



Northern Ireland
Assembly

Committee for Employment and Learning

OFFICIAL REPORT (Hansard)

Briefing from Professor Patrick Johnston,
Vice Chancellor of Queen's University
Belfast

2 July 2014

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:

Mr Thomas Buchanan (Deputy Chairperson)
Mr Sammy Douglas
Mr David Hilditch
Mr Fra McCann
Ms Bronwyn McGahan
Mr Pat Ramsey
Mr Alastair Ross
Ms Claire Sugden

Witnesses:

Professor Patrick Johnston Queen's University Belfast

The Deputy Chairperson: I welcome Professor Patrick Johnston, president and vice chancellor of Queen's University. We are glad to have you here. We will give you up to 10 minutes to do your presentation and give us your vision for the university. We will then open it up to questions.

Professor Patrick Johnston (Queen's University Belfast): Thank you very much, Chair. My thanks to the Committee for giving me the opportunity to outline the vision that I have for the institution and what we have begun to debate and work on over the last three months in particular.

The vision is to create a world-class international university here in Belfast that supports outstanding students, no matter what their background, and staff, working in world-class facilities, conducting leading-edge education and research but, most importantly, very much focused on the needs of society here and globally.

What does that actually mean? What is a global international university? First of all, it is a university that is led by world-class leaders and academics. It is one that has a culture imbued with leadership at all levels, focused on meritocracy, transparency, conviction and ambition. In other words, being there should really impact not just in Northern Ireland but across the world. It is also, very importantly, about supporting staff and students in developing the next generation of leaders for our society and more globally. It is particularly about supporting students from disadvantaged backgrounds. It is about driving and supporting world-class research to advance knowledge and build understanding about people, communities and societies. That is what modern and future universities need to be about. Finally, you cannot do that unless you drive the exchange of knowledge that maximises the intellectual, cultural, social and economic impact on society, beginning with local society.

How do we go about achieving that? Queen's is already an internationally very well known university, one of the Russell Group of universities, and has very high standards. However, we start, as in any

organisation, with the culture. It is not about buildings but about people; it is about staff and students. That culture has to be strong and unified, dynamic and innovative, and it has to permeate all sections of the institution and beyond. It has to be leadership that empowers innovative academic and broader leadership, alongside accountable academic performance, and one that rewards academic and administrative excellence and achievement. When I use the word "reward", I am not talking about financial reward; I am talking about recognition of real excellence. Fundamentally, it is about a culture of leadership, ambition and conviction, and does not accept "good enough" — there is no "good enough". It is that dynamic of innovation that actually searches for new knowledge and educates across new knowledge.

How do we do that? As with all universities, we must now strategically and selectively invest in very high-quality areas. In a modern university, you cannot fund everything, particularly at the top end. One of the things that we are now debating is how we might develop interdisciplinary research institutes, which would mean moving people away from discipline-based research to the interfaces between disciplines, where real innovation takes place. Those areas have to be financially viable, and they have to be areas in which we have a comparative advantage based on the leaders and skill sets that we have. Also, as a development, it must partner with government, particularly yourselves, but also with international Governments, as well as with industry, NGOs and other top global institutions. We can come back to that later in questions.

One area we are going to drive a real focus on is the graduate level; that is, post-undergraduate. Queen's is, as I will come to in a minute, a very good undergraduate university. In my view, it is not as good at a postdoctoral level. The postdoctoral and graduate level — PhD level — is what defines and distinguishes universities across the world. I will talk later about some of the ideas we have for how we go about that. Of course, these entities have to be inclusive in educating our undergraduates.

One thing that Queen's has done very well, over recent times, is drive up the quality of undergraduate student experience. It is not just me who says so; it is the students who say so. According to student feedback, we are now number 12 in the UK. We do not have this year's results yet, but we have had an over 81% return in the National Student Survey (NSS), our highest ever.

In going forward, however, we must focus on interdisciplinary, cross-faculty school courses. Again, it is about moving away from just being discipline-based to interfaces across disciplines in undergraduate education. We also have to focus on efficiency, effectiveness and, most importantly, employability. Students need to know that what they do is going to lead to greater chances of employment. That is something that we already do well; 93% of our students are in employment within six months or doing a further degree.

