



**Researcher  
Development  
Framework**

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# Researcher Development Framework

## Overview

The Researcher Development Framework (RDF) is a major new approach to researcher development, to enhance our capacity to build the UK workforce, develop world-class researchers and build our research base.

The RDF is a professional development framework for planning, promoting and supporting the personal, professional and career development of researchers in higher education. It articulates the knowledge, behaviours and attributes of successful researchers and encourages them to realise their potential.

## The Framework is designed for:

- researchers to evaluate and plan their professional development
- managers and supervisors of researchers in their role supporting the development of researchers
- trainers, developers, human resources specialists and careers advisors in the planning and provision of support for researchers' development.

It will also be of interest to employers to understand the portfolio of skills unique to researchers and their potential as highly-valued employees, individuals interested in becoming researchers, and researchers looking to move into higher education from other sectors. Policymakers, funders of researchers and other stakeholders will find the associated Researcher Development Statement (RDS)<sup>1</sup> a useful strategic overview of the RDF.

The RDF supports the implementation of the Concordat to Support the Career Development of Researchers<sup>2</sup>, the QAA Code of practice for research degree programmes<sup>3</sup> and the 'Roberts' recommendations for postgraduate researchers and research staff<sup>4</sup>.

The RDF is not intended to be linked to performance management or replace locally agreed progression criteria or job requirements.

<sup>1</sup> [www.vitae.ac.uk/rds](http://www.vitae.ac.uk/rds)

<sup>2</sup> [www.researchconcordat.ac.uk](http://www.researchconcordat.ac.uk)

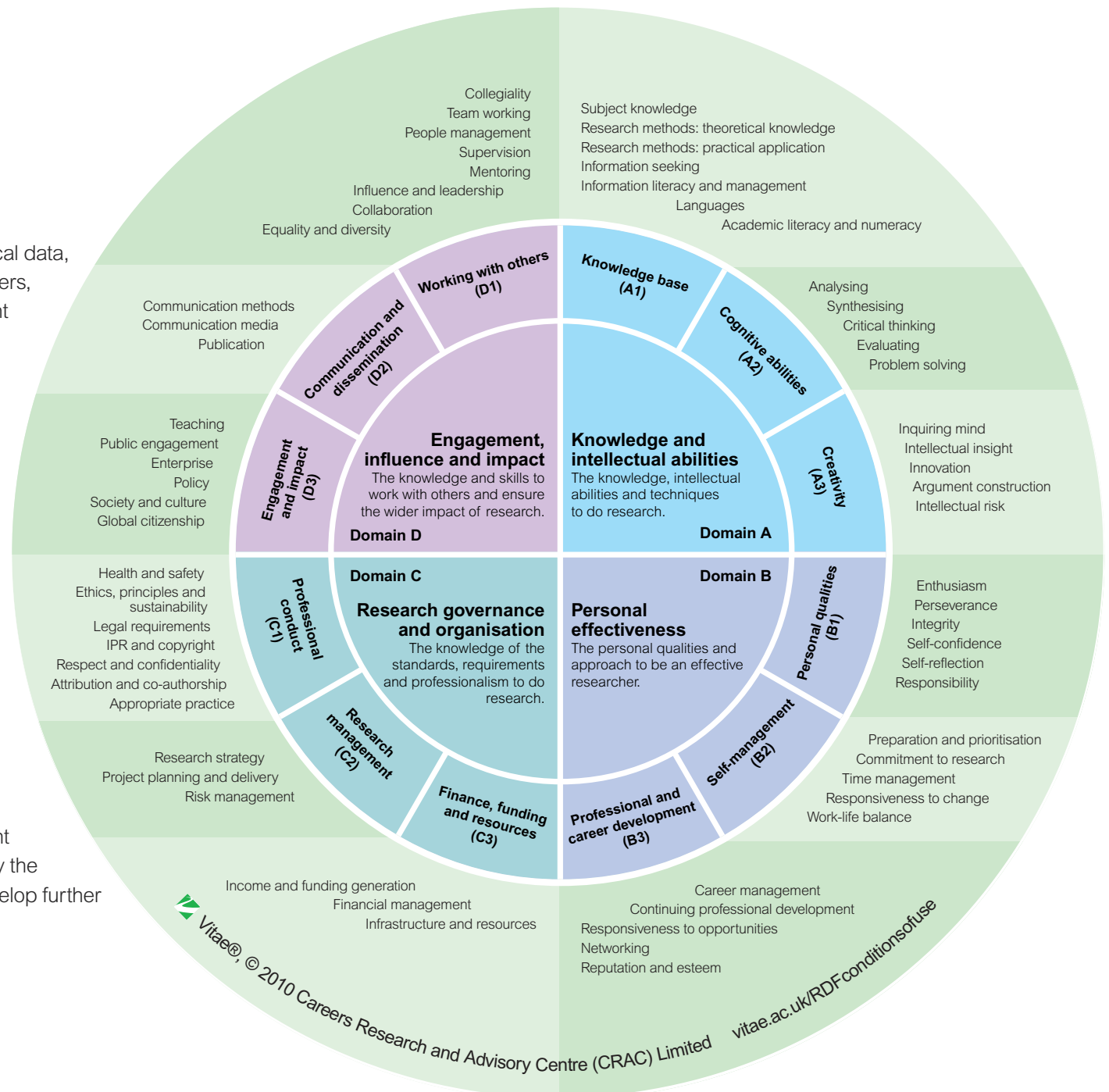
<sup>3</sup> [www.qaa.ac.uk](http://www.qaa.ac.uk)

<sup>4</sup> [http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/set\\_for\\_success.htm](http://webarchive.nationalarchives.gov.uk/+/http://www.hm-treasury.gov.uk/set_for_success.htm)

## Structure

The RDF has been created from empirical data, collected through interviewing researchers, to identify the characteristics of excellent researchers expressed in the RDF as 'descriptors'. The descriptors are structured in four domains and twelve sub-domains, encompassing the knowledge, intellectual abilities, techniques and professional standards to do research, as well as the personal qualities, knowledge and skills to work with others and ensure the wider impact of research. Each of the sixty-three descriptors contains between three to five phases, representing distinct stages of development or levels of performance within that descriptor.

