AAH Policy

SENATE INQUIRY INTO THE HIGHER EDUCATION SUPPORT AMENDMENT (HESA) BILL 2020 SEPTEMBER 2020

The Australian Academy of the Humanities (AAH) welcomes the opportunity to provide a submission to the Senate Education and Employment Legislation Committee Inquiry on the Higher Education Support Amendment (Job-Ready Graduates and Supporting Regional and Remote Students) Bill 2020 (the *Job-ready Graduates legislation*).

The Academy is the national body for the humanities in Australia, championing the contribution humanities, arts and culture make to national life. Our work aims to ensure ethical, historical and cultural perspectives inform discussions regarding Australia's future challenges and opportunities.

The Academy is not supportive of the *Job-ready Graduates legislation*. We fully support the need to create more spaces for students to attend university at this critical time, and we unequivocally support a robust higher education system, which can deliver knowledge and skills now and for the future. We do not believe the *Job-ready Graduates legislation* in its present form can deliver on these objectives.

The legislation has not been subject to rigorous modelling, particularly to take account of the extensive disruptions driven by COVID-19; the policy rationale of 'job readiness' or 'job-relevance' is disputed by the data; the legislation is not based on sound evidence about workforce trends, or the way students make choices about their courses; and the reforms risk introducing a range of perverse incentives and outcomes.

The proposed changes misjudge the skills and knowledge required for our society *and* our economy, by undermining our knowledge and expertise on matters that are uniquely Australian, including Indigenous history and culture; impeding our ability to smartly position Australia in a rapidly shifting global order; and jeopardising the skills needed for Australia's growth industries.

We would be happy to elaborate on any of the comments in this submission and assist in convening relevant expertise.

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SUBMISSION SUMMARY

1. The policy rationale for shifting students into areas that are 'job ready' or 'job-relevant' is disputed by the evidence from graduate outcomes and census data, that shows humanities graduates:
    a. Have either equalled or outperformed science and maths graduates in full-time employment and labour force participation in the past three years.
    b. Are in demand in sectors projected for substantial growth and expected to resist automation.
2. The package is predicated on unsubstantiated and contentious claims about disciplines that support the 'national interest'. Humanities graduates are trained in the high demand skills Australian companies say they need – creativity, initiative complex problem-solving, leadership, and emotional intelligence – along with specific capabilities vital to Australia's future, such as the study of China's cultural, trade and political systems, or the culture and history of Australia's First Nations People.
3. The 'job ready' ambitions of the package fail to account for the interdependencies between science, technology, engineering and mathematics (STEM) and humanities, arts and social sciences (SHAPE) fields in innovative businesses and the economy more broadly.[1]
4. The new, extreme funding differentials introduce perverse incentives and outcomes which risk Australia's economic and social recovery from COVID-19. The fee changes:
    a. Make the study of Indigenous culture and history more expensive than medicine.
    b. Disproportionately impact Indigenous and economically and socially disadvantaged students.
    c. Provide a disincentive for the study of subjects of critical importance to Australia's future in the region.
    d. Risk regional recovery by introducing disincentives to study subjects that underpin the creative and cultural industries – identified as one of four sectors key to the economic future of regional Australia.
5. The legislation punishes the current cohort of university-aspiring senior school students, their families and teachers who have selected subjects based on aptitude and passion, at a time of great stress and anxiety about their future.
6. The proposal to remove the research component of the funding formula is high-risk without having any plan yet for what research funding stream will replace it.
7. Given the magnitude of the proposed changes, which promise a fundamental reshaping of higher education in Australia, the Academy calls on the Senate Education and Employment Legislation Committee to:
    a. Seek the release of the modelling (costings and impacts) and labour market outcomes analysis on which the legislation is based to enable full and transparent review.
    b. Commission independent modelling to ensure confidence in the reforms prior to any implementation.
    c. Ensure that a review mechanism is built into the legislation to assess the impacts and consequences of the legislation on the higher education sector, on student choice, and on national capacity and workforce needs.

