



Nuffield Future Researchers Programme Summary for Students

Introduction

The **Nuffield Future Researchers** programme has been developed in response to the coronavirus (COVID-19) pandemic and the need to move to an online model of the Nuffield Research Placement programme during summer 2020.

As a Nuffield Future Researcher, you will develop your essential STEM skills through collaboration with a knowledge expert on a research question, using innovative ways of working where assignments and tasks will be set within a Virtual Learning Environment (VLE).

By taking part you will complete a meaningful and rewarding experience that will challenge and develop your research, critical thinking, planning and communication skills. Participation will also provide you with valuable supervision from knowledge experts thereby allowing you additional scope to become more confident about working on novel situations. In many cases, the collaboration on a research question will allow you to make a notable contribution to the work of your research supervisor.

In summary, we hope that this new programme will equip and develop your STEM research skills through high quality online activities and remote access to knowledge experts thereby providing an opportunity to be guided and supported in your career choices.

How will you achieve this through the Nuffield Future Researchers programme?

- You will engage with online research activities to broaden and deepen your understanding of STEM and STEM-related research including qualitative social science.
- You will collaborate on a research question facilitated online by a knowledge expert and communicate the research findings through high quality outputs
- You will develop essential and transferable skills such as problem solving, analysis, confidence, self-efficacy, communication, and time and resource management.

Nuffield Future Researchers Timetable

You will be expected to journey through 5 x online modules (see Pages 2 &3) which will include a series of activities to be completed over May – September.

May 2020 onwards	Students to begin and complete ' <i>Building essential professional skills</i> ' Module
Jun onwards	<ul style="list-style-type: none"> • Coordinators to hold virtual inductions • Following induction, students to begin '<i>Developing research skills</i>' Module and '<i>Developing data analysis and numerical skills</i>' Module via VLE • Following induction, student <> supervisor introduction to start via VLE
Jul onwards	Students to begin and complete ' <i>Investigating a research question in collaboration with a knowledge expert</i> ' Module and ' <i>Communicating your research evidence</i> ' Module with ongoing collaboration with supervisor
September	Deadline of completed report and poster upload to online system

Module	What you will learn	How you will be given the activities	What you will need to do to complete the activities	Time to complete
<p>Building essential professional skills</p> <p>These skills and attributes include communication, problem solving, confidence, self-efficacy and time and resource management.</p>	<p>Show that you know what is meant by the key essential skills.</p> <p>Explain what essential skills will be required during your research experience.</p>	<p>In collaboration with the Skills Builder Partnership, the Nuffield Foundation have developed 4x short online Kahoot activities that are completed via your independent study before the final activity takes place during online inductions with your regional coordinator.</p>	<p>You will not be formally assessed in this module; however, regional coordinators will monitor your completion of the Kahoot activities.</p> <p>You will also be asked to submit a separate reflective piece on the essential skills required for your project.</p>	<p>1-2 hours</p>
<p>Developing research skills</p>	<p>Identify, evaluate and synthesise information from relevant subject-related sources.</p> <p>Use the internet effectively and critically as a research tool e.g. to complete a literature review.</p>	<p>Activities and tasks addressing each learning outcome have been curated by the Nuffield Foundation and will be made available to you for your independent study via the VLE.</p>	<p>You will not be formally assessed in this module; however, regional coordinators will monitor your completion of the module activities.</p> <p>You will be asked to complete several core activities with an opportunity to complete further optional activities if desired.</p> <p>Part of the core activities will be that you will need to submit a reflective piece on the research skills required for your project.</p>	<p>10 - 15 hours</p>
<p>Developing data analysis and numerical skills</p>	<p>Describe how data can be collected and managed.</p> <p>Give examples of how data can be analysed.</p> <p>Track the development of specific numeracy skills including your numeracy/data strengths and areas to develop.</p>	<p>Activities and tasks addressing the data analysis learning outcomes have been curated by the Nuffield Foundation and will be made available to you for your independent study via the VLE. Numerical skills will be developed via completion of the National Numeracy Challenge.</p>	<p>You will not be formally assessed in this module; however, regional coordinators will monitor your completion of the module activities.</p> <p>You will be asked to complete several core activities with an opportunity to complete further optional activities if desired.</p> <p>Part of the core activities will be that you will need to submit a reflective piece on the data analysis and numeracy skills required for your project.</p>	<p>10 - 15 hours</p>

Module	What you will learn	How you will be given the activities	What you will need to do to complete the activities	Time to complete
Investigating a research question in collaboration with a knowledge expert	<p>Summarise the aim and objectives of the project within the wider context of the research (to include ethical, social and economic implications).</p> <p>Identify a range of approaches, select the most appropriate approach to investigate the research question and justify this choice.</p> <p>Make good use of materials and sources available.</p> <p>Select and use the research skills and applications (e.g. software packages etc.) required to investigate, gather information, analyse and interpret data and findings as identified in earlier modules.</p> <p>Employ essential skills.</p>	<p>Activities and tasks set and supported by your project supervisor (knowledge expert) within the VLE that can be completed by you in order to present a conclusion to a research question outlined by your supervisor.</p> <p>It is anticipated that the research question will be investigated either through analysing data or a literature review and other proposals from your project supervisor.</p>	<p>You will need to keep in regular contact with your project supervisor on an ongoing basis in order to collaborate on the research question.</p> <p>Your communication with your project supervisor will be via activities and tasks uploaded by them to the VLE and through video conferencing. You will be required to respond in a timely manner.</p> <p>To aid this process, you will complete a project plan via a template supplied by the Nuffield Foundation.</p>	60+ hours
Communicating your research evidence	<p>Complete a written research report in the area of research against a given brief for submission to the Nuffield Foundation.</p> <p>Complete a research poster in the area of research against a given brief for submission to the Nuffield Foundation.</p> <p>List the different avenues where your research findings could be communicated.</p>	<p>You will complete a written report which contains the following features (Abstract, Introduction, Methodology, Results and discussion, Conclusion, Evaluation, Appendix, References, Bibliography, Acknowledgements).</p> <p>You will also complete a poster presentation guided by a template supplied by the Nuffield Foundation.</p>	<p>You will need to complete a report and poster that has been reviewed by both your project supervisor for specialist subject and technical knowledge and by your regional coordinator to ensure all required elements are present.</p> <p>You will need to upload your report and poster to the Nuffield Foundation's online application system.</p> <p>Part of the core activities will be that you will need to submit a reflective piece on the skills gained during your project.</p>	