# **Group Activity**

Delegates were split into groups and asked to consider the following questions in relation to practical or literature projects:

- How do students benefit from undertaking projects?
- Which of these benefits (learning outcomes) should we try to assess?
- How should we assess them?

Below are listed some of the points raised in response to the above questions:

# **Literature projects:**

### **Benefits:**

- Not lab-based benefit for students who do not want lab-based career / further study
- Ability to extract information and to criticise it
- Evaluation of data sources
- Time management and organisational skills developed
- Can be used to identify future work or opportunities
- Can write at different levels or to different audiences
- Writing in own words / synthesis of information
- Independent and flexible, develops self-discipline and self-learning
- Use of library skills
- Develops communication skills

### Which benefits should be assessed?

- Criteria need to be set / known
- Has the student identified hypotheses and unanswered questions?
  - o Possible inclusion of experimental design to test some of these
- Library skills
- Data analysis
- Self learning has the student learnt anything from the project?
- Originality of project / conclusions

## How should we assess them?

- Difficulty for supervisor assessing the literature of a literature review, not always time to read all references
- Either abstract or whole project can be directed at a different (e.g. non scientific) audience
- Assess communication skills and knowledge of subject
  - O Viva could also test knowledge of subject and communication skills
- During project assessment of organisational / time management skills

## **Practical projects**

#### Benefits

- Wide variety of benefits including:
  - o Knowledge of scientific concepts
  - o Knowledge about science, such as:
    - Design of experimental study
    - Role of previous scientific enquiries
    - Impact of funding bodies and commercial interest
    - Potential for multiple interpretations of data
  - o General skills such as:
    - Time management
    - Use of initiative
    - Communicating results
    - Personal organisation
- Development group / team work
- Problem solving skills
- Organisational and time management skills
- Synthesis of 'modular' knowledge in a practical setting (thinking 'outside the box')
- Critical appraisal
- Ethical / GLP / Health and safety
- Level 3 skills
- Employability after working in lab environment

## Which benefits should be assessed?

- Design of experiments
- Critical appraisal skills
- Data analysis and interpretation
- Ability / performance in lab demonstrate good lab practice
- Development (further) problem solving skills

## How should we assess them?

- Presentation written / oral / poster
- Production of lab / field/ project diary
- Review of literature / interpretation of dissertation
- Discussion of project process in dissertation and viva (and reflective diary?)
- Supervisor report
- Should the supervisor assess?