Chemistry careers in SMEs (CCiSME)

A context-based learning (CBL) resource

Student handbook

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Introduction
During this project, you will explore working for a small to medium sized enterprise (SME) in the chemical and allied industries. You will see that a growing number of graduates (including chemists) will work for an SME at some point during their working life. This provides you with a great opportunity to consider careers within the SME chemical sector; an option often overlooked by students who have tended to set their sights on big pharma and other blue chip companies. You will also have access to videos from people working in SMEs to give you more insight into SMEs as a career option.

This project will help you to explore the challenges that face SMEs in particular, as well as the benefits of working for an SME. You will be undertaking a learning activity that is set in the context of an SME.

You will be working as a group and you will be expected to come up with a solution to the problem that has been set. The assessment will look for evidence of good teamwork, and your ability to communicate your findings effectively.
Learning outcomes
By the end of this module, you will be better able to

- Identify the pressures and opportunities facing SMEs in the chemical and allied industries
- Research and present information on SMEs
- Describe the nature of work for people working in SMEs
- Give an account of the benefits and challenges of working for an SME
- Work as a team on a project and understand their own role in the team
- Present information clearly and succinctly
- Demonstrate knowledge of the skills that might be required for working in an SME and evaluate these against their own skills set.

Your assignment
You will be working in a group of 3 – 5 students (to be defined by the tutor) for this project. There are three components to this project.

Choosing an SME in the chemical sector
You will need to choose a SME in the chemical sector to base your study upon. The best approach is to use an existing company. You will need to research this company.

- Where are they based and how big are they?
- What type of business are they? R and D, contract research, manufacturing, chemical services (eg. testing, analysis), consultancy services, etc.
- What are they selling?
- Who are their customers?

This exercise will need to be completed by the end of week 3 of the module.

Emails
You will be given a number of emails to consider. The scenario is that you are working for an SME in the chemical sector, and you should assume that you are working for the company that you have researched.

You will be initially given 5 – 10 emails. Each email is typical of the types of emails that a company may receive. They all represent opportunities or services that might be useful to your business.

You need to appraise each email as a group. You must decide if the email should be considered further, or discarded. You must document your decision making. A good way to do this is to minute your discussions. Guidance on minute taking is included in the guidance section of this booklet.
For each opportunity that you decide to investigate further, you must decide how you will take it forward, and what allocation of time is needed to pursue it. In any business, but in SMEs in particular, the time taken to pursue an opportunity or undertake a task must be carefully considered. In SMEs in particular, staff resource, as well as funding, can be very limited, and pursuing new opportunities will need to be balanced with delivering the core business of the company.

In subsequent weeks, you will be sent additional emails, which you will have to also consider. It is quite possible that the later emails may alter your initial plans, and you will have to rethink your decisions. This is very typical of a real business situation. The environment you are working in will be constantly changing, with new opportunities and threats appearing all of the time.

To allow for creativity within this module, you may also find your own opportunities for your business, although this is not an expectation of the project.

The final part of this task will be to present the opportunity or opportunities that you identify as most beneficial to your business.

You should present this opportunity to your boss/CEO with its justification in a memo.*

You should present this opportunity to your boss/CEO (the tutor) in a meeting (as an informal presentation).*

(* delete as appropriate)

Individual reflection on skills
At the end of the module you will be asked to reflect on the skills that you have developed during the project, and from your wider experiences, and how these may fit with the skills needed to be successful in an SME.

Assessment
There is no final examination associated with this module, all the marks come from three pieces of coursework: the description of the company, the minutes from your meetings and your final memo/presentation.* All three components will be staff marked as a team contribution i.e. all members of the team will get the same mark. However, that team mark will be modified by the peer assessment (PA) score (which is a reflection of your contribution to the group effort) to give an individual mark for each student. (See the group work section and appendix 7 to see how the PA score is derived).

Overall, the assessment for this 5 credit project will be as follows (the first three components will be assessed as a group submission but the marks will be modified by the peer assessment score).

- Description of the company selected: 20%
• Complete and coherent minutes from meetings: 40%
• Presentation/memo* for chosen opportunity: 20%
• Reflection on skills: 20%

(* delete as appropriate)

Selection of a company (weighting 20%)
As a group, you will need to choose a company to base your scenario upon. You will be assessed against the following criteria: Appropriate company selected, description of the business and understanding of their product(s).

