



iPREP_{WA}
Industry and PhD
Research Engagement Program

www.iprep.edu.au

Mr Ian Blayney, MLA
Chairman, Economics and Industry Standing Committee
Parliament House, Perth
Western Australia 6000

13th November

Dear Mr Blayney

RE: iPREP WA submission to Inquiry into Technological and Service Innovation in Western Australia

Thank you for inviting iPREP WA to make a submission to the Economics and Industry Standing Committee regarding the Inquiry into Technological and Service Innovation in Western Australia.

This submission outlines the iPREP WA program, a new initiative by the 5 universities of Western Australia, which is just one example of a successful program linking researchers and industry to enhance innovation.

We welcome the inquiry and hope it will make a valuable contribution to innovation in Western Australia. Successful innovation relies on strong collaborations that must be mutually beneficial and outcomes focused.

Thank you for considering our submission and we are happy to discuss iPREP WA in more detail with you.

Kind regards

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Program overview

iPREP (Industry and PhD Research Engagement Program) is unique in that PhD candidates who have submitted their thesis for examination are given the opportunity to work in interdisciplinary teams with an industry partner on a 6-week project (with scholarship) during the thesis examination period.

The main drivers for developing iPREP were:

- Increasing number of PhDs awarded in Australia with a diminishing number of academic places available for graduates.
- PhD graduates not always prepared for careers outside the university.
- Perception from industry that PhD graduates are overly specialised and lack key skills required for the workplace such as communication, teamwork, project management and business acumen.
- Lack of short-term industry engagement programs that are appealing to businesses.
- PhD students are 'in limbo' during the thesis examination period, making this an ideal time for them to undertake career development opportunities, such as an industry placement.

The iPREP concept was developed and trialled by Edith Cowan University in 2014. It has now been successfully run twice in 2015 as a state based program (iPREP WA) with the 5 collaborating Western Australian universities. The initiative continues to grow, with an agreement in place to run three rounds of iPREP WA in 2016, highlighting the interest from both the university sector and industry.

Participants complete a two-day training program prior to commencing their placement. The program features expert guest speakers on topics including:

- Project management
- Communicating in a business context
- Compliance with industry requirements
- Collaborative leadership
- Strategic problem solving
- Social and emotional intelligence

The student teams then undertake the 6 week project, mentored by their industry partner. All teams meet together weekly to discuss their projects, network and further develop their professional skills. At the conclusion of the project, each team is required to pitch their solution to the industry partner through an oral presentation and a short written report.

Following the conclusion of the program, a presentation evening is held where the students present their project findings as a 5 minute informal speech and receive certificates (presented by the Premier Colin Barnett in March 2015 and Minister Michael Mischin in November 2015).

The industry partner payment ranges from \$5000 to \$10000 for a team of 3 PhD students for 6 weeks. Students are paid a \$3000 scholarship for the 6 week program, which is administered by their home university, who also contributes 50% of the stipend. The industry partner provides a mentor to work with the student team during the 6 weeks and also attends part of the induction program.

Program benefits

The concept of an industry engagement program after thesis submission is extremely valuable – from both the student and business perspective. Participating students have been from a wide range of disciplines, including arts, humanities, business and STEM backgrounds; which highlights the broad applicability of iPREP.

The main benefits reported by the students include:

- improved employability
- increased confidence
- greater business awareness
- new skills (e.g. project management)
- leadership development
- greater interdisciplinary understanding

The interdisciplinary aspect was challenging at first for some students, but all found this highly beneficial to their development, with candidates commenting *"I was quite surprised at how easily I could conduct research in a new field"* and *"I was able to apply my understanding gained from the PhD into the real business world"*.

Feedback from industry partners highlights the value PhD researchers can bring to their organisation. Industry partners reported that they received expert, unbiased consultation from experienced researchers who could help provide innovative and creative solutions to business problems. All businesses reported cost savings from the student team project, but wider benefits were also highlighted such as *"intangible benefits like expansion of our networks, linkages within a number of universities and an increased public profile"*. After participating in iPREP one organisation has subsequently submitted an ARC linkage grant involving 3 of the WA universities.

Beyond these immediate benefits, we see the potential for iPREP to have a long term impact on the career development of PhD graduates, and also for building strong relationships between universities and businesses. Interviews with industry mentors found that all businesses would be keen to establish further collaborations with the participating

universities. We see iPREP as an excellent starting point for establishing significant, long-term relationships between universities and businesses, as the benefits of working with researchers can be demonstrated to the industry partner for only a small cash outlay and minimum administrative burden.

The value of a collaborative approach

The establishment of an overarching committee and brand that encompasses the 5 WA universities (Advancing Western Australia Research Education, AWARE) has been a critical factor in presenting a coordinated approach to the WA business community. A joint website has been established to promote the iPREP program and partners – see www.iprep.edu.au

Having both the industry partner and the University of the participating student contribute to the scholarship and program costs ensures iPREP is a true collaboration. The scholarship is administered by the university the participating student is enrolled in, which helps reduce the administrative burden of the industry partner to encourage their involvement in iPREP.

Initial feedback from iPREP participants indicates that the program is achieving its overarching objective of enhancing engagement between researchers and industry. So far there have been 13 projects with 12 different companies engaging with 40 researchers. Several of these companies are keen to have another iPREP project in 2016.

Given that iPREP WA has been running for less than 12 months, the broader impacts of the program are yet to be realised. The following areas are expected to grow as a result of iPREP:

- Additional collaborative activities undertaken between the industry partners and universities to enhance career development of HDRs e.g. mentoring schemes, scholarships
- Joint grant applications (e.g. ARC linkage) between industry partners and the universities
- Improved employment outcomes for PhD graduates
- Increase in number of PhD graduates employed in non-academic settings

Collaboration is critical to the success of iPREP - both between the 5 universities and with the industry partners. Industry feedback highlights the value of engaging in a program with access to researchers from all 5 WA universities. We are also looking to further build on partnerships with State government departments and hopefully obtain Federal government support in the future. A coordinated and collaborative approach is critical to ensuring the program remains sustainable and contributes to innovation in the 'knowledge economy'.