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HDR EMPLOYABILITY GUIDE 1: GUIDE TO EMPLOYABILITY

2019

HIGHER DEGREE BY RESEARCH EMPLOYABILITY GUIDE 1: GUIDE TO EMPLOYABILITY

Employability refers to a person's ability to obtain (or create) a job by having the knowledge, skills and personal attributes to successfully participate in the workforce. It is a mutual process as your employability depends on potential employers and what they are looking for – it's all about whether you are the right 'fit' for a job and whether the job 'fits' with you.

In an HDR context, this means being aware of what employers want and (1) developing relevant skills and experience to optimise your employability throughout your candidature; (2) being aware of and able to source appropriate employment that utilises these skills upon completion of your degree; and (3) having the traits and behaviours that make you a good 'cultural fit' and effective employee. In general, this employment could include professional roles—which may or may not be research focused— middle management roles, post-doctoral research or early career academic positions.

In order to maximise your employability there are three main areas for you to understand. These are:

1. **The world of work:** Includes the broad job market, political and societal influences on employment and future trends such as technological advances that will impact on jobs.
2. **Key employability skills:** Encompasses attributes employers identify as being highly desirable in their staff and which are utilised in roles and workplaces.
3. **Yourself:** Recognising qualities and skills you have obtained—and can demonstrate—through your candidature and other roles, as well as identifying skills that may require further development.

This Guide covers points 1 and 2 in general; Guide 2 focuses on these same points in the specific context of the HDR job market; and Guide 3 covers point 3.

Once you understand these three areas you can start *linking yourself to the world of work* so you can identify, prepare for and ultimately obtain suitable employment or create your own opportunities. Guides 4, 5 and 6 will assist you in these areas.

A common theme across reports on employment issues is that people need to proactively drive their own career and take personal responsibility for ongoing skills development to keep pace with the changing nature of work[1]. This means it is important for you to actively seek out opportunities to develop key employability skills and attributes to complement your formal research training—regardless of whether you plan to pursue an academic or a non-academic pathway.

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[1] For example, see World Economic Forum, 2018, p. 23.

The world of work

There are several factors that impact on the world of work. Understanding and responding to these factors can increase your employability by enabling you to identify emerging trends and adapt accordingly.

Employment trends

While most of us would like a permanent role, the proportion of PhD and Research Masters graduates in full-time employment in Australia actually decreased over the 10 years until 2015 (Graduate Careers Australia, 2016, p. 4) and continues to do so—discussed further in Guide 2. This trend is reflected in many other nations and perhaps reflects the broader reality that casual or contract-based jobs are becoming more common worldwide. The reduction of permanent positions is due to multiple factors including:

1. Economic pressures—it is more cost effective for organisations to pay staff to work only when required rather than maintain a permanent, potentially under-utilised workforce.
2. Workflow demands—hiring people with specific skills to work on projects on-demand or during busy periods (Australian Industry Group, 2018, p. 9).

While the temporary nature of the work environment can be problematic for some, it can also provide an opportunity for flexibility and variety for others.

In addition to the casualisation of the jobs market there is an increasing number of people who are self-employed as contractors, consultants or who are running businesses—real or virtual. The 'gig' economy (in which service/product providers are linked with clients via digital platforms) is also expected to grow from its 'boutique' status to occupy a larger proportion of the labour market; and 'portfolio' careers—in which people have more than one concurrent role (for example, working part-time in an organisation while operating a part-time consultancy business) —will likely also become more common (Productivity Commission, 2017b, pp. 18-20). You may have already experienced the 'portfolio' career if you are working part-time while doing your research degree.

Critical to maintaining your employability in this changing job market is to be *flexible* in your thinking; *proactive*; and *willing to adapt* to changing circumstances. Given that researchers are generally open to learning and adept at interpreting and applying information, you are well placed to manage this world!

Societal impacts

No matter how old you are or how much experience you have in the workforce, you will probably have noticed changes in society. Issues such as climate change, food and resource security, changing demographics, security concerns, globalisation and migration all impact on the employment market and can create new employment opportunities (Ai Group, 2018; Committee for Economic Development of Australia, 2015; Price Waterhouse Coopers, 2018).