Minutes (weighting 40%)
The minutes should be a record of all of the work that your group has undertaken in arriving at the final decision for your project. The minutes should include:

• The main points of their discussions and their decisions.
• Any actions, and who is responsible for the actions.
• A section dedicated to the follow up of the actions set in the previous minutes.

All issues raised by the minutes must be discussed and resolved.

The criteria against which the minutes will be assessed are given in appendix 2.

Presentation (weighting 20%)*
As a group you will be given 10 minutes to present your decision with justification to the module leader, who will be assuming the role of company CEO for this particular task. There will be additional time for the assessor to ask questions. The assessment sheet the marker uses, including an explanation of the marking criteria is shown in appendix 3.

Memo (weighting 20%)*
As a group you will need to submit a one page memo, to present your decision with justification to the module leader, who will be assuming the role of company CEO for this particular task. The memo should succinctly describe the opportunity you are proposing with a full justification of the benefits to the business. The assessment sheet the marker uses, including an explanation of the marking criteria is shown in appendix 4.

(* delete as appropriate)
Individual reflection (weighting 20%)
As well as the group elements to this project, you are also asked to reflect individually on your skills. We would like you to consider, as a result of your experience with the project, what skills are needed to work within an SME (and how this might compare to a larger organisation). You should then reflect on your own skills (both from working on this project, and your wider experiences) and comment on whether you believe an SME might be a suitable working environment for you, at this stage.

Guidance

Running meetings and taking minutes
Before a meeting, you should try to ensure that everyone is clear about the agenda (and objectives) for a meeting. Your team should agree on this each time. The items on the agenda should be numbered. The same numbering system should also be used in the minutes.

Minutes should be taken, detailing the activities and the outcomes of each session. It is almost impossible to record the meeting “word for word”. Therefore, it is a very useful skill to be able to pick out the important points and record them in a way that other people will be able to understand. The minutes have two major purposes: to record the substantive issues discussed (especially those agreed/approved) in the meeting and to provide a “things to do” list for the group.

When writing minutes, there are a number of rules that you should follow. It is important to avoid ambiguity; use specific details and avoid vague phrases such as, “as soon as possible.” When referring to additional documents ensure that a full reference is recorded, to allow the document to be easily located in the future. Use short, concise sentences and use the past tense. Any abbreviations that are used should be written in full the first time that they are used in each document. If there are a lot of common abbreviations it may be useful to produce a separate sheet of these abbreviations.

Action points should be clearly noted. Each action should be assigned to one or more of the team member(s). This will act as a reminder for what each member needs to do before the next session. As soon as you receive minutes and again prior to a meeting, you should read over the minutes of the previous meeting to remind yourself of what was discussed and also to check that you have carried out your action points (if not, try to do them asap if possible/appropriate).
If you are the chairperson you should make sure that the group keeps to the agenda (i.e. maintain the group’s focus). If the conversation starts to wander interrupt at a suitable point and bring the discussion back to the agenda item under consideration. If appropriate, the conversation can either be restarted in the correct agenda item, or under “any other business” at the end of the meeting; this should help to ensure that you cover all the agenda items and also make it simpler for the secretary to minute the meeting in a structured way. It is useful to summarise the key points at the end of each agenda item, to ensure that all members agree on the conclusion of each discussion. Also, the secretary will know what to minute from the discussion. At the end of each agenda item, the chair should ask the group members if they have anything else that they wish to discuss under each agenda item, before moving on to the next item. The chair should also try to ensure that all group members have a say in discussions and that any one individual does not unduly dominate a discussion or the meeting as a whole.

Each session should have a chair and a secretary. There are five sessions in all, so each member of your team will have an opportunity to play each role. If you, as a group, feel that it is appropriate, you can split a session into two or more meetings, each with separate minutes. The chair should ensure that the team sticks to the agenda, and that all the agenda items are discussed (unless the team agree to dismiss or hold it over to the next meeting). The minutes from the meetings will form part of the final assessment portfolio. This will be used to assess the ability of the group to execute tasks in a logical and timely manner, and also assess the ability to carry out and follow up on any actions generated. Minute taking is a valuable skill and your ability to take accurate and comprehensive minutes (but not containing waffle) will be assessed. Any group or sub-group meetings that take place outside of the five scheduled workshops should also be appropriately minuted/recorded.

