

12

Postgraduate Study Options

Read this chapter if you would like the following issues addressed:

- What options are available to students who want to get more out of university study than a basic Bachelor's degree?
- How can postgraduate study options be pursued and how do they impact upon professional careers?

The influential 20th Century philosopher, Martin Heidegger made the following statement about teaching and learning:

“Teaching is more difficult than learning because what teaching calls for is this: To let learn. The real teacher, in fact, lets nothing else be learned than learning. His conduct, therefore, often produces the impression that we properly learn nothing from him, if by “learning” we now suddenly understand merely the procurement of useful information.”

It is interesting to note, in the context of Heidegger’s statement, that in universities, the word “teaching” is not widely used because the fundamental tenet of universities is to “let learn”.

A university that has performed its role well should have endowed its graduates with the ability to self learn in the broadest sense – that is:

- To read, in the true context of the word.
- To understand.
- To analyse.
- To question.
- To compare.
- To evaluate opportunities.
- To evaluate risks.
- To synthesise solutions.
- To be impartial.
- To be self-aware and self-critical.

- To understand limitations, including one's own.

Armed with these attributes, one might well ask why an individual would consider undertaking further study beyond that which is provided by an undergraduate program.

The answer to this question is somewhat complicated, and there are numerous reasons, including:

- A professional requirement for a particular postgraduate qualification (e.g., a Master of Business Administration degree).
- A personal or professional interest in expanding one's own knowledge by branching out into other areas (e.g., moving from a Bachelor's degree in, say, science, to a postgraduate qualification in arts).
- A need to move from one field to another as a result of maturing in one's own career (e.g., from law to business).
- An interest in increasing specialist knowledge in a sub-field of the original degree (e.g., undertaking a Master of Engineering coursework degree in a specialised area).
- An interest in increasing specialisation by undertaking postgraduate research either at Master's or Doctoral levels.
- An interest in further learning and personal development for the sake of further learning and personal development.

Of course, beyond the formal accreditation provided by universities that offer postgraduate learning, one could ask why formal study programs are required if students have genuinely “learnt how to learn” during their undergraduate education.

In fact, there are several reasons that students choose to study in a university environment, rather than just informally learning by themselves. The first is that not all students graduate from university having “learnt how to learn” – many graduates have a lifelong requirement for structured learning, in which the process is driven and controlled by others. The second is that some areas of postgraduate learning require facilities and resources – it is unlikely that individuals could fund the cost of multimillion dollar laboratories in their own homes for the sake of further learning. The third reason is that, in order to achieve any recognised outcomes, some areas of postgraduate learning (chiefly research) need to be conducted in a structured and controlled environment – for example, the likelihood of someone achieving credibility for a medical research breakthrough arising in a garage is very small.

One other important reason that leads people to undertake postgraduate degrees is the ability to network with people in a narrow field. This is particularly important for those interested in areas such as business and management – the ability to strike friendships with colleagues in the same cohort can present lifelong opportunities and support in a career. This is not something that can readily be achieved by self-learning. In particular, in the case of business schools, the calibre of the school is generally directly defined by the calibre of the people who undertake courses there.

Having decided that there is a need for some people to undertake postgraduate study, the next issue is when such study should take place. Some graduates elect to move directly on to postgraduate study immediately upon completing their undergraduate qualification. Others move into the professional workforce and return to study years later – sometimes on a part-time basis and sometimes on a full-time basis.

There are five basic types of postgraduate degrees that can be acquired from universities around the world, specifically:

- (i) *Postgraduate Coursework Degrees* – these are degrees that are composed of a collection of subjects and projects in specialised fields. The titles that arise from such degrees are typically Graduate Certificate; Graduate Diploma and Master’s. The sub-titles reflect the specialisation of the study – for example, Master of Arts (European History), or Graduate Diploma (Polymer Science). Sometimes, postgraduate coursework degrees can contain a minor research thesis or project as part of their structure, particularly in the case of Master’s level qualifications. As their titles suggest, the scope of postgraduate programs is generally narrower than those undertaken at undergraduate level.
- (ii) *Professional Postgraduate Coursework Degrees* - In some university systems, particularly in North America and parts of Europe, the Master’s programs are effectively professional extensions to generic Bachelor’s programs – for example, rather than offering a simple four-year Bachelor of Engineering degree, some universities can

require students to undertake a three-year Bachelor of Science degree followed by a professional postgraduate coursework degree such as a Master of Engineering (Electrical). In these situations, the Master's degrees are essentially pseudo Bachelor's degrees. In Europe, this 3+2 (Bachelor's + Master's) structure is referred to as the Bologna Model and it is the one which was first adopted in Australia by the University of Melbourne in 2006.

