**Royal Society Partnership Grants scheme**

**Project planning guidance document (with examples)**

In Stage 2 of the application process on the Flexi-Grant system, you will be asked to complete a table with details about your project plan. This is a guidance template with examples of what needs to be considered and explained in each of the sections of your project planning table.

Please note that each of the sections can be repeated (e.g. Investigation 1, Investigation 2, etc.) and the order of the activities can be tailored for your school specifically. Each project should include several investigations and it is important to also consider how data collected during the project will be handled and analysed. The complexity of the investigations and data handling will of course vary dependent on the age of students involved in the project. Please note that this is a guidance document, and your application’s final project planning table does not necessarily need to include all the suggested elements below.

If you would like feedback on your project plan before starting the application on Flexi-Grant, please email a completed copy of this document to the Schools Engagement team via education@royalsociety.org.

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| **Project element description**Please select from: * Project kick off meeting
* Background research session
* Careers talk from your STEM partner
* Investigation
* Project presentation
* Data handling and evaluation session
* Other
 | **Please provide some detail about what the students will be doing.**  | **Please detail what equipment will be needed for this element. If no equipment will be needed please state N/A.** | **Please clearly explain how the STEM partner(s) will be involved with this element and how they will engage with students. If the STEM partner(s) will not be involved please state N/A.** |
| Project kick off meeting | * Explain how the project planning will be carried out and what will be considered for students to start the investigations.
* Explain how the project will be initiated and presented to students and/or wider school.
* Consider and explain if students will contribute with their ideas in shaping the project.
 | * List what, if any, equipment will be used for the project kick off meeting.
 | * STEM partner to advise and agree with the teachers on the scope of the research project – i.e. the timelines, methodology and equipment required.
* This can include an event for the participating students where the STEM partner(s) and teachers initiate the project, e.g. a school assembly.
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| Background research session  | * Explain what activities will help students understand the wider context and importance of the specific experimental investigations they will be conducting later.
* This part can involve baseline data collection which will help to decide on what investigations students will carry out later – e.g. what would be good spots for setting up pollution monitors.
* This part can involve the students working independently or in groups to decide on some elements that they would specifically like to investigate within their project which then would be reviewed by the teacher and STEM partner for approval.
* This part can involve students going on a trip to a research facility or site to learn more about the research done within the field of their investigations – e.g. going to botanical gardens to learn more about plants if the project is on pollination.
 | * List what if any equipment will be used for the background research session.
* This can include the travel costs of visiting a research facility or site.
 | * STEM partner to provide guidance and wider context to the students for the investigations they will be conducting later.
* This can include STEM partner providing advice, reviewing and refining student proposed project investigations for later parts of the project.
* This can include STEM partner providing guidance to students on how to read and present scientific papers.
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| Careers talk from your STEM Partner  | * Explain the format of career talks which students will be attending – e.g. STEM partner presentation with Q&A.
* The relevance of different project tasks to STEM professions can be revisited throughout the project.
* This can be done as part of a visit to the STEM partner’s organisation.
* This can include guidance for CV writing/work or placement interview preparation.
 | * List what if any equipment will be used for the careers talk(s).
* This can include the travel costs of visiting a research facility or site.
 | * STEM partner to deliver the careers talk.
* This can be done as a school assembly wide event for more students to benefit.
* Inviting colleagues of the lead STEM partner or other STEM professionals is encouraged to show the diversity of people working in STEM and the range of different tasks and skills linked to each role.
* Hearing about the challenges from the speaker’s experience can be as valuable as hearing about the benefits.
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| Investigation  | * Break down and explain all the investigations the students will be conducting in the project.
* Consider and explain if there are going to be tailored investigations for different age groups and if these will be linked together, e.g. younger students collecting data and older students analysing it.
* For the student investigations consider and explain the:
* different methodologies,
* sample size and collection,
* preparation of control measures,
* what are the different variables that will be changed,
* what is going to be measured and how,
* breaking down the project into a timescale,
* data collection and processing,
* health and safety.
* This part can include a school visit to a research facility or site.
 | * This part will include all the equipment needed for each of the investigations.
* Please ensure that the equipment listed in the project planning table includes all the equipment listed in the budget table.
* This can include the travel costs of visiting a research facility or site.
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| Data handling and evaluation session  | * Explain how the students will analyse the collected data to draw conclusions which will help them to answer the project’s title question.
* Consider and explain:
* what data will be analysed,
* what statistical techniques will be used,
* if students will use tables, graphs and/or charts for data visualisation,
* This part can include evaluation of the methodology used in the investigations to consider the limitations, reliability and validity of the student investigations.
* This part should include reflection on what improvements can be made for similar investigations in the future.
* This can include students doing more background research to explain the findings and see if they align with other peer reviewed studies.
 | * List what equipment and/or software will be used for data analysis and visualisation.
 | * STEM partner to help with choosing the right data analysis techniques and provide guidance to students to do data analysis themselves or to explain how it was done.
* STEM partner to help students with data visualisation.
* STEM partner to help students with drawing conclusions from data analysis.
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| Project presentation  | * Explain how and where the students will present the project’s findings, the methodology used and skills they had developed.
* Consider and explain:
* what tools will be used for the students to present the project findings, e.g. presentation slides, posters, videos,
* who is going to be the audience, e.g. school assembly, showcase or conference with other schools, students, STEM partners and/or parents,
* if the students will be mentoring other students on the different aspects of the project,
* how the project’s findings will be shared on the school’s newsletter or different social media channels and if this would be done throughout the project or just at the end.
 | * List what equipment and/or software will be used for project presentation.
 | * STEM partner to provide guidance and support on how to present the project’s findings.
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| Other | * Explain any other project relevant significant tasks that students will be carrying out during the project’s lifecycle - e.g. digging and constructing a wildlife pond which will be used for investigations later.
* This can include teacher or technician training day provided by the STEM partner on different lab/field work techniques that will be important for the project.
 | * State any equipment that will be used for these activities and tasks.
 | * Explain how the STEM partner will be involved in these activities or tasks.
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