[1] 'SHAPE' stands for Social Sciences, Humanities and the Arts for People and the Economy, https://thisisshape.org.uk/

1 Getting job readiness right

1.1 Disciplines of 'national importance'

There is little transparency or logic offered in the Department of Education's *Job-ready Graduates Discussion Paper* about the process for determining what disciplines count as being in the 'national interest', or why the national interest has been defined in purely economic terms. The disciplines earmarked for extreme fee hikes and therefore deemed of less importance to the 'national interest' are shown to produce both specific and generic capabilities vital to Australia's social *and* economic future.

Analysis by Bankwest Curtin Economic Centre suggests that the *Job-ready Graduates Package* "misses the target" of jobs for the future: "While productivity is often thought to be related to STEM fields, the greatest areas of employment growth have and will likely continue to be in jobs which are difficult to automate. These occupations typically require more interpersonal skills, which may be more supported by courses in Society and Culture. Such skills are also more transferable when jobs and tasks are disrupted by automation" (Bond-Smith and Cassells, 2020, p. 3).

The Government's *Australian Jobs 2019* report identifies high demand skills by Australian companies: creativity, initiative complex problem-solving, leadership, and emotional intelligence (Department of Jobs and Small Business, 2019). These capabilities are the hallmark of a humanities training.

The humanities also produce specific capabilities vital to Australia's future, including knowledge to smartly position Australia in rapidly shifting global order; to advise on matters that are unique to the Australian community, including our history and culture; and understanding how people have experienced and responded to major social or environmental change over time.

It is difficult to also understand the logic that the study of China's cultural, trade and political systems, or the culture and history of Australia's First Nations People, to take just two examples, could be determined as not being in the 'national interest' in either social *or* economic terms.

The humanities also provide the underpinning skills to support the cultural and creative industries, one of the fastest growing sectors of the economy.

Of the six industries identified by Bureau of Communications and Arts Research (BCAR) as the fastest growing in 2016-17, three have leading shares of workers with creative qualifications – professional, scientific and technical services; rental, hiring and real estate services; and information, media and telecommunications. Of the six industries least susceptible to automation, five are traditional humanities graduate destinations (Education, Professional Services, Healthcare, Information, Media and Comms., and Arts and Recreation Services, and Public Administration) (BCAR, 2019, p.4).

1.2 Skills and capabilities valued by employers – what the evidence says

We know these skills and capabilities are valued because graduate destination data shows that humanities graduates are in demand in sectors projected for substantial growth based on the government's own jobs data (Education and Training, Public Administration and Safety, Professional, Scientific and Technical Services, Health Care and Social Assistance and Arts and

Recreation Services) and outperform science and maths graduates in full-time employment and labour force participation (see Attachment).

The rationale offered for the changes, producing 'job-ready graduates' for Australia, is not supported by the evidence. The data on humanities graduate destinations and labour force participation indicates that these degrees are meeting "the needs of employers and the future workforce" which is the stated aim of the Government's proposed reforms.

These data show humanities graduate outcomes at least as strong, if not stronger, than in those fields targeted in the package of reforms as 'job-ready' according to analysis of jobs growth and trends in areas such as STEM (see Attachment).

The results from the 2020 Graduate Outcomes Survey – Longitudinal (GOS-L) published in August 2020 examined medium-term outcomes (using data from 2017 and 2020). A key finding of the 2020 survey is that graduates with generalist degrees (whether in SHAPE or STEM fields) may have weaker employment outcomes initially, but this gap closes over time (see Attachment). In 2017, 21.6 % of science and mathematics undergraduates were in full-time employment compared with 61.9 % for humanities, culture and social sciences. By 2020, the full-time employment rates were on par (87 %) for both science and humanities graduates (see Attachment).

