



unite!

University Network for Innovation,
Technology and Engineering

Development Needs Analysis

DNA TOOL

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Development Needs Analysis

Developing a blend of subject-specific skills, intellectual abilities like critical thinking, and more general skills like communication and enterprise will be necessary for you to successfully and on time complete your research degree.

No matter what career or life decisions you make, many of these skills will also be crucial in the future.

The **Development Needs Analysis (DNA) form** uses UNITE's Researcher Development Framework (RDF) to assist you in making a plan for your personal growth.

You'll need to assess your present skill set, identify knowledge gaps, and pinpoint areas that need improvement. The RDF describes the skills, dispositions, and knowledge of outstanding researchers, ranging from postgraduate students to seasoned academic leaders.

First things first:

The completed DNA form is an action plan for your development activity over a specific period of time, that you must individually define.

For each of the domains of the RDF, identify a few (2-4) priority areas for development and the development activities that will enhance your abilities in these areas.

The form provides space for you to indicate how you will know when you have achieved your goal for development in this area ("what will I achieve?") and a space for when you want to achieve this by ("deadline").

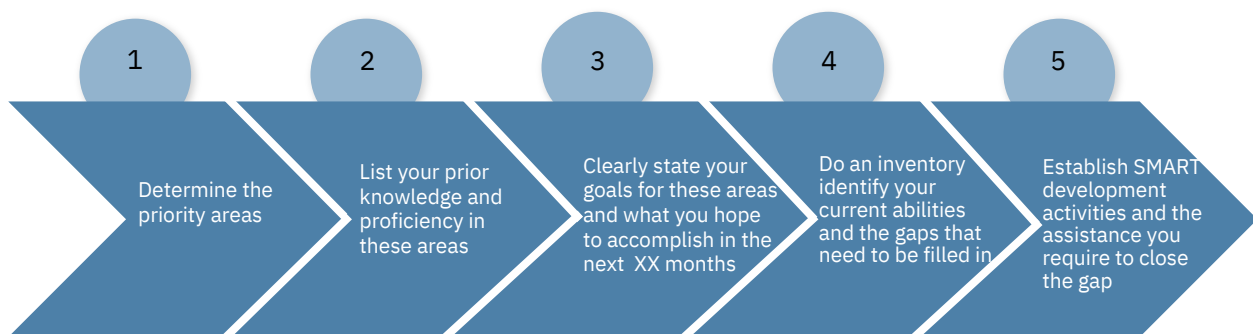
This is to help you ensure your action plan activities are SMART (Specific, Measureable, Achievable, Relevant, Timely).

The form also provides space for you to indicate the people and resources which will support you in meeting your development needs.

You should complete the form in discussion with your supervisor.

How to get started - Conducting an analysis of one's own skill gaps:

Set out here is a methodical, step-by-step process for determining the needs you have for development and creating an action plan for those needs for your DNA form. You are welcome to finish your form by following this procedure.



1. Determine the priority areas

Consider the abilities, know-how, and conduct that a postdoctoral researcher in your field would most likely require over the course of the next period of time that you settle for yourself.

Remember to include priorities that will support your current research attempt as well as those that are related to your intended career in the future.

2. List your prior knowledge and proficiency in these areas:

Provide examples of your prior work in each of the priority areas you have identified, being as detailed as you can. This is your chance to express gratitude for your current skills and strengths. Talk about these with your superiors to make sure you've accurately captured your present skill set.

3. Clearly state your goals for these areas and what you hope to accomplish:

What precisely are you going to accomplish? Saying "I want to be able to confidently present my research to a specialist audience via an oral presentation" would be a more useful formulation of "I'd like to be better at communicating my research."

Once more, your supervisor can assist you in determining pertinent and reasonable goals. In general, you will be looking to achieve phases 1 & 2 over the course of a doctoral research program if you are using the full RDF to help you understand what progression in these areas might look like. Keep in mind, however, that the RDF applies to researchers across their entire research career.

4. Identify your current abilities and the gaps that need to be filled in

You should be able to determine whether or not you believe there is a development gap by consulting the notes you made in steps 2 and 3.

It's great if your prior experience shows that you can accomplish your goal without the need for additional development. You can document this by suggesting in your DNA development plan that your development activity will involve "learning by doing" the outcome you identified in step 3. If you have identified a development gap, you can start to think about what you might need to do to close that gap.

5. Establish your SMART development activities and the assistance required to close the gap

Always consider your learning preferences and the resources at your disposal when selecting development activities. Make sure all of your actions are **SMART**:

- **S**pecific – record this under “planned activity”
- **M**easurable – referring to step 3, record this under “what will I achieve?”
- **A**chievable – this should be built in from step 3
- **R**elevant – this should be built in from step 1
- **T**imely – record this under “deadline”

Please note under "support/resources" if you will require any assistance (such as from your supervisor) or resources (such as a conference fee). Be as explicit as you can.

Personal Development Plan

RDF Domain 1: Research Skills and Competencies

RDF Descriptor	Planned activity	What will I achieve?	Support / resources	Deadline

Table 1: I Domain 1

RDF Domain 2: Project Management and Impact

RDF Descriptor	Planned activity	What will I achieve?	Support / resources	Deadline

Table 2: I Domain 2

RDF Domain 3: Self-Management & Cognitive Abilities

RDF Descriptor	Planned activity	What will I achieve?	Support / resources	Deadline

Table 3: I Domain 3

RDF Domain 4: Working with Others

RDF Descriptor	Planned activity	What will I achieve?	Support / resources	Deadline

Table 4: I Domain 4

RDF Domain 5: Managing Research Tools

RDF Descriptor	Planned activity	What will I achieve?	Support / resources	Deadline

Table 5: I Domain 5

These development activities:

- are in the best interest of the postgraduate researcher;
- require support/resources which are available;
- will be reviewed regularly, at least annually.

The postgraduate researcher is responsible for ensuring these development activities are carried out.

	Name (printed)	Signature	Date
Postgraduate researcher			
Supervisor			
Co-supervisor(s)			

Appendix 1: Abbreviated Researcher Development Framework from Unite!

It is highly advised that you become acquainted with the entire RDF, which can be accessed on Unite's website. On the other hand, the following condensed version might be useful for familiarization if you are unfamiliar with the RDF.



1. Research Skills and Competencies:	2. Project Management and Impact	3. Self-Management and Cognitive Abilities:	4. Working with others	5. Managing Research Tools:
1.1. Research Methods and Techniques 1.2. Broader Disciplinary Knowledge 1.3. Ethical and Legal Requirements	2.1. Leadership and Project Management 2.2. Research Impact 2.3. Open Access and Innovation 2.4. Pedagogical Prowess 2.5. Engaging with the Broad Public	3.1. Personal Professional Development 3.2. Mastering Stressful Situations 3.3. Thinking Skills	4.1. Professional Interaction and Languages 4.2. Network Development 4.3. Mentorship 4.4. Diversity and Multicultural Environments	5.1. Data Management and Programming Languages 5.2. Intellectual Property and Innovation 5.3. Citizen Science