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Committee for Culture, Arts and Leisure

OFFICIAL REPORT
(Hansard)

Inquiry into Maximising the Potential of the Creative Industries in Northern Ireland: Digital Circle/Momentum

22 March 2012

NORTHERN IRELAND ASSEMBLY

Committee for Culture, Arts and Leisure

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Members present for all or part of the proceedings:
Miss Michelle McIlveen (Chairperson)
Mr William Irwin (Deputy Chairperson)
Mr Dominic Bradley
Mrs Brenda Hale
Mr David Hilditch
Mr Michael McGimpsey
Mrs Karen McKevitt
Mr Oliver McMullan
Mr Robin Swann

Witnesses:

Mr Matt Johnston	Digital Circle
Ms Mary McKenna	Digital Circle
Dr Ian Graham	Momentum

The Chairperson: I welcome Mr Matt Johnston, collaborative network facilitator; Ms Mary McKenna, director of Learning Pool; and Dr Ian Graham, chief executive officer of Momentum. Good morning. Thank you for attending and for your written submission. Perhaps you would like to make an introductory statement. The Committee will then follow that up with questions.

Mr Matt Johnston (Digital Circle): Digital Circle is the project that I work for. I am employed by Momentum, the ICT Federation for Northern Ireland. Collectively, we represent more than 350 companies in Northern Ireland, which range from huge multinationals, such as Citigroup and Allstate, to small, one-man companies that essentially work out of people's bedrooms. So it is the full gamut.

Digital Circle/Momentum represents software and digital content companies. That includes companies that work in insurance software, web design, mobile app development, games development, e-learning, film, television, radio, animation and post-production. We also lay a little claim to fashion, jewellery design and architecture, because, in many cases, the production of such assets is digital at first.
We believe that the digital content industry in Northern Ireland represents an immense opportunity for Northern Ireland's economy. Skillset estimates that, in the next five years, software and digital content will be responsible for 9,000 jobs. In the past four years alone, the app economy, which is just mobile development and games, has been responsible for 500,000 jobs in the United States. Through a

simple scaling down of that figure, our guess is that that would have led to 2,500 jobs in Northern Ireland. We believe that due to a lack of support, the app economy may have been responsible for 100 jobs. We see that as an immense opportunity cost. We are here to give evidence to see whether there is anything that the Committee can do to help us on that.

We are very interested in the inquiry and spent a lot of time consulting our members to make sure that all the evidence was presented.

The Chairperson: Thank you. You referred to challenges, particularly around the respective skills and training. Your paper quotes a company saying:

> *"None of the universities or colleges provide programmers with a skillset that we find immediately employable."*

You also talked about issues with Queen's University. Will you elaborate on that and on what your sector is doing to address issues around the lack of skills? Are you doing your own training?

Mr Johnston: According to data that I got from the University of Ulster just last month, there are, apparently, 650 vacancies in software engineering with large companies and a large number of vacancies in software engineering and mobile and web development in smaller companies that do not use recruitment agencies. Our universities are currently training 300 graduates a year in software engineering, which is fewer than the number in the industry who retire or die. That is a morbid figure, but the gap that we are seeing will just increase. Not only are we not training enough people with the right skills but we are just not training enough.

Ms Mary McKenna (Digital Circle): I run a small business in the north-west of Northern Ireland, and we have had vacancies for software developers in our company for about 18 months. We just cannot find any people at all. Our company is five years old, and we have grown to 50 people and a £3 million turnover in those five years. Our company would probably be twice that size and have twice that many jobs if we had been able to recruit more people in Northern Ireland. The skills issue is a real constraining factor for business people trying to start businesses in Northern Ireland.

Dr Ian Graham (Momentum): We have engaged with e-skills UK in working with the Department for Employment and Learning (DEL) — well, for as long as it is around. I must say that Stephen Farry has given a lot of support to recognising the issue. An entire board is now looking at actions that can help to redress the balance and to encourage more young people to study for a career in software development.

Actions are under way, but we need as much support as we can get. We see this as a huge opportunity. It is very much a skills-based activity. You do not buy a new machine to double production; you need more skilled people. It is about employment, and, although action is being taken, we need to redouble our efforts to grasp the huge opportunity that is out there.

The Chairperson: You mentioned difficulties that you were having in engaging with Queen's. Has that changed with the creation of its facility of creative arts?

Mr Johnston: No. We talked to Michael Alcorn and his team when he was in the Sonic Arts Research Centre (SARC). The creative arts faculty, though, is quite new, so things have not really changed there, but we expect that to change because it is new to Queen's and they will be looking to catch up. There are other areas outside of there where Queen's is very much an institution onto itself. I am an ex-graduate of Queen's, and I am surprised at how difficult it is to get inside their hallowed halls. We find the University of Ulster an awful lot more approachable. That is not necessarily down to the institution; sometimes it is down to individuals.

