Educating within the manufacturing and engineering sector

With a contribution to the Gross Domestic Product of £455.6 billion and an estimated 5.7 million jobs in the UK, it is undeniable that the engineering and manufacturing industry forms a solid career choice. It is one of the largest economic sectors in the UK, and students are picking up on this early.

Career choices start with education and interest, and with 96% of teachers recommending engineering jobs, it is unsurprising that the viewpoint of engineering and manufacturing among the younger generation is a positive one. Parents are pleased to hear it too, with a quarter holding careers in engineering in high regard.

Omega Plastics, who offer rapid prototyping services, have taken advantage of this growing positive view with the launch of their education programme in manufacturing and engineering. The company has explored the education options open to prospective future employees within the industry, to see what can be improved.

Continuing to Higher Education

Though the industry is clearly viewed in a positive light, there has been a notable reduction in the number of engineering graduates. The future forecast predicts that we will need 265,000 skilled entrants per year to meet the demand for engineering enterprises until 2024. However, currently, we are experiencing a shortage of 20,000 graduates.

Already, this looks to be on an upward improvement -- engineering and manufacturing courses saw an increase of 5% in applicants for their courses and sub-disciplines, whereas other courses saw only 2.7% growth. Likewise, 71% of those applicants entering a first degree in engineering and technology are from UK origin.

The achievement of graduates in the industry is not going unrecognised either: many are finding jobs soon after graduation. 68% of UK first degree engineering graduates are in full-time work six months after graduation and 84% are in full-time work three years after graduation, with only 2% unemployed.

Starting an Apprenticeship

Within the apprenticeship route, engineering and manufacturing roles have become a popular choice. In fact, they have remained in the fourth position since 2010, with around 74,000 apprentices starting in 2016-2017.

Though this route is seeing a positive start, many apprentices do not make it to the finish line: figures show nearly a third fail to complete their programme of choice. Overall success rate for apprenticeships has taken a decline to around 68.9% when compared to 2010 when it was at 76.4%. So, what do the figures look like for engineering and manufacturing? Is the decline apparent here too?

Achievements have been on an upward trend as of 2014-2015, with Level 3 or above being achieved in 42% of apprenticeships. However, despite no official figures, we can assume that the 2016/17 success rate figures for engineering apprenticeships has continued to rise now that there are over a quarter of a million workplaces offering apprenticeship programmes, a 50% increase over the past

five years. Furthermore, four out of five manufacturing employers are reported to be planning to recruit manufacturing and engineering apprentices in the next year.

The need for skilled prospective candidates will likely only increase for a sector that contributes so heavily to the UK. Improving the perception of the industry is vital to the continuous success of the industry, as well as appropriate training. However, if the figures discussed here are anything to judge by, the engineering and manufacturing sectors don't have much to worry about in this department.

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