Innovative Research Universities

IRU response to national priorities and industry linkage fund consultation paper

Overview

Over the past decade universities have strengthened work-driven learning and activities across all degrees. This has extended work-based learning from the traditional professions that have previously included placements through to the full suite of courses on offer. Doing so has transformed the large generalist degrees like arts and commerce and business.

Universities have done this to ensure degrees prepare students better for their careers (that they are job ready graduates). Government has encouraged universities to do by supporting industry partnership initiatives and measuring graduate employment outcomes.

The National Priorities and Industry Linkage Fund (NPILF) will be resourced by funds moved from the annual Commonwealth Grant Scheme payment per student.

The risk for NPILF is that universities are subjected to a time consuming and administratively cumbersome mix of performance metrics and a need to highlight certain projects. Taken together this could distract from, rather than enhance, the focus universities already have on improving future workplace outcomes for graduates.

NPILF needs an effective means to bring employers into active engagement with universities, with sufficient time to test out and identify the better practices that all can consider.

It also requires a more detailed discussion about how indicators are used to assess performance in ways that lead to better outcomes and avoids discouraging diverse approaches with potentially less predictable outcomes.

The IRU response addresses:

- NPILF aims, principles and approach;
- ensuring that employers want to be involved;
- best practice approaches – development and sharing;
- future allocation of funding;
- equity and work driven learning; and
- using performance metrics more effectively.

It concludes with highlight examples of existing IRU work driven learning including an innovative suite of eWIL (e-Work Integrated Learning) projects across three government departments.

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Recommendations

To ensure the best return from the new program the IRU recommends eight improvements.

1. The STEM priority should remain focused at the STEM degrees and units that provide the broader generalist skills at issue and which current do not lead consistently to the desired economic outcome.
2. The program should focus on nine core indicators only, removing the need for three additional choices.
3. Financial incentives for industry to partner with universities under NPILF, through additional funding for an industry incentives payment.
4. The program structure be altered such that:
   - the pilot phase be organised as a three-year assessment with annual feedback, with the three-year approach to be routine once the NPILF model is implemented in 2024;
   - the entire process be greatly simplified from 2024 with less emphasis on multiple reporting indicators to remove the considerable administrative burden on universities for the initial 2021 to 2023 period;
   - the concept of withholding funds from universities which do not meet their stated NPILF goals be removed. Publication of each university's outcomes would be sufficient.
5. Support for universities to expand and adopt good practices highlighted through NPILF agreements.
6. That the banded allocation of funding based on CSP EFTSL used between 2021 and 2023 should be continued from 2024 and beyond to provide the most realistic support, taking account of institutional needs and the spread of students across universities.
7. The metric indicators should be contextualised for the different composition of the student group at each university.
8. The following revisions to indicator performance measurement:
   - universities can meet the NPILF metric requirements if successful on any metric within a priority;
   - an ongoing discussion between the Department of Education Skills and Employment and university representative bodies about the use of performance indicators to ensure they are well suited both to encouraging improvement and recognise currently high-level performance that need not be the focus for immediate improvement.

NPILF aims, principles, and approach

The IRU supports the broad NPILF aims to improve graduate employability and university-industry collaboration.

University discretion over NPILF funds is supported, with evaluation of university outcomes rather than reconciliation to NPILF activities. This allows universities to offset the administrative impact of operating NPILF compared with use of funds from general allocations to the same purpose.

The three priorities

The Priorities of WIL, STEM-skills and industry partnerships align with the Government's ambitions.

WIL has become the standard for all degrees across all IRU members over the past two decades. There is great scope to keep improving, in particular the constant challenge to involve the number and breadth of employers to offer all students the experiences required.

Through WIL and other engagement, universities have focussed extensively at involving industry and other employers in the development and delivery of education, thereby enhancing student learning. These are all issues that universities have worked with extensively over the past decade and areas in which universities have made major progress.