The Chairperson: There was positive news yesterday when video games were highlighted as having been on the right side of the Budget. How important is that to your industry?

Mr Johnston: Although I welcome change in the Budget, I honestly believe that it will have no effect on the Northern Ireland industry. It is R&D tax credits, which means that, although you can be pre-revenue, you still have to have liquidity and to be able to invest heavily. That means that you have to have money.

Ms McKenna: You have to pay tax.

Mr Johnston: Yes, you have to be paying tax. Somebody has to be paying tax somewhere. The problem that most of our companies have is that they are very small. A lot of the businesses are being started up by people who have full-time jobs in companies such as Allstate or Singularity in an effort to be entrepreneurial, so they are working out of their bedrooms in the evenings after they put the kids to bed. They are not paying tax on that work because no money is changing hands. They are just trying to start something in their spare time and they cannot get finance to break out on their own or to hire somebody to do something. With the exception of the Department's creative industries innovation fund (CIIF), there is no way for those companies to start up.

Not paying tax or getting tax credit is fantastic when you are in that position. However, most of our companies would need a substantial change to be in the position where that would even be a likelihood. I do not think that most of them would pay the accountants' fees to enable them to get to that position. It is a long way off.

The Chairperson: In your paper, you were very positive about CIIF funding as a catalyst. Can you give any other suggestions on assistance that could be given to your sector?

Mr Johnston: CIIF is a great fund. I believe that it is potentially the best fund in Europe for start-up businesses, and we have looked at most of them. As regards the scale and timing of it, once a year, it involves an onerous amount of paperwork. However, it enables some businesses to start. It enabled 17 games companies to start in Northern Ireland, based on small teams that were then able to hire in the expertise that they required to make the games. That is fantastic.

I am a little bit concerned that digital is, essentially, stealing from the mouths of artists, sculptors and the traditional crafts and arts industry. I have suggested to NI Screen that we talk to it about its digital media fund, which, in the past, has not been used for the purpose that we think that it should have been used for. We think that that would effectively double the amount of money that is given to creative businesses, while, at the same time, allowing creative businesses outside digital to flourish.

Mr D Bradley: Good morning. You mentioned the apps industry and the number of jobs that have been created in America. How many did you say there were?

Mr Johnston: Half a million.

Mr D Bradley: That is, obviously, a huge number. To what extent is Northern Ireland capitalising on that new stream at the moment? Is there potential for future development?

Mr Johnston: We have a very active service-based economy. We are still not at the scale that we should be for the size of our population. That is mostly a skills issue. Our small companies simply cannot find people with the skills to be able to hire them. Because of liquidity, they cannot afford to train them. They are expecting graduates to come out of university. There is a growth issue there.

The service business is also a little bit short-sighted. We spend a lot of time encouraging our members to be working to a situation in which they are making money while they sleep, instead of working on a per-hour rate. That means going for global products that can be put onto app stores. You can make sales 24 hours a day in all regions of the world. Most of our companies are involved in service-based business, because of the need to bootstrap and the lack of capital, and are able to charge for only eight hours a day. They are charging an hourly rate and are being very competitive with one another. They are building brochure apps for local companies. That is not necessarily the best use of their talents. However, it is the only way that they can pay the bills.

Dr Graham: The problem is that they are dealing in the local market, which is very small. There are 1·7 million people. Therefore, getting into the global market is hugely important. One unique feature of the app economy has been the development of the app store. That is a hugely significant development, which opens up opportunities for small regions because you have now got global distribution channels. If you publish your app on the app store, it is available worldwide if you can market it properly etc. Moving into products and looking at global markets is where the future must be to realise the opportunity.

Mr Johnston: A danger is that, because our companies are focused on services just to pay the bills, they are missing out on the time-to-market opportunity. By the time they get to market, competitors are already there. There is a limited amount of liquidity in the market and limited seed capital and venture capital markets. That means that, yesterday, for example, a games company — my kids all play one of its games — was sold to Zynga for $200 million. It had previously received $16 million in venture capital. There is no way that you could receive that amount of money in Northern Ireland. So we will just lose good companies; they will go elsewhere. We have already had some companies that have been approached by partners south of the border to relocate to the Republic of Ireland because of the better availability of finance.

Mr D Bradley: Is any research and development on apps ongoing in Northern Ireland?

Mr Johnston: Yes, there are projects on connected health, accessibility, finance and mobile security. We work with the other part of Queen's: we work quite well with the Institute of Electronics, Communications and Information Technology (ECIT) in the Titanic Quarter because we know the team there very well. We also work with HaptiMap, which is a European-funded project to make location services more accessible. There is also R&D on games interfaces and connected health, which is for very specific markets.

