



### Employability: Student focus groups discussions

Two student focus group discussions were held in July 2007 to find out what students believed would be useful in preparing graduates for employment. One group involved third-year biology and biomedical sciences students, and the other third-year physics and mathematics students. No volunteers came forward to represent the chemistry and geosciences disciplines.

Students felt that they had developed some skills that would be valuable to employment such as communication and working in teams. They also recognized the unique knowledge set they had obtained through their studies as an asset. They identified that “Self directed projects in third year develop skills in working autonomously”. One student commented the role of SCI2010 in providing a valuable overview of the Science Faculty.

A key idea that came out of these sessions is the need for greater awareness of possible careers resulting from different studies within the Science Faculty. The need for this information early in a degree and then continuing throughout a degree was seen as important by most students. As one student put it “you feel a little bit thrown into the deep end because you aren’t really sure what is at the end” or another who said “at times it is just coursework, coursework, coursework. There needs to be a link to why we are here”. It was recommended that greater links be created between what students learn and how this can be used in different careers.

Students did not feel confident in preparing job applications or preparing for interviews. One student commented that “At Monash they think that everyone is going to be a lecturer, they prepare you to be an academic”. They did recognize that there was a careers service on campus but felt that it was a last minute resource for students suddenly realizing “oh my god I’m three months away from graduating, I really better work some of this stuff out”.

Work experience was seen as an important and useful aid to increasing the employability of graduates. One student was concerned that there was no incentive to go out and develop skills by working in industry. IBL was recognized by all students to be one of the best initiatives that universities had implemented to increase the employability and relevance of university courses for students.

Seminars were suggested as a useful means of communicating career options with students as a member of the Biological Society commented “I have a lot of people asking me if we can do more seminars”. However, one student thought “seminars are not that useful. If they are not compulsory people won’t go”. One student even recommended monthly seminars to inform students about career profiles and pathways with downloadable recordings available online.

There was some concern among the Biological and Biomedical Science students that key practical and laboratory skills were underdeveloped. Some students felt that they were given too much assistance with basic laboratory procedures and were ill-equipped for the workforce as a result. In suggesting future options for Monash these students felt that “Pay more attention to important skills. From first year they (students) should be shown different ways of doing things.”

It was generally agreed that any approaches to increasing employability of graduates should be made at a School level. The benefits of a University approach were recognized in terms of generic skills as well as skills in job application and interview technique. On this issue one student felt that by pitching things at a University wide level, approaches can seem less important to individuals who may perceive they are not having their individual needs met. The Science Faculty was not considered as the best level for any approaches as one student commented “I already feel that the Science Faculty is this big unwieldy thing that does not really represent the Schools” and another “Faculty level is mostly going to be irrelevant, I really don’t care what Biomed are doing”.

While comments suggest that students feel quite distant from the Science Faculty, comments indicated strong connections within individual Schools. There was praise for the relationships that have been developed with academics. One student considered the way that Monash had helped prepare her for employment “approachable staff who are prepared to answer questions and available to seek advice from” and another felt “By the time you are in third year, you know most of the academic staff and they know where you are at”.

In suggesting what should be done at Monash University to increase the employability of Science Graduates an awareness of employment opportunities and pathways was important. Students suggested providing examples of how what they are learning is used in industry within lectures so that students are learning about careers as you are about theory. Greater information relating to choices as well as examples of what graduates are doing was suggested. Students would also like to hear more from the academics themselves, about what they have done and how they ended up where they are. The value of employing staff with a breadth of experience to work with students in laboratories was also recognized as an asset.

The general feeling from these discussions is that students would feel much better equipped to successfully gain employment if they had a greater understanding of what it is that they could do with their degrees. They felt that information was not readily available. It is hard to know how you feel about getting a job if you don’t even know what job you can get.

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September 2007

## **Session details**

### ***Session 1***

Students area of study	Mathematics and Physics
Number of students	Two
Date of discussion	27 <sup>th</sup> July, 2007
Duration of discussion	30 minutes

### ***Student comments:***

#### **What do you think employers are looking for in employees?**

Experience most of all, it looks the best on a resume and limits training requirements

Graduates have a good knowledge base but perhaps not as much hands on experience

Depends on the job – people skills, group work, team skills, and business skills depending on the company you work for.

