



<b>Full name:</b>
<b>Faculty:</b>
<b>Date of Training Needs Analysis:</b>

## Training Needs Analysis Form

The Researcher Development Framework sets out the knowledge, behaviours, and attributes that characterise an effective and highly skilled researcher. It has now been adopted by the majority of UK universities and research institutions and can be used as a mechanism to reflect on your skills and identify potential areas of development.

It also acts as a recognised benchmark for students to articulate their skills to potential employers and others.

You should undertake a training needs analysis at the start of your research degree and utilise this to develop a training plan. You need to assess your current skills level to indicate any gaps using a rating scale from 1 to 3 (1 indicating no skill to 3 very confident) and then further rate these development needs by priority: low (not required immediately), medium (needed this year), or high (needed in next few weeks/months). Vitae has an informative section that breaks down the importance of each skill, how it can be demonstrated and gives ideas for further development. This resource can be found at <https://www.vitae.ac.uk/researchers-professional-development>. Remember your development is unique – it's up to you to decide what your priorities are, how you need to develop them and how this can be achieved.

### Domain A – Knowledge and Intellectual Abilities (Knowledge Base)

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

Subject Knowledge	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Has, at least, core knowledge and basic understanding of key concepts, issues, and history of thought						
Knows of recent advances within own research area and in related areas						
Is working towards making an original contribution to knowledge						
Is developing a broader awareness of international and non-academic aspects of knowledge creation						

Research Methods – Theoretical Knowledge	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands relevant research methodologies and techniques and their appropriate application within own research area						
Justifies the principles and experimental techniques used in own research						

Research Methods – Practical Application	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Uses a range of research methods linked to study area; documents own activity						
Shows growing competence in own subject area and is developing awareness of alternative methods and analysis techniques						

Information Seeking	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Acquires and develops search and discovery skills and techniques						
Identifies and accesses appropriate bibliographical resources, archives, and other sources of relevant information						
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						

Information Literacy and Management	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Designs and executes systems for the acquisition and collation of information using information technology appropriately						
Develops awareness of information/data security and longevity issues						
Knows where to obtain expert advice, such as information/data managers, archivists, and librarians						

Languages	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Has excellent knowledge of language(s) appropriate for research, including technical language						

Academic Literacy and Numeracy	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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 and context for specialist and non-specialist audiences						
Is mathematically competent to undertake research in own research area; understands and applies any statistics that may be used in own research area; analyses data and uses appropriate computer packages						
Is IT literate and competent in using information and digital technology						

**Domain A – Knowledge and Intellectual Abilities (Cognitive Abilities)**

Analysing	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Critically analyses and evaluates own findings and those of others						
Validates datasets of others						

Synthesising	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Sees connections between own research and previous studies; benefits from guidance with synthesising information/data and ideas						

Critical Thinking	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Able to understand argument (oral and textual) and articulate own assumptions; developing independent and critical thinking						
Has the ability to recognise and validate problems						
Recognises multiple ways of knowing and alternative paradigms						

Evaluating	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Summarises, documents, reports, and reflects on progress						
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						

Problem Solving	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Isolates basic themes of own research; formulates basic research questions and hypotheses						

**Domain A – Knowledge and Intellectual Abilities (Creativity)**

Inquiring Mind	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Demonstrates a willingness and ability to learn and acquire knowledge						
Demonstrates flexibility and open-mindedness						
Develops a style of questioning and questioning technique						

Intellectual Insight	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Absorbs and appropriates ideas; is intellectually astute						
Creates ideas and opportunities by investigating/seeking information						

Innovation	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands the role of innovation and creativity in research						
May engage in inter-disciplinary research						

Argument Construction	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Constructively defends research outcomes						
Provides some evidence in support of ideas						
Structures arguments clearly and concisely						

Intellectual Risk	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Tests the boundaries, is willing to expose ideas to a critical audience, and to critically appraise other research						

**Domain B – Personal Effectiveness (Personal Qualities)**

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

Enthusiasm	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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						

Perseverance	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Demonstrates self-discipline, motivation, and thoroughness						
Perseveres in the face of obstacles and set-backs but benefits from peer, supervisor, or leader support; is developing resilience						
Deals effectively with the routine aspects of research						

Integrity	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands and demonstrates standards of good research practice in the institution and/or research area						
Seeks guidance as necessary						

Self-Confidence	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Aware of some personal abilities and willing to demonstrate them						
Recognises boundaries of own knowledge, skills, and expertise and draws on and uses sources of support as appropriate						

Self-Reflection	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Makes time to reflect on practice and experience						
Develops strengths and improves on weak areas						
Seeks personal feedback						
Learns from mistakes						

Responsibility	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Gradually takes complete responsibility for own project and own well-being; develops independence						

**Domain B – Personal Effectiveness (Self-Management)**

Preparation and Prioritisation	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Prepares and plans project to meet objectives and, with support, is able to adapt if necessary						

Commitment to Research	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Commits to and completes first project and establishes research credentials						

Time Management	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Manages own time effectively to complete research project; adheres to clear plan						

Responsiveness to Change	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Adapts approach when required to; seeks guidance and recognises risks						

Work-Life Balance	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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						

**Domain B – Personal Effectiveness (Professional and Career Development)**

Career Management	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Takes ownership for and manages own career progression, sets realistic and achievable career goals, identifies and develops ways to improve employability						
Presents own skills, personal attributes, and experiences through effective CVs, applications, and interviews						
Begins to establish a career network						

