Welcome to a Universities UK podcast on the future of skills. My name is Greg Wade. I'm a policy manager here at Universities UK and I lead on the area of skills. We've just released a report on the future of high-level skills in the context of the fourth industrial revolution. And joining me to talk about some of the things in that report is Joe Marshall, Chief Operating Officer of the National Centre for Universities and Business. Welcome, Joe.

Joe Marshall

Good morning, Greg.

Greg Wade

Good morning. Before we start on some of the questions, could you say a little bit more about your role, about the National Centre, and the relevant areas of work you do in collaborating with universities and employers?

Joe Marshall

Yes. So National Centre for Universities and Business is a membership network of 75 universities and 50 corporate members. We work very closely with those members to look at opportunities for collaborations, partnerships that foster greater links between the two parties. One of the areas of real focus for many of our employer members is the skills pipeline that they get from universities and the graduates that they bring into their workplace. The world of the work is invariably changing, and the sort of fourth industrial revolution is throwing up a whole series of challenges to businesses. And certainly what the collaboration that the National Centre is interested in are those ways in which universities and businesses respond to that challenge.

Greg Wade

Excellent. You mentioned the fourth industrial revolution. And certainly, the nature of the UK economy is changing.
What does this mean for the future of business?

Joe Marshall 01:53
I think it opens up a series of both challenges and
opportunities. Clearly, a number of our employers are
changing their business models. They are responding to
artificial intelligence. They’re responding to a transition
away from or becoming much more digitally-oriented
businesses even though traditionally they’ve been more
kind of sort of traditional forms of manufacturing or
ing engineering. And so the need to bring a different type of
skill set into their business, be that big-data scientists, be
that people who can work on artificial intelligence and
algorithms, people who can embed and digitise processes
and procedures. So that part of the world of work is-- or
the ways in which work is operating is changing.

Joe Marshall 02:47
But also I think we’re seeing that the advent of digital
technologies is disrupting the ways of work. So you have
the kind of sharing economy or gig economy. The ways in
which people will move and change jobs and be much
more mobile as a workforce and can expect to work in not
necessarily traditional 9:00 to 5:00 jobs, work for one or
two employers. Now potentially they work for themselves.
They can work as consultants. They can set up their own
businesses. They can work in kind of flexible working. So I
think businesses are responding to those changes, but it
means that-- actually, I think there’s a really exciting
opportunity for universities to equip with skills and a
mindset for the future ways of work.

Greg Wade 03:40
Yes. And, obviously, there are quite a few challenges in
relation to skills. And when we talk about skills, we also
mean attributes, and mindsets, and experience. Are there
some more specific implications from this for the skills
needs of businesses?

Joe Marshall 04:01
I think a number of our businesses are having to change
their business models. They’re having to change the ways
in which they deliver their goods, their services, their
products to market, the ways in which-- without getting into a whole set of questions around Brexit and movement of goods and people, but clearly, we have a whole set of new models of production and delivery, which are disrupting the ways that businesses operate. And part of that challenge I think has been where-- the equipping is actually how do you equip your workforce to be receptive, responsive to that change, and agile in that sort of language about how as an employee, you are able to not be necessarily stuck in a particular way, but also how do we skill, train, redeploy people? And I think that's where certainly a number of our businesses are thinking through their modes of delivery and the skill set that they need for that.

Greg Wade 05:23 Excellent. Thank you. So what role can universities play in meeting these new and changing needs?

Joe Marshall 05:31 So I think there's a lot of work already going on. I think one of the roles of the National Centre for Universities and Business is to showcase and highlight actually some of the fantastic examples of where universities and businesses are working together already. But that is part of a broader narrative, which is that universities need to make sure that their courses, that the graduates they're producing - both undergraduates, and postgraduates, and the advent, as well as degree apprenticeships - are genuinely attuned to the needs of businesses.

Joe Marshall 06:03 So how do you make sure that your education provision is meeting the needs of business? And that's effectively achieved by making sure that you've got lots of bridges, lots of connections to employers, and making sure that they are feeding into, providing feedback on, providing opportunities for your students to engage in the world of work. And for those students to come back into courses and bring new ideas back into curriculum development, opportunities for work experience. But it's really important
that that dialogue, that communication between universities and businesses is as full, frank, open as possible.

Greg Wade 06:53 One of the things that is an important part of the skill set that employers look for is transferable skills alongside subject knowledge. How important do you think transferable skills are to employers?

Joe Marshall 07:09 I think incredibly important. It's often a very difficult area to define in a sort of standard way. But a number of our employers are looking for not only technical expertise, engineering, science, mathematics, but also the ability to work in the workplace. Do you have the sort of fundamentals of being able to operate with colleagues, the ability to collaborate? But also those skills, and in the context of a very changing workforce, have the ability to almost have a lifelong learning approach, to recognise that actually the skills that you leave university with at 21, 22, 23 will invariably not see you through until you are 62, 63, or now 72, 73. But that mindset of being able to continuously learn, continuously develop, continuously grow, but be responsive and receptive to that, I think, is a really important part of the sort of changing dynamic of workforce.

Joe Marshall 08:22 And I think the other part that we're seeing is that a number of our employers are more interested in your problem-solving abilities, your ability to collaborate, and facilitate, and make things happen, which are probably sometimes as important as your technical understanding of a subject area. And so, certainly, our employers are very attuned to now increasingly different ways in which they select, recruit graduates into their programs. And that ability to demonstrate that you have those skills and attributes is an important part of that recruitment process. So, therefore, there's a really important role that universities have in providing opportunities to complement
their technical or academic learning with those skills that allow those graduates to shine at interview. Yeah.