Remember, the minutes should:

- Have a title
- Provide details such as: location, start time, end time, date, chair and secretary.
- List who was present and who was absent.
- Confirm the previous minutes as being an accurate and fair record (or note changes approved);
- Begin with matters arising from the minutes of the previous meeting.
- Provide a record of progress made with each action point.
- Provide an update on issues in minutes that are not going to be covered elsewhere in the agenda.
- Provide a useful summary of the discussions that take place under each agenda item.
- List the decisions taken for future actions, who made the suggestions and show which individual(s) has/have been assigned to which tasks.
- Give the date of the next meeting.

Note, when a set of minutes have been finalised and approved they should be signed and dated by the chair (of the meeting considering them) on behalf of the team/committee. It is this signed copy that needs to be put into the final group assessment portfolio.
The requirement to produce team meeting minutes can serve several functions:

- It helps to keep the project on schedule, by providing a record of where you are up to in your work.
- It illustrates an important formal procedure, which you will come across in many workplace situations.
- It provides training in producing an informative, concise record of the key issues at a meeting. This is a highly valuable skill.
- It provides a formal structure for meetings, which may help to make them more efficient.
- It illustrates the method and effort made by a team which might not be reflected otherwise in their results.
- It provides a record of individual contributions that can act as a useful aid to assessment when assigning individual marks to a team effort.

An example (fictitious) set of minutes is outlined below. You should ensure that you use a logical numbering system. It is often useful to set the minutes out in a table.
Staff-student committee minutes
Applied Science Department

Monday 5th December 2012, 12:00 – 1:30pm
Present: AB (chair), CD (secretary), EF, AM, JK, SM.

1 Apologies
AH, MS

2 Previous minutes (meeting on Tuesday 4th October 2011)
The minutes of the previous meeting were approved and signed by the chair.

3 Matters arising from the minutes of the meeting held on 11 October 2011

3.1. Re 4.1: Induction programme for new first years – reps from the science library and ISS have both agreed to participate next year, still awaiting confirmation from Royal Society of Science. (Action: CD to chase up SM).
3.2. Re 4.4: completed.
3.3. Re 4.6: completed.
3.4. Re 5.7: a response was tabled and approved by the committee.
3.5. Re 6.8: confirmed.

4 Safety

4.1 Fumehoods (LB)
An audit of work carried out in the laboratories, which requires the use of a fumehood should be drafted. This could be used to assess the needs of the researchers and their possible relocation in the department or the purchase of fume-cupboards. (Action: LB)
The results of the review of fume-cupboard space in the department should be discussed at the departmental meeting. (Action: CD to raise in staff meeting and AM to raise in safety committee meeting)

4.2 Apparatus left unattended forms (EF and SM)
There are new forms that all staff and research students should now be using when apparatus / reactions are left unattended. These forms must be countersigned by the supervisor or nominated person. (Action: CD to distribute forms and details of procedures to all concerned and include in postgraduate handbook)

5 Modular course review, lectures, practicals and assessment

5.1 Lecture times (JK)
Some lecturers are over-running the timetabled lecture session. It would be appreciated if lecturers would keep to the timetabled slot. (Action: JK raise at L and T meeting)

5.2 Overhead projector in MLT (JK)
This is partly broken and is likely to need replacing. (Action: AM to raise in L and T meeting)
5.3 ASCI3000 (JW)
Students would like a wider choice of projects (Action: AB to raise in L and T meeting)

5.4 ASCI2001 (CD)
This is a 10 credit practical module. The amount of material for this module requires reviewing (Action: JK to review with practical sub-group committee)

6 Postgraduate matters

6.1 Thesis/report feedback
It would be useful to students and supervisors if an approximate deadline for reviewing theses/reports was discussed when work is submitted to the supervisor for comment. (Action: AB to raise in staff meeting)

If this idea is agreed, the matter should be included in the postgraduate handbook. (Action: CD)

7 Main library student user group

7.1 CD as student rep
There has been a meeting already but CD was unaware of it taking place. (Action: CD to contact library and follow up as necessary)

