wordpress.com/resources/>)

Where possible, details of these sessions and contacts have been provided on the website.

Places on the PGR Skills and Career Management workshops need to be reserved by completing and returning this form: <http://shardprogramme.files.wordpress.com/2013/09/pgr-skills-and-career-management-workshops-registration-form.doc>

Recording Development

The RDF Planner also has ePortfolio functionality. Evidence collected of development undertaken can be stored and shared on the system. DRs already using PebblePad or another ePortfolio are welcome to continue to use their preferred system.

Evidence title	Type	Evidence	Created	Public	Mapped to RDF?
Lab Safety Course	Text	Scan of certificate	05/11/2013		<input checked="" type="checkbox"/>  

Sharing Content

No one can see what researchers input on their account - they own it and can choose what to share and with whom. Reports, action plans and evidence can all be downloaded as PDFs and sent to supervisors in advance of meetings.

Supervisor Role

Doctoral skills training should be a collaborative process between DRs and their supervisory team, so supervisors are expected to actively support DRs in this area, and integrate it into the supervisory relationship alongside the core research output (thesis) element. Supervisors are also expected to check 'satisfactory engagement' with skills training, particularly with reference to the 12-month (24-month part-time) confirmation process (RF2).

End of Programme

At end of the programme, so content is not lost, researchers can either download everything off the system, or make a 'transfer request' to take on a personal subscription (£24 pa). If they become SHU research staff, they can continue with their accounts unbroken. If they move to become staff at another UK university, they can transfer their account there.

Contacts

Queries relating to the doctoral skills training and the RDF Planner should be directed to the Researcher Development Adviser (k.fildes@shu.ac.uk, x3417).

A full list of doctoral contacts can be found at: <https://shdoctoralschool.wordpress.com/current-drs/support-and-contacts/>

Summary of Actions Required by Doctoral Researchers

1. Register an RDF Planner account (you should automatically receive an email prompting you to do this). Do not pay for an account - SHU has an institutional subscription which you will be set up under
2. Attend RDF Planner training (organised on a faculty level)
3. Undertake a development needs analysis (work through the myRDF section of the RDF Planner; access the system by logging in at: www.rdfplanner.net)
4. Set actions to address skills gaps that are identified (still within the myRDF section of the RDF Planner)
5. Submit completed 'My action plan' and 'My actions' reports, generated by the RDF Planner, to your supervisor (download reports as PDFs and email them) and jointly agree your development plan
6. Access the relevant training and development (overview provided at: <http://shardprogramme.wordpress.com/shard/pgr/>)
7. Record your progress (as evidence in the RDF Planner)