The STEM priority is less well articulated. The economic aspiration that more STEM capable graduates will lead to more innovation and more individuals creating business opportunities is valid in intent but variable in achievement. The challenge is how to make it more likely to occur and *this* should be the focus for the STEM Priority in NPILF. This focus would work well in parallel with encouraging STEM aspects to all degree programs.

The emphasis on increasing STEM graduates has been strong for some time. It is reflected in the particularly high-level growth in those subjects since 2009 when universities were fully funded for growth in those programs for close to a decade. The Government's recent changes to the charge for such units is intended to maintain interest from students, following withdrawal of the financial incentives from universities to grow those programs.

The growth in STEM students creates some tension with the relative weakness of employment, especially in the more generalist science degrees, a factor Andrew Norton has emphasised. The argument about STEM skills seems to ignore the fact that employment outcomes for graduates of STEM and humanities degrees are equivalent three years from graduation.

The broader STEM+ concept sits uneasily with this. The STEM+ construct essentially includes all but the social sciences, humanities and the status heavy trio of medicine, dentistry and veterinary science.

The challenge is to ensure the flow through of STEM like conceptual skills into graduate outcomes. Adding essentially professionally oriented areas that have high levels of graduate employment (the allied health professions along with Architecture and Building) does not seem relevant. These are specific knowledge areas unlikely to be relevant to students of other degree programs, unlike for example the value that continued study of mathematics might bring.

Metrics, demonstration projects and innovation projects

The discussion paper's outline of three different types of indicators has created a degree of confusion about what each means. The metrics are the clearest, in appearing to refer to a quantitative measure that is likely to be relevant to the university as a whole and could be comparable across universities where similar data are available.

The demonstrators and innovators appear to mean the types of activities done to achieve the outcomes desired, with the demonstrators being useful but not necessarily novel activity and the innovator activity that is novel and hopefully also useful. The demonstrators might tend to be larger in extent (students and programs directly affected).

Behind the general metrics and the specific programs and projects sits the general activity of the universities to ensure a good education for students that leads to good graduate employment outcomes.

It is important that NPILF does not overwhelm that core activity.

This suggests that 12 indicators are simply too many. There is no cogent reason for the additional three floating indicators. Universities may well have more action underway; they may be able to cite multiple metrics but requiring that there be 12 only pushes NPILF towards being the show pony that does little rather than being the showcase that encourages improvement.

Recommendation 1

The IRU recommends that the STEM priority remain focused at the STEM degrees and units that provide the broader generalist skills at issue and which currently do not lead consistently to the desired economic outcome.

Recommendation 2

The IRU recommends that there be nine required indicators only, removing the need for three additional choices.

Ensuring that employers want to be involved

Universities already engage willingly and seriously with industry on both research and work driven learning. A list of IRU exemplar industry engagement initiatives is included at the end of this submission to highlight the range of opportunities already on offer to current students.

Post COVID19 and at least for the next few years as businesses struggle to maintain their existing staff numbers, the opportunities for industry partnerships are likely to be fewer rather than greater.

There is always a cost as well as a benefit to industry partners when they become involved in a work integrated partnership with a university.

The consultation paper states on page 15 that in proposing its NPILF plan a university "may seek involvement from industry in selecting indicators and developing the plan, which would reinforce authentic and meaningful industry partnerships." The consultation paper fails to consider the possibility that industry may choose not to be involved.

The representatives of industry groups who participated in the NPILF consultation session of 16 October 2020 with Professors Schmidt and Glover were firmly of the view that government incentives for industry were vital for the ultimate success of NPILF.

This means that the cost to industry, and therefore incentives to industry must be considered before the NPILF can be effective.

A simultaneous NPILF program for industry partners is one way in which the Government can help ensure that both sides of the partnership play their part. Otherwise it is ultimately unfair to judge and reward or penalise one side of the partnership on the outcomes.

Recommendation 3

The IRU recommends that there be financial incentives for industry to partner with universities under NPILF, through additional funding for an industry incentives payment.

Time to develop best practice approaches

The consultation paper and feedback sessions with universities and industry have asked universities to "be creative" and to "take risks to change the ecosystem" of work driven learning.

