BENEFITS OF POSTGRADUATE TAUGHT (MASTERS) EDUCATION

Gurmel S Ghataora\textsuperscript{1} and Michael Burrow\textsuperscript{1}

1. University of Birmingham, UK

\textbf{ABSTRACT.} Graduates completing their first degrees are often faced with a dilemma of either entering the labour market or furthering their education to a masters level or a higher level, which may offer them better job prospects and fast track their career development. Findings of this study suggest that taking masters level qualification may pay dividend in both the short and long terms. Over the last few years, many employers have seen the benefit of recruiting staff with a higher level of education in terms of improvements in quality of work and an increase in productivity and more. There are only a limited number of studies on the benefits of taught postgraduate degrees, but they clearly suggest that graduates with such degrees have greater potential of undertaking high skill jobs, have higher salaries and improved professional development compared to one-degree graduates.

\textbf{Key words:} postgraduate education, benefits of taught postgraduate degrees

\textbf{Dr Gurmel S Ghataora} is a senior lecturer in the Department of Civil Engineering, University Birmingham, UK. He is a geotechnical engineer and Admissions Tutor for postgraduate taught programmes in Civil Engineering. His research interests are geotechnics of roads and railways and use of waste and marginals in construction. He has published widely in these areas.

\textbf{Dr Michael Burrow} is a senior lecturer in the Department of Civil Engineering in the University Birmingham, UK. He is a highway geotechnical engineer. His research interest is asset management of road and rail infrastructure. He has published widely in this area.
INTRODUCTION

In ancient times, when there was a lack of formal education much of the education was on the one-to-one, master-apprentice basis. Education was available to chosen few. However, for sustained growth of civilisations and empires, it was essential to widen the availability of education. One of the early proponents of mass education was Emperor Charlemagne who realised that for his empire to survive, he needed educated people. In 789 AD, he passed a proclamation that every cathedral and monastery was to establish a school to provide free education. With time his education reforms resulted in the Carolingian Renaissance during which there was an increase in output in literature, art and philosophy of law amongst other areas. By the start of the second millennia, universities had started to develop across the mainland of Europe and the UK. These universities were attended mainly by students who had progressed through the church or monastic schools, where Latin was the main language of learning. Only the talented few made it to higher levels of education. In the current age, of globalised trade, the economic success of a nation depends on the skills and education of its workforce. As such all levels of education have an important role in the development of an individual and society. The European commission report on quality indicators of lifelong learning (EC, 2002) state that “education and training rank among the highest political priorities”. It describes the lifelong learning approach as an essential policy strategy for the development of citizenship, social cohesion, employment and for individual fulfilment. Masters programmes are included in lifelong learning.

There are many statistics that show that typically a graduate can earn much more than a non-graduate over a lifetime. For example, U S Department of Education (2015) states “an average worker with a bachelor’s degree will earn approximately $1 million more than a worker without a postsecondary education”. Specific earning potential of a graduate will, of course, vary from country to country and depends on many factors. However, there are limited studies on drivers for postgraduate education at the masters and PhD levels (Pires, 2009 and Mellors-Bourne, 2014).

Higher education essentially has three levels of qualifications: graduate (bachelor – requiring three to four years of study), postgraduate taught (masters - requiring one or two years of study) or doctorate leading to a PhD (doctorate - requiring three to four years of study). So, having completed the first degree, which can be rewarding, as noted above, why continue to a higher qualification of a postgraduate taught degree? Some of the key factors are discussed below. It is worth noting that some of the statistics make no distinction between taught and research postgraduate degrees. In the discussion presented below, the distinction is not made between the two where the data for both the qualifications is combined as numbers of graduates with PhD degrees is small compared with those with postgraduates taught qualification.

POSTGRADUATE QUALIFICATION

In the European Union, including the UK, masters level degrees can take from 1 to 2 years to complete. Masters level degrees are further divided into two types – taught and research. Both these types of qualifications are generally offered in specialist areas. The research type of masters is more focussed requiring finding a solution to a specific problem. Postgraduate taught degrees are normally designed to develop expertise in a subdiscipline of a subject. For example, a civil engineer may specialise in groundwater, geotechnical engineering, structures or another topic through a suitable taught master’s degree. A graduate with such qualification
is expected to have a high level of specialist knowledge and expertise about the subject. These degrees often include aspects that reflect issues and challenges facing industry through individual or group projects.

