RSci
Registered
Scientist

Science Council

Assessing a Registered Scientist competence report

Advice to assessors

Applicants for RSci will need to demonstrate competence across five areas. Guidance on what assessors should be looking for under each competence is provided below but the examples are just indicative – there will be many other valid examples the applicant could choose.

Here are some tips you should bear in mind when assessing the application:

- For each competence statement, the applicant needs to have given clear examples of the role that they play or the contribution they make to a task or activity.
- The examples must have sufficient depth – if you can't visualise what they did, the answer is probably lacking this depth.
- They can use the same task of activity more than once, but they should be clear on how it applies to the specific competence they are addressing.
- Most of the examples provided should be recent (in the last three years) but they can draw on relevant experience further back in their career.

A: Application of knowledge and understanding

Identify and use relevant scientific understanding, methods and skills to complete tasks and address well defined problems

A1: Apply extended knowledge of underlying concepts and principles associated with area of work.

We are looking for an example of how they have used their extended knowledge within the area in which they work. This will include developments within their field and the ability to understand and apply new developments to their area of work.

For instance, they may describe how they:

- Take part in a journal/publication review group within the workplace.
- Suggest updates to the way in which designs, prototypes, processes, programmes, experiments, or procedures are approached and carried out based upon new knowledge of technology or underlying theoretical principles.
- Undertake further academic / vocational / self-study or technical training in their current or advancing field of work.

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A2: Review, evaluate and apply underlying scientific concepts, principles and techniques in the context of new and different areas of work.

What we are looking for here is how they have taken techniques/principles and reviewed, evaluated and applied them in a new area of work.

Their example may for instance describe how they:

- Work in a new subject, in a different discipline, area or with new material. They should be able to explain and describe in technical terms the main components/elements/tools/material etc. involved and why they are carrying out the new work.
- Are involved in carrying out a new procedure, process, or design; they should be able to explain from a technical perspective why they are using this and why it is relevant to the new area of work.
- Are involved in using different or new design or experimental model; they should be able to explain why they are using that model, how they are using it and what the results might mean.

A3: Analyse, interpret and evaluate data, concepts and ideas to propose solutions to problems.

We are looking for an example of how they observe and interpret the results from their data to draw conclusions and inform their next steps.

Their example could show how they:

- Enable others to be able to analyse and interpret their work and advise on how they may overcome problems.
- Review a number of relevant literature/manuals/designs and present their findings to others.
- Develop new methods/approach based on information or outcomes from previous work by others or themselves.

B: Personal Responsibility

Exercise personal responsibility in planning and implementing tasks according to prescribed protocols

B1: Work autonomously while knowing when to escalate appropriately and recognising limits of scope of practice.

We are looking for an example of how they work with no supervision for certain key tasks, experiments or procedures associated with their role within required timeframes. They will also be able to demonstrate their understanding of when they need to seek input from either their supervisor or others and when to escalate.

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B2: Take responsibility for safe and sustainable working practices and contribute to their evaluation and improvement.

We are looking for an example of how they have taken responsibility for working safely and sustainably.

Their example could include:

- Identification of potential safety issues and recommending solutions.
- Risk assessments associated with their work.
- Relevant Health and Safety regulations, e.g. COSHH, Noise, Manual Handling, DSE.
- Relevant Home Office Licences.
- Safety training courses they have successfully completed for their laboratory role.
- Any monitoring of safety within their work, e.g. for radioactivity, chemical exposure.
- Safety equipment and control measures necessary to work safely and protect others.
- Carrying out safety inspections of premises and equipment, producing reports and making recommendations.

They may also be responsible for an aspect of 'safety monitoring or training' and (if relevant) a description of this could be included.

B3: Take responsibility for the quality of your work and also enable others to work to high standards.

This means that they can show how they are aware of the quality standards necessary for the work being carried out by themselves and others. They should be able to describe an example of how they enable these standards and ensure that they are applied.

They may for example:

- Produce and communicate protocol standards (such as good laboratory/workshop/design practice.)
- Train others to recognise when something has not been carried out correctly and explain the impact this could have.
- Contribute to the analysis of their own and others' work and explain the impact of good and bad data and outcomes.
- Recognise when their own and others' work needs to be repeated or the methodology updated and can communicate the reasons for this in terms of reproducibility or quality standards for example.