However, an assessment timeframe under NPILF of three 12 monthly assessments through the pilot phase 2021-23 and then annual assessments with funding potentially at risk beyond the pilot phase will encourage the opposite of such creativity and risk-taking behaviour.

The NPILF initial three-year period is best taken as a whole, with yearly stepping stones throughout. It would be far more reasonable and more likely to ensure the success of the program through giving universities the incentive to plan out a medium-term strategy for better outcomes. It would also account for the time lag in some of the draft metrics (e.g. employment outcomes).

A three-year assessment period would give universities the opportunity to learn as they go and the opportunity to take some risks. This would be preferable to government than stalling the implementation of the process altogether.

The impact of public measurement, that is publication of each university outcome, would be sufficient incentive for each university to achieve its goals without needing to threaten to withhold funding.

Recommendation 4

The IRU recommends that:

- *the pilot phase be organised as a three-year assessment with annual feedback, with the three-year approach to be routine once the NPILF model is implemented in 2024;*
- *the entire process be greatly simplified from 2024 with less emphasis on multiple reporting indicators to remove the considerable administrative burden on universities for the initial 2021 to 2023 period;*
- *the concept of withholding funds from universities which do not meet their stated NPILF goals be removed. Publication of each university's outcomes would be sufficient.*

Supporting sharing of good practices

The consultation paper assumes transparency, evaluation and publication of case studies will "enable universities and industry across the country to identify and share best practice and successful models which can be modified or implemented elsewhere." (p. 19).

Although it is possible that sharing and widespread adoption within and across universities will occur naturally due to competitive or collaborative instincts, the zero sum game nature of the NPILF funding allocation process, in which universities stand to lose funding if they do not meet their 12 indicators in a 12 month period, could serve to work against such sharing of information.

With relatively modest additional resourcing at the end of the NPILF pilot phase and co-ordination by the NPILF unit in DESE, the government could ensure the NPLIF exemplars are provided with the best

opportunity to be adopted across the sector. One possible platform is to use existing networks and communities of practice.

Recommendation 5

The IRU recommends funding support for universities to expand and adopt good practices highlighted through NPILF agreements.

Future allocation methodology and distribution options

The consultation paper sets out several ways to allocate the NPILF funds from 2024 that straddle the tension between essential institutional costs that each university will face against the distribution of students across universities with small to large student numbers.

The funds are sourced from a general reduction across the board for all universities which supports the need to recognise student numbers in the long-term funding distribution.

The better way ahead is to continue with banded allocation based on CSP EFTSL which will be used between 2021 and 2023 from 2024 and beyond.

Recommendation 6

The IRU recommends that that the banded allocation of funding based on CSP EFTSL which will be used between 2021 and 2023 should be continued from 2024 and beyond to provide the most realistic support, taking account of institutional needs and the spread of students across universities.

Equity and work driven learning

The consultation paper asks universities to consider strategies to enable access and equity (p. 9) but the example metrics work against this goal by not accounting for the greater difficulties low SES students and some other sets of students face gaining WIL and exposure with industry.

We know that WIL is less common for those from low SES and other equity target groups. Universities Australia's *Work-integrated learning in universities: final report* showed that low SES students were 13.5% of all WIL participants despite being 18.1% of all enrolments (p. 29). This pattern is consistent across all fields of education. It is also evident for regional and remote students.

Universities located in disadvantaged regions or teaching low SES students face greater graduate employment challenges. The 2019 *Beyond graduation: long-term socioeconomic outcomes amongst equity students* report found low SES graduates to be less likely to employed, employed in professional roles or have a high income. The IRU's Demand Driven Funding: A decade of achievement showed that low SES students has now reached 19% for the sector and population parity at IRU members (25%).

The NPILF demonstrators and innovators offer a useful contextualised approach, providing flexibility for universities to propose actions most suitable to their mission and strategy, including targeting programs towards low SES and under-represented students. Institutional self-improvement for equity group students may also be part of a specific demonstrator.