We also have to focus on e-learning and using technology — blended learning opportunities. That is shaping how education is going forward and is one of the big challenges to educational institutions across the world. On partnerships with industry within the curriculum, I was delighted to be able to announce, in May, a partnership with PricewaterhouseCoopers (PwC), which, alongside our management courses, is bringing forward a curriculum that will allow our students to work with PwC for a year over a four-year course. It is about developing global alliances that enhance the diversity of our student population. A major goal will be to double, at least, the international population coming to Queen's.

One of the most important aspects of any university is for it to be relevant and at the heart of its local society before it becomes relevant anywhere else. Therefore, its responsibilities to its community and society come first and foremost. In doing that, Queen's must have a strong relationship with local political parties, local government and the city council. I very much welcome this meeting as part of the evidence of a strong relationship.

The economic impact of Queen's is huge. For every £1 of public funding that we receive, we return £7 to the local economy. I want to see that doubled. I also want to see us maximise the intellectual, cultural, social and economic impact. So, it is not just about the economic impact; we have to look at the interplay between the cultural, social and intellectual climate as well, because they will all add to the broader impact on society.

Widening participation is clearly very important. Currently, we are at the top of the Russell Group, with 31% of students coming to Queen's belonging to the lower socio-economic groups. However, in my view, that is not good enough. We need to be more visible as an institution in deprived social communities. That is something that I will not talk about today, but am happy to take questions on. It

is also about developing special initiatives and partnerships with further education colleges. I have already begun discussions with one such college in that regard.

I mentioned earlier the postgraduate culture. It is something that we really need to work on. It is a very important area and one that, in my view, is deficient. We plan to develop a graduate school with dedicated postgraduate taught and research courses, which will go right across the institution. It will focus on promoting cooperation across academic disciplines and enhance career development opportunities with industry and other partners. It will also be a focus for internationalisation.

Over the past three and a half months, we have been debating this vision in detail. What I have not given you today — partly because of time — is some of the meat that is actually around this, and that will evolve as we go forward. Within the university, everyone agrees that the strategy is exactly what Queen's needs to be doing. We set up three project groups to take forward the initial three elements of this around leadership, the culture around university structures and the development of a postgraduate culture that is fit for purpose. The academics and individuals leading those are highlighted on the slide.

I have been communicating the vision widely, and I have met nearly 2,000 staff in the institution. I have also had widespread meetings with political leaders; I have met all the political parties at this juncture. I have also met community leaders. In May, we launched a vision website within the university, allowing staff to be able to comment. Over 60 staff have already done so. We have also developed a vice chancellor's blog that picks up various themes, and a third of those was just released earlier this week. During the next three or four months, I will continue with school and directorate visits, political meetings and feedback through the vision website. The project groups will also continue to meet.

I will summarise where we are. On leadership values and principles, we absolutely agree that we must have a committed leadership that is focused on meritocracy and transparency, that aligns with the vision, and that employs and ensures the implementation of rigorous academic standards and allows world-class students, no matter what their background, to have access to the best world-class education that they can have, driven by world-class staff. That will be underpinned by dynamic and innovative culture and curriculum, which ensures that it continues to change and further develop as new knowledge comes to the fore. That process is being worked on over the next three months.

Similarly around structures, we have agreed that they should be interdisciplinary, that they should align with the vision and that they should empower academic leadership and accountability. We have agreed that we must create executive faculty structures, which we currently do not have, and also create distinctive world-class research institutes.

Finally, on the postgraduate end, we have agreed that this area needs real focus. We need to significantly increase our postgraduate research base and taught programmes and increase and enhance the postdoctoral provision funded through increasing research income. Within the postgraduate vision, there will be a significant focus on internationalisation and partnership with industry, both here in Northern Ireland and globally. We have already agreed that a graduate school is the right way to take that forward.

What are the keys to the success of this vision? First of all, a clear vision and strong and committed leadership right across the whole institution; world-class students and staff, no matter what their background; and a dynamic and innovative academic culture that permeates every aspect of what we do. It is critical that we ensure government support and buy-in, because the vision will not happen without that. It is also critical that we ensure the support and partnership of wider stakeholders, whether that is our community groups, our schools or our businesses. It is absolutely, emphatically important to ensure that what we prioritise and do has a local and a global impact. Thank you very much for listening to me.