A doctorate, leading to the degree of PhD, requires a very focussed study of a topic to solve a specific problem. The skills learnt during the doctorate include critical thinking and problem solving. These are transferable and a graduate with a PhD should be good at solving problems. However, generally, a good masters level graduate is likely to be more attractive to industry compared to a someone with a PhD, but without a masters, as former is likely to have a greater breadth subject focussed knowledge base, whereas the latter is likely to have very narrow focussed knowledge about the topic of his/her research project.

In the UK there has been an increase in the 26 to 60 age group with a postgraduate qualification from 4% in 1996 to 11% in 2013 (Lindley and Machin, 2013). In a survey of 1817 people, Mellors-Bourne (2014) found that about 40% of the cohort who had graduated in the previous three years were considering postgraduate taught education of some form. By far the most popular postgraduate degrees were in Business related subjects which had more than twice as many students as those studying Education or Engineering Technology. The latter was the most popular in area in the science subject area category(HESA, 2017).

In considering drivers for postgraduate studies it should be borne in mind that some students will move onto postgraduate education directly after completing their first degrees and others will undertake to do postgraduate course after spending some time in the industry. The latter may either take time out or study on a part-time basis. For this group, financial considerations, work and personal circumstances, and mobility in terms of distance to the university will be important considerations in their decision making.

**BENEFICIAL FACTORS OF POSTGRADUATE STUDY**

There are numerous factors that make the postgraduate study attractive. These are described below in no specific order of importance as such prioritising is going to be subjective.

**Employability**

In the fast-changing world, many employers now favour employing people who already have a high level of specific knowledge that enable them to generate revenue quicker compared to a generalist (graduate) who will need to be trained for many years. Thus, often a first degree is not enough to secure a job.

Pires (2009) reported that about 40% of the people surveyed expected that a postgraduate taught qualification would help graduates find a job and a similar percentage expected that such education would help them keep their job. In terms of getting the desired job, those considering the importance of postgraduate taught qualification increased to about 66.7%. Mellors-Bourne (2014) suggest that the number of graduates expecting improved employment may be as high as about 50%. Both these surveys show that a significant number (about 45 to 60%) expect that a postgraduate taught, preferably MSc, qualification will improve progression in their careers.
It is envisaged that in many countries there will be an increase in demand for employees with taught postgraduate degrees. The Bureau of Labor Statistics (2018) in the USA estimates that occupations that will require taught postgraduate degrees at entry will increase from 1.7% in 2016 to 16.7%. In the UK, 27% of employers recruit masters graduate for positions that used to only require a bachelor’s degree (The Guardian, 2017). In the USA, Career Builder (CareerBuilder, 2017) and Dam (2014) report that increased educational requirements for their workforce have seen positive effects on quality of work (most positive effect), productivity, communication, innovation/idea generation, employee retention, revenue and customer retention. Based on this, a masters graduate would appear to be more attractive to an employer compared to a bachelor graduate.

In the UK, for 16 to 64 age group, the employment of postgraduates, across disciplines, is a couple of percentage points higher than graduates at 87% and 85% respectively as shown in Figure 1 (DoE, 2018).

Annual employment rate, across disciplines, for 21 to 30 year age group: 2016-2017 (DoE 2018) shows that there is generally higher employment of graduates with a postgraduate qualification compared to one-degree graduates, see Figure 2.

![Annual employment rate for 16 to 64 age group: 2016-2017 (DoE, 2018)](image)

Figure 1 – Annual employment rate for 16 to 64 age group: 2016-2017 (DoE, 2018)

On occasions those who have qualified with a first degree from universities with a poor track record in the employment of their graduates, or those who have done first degrees in subject areas that do not give them enough knowledge in an area they wish to work in, undertake to do taught postgraduate degrees as an upgrade or conversion degrees. Available data is not fine grained enough to determine numbers of people upgrading their qualifications.