Mr D Bradley: Is the curriculum in post-primary schools aligned to the type of developments that have taken place in the industry and market?

Mr Johnston: Absolutely not.

Dr Graham: That is a major issue.

Mr Johnston: We cannot express how bad the situation is. We may take some responsibility in that it happened on our watch, but the information and communication technology (ICT) qualification is utterly unsuitable for a digital economy. Essentially, we have given people GCSEs and A levels in the 21st century equivalent of typing.

Dr Graham: User-based rather than practitioner-based skills are being taught. We need people who understand how to create applications, not just how to use them.

Mr Johnston: It is something that we have lost over the past 15 years.

Dr Graham: In fact, the ICT qualification encourages young people to think about a career only for them to realise that it is a totally inappropriate subject. They need to have studied mathematics and other hard subjects before getting into the market that we are describing.

Mr Johnston: At the same time as training a vastly insufficient number of people in software engineering, which is a skill that we absolutely need, we are training far too many physiotherapists and lawyers. I used the law example yesterday in a high school. When I asked how many pupils wanted to be software engineers, one hand went up, and that was in a room of 100 students. When I asked how many wanted to be lawyers, 10 hands went up. I had to explain that 450 of the 600 lawyers produced in Northern Ireland will not be admitted to the Bar.

Mr D Bradley: Are you saying that there is a need to move from the present ICT qualification back to something similar to the old subject of computing?

Mr Johnston: Such a qualification exists.

Dr Graham: An alternative A level was called computing, which eight schools in Northern Ireland still offer. Computing is a true subject that equips people with the necessary background for going on to study computer science. However, very few schools teach computing, and league tables are, frankly, part of the problem. It is easier to get high GCSE and A-level grades in a simpler subject. Schools encourage children to do that because it helps their league table position. We need to get away from that approach and start thinking about what the economy needs, what skills we have to generate and how we work through the whole education system to achieve that.

Mr D Bradley: What is the situation in further education (FE) and third-level education?

Mr Johnston: The number being trained is simply not high enough.

Mr D Bradley: Are the courses more aligned with what is needed?

Mr Johnston: The courses are aligned to what large companies want. For example, if a large company says that it needs 30 dot.net people a year, that happens. We do not really care about the specifics; we just want people to be taught to be programmers. One of the issues for universities is that they introduce programming to their software engineering students halfway through the first year, and they get a huge drop-off rate immediately because —

Ms McKenna: It is too hard.

Mr Johnston: Yes, people go into software engineering expecting ICT — more of the same. Prepared with just an ICT A level, they enter university and are introduced to programming. That hits them really hard, so they leave.

Dr Graham: To return to your point: we have found the colleges to be very receptive. We have worked closely with Belfast Metropolitan College in respect of upskilling employees in new technologies such as app developments. The computer science department at Belfast Met ran a 12- or 14-week course. There were about 40 people on it, and it taught them how to develop programming techniques for these kinds of devices. Therefore, colleges are being receptive, and they can contribute significantly to the development of the skill base that we need.

Mr Johnston: People in the industry do not understand the maximum student number (MaSN) cap, and I do not understand it. We are artificially restricting the number of people that we need for the industry.

Mr Hilditch: I will pick up where Dominic left off. Matt, we are surprised at the figures that you have given us in relation to vacancies and various other things. Today's presentation obviously relates to the inquiry into the creative industries. Have you taken this argument or issue anywhere else in central government? Have you taken it to DEL? What other avenues have you tried?

Mr Johnston: Essentially, we put the same points into our response to the economic strategy. We are funded by the Department of Enterprise, Trade and Investment (DETI), and we have been reporting to Invest Northern Ireland every quarter for the past three years. Therefore, I presume that that will have filtered upstairs.

As regards DEL, I talked to DEL and was told that it is too hard to deal with small companies. So, our small companies that are in need of the most help were unable to get any from DEL.

Mr Hilditch: Other members may wish to speak about apps development, but, when we wear different hats through sport and tourism, we are inundated every week by small companies. If individuals or a couple of guys in partnership come and try to develop some programme, is there any regulation or licensing on that type of work?

Mr Johnston: No.

Mr Hilditch: Mary has explained her vacancies. Are people taking the opportunity to go down their own route doing that type of work before they take a job in a company?

Mr Johnston: People who have developed the skills and want to be independent are taking that opportunity because they see it. Some companies that are taking on some of the cultural tourism app work may not be doing that full time. We have monthly meetings where we gather together people in mobile, in games or in open data. All those people have full-time jobs, and about 90% of them work for large multinational corporations. One of those people commented that he comes to the games development network and puts his time into it and helps other people because his day job bores him to the extent that he will leave programming and stop being a software developer if he does not do something exciting with it.