Although these trends may not directly affect you there are often flow-on effects in the broader employment market. For example, research is required to identify areas of need, projects must be undertaken to trial initiatives, government policies need to be developed and updated and so on.

One example of societal change is the ageing population in Australia and many other nations. This impacts the labour market by creating a greater demand for workers to support older people and to create the infrastructure needed to accommodate their changing needs. For example, the Productivity Commission's 2011 *Caring for Older Australians Report* projects that the aged care workforce in Australia will need to more than quadruple in size by 2050 to address the care needs of an ageing population.

Flow-on effects may include research to determine how to best cater and care for this cohort and the development of technologies for assisted living. Additionally, with an ageing population comes a decline in the labour force. As a result, there is a need for innovative solutions to increase productivity and efficiencies to offset this loss.

Finally, government agendas also influence the employment market by determining research priorities (see Guide 2) and providing funding for projects to manage the changing demands of society. Being aware of societal trends will help you predict areas of employment growth to take advantage of opportunities.

Activity 1.1

Reflect on the following questions:

* What societal changes have you noticed in your lifetime?
* Did you or anyone you know have to adjust to this change? How did they do that?
* What issues may impact on your future career?

Technological advancements

Perhaps the most commonly-discussed disruption in the world of work is the impact that the rapid pace of technological change and transition to a 'knowledge economy' will have on the job market. For instance, it is not uncommon to see reports about possible job losses as robots take the place of human workers in manufacturing or routine customer service, the automation of activities such as driving, or the use of artificial intelligence to assist with medical diagnoses (Hajkowicz et al., 2016). These types of production and procedural jobs have already declined to just 50% of the workforce, and are expected to fall by another 10% in the next 10 years (Lowe, 2017).

However, there is also an upside. Jobs that involve more complex human interactions and judgements are steadily increasing and are expected to account for at least 60% of the workforce by 2030 (Lowe, 2017). Adoption of technology drives productivity by freeing up valuable time—once consumed by routine, repetitive tasks—for more knowledge-based work and complex problem-solving. Technology also creates new roles for those with the 'right skills' —that is, skills such as adaptability in conjunction with problem-solving skills, and the technical expertise needed to harness new and enabling technologies in a data-driven economy (Productivity Commission, 2017a, pp. 85-87).

The World Economic Forum's 2018 *Future of Jobs report* (pp. 9-11) predicts increased demand for those with the skills to mine, analyse and interpret data such as data scientists and specialists in big data/machine learning, user experience and human-machine interfaces. HDRs have opportunities to develop many of the skills needed to participate in the knowledge economy as part of their research training.

Activity 1.2

- What technology do you currently use?
- How has this changed over the past five years?
- How did you adjust and learn to use new programs, apps and so on?

What this means for you

In order to maximise your employability it is important to be aware of changes in the employment market, societal impacts and technological advancements—in Australia and globally—so you can prepare and adjust accordingly. Proactively monitoring the issues impacting on the world of work will enable you to identify areas of future job growth and develop skills to take advantage of these opportunities.

Some sites to monitor for information on factors affecting the world of work include:

- World Economic Forum.
- Australian Government: Department of Jobs and Small Business and Productivity Commission.
- Our World in Data.

Activity 1.3

Peruse the suggested websites and other relevant sources, and note some of the key issues relating to employment trends, societal impacts or technological advances. How will these issues impact on jobs and employability in the future? What you can do to prepare?

Issue	Possible career opportunities	One potential job opportunity	What can I do now?
e.g. Climate change	• Scientific analysis • Social assessments • Planning and infrastructure • Communication • Policy development	• Highly skilled communicators to educate people on the impact of climate change	• Subscribe to environmental websites and read relevant reports • Practice communication skills

Key employability skills

As well as understanding the impact of changes in the world of work it is important to be aware of skills employers currently seek and those predicted to be valued in the future.