**Type of Employment**

Since master’s degrees tend to be focused in specific areas, it is anticipated that holders of such qualifications will undertake more specialist and skilled work compared to a graduate. This is confirmed by the DoE, 2018, data on employment type as shown in Figure 3. Nearly 78% of those with postgraduate degrees tend to hold high skilled jobs compared to about 66% of graduates and 22% of non-graduates. Data suggest that across the 16 to 64-year-olds there is a high chance of holding a good job if you have a postgraduate degree.
Sustained Employment

Masters level education includes enhancement of skills such as problem solving, critical appraisal and analysis of information, writing skills amongst others. These skills often engender yearning to learn more during employment. Pires (2009) shows that acquiring more knowledge and contribution to intellectual knowledge were the biggest reasons for undertaking postgraduate taught studies with about 95% of the respondents regarding these as being very important. Pires (2014) also found that the second most important reason for further studies was “doing a better job” with 86% of the respondents considering this to be most important. These fit with the employers’ expectations of recruiting people with higher qualification
leading to the retention of employees (CareerBuilder, 2017). DoE (2018) statistics show that about 73% of the postgraduates hold sustained employment five years after completing their studies.

**Progress to higher level doctorate research**

Improving chance of progressing to a doctorate research degree is also likely to be a contributing factor to the approximately 11% increase in further study for postgraduates. Indeed, Mellors-Bourne (2014) study shows that about 20% of those studying postgraduate taught degrees were considering them as stepping stones for progressing to PhD level research. Their findings suggest that an increase in time after completion of the first degree reduces the desire for progressing from postgraduate taught degree to a doctoral research degree. This drop is about 10% for those who graduated for 7 years or longer compared to recent (less than 3 years) graduates. It seems that with time postgraduate taught degrees are viewed more in terms of helping with career change than progressing to a research degree.

**Improved Earnings**

Earnings of taught postgraduates can vary depending on the disciplines. For example, graduates with a taught postgraduate degree in Computer Sciences or engineering are likely to earn more than those with master’s in arts related subjects. Graduates with an MBA are likely to earn the highest salaries. Data on comparisons of salaries on subject basis for masters graduates are presented for various organisations such as Study.com (2018) and DoE (2018). In the UK the Department of Education publishes a comparison of median salaries of Postgraduates, graduates and non-graduates. Data for 21 to 30- year age bracket from 2006 to 2018 shows that those with a postgraduate degree have a median salary that is about 15% than those with one degree only, see Figure 4.

In the USA the difference between the median salaries of bachelors and masters graduates is as high as 35% (Sahulsinger, 2017).

**Professional Development**

In many professions, particularly those relating to engineering, it is essential to obtain a Chartered Engineer or Professional Engineer status for practicing engineers. Thus, graduates will sometimes do a masters taught degree in a suitable subject, as “upgrade”, of their existing graduate qualification in order to qualify in order be eligible to apply for Chartered Engineer status.

**Other Benefits**

The commonest benefits of postgraduate taught studies are discussed above. There are, however, other benefits or reasons for undertaking masters level studies. These include family reasons, peer pressure or others. They generally affect only a few people; perhaps less than about 5% Pires (2009).
CONCLUDING REMARKS

There are many benefits of a postgraduate taught degree. They help to short-cut development of skill sets and knowledge base that are essential for many occupations, which may otherwise take many years of on-the-job training.

From the employer's point of view, a workforce with higher education will benefit with higher quality and increased productivity, retention of employees, amongst other positive effects. In a few occupations, a postgraduate is an essential starting point.

From the graduates’ point of view a postgraduate taught degree may have the following benefits:

- Improvement in employment prospects in the short and the long term, with the greater prospects of undertaking high-skilled work.
- Postgraduate taught degree is considered by some as a beneficial qualification before undertaking doctorate research.
- Improving the potential for earning a higher salary compared to those with a bachelor’s degree.
- Professional development leading to chartered status. Postgraduate degrees holders would thus be at an advantage in terms of career development.

Overall a postgraduate taught qualification is generally a step up in terms of benefits compared to graduate with bachelor’s degree.
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