1.3 Skills mixing for Australian industries

The *Job-ready Graduates legislation* fundamentally misunderstands the interdependencies between STEM and SHAPE fields in the economic landscape. Two examples illustrate this point.

The resources sector currently contributes around 8.5% of Australia's GDP. This sector relies on archaeologists and anthropologists trained in Society and Culture fields to undertake the cultural heritage and ethnographic surveys ahead of mine development. 55% of professional archaeologists are employed in the private sector undertaking cultural heritage work and these roles have expanded over the last two decades to service the expanding resources sector (Mate and Ulm, 2016). 97.4% of professional archaeologists had a minimum qualification of a pass degree in Society and Culture. Similarly, the Native Title Anthropologist Grant Program funded by the Attorney-General's Department seeks to fill the skills gap of anthropologists able to support the resolution and management of native title, again key to our economic future.

Another example of the critical interdependencies between STEM and SHAPE concerns the development of artificial intelligence (AI) and other emerging forms of automated decision-making. The social, legal and economic consequences of AI and automation have been recognised as a high priority field for current research, education and policy development by the Commonwealth Government's own Technology Roadmap, the Australian Human Rights Commission, the Australian Council of Learned Academies' AI report, and in a series of recent major national research investments, including the new humanities-led ARC Centre of Excellence for Automated Decision-Making and Society. These developments underline the need for the technological sciences to engage directly with the social sciences and humanities, in both research and teaching programs (Connolly, 2020).

Together with Australia's other Learned Academies, the Academy of the Humanities is concerned that the proposed fee restructure risks limiting the pipeline of workers and researchers

who can help us tackle real-world problems and drive innovation (Australian Council of Learned Academies, 2020).

1.4 Regional employment

Representatives from regional areas have highlighted the impact of the fee increases for social work on the provision of vital mental health services in regional and rural communities. Fee changes to other areas of study also risk regional economic and social recovery efforts. Australia's regional economies are major employers in education, social services, health, tourism and creative industries, all of which are underpinned by knowledge and skills derived from training in Society and Culture.

Despite perceptions about the dominance of the mining sector, healthcare and social services are in fact the major employers in regional Australia, and in regional Queensland, for example, creative industries are bigger employers than both mining and agriculture. Research from the Regional Australia Institute (RAI) found that access to arts and culture activities and infrastructure are a significant factor in families deciding to relocate and where to live (Regional Australia Institute, 2019).

The RAI further identifies the creative industries as one of four sectors which are "key for the economic future of regional Australia". A 2019 report from the Government's Bureau of Communications and Arts Research (BCAR), *Creative Skills for the Future Economy,* provides a rich analysis of the opportunities for creative skills across the Australian economy, in and beyond the cultural and creative sector.

BCAR notes the 'common misconception' that these skills are predominantly found solely in 'creative' fields, such as the performing and visual arts. In fact, several of the subjects earmarked for fee increases are the very ones that underpin the creative economy, such as media and communications, which BCAR's research shows is one of the most likely qualifications to be held by those employed in creative occupations, wherever they are across the economy.

2 The risks and perverse impacts of *the Job-ready Graduates Package*

The *Job-ready Graduates legislation* introduces two separate dis/incentives, for individuals (the proportional change to student contributions) and institutional (total funding per student to the institution). It is not at all clear how universities and students will respond to these incentives and disincentives in the current economic climate.

Under the new model, total funding for humanities subjects in the Society and Culture cluster has increased, in recognition of the historic underfunding of these subjects, but the cost has shifted to the student who will now face 93% of the share (up 113% to $14,500 per annum) with the Commonwealth support at 7% or $1,100 per annum.

There has been a lot of attention on the ramifications for students who wish to pursue a career in social work, but other fields across Society and Culture face similar threats and are involved in equipping students for jobs needed for Australia's recovery.

The *Job-ready Graduates legislation* introduces a complex web of incentives and disincentives that work against education, social and economic outcomes.