The RDF has been incorporated into a downloadable Professional Development Planner to enable researchers to identify the areas in the framework they want to develop further and to create an action plan.



## Domain A: Knowledge and intellectual abilities

This domain contains the knowledge and intellectual abilities needed to be able to carry out excellent research.

Sub-domains and descriptors	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
<b>A1 Knowledge base</b>					
<b>1. Subject knowledge</b>	<p>Has, at least, core knowledge and basic understanding of key concepts, issues and history of thought.</p> <p>Knows of recent advances within own research area and in related areas. (A3)*</p> <p>Is working towards making an original contribution to knowledge.</p> <p>Is developing a broader awareness of international and non-academic aspects of knowledge creation.</p>	<p>Develops detailed and thorough knowledge/understanding of own and related subject areas – and becomes familiar with associated areas in other disciplines/research areas.</p> <p>Demonstrates link between own research and real world affairs.</p> <p>Situates knowledge in international context.</p>			<p>Stimulates new knowledge; may make outstanding breakthroughs. Considers multiple perspectives.</p> <p>Has deep and holistic understanding of strategic direction and intellectual developments of discipline/research area and its inter-relatedness with other disciplines/research areas. Uses this knowledge to enrich own discipline/research area.</p> <p>Contributes to the integrity and future vibrancy of the discipline/research area. Exercises international influence.</p>
<b>2. Research methods – theoretical knowledge</b>	<p>Understands relevant research methodologies and techniques and their appropriate application within own research area. (A4)*</p> <p>Justifies the principles and experimental techniques used in own research. (B6)*</p>	<p>Appreciates the value of a range of standards and methods/techniques for information/data collection and analysis; assesses and demonstrates usefulness and validity of information/data in the context of a specific problem/question.</p>	<p>Combines and justifies methods/techniques designed specifically for an investigation in a flexible and vigorous manner.</p>		<p>Recognises the value of alternative research paradigms and is able to work in, and support others working in, an inter-disciplinary way.</p>
<b>3. Research methods – practical application</b>	<p>Uses a range of research methods linked to study area; documents own activity.</p> <p>Shows growing competence in own subject area and is developing awareness of alternative methods and analysis techniques.</p>	<p>Develops research approach and applies a range of appropriate methods and techniques with confidence.</p> <p>Documents and evaluates research processes, using statistics where appropriate.</p>	<p>Educates and guides others in the appropriate selection and use of research design, information/data collection, information/data management, analysis and methods/techniques.</p>		<p>Creates new models and hypotheses, research designs, data collection and analysis techniques.</p> <p>Sets expectations for application of methods locally, nationally and internationally.</p>

## A1 Knowledge base

### 4. Information seeking

Acquires and develops search and discovery skills and techniques.

Identifies and accesses appropriate bibliographical resources, archives and other sources of relevant information (C3)\* including web-based resources, primary sources and repositories.

Makes best use of a range of current tools and techniques.

Assesses the reliability, reputation, currency, authority and relevance of sources.

Seeks feedback from relevant groups to access other insights.

Conducts advanced searches using a range of information software, resources and techniques; recognises their advantages and limitations.

Recognises the importance of bibliometrics and citations.

Shows highly developed awareness of appropriate sources for research.

Uses a range of specialist print and on-line resources, as appropriate.

Manages bibliometrics and citations to best advantage and with a high level of proficiency.

Educates others in information/data seeking, accessing, evaluating and verifying techniques.

### 5. Information literacy and management

Designs and executes systems for the acquisition and collation of information using information technology appropriately (e.g. word processing, spreadsheets, simulation systems, databases). (C2, C4)\*

Develops awareness of information/data security and longevity issues.

Knows where to obtain expert advice, i.e. information/data managers, archivists and librarians.

Develops awareness of the creation, organisation, validation, sharing, storing and curation of information/data and the associated risks.

Understands legal, ethical and security requirements involved in information/data management, especially over time.

Has knowledge of purpose of metadata.

Advises and educates peers, less experienced researchers, students and staff in discipline/research area-specific information/data management techniques, data security, legal and ethical requirements.

Develops new techniques for information management.

Keeps abreast of and anticipates trends in the design and use of information/data collection, analysis and preservation.

### 6. Languages

Has excellent knowledge of language(s) appropriate for research, including technical language.

Learns additional language(s), including technical, appropriate for research and career development.

Becomes fluent/expert in additional relevant language(s).

## A1 Knowledge base

### 7. Academic literacy and numeracy

Ability to understand, interpret, create and communicate appropriately within an academic context.

Prepares grammatically and syntactically correct content for presentations.

Writes in a style appropriate to purpose (E1)\* and context for specialist and non-specialist audiences.

Is mathematically competent to undertake research in own discipline/research area; understands and applies any statistics that may be used in the discipline/research area; analyses data and uses appropriate computer packages.

Is IT literate and competent in using information and digital technology.

Continues to develop academic literacy abilities within wider contexts; understands the literacy requirements for different communication media.

Develops capabilities in IT and digital technology, as appropriate.

Presents complex ideas with clarity.

Understands analytical or statistical procedures in related disciplines/research areas and continues to develop mathematical ability.

Has high level academic literacy and numeracy across a range of contexts and communication media.

Keeps up to date with the use of the latest IT and mathematical tools, techniques and procedures for the discipline/research area.

Educates, advises and guides others in academic literacy and numeracy skills, as appropriate.

## A2 Cognitive abilities

### 1. Analysing

Critically analyses and evaluates own findings and those of others. (A5)\*

Validates datasets of others.

Has well developed analytical abilities with knowledge of a range of methods. Willing to learn new ones.

Develops the analytical understanding of less experienced researchers and staff.

Has outstanding analytical abilities.

### 2. Synthesising

Sees connections between own research and previous studies. Benefits from guidance with synthesising information/data and ideas.

Critically synthesises new and complex information from diverse sources.\*\*

Recognises patterns and connections beyond own discipline/research area.

Makes imaginative leaps of understanding across disciplines/research areas/agendas and beyond academia.