#### **How has your degree prepared you for developing these skills?**

Group projects and that sort of stuff prepare you for team work although mathematics has limited group project work.

Communication – speeches and talks in physics.

Report writing skills – subject specific.

#### **How has Monash helped you to prepare for employment?**

It really depends on what subjects you take, a science degree as such does not narrow down the specifics of the degree– knowledge that relates to different areas of work –

The types of assessments that you have worked under– project work and exams. Different ways of going about things are developed in these different units.

Some specific skills related to mathematics and physics.

#### **What are the barriers to graduates who are looking for work?**

A science degree is not really specific. Generic nature of science degree.

You feel a little bit thrown into the deep end because you aren't really sure what is at the end of and whether you are prepared for these jobs. Unsure of what you have to do to get to jobs at the end of a degree and what is required for the jobs that are out there.

Not much emphasis on the job process.

Students are unsure of how to apply for jobs and how the degree is relevant to employment.

Mathematics leads to academic future, mathematics degrees can lead to any job not even directly related to what has been studied. Math can affect a lot of other jobs to have it on your CV is a good thing.

**What could be done to overcome the barriers to employment?**

**What can Monash do to increase the employability of Science graduates?**

An awareness of what is out there and examples of what we can do within our specialties.

Awareness of what can be done within specialties of degree, what jobs will be available to them at the end of their degree.

Being able to use the fact you have a degree to your advantage – ways to exploit it and explaining how you are more qualified than someone who doesn't have a degree.

Resume and interview side of things.

**These are the initiatives other universities have implemented, try to sort them from most to least useful. What are useful initiatives?**

Seminars are useful, at lunchtime. Like those careers expo at lunchtime, but more specific. Based on what areas you are in.

Websites - mapping skills to degrees more useful than job application instructions. Ideas about what are the possibilities for using degree – job prospects. Identifying certain careers with different majors would be useful.

IBL would be good, about half way through a degree or two thirds would be useful.

Academics making a link between skills, knowledge and careers that are relevant.

Careers websites would be useful if you actually used them. Perhaps need to be marketed to students more effectively.

Tying the skills developed in your subjects to possible careers in the area would be even more useful than just mapping the skills developed.

**Not useful?**

Employment subject is probably not a good idea, feel forced together.

Online management tool – not going to spend time looking through a portfolio.

### **Should approaches to this issue be at a University, Faculty or School Level?**

The more specific the better, Faculty level is mostly going to be irrelevant I really don't care what biomed are doing.

Each school should tailor to meet the needs of their own students.

By the time you are in third year you do know most of the academic staff and they know where you are at.

### **If there were one thing you could suggest for Monash to do to increase the employability of Science Graduates, what would it be?**

Regular seminars, I know they do them every now and then but once a month to inform students

Feature careers on the website.

Advertise important dates on the my.monash website

Downloadable information and recordings of the seminars.

Examples of what students are doing who have finished their degrees. I think geosciences do it well, Marion Anderson used to talk about what graduates were doing.

Targeted information for first years to encourage awareness of what different majors will lead to in terms of employment. Most kids don't know what they want to go into and are still unsure. They need to know what the choices are for employment.

At times it is just coursework, coursework, coursework, there needs to be a link to why we are here.

How can what we are doing at university be applied to the workforce?

Chuck some employment information into SCI2010.

Little bits of information or advice in lectures here and there, constantly throughout subjects, without bombarding students. At the same time you are learning about careers as you are about theory.

## ***Session 2***

Students area of study	Biological and Biomedical Science
Number of students	Five
Date of discussion	30 <sup>th</sup> July, 2007
Duration of discussion	43 minutes

### ***Student comments:***

#### **What do you think employers are looking for in employees?**

What you do outside your degree; clubs and societies, volunteer work.

Extra activities are what set you aside from everyone else who is doing the course.

Reliable, mature, ability to work independently. Motivated and ability to work initiative.

Lab skills, communication skills.

Making contacts.

Problem solving, designing an experiment.

Extra time spent developing skills, such as lab skills by volunteering to work with an academic.

#### **How has your degree prepared you for developing these skills?**

Approachable staff who are prepared to answer questions and seek advice from.

Self directed projects in third year subjects develop skills in working autonomously.

Basic grounding in lab skills are developed.