Continuing Professional Development	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Demonstrates self-awareness and the ability to identify own development needs						
Appreciates the need for and shows commitment to continuing professional development						
Recognises transferability of own experience and articulates this to potential employers or line managers						
Develops and maintains own records of achievement and experience						

Responsiveness to Opportunities	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Demonstrates an insight into the transferable nature of research skills to other work environments and the range of career opportunities within and outside academia						
Understands and takes advantage of a broad range of employment and professional development opportunities within and outside academia, including work experience and internships						

Networking	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Develops and maintains co-operative networks and working relationships with supervisors, colleagues, and peers within the institution and the wider research community						
Uses personal and/or online networks effectively for feedback, advice, critical appraisal of work, and responding to opportunities						
Engages with learned societies and public bodies						

Reputation and Esteem	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Speaks with authority on own topic						
Begins to be known as a good researcher						

**Domain C – Research Governance and Organisation (Professional Conduct)**

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

Health and Safety	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands relevant health and safety issues and demonstrates responsible working practices						
Takes responsibility for own space; aware of impact on others and wider environment						

Ethics, Principles, and Sustainability	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands and applies the relevant codes of conduct and guidelines for the ethical conduct of research; seeks advice from supervisor						
Demonstrates awareness of issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research						
Is mindful of own impact on the environment; understands how to behave and work in a sustainable way						
Understands the concept of corporate social responsibility; seeks guidance as necessary						

Legal Requirements	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Has basic understanding of legal requirements surrounding research – e.g., Data Protection Act, Freedom of Information Act, Equality Act, and equivalent legislation in other parts of the UK						

Intellectual Property Rights and Copyright	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Has basic understanding of data ownership rules as they apply to own research						

Respect and Confidentiality	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Within own research respects the right of participants to confidentiality and anonymity						
Respects colleagues						

Attribution and Co-Authorship	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands concept of attribution and applies it consistently and fairly to appropriately recognise contributions and co-authorship; seeks advice on local codes of conduct						

Appropriate Practice	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands and adheres to the rules and regulations concerning academic malpractice in the institution in which based and of professional body and funder if appropriate						

**Domain C – Research Governance and Organisation (Research Management)**

Research Strategy	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Aware of how own research aligns with the research strategy of the institution and strategic focus of the research area						
Develops understanding of broader context of research						

Project Planning and Delivery	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Applies effective project management through the setting of research goals, intermediate milestones, and prioritisation of activities						
Acts on decisions agreed with supervisor/line manager and delivers results						

Risk Management	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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						

**Domain C – Research Governance and Organisation (Finance, Funding, and Resources)**

Income and Funding Generation	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands the processes for funding and evaluation of research						
Writes own research proposal						

Financial Management	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands the basic principles of financial management						
Has some commercial awareness						

Infrastructure and Resources	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Makes efficient use of available resources						
Knows immediate academic system/work environment, departmental or faculty						

**Domain D – Engagement, Influence, and Impact (Working With Others)**

Collegiality	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Shows consideration to others						
Listens, gives, and receives feedback and responds perceptively to others						

Team Working	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understand own behaviours and impact on others when working in and contributing to the success of formal and informal teams						
Appreciates contributions of other team members including non-academic members; thanks people for their contributions						

People Management	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Negotiates activities and deadlines with supervisor/line manager						

Supervision	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Engages in peer support and evaluation and undergraduate support and assessment						

Mentoring	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Effectively supports the learning of others when involved in teaching, mentoring, demonstrating, or other research activities						
Recognises the importance of mentorship and receiving mentoring						

Influence and Leadership	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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						

Collaboration	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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 research areas						

Equality and Diversity	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Is sensitive to and respectful of individual differences; develops awareness of diversity and difference within working environment						
Understands equality and diversity requirements of institution						

**Domain D – Engagement, Influence, and Impact (Communication and Dissemination)**

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

Communication Methods	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Constructs coherent arguments and articulates ideas clearly to a range of audiences, formally and informally, through a variety of techniques						
Actively engages in knowledge exchange and debate with colleagues, sometimes between research areas						
Appreciates the skills of rhetoric						

Communication Media	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Develops skills in a range of communication means – such as face-to-face interaction, using interactive technologies, and/or textual and visual media						
Has a web presence as a researcher						
Uses audio-visual aids effectively in presentations						

Publication	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands the processes of publication and academic exploitation of research results						
Produces some publishable material in print, electronic, or other format						
Is developing awareness of the range and diversity of outlets for publications						

**Domain D – Engagement, Influence, and Impact (Engagement and Impact)**

Teaching	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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						

Public Engagement	Current Skill Level			Priority		
	1	2	3	Low	Med	High
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						

Enterprise	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Creates ideas and identifies opportunities internally and externally						
Develops ideas in an innovative manner within own institution or externally						
Understands the process of commercial exploitation of research results						
Learns of the value to academia of establishing relationships in business/commercial contexts						

Policy	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Understands the relevant policy-making processes and presents findings in a policy-friendly format						
Analyses policies and understands the wider contexts in which they are situated						

Society and Culture	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Develops awareness of the impact of research on wider society and the impact of society, the environment, and culture of research						
Understands concept of corporate social responsibility						

Global Citizenship	Current Skill Level			Priority		
	1	2	3	Low	Med	High
Shows a broad understanding of the context in which own research takes place, at the national and international level						