The extreme funding differentials:

- Make the study of Indigenous culture and history now more expensive than medicine.
- Introduce equity and access barriers that disproportionately impact women. The reforms "imply a transfer between fields where more women are enrolled" and the "largest additional student costs would come from Society and Culture, where women make up around two thirds of total students" (Bond-Smith and Cassells, 2020, p. 4).
- Make it harder for students from low SES backgrounds, including in the regions, to aspire to and succeed at university in subjects of social, economic, cultural and community value such cultural heritage, tourism, and archaeology.
- While there are welcome subsidies to encourage participation from Indigenous students in remote and rural Australia, there is no rationale offered for why they do not extend to metropolitan-based Indigenous students.

2.1 Inequities in multidisciplinary studies

The reforms shifts the onus of multidisciplinary study to only half the student body by introducing incentives for students majoring in Society and Culture to enrol in maths or IT (because the costs apply at unit not course level) but disincentivising skills-mixing in the other direction, such as for future technologists, engineers and computer scientists to take up applied ethics or communications subjects. This compromises the skills and knowledge needed for trusted and culturally resilient technological development in Australia. The chair of Engineers Australia has raised concerns that:

> Successfully meeting societal challenges of sustainability, economic growth and improved quality of life through innovation requires engineers to work in cross-disciplinary teams of human behaviouralists, economists, lawyers, communication specialists and more. The future of engineering requires a diversity of students that have a breadth of knowledge that extends beyond the technical. This new policy will make education more expensive for the many engineering students who choose to do a double degree. (Lynch, 2020)

3 The role of higher education in the context of COVID-19

3.1 Education for society and the economy

Studying at university delivers substantial benefits to individuals and to society. Students may be driven to select courses by the career they wish to pursue, or primarily motivated by a passion for and interest in a subject. Regardless, the benefits of education extend beyond employment, creating well-rounded, knowledgeable citizens who can contribute to the wider community in innovative ways.

The Government's Napthine Review focused on regional and remote education but its principles hold true across the system: "The decision to participate in tertiary study is typically driven in the first instance by the career being pursued, but the benefits of tertiary education extend beyond employment, to participating in society and contributing to the wider community". This suggests a "bigger shift away from human capital towards human capabilities to frame education outcomes" (Commonwealth of Australia, 2019, p.74).

Professor Peter Shergold, Chancellor of Western Sydney University, calls this 'learning to learn' and says this is the true value of the post-secondary education system:

> Actually, what you're learning here, whether you're doing history or plumbing, in a sense, are attributes that you need which is communication, complex problem solving, ability to work as part of a team. […]
>
> What you need to do, going through school and beyond, is learn to learn because the only thing that I'm certain about in an uncertain future is that you will not be going in to trades or professional careers that are going to be the same for 40 years. (Australian Broadcasting Corporation, 2020).

The *Job-ready Graduates legislation* risks jeopardising this human capability development when Australia needs it most.

3.2 Shifting the goalposts

The legislation stands to impose an unforeseen debt load on students and families of the current cohort of university-aspiring senior school students, specifically those pursuing Society and Culture subjects. Suggestions that these students could take maths or science subjects to reduce their contribution (from $14,500), ignore both the requirements for prerequisite subjects to be studied at school and evidence that an aptitude or passion for the subject are key drivers in student success.

It is also now apparent that the Government intends changes to funding Australian students based on their first-year results. Attempting to funnel students into subjects they are not well suited to could lead to decreased productivity, failures and attrition.

3.3 Flow on effects across the research system

The higher education sector has a value in Australia of $35 billion annum, and over the five-year period to 2020, University and Other Higher Education grew 2.5%. The Government's projected revenue (from an additional 39,000 domestic university places) is unlikely to offset the loss in international student income, thereby risking both the quality of educational provision and research funding, which has been underwritten by international student fees (Rapid Research Information Forum, 2020).