AM queried if CD was also involved with issues relevant to the science library. This would be useful since many references relevant to the applied science department are kept here. (Action: CD)

8 Any other business

8.1 Deadlines related to ASCI2001 coursework were not maintained for the applied science students. (Action: AB to raise in L and T meeting)

8.2 Computers
Four new computers are now available in the common room for students to use.

There have been occasions when students have been told to leave computer clusters due to timetabled teaching sessions. A review of the use of computer clusters by students should be carried out (Action: CD to see SM)

8.3 Common room
This area is welcomed by the students as a place to meet fellow members of the department. However, students are reminded to maintain this area tidy and rubbish free. (Action: student reps to inform year groups)

9 Date of next meeting
5th March 2012
Guidance: The presentation

Presentations – general
Throughout this module, and no doubt at other times during your degree, you will have undertaken various activities where you had to communicate verbally with your friends, classmates and tutors. Many students find presentations nerve wracking and so try to avoid them. Although giving a presentation may seem daunting, they do become easier with practice and they do develop skills useful for future employment eg the ability to plan, develop and communicate a theme. When they go well they can be an excellent confidence booster. As with most things it is essential that you plan well before giving a presentation and that you are familiar with the material. Below are some tips.

• Make sure you are clear about the purpose and length of the presentation and the target audience.
• Research topic thoroughly and allow sufficient time for preparation of the presentation
• Make sure the presentation is ordered logically into introduction main body of information and concluding remarks or summary
• Check the facilities available; for example if you need a projector with computer make sure you have access to these
• Practise presentation by giving it several times to an empty room or to friends; and then to listen and could teak the content and delivery
• Try recording your presentation and listening back to it. Are you talking too quickly, too slowly? Is their variation in your intonation?
• Make sure you maintain eye contact with your audience: never turn your back on them to deliver the presentation to the projector screen (a frequent mistake made by people who are nervous)
• Make sure your audience can hear you by speaking clearly and sufficiently loudly (in a large room a good tip is simply it ask people at the back if you can be heard)
• Deliver at a pace that is not too fast and not too slow (if you have rehearsed with an audience of friends and then they should have advised you on this). There is a temptation when nervous to speak too rapidly – if you have rehearsed well you should be able to overcome your nerves
• Never read out your presentation to your audience: this appears monotonous and reduces lack of eye contact (i.e. it stifies interaction with your audience)
• Make sure you know how to pronounce scientific terms before the presentation – this will add to your confidence
• If using PowerPoint slides, take advice from your tutor on font size and display options – do not be tempted wow your audience with your technical abilities at the expense of the actual content. Do not display too much information and never read from the slides, use them as a prompt only – the slides should complement the content of your talk
• At the end of the presentation thank your audience and asked them if they have any questions: thorough preparation should mean you are able to answer them.

[List taken from: Verran and Dawson (2011)]
Guidelines for this assessment

- Firstly don't panic. The assessor is there to see the extent to your knowledge not to trip you up or make you look bad.
- Don't get bogged down in the detail, the presentation needs to be succinct. The questions will provide an opportunity for you to expand on areas.

Don't use PowerPoint – this is an information presentation. You can use handouts/diagrams/props if you think it is appropriate.
**Group work**
The majority of work you do in this module will be done as part of a group. This is for a number of reasons; not least the only way to learn to work as part of the team (a key skill for employers) is to work as part of a group or team. Also when they work well, teams achieve results greater than the sum of the individuals.

**Calculating each individual contribution to group work**
To try and best reflect every individual’s contribution to the team effort, the group mark for the progress log and project pitch will be multiplied by a peer assessment (PA) factor so that each student will get an individual mark for the coursework.

Individual student’s mark = Student’s PA score × Group mark

To calculate the PA scores at the end of the module you’ll be asked to score yourself and your colleagues’ efforts using the criteria in the table below. (A worked example of how the numbers are used to calculate each PA score is given in appendix 7).