The key equity problem is in the sector-level list of metrics in Table 4 (listed as Table 1, p16) of the consultation paper. None appear to be contextualised for university student or disciplinary backgrounds, or the external environment of where universities are located.

Universities may be (dis)advantaged under sectoral-level benchmarks for "excellence" due to student and geographical contexts. For improvement, universities may also be (dis)advantaged by changes in the composition of the annual student cohort, such as enrolling fewer (or more) low SES students. This is most

obvious for the "employment outcomes" metrics (e.g. "Improvement in employment outcomes for STEM+ course graduates" and "Improvement in graduate employment outcomes overall"), but is also relevant to sectoral-level benchmarks for WIL participation due to the lower uptake and ability to engage in WIL for students from low SES backgrounds.

Recommendation 7

The metric indicators should be contextualised for the different composition of the student group at each university.

Using performance indicators more effectively

The NPILF Agreement requires universities to choose:

- 1 or 2 NPILF metrics for benchmarking in each NPILF priority (WIL, STEM and Industry partnerships).
- Benchmarking against past performance ("self-improvement") or excellence if they already meet a certain threshold ("maintenance of established excellent performance").

It is important that universities are recognised for excellent performance and have flexibility to choose between maintenance or self-improvement. However, for the outcomes which NPILF is to achieve, there may be more to be gained from encouraging improvement in areas of relative weakness, rather than maintenance of the status quo. By locking universities into choosing between metrics and benchmarking options, there is a risk that universities will become conservative in their approaches.

Universities are only assessed on pre-nominated NPILF metrics. If they do not achieve the target for the nominated metric, they risk public scrutiny for underperforming and potentially from 2024 losing NPILF funding even if they improve or maintain excellence across other NPILF metrics within the same priority area.

This penalises universities for making the wrong nomination of NPILF metric, rather than for their NPILF performance more broadly.

Rather than disincentivising universities to nominate metrics in areas of greatest weakness or challenge, NPILF metric funding could be guaranteed if universities achieve improvement or maintenance of excellence in any NPILF metric within a priority. (Or any two metrics should the requirement for 12 indicators remain and a university chooses other metrics for its final three indicators).

By having the option to be assessed on any NPILF metric, universities can pay more attention to achieving the broader NPILF priorities, rather than narrowly focusing on a chosen metric whose individual significance is unlikely to be major.

Demonstrating self-improvement is relatively straightforward, but it is important that improvement on a metric does not come from reducing access to equity group students (see above: Equity and work driven learning). The consultation paper accepts that "local variance may also be taken into account" when determining success/failure on improvement or maintained performance, but this contextualisation is vaguely defined.

The threshold for excellence is yet to be defined. If defined by performance relative to the sector, such as the top quarter of universities in a given NPILF metric it would require:

- universities to report on all NPILF metrics so sectoral benchmarks could be determined;
- contextualisation for student and disciplinary backgrounds, and the external environment of where universities are located.

Demonstrators and innovators offer a useful contextualised approach, providing flexibility for universities to propose indicators most suitable to their mission and strategy.

The ambition to have “failure tolerant” innovators and “reward noble failure” is commendable, but it is unclear how success or (noble) failure will be determined and who will make this assessment, including the role of industry partners. This will require ongoing discussions between the Department of Education Skills and Employment with university representative bodies about the use of performance indicators, ensuring they remain targeted towards the NPILF goals.

More broadly the whole question of how the Department and the Government use performance metrics should be the subject of a thorough discussion focused at the intent and impact of using metrics, not the technical detail of their construction.

Recommendation 8

The IRU recommends the following revisions to indicator performance measurement:

- *universities can meet the NPILF metric requirements if successful on any metric within a priority; and*
- *an ongoing discussion between the Department of Education Skills and Employment and university representative bodies about the use of performance indicators to ensure they are well suited both to encouraging improvement and recognise currently high-level performance that need not be the focus for immediate improvement.*

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Existing IRU and industry partnerships

Existing practice - Does your business or university have good examples of WIL, or partnerships, which can be used as exemplars?