## A2 Cognitive abilities

### 3. Critical thinking

Able to understand argument (oral and textual) and articulate own assumptions; developing independent and critical thinking.

Has the ability to recognise and validate problems. (A1)\*

Recognises multiple ways of knowing and alternative paradigms.

Recognises significant and important arguments and can evaluate the assumptions of others.

Is capable of original, independent and critical thinking and has the ability to develop theoretical concepts. (A2)\*

Makes sound and realistic judgements based on evidence.

Is proficient and confident in applying critical thinking skills.

Stimulates critical thinking in less experienced researchers and peers.

Is a creative critical thinker, acknowledged nationally and internationally.

Stimulates critical thinking at discipline/research area and policy levels.

### 4. Evaluating

Summarises, documents, reports and reflects on progress. (A6)\*

Evaluates the impact and outcomes of own research activities.

Assesses the quality, integrity and authenticity of primary and secondary research information/data.

Accepts and gives constructive criticism.

Evaluates progress, impact and outcomes of peer researchers' activities.

Advises and guides less experienced researchers on the quality, integrity, authenticity and validity of primary and secondary research information/data.

Is able to provide and accept constructive criticism at appropriate times.

Monitors and evaluates progress, impact and outcomes of a range of other researchers' activities.

Effectively manages difficult criticism.

Creates evaluation processes and evaluates progress, impact and outcomes for national/international organisations and/or projects.

### 5. Problem solving

Isolates basic themes of own research; formulates basic research questions and hypotheses.

Formulates and applies solutions to a range of research problems and effectively analyses and interprets research results.\*\*

Identifies new trends, complex questions and broader problems; designs substantial projects.

Challenges particular hypotheses and refines them in the light of results.

Leads a research agenda by making major contributions to understanding.

Asks the pertinent questions and designs projects that challenge traditional thinking in general and progress research themes.

## A3 Creativity

### 1. Inquiring mind

Demonstrates a willingness and ability to learn and acquire knowledge. (D1)\*

Demonstrates flexibility and open-mindedness. (D3)\*

Develops a style of questioning and questioning technique.

Identifies and asks useful, challenging questions; always curious.

Sees beyond immediate questions to unexplored areas.

Confidently enquires, challenges and questions.

Anticipates cutting-edge questions.

Encourages challenge and inspires curiosity.

**Sub-domains and descriptors**

Phase 1

Phase 2

Phase 3

Phase 4

Phase 5

**A3 Creativity**

<b>2. Intellectual insight</b>	Absorbs and appropriates ideas; is intellectually astute.  Creates ideas and opportunities by investigating/seeking information.	Recognises new trends; is insightful; goes beyond the obvious.  Develops own conceptual approach/understanding of intellectual position.  Shows initiative and works independently. (D7)*	Identifies where discipline/research area is going and to some extent influences the intellectual agenda.  Independently and confidently shares own lateral thinking.	Makes connections between previously unrelated issues.  Influences and stimulates the intellectual agenda for the discipline/research area.	Provides outstanding breakthrough thinking for the discipline/research area and has strategic input to other disciplines/research areas.
<b>3. Innovation</b>	Understands the role of innovation and creativity in research. (D2)*  May engage in inter-disciplinary research.	Exercises critical judgement and thinking to create new and/or imaginative ways of understanding.**  Develops new ways of working on a topic and has innovative ideas.  Identifies which ideas are likely to be successful.	Goes beyond recognising to realise the potential of ideas. Drives and delivers innovative research projects.  Encourages, inspires and works with others; actively seeks collaborations for inter-disciplinary research.		A visionary; challenges traditional viewpoints.
<b>4. Argument construction</b>	Constructively defends research outcomes. (E3)*  Provides some evidence in support of ideas.  Structures arguments clearly and concisely.	Rigorous in argument construction and production of evidence.  Produces convincing arguments to defend research theses.	Produces finely honed argument rapidly.  Educates, advises and guides others in argument construction.		
<b>5. Intellectual risk</b>	Tests the boundaries, is willing to expose ideas to a critical audience and to critically appraise other research.	Challenges the status quo in thinking within discipline/research area.		Pioneering; takes intellectual risks appropriately.	



## Domain B: Personal effectiveness

This domain contains the personal qualities, career and self-management skills required to take ownership for and control of professional development.

Sub-domains and descriptors	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
<b>B1 Personal qualities</b>					
<b>1. Enthusiasm</b>	Maintains enthusiasm and motivation for own research. Recognises the need for passion and pride in own work. Is highly motivated even when work is mundane.		Is passionate about research: enthuses others; inspires enthusiasm in the discipline/research area.		Inspires communities of international researchers.
<b>2. Perseverance</b>	Demonstrates self-discipline, motivation and thoroughness. (D5)* Perseveres in the face of obstacles and set-backs but benefits from peer, supervisor or leader support. Is developing some resilience. Deals effectively with the routine aspects of research.		Perseveres through difficulties while supporting others. Is resilient.	Perseveres steadfastly and leads the way for others.	Dedicated and stimulated by obstacles and challenges.
<b>3. Integrity</b>	Understands and demonstrates standards of good research practice in the institution and/or discipline/research area. (B3)* Seeks guidance as necessary.	Acts with professional integrity and honesty, takes especial care in information/data handling and dissemination and engagement with others  Demonstrates standards of good research practice without need for guidance and encourages professional integrity in others.	Acts as exemplar to and advises peers and less experienced members of staff, respecting their views and engaging effectively in discussion.	Sets expectations and standard of conduct.  Advises all staff and contributes to institutional and disciplinary policy/practice.	Shapes policy and procedures of good practice in research in the HE sector, professional associations and bodies.
<b>4. Self-confidence</b>	Aware of some personal abilities and willing to demonstrate them.  Recognises boundaries of own knowledge, skills and expertise and draws upon and uses sources of support, as appropriate. (D6)*	Aware of range of own skills and enjoys demonstrating them.  Able to defend ideas in the face of reasonable challenge both from colleagues and others.  Self-reliant; (D7)* capable of directing others.	Is confident of own skills and ideas in the face of strong challenge – seeks challenges.  Builds a range and variety of support structures.  Contributes to others' support; recognises need for collegiality.	Comfortable that own ideas are likely to be radical/unusual; has self-confidence to initiate challenge and engage with others.  Maintains a variety of support structures.  Develops confidence in others.	Seeks out sophisticated challenges to any new/unusual/radical ideas.  Inspires confident behaviour in others.