Greg Wade
09:20
You talked about skills that enable students to succeed in the workplace. And one thing that certainly boosts those skills and then helps students learn is work experience. Do you think work experience is valued by employers, and should all employers offer it?

Joe Marshall
09:44
Work experience is an incredibly important part, we think, of that preparation for the world of work. It allows undergraduates or postgraduates the opportunity to find out how they can apply their academic skills and learning into the world of work. We also think the employers can gain a huge amount. Not only do they get to see students before they come on to the job market - so they get to see if they're a good fit for their organisation, sometimes described as the sort of long interview - but also, it brings in new ideas. It brings in fresh approaches that can often allow a business the capacity to try new things, to develop new ideas in a relatively low-risk or certainly often low-cost approach.

Joe Marshall
10:49
Do I think all employers should provide it? I certainly think all employers should be receptive to it. I think there has been a traditional approach to work experience which has been the sort of one-year [route?], which has been the sort of traditional model or approach to work experience. I think in a way that we've sort of talked already about the changing world of work, and to an extent the changing world in which universities operate, I think we need different modes and different approaches to work experience. That can be everything from taster days, a few weeks, weekend working. And then I think you open up that this becomes something that shouldn't just be the preserve of big corporate organisations that can afford a year around or nine months in industry. Actually, if you develop kind of much more nuanced approaches, then in
the third sector, charities, public-sector bodies get the opportunities to benefit from work experience, and you open up much more opportunities in that sense.

Greg Wade

Excellent. We’ve talked about some of the benefits of university-employer collaboration, and it’s of the part of your overall objectives and strategy and reason for being. What are the other benefits of university-employer collaboration?

Joe Marshall

The broader benefits that we see are the building of strategic partnerships between often two organisations or multiple organisations that have many common agendas but can sometimes become quite transactional. And so, what we try to encourage many of our universities to do, and many of our businesses to do, is to think about strategic partnerships that have multiple layers and often will transcend across many years and become an embedded part of a long-standing relationship that sees work experience students going and getting all sorts of types of different work experiences, but also people movements at sort of manager level or higher where actually you’ve got people working on going on to come on into universities or going in to come into businesses, but also working on kind of big multi-year collaborative research projects, but also working through other ways in which course development is taking place and co-creating new courses or new modes of delivery.

Joe Marshall

So I think we see lots of advantages and benefits that kind of transcend rather than seeing this as simply transactional, universities are there to provide us with--actually businesses can provide lots of expertise and lots of insight into universities. But equally, universities are businesses in themselves, so they can often offer insights and perspectives back the other way. So I think it should be about mutual benefits that can benefit both sides.

Greg Wade

Then my last question is we have an industrial strategy,
and we have local industrial strategies planned. Given what we've discussed, what recommendations would you have for government in relation to these?

Joe Marshall

I think the industrial strategy at its heart and its manifestations at kind of local levels really sets out a really strong agenda that businesses have an active role to play, and universities have an active role to play. They are the two main actors that pervade all of the different elements of the industrial strategy. But sometimes there are challenges and tension points that-- universities and businesses don't talk the same language. They don't work to the same timescales. And so what I think we would always encourage the government to look at is are there ways and means by which you can encourage more, make it easier for collaboration and partnerships to form? What are the incentives, what are the barriers that the government can actually encourage, support, or remove?

Joe Marshall

I also think that what the industrial strategy does, certainly, if you think about in the context of the 2.4% R&D target against GDP is a call to action to think about where the UK economy is going in the future, and does it want to be a genuinely advanced knowledge economy? And if it does want to be a genuinely advanced knowledge economy, then at the heart of that has to be the collaboration, the partnerships between universities and businesses. That, for me, is a call to action. And therefore all of the initiatives, all the interventions, all of support mechanisms need to be certainly incentivising, encouraging that. But wherever possible, if there are friction points in the system that remain, and if universities and businesses aren't feeling that they're able to collaborate and partner together effectively, how do we encourage universities? How does the government help to unlock or remove some of those friction points?

Joe Marshall

And certainly one of the things that we're advocating at the
moment is how do you start to encourage more of the better behaviour in the system, but also genuinely unpick and resolve some of the sort of traditional issues? Not necessarily once and for all, but actually what you want to do is the 2.4% is a huge target. Therefore, anything that's slowing us down should be in our grasp to try and resolve.

Greg Wade
Well, in a sense, the same principles that you've identified that make for good individual university-business partnerships in terms of building a relationship, and having an almost open relationship, and working together for sort of common objectives, is something the government should encourage, but also should be replicated at the national level with national organisations and policy-making bodies as well, I guess.

Joe Marshall
Yeah. The advent of the UK research and innovation is a real opportunity to align strategically the work of a number of organisations, that I think actually coming together will genuinely be greater than some of the parts. And actually one delivery arm now for the government to say we want this to happen, how do those constituent parts play to that one agenda rather than a series of individual agendas? But I think the-- and where you then locate that in a national and the local industrial strategies is though there have been a number of industrial strategies over the years, you do have a sense of a clear set of targets and ambitions for the UK economy. And what you're hoping you then have is that that can have both resonance and drive on a UK PLC level, but also you don't then have 38 disparate approaches, all of those 38 local industrial strategies, and then what happens in Northern Ireland, Wales, and Scotland are all pointing towards this kind of overarching UK industrial strategy.

Greg Wade
Yeah. Thank you, Joe. It's been fascinating talking to you. I'm sure we could carry on talking. We'll have to invite you back for another podcast interview. So thank you very
much.

Joe Marshall  Pleasure.
19:02