Work integrated learning (WIL) is a practice that has high impact on students' learning and employability.

Analysis of WIL participation data shows that over a given year 37% of all university students have undertaken WIL activities as part of their study – though the number of WIL participants varies significantly across institutions.[1]

The IRU has created a suite of resources to support member universities provide quality work based experiences for their students.

The IRU is now collaborating with government agencies to scope the potential for students to participate online in real projects as part of their work-integrated learning at university.

This pilot project will see students working on live and real eWIL (e-Work Integrated Learning) projects across three government departments:

- Federal Department of Defence
- Federal Department of Finance
- Northern Territory Department of Trade, Business and Innovation

Students from IRU institutions will participate in the projects off-site using an online 'virtual workplace'. Utilising virtual workplaces in this way will provide opportunities for remote and equity groups to take part in future eWil projects. If successful, this pilot project could path the way for remote and equity groups to take part in future eWil projects in government.

The IRU has also hosted a series of webinars for university staff, discussing how to maximise the benefits of WIL.

IRU exemplars

The IRU has collated the following examples of current industry and business partnerships already occurring within member universities to highlight the fact that IRU members already demonstrate a serious commitment to work integrated learning.

Charles Darwin University – Deloitte Integrated Industry Partnership
The CDU Business School has partnered with Deloitte, which has struggled to maintain a well-trained graduate base in the Northern Territory, to provide students with an opportunity for a semester-long work placement to improve student career readiness and employment opportunities. The program has greatly improved Deloitte's graduate intake and provides benefits for both sides of the partnership.

Flinders University – Science and Engineering Work Integrated Learning (WIL) Program
The Flinders Science and Engineering Work Integrated Learning (WIL) Program has successfully placed approximately 1,000 students (around 100 students each year) to work on innovative design, development and commercialization projects with industry partners. The program provides students with

[1] Analysis of WIL participation data 2018

comprehensive preparation around innovation, project management and workplace preparation, as well as ongoing supervision and feedback.

Griffith University – Work Integrated Learning with Queensland businesses
Griffith University has business partnerships with a number of innovative firms in south-east Queensland. One of those partners is Brisbane-based game developer Halfbrick Studios, where students work in small, collaborative teams guided by Halfbrick mentors for 100 hours over the course of a semester. Halfbrick has benefited from tapping into Griffith's pool of emerging talent across a range of relevant disciplines, and has employed numerous Griffith graduates.

James Cook University – School of Business Law and Governance (WIL)
Final year students from JCU's School of Business, Law and Governance have the opportunity to enrol in one of three 'Work Integrated Learning' (WIL) subjects as best suits their current situation, learning the theory and practice of work with one of JCU's industry partners. A significant amount of evidence has been captured to demonstrate the positive impact the WIL experience has had in helping students become employment-ready, including feedback from industry partners.

La Trobe University – Animal and Veterinary Biosciences placements
AGR1WIL is a for-credit work placement course, compulsory for first year students in the Bachelor of Animal and Veterinary Biosciences at La Trobe University. Students are placed at veterinary clinics, farms and agricultural businesses, pet care and grooming, animal rescue and sanctuaries, zoos and tourist parks, and government agencies. Several students were offered ongoing employment after their placement.

Murdoch University – Young Professionals Program
Murdoch University has partnered with the local Chamber of Commerce to bring together students, business people and those interested in business in an interdisciplinary program that provides opportunities for young people to hear and share their stories of professional success. Students say it has developed their confidence to deal with people at very high levels and learnt how to work in a team of people from very varied backgrounds.

Western Sydney University – Western Sydney entrepreneurial hub partnership
Western Sydney University and University of Technology Sydney are collaborating to provide a major boost to research and entrepreneurial activities in the fast-growing Western Sydney region. Local communities, industry and business are set to benefit from the agreement, which will see the two universities' business incubator programs co-locate at the Western Sydney University's Bankstown CBD campus.

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