The Deputy Chairperson: Thank you, Professor. I commend you on your vision for Queen's University and keeping it up there as a world-class university. You mentioned that you were looking to develop a postgraduate school. When do you see that being developed?

Professor Johnston: In the September to October cycle of work, we will take an integrated plan to senate for approval. If senate approves it, the initial components of the plan will begin, and there will be a lot of further work to be done. At that point, we will start the formation of a graduate school. It will not become fully operational until academic year 2015-16, because we will have to appoint an academic dean to lead the graduate school. We will be connecting the graduate school dendritically

to all of the faculties and all of the schools and operationalising the administration around it. It will take us several months to get all of that completed, so it will not become fully operational until academic year 2015-16.

The Deputy Chairperson: As you have looked at your vision to take this forward, obviously, no matter what you are going to do, there will always be challenges, difficulties and pitfalls. Have you looked to see what may be the challenges and difficulties that you may face as you seek to take your vision forward?

Professor Johnston: There are many challenges, Chair. The first is to bring the broad constituency of the academic and other leadership within the university with you. That is why, as I said, I have already spoken to 1,800 staff. I have made the vision very transparent. I have extended the period for consultation until the end of September — initially, it was going to be the end of June — to allow for greater interaction and feedback from all quarters. That is the first challenge: to ensure significant buy-in. In doing that, we will find that there are challenges but also opportunities, because people will come up with suggestions that we had not thought about.

The other challenge is beginning to understand what I am talking about. Words have to be translated. "Global standards" and "a top-class institution" mean that the behaviours and culture around those have to aspire to that level of conviction and ambition. There is no reason why we should not, right across the institution, because it has benefits for all of society.

The third thing is the partnership with major stakeholders — importantly, yourselves. In the absence of government funding for this, this will not happen. I am not saying that government would fund all of this, but our people are our only resource in Northern Ireland. Unless we invest in those, we will not see the type of return in society that we all want. That is why I made the comment about the leverage function around what we do. For every £1 of government money that we spend, we currently return £7, but I would like to see that double, and we do that by driving the quality agenda and the networking that comes with that.

The Deputy Chairperson: Finally, before I open it up, do you see this as opening the demand for more students to be coming to Queen's?

Professor Johnston: I think the answer to that is yes. It will certainly increase the competition, because what attracts people from outside to go to global universities is that they have greater options in terms of career development, so it accelerates that. People want to go to institutions that allow them to develop in a world-class way, so that level of competition will absolutely go up and numbers, I think, will follow that.

If I was to extend and evolve that, the biggest increase in terms of the type of students that I want to see, proportionately, is at the postgraduate level, because we are underperforming there. Currently, 23% of students at Queen's are postgraduates. I would like to see that closer to 35% to 40%, because that is not only good for the postgrads; it is very good for the undergraduate programmes.

Mr P Ramsey: Good morning, Patrick.

Professor Johnston: Morning, Pat.

Mr P Ramsey: I wish you every success, as one Derry man to another. I think that people in the city are certainly delighted and proud that someone has got to vice chancellor of Queen's. There is absolutely no doubt that Queen's is an economic driver, and its dividend to Belfast in particular in terms of inward investment is immense. I suppose that is why those in the city have been articulating for so long the rationale for increased numbers at Magee, but I am not going to ask you a question on that.

I am keen to see, as someone who chairs the all-party group on disability, how Queen's is going to include greater access or widening participation for the student body, and how those with disabilities can access the student support programmes, which is the incentive for them to go to third-level at Queen's.

Professor Johnston: This is a really important issue. We look very good in terms of our overall widening participation numbers as a Russell Group university, but I think we could do even better.

One thing that we could begin to do better is to work with schools in an integrated way to look for opportunities. In certain parts of our society, Queen's might as well be in a different country or on a different planet. So we need to create an aspiration early on, at primary-school level, so that people aspire to going to university, whether it is Queen's or anywhere else. As you probably know, we have formed senior and junior academies to start to take that process forward, and that is already beginning to have some success.