- (iii) *Postgraduate Research Degrees* – these are also known as higher degrees by research (HDRs) or research higher degrees (RHDs). These include the Master's (by Research); Master of Philosophy (MPhil), and Doctor of Philosophy (PhD). A postgraduate research degree is generally based upon the completion of a single research project, which is then documented and submitted for examination as a major thesis.
- (iv) *Hybrid Degrees* – typically referred to as professional doctorates, these degrees are composed of both coursework elements and major research project elements, and are often seen in the context of degrees such as the Doctor of Business Administration.
- (v) *Higher Doctorates* – normally, these degrees are of primary relevance to research oriented organisations such as universities. They tend to recognise a history of research work through publication, or significant contributions to a particular field. Such qualifications are relatively rare and are issued in recognition of a

career in research, rather than as a qualification for research.

In general, the flagship postgraduate qualification provided by a university is the PhD, and this is the one which is widely recognised as a formal apprenticeship for research. The other postgraduate qualifications have varying levels of recognition. For example, the Master of Business Administration is one of the most widely recognised Master's coursework programs because it is used internationally as an entry benchmark for many management positions in the workplace. The recognition of other postgraduate qualifications depends highly upon the individual degree.

Some postgraduate degrees have diminished in significance as the learning and workplace environments have evolved. In particular, the value of many Master's degrees has declined significantly for several reasons. One reason is the fact that Master's degrees are sometimes used as qualifiers for entry to Doctoral programs – this has diminished the value of the degrees in their own right. The other factor is the introduction of professional Master's degree programs (outlined in (ii), above). These have effectively accorded professional Bachelor's programs the status of Master's, again leading to a corresponding decline in the value of the Master's in its own right. In Australia, these and other factors led to a steady decline in the number of students enrolling in Master's (research) degrees – a decline of some 40% in the decade commencing in the mid-1990s. The decline in interest for Master's programs has led to a steady increase in enrolments in PhD programs.

The value, to the individual, of a postgraduate degree can vary significantly. Firstly, there are personal benefits which arise from the

enjoyment of learning and, subsequently, from the feeling of achievement that one can have from completing an advanced coursework or research degree. These benefits are real but intangible.

The second set of benefits that an individual can acquire from postgraduate study are career or professional benefits. These benefits are tangible but are highly dependent on an individual's career decisions, and the nature of the postgraduate degrees themselves. Specifically, these depend upon:

- How well recognised the qualification is in the profession where advancement is being sought.
- How well recognised the university provider is in the area in which it provides degrees.
- Whether an individual employer pro-actively supports postgraduate qualifications (for example, by sponsoring staff to undertake further education).

Looking at the last issue first, it is important to note that not all employers support the notion of postgraduate qualifications. Some are genuinely active supporters; some are merely tolerant of the qualifications, and others are negatively predisposed to them. It is a commonly held view that an individual who is overqualified for his/her workplace is likely to have difficulty fitting in; become bored and/or move on – to the detriment of the employer.

A major issue in regard to the acceptance of postgraduate qualifications in the workplace is therefore the overall profile of that workplace. For example, in a government research laboratory or university, it would be commonplace for staff to have Doctoral

qualifications and it would therefore (potentially) be beneficial for individuals to pursue them through further study – the same would obviously not be true in the case of an employee working in a dry-cleaning store. So, it is important to understand that higher qualifications do not necessarily translate into higher positions or income unless those qualifications add value to the organisation that employs the recipient.

Even within a workplace that supports postgraduate qualifications there are issues in regard to the qualifications themselves. An employing organisation may well ask how relevant a particular qualification is to their needs. For example, a company may be predisposed to having its managers hold Master of Business Administration (MBA) degrees rather than Master's degrees in business or economics. The reasons for this are numerous but can be as simple as how familiar an employer is with the skills that are acquired through a particular degree. An employer may know what to expect from an employee with an MBA but not one who holds a Master of Business degree – even though the content of the two programs may be similar or even identical.