How science works gave a nice overview of the science faculty. The unit perhaps needs to include some writing and design skills.

Important skills such as endnote should be shared with students eg in sci2010.

#### **What are the barriers to graduates who are looking for work?**

Basic stuff that should be taught in first year is absent from lab experience. Solutions are made up for students. Instructions are all laid out and students are terrified of not following these instructions. Graduates are not confident in their skills areas.

Opportunities have been presented to work in small groups allow for greater understanding and discussion of key ideas.

Chances to work with new and different people who may have different perspectives, which increases employability.

### **What can Monash do to increase the employability of Science graduates?**

Work experience is offered at other universities. Recognition of summer work, industry experience is not given to students. There is no incentive to go out and develop the skills by working in the industry.

There is no chance or support to students who want to practice the stuff you learn in your subjects.

Looking at other facilities and other labs provide an important comparison and breadth of experience.

Further development and support for basic skills in communication – writing a good essay, speaking well and being able to coherently get your point across. There is a lack of constructive criticisms and over concentration on the facts, little attention paid to essay structure and presentation skills.

### **What about preparing job applications and resumes in order to apply for jobs?**

No one teaches you that and no guidance is given unless you actively seek it out.

At Monash they seem to think that everyone is going to be a lecturer. They prepare everyone to be an academic. The whole thing that they are teaching you is preparing you to be an academic. They are not preparing you to write your cv and get a job.

It is very academic.

It is something that we should be taught coming out of high school because it is not just about university graduates. But if you are not going to get it in high school then it would be very beneficial for people.

### **These are the initiatives other universities have implemented, try to sort them from most to least useful.**

It would be good if at the start of your degree not so much areas of study, but a list of occupations you could end up with and how you get to those occupations and what paths you could take.

An awareness of what your degree can lead to.

Career advice is really important and students need to have more direction and understanding of what the degree can lead to.

IBL is important and useful.

I think the employment subject is a really good idea, but I would like to see that as part of how science works. Perhaps four or five lectures and students prepare a cv for themselves. It is not specific for any one person, but is skills that everyone needs.

It would be beneficial to know how the courses and units you take complement each other.

Perhaps even more useful if the skills are then mapped to careers. Unit by unit information would be more useful as the synopsis for each unit doesn't really say much. You don't know what you are letting yourself in for.

Seminars are not that useful; if they are not compulsory people won't go.

I don't know, I have a lot of people asking me if we can do more seminars (as part of the biological society).

Careers website is the type of thing that people go "oh my god I am three months away from graduating, I really better work some of this stuff out".

Online management tool, restrictive as it takes too much time. It would contain too much information that would not be able to be included in a cv.

### **Should approaches to this issue be at a University, Faculty or School Level?**

University level if you look at what the average student coming out of high school comes out with and there is (especially writing skills, interview skills, skills with cv preparation) a wide spectrum of skills, some will be great at it and some will suck at it. If you go at university wide scale then you will ensure that everyone gets what they need.

By pitching things at a university wide level, approaches can seem less important to individuals who may perceive that their specific needs are not being met.

These approaches should be made early in a students time at university.

I think school level would work really well as I already feel that the science faculty is this big unwieldy thing that does not really represent the schools. So I would be looking to someone within the school to help me out with my career.

I would like to hear more from the staff, introducing themselves and how they came to be where they are and what experience they have had.

Discussions with staff that have experience outside of university provide a valuable insight into pathways and careers.

### **What would be an influence on students taking up an employability subject?**

How much credit is offered for taking the subject?

I don't know that it needs to be an entire subject, better to be incorporated into existing units. Getting a job is a big part of how science works.

I don't think it should be a subject on its own. I think people would be reluctant to take it.

**If there was one thing that Monash University could do to increase employability, what would you recommend?**

Work experience

Teaching employability skills is really important. To be able to present yourself well to an employer, if you can do that you will stand out over and above the 80% of people who do not spell check their resumes.

I think knowing your options earlier and developing your skills earlier is much more important, push everything earlier. As you get on in your degree you don't want to have to deal with developing all the knowledge as well as going back to basics that you should have already covered.

Knowing who in your school you can talk to about these things is very important. It would be good to have points of contact within each school who you can discuss these things with.

Pay more attention to important skills. From first year they should be shown different examples of ways of doing things.