**Sub-domains and descriptors**

Phase 1

Phase 2

Phase 3

Phase 4

Phase 5

## B1 Personal qualities

### 5. Self-reflection

Makes time to reflect on practice and experience.  
Develops strengths and improves on weak areas.  
Seeks personal feedback.  
Learns from mistakes.

Has heightened awareness of own strengths and weaknesses.  
Strives for excellence, seeks and takes personal feedback on performance and acts on it.

Continuously seeks ways to improve own performance and that of less experienced researchers and/or team/department/institution.  
Encourages self-reflection in others.  
Leads by example.

### 6. Responsibility

Gradually takes complete responsibility for own project and own well-being; develops independence.

Takes responsibility for own and others' projects (students and less experienced colleagues).  
Delegates responsibly.  
Alert to the well-being of others.

Accepts and takes responsibility for building/leading research team and developing its members.  
Engages in and encourages the development of well-being in other researchers/the team.

Has leading responsibility for delivering highly skilled researchers for academic and non-academic professions. Is responsible for leading the discipline/research area nationally and/or internationally.  
Engages in and encourages the development of well-being in academic and non-academic colleagues.

## B2 Self-management

### 1. Preparation and prioritisation

Prepares and plans project to meet objectives and, with support, is able to adapt if necessary.

Takes strategic view of project; prioritises, plans and is forward thinking; deals with the unexpected.

Anticipates future directions and trends in research, prepares for the unexpected.  
Recognises good ideas.  
Sees the gaps and opportunities in project plans and evaluates the changes needed.

Plans, balances and responds effectively and appropriately to change and the unexpected.  
Gives evidence for the need for change of priorities. Prioritises and switches focus between multiple projects/tasks.  
Influences environment; has long-term strategic vision.

### 2. Commitment to research

Commits to and completes first project and establishes research credentials.

Evaluates and manages potential distractions. Dedicated: has purposeful and determined focus on developing own research and research credentials.

Has a purposeful and determined focus on developing excellence in research, taking it from the ordinary to the extraordinary.

Determines to leave a legacy of inspirational research.

### 3. Time management

Manages own time effectively to complete research project; adheres to clear plan.

Is establishing own time management systems: delivers projects on schedule, responds flexibly.

Has established own time management skills, advises others and acts as role model.  
Manages multiple or complex projects to time; balances constraints.

### 4. Responsiveness to change

Adapts approach when required to; seeks guidance and recognises risks.

Adapts to changes; balances risk and opportunity. Knows when to seek advice and reassurance.

Engages with change; expects change and is prepared for it, manages risk accordingly. Advises and reassures less experienced researchers.

Embraces change and anticipates risk. Responds decisively, coaches and reassures others.

Promotes change and contributes to institutional change initiatives; is willing to take reputational risk.

## B2 Self-management

### 5. Work-life balance

Is developing an awareness of work-life balance issues.

Uses support and advisory resources when necessary to avoid undue pressure and to enhance personal well-being.

Considers the needs of others.

Maintains an acceptable work-life balance and manages pressure.

Notifies and helps manage the pressure on colleagues and less experienced researchers.

Actively maintains attention to work-life balance issues. Promotes an effective work-life balance for self and team. Sensitive to signs of pressure on and stress in colleagues, students and staff; provides support, advice and management where necessary.

Influences departmental, institutional or disciplinary policies on work-life balance and well-being.

## B3 Professional and career development

### 1. Career management

Takes ownership for and manages own career progression, sets realistic and achievable career goals, identifies and develops ways to improve employability. (G2)\*

Presents own skills, personal attributes and experiences through effective CVs, applications and interviews. (G4)\*

Begins to establish a career network.

Forms credible career plans;\*\* critically reflects on experiences and pursues a cycle of self-improvement.\*\*

Seeks advice, guidance or coaching from appropriate professionals

Initiates and sustains networks and relationships that may encourage opportunities for employment.\*\*

Is in process of establishing career trajectory; uses networks and coaching opportunities to manage own career.

Actively develops less experienced researchers and staff. Coaches others for specific academic activities.

Uses networks to enhance the employability of others.

Is an established researcher.

Maintains career momentum. Extends and manages career networks.

Acts as role model; creates opportunities for others and nurtures researchers' careers.

Is an exceptional career role model: an exemplar and inspiration to others.

Engages in succession planning.

### 2. Continuing professional development

Demonstrates self-awareness and the ability to identify own development needs. (D4)\*

Appreciates the need for and shows commitment to continuing professional development. (G1)\*

Recognises transferability of own experience and articulates this to potential employers or line managers.

Develops and maintains own records of achievement and experience.

Becomes familiar with employers' requirements and develops skills accordingly.

Actively seeks opportunities to enhance skills and take responsibility, formally or informally, within a research environment.

Maintains a portfolio of achievement and experience.

Has realistic view of own potential in academic or non-academic job market and adapts career development plans appropriately.

Supports and encourages the continuing professional development of others. Helps others make informed decisions in the light of employers' requirements.

Reflects on skills and creates opportunities to develop further. Demonstrates, with evidence, initiative and competence in a wide range of contexts.

Acts as continuing professional development role model for others.

Is influential in setting standards and devising criteria to define the skills required of professional researchers.

Contributes to the culture of continuing development within own institution and discipline/research area.

Actively acquires information and feedback on matters affecting the direction of discipline/research area/department/institution and on colleagues and less experienced researchers in relation to their professional development.

## B3 Professional and career development

### 3. Responsiveness to opportunities

Demonstrates an insight into the transferable nature of research skills to other work environments and the range of career opportunities within and outside academia. (G3)\*

Understands and takes advantage of a broad range of employment and professional development opportunities within and outside academia, including work experience and internships.

Seeks out appropriate opportunities to enhance employability and may gain international experience; has realistic and mature approach to job search including positions outside academia.