The value of a postgraduate qualification to an individual can also be dependent upon the institution which awarded the degree. For example, a Harvard MBA has significant cachet value for the recipient – far more so than one from an obscure university.

Even with cachet value, there is no guarantee that a postgraduate qualification will convert into tangible benefits for an individual. The individual must have attributes that augment the qualification rather than detract from it. For example, an introverted individual is unlikely to gain significant advantage from an MBA but

they may gain advantage from a research degree that enables them to work at a high level of specialisation in limited isolation.

In simple monetary terms, the other tangible factor that impacts upon the net value of a postgraduate degree is the cost of acquiring it. In fact, this cost is composed of several elements:

- University fees.
- Forfeiture of income.
- Career opportunity losses.
- Investment opportunity losses.

The university fees associated with postgraduate study are the most visible costs associated with study because they translate directly into out-of-pocket expenses. Somewhat less obvious is the fact that an individual sometimes also has to forfeit income in order to undertake study and, over several years of study, the net income which has been forfeited is substantial. In order to recover the income that has been forfeited, an individual would need to have an increase in income (after receiving the postgraduate qualification) that was well in excess of what was expected prior to acquiring the qualification.

Even less obvious than the fee costs associated with postgraduate study are the career opportunity losses. An individual who enters the workplace after graduating from an undergraduate degree can typically expect at least one promotion (and perhaps more) during the time that it would take to complete a postgraduate qualification. Again, this means that someone graduating from a postgraduate program would have to commence at a salary well in

excess of that of an equivalent “promoted” person if the qualification is to have a cost benefit.

Another invisible cost associated with postgraduate study, that needs to be considered, is the investment opportunity loss. An individual “A” who terminates study at Bachelor’s level, and enters the workforce, is able to accrue several years of savings during the time another individual “B” undertakes postgraduate study. By the time the “B” has completed his studies, individual “A” already has sufficient savings to invest in, say, real-estate. By the time “B” is ready to make the same investment, the value of the same real-estate may have risen significantly – in other words, to acquire the same asset, “B” would need to expend significantly more money than “A”. And, if “B” has to borrow money to acquire the asset then the problem is compounded significantly. Overall then, “B” has incurred additional expenditure; forfeited income; foregone promotions and has missed investment opportunities.

For these reasons, postgraduate studies are very, very costly to undertake and, if the only motivation for undertaking them is a perceived financial gain, then individuals need to carefully consider the full costs associated with postgraduate study – which are substantial. The real benefits of postgraduate study are therefore seldom strictly financial simply because the costs incurred can rarely be recovered – they are, instead, generally related to personal development; broader career options, and an interest in increasing knowledge and understanding.

Many people who are interested in postgraduate study are unable to shoulder the entire costs, simply because they are so large

when considered in totality. For these reasons, there are several mechanisms available to make such study feasible:

- Employer-subsidised study.
- Part-time study.
- Scholarships.

Of the three mechanisms, clearly the best alternative for postgraduate study is when an employer is prepared to support that study – by subsidising tuition fees and/or providing time release from employment. This is a common practice in enterprises that encompass areas such as finance, management and law – it is less common in areas such as science and engineering. Moreover, employers only tend to fund a limited range of study options – generally those in business and management.

A common technique for reducing the costs associated with postgraduate study is to undertake such study on a part-time basis. In this way, an individual can undertake employment and simultaneously undertake a postgraduate study program. The benefits are that the individual has income to fund living and fee expenses while studying, and does not suffer from career opportunity losses because of the study. The downside of this is that it presents an enormous workload – particularly if the person has family concerns. In addition, it is difficult for an individual to perform well in two arenas simultaneously.

The final option is to acquire a scholarship for postgraduate study. Normally, scholarships are geared towards research degrees (Master's, Master of Philosophy and PhD), but sometimes there are mechanisms for funding postgraduate coursework programs as well.

Research scholarships, in turn, are geared towards recent graduates – predominantly because the objective of postgraduate research programs is to provide an apprenticeship to research. For this reason, the value of such scholarships is limited and aimed at supporting only a single person – this can cause problems if an individual has a family to support.

Accepting that there are significant costs associated with postgraduate study, it is a fact that each year the number of students enrolled in such programs increases. In 1960, in Australia, there were fewer than 100 PhDs awarded across the entire university system – in 2006, the number of Doctoral completions had risen to almost 5500 and the total number of postgraduate completions (Master’s, Doctorate, Higher Doctorate, etc.) had reached almost 90,000. In other words, by 2006, almost half a percent of the national population was being awarded a higher degree each year.