We are trying to promote the use of exciting products in e-learning and games. Most software developers got into programming because of computer games, but they end up making insurance software, and they want to rekindle that interest and perfect their craft. They are proud people. They are highly motivated to solve really hard maths problems, and we are not making it easy for them.

Dr Graham: There are some encouraging developments. We see a role for the public sector to help stimulate some of this sector by purchasing locally rather than procuring from overseas. With DETI, there was a pre-commercial pilot competition, which was the procurement of a number of tourism apps to see what value they could have. A company called My Tour Talk developed an iPhone app, and it has used that success as a catalyst to grow its company. It is selling all over the world. That kind of initiative is fabulous where it is actually focused on procuring locally and not procuring from other regions.

Mr Hilditch: That was the one that I had in the back of my mind.

Dr Graham: It was an excellent scheme, and it worked well. The other competition that we are finishing off involves two companies that won contracts, one for a GAA Comhaltas app and one for an Ulster-Scots app. Those will be launched some time in April, again, using public sector funding to deliver value to the public sector and to stimulate the development of companies that can deliver and create these kinds of skills. It was an excellent initiative.

Ms McKenna: I am glad that you mentioned that. Invest Northern Ireland recently bought an e-learning programme from a North American company. It did not even look at ours, and we are up the road from them. That was very disappointing.

Dr Graham: Everybody talks procurement regulations in Europe. The French buy locally and then say sorry to the European Commission. They do not get hung up on all the regulations. We need to look after ourselves and use our procurement possibilities as a way to stimulate the development of local industry. In the Republic of Ireland, of course, that is what they do. We need to think of ourselves and build our economy.

Mr McGimpsey: I found what you said both interesting and quite disappointing. I expected that our creative industries sector would be a lot bigger and much more robust. When I look, for example, at the experience in Scotland, I always think that it is a brilliant model for Northern Ireland. However, we do not appear to be marching along with Scotland. Are there lessons to be learned from there?

You talked about your product and about finance, but the main message that I am hearing concerns the inability to get the right sort of folk that you need to man the workforce. That is down to training, and so on. You also mentioned that you have issues with Queen's and the University of Ulster. However, you said that students get an ICT O level, followed by an A level, end up with a degree from Queen's and then come to you. We are not producing enough graduates. Another problem is that there is, potentially, another raft of young people who could become part of your workforce: they will not get O levels or A levels, but they may have skills, creativity and inventiveness that you can use. How do we stimulate that? What do you get from Queen's: qualifications or skills? Are the relevant skills not better learned on the job? Is there an avenue there that we can consider, such as a form of

apprenticeship or training for suitable young people? We could offer support in paying their wages to allow you to bring in young people to acquire the skills that you need.

It is a chicken-and-egg situation. This started off being about unlocking creativity, one product of which is the creative industries. It was about primary and secondary education; it was about employment and learning; it was about bringing it all together and our trying to replicate, as far possible, what is happening in Scotland, England and other parts of the world. There is as much creativity and inventiveness in our population as there is anywhere else. How do we unlock that and bring it to the fore? What I have heard today is quite disappointing. Is there another way that you can do it, rather than waiting for kids to take O levels and A levels, get their degree at Queen's and then come knocking on your door? You need to expand more quickly than that process allows. You are not getting the workforce coming through the universities at the rate that you need. Is there another way?

Mr Johnston: We are working on that. I went to DEL, for example, to ask about its apprenticeship scheme, but I was told that the scheme works only for big companies.

Mr McGimpsey: Sorry?

Mr Johnston: We were told that DEL's apprenticeship scheme works only with big companies and that it would be hard for it to offer ICT apprenticeships on any kind of scale. Taking that on board, and given the lack of provision of skills for the sector and in certain schools, we decided to do it ourselves. We run mostly skills-based monthly meetings, at which we teach people in the industry. There is no membership fee, and anybody can turn up. We have people aged 17 attending. The youngest participant in our events was 14 years of age, and he had to come with his dad.

On top of that, a movement called CoderDojo has started in Limerick. Essentially, it gets kids of any age started on programming, although, for legal purposes, under-16s have to bring a parent. That started out in Limerick, kicks off in Newry on 31 March and gets to Belfast in May.

Ms McKenna: That is a massive initiative. It was showcased at the London Web Summit on Monday of this week, and people from the Republic of Ireland showed what they were doing with younger kids.

Mr Johnston: We are doing it, but we are not supported in doing it. We have asked programmers in the industry to come along and those who are also parents to bring their children, too. Belfast Met has offered free space and a member of staff to manage it. I have yet to ask them whether they can provide refreshments — they might be able to do so. We are doing that in spite of things. We know the situation, and we do not see an easy fix for it, but that