Recognises, creates and confidently acts on opportunities with the potential to develop own career within or outside academia.

Understands the complexity of the academic job market; able to advise others effectively and in a sensitive manner.

Actively creates and champions opportunities for others within and outside academia. Is responsive to collaborative opportunities across disciplines/research areas and with non-academic organisations.

### 4. Networking

Develops and maintains co-operative networks and working relationships with supervisors, colleagues and peers, within the institution and the wider research community. (F1)\*

Uses personal and/or online networks effectively for feedback, advice, critical appraisal of work and for responding to opportunities.

Engages with learned societies and public bodies.

Shares external networks with less experienced researchers/students.

Builds professional rapport.  
Becomes respected member of learned society(ies).

Leads networks.

Has national, international and policy-making network connections with academic and non-academic bodies and organisations, and in public and private research and development areas.

Has influential connections with significant bodies and organisations; has high impact on society through academic and non-academic bodies and organisations.

### 5. Reputation and esteem

Speaks with authority on own topic.  
Begins to be known as a good researcher.

Maintains position in debates about own research areas.

Is establishing a reputation in the discipline topic/research area and locally.

Has an established and growing reputation in own and, possibly, other disciplines/research areas; increasing research esteem.

Conducts peer review internally and acts as reviewer for projects and journals.

Supports the development of the reputations of less experienced researchers.

Is a leading, well-known national authority and speaker on own focal topic and related areas and in some international arenas.

Acts as reviewer for external chairs.

Actively promotes the reputation and esteem of department/team, colleagues, peers and less experienced researchers.

Is globally renowned; becomes international authority and leading speaker on own focal topic and related areas.

Actively champions the reputation of the discipline/research area and own institution.

## Domain C: Research governance and organisation

This domain contains the knowledge of the standards, requirements and professional conduct that are needed for the effective management of research.

Sub-domains and descriptors	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
<b>C1 Professional conduct</b>					
<b>1. Health and safety</b>	<p>Understands relevant health and safety issues and demonstrates responsible working practices. (B4)*</p> <p>Takes responsibility for own work space. Aware of impact on others and wider environment.</p>	<p>Recognises the significance and relevance of health and safety regulation and guidance. Sets example, can educate and advise peers and less experienced researchers/students.</p> <p>Takes responsibility for immediate work environment and people in it.</p>	<p>Sets expectations, educates, trains and guides peers and less experienced researchers in health and safety.</p> <p>Manages and takes responsibility for health and safety within department.</p>	<p>Determines departmental/local expectations on health and safety matters. Educates, trains, guides and disciplines students and staff.</p> <p>Determines institutional policy and/or contributes ideas to national policy.</p>	<p>Shapes policy and procedures of own institution, national or international professional associations/bodies</p>
<b>2. Ethics, principles and sustainability</b>	<p>Understands and applies the relevant codes of conduct and guidelines for the ethical conduct of research; seeks advice from supervisor.</p> <p>Demonstrates awareness of issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research. (B2)*</p> <p>Is mindful of own impact on the environment. Understands how to behave and work in a sustainable way.</p> <p>Understands the concept of corporate social responsibility; seeks guidance as necessary.</p>	<p>Makes own ethical judgements about work and advises less experienced researchers and students. Challenges potential or actual unethical behaviour of others.</p> <p>Acts and works in a responsible way to create a sustainable environment.</p>	<p>Sets expectations and ensures ethical principles are adhered to within own research environment. Educates and advises peers and less experienced members of staff.</p> <p>Acts as exemplar, advises peers and staff on environmental issues; promotes sustainable attitude to research among less experienced researchers.</p>	<p>Determines appropriate ethical conduct for discipline/research area; advises policy makers.</p> <p>Drives local environmental policy and promotes sustainable approach to research among colleagues/department.</p>	<p>Shapes policy and procedures of the HE sector and professional associations/bodies.</p> <p>Promotes public understanding of the ethical issues raised by research.</p>
<b>3. Legal requirements</b>	<p>Has basic understanding of legal requirements surrounding research, e.g. Data Protection Act, Freedom of Information Act, Equality Act 2010 and equivalent Northern Irish legislation.</p>	<p>Understands the legal obligations of the profession and can advise peers and less experienced researchers, especially on ownership of data and the requirements of the Data Protection Act. (B2)*</p>	<p>Assumes, for the local research context, responsibility for working within the legal framework; sets expectations, advises peers and less experienced members of staff.</p>	<p>Advises staff and contributes to institutional policy.</p> <p>Ensures that students and staff have equality of opportunity and are treated fairly.</p>	<p>Shapes policy and procedures of the HE sector and professional associations/bodies.</p> <p>Leads by example.</p>

**Sub-domains and descriptors**

Phase 1

Phase 2

Phase 3

Phase 4

Phase 5

**C1 Professional conduct**

<b>4. IPR and copyright</b>	Has basic understanding of data ownership rules as they apply to own research.	Has sufficient understanding of copyright, (B2)* IPR, licensing to advise peers and less experienced researchers.  Understands the value of open access of research outputs to researchers and the wider society.  Manages the deposit of research outputs, open and wider access, and the Creative Commons license.	Sets local expectations among staff/team/department.  Engages in the commercialisation of intellectual property where appropriate.  Advises all staff and contributes to institutional policy.	Shapes policy and procedures of the HE sector and professional associations/ bodies.
<b>5. Respect and confidentiality</b>	Within own research respects the right of participants to confidentiality and anonymity.  Respects colleagues.	Advises peers and less experienced researchers on respect, confidentiality (B2)* and anonymity.  Encourages others to respect colleagues; challenges those who do not respect others.	Sets expectations, advises peers and less experienced members of staff.	Directs local policy, advises all staff and contributes to institutional policy.
<b>6. Attribution and co-authorship</b>	Understands concept of attribution (B2)* and applies it consistently and fairly to appropriately recognise contributions and co-authorships. Seeks advice on local codes of conduct.	Advises peers and less experienced researchers on bibliometrics and citation practice.	Sets expectations, advises peers and less experienced members of staff.	Directs local policy, advises all staff and contributes to institutional policy.
<b>7. Appropriate practice</b>	Understands and adheres to the rules and regulations concerning academic malpractice (B2)* in the institution in which based and of professional body and funder, if appropriate.	Has sufficient understanding of the rules of academic malpractice to advise peers and less experienced researchers. Challenges malpractice.	Sets expectations, advises peers and less experienced members of staff.	Directs local policy, advises all staff and contributes to institutional policy.  Is involved in decisions regarding malpractice.