There are consequences for research funding implied in *Job-ready Graduates* legislation, which expose structural gaps. The separation of a teaching and research funding streams essentially breaks the 'dual funding' model. The fact that the base research component has been removed from the Commonwealth Grant Scheme will impact the entire system with implications for research across SHAPE and STEM.

We welcome the Minister's establishment of a working group to address the sustainability of research funding, but these important discussions need to bring together 'interdependent' aspects of the *Job-ready Graduates legislation* and not develop solutions in isolation from each other.

4 Further consultation and deliberation to address identified problems

In the midst of the COVID-19 pandemic, there is a lot at risk.

Given the magnitude of the proposed changes, which promise a fundamental reshaping of higher education in Australia at a time of unprecedented upheaval, a rigorous and transparent discussion and review should be undertaken before the reform package is passed by parliament.

We appreciate that the Senate Inquiry offers an opportunity for more sustained review than has taken place to date, but we do not think that the timeline for reporting is adequate and remain concerned that the legislation will be passed without due consideration.

In light of the limited time for consultation, we are concerned that the voices of those most affected by these changes, the 'COVID-19' cohort of Year 11 and 12 students, and their families, will not have been heard.

4.1 Modelling the changes

In particular we are concerned that there has been no modelling undertaken by the Department of Education, Skills and Employment of the impact of the extreme fee differential being introduced, and a general lack of transparency on the data used as the basis for the reforms. The basis on which 'job readiness' is asserted is also not backed up by the data. The legislation has introduced new elements which have not previously been announced and it is unclear whether these have been subject to impact modelling. These risk further disadvantaging students who are steered into courses for which they are ill-suited.

The success of the policy appears predicated on a contradiction – if students follow the incentives and move to cheaper courses in significant numbers then the overall system becomes underfunded with reduced student fees coupled with a reduction in the Commonwealth contribution. If enrolment patterns remain the same, the jobs rationale is called into question.

The level of uncertainty and contradiction does not make for good public policy.

There is a risk that last-minute amendments will introduce further contradictions and inconsistencies, and risk additional perverse impacts. 'Cherry-picking' around the edges further calls into question the robustness of the overall plan and policy logic.

4.2 Safeguards

Safeguards in the legislation are vital to ensure the reforms will not introduce unintended outcomes, and an opportunity to consider more balanced options for reform, such as targeted incentives for vocational courses or in areas where there are skills shortages (such as nursing); or distributing the fee hikes more evenly – such as a 1-2% rise across the board.

At a minimum, the ensure that a review mechanism is built into the legislation to assess the impacts and consequences of the legislation on the higher education sector, on student choice, and on national capacity and workforce needs.

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SUPPORTING ANALYSIS

The intent of the *Job-ready Graduates Package* is to use the new funding rates to expand enrolments and direct students towards courses with strong employment prospects, on both counts the evidence does not add up.

Fee increases in an income-contingent loan system have not historically resulted in changes to enrolment patterns (Bolton, 2020). While the Department of Education has pointed to a precedent, when subsidies for science and maths students were introduced in 2009, the Innovative Research Universities (IRU), for one, have questioned the extent to which the subsequent enrolment increases can be directly attributed to the fee change. "From 2009 to 2012, the charge for maths and science units was reduced. At the same time demand driven funding saw universities expand to enrol all suitable applicants. More students enrolled in these disciplines. How many more enrolled because it was cheaper is unclear. When the charge went back to previous levels there was no drop in student numbers but continued growth" (Innovative Research Universities, 2020).

Andrew Norton has observed that "the central concern with the student contribution changes is that, to produce marginal changes in the pattern of student enrolments, many students would have windfall gains in lower fees for courses they were always going to do, while other students would spend many extra years repaying their HELP debt" (Norton, 2020).

A number of commentators have also argued there will be an incentive for universities to enrol in humanities courses because many STEM courses have actually decreased in total funding per student place. Frank Larkins and Ian Marshman, for example, have suggested that "the profile adjustment that will yield universities the greatest increase in domestic fee revenue occurs when STEM students are substituted for HASS students" (Marshman and Larkins, 2020).