We need to encourage our staff to become governors of schools and people who are from certain areas that are maybe economically disadvantaged to give back to those communities, because they have been privileged. It is no accident that one of the first things that I did as vice chancellor was to go to my old primary school. That was a very deliberate thing on my part, although I probably should have done it a long time ago, in some ways. We have a responsibility, because those of us who have been fortunate enough to benefit from a third-level education and all that it brings are privileged. We have to develop a culture within the university that recognises that privilege and wishes to give back to society.

We are actively working on that. I have not talked about that programme today; I would be happy to come back at a later point and talk about some of those ideas. However, they involve working more closely with schools and building on the academies that I have talked about, and building and expanding the homework clubs that recently won Business in the Community awards. In those, students work with primary schools and, this year, close to 200 students have signed up. I want those to be expanded very significantly. I also think that we have to work very closely with Belfast City Council in a way that, together, really looks at how we can work in partnership with it and, indeed, with the University of Ulster around some of those issues. Those are just some of the ideas that I have.

Mr P Ramsey: This is my final question. The relevance of STEM-related subjects in modern society is key. The Committee has been hosting and participating in a number of events that promote and advocate STEM. How do you see that diversifying? I take the point that there is a huge amount of research going on in health and well-being, for example, and that we are five stars on that. How do you see the STEM subjects being made more available and accessible?

Professor Johnston: STEM is our top priority, which will not surprise you. We are very grateful for the enhanced funding and, indeed, we have increased the number of slots with some of our own funding to enhance the availability of STEM subjects. We have seen very significant increases in our overall numbers in subjects like physics and computer science over the last three years in particular, and that is going to continue. Importantly, we have also begun to connect that to employability. Some of those programmes are now connected to Liberty IT, PwC and Allstate, so we are broadening the dimension of the experience that our students get as part of that education in STEM. As you know, employers are crying out for even more numbers.

There is always a tension with that, because we also have to be careful that we do not over-focus on this and imbalance the humanities to a degree that is harmful. The humanities and social sciences are really important for our society, because they contextualise the advances that come from technology in society. That is how we debate governance and ethics and how we shape society, in some ways. There is a tension there, and I acknowledge that, but, as an institution, we are fully committed to the STEM agenda. We recognise its importance to the economy and to the global economy. We want to be players in that.

Mr Hilditch: You are very welcome, Patrick. I wish you well with the task ahead.

It is really around that topic that Pat touched on and you spoke about — trying to get into some of the socially deprived communities in Northern Ireland. I have worked with others in the provision of further and higher education who have attempted to do that, and it has been very successful, I have to say. It has probably even reached into communities where, sometimes, it was politically very difficult to do that and has breached those gaps. You mentioned special initiatives, and it is very early on. Can you tell anything further on that?

Professor Johnston: First of all, the homework clubs are a concrete example of something that is up and running, and I would like to see those expanded very significantly. Our students work with primary schools, both with very young children and with primary 6 and primary 7 pupils, to help them with homework. We have begun to discuss and actively think about working with parents and children together and how we might do that. I met May Blood to talk about specific issues related to the Shankill, and we will meet again in July. Perhaps there are ways to get students or primary-school

children to come to Queen's for sports activities or to the Queen's Film Theatre (QFT) for an afternoon. They could use the facilities in a way that gets rid of the myth that you can never come to a place like Queen's. Something like that could join up with the aspirations and hopes that that can encourage in young children. If we can, we should do that sort of thing throughout society.

I want more of our staff to be governors in our primary schools, particularly in disadvantaged areas and if they come from those areas. That is why I emphasised ways of giving back. We should also work more closely with our further education colleges. I am absolutely clear: it is a global world-class education. There is a tension, however, in maintaining standards, but that does not mean that we have to close the door on people who are disadvantaged and have not had the opportunities that others have had or who are late bloomers. For example, virtually the final thing I did as dean of medicine was, for the first time, to ignore GCSEs — apart from maths and English, which they have to pass — for people from socio-economic (SE) groups 5 to 7. We focus on AS levels, so if people get an A or B at AS level, we will interview them if they come from those areas. We should think about more creative programmes like that. Equally, we should work closely with further education colleges, which will increase the opportunities for widening participation. There is a range of things.

Mr Hilditch: I was going to follow that up by mentioning the excellent sports facilities at Queen's. Hopefully, those can come into play as well.