**C2 Research management**

<b>1. Research strategy</b>	Aware of how own research aligns with the research strategy of the institution and strategic focus of the discipline/research area.  Develops understanding of broader context of research.	Ensures research contributes to the discipline/research area and own institution and also to wider aims of all stakeholders, the public and the business sector.	Shapes and influences broader research agenda.
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## C2 Research management

### 2. Project planning and delivery

Applies effective project management through the setting of research goals, intermediate milestones and prioritisation of activities. (C1)\*

Acts on decisions agreed with supervisor/line manager and delivers results.

Independently defines a manageable research project.

Understands project management cycles and is able to draw on a range of project management techniques and tools.

Allows for wider public access to and long-term preservation of research information/findings.

Manages problems and conflict.

Defines large research projects, draws up long-term plans for research.

Uses range of project management strategies.

Clarifies priorities; sets expectations, keeps project on track.

Effectively manages multiple research projects and both the research agenda and bureaucracy for various projects.

Able to take unpopular but evidence-based appropriate decisions.

### 3. Risk management

Makes basic risk assessment and is able to manage risks in own project with support.

Aware of risks in virtual environments and when using interactive communication technologies.

Assesses risks in own research environment, takes responsibility for others in that environment.

Aware of risks to research information over time.

Conducts thorough risk analysis for self, team and others; quick to identify risks and confidently manages them.

Accepts responsibility for risk management; educates and advises others.

Determines and directs procedures/expectations for own institution.

Shapes policy on risk management for the HE sector and professional associations/bodies

## C3 Finance, funding and resources

### 1. Income and funding generation

Understands the processes for funding and evaluation of research. (B5)\*

Writes own research proposal.

Has broad awareness and knowledge of key relevant funding sources and grant application procedures.\*\* Recognises the significance of income and funding generation for own institution.

Applies for small grants/fellowships successfully.

Aware of wider economic context. Understands funding complexities and variety of sources for funding. Educates, advises and guides others on income and funding generation.

Applies for increasingly larger grants, seeking alternative sources. Engages in income generation for own institution.

Supports funding applications led by others.

Influences funding policy within the HE sector and professional associations/bodies.

### 2. Financial management

Understands the basic principles of financial management.

Has some commercial awareness.

Has knowledge of required financial management systems.

Keeps basic accounts and reconciles them.

Manages own grant.

Develops deeper commercial awareness.

Is expert in the use of required financial management systems for audit tracking and budgetary planning.

Understands institutional and national financial systems for supporting research.

Manages multiple budgets; educates, advises and guides others.

Helps shape/contributes to funding policy and financial management processes and commercial awareness in institution /department.

## C3 Finance, funding and resources

### 3. Infrastructure and resources

Makes efficient use of available resources.

Knows immediate academic system/work environment, departmental or faculty.

Makes creative use of available resources; cultivates useful connections.

Aware of research organisations' reporting mechanisms and house styles, and of procurement law and best practice.

Recognises corporate culture and what is acceptable within it; acknowledges the impact of own role within it.

Contributes to the planning and resource management of the department; accepts responsibility for own and others' actions.

Procures and maintains resources appropriate to range of projects; mindful of economies of scale.

Drives/directs/influences internal use of infrastructure and resources.

Contributes to institutional administration and governance; chairs high level institutional committees.

Makes persuasive arguments for the allocation of resources and appropriate infrastructure.



## Domain D: Engagement, influence and impact

This domain contains the knowledge, understanding and skills needed to engage with, influence and impact on the academic, social, cultural and economic context.

Sub-domains and descriptors	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
<b>D1 Working with others</b>					
<b>1. Collegiality</b>	Shows consideration to others. Listens, gives and receives feedback and responds perceptively to others. (F3)*	Is approachable, demonstrates interpersonal sensitivity. Ensures everyone has a shared understanding.	Keeps people informed of wider institutional issues. Promotes collegiality, regardless of status. Engages in supportive peer review with colleagues.	Exemplar for collegial behaviour in department/institution. Cascades knowledge. Solicits and attends to feedback from colleagues at all levels.	
<b>2. Team working</b>	Understands own behaviours and impact on others when working in and contributing to the success of formal and informal teams. (F2)* Appreciates contributions of other team members including non-academic members. Thanks people for their contribution.	Understands leadership in team environments; recognises the strengths of team members and works effectively to achieve mutual goals.** Coaches less experienced researchers and students. Gives credit to people for their contribution. Builds support and coalitions to attain goals	Leads, manages and delegates impartially. Is sensitive to intentions, needs and positions of team members; acts accordingly to achieve success. Manages expectations and resolves conflict. Coaches team members; helps team members clarify their roles and responsibilities. Acknowledges the results of the team. Actively seeks collaborative partners.	Recruits, trains and builds sustainable team; develops staff and facilitates relationships. Collaborates with key figures/teams internationally.	

## D1 Working with others

### 3. People management

Negotiates activities and deadlines with supervisor/line manager.

Develops own management style.  
Supervises/manages and develops less experienced researchers and students with sensitivity.  
States clear expectations, clarifies goals and negotiates realistic deadlines so that people know what is expected of them.  
Sets an example in relation to equality and diversity matters; challenges inappropriate behaviour.  
Motivates and encourages others.

Has established an independent personal management style.  
Rewards good performance and deals effectively with under-performance.  
Explains the rationale behind decisions and the importance of issues.  
Ensures appropriate equality and diversity policies and procedures are implemented.  
Empowers others.

Creates nurturing/supportive culture for others.  
Ensures the implementation of equality and diversity policies.  
Leads by example, inspires others, communicates vision.