**Table 1: Peer evaluation scores**

<table>
<thead>
<tr>
<th>Write the names of the other group members in the blank boxes on this row:</th>
<th>You</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of enthusiasm/participation</td>
<td></td>
</tr>
<tr>
<td>Suggesting ideas</td>
<td></td>
</tr>
<tr>
<td>Understanding what was required</td>
<td></td>
</tr>
<tr>
<td>Helping the group to function well as a team</td>
<td></td>
</tr>
<tr>
<td>Organising the group and ensuring things get done</td>
<td></td>
</tr>
<tr>
<td>Performing tasks efficiently</td>
<td></td>
</tr>
</tbody>
</table>

(For each criterion marks are awarded as follows: 4 for ‘better than most of the group in this respect’, 3 for ‘about average for this group in this respect’, 2 for ‘not as good as most of the group in this respect’, 1 for ‘no help at all in this respect’ and 0 for ‘a hindrance to the group in this respect’).
You will see that the criteria focus on a range of activities that help a team work effectively. This table should be used to genuinely reflect the range of contributions within a working team. Obviously a score of 0 can and should be given where deserved. However, for someone who has seriously hindered the function of the team, such as by persistent absence or obstructive behaviour (and so deserves a string of 0s) then this table should not be the first indication of that behaviour. That is, the team should use the yellow/red card system (described below) as soon as possible to highlight his or her lack of contribution to the module.
Appendices

Appendix 1: Company description assessment sheet

Group members:

Project title:

Module:

<table>
<thead>
<tr>
<th>Description of the company</th>
<th>Fail</th>
<th>Poor</th>
<th>OK</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate company selected</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Description of the business</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Understanding of their product(s)</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Well-presented/good standard of writing</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>

Comments:

To improve:

Overall grade/mark for company description:
## Appendix 2: Minutes assessment sheet

**Group members:**

**Project title:**

**Module:**

<table>
<thead>
<tr>
<th></th>
<th>Fail</th>
<th>Poor</th>
<th>OK</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of business</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Coherent writing</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Follow up on actions</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Decision justified</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Appropriate level of detail</td>
<td>Too little</td>
<td>OK</td>
<td></td>
<td>Too much</td>
<td></td>
</tr>
</tbody>
</table>

**Comments:**

**To improve:**

**Overall grade/mark for minutes:**
Appendix 3: Presentation assessment sheet

Group members:
Project title:
Module:

<table>
<thead>
<tr>
<th>Presentation*</th>
<th>Fail</th>
<th>Poor</th>
<th>OK</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionally delivered</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Succinct</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Well-presented argument</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Appropriate decision for the business</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>

Comments:

To improve:

Overall grade/mark for presentation:

(* use either appendix 3 or appendix 4 as required)
Appendix 4: Memo assessment sheet

Group members:

Project title:

Module:

<table>
<thead>
<tr>
<th>One page memo*</th>
<th>Fail</th>
<th>Poor</th>
<th>OK</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionally written</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Succinctly written</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Well-presented argument</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Appropriate decision for the business</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>

Comments:

To improve:

Overall grade/mark for memo:

(* use either appendix 3 or appendix 4 as required)
Appendix 5: Reflective summary assessment sheet

Name:
Student ID:
Project title:
Module:

<table>
<thead>
<tr>
<th>Reflective summary</th>
<th>Fail</th>
<th>Poor</th>
<th>OK</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflection on own skills development</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Reflection on working in a team</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Consideration of skills needed for SMEs</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>Reflection on impact on own career plans</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>

Comments:

To improve:

Overall grade/mark for reflective summary:
Appendix 6: Group work – evaluating the contribution from each group member

Please complete the table below assigning a value for each criterion for each person using the guidance below. The figures you give will be used to calculate the peer assessment factor as outlined in the module handbook.

Table 2: Peer evaluation scores

<table>
<thead>
<tr>
<th>Write the names of the other group members in the blank boxes on this row:</th>
<th>You</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of enthusiasm/participation</td>
<td></td>
</tr>
<tr>
<td>Suggesting ideas</td>
<td></td>
</tr>
<tr>
<td>Understanding what was required</td>
<td></td>
</tr>
<tr>
<td>Helping the group to function well as a team</td>
<td></td>
</tr>
<tr>
<td>Organising the group and ensuring things get done</td>
<td></td>
</tr>
<tr>
<td>Performing tasks efficiently</td>
<td></td>
</tr>
</tbody>
</table>

For each criterion marks are awarded as follows:

4 for 'better than most of the group in this respect'
3 for 'about average for this group in this respect'
2 for 'not as good as most of the group in this respect'
1 for 'no help at all in this respect'
0 for 'a hindrance to the group in this respect'
Appendix 7: Details of how the peer assessment score is calculated

The calculation is based around the allocation of a group mark for the work produced by the group (in this case for the project pitch) and the manipulation of this group mark to derive a mark for each individual within the group. The formula adopted is as follows:

Equation 1: Individual student’s mark = Student’s PA score × Group mark

Where PA stands for Peer Assessment.

