'Actioning the worry': Supporting science students' participation in work-integrated learning

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WIL in Science Program

Leadership for WIL (2015-2016)

Successful WIL in Science (2016-2018)

Climate for change → Leadership for change → **More staff capacity New WIL curriculum** ← Resources for change ← Stakeholder voices

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AUTHENTICITY

HIGH

Authenticity: assessment tasks resemble professional practice

Work integrated learning occurs at various levels across a range of tasks that are *authentic* (the task resembles those required in professional life) or *proximal* (the setting resembles professional contexts).

PROXIMITY

LOW

Proximity: assessment task occurs in workplace or with practitioners

Our research

1. What encourages or discourages science students' participation in WIL?
2. What makes WIL meaningful?

- 23 'WIL specialists': interviews across 13 Universities
- 138 students: 27 focus groups, 9 interviews - 4 Universities

Are science students interested in WIL?

WIL Staff	Students
• **Think science students are very interested in WIL** • **Staff reported that engagement with optional WIL is low**	• **Were all interested in WIL** • **Thought most of their peers would be interested** • **Some had not participated or questioned the proactivity of others**

Interest does not equal action…
(students don't always prioritise WIL)

Barriers to participation

WIL Staff	Students
• **Need to show relevance** • **Build confidence** • **Opportunities need to be more visible** • **Don't have opportunities for all students**	• **Need to show relevance** • **Some questioned their own abilities and lacked-confidence** • **Were not aware of opportunities** • **Could not find opportunities**

Barriers to participation

Some students lack the knowledge, confidence or networks to self source placements...

"Trying to find an internship is really hard ... someone you can talk to that can direct you to the right place to apply for an internship or where to look or how exactly to go about doing an internship."

Chemistry Student

Barriers to participation

Accessibility is not equal for all students…

"I don't have a lot of time because I have to work quite a lot to help our finances at home, so at the moment I'm part-time uni and I'm working more than I'm at class. I do want to do things like join the chem club and that, but I always have scheduling conflicts"

Chemistry Student

WIL comes at a cost: time, money, other opportunities

Science students do value WIL but do not always prioritise it...

...because they don't know enough about it, how to access it or how to fit it into their lives

Many of their concerns are actionable

What WIL is meaningful?

Students valued learning in the workplace the most...

"To me WIL is a two-way street. What you have learned in your degree so far, you're applying it to a real job, but at the same time you're learning stuff from that real job that will help you finish your degree with more skills."

Student

...but recognise the importance of on-campus learning to provide knowledge, skills and confidence

What makes WIL meaningful?

Staff	Students
• Assessment and reflection	• Relevance to career ambitions • Situated in the workplace

Student perceptions of the value of WIL

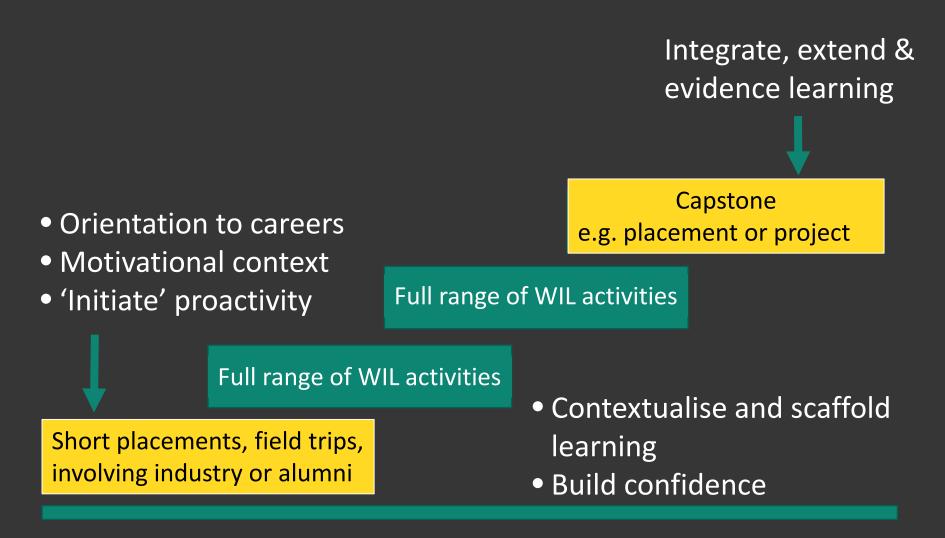| On-campus	In the workplace
• Context and purpose • Hands-on experience and skills development • Understand their discipline • Experience relevant to future work • Confidence in ability • Makes learning more meaningful	• Context and purpose • Hands-on experience and skills development • Understand their **profession and workplace** • Experience relevant to future work **and employers** • Confidence for **careers** • Makes **degrees** more meaningful • **Building networks** • **Test career options**

Recommendations

On-campus WIL	WIL in the workplace
• Contextualise all learning to the real-world and careers • Provide (early) opportunities to explore careers • Make use of the full range of WIL activities to build career awareness, scaffold skills development and build confidence	• Make opportunities visible • Provide more opportunities • Maximise flexibility • Financial support for students in need • Maximise relevance • Ensure all students have space in their degree for a placement or equivalent project

Not all WIL is equal...

...but WIL serves many purposes

Some WIL is better than no WIL

WIL in the "ideal degree"

Integrate, extend & evidence learning

Capstone
e.g. placement or project

• Orientation to careers
• Motivational context
• 'Initiate' proactivity

Full range of WIL activities

Full range of WIL activities

Short placements, field trips, involving industry or alumni

• Contextualise and scaffold learning
• Build confidence

+ Extra-curricular opportunities