



# Science in Action

## Guidelines for a Successful Science Based Work Experience Placement

Work experience can have a huge impact on a young person and can influence their choice of future qualifications and career paths.

*“Joanna has gained more self-confidence and raised her expectations. She has impressed the university where she did her placement and the school. She has been a trendsetter and an ambassador for the school and the partnership”.*

Despite a national shortage of young people choosing science based qualifications post 16, many laboratories are reluctant to offer work experience to pupils, most of who do their placements when they are 15. This is impacting on recruitment.

Planet Science worked with the National Education Business Partnership Network and research laboratories to try to provide more support for schools and students, specifically in relationship to Applied Science GCSE. Science teachers were placed in selected laboratories to look at potential programmes for work experience placements.



As a result of the pilot work the following guidelines have been devised to help other laboratories. Laboratories differ widely in scope and size. However, the guidelines should help with planning for companies new to work experience and also form a useful checklist for laboratories already involved.



## Before the Placement

- Before taking a student for the first time, a work experience organiser will visit your company and discuss a potential programme and suitable tasks with you. This visit will also include looking at your insurance certificate, existing health and safety policy, hours of work and suitable clothing.
- If the placement is in support of a particular course then additional information will be provided about any desired outcomes in terms of project work supporting particular units of the course. You should also be given a contact point at the school to discuss further information if anything is unclear.
- It is helpful to arrange an interview with the student before the placement to clarify aims and objectives and provide background information about the company.
- A company representative will need to identify a department or departments willing to support the placement and the main contact or “buddy” for the student.

## The Placement

Successful placements will include the following elements:

- 1) A health and safety briefing on the first day including a company orientation, discussion of fire procedures, and any restricted areas and duties.
- 2) A structured programme of varied activities including some targets for the student to achieve. The activities, if possible, should include some hands-on activities. They might include separate days in different departments to gain a company over-view, or a range of duties in one department. The experience of the pilot is that students will not need one-to-one supervision while undertaking medium risk tasks, providing help is available if necessary
- 3) A question and review time each day with the named supervisor or “buddy” and a final session at the end of the placement.
- 4) An opportunity to validate any units of applied GCSE courses if required.



## Examples of activities suggested by the pilot

- ✓ A student could be set a project or problem at the beginning of the placement and be expected to produce a written or oral report at the end of the placement. This could include Internet based research or looking at past experiments and their findings. At Merlewood Laboratories two of the students have produced a website outlining their experiments. The laboratory intends to build on this with future students. See [www.merlewood.ceh.ac.uk/sections/soils/workexp/work\\_exp.htm](http://www.merlewood.ceh.ac.uk/sections/soils/workexp/work_exp.htm)

### **Research and report writing are key features of the Applied Science curriculum.**

- ✓ Worksheets could be developed for the student to record and review progress and extend their knowledge.
- ✓ Students could be asked to review existing risk assessments relating to specific projects. **Unit 1a OCR/EXDEL asks students to conduct a survey of health and safety in the workplace, including hazards, risks, and first aid and fire prevention.**
- ✓ Students could be asked to assist with data evaluation and look at methods of recording and monitoring in a scientific environment.
- ✓ Provide an opportunity for the students to learn what is unique about the facility and what work is on hand (confidentiality permitting).
- ✓ Provide an opportunity to look at any large-scale equipment that they would not see at school and ask them write up about the application of the equipment.
- ✓ Give them a chance to look at job roles, and responsibilities and career paths, by interviewing several members of staff. **Unit 3a OCR/EXDEL asks students to provide a report on how science is used in the workplace.**

**If you are a school or a laboratory not currently working with your local Education Business Partnership, please contact the National EBP Network, on 01635 279914 or consult [www.nebpn.org](http://www.nebpn.org).**

**The full report of the project is also on the nebpn site.**

## TO FIND OUT MORE

1. Contact your local EBP for further advice on programmes available
2. If you are not currently working with your local EBP, you will find contact details on the NEBPN website, [www.nebpn.org](http://www.nebpn.org) or call the NEBPN office **tel: 01635 279914**