C: Interpersonal Skills

Demonstrate effective communication and interpersonal skills

C1: Demonstrate effective and appropriate communication skills.

What we are looking for here is an example that they are an effective communicator. The example can be through appropriate oral, written or electronic means.

This may include examples of:

- Discussing and agreeing objectives with their supervisor.
- Discussing and agreeing objectives in team meetings.
- Giving presentations of their work or other aspects of lab work (e.g. safety updates, method updates) to their supervisor and team.
- Preparing written reports on their work.
- Train, demonstrate or teach others in procedures or protocols.
- Play a part in staff development (e.g. carry out appraisals or staff reviews)
- Carry out induction training.

C2: Demonstrate effective interpersonal and behavioural skills.

This means that they can give an example that demonstrates the skills that they use to interact with colleagues in a constructive way within the work setting. In these situations, it may be appropriate to discuss these with their supervisor, as an external perspective is often very useful in this regard.

C3: Demonstrate productive working relationships and an ability to resolve problems.

This means that they should be able to describe how, when working with others, they are able to demonstrate that they developed positive working relationships and resolved the problem. Their example should demonstrate how those working relationships were effective in resolving problems.

For instance, they may:

- Be a member of a committee/group that is tasked with a safety aspect of the job and can demonstrate that together they made a difference that was useful and effective in the workplace.
- Liaise with other groups within their organisation to effectively deal with problems (e.g. lack of or demand for training in a particular area.)
- Be a part of working group tasked with addressing specific problems or the need for change.

D: Professional Practice

Apply appropriate theoretical and practical methods

D1: Identify, review and select scientific techniques, procedures and methods to undertake tasks.

This means they can give an example of work that they have undertaken showing where and why the method/procedure used was chosen as the best (or most relevant) to use.

This might include:

- Review of method – why is this one the best compared to others that are available.
- Cost effectiveness.
- Time taken.
- IT considerations.

D2: Contribute to the organisation of tasks and resources.

This means that they can give examples of how they have contributed to the running of the laboratory/workshop/section or other types of working environment.

For instance this might mean:

- Organisation of safety checks and inspections.
- Ordering equipment, software, and materials.
- Organisation of a rota for cleaning, maintenance, or machine time.
- Organisation of human and physical resources when an issue arises.
- Organisation of statutory inspections, external/internal servicing, and maintenance of equipment or infrastructure.

D3: Participate in the design, development and implementation of solutions.

This means that they can give an example of 'problem solving' that describes their specific role in helping to overcome a specific problem. For instance, it might mean that a process, programme, design, assay, or method suddenly stops working and they are involved in finding out the reason why. Their example should show what their role was in understanding the problem and what their contribution achieved.

D4: Contribute to continuous process improvement.

This means that they can give an example which shows how they are aware of progress in their area and seek ways of improving the efficiency of their work. It should describe how they seek to discuss with their supervisor the strategy for achieving this. For instance this could include new and improved methods, new ways to increase throughput, or ways to increase cost-effectiveness.

Examples might be their role in:

- Taking part in staff reviews.
- Working within time frames and using SMART objectives.
- Contributing to operational plans.
- Looking for cheaper resources.
- Working within a budget.
- Playing a role in procurement management.

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E: Professional Standards

Demonstrate a personal commitment to professional standards

E1: Comply with and promote relevant codes of conduct and practice.

This means that they can give an example of how they comply with a code of conduct (e.g. of their professional Body) or how they work within and promote all relevant legislative, regulatory and local requirements.

This means that they can give examples of how they, for instance:

- Comply with their professional body's code of conduct .
- Manage their work within all relevant legislative, regulatory and local requirements, frameworks such as Health and Safety Legislation, Home Office Regulations, Good Laboratory Practice (GLP), local Codes of Practice, etc.

E2: Maintain and enhance competence in own area of practice through professional development activity.

This means that they undertake activities to enhance their competence in their own area of practice i.e. Continuing Professional Development (CPD) and reflect on its impact on themselves and others. We are not looking for a list of courses here but evidence of how their CPD benefits their practice and benefits others. Their CPD may include work-based learning, professional activity, formal/educational, self-directed learning.

(Note registrants will need to comply with the Science Council CPD Standards)