



## **Nuffield Foundation Science Bursaries for Schools & Colleges Guidance for teachers**

This information has been sent out by STEM Sussex, the Nuffield Coordinator for Sussex, to describe how the science bursary programme works in this area. These notes supplement the information in the colour leaflet and on the Nuffield Foundation website at [www.nuffieldfoundation.org/scb](http://www.nuffieldfoundation.org/scb). You will find the contact details for your local Nuffield Coordinator on page 11 of the colour leaflet and also on the website.

The awards are for students on any science, technology, engineering or maths (STEM) based post-16 course, including AS levels, Scottish Highers, BTEC and International Baccalaureate. The Foundation is keen to encourage applications from students studying for Advanced vocational courses in STEM as well as other post-16 qualifications such as A-levels.

The bursary programme has been running successfully for nearly ten years and has benefited many thousands of students. Please encourage some of your students to take part in a project this summer, and benefit from the opportunities which the programme presents.

Our aim is to make the process of setting up bursaries as simple as possible for teachers. You should expect your students to do most of the planning. Support comes from the Nuffield Coordinator.

### **Setting up projects**

#### **What makes a good project?**

A bursary project should be self-contained so that the student can experience a beginning, middle and an end within 4 weeks.

A project should allow the student scope to use their initiative.

The criteria for selecting projects are that they should:

- have clear scientific or technological content;
- contribute to the work of the host organisation;
- be well defined, having a clear outcome in mind from the beginning;
- allow scope for initiative on the part of the student.

#### **Who plans the projects?**

In this area your students have a choice. They may prefer to set up their own project placements with the help of their own contacts or contacts provided by you or the Nuffield Coordinator. If so, make sure that your students get in touch with STEM Sussex before they start. STEM Sussex will be able to provide guidance for potential project providers.

Alternatively they may wish to apply for one of a number of projects with host organisations that STEM Sussex has set up. STEM Sussex compiles a list of projects with local providers, but does not publish this list. Students should indicate on their application form the type of project that they would like (eg Biochemistry, Physics, Psychology etc). Note that competition for these project placements is likely to be high.



### **Making the arrangements**

Start by identifying the students who would like to be involved in the scheme and the subject and types of projects in which they are interested. It is worth noting here that we **do not provide any medical placements**. Students are able to work on biomedical projects, but these must be **research based** rather than clinical. The programme is designed for students interested in any area of STEM, and will give students an experience of scientific research. For this reason, it may not be the most relevant experience for those who have decided on medicine as a career.

It can sometimes be possible for two or more students go to the same host organisation.

When matching a student to a project, it is as well to bear in mind the student's personality and temperament as well as his or her knowledge, skills and interests. Project providers will be looking for evidence of enthusiasm, motivation and commitment. We are not only interested in the academic potential of the student but also their personal qualities.

Liaise with your Nuffield Coordinator about any project providers based on projects from previous years. If appropriate make new contacts and arrange your own projects. Make sure that project providers receive the information and forms from STEM Sussex.

Talk to the Nuffield Coordinator to find out what projects have already been set up to find out if any are appropriate for your students.

### **Making applications to the programme**

Encourage students to complete an Application Form and then complete part **F** before submitting the forms to the Nuffield Coordinator.

Normally 4 student applications are permitted from any one school or college. However, if you are in a large institution, please contact STEM Sussex. Each student will need to complete an application form. If you have a number of students applying for the scheme, you will only need to provide details about the school/college as well as supporting the students' application on **one** of the application forms. The personal reference for the student should be completed by the science teacher/lecturer.

In your reference could you please comment on the student's:

- **motivation** and **enthusiasm** for science and for the area of science, technology, engineering and maths in which they have expressed an interest in finding a project
- ability to make a contribution to the project and how the project could provide particular benefit to the student's maturity and career decisions.
- ability to work as part of a team and take instructions
- ability to work on their own and take responsibility and initiative
- particular skills and attributes that make them a suitable candidate for a Nuffield Science Bursary.

Please bear in mind that this is a competitive scheme, with a limited number of bursaries for each region. Each Nuffield Coordinator has to meet a number of targets to ensure balance across the type of school, the types of project and the type of project provider. This means that unfortunately even if they have set up their own projects this does not guarantee that they will be awarded a bursary.

### **Insurance**

The primary responsibility for health and safety rests with the project provider. A separate set of guidance notes is available from your Nuffield Coordinator. However, if you are arranging your own projects you should check that the project provider has a copy of these notes and is aware of their responsibility. **You should also check that the insurance scheme of the project provider covers the student while they are on their bursary placement.** Your school/college/LEA may require you to vet the host organisation for health and safety purposes.

### **Feedback**

If you are interested in visiting your student on their placement please contact STEM Sussex.

At the completion of the placement we ask the students to complete a questionnaire that also includes a brief synopsis of their project. There is also a questionnaire for you to complete to provide us with feedback on particular aspects of the scheme.

### **Events**

Where feasible, Nuffield Coordinators hold an **induction session** for students in their area who have been selected to take part in the scheme. This is an opportunity to focus the students' minds on approaches to problem solving and project management as well as to answer any questions they may have.

In addition, and again where practicable, Nuffield Coordinators hold a post-bursary **celebration event**, for those who have participated in the scheme. This enables students to present their work to a wider audience.

Your Nuffield Coordinator will inform you of these arrangements nearer the time.

### **Making the most of your bursary students**

Bear in mind that students may be able to exploit the knowledge and skills from their bursary when they get back into school. They could have evidence to add to a key skills portfolio, they might have results that could feed into their coursework and they will certainly have something interesting to talk about at an interview.



The students will make a presentation, put on a display or contribute to a seminar at the Nuffield Regional Celebration Event. This might be something that they could repeat in school or college.

Your students could: talk to other post-16 students; write an article for the school newsletter or local newspaper; take part of a lesson linked to their project; talk to the school science club; give a presentation to pupils in KS4, KS3 or a local primary school; or give a presentation to parents during a school open evening.

## **Timetable**

### **November 2011 to February 2012**

Nuffield Coordinators distribute information about the scheme. Schools and colleges register interest with the Nuffield Coordinator.

### **February to March 2012**

Students/teachers liaise with the Nuffield Coordinator and potential project providers to plan projects. Students submit their application forms.

### **April 2011**

Successful applicants are notified and projects assigned.

### **June to July 2012**

Students attend an induction event run by the Nuffield Coordinator designed to help them get the most from their bursary experience.

### **July to August 2012**

Students carry out the bursary projects and complete their reports.

### **November 2012**

Students show off their work at a celebration event run by the Nuffield Coordinator.