GAMBICA

If there is a skills shortage, why are some graduates struggling to find jobs?

There are no short-term fixes for the UK's engineering skills shortage. But why do some engineering graduates find it hard to get a job? Victoria Montag, Gambica's sector head* for industrial automation, suggests that industry needs to work more closely with universities.

ore than once, I have used these column-inches to ponder the skills shortage in automation and, more broadly, in engineering in the UK. Or rather, I have pondered over what can be done to mitigate the problem – three key lines of attack are: to introduce more school children to Stem, at a younger age and to promote more diversity in the sector; to encourage more students to take engineering degrees/apprenticeships; and to re-skill people in the existing workforce.

I think that we can all acknowledge that these are good things, but they are not silver bullets that will solve the problem today. For one thing, these things take time – re-skilling an adult takes years, while it can take up to two decades to turn a four-year-old into a working engineer. Furthermore, the problem is largely caused by the loss of skills at the more senior end, with the IET reporting in 2015 that half the workforce will have retired by 2020. So, we can't fix the problem now, but at least training more engineers means the problem won't be exacerbated, right?

About 18 months ago I had an encounter that made me think again. I was at an Industry 4.0 event and got chatting to an MEng student who was one of a number demonstrating their final projects. The student raised the subject of engineering jobs and the problem he was having finding one. This shocked me. I had been hearing from more than one quarter that we needed more engineers and we needed more engineering graduates. Now, I am a scientist, I know that a sample size of one does not make a trend, and I know that not all engineering graduates are equal. However, I was talking to a confident, wellspoken, clearly intelligent, MEng student from a good university. I was perplexed.

But it did get me thinking. The IET (again) reported that 40% of its members had

government on policy. It also acts as a platform to promote our research and to form consortia for funding proposals with real industry input."

What the universities' associate membership means to Gambica is that a noncommercial voice lends weight to, but perhaps also "softens", the message Gambica

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trouble recruiting engineering graduates because of perceived lack of skills – a question of quality as well as quantity. Is there really a disconnect between what is being taught and what industry needs? Or is the disconnect supposed?

There are many ways in which industry and academia successfully collaborate, so why should the skills shortage be any different? Anyone who has read this column before will know that I am big on dialogue and hearing from as many perspectives as possible. So Gambica decided that there was an argument to make closer ties with relevant universities to create a platform for our members across all the sectors to engage on topics such as skills.

In 2017, the University of Manchester became our first "University Associate Member". In 2018, we added two more – Manchester Metropolitan and Surrey Universities.

Already, it is clear that the benefit is mutual. From the university side, Dr Carl Diver, reader in industrial digitalisation at Manchester Metropolitan University, told me: "Being part of Gambica allows us to work very closely with industry, we are invited to take part in workshops where real issues are discussed, and it allows us to collaborate with industry to contribute submissions to is making on the behalf on its traditional membership, to end-users and to government. When the Education Select Committee put out a call for evidence on the skills needed for the Fourth Industrial Revolution, Gambica and Manchester University co-hosted a workshop for members, academia and end-users to formulate a collective response. It is precisely this multi-sided dialogue that I had hoped for.

Gambica hopes to bring more universities into membership so we can sort out if there is really a gap between what is

being taught and what is needed and so there can be more voices in the discussion around a practical solution to the current and future skills shortage. And if this is a subject that you would like to lend your voice too, please get in touch.



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