Professor Johnston: Absolutely, and it is happening already. Last week, we handed out certificates for the kids on the initial homework clubs programme. One activity was to visit the sports facilities.

Mr Douglas: Thanks for your presentation, Patrick. I wish you all the best in your new career.

Professor Johnston: Thank you, Sammy.

Mr Douglas: Last week, I attended the commencement ceremony at St Mary's University College. I met a lot of the students and was very impressed. It was great because, for a number of students, they were the first person in their family to go through St Mary's, and they were looking forward to their graduation this week. I am also involved with groups in Sandy Row. They say that they have had a very good relationship with you and Professor Tony Gallagher.

A report on the review of initial teacher training was published this week. Can you comment on the report? Have you had time to read it?

Professor Johnston: I have not had time to read the report. As you know, it came out only yesterday, and I very much welcome it. It points out the challenges in teacher education. The university's view is that we have to create a world-class educational programme for teachers. A number of options have been presented. At Queen's, we will need time to digest those and think about them, and we will obviously be back in September. We come from the view that we should develop the highest quality educational system for training our teachers and for lifelong learning. That should be enhanced with research and other things into lifelong learning so that the most competent and competitive people apply and get employment, and the report points to those. We will sign up to all that, and I look forward to the debate on the issue in September.

Mr Douglas: Pat and David mentioned the potential of working with students from disadvantaged areas. We had a big Somme parade in east Belfast last night, and it struck me that huge numbers of young people are involved in bands. I thought that, if you wanted to contact those young people, that would be an excellent opportunity. Some of those young people have low aspirations and no hope of getting a job. I think that you are coming back to the Committee at some stage, and I am keen for you to tell us about the work that you are doing and that you propose to do.

Professor Johnston: Given that the university is just starting to engage in that work, I cannot go into the details, but I think that we could do more to make it more visible. I have asked a colleague to take forward the development of a social charter that would run in parallel with the issues that I spoke about. If the culture is to give back, everyone benefits, and it will drive its own excellence. If this is underpinned by activities that relate it to a social charter for the university, that will be of great benefit to the university, the staff, the students and society.

Mr F McCann: Patrick, thank you very much for the presentation. It was certainly interesting. Today, I am fifth in line to ask a question, so a lot of my questions have already been asked. You said that up to 92% of students get work. Is that local work? How many students head abroad?

Professor Johnston: I do not know the answer to that. I cannot give you the specific number, but I will follow that up and find out. About 73% of students go into direct employment, and the remainder go into further education on master's programmes or PhDs. It is important for us to drive up the employability agenda, which is challenging. For me, it is about how we bring employers closer to some of our programmes.

Whether the subject is history, English or whatever, our students can do things in plenty of areas. A number of students are now in the New York Stock Exchange, for example, and I want that number to increase significantly. The students come from a variety of disciplines. The Washington Ireland Program has been very successful for work placements. This year, we started joint degrees with PwC, and I want those to be extended to other companies. We have relationships with local companies such as Citigroup, Almac and Randox, and I also want to drive those partnerships forward.

Mr F McCann: You are a global institution, so where is your target audience? Is it America, or is it a number of countries?

Professor Johnston: It is a number of countries, and America is certainly one of them. In November, we will be announcing the development of a Queen's college in Xinjiang in partnership with Xinjiang Medical University to deliver pharmaceutical technology and pharmacy degrees. We are working on a set of proposals for a Queen's academy in India, which will link to four north-eastern universities and an institute of technology in Delhi. Later this year, once that has been finalised and agreed, we will make it public.

We are working on some concrete initiatives. We have a programme in Brazil, where we have been recruiting people at PhD, master's and, indeed, undergraduate level over the past 18 months. I want to expand those initiatives.

In the last two months, I met the presidents of three American universities, including Notre Dame and Michigan State. I am looking at partnerships with US institutions and the potential for our students to move there, and vice versa, and, in some cases, creating combined degree programmes.

There are a number of initiatives on the international front, some of which are about putting our stamp internationally and being physically present while also being very much connected to Queen's in Belfast but in partnership with other institutions.