The PA score is obtained by asking students to access each other’s contributions via a peer assessment form. Each individual’s scores are then added up to give an individual PA total. This is then divided by the average PA total for the group to give the individual’s PA Score.

Equation 2: PA Score = \[
\frac{\text{Individual PA total}}{\text{Average PA total}}
\]

The PA score reflects the individual’s comparison with the other members of the group.

A worked example

Three students, Angela, Julie and Thomas, worked in a group and received a group mark of 60%. The PA self-assessment results are summarised below:

In row 2 of the table: A = Angela, J = Julie and T = Thomas

Table 3: A worked example of peer evaluation scores

<table>
<thead>
<tr>
<th>Marks awarded to:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Angela</td>
<td>Julie</td>
<td>Thomas</td>
</tr>
<tr>
<td>Marks awarded by:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>J</td>
<td>T</td>
</tr>
<tr>
<td>Level of enthusiasm/participation</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Suggesting ideas</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Understanding what was required</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Helping the group to function well as a team</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Organising the group and ensuring things get done</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Performing tasks efficiently</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>39</td>
<td>21</td>
<td>36</td>
</tr>
</tbody>
</table>
Applying equation 2 for each student reflects each individual’s effort in comparison to the rest of the group. A PA score >1 is above average, <1 is below average.

\[
\text{Average PA score } = \frac{(39 + 21 + 36)}{3} = 32
\]

Applying equation 2 is the final step which adjusts the group mark by the student’s PA score:

\[
\text{Angela’s PA score } = \frac{39}{32} = 1.22
\]

\[
\text{Julie’s PA score } = \frac{21}{32} = 0.66
\]

\[
\text{Thomas’ PA score } = \frac{36}{32} = 1.13
\]

Applying equation 1 is the final step which adjusts the group mark by the student’s PA score:

Angela: 1.22 x 60% = 73.2%

Julie: 0.66 x 60% = 39.6%

Thomas: 1.13 x 60% = 67.8%

[Taken from Lejk et al., (1996)]
Please complete this audit on your own. Try not to over analyse but give your immediate feeling of how experienced you feel in each of these skill areas, how able you are (i.e. how well you perform these tasks) and how confident you feel when doing these activities. It is important you give brief (bullet point) examples of activities you have undertaken for each skill if you are able to do so.

Table 4: Initial skills audit

<table>
<thead>
<tr>
<th>Skill</th>
<th>Brief description</th>
<th>Score (1 – 5)</th>
<th>Notes and example activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork</td>
<td>Be able to work as part of a team by making meaningful contribution to a collective task</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication &amp; persuasion</td>
<td>Persuade others, using a variety of approaches, through informed opinion and negotiate support for ideas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision making</td>
<td>Evaluate issues and make decisions in situations of ambiguity, uncertainty and risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Verbal) presentation</td>
<td>The ability to communicate ideas and arguments effectively verbally, using approaches tailored to the needs of different audiences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Written (presentation)</td>
<td>The ability to communicate ideas effectively in writing, using approaches tailored to the needs of different audiences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project planning</td>
<td>Take responsibility in project planning and in the management of tasks and activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill</td>
<td>Brief description</td>
<td>Score (1 – 5)</td>
<td>Notes and example activities</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Time management</td>
<td>The ability to work in an efficient, effective and flexible manner to prioritise and complete a range of tasks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding information</td>
<td>Collect, evaluate and interpret information from a variety of sources; present findings objectively and concisely recognising any limitations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perseverance</td>
<td>Demonstrate perseverance, resilience and determination to achieve goals, especially within challenging or complex situations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>The ability to work and learn independently, using self-reflection to critique individual performance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>