There are more targeted measures at the Government's disposal which could achieve desired enrolments in areas of skill shortage, such as nursing. It is not clear why these avenues have not been pursued. Wholesale changes to fee structures is a heavy-handed approach, focused on the 'supply side' and run the risk of over-supply without also addressing 'demand' and the necessary structural change to achieve sustainable, quality career pathways. The fact that the funding for nursing places has actually gone down under the reforms has seen the Council of Deans of Nursing and Midwifery question whether the "reforms could compromise the quality of teaching as well as the standard of student entering the demanding bachelor of nursing" (Lansdown, 2020).

Graduate employability and outcomes

2020 Graduate Outcomes Survey – Longitudinal (GOS-L):

The results from the 2020 Graduate Outcomes Survey – Longitudinal (GOS-L) published in August 2020 focuses on medium-term outcomes (using data from 2017 and 2020) and includes postgraduate data. A key finding of the 2020 survey is that graduates with generalist degrees (whether in SHAPE or STEM fields) have weaker employment outcomes initially, but this gap closes over time.

In 2017, the lowest percentage of undergraduates finding full-time employment in the short-term was observed in following fields of education:

- 53.4 % for Creative arts,
- 61.6 % for Science and mathematics,
- 61.9 % for Humanities, culture and social sciences, and
- 62.0 % for Psychology.

Three years later, all of these fields saw significant increases in the ability of undergraduates to find full-time employment, such that medium-term outcomes were:

- 79.4 % for Creative arts,
- 87.1 % for Sciences and mathematics,
- 87.0 % Humanities, culture and social sciences and
- 87.2 % for Psychology.

These data reinforce the point that while undergraduates from some fields of education – and in particular those of a generalist nature – have weaker employment outcomes over the short-term, the gap in employment outcomes across fields declines over time (p. 7).

Trends in employment outcomes for postgraduates, whether obtaining their degree via coursework or research, are similar but less pronounced than those observed for undergraduates. That is, graduates from more vocationally oriented programs such as Medicine tend to have higher rates of full-time employment in the short-term in comparison to more generalist study areas such as science and mathematics, and humanities, culture and social sciences. Once again, however, the gap in employment rates between those with vocational and generalist degrees diminishes over time (see p. 8). For postgraduate coursework in humanities, culture and social sciences the full-time employment rates are 81.2 % in 2017, increasing to 90.5 % in 2020.); for postgraduate research in humanities, culture and social sciences the results are 73.9 % in 2017 to 87.1 % in 2020.

It is particularly worth noting that the gender gap in graduate median salaries has increased over time. In 2017, the gender gap in graduate median salaries was $2,600 or 4.3 %. In 2020, for the same cohort of graduates three years later, the gender gap in graduate median salaries had increased to $6,900 or 9.4 % (p. 3).

Earlier research suggested that a key factor contributing to the gender gap in salaries was the fact that females tend to graduate from fields of education that attract lower salaries (e.g. Creative Arts), while males tend to graduate from more highly remunerated fields (e.g. Engineering). The 2020 survey, however, notes that female graduates often earn less than their

male counterparts within the same fields of education. There are some exceptions – in Creative arts females are paid more than males by approximately 4 % (p. 3).

Overall, the rise in course fees will have a more significant impact on women, regardless of the field of education.

2019 Graduate Outcomes Survey:

Graduate employability [p. 2]

> In 2019, 72.2 % of undergraduates were in full-time employment four months after completing their degree, down by 0.7 percentage points from 72.9 % in the previous year.

> The overall employment rate for undergraduates was 86.8 % in 2019, down slightly from 87.0 % in 2018.

> The fall in employment among new graduates is in contrast with the improvement in full-time employment among more established undergraduates three years after graduation from 89.2 % in 2018 to 90.1 % in 2019, as shown by the 2019 Graduate Outcomes Survey – Longitudinal (GOS-L).

