

Work Integrated Learning in Science

Janet Hergt Faculty of Science



- Why we thought creating a Science & Technology Internship subject (SCIE30002) was important
- What students do, and how they are assessed
- What's involved and how SCIE30002 is supported
- The importance of pre-placement classes
- Feedback from students and host organisations
- Things we have learned!

Why it is absolutely worth the effort!



Ten types of Scientist: Diana Garnham (CEO, UK Science Council; 2011)



...are we providing students with <u>all</u> of the skills they need?





THE UNIVERSITY OF

MELBOURNE



- First two weeks (8 hours total): Pre-placement classes (expectations, fears, goals, purpose of assessment tasks)
- 80-100 hours of work at host organisation (over ~8-10 weeks)
- Mid-semester (2 hours): check on progress, "industry" fireside discussion (Q&A)....information interview essay submitted
- Final 2 weeks (6-8 hours): presentations (reflecting on initial goals, key experiences/insights, next steps, sharing stories!)
- Exam period: final essay describing translation between university and internship learning (both ways) in terms of discipline skills, knowledge, and soft skills











The pre-placement classes





Presentations by 1 or 2 students from the previous class!!

THE UNIVERSITY OF MELBOURNE

Some terrific (and sometimes alarming) feedback from students

"…at Uni it's all about answers, but in the workplace it's about <u>solutions</u> (and there are often many different options to consider)"

"...I thought a strong CV was all about getting great grades and some work experience...but my boss commented that I am naturally good at client negotiation and communication, something they consider equally important"

"...at Uni, team projects mean dividing up the work and doing each part individually. In the workplace, genuine collaboration is super important... day to day!"

"...I'm still not sure what I want to do, but I have learned a lot about myself; I'm good at multitasking, showing initiative, and I'm quick to learn new things"

"Don't tell anyone but I believe that SCIE30002 is the most useful subject that we have at Uni! :)"

THE UNIVERSITY OF MELBOURNE Some terrific feedback from host organisations

"...you may not remember me, but you taught me when I was an undergrad at Melbourne....I wish this subject had been available when I was a student!"

"...x (intern) was fabulous. A senior role became vacant, but we have re-scoped it to encourage her to apply. Frankly we all thought y, who'd been with us for years would get the job, but x interviewed so well. She came armed with a workflow plan she's keen to implement, had really done her homework, and is clearly genuinely enthusiastic about working with us."

"If you keep a database of host organisations, please add us to the list. We are very keen to have more of your students as interns into the future."



- Demand is high
 - Even students continuing into further study are keen to test the waters!
 - Masters students want to take the subject
 - Now run this in both semesters and over Summer and for Hons/Masters students!
- Unforseen benefits
 - New connections with organisations (potential for deeper relationships such as research partnerships, networking events...not just internships)
 - Students have re-connected us with our alumni
 - The subject brings academic and professional staff together in new and powerful ways

Yes, the effort is great, but so too are the benefits!

Can employability be usefully measured? (Sue Elston, Melbourne Business School)

Core Skills for Work Self-Assessment tool

7. Make decisions

THE UNIVERSITY OF

MELBOURNE

These groups of statements are about your capacity to make choices from a range of possibilities, to apply different decision making approaches and to reflect on the outcomes of decisions.

Think about where you might have used these skills in your life, study or work experience so far. For example, it could be that you have had to make decisions in a work setting, in semi-formal social settings such as in a sports club or in planning your ongoing course of study.

Focus Areas	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
7a. When applying decision- making processes,	☐ I follow instructions for making routine decisions and may need help if I am not sure what to do	I choose one of the options given to me for routine situations and will seek advice in an unfamiliar situation	I can see when problems come up and apply routine or formal decision making processes, seeking input and advice as required	✓ I draw on my experience to make a quick, intuitive decision, or in more complex situations, employ systematic, collaborative decision-making processes, evaluating options and recognising each situation as unique	I approach decision-making in diverse ways in response to a range of impacting factors, making rapid decisions or undertaking more formal processes as required
7b. When it comes to reviewing the impact of decisions,	I sometimes talk with others about the impact of a decision	□ I sometimes reflect on whether it was the right choice in that situation	☐ I take responsibility for evaluating how well a decision achieved the goal it was aiming to achieve	✓ I assess the impact either informally or formally, using my insights and learning to inform future judgement	I monitor the impact from multiple perspectives, identifying key concepts and principles that may be adaptable to future situations

I was a trainee manager at a fast food company before coming to university. One of my tasks was to do the staff roster for my team. I talked to some of the other managers to find out how they did the rosters. I also spoke to each of my team members to see what would work for them and then decided on the best way to do the roster. After a couple of months I talked to my team members again to see how it was working and made a few more changes. My team were pretty happy and didn't complain about the roster nearly as much as those on other teams.

https://www.online.fbe.unimelb.edu.au/esa/#



jhergt@unimelb.edu.au

© Copyright The University of Melbourne 2011