The increasing number of postgraduate qualifications is also a reflection of the increasing complexity of society, with more and more specialist areas evolving as science, technology and human endeavours evolve. So, one intangible benefit of postgraduate qualifications is that they enable an individual to maintain pace with the “qualifications” wave that arises from an increasingly educated society.

Given that there are definite benefits to postgraduate study, the next question is how does one become involved in such study?

In the context of postgraduate coursework programs, the answer is relatively straightforward. An individual can scour university websites; read brochures; attend postgraduate open days,

and so on, in order to select a course that is relevant to their learning requirements. The application process is relatively straightforward and generally based upon a defined set of parameters (e.g., undergraduate results; work experience, etc.).

It is more complex, however, when individuals wish to enrol for postgraduate research programs. For these programs, an individual generally needs to make contact with an academic supervisor in a field of interest and university of interest; define a project for research, and then submit an application for research candidature with the university. For research degrees, the student not only has to satisfy basic entry criteria (based upon undergraduate academic records) but also to satisfy a potential academic supervisor that they have the capacity to undertake such a program of study.

An application form for research candidature then needs to be approved by various university committees which are set up to govern postgraduate research. In addition, if the candidature form requires experimentation that involves humans (including surveys and interviews) or animals, then there is a need for the program of research to be approved by an ethics committee.

The other factor that needs to be considered in the context of a research degree is the sort of research that is to be undertaken – that is, pure or applied; university based or industry collaboration. In some disciplines (particularly applied disciplines such as engineering), there is limited value in undertaking a pure research degree within the confines of a university, because the research is far removed from the application – which, after all, is the objective of the discipline itself. In other areas, such as medical research, there may

be better opportunities for those that have undertaken a postgraduate research degree in a pure research area, in an established university laboratory.

So, the decision to undertake a research degree requires far more consideration than a coursework degree. All the more so because the career opportunities for those with postgraduate research degrees are limited and specialised – some opportunities for employment can only be pursued internationally.

Given an understanding of all the above issues, the next question is when should a person undertake a program of postgraduate study? There is no simple answer to such a question but there are a few basic principles that need to be considered.

Firstly, degrees that are undertaken for personal satisfaction or personal growth can be undertaken whenever an individual feels that they are ready and whenever they are able to fund the costs of such a program.

Secondly, degrees that are taken strictly for professional or career development purposes should really only be considered after an individual has undertaken an investigation of how the costs of such a program will be offset by compensation from an employer (or potential employer). It is naïve for an undergraduate student, with no professional experience, to believe that they understand the requirements of an employer and then pursue a postgraduate program only to find that it is not something that employers require. Generally, some time spent in the professional workforce will provide people with the opportunity to make such a decision.

Thirdly, in the case of research degrees, it needs to be recognised that these are an apprenticeship and, by definition, generally aimed at individuals who wish to pursue a career in research – ergo, they should be undertaken when an individual decides that such a career is what they wish to pursue. Moreover, in the case of research degrees, these are best taken early in one's career, as it takes many years of subsequent work to build up a career in a research field.

Given the growth in postgraduate student numbers each year, for most undergraduates, the question of postgraduate study will not be one of "whether" to undertake such study but "when" such study should be undertaken and "what" sort of study will best suit their requirements.

Chapter 12 Summary:

- (i) *There are five basic types of postgraduate degree – these are the postgraduate coursework program; the professional postgraduate degree; the research degree, the professional doctorate and the higher doctorates.*
- (ii) *The “value” of a degree depends upon the specific nature of the degree and its relevance to the work environment. It also depends upon other issues such as the reputation of the university, and the intrinsic characteristics of the individual who undertakes the degree.*
- (iii) *The costs associated with postgraduate study options are considerable – they include direct costs (the fees) and indirect costs such as loss of income, as well as opportunity losses in terms of career and investment.*
- (iv) *The benefits of postgraduate degrees vary significantly depending upon the individual – they can include personal self-esteem; networking opportunities; career opportunities, and general fulfilment from the learning process.*
- (v) *Individuals need to consider the best time to undertake postgraduate degrees. Research degrees are generally aimed at early career individuals. Other degrees, such as MBAs need to be considered in the light of career opportunities and personal maturity.*

