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***Ingenious***

**Project planning template**

Principal applicant name:

Organisation:

Project title:

Grant reference:

Date:

**1. Purpose of this document**

The aim of this document is to help you plan your *Ingenious* project and record the decisions you make. The plans you set out in this document should be more detailed than those in your original funding application. You should take account of the feedback you received on your original application and what you learnt during the kick-off workshops.

You are required to send a draft copy of this document to Ben Gammon at [benjamin.gammon@btinternet.com](mailto:benjamin.gammon@btinternet.com), for review.

A final version must be sent to [Engagement@raeng.org.uk](mailto:Engagement@raeng.org.uk) before starting your project. This is a formal requirement of your contract with the Academy. You must complete the Declaration section at the end of this document before submitting it to the Academy.

You should refer to the information you provide in this document when you come to write the Final Report at the end of your project.

**2. Updated project objectives**

List your project objectives in the box below, taking account of any feedback you received on your application and any changes you have made to your original plans since submitting your proposal. Please ensure that these objectives are: Specific, Measurable, Achievable, Realistic and Time scaled.

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| **Updated project objectives** |
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**3. Key outcomes**

Grant-Holders are required by the Academy to conduct an evaluation of their project. You will be asked to summarise the results of this evaluation in your **Final Report Form**. In the following sections, you need to record the key outcomes you aim to achieve for both the engineers who take part in the project, and public audiences you reach through your activities. These outcomes have been divided into:

* **Reach** – the number and range of engineers you will involve in the project and what training you will provide for them; the number of activities you will deliver and the type and number of public audiences you aim to reach through your activities. Which under-served audiences you intend to reach and how you plan to engage them.
* **Learning** –benefits that will be gained by your engineers; benefits that will be gained by your public audiences.

You will be asked to provide data in your Final Report about the extent to which you met your targets for reach and learning. Please be realistic in setting these targets, taking into account the time and budget you have available.

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| **Reach** | |
| Number and type of activities that you aim to deliver |  |
| Number of engineers you aim to involve in your project  Proportion of female engineers you aim to recruit |  |
| What training you will provide for the engineers involved in your project |  |
| Target numbers and type of audience you aim to reach (see footnote for further details) |  |
| Under-served audiences you aim to reach (see information below for example categories) and how you will do so: e.g. which partner organisations you will work with, channels of communication to promote your activities to the audience, choice of venues, |  |

‘Type of audience’ could include one or more of the following: families with children aged x to y; school pupils from Key Stage … and their teachers; university students studying … ; teenagers outside of school; adults without specialist knowledge of STEM, adults with specific interests in … and so on.

By under-served audiences we mean segments of the general population who are under-represented among STEM engagement audiences and/or among the engineering profession. They can include:

* Women and girls
* People of Black, Asian and other Minority Ethnic heritage
* People living in communities with above average indices of multiple deprivation[[1]](#footnote-1)
* People living in areas with high indices of Multiple Deprivation
* Pupils receiving Pupil Premium funding (or equivalent for the devolved regions)
* Young people not in education, employment or training (NEETS)
* People with a disability or are living with a long-term illness

We strongly recommend focusing on just one or two of these audiences rather than risk spreading your resources too thinly. We also encourage grant holders to look beyond the traditional under-served audiences to those who are less often targeted by STEM engagement activities.

The Academy requires you to collect data about the socio-economic profile of the public and school audiences you reach. To do this we ask that you to gather one, or both, of the following sets of data (depending on the type of audiences you aim to reach).

* For adult and family audiences: the full post-codes from a representative sample of **adult** attendees (NB we **don’t** want you to ask children for this information)
* For school audiences: the name and address of each school involved in your project; and the number of pupils from each school who took part

Using this data, and the links that we will provide, you will:

1. Use the Government post-code look-up tables to calculate the proportion of adults/parents who come from areas of high IMD (Indicators of Multiple Deprivation) or the equivalent data for Northern Ireland, Scotland and Wales

and/or

1. Use the Government data on school level allocation of Pupil Premium or Free School Meal funding to estimate the proportion of pupils you engaged who receive this funding.

The Academy will provide you with links to the relevant post-code look-up tables and school data spreadsheets to make these calculations.

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| **Learning**  The Academy requires you to gather data about the learning outcomes from your project for **both** engineers and your public audiences. To help you plan this part of the evaluation we ask that you define your intended learning outcomes in the table below. These learning outcomes should be described as **bullet point objectives**. We have added some examples in the section below for guidance. These must be modified and add to define the learning outcomes for your project | |
| **Learning outcomes for your engineers** | |
| **Knowledge and understanding of public engagement** |  |
| **Attitudes towards public engagement** (in what ways do you intend to change their attitudes) |  |
| **Motivation** |  |
| **Specific public engagement skills** |  |
| **Learning outcomes for your public audiences** | |
| **Knowledge and understanding of engineering & engineers** (what in particular will they learn about) |  |
| **Attitudes towards engineering and engineers** |  |
| **Motivation** (to do what) |  |
| **Specific skills developed** (if relevant) |  |

**4. How you will evaluate your project**

In the following section describe **how**, **when** and **where** you will gather data from a) the engineers taking part in your project and b) the public taking part in your activities (including collecting postcode data from adult visitors if relevant).

Please also describe **how** you will encourage your engineers and audience members to provide thoughtful and honest feedback.

If you have any questions about your evaluation please contact the Academy’s evaluation consultant Ben Gammon on [benjamin.gammon@btinternet.com](mailto:benjamin.gammon@btinternet.com)

To conduct your evaluation, you will probably need to do one or more of the following:

* Hand out self-completion questionnaires
* Conduct an on-line survey
* Conduct interviews in person or via video-link / phone
* Conduct focus groups
* Run online discussion panels
* Observe engineers engaging with members of the public
* Analyse data from bookings, social media, website usage etc.