Other conversations are about the island. I have already met the presidents of Trinity College and University College Cork to look at how we can do things together rather than reading something on paper that does not really produce results. Perhaps we can expand the Science Foundation Ireland (SFI)/DEL programme. Can we have an academy with UCD and Trinity? How well is that performing? Can we build on that to create broader relationships across the university infrastructure on the island?

Mr F McCann: My final question is about working with socially deprived communities. I happen to believe that education is the greatest thing in the world, and it offers the greatest opportunities to people. If we are ever to defeat poverty and deprivation, a pathway through education is probably the best way to do it. I represent West Belfast, which probably has the highest number of socially deprived communities. I am interested to know how Queen's would work with them, Patrick. The homework clubs have been excellent, but there is a whole world outside the schools. A number of people are involved in neighbourhood renewal partnerships and partnership boards. How do you work with them?

Professor Johnston: We need to look at those partnerships and see where we can contribute to them and add real value, and work with community groups, whether in west or east Belfast or beyond Belfast. It does not have to be in Belfast. We should be contributing, when that is meaningful, to the development of society and the hopes and opportunities that are there for young people. That is the basis for developing the social charter. As a university, we see that as a responsibility, and we should flag it up front. We have a responsibility or a duty to deliver on that.

The programmes will differ in different locations, Fra. They are to be shaped in part by the needs of a local community, as opposed to Queen's dictating them. We do not have that level of connectivity in

terms of need. It is important that we are engaged in those conversations at many different levels. Some of my ideas relate to the way in which we influence education per se, for the primary and secondary school agenda, and working with students directly as well as working on how programmes might be shaped. If there are things — economic drivers, small biotech companies setting up or a business liaison that we can start to do as an institution — we should look at them as well.

Mr F McCann: It is an excellent idea for university people to be on boards of governors. That is being considered. A number of primary schools teach through the medium of Irish. I take it that they will be included in that.

Professor Johnston: D'imigh sin agus tháinig seo. The bottom line is this: why would they not be? I do not see that the medium of Irish or any other language would exclude people. It is about the educational process.

Ms McGahan: Thank you, Patrick. I wish you all the best for the future. On the back of Fra's point about homework clubs, what connections do you have with areas outside Belfast? I represent Fermanagh and South Tyrone. We have two neighbourhood renewal areas, in Enniskillen and Dungannon. I represent the Dungannon area in particular. However, we also have a significant growth of ethnic minority populations. How do you deal with those types of language barriers at the homework club level?

Professor Johnston: The honest answer is that I do not know the answer. Should we be exploring that? Yes. The homework clubs, as you will know, were a pilot project, and they have been in existence only for the last year. The fact that close to 200 students have already signed up this year shows you the appetite that our students have for it. We have to build on its success. I agree with you entirely that it should not be seen as Belfast-centric; it should be seen as something that we can deliver elsewhere. The challenge is getting funding for it. One of my targets is to try to double the funding that we can get into it so that we can create those opportunities.

We can potentially add value to the area of languages and culture because we have such a diverse set of educational programmes on social sciences, cultural diversity and languages, including creative languages. We could really contribute there. The Department has just provided us with funding to upskill computer science teachers, which is great because the curriculum changes so quickly that it is a challenge for teachers. It is fine to extend a STEM programme, but that is a real challenge if you do not have the educational base to take on those subjects in secondary and grammar schools. In the same way, if there were pockets where we need to enhance language or communication skills in different languages, we could contribute.

Mr Ross: Thank you for your presentation, Professor Johnston. I also wish you well in your new role.

You mentioned the tension, or the balance that has to be struck, between social science subjects and universities being seen to provide courses that are directly relevant to the needs of the economy. You also mentioned the global institution idea. We obviously all live in a global world, and it is important that Queen's is seen as a global force. Jobs, however, are incredibly mobile in that global world. We want the university to be an economic driver, and perhaps that is where the focus is, rightly or wrongly, from Stormont. On the back of Fra's comments concerning your connections with the US, a number of US companies are investing in Northern Ireland, and it is great that the university is working closely with them in R&D and suchlike. Can you give us an idea of the type of work that the university is or will be involved in with companies that are not here to meet future needs or look for future investment? Those companies are crying out for young people with particular skills, and there is the potential for Northern Ireland to get those skills here so that we continue to attract those types of jobs and big companies, to our future economic benefit. Will you develop your linkages with Invest NI and its work with potential investors so that you can come in on the back of that and provide the skills that they are looking for so that they can invest here?

