Unifying WIL in Science at the University of Tasmania

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Background

UTAS context

Strategic plan ‘Open to Talent’

– Provide graduates with the skills required for participation in national and international work

– Extend the curriculum by providing real world experiences for our students

WIL policy has provision for:

– Student placement in industry

– On-campus simulation of the workplace linked with authentic assessment

– The university will shortly release a Green Paper on WIL as part of a university-wide curriculum renewal process

– Uptake of WIL is far less in Science than other STEM disciplines at UTAS\(^1\)

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\(^1\) EDWARDS, D., PERKINS, K., PEARCE, J., & HONG, J. (2015). WORK INTEGRATED LEARNING IN STEM IN AUSTRALIAN UNIVERSITIES. FINAL REPORT SUBMITTED TO THE OFFICE OF THE CHIEF SCIENTIST
Project aims and activities

– Develop a generic program for on- and off-campus WIL in the faculty
– Develop a network of industry contacts for WIL in Science and related disciplines for Tasmania
– Create a Faculty Advisory Board for industry engagement
What is the approach to WIL in other Universities, Faculties and Schools?

– Science Faculties: Deakin, Monash & Melbourne universities
– UTAS: Business, Engineering, ICT & Agriculture, Health
– Academics were very generous with their time and sharing their WIL resources!
Common themes

- Placement/project WIL for credit, usually in 2nd/3rd year

- Learning outcomes & assessment focus on:
  - Application of knowledge/skills
  - Student reflection on:
    - Planning for their career
    - Strengths and weaknesses
    - Q - how and when to teach Science students critical self reflection?

- Provision of activities to support career planning mostly separate to the unit

- Students generally expected to find their own placement/project

- Duration around 80 – 100 hours in a unit (some exceptions)
Where will the unit fit in the BSc?

<table>
<thead>
<tr>
<th>Semester</th>
<th>Major</th>
<th>Minor</th>
<th>Degree Electives</th>
<th>Student Electives/Breadth Units</th>
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<tbody>
<tr>
<td>Sem 1</td>
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<td>Sem 2</td>
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KAA2/3xx

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<tr>
<th>Major</th>
<th>Minor</th>
<th>Degree Electives</th>
<th>Student Electives/Breadth Units</th>
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<tbody>
<tr>
<td>2 introductory, 2 intermediate &amp; 4 advanced units</td>
<td>2 introductory &amp; 2 intermediate units</td>
<td>2 introductory &amp; 2 intermediate units</td>
<td>6 units Breadth Units 2 units</td>
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Learning design

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<tr>
<th>Week / Date</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Study break</th>
<th>Week 8</th>
<th>Week 9</th>
<th>Week 10</th>
<th>Week 11</th>
<th>Week 12</th>
<th>Week 13</th>
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<tr>
<td>Intended Learning Outcomes</td>
<td>ILO 1. Identify and apply the knowledge, skills and attributes required for the professional workplace in a relevant science setting</td>
<td>ILO 2. Communicating and documenting of professional work experience</td>
<td>ILO 3. Working responsibly and safely as individuals and in collaboration with others</td>
<td>ILO 4. Critically self-reflect on personal strengths and development needs in the workplace</td>
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<td>Formal Assessment</td>
<td>SA#1 Preparation of a cover letter and cv; risk analysis of work environment and completion of legal agreements</td>
<td>SA#2 Extract of critical self-reflections on application of knowledge, skills; Working responsibly and safely as individually and with others; communication; employer feedback</td>
<td>SA#3 Self-reflection on application of knowledge, skills and attributes used in professional work; self-reflection on personal strengths and development needs; communication; employer feedback</td>
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<td>Learning Activities</td>
<td>LA#1 students completed iPREP and ResumePlus; identified and applied for a work placement/project; complete a risk analysis of the workplace; have completed any legal agreements</td>
<td>LA#2. Professional experience (off-campus or on-campus; may be project work for a client in small groups)</td>
<td>LA#3. Journal reflections on professional work</td>
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**TEMPLATE:** STEPHEN LINQUIST AND RACHAEL PHEGAN, UTAS
Consultation

Students
- Learning design and preferences
- Online survey

Academics from the BSc
- Understanding of WIL activities and where taught in their major
- Proximity vs. authenticity of WIL
- Use of student self-reflection in assessment
- Small focus group discussions

Employers
- WIL activities and employability
- Work placement or small groups working for a client
- Capacity to host students
- Previous participation in WIL in their organization/business

HREC H15699
Intended project outcomes

- Make a step change for embedding effect WIL into course delivery within the faculty
  - Developing a generic on- and off-campus WIL programs

- Create effective leadership of WIL in the Faculty
  - Aggregate current within-school activities

- Link to institutional organisation/resources/policy
  - Link with existing university resources such as the UTAS Career Services team in planning for coursework

- Identify and leverage other opportunities
  - E.g. existing UTAS Community of Practice in WIL

- Inform development of WIL in Science in other institutions
  - WIL in Science initiative of the ACDS