Each of these methods has strengths and weaknesses. It is important to choose those that will most effectively address the research objectives set out in this document.

In addition to your own questions, we require all grant holders to provide some standardised feedback about the impact of their project on public audiences. To do this we have designed a set of standardised questions that you need to incorporate into your surveys or questionnaires.

You will be asked to quote the data from these questions in your Final Project Report. Which of the standardised questions you use will depend on the age of your audience members.

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| **Standardised questions for children aged 8-13 years**  Incorporate the following questions into your questionnaires or interviews  A. Thinking about the [activity][[2]](#footnote-2) you just took part in, did you …   |  |  |  |  | | --- | --- | --- | --- | |  | **Yes** | **Not sure** | **No** | | Enjoy the [activity]? |  |  |  | | Learn something new about engineering? |  |  |  | | Find out more about what engineers do? |  |  |  | | Find out how engineering improves our lives? |  |  |  |   B. Are you …?   |  |  |  |  | | --- | --- | --- | --- | |  | **Yes** | **Not sure** | **No** | | Interested in finding out more about engineering? |  |  |  | | Likely to recommend this [activity] to your friends or family? |  |  |  | |
| **Standardised question for teenagers and adults**  Incorporate the following question into your questionnaires or interviews  Thinking about the **[activity][[3]](#footnote-3)** you just took part in: to what extent do you agree or disagree with the following statements?   |  |  |  |  | | --- | --- | --- | --- | |  | **Yes** | **No** | **Not sure** | | I enjoyed the [activity] |  |  |  | | I learnt something new about engineering |  |  |  | | I gained a deeper understanding of what engineers do |  |  |  | | I have a better understanding of how engineering improves our lives |  |  |  | | It inspired me to find out more about engineering |  |  |  | | I would recommend this [activity] to other people |  |  |  | |

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| **How you will conduct your evaluation** |
| **With your engineers**  NB your evaluation with engineers is **in** **addition** to the data that the Academy collects from them using pre-project questionnaires and long-term tracking survey.  **How** will you collect data from engineers?  **When & Where** will you collect data from engineers?  **How** will encourage them to participate in the evaluation and provide honest, thoughtful responses? |
| **With your public audiences**  **How** will you collect data from your public audiences – including postcode data from adult audience members  **When & where** will you collect data from your public audiences?  **How** will encourage them to participate in the evaluation and provide honest, thoughtful responses? |

**4.1 The evaluation conducted by the Academy**

Complementing the evaluation you conduct, the Academy will gather information about your engineers using two surveys.

Atthe **start** of your project, we will gather background demographic information about your engineers using an online ‘pre-project questionnaire’.

Twelve to eighteen months **after** your project has finished, the Academy conducts an online ‘long-term tracking survey’ of all the engineers involved in *Ingenious* grant funded projects, to assesses the longer-term impact of the scheme.

The results from these surveys are reported to our funder, the Department for Business, Energy and Industrial Strategy. This helps the Academy secure future funding for the *Ingenious* grant scheme.

To run the pre-project questionnaire and long-term tracking survey the Academy requires all grant holders to do the following.

1. At the start of your project e.g. when you run training for the engineers or at an early briefing session - provide all the engineers with a link to the online pre-project questionnaire. This gathers basic demographic data about them and their email addresses so that they can later be sent the long-term tracking survey
2. Remind and encourage your engineers to complete the pre-project questionnaire – providing any background information they require
3. Brief your engineers about the forthcoming long-term tracking survey – when they will receive the invitation, how it is administered, what it will be covering, and why the Academy requests this information

**Please note**: the above are requirements of your funding agreement with the Academy.

All data that the Academy receives about or from the engineers is gathered, stored and used in compliance with the General Data Protection Regulation as described below.

**5. Declaration**

**Your promise**

□ {Please tick} I confirm that I have read all the sections of this document covering the requirements of the *Ingenious* grant funding and have/will brief other members of my team about them as required

□ {Please tick} I confirm that we will distribute the link to the pre-project questionnaire to all of our participating engineers and brief them about the forthcoming long-term tracking survey

□ {Please tick} I confirm that we will conduct our own evaluation with the participating engineers at the end of our project

□ {Please tick} I confirm that we will conduct our own evaluation with school and/or public audiences which will include, but not be limited to, the standardised questions described in this document

□ {Please tick} I confirm that we will provide the Academy with: information about the proportion of school students attending our events who are receiving Pupil Premium / Free School Meals funding; and/or information about the percent of adult visitors attending our events who live in areas of high Indices of Multiple Deprivation

**Our promise**

The Royal Academy of Engineering is committed to ensuring that the personal information entrusted to us is processed in accordance with the Data Protection Act 1998, the Privacy & Electronic Communications Regulation 2003, and the General Data Protection Regulation (EU) 2016/679 (GDPR). The Academy will ensure that all data provided by the engineers is securely stored and is only used for the purpose stated on the questionnaire. Once the long-term tracking survey has been conducted any contact details provided will be securely deleted unless individuals have asked to stay in touch with the Academy. Full details of our privacy policy are available at <https://www.raeng.org.uk/terms-and-conditions/privacy-policy>.

1. see <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019> for more information about IMD [↑](#footnote-ref-1)
2. You may want to change the word ‘activity’ to something that more clearly describes what your audience actually experienced e.g. workshop, theatre performance, film, festival etc. [↑](#footnote-ref-2)
3. As above you may want to change the word ‘activity’ to something that better describes what your audience experienced e.g. workshop, theatre performance, film, festival etc. [↑](#footnote-ref-3)