Professor Johnston: Thank you for that question. It is an important area and is certainly a top priority for me. I will start with the INI relationship. Last week, we had the Biotechnology Industry Organization (BIO) convention in San Diego. Minister Arlene Foster was there, along with Invest NI's chief executive, Alastair Hamilton, and a number of people from Queen's. As a direct result of that, discussions about coming to Belfast have started with two companies that are looking to relocate. Why? It is because the expertise sits here. They happen to be health-related companies and health biotech-related companies. That is an example of what happens when you build world-class facilities and have recognisably world-class people.

This is why I am really challenging the university. It does some things very well in this sector: it is the UK's leading knowledge transfer partnership university, outdoing Cambridge, Oxford and Edinburgh, so we have a strong base to build on. However, it is important to say that we cannot do everything. Even from a Northern Ireland plc point of view, you cannot do everything. What can Queen's deliver? It can deliver in areas such as STEM, cybersecurity and a healthy living world — clean water and safe food. Those are some of the big things. Health, of course, will also be a landmark area for us. That is part of what I am driving at at postgraduate level. It is not that everything else will be excluded, but you will drive the issues that are truly world-class because they will drive the networks and the connectivity that you talk about.

As some of you may know, I sit on the Medical Research Council (MRC) board nationally and chair the translational research group. Part of that connectivity and part of the way in which we do research in the modern world is about driving partnerships with industry globally and in the UK, where we are increasingly doing things together. That is challenging because we are partnering public money alongside private investment, but it will be the way that future societies develop innovation and products. Academia can take a product only to a certain point. In fact, it will kill the product if it tries to develop it, because it does not have the commercial expertise. It is then that it needs partnership to get it across what is called the valley of death to make the technology or the discovery relevant to society. I want Queen's to do that. I want it to have open innovation centres that allow industry into those partnerships, much like those that you see in the Titanic Quarter, and that they become centres of excellence globally, with the result that industry, other universities and, indeed, governments want to work with us.

Ms Sugden: Thanks for your presentation; I am sorry that I missed t

One of the biggest frustrations that I hear — you have probably mentioned this already — is that there is no work for graduates after they finish their degree. I believe that the key to addressing that is to provide experience. I was delighted that you mentioned the Washington Ireland Program, because I was a student and a manager on that. How do we weave experience and programmes like the Washington Ireland Program into courses so that students who are about to graduate have some experience that will make them more competitive?

Professor Johnston: By doing exactly that: building on that model. That is where the partnership not only with industry but with government is really important. I know that an intern has been with the Committee. It is about driving more of that so that people get real experience. As the dean of medicine, I had people working with me and shadowing me for three months to see what I did. Some of our students are doing the same thing in the health service locally, but I think that we need to make that much more formal. You will know that we have Degree Plus, which gives additional credits to students and acknowledges a lot of the broader range of activities that students do. As for the curriculum, there is some pushback from academics who think that we are sullying the discipline by allowing industry in. I think, however, that we have a responsibility to deliver on that so that our students either have a three-month attachment with industry or possibly do a joint degree programme, whereby they work with industry for perhaps a year across three years or even one final year, and then get a job if they get a good enough grade and pass everything. Those are the types of things that I am looking at.

The PwC programme is the first to guarantee a job to someone if they get a 2:1 and have been chosen by PwC at the start. So, it is not at the end; it is at the start. If you are chosen for the programme and get a 2:1, you will get a job working with PwC. Liberty IT and Citigroup are doing the same thing with a different model. Again, they will guarantee jobs to a number of students. I want that type of approach to be expanded. Equally, I want the types of programme that are associated with the Washington Ireland Program or the New York scholarship programme to be expanded to Boston, San Francisco, Singapore and other major cities around the world.

The Deputy Chairperson: That seems to be all our questions. Patrick, thank you for briefing the Committee today and for sharing your vision for Queen's with us. We wish you well in your post and every success in the future. No doubt we will hear from you again at some stage.

Professor Johnston: Thanks very much.