### 4. Supervision

Engages in peer support and evaluation, and undergraduate support and assessment.

Provides support and advice to peers and less experienced researchers.  
Takes on co-supervision role.  
Welcomes feedback on own supervisory skills.

Encourages the development of autonomy in others.  
Takes on lead supervisor role. Supports the development of supervision skills in others.  
Keeps up to date with supervision policy and procedure.  
Actively seeks feedback on own supervisory skills and techniques; provides feedback for less experienced colleagues.

### 5. Mentoring

Effectively supports the learning of others when involved in teaching, mentoring, demonstrating or other research activities. (E5)\*  
Recognises the importance of mentorship and receiving mentoring.

Develops skills as a mentor and uses own mentorship effectively.  
Encourages peers and less experienced researchers to present at conferences, write and publish joint or individual papers.  
Acts as a mentor to students.

Acts as mentor to less experienced colleagues.  
Helps mentees and other people to see opportunities and take up new challenges.  
Identifies potential in others; empowers people.  
Sets challenges but builds and develops confidence; manages the over-confident.

Is a role model. Shares networks; creates opportunities for others.  
Shapes the mentoring strategy of own institution.  
Involves people in decision making and leadership roles, promoting their autonomy.  
Nurtures talent; develops skilled researchers.

## D1 Working with others

### 6. Influence and leadership

Engages in debate and invites challenge.

Develops awareness of need to gain support.

Recognises implications of own research for real life contexts.

Learns of the value to academia of engaging in dialogue with those who use the outputs of research to achieve influence and impact.

Influences and leads less experienced researchers and students.

Listens actively and communicates confidently. Presents a convincing case.

Engages with stakeholders and users of research to extend influence and impact of research within and beyond academia.

Develops awareness of different leadership styles.

Takes responsibility for key areas of work within the institution.

Generates excitement about ideas.

Recognises and encourages the contributions of others and uses them to best effect.

Offers ideas that encourage people to think differently; states expectations clearly as a role model.

Develops own leadership style.

Protects less experienced researchers in an academic context.

Demonstrates initiative and competence in leading people, resources and services, formally or informally

Influences and provides leadership in committees and in external relationships.

Highly influential in academic and non-academic spheres. Presents and defends strong or radical ideas.

Is recognised as making significant contributions to policy-making bodies and academic committees.

Can use range of leadership styles; includes and enables others; convinces through argument; involves others in decisions.

Promotes the value of own staff and department/institution.

Has exceptional influence; internationally renowned.

Input sought by policy makers, funding bodies, etc.

### 7. Collaboration

Aware of the value of working collaboratively to benefit research and for maximising the potential for impact.

Co-produces research outputs with supervisors/research leaders.

Recognises common/conflicting interests within own and adjacent disciplines/research areas.

Builds collaborative relationships with a range of colleagues within own and adjacent disciplines/research areas and with stakeholders and users of research to co-produce research outputs.

Actively participates in and contributes to collaborations and external relationships.

Manages and negotiates collaborations and external relationships; contributes to development of discipline/research area.

Works in multi- or cross-disciplinary contexts; thinks comparatively.

Builds collaborative relationships with a range of external organisations and bodies; negotiates at national and international level.

Actively builds capacity in collaborations and external relationships nationally and internationally; contributes to reputation and vibrancy of department/institution.

### 8. Equality and diversity

Is sensitive to and respectful of individual differences. Develops awareness of diversity and difference within working environment.

Understands equality and diversity requirements of institution.

Appreciates and works with diversity and difference in education/research.

Acts as role model for personal conduct when dealing with diversity and difference; educates, advises and guides less experienced researchers.

Makes positive use of diversity and difference to enrich research projects and outputs.

Sets example locally, nationally and internationally.

Helps shape departmental/institutional policy and implementation.

## D2 Communication and dissemination

### 1. Communication methods

Constructs coherent arguments and articulates ideas clearly to a range of audiences, formally and informally, through a variety of techniques. (E2)\*

Actively engages in knowledge exchange and debate with colleagues, sometimes between disciplines/research areas.

Appreciates the skills of rhetoric.

Presents work confidently.

Able to persuade others, asking timely and appropriate questions.\*

Can communicate research effectively to a diverse and non-specialist audience.

Recognises the value of ideas from outside academia and incorporates them where appropriate.

Actively engages in inter-disciplinary knowledge exchange.

Eloquently makes the complex accessible.

Demonstrates incisive interrogative and interview techniques.

Actively engages in knowledge exchange with the public, business, industry, the professions and other users of research.

Varies approach and presents research to professional peers/expert and non-expert audience in an inspirational way.

Produces finely honed argument rapidly.

### 2. Communication media

Develops skills in a range of communication means, e.g. face-to-face interaction using interactive technologies, and/or textual and visual media, where useful/necessary.

Has a web presence as a researcher.

Uses audio-visual aids effectively in presentations.

Is confident in face-to-face interactions. Uses interactive communication technologies for networking, information/data sharing and promoting research presence.

Engages with locally available media.

Makes the complex accessible using a wide range of audio-visuals as appropriate.

Willingly learns additional skills.

Confidently uses e-resources.

Establishes and leads virtual research environments.

Collaborates and communicates research 'virtually'.

Uses national/international media and web media.

Continuously seeks self-improvement in terms of media usage. Educates, advises and guides others.

Maintains advanced level of knowledge and skill in interactive communication technologies.

Is aware of and engages with international media.

Is an institutional/disciplinary leader with global presence on key issues.

### 3. Publication

Understands the processes of publication and academic exploitation of research results. (B7)\*

Produces some publishable material in print, electronic or other format.

Is developing awareness of the range and diversity of outlets for publications.

Understands how research is evaluated and published in print, electronic or other format.

Produces publishable material of high standard; may co-author/collaborate with others.

Disseminates in a range of research, professional and public outlets.

Regularly publishes and is involved in editing/may be editor of national publication.

Aims for the most prestigious publication in academic and non-academic outlets.

Actively seeks collaborative and/or interdisciplinary partners; is lead author on co-authored outputs.

Supports and enables less experienced researchers to publish.

Willingly peer reviews publications.