> Similarly, overall employment among undergraduates three years out improved from 91.9 % in 2018 to 93.3 % in 2019.

> That new graduates were finding it harder to gain employment than more established graduates is consistent with the slight softening in the labour market observed in early 2019 with the overall unemployment rate rising from a low point of 4.9 % in February 2019 to 5.3 % in May 2019, as shown by the ABS Labour Force Survey (6203.0).

Study area [pp. 6-7]

> Graduates with more generalist degrees can take longer to gain a foothold in the labour market immediately upon graduation. Study areas with the lowest rates of full-time employment in 2019 were Creative arts, Tourism, hospitality, personal services, sport and recreation, Communications, Science and mathematics and Psychology of 52.9 %, 56.4 %, 60.1 %, 63.4 % and 63.4 % respectively. [Humanities, culture and social sciences 64.3 %, same as in 2018].

> The 2019 Graduate Outcomes Survey-Longitudinal (GOS-L) shows three years after graduation, many more graduates are in employment. This is especially the case among graduates with more generalist degrees. For example, study areas with the lowest full-time employment rate immediately upon graduation in 2016 included Creative arts and Science and mathematics at 56.6 % and 62.5 % respectively. Three years later, their full-time employment rates had increased appreciably to 79.7 % and 87.8 % respectively.

> The areas with the lowest proportion of graduates employed (Total employment category) were Computing and information systems, Creative arts, Communications, Science and mathematics and Humanities, culture and social sciences, Tourism, hospitality, personal services, sport and recreation all of which had overall employment rates under 84 %. [Humanities, culture and social sciences 83.9; slightly up from 83.8 in 2018].

> The study area with the lowest labour force participation rate was Science and mathematics at 84.1 (up from 81.8 in 2018).

OECD Education at a Glance 2019:

Looking at OECD comparative data helps to put Australia's performance in context.

> Compared to other countries, regards graduate employment rates, Australia has a "much smaller differences between fields. For example, in Australia, Iceland and the Netherlands, which have relatively high employment rates in general, the differences in employment rates between different fields of study do not exceed 5 percentage points (Table A3.4)" (p. 73).

> And OECD on "Using higher earnings as a proxy for market demand, these figures suggest a potential imbalance in some countries between the fields most in demand by the labour market and the current supply of graduates" but "In some countries, the difference in earnings advantages across fields is relatively small. This is the case in Australia and Finland, where those with the highest-paying degree earn 30-40% more than those with the lowest paying degree" (pp 86-87).

Data from the Australian Academy of the Humanities' Future Humanities Workforce project (forthcoming) shows:

> The education sector, which has been flagged as important to Australia's future, is the single biggest destination for humanities' graduates, based on employees holding a humanities degree as their highest qualification working in that sector as of the 2016 ABS census.

> On the government's own projections, the top three growth sectors (Health Care and Social Assistance, Professional, Scientific and Technical Services and Education and Training) account for three of the top four destinations for employees holding humanities qualifications.

> The top five destinations for humanities graduates are all projected for substantial growth in the near future. Pre-COVID estimates to 2024 by the Government's Labour Market Information Portal indicate the following growth rates respectively:
    - Education and Training, 12.2% or 129.3k jobs
    - Public Administration and Safety, 6.2% or 52.1k jobs
    - Professional, Scientific and Technical Services, 15.1% or 172.4k jobs
    - Health Care and Social Assistance, 15.0% or 252.6k
    - Arts and Recreation Services, 10.4% or 26.7k jobs.

2020 STEM Workforce Report:

The Office of the Chief Scientist has released a comprehensive analysis of the STEM workforce. It shows that:

> In 2016, the unemployment rate for people with university STEM qualifications (5.7 %) was higher than the unemployment rate for people with university non-STEM qualifications (3.8 %) (p. 44).

Sources

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