

Remodelling employability skills teaching in an engineering curriculum: making way for employers (0113)**Paper**

The acquisition of employability skills has always proved an interesting topic of debate within the academic community; it has routinely been suggested that by possessing an employability-skill set, graduates invariably leave academia with better employment prospects (for example UKCES 2009). Work has been carried out to develop a more nuanced appreciation of the most conducive mechanisms through which this acquisition becomes seamless. For example, previous research carried out by Fallows and Steven in 2000, highlighted the need to embed skills into the curriculum by firstly defining the skills expectations and associated provision within their institution and across a number of disciplines through a mapping exercise. As a consequence of this work, institutional templates were produced in the hope that skills development would become more explicitly recognised.

However, employability skills have never become a central feature of the curriculum with Cranmer (2006) suggesting that there are still difficulties related to effectively teaching these skills. Her research findings concluded that employment-based experience and similar opportunities would result in a better use of resources and have greater impact upon development than modifying curricula to accommodate the teaching of skills. Measures have been taken to readdress this balance and a variety of institutional-wide initiatives were identified as proponents of best practice in terms of teaching skills, but there have always been obstacles in terms of skills development becoming an integral part of the curriculum, for example training, funding and assessment (UKCES 2009). Employability skills are still referred to as 'soft skills' – a term that is altogether damaging when we consider the present context in which we find ourselves. Due to increased competitiveness amongst higher education institutions (HEIs) and a shortage of graduate jobs, academics are concerned about their students' employability prospects and need to pay particular attention to the employability agenda within an academic framework. With an increase in tuition fees, students are keen to ensure that their time spent at HEIs is providing value for money. Recent initiatives such as the higher education achievement report (HEAR) have also become part of

a larger, national debate as institutions are beginning to ask their students to highlight their other, non-academic achievements and be able to showcase their attributes.

Chadha (2005) provides a model for the development of students' employability skills by highlighting the most effective pathway for this development. This model was developed in an engineering setting and drew upon research conducted for a PhD thesis. It was based upon the premise that curriculum intervention is a fundamental element in supporting the development of employability skills. This model was prepared within academia and has been useful in terms of generating discussion around curriculum intervention and employability skills. However, the employer perspective of the model has not been considered to date. Bearing in mind that those working in industry are effectively the end users of our graduates' skills, it is worth asking whether the model fulfils employer expectations of the student learning experience in terms of students' development and articulation of their attributes.

This paper presents the findings from follow-up work that is currently being conducted with six graduate engineers who are being independently interviewed as part of this study. The interviewees are being asked to explore the utility of the model in terms of their own current understanding of graduates' acquisition of employability skills. In other words, they are being asked whether the skills development pathway being presented as part of this model is workable and whether an alternative pathway should be considered. Each of the interviewees that are taking part in the study, have spent between three and seven years in industry working as professional engineers. A qualitative paradigm was selected as the most appropriate methodological framework to explore perceptions of the appropriateness of the model. Rich data is required to illuminate the applicability of the model in terms of whether it was appropriate preparation (Denzin and Lincoln 2000). The data collection methods being used to conduct the research are qualitative (Cohen, Manion and Morrison 2007). Data is being gathered through interviews as these provide the best tools for understanding the interviewees' personal perceptions enabling the generation of an open dialogue (Kvale 1996).

As recently as 2010, the Quality Assurance Agency for Higher Education (QAA) produced a report identifying the need to set up an employer-responsive provision and instigate and maintain a greater involvement from employers within academia with a view to seeking accreditation for employer-orientated components of degree programmes such as work-based

learning. There is certainly a need for academics to appreciate and accommodate the views of employers and therefore this work is timely. It is envisaged that, following on from analysis of the interview data, the original model will change to encapsulate the views of professional engineers in terms of what opportunities HEIs ought to deliver for students to develop their skills and where these opportunities ought to exist within an engineering curriculum. Both the original model and the outcomes from the interviews will be presented as part of this work.

Bibliography

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