Chooses to actively publish in a variety of outlets, sometimes solicited contributions; is involved in editing/is editor of international journal or other form of dissemination.

Targets appropriate journals/outlets to gain an extensive track record of high quality published research.

Internationally and publicly renowned for publications.

Serves on influential editorial boards.

## D3 Engagement and impact

### 1. Teaching

Contributes to teaching at undergraduate level.

Assists in the supervision of undergraduate projects.

Participates in research meetings (seminars, workshops, conferences, etc). Has a developing awareness of the ways research influences/interacts with teaching.

Has a developing awareness of own teaching style and techniques. Is involved with the assessment of student knowledge and supervision of projects.

Assists in the development of student research skills.

Willing to co-supervise postgraduate research projects.

Recognises the significance of translating research into other educational outputs; seeks ways for own research to influence teaching.

Organises research meetings; seminars, workshops, conferences, etc.

Improves own approach and develops wider repertoire of teaching styles and techniques.

Contributes to and manages the teaching and learning programmes in the department and contributes to the development of the curriculum in own area.

Values the teaching-learning-research connection and interactions.

Educates, advises, guides and manages less experienced researchers.

Builds supervisory experiences; supervises postgraduate researchers; acts as external examiner at doctoral level.

Attracts new postgraduate researchers.

Leads teaching programmes and their evaluation/quality assurance procedures.

Pursues opportunities to develop research-informed teaching. Actively encourages and promotes a culture that links research and teaching.

Mentors supervisors of postgraduate researchers.

### 2. Public engagement

Understands and appreciates the value of engaging with the public, willingly participates.

Open to influence of public interactions on own work.

Responds to local opportunities and existing activities; presents aspects of research at public events.

Contributes to promoting the public understanding of own research area. (E4)\*

Actively seeks ways to realise opportunities for public engagement.

Facilitates engagement with others, leads on local opportunities, is involved with national programmes; makes appropriate use of external support for these activities.

Recognises the mutual benefit of engagement to research, researchers and the public.

Facilitates opportunities for public dialogue, connects with users of research and beneficiaries; leads major public engagement projects and funding applications.

Helps to shape the public's conception of research. Facilitates a dialogue between the public and researchers; educates, advises and guides less experienced researchers about the importance of public engagement.

Initiates activities; building track record of public engagement.

Creates a climate where engagement activity is valued.

Establishes public engagement reputation, gives strategic support, promotes projects and supports funding applications.

Is known advocate for public engagement in discipline/research area; Occupies specific public engagement post(s) or personal chair.

## D3 Engagement and impact

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
<b>3. Enterprise</b>	<p>Creates ideas and identifies opportunities internally and externally.</p> <p>Develops ideas in an innovative manner within own institution or externally.</p> <p>Understands the process of commercial exploitation of research results. (B7)*</p> <p>Learns of the value to academia of establishing relationships in business/commercial context.</p>	<p>Demonstrates high motivation and commitment to take forward enterprising ideas. Appreciates the significance of the research-enterprise relationship.</p> <p>Understands different environments, appreciates and, where appropriate, contributes to knowledge exchange within society.**</p> <p>Becomes more aware of commercialisation, entrepreneurship/intrapreneurship and social enterprise.</p>	<p>Leads others in a range of environments to solve problems in a creative and innovative manner.</p> <p>Builds strong networks to acquire resources and influence change through knowledge exchange.</p> <p>Turns ideas into real ventures which enrich research and transfer knowledge and expertise to wider audiences internally and externally.</p> <p>Recognises potential for new products and novel applications of research for commercial and/or social benefit. Highly skilled at developing relationships in business/commercial context; commercially and socially aware.</p> <p>Educates, advises and guides less experienced researchers.</p>	<p>Stimulates, creates and builds extensive relationships in business/commercial context.</p> <p>Establishes recognised reputation for enterprise and knowledge exchange.</p> <p>Provides strategic leadership and support to others relating to enterprise.</p> <p>Is highly skilled in getting new technologies and/or new ideas adopted by non-research specialists/industry.</p> <p>Acts as advocate for enterprise.</p>	
<b>4. Policy</b>	<p>Understands the relevant policy-making processes and presents findings in a policy friendly format.</p> <p>Analyses policies and understands the wider contexts in which they are situated.</p>	<p>Recognises, understands and appreciates the importance of policy making to research and the importance of research to policy making.</p> <p>Engages in dialogue with the public, policy makers, government and other key organisations.</p> <p>Evaluates the impact of policy and its fitness for purpose.</p>	<p>Produces research which can inform the development or enhancement of policy.</p> <p>Educates, advises and guides less experienced researchers.</p>	<p>Understands/builds the relationship between academia and the policy-making process and makes the appropriate links to influence policy making.</p> <p>Advises and informs all staff on impact of policy on research.</p>	<p>Has the ability to get research knowledge into the policy-making process through a variety of mechanisms.</p> <p>Is able to influence policy by working directly with key policy makers.</p>

## D3 Engagement and impact

### 5. Society and culture

Develops awareness of the impact of research on wider society and of the impact of society, the environment and culture on research.

Understands concept of corporate social responsibility.

Recognises, understands and appreciates the potential impact of research on society, the environment and culture.

Engages in dialogue with the community and/or relevant stakeholders.

Has deeper understanding of corporate social responsibility and acknowledges the impact of own role within it.

Politically aware.

Actively seeks ways to enrich society and culture with research projects and outputs.

Educates, advises and guides less experienced researchers in corporate social responsibility.

Politically astute.

Sets example locally, nationally and internationally.

Helps shape departmental/institutional policy and implementation.

Uses politics to advantage.

Sets expectations of staff in respect of corporate social responsibility.

### 6. Global citizenship

Shows a broad understanding of the context in which own research takes place, at the national and international level. (B1)\*

Recognises impact of own and others' research as global citizens.

Develops international contacts and networks; engages with and understands other cultures.

Sets example and expectations; takes lead on impact issues for discipline/research area and/or institution.

Can educate, advise, train and guide peers, researchers and staff in international research issues.

Has global impact.

Takes lead; sets example and agendas, and influences policy on national and international scale.