Adaptability and flexibility; analytical thinking and innovation; complex problem-solving; initiative; management of self and others and a commitment to lifelong/on-the-job learning are consistently ranked amongst the most desirable employee skills and attributes now and for the future (e.g. Deloitte Access Economics, 2014; Productivity Commission, 2017b; QS, 2018; WEF, 2018). See the World Economic Forum's _2022 skills outlook_ for predictions of which skills will grow and decline in demand in the coming years. There is general agreement that as we progress to a more data-driven, knowledge-based society, higher order skills and attributes—such as those developed in your research degree—are becoming increasingly important. Guide 3 will help you identify your skills!

Importantly, the _global graduate skills gap in the 21st century report_ (QS, 2018) identified a gap between the skills employers identify as being important and those that graduates _believe_ employers desire. Specifically, employers ranked **problem-solving** as being the most desired skill whereas graduates thought that employers valued **creativity** most highly. Graduates also underestimated the value employers placed on flexibility and adaptability, analytical skills and leadership and organisational skills. This highlights the need to research what employers want by reading reports and job advertisements in your chosen field, rather than assuming you know what employers may be looking for.

Understanding subtle differences between skills and how they operate in the workplace will help you recognise your current capabilities, your suitability for roles and whether you need to develop or broaden your skill set (discussed in more detail in Guide 3). For instance, what is the difference between leadership and management? Although both involve working with others and managing people and tasks, leadership involves inspiring and motivating others to perform at their best—whereas management relates more to implementing practical strategies to help people achieve outcomes.

Tip

When looking for a job, use you research skills to identify what employers are looking for— then match your skills to their requirements and respond accordingly. For example, if an employer wants to hire someone to clean the office and you tell them all about your research in particle physics, your years of teaching experience and the papers and books you've published they are not going to employ you. It doesn't matter that your skills and knowledge are both extraordinary and rare, they are entirely irrelevant to the job that the company wants done. They are looking for someone who can clean!

Activity 1.4

Liaising and negotiating are both communication skills, yet they are different from each other. How? A suggested answer can be found on page 8 of this Guide. Are you aware of any other skills that have subtle differences?

You may find these sites useful as starting points to research about skills of the future:

- [Australia's future workforce?](#) (CEDA, 2015).
- [Tomorrow's digitally enabled workforce: Megatrends and scenarios for jobs and employment in Australia over the coming twenty years](#) (CSIRO/Data61, 2016).
- [The global graduate skills gap in the 21st century](#) (QC, 2018).
- [The future of skills: Employment in 2030](#) (Pearson & NESTA, 2017).

Activity 1.5

Imagine you are running a project which aims to demystify university research so the general public understands the value of participating in research projects. You are recruiting for a Community Engagement Officer and are currently choosing between two candidates. They have very similar research backgrounds, skills and experience—however, they have chosen to pursue different extra-curricular activities as shown below.

Candidate one	Candidate two
Participated in the Three Minute Thesis competition	Presented at a university symposium
Voluntary board member for community organisation	Faculty HDR representative for the university
Social media presence on Twitter, Instagram and LinkedIn	Social media presence on LinkedIn and ResearchGate

Which candidate would you choose for this role? Why? Consider the extra-curricular activities you currently undertake (or plan to undertake). How will they help you develop the skills or stand out for the roles you are seeking?

References and resources

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World Economic Forum (WEF). (2018). *The future of jobs report 2018*. Retrieved from http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf.

Answer to Activity 1.4

Liaising involves communicating with one or more people when you are all working towards the same outcome. Negotiating is trying to reach an agreement with people who may have different goals—so you may need to use persuasion!

For example: Imagine you are presenting at a conference and your session contains three 15-minute presentations (without question time) followed by 15 minutes of questions at the end for all three presenters (in the style of a panel).

- *Liaising* might involve talking with the other presenters before the session to create a good rapport for the panel component, or to see what content they'll cover in their presentations so you can refer to each other's talks or even make minor adjustments to your presentation to avoid duplication.
- *Negotiating* might involve talking with the other presenters before the session to persuade them to change the order so you can be the first/last speaker, or asking the session Chair to extend your talk by cutting into question time (not recommended!).

Higher Degree by Research (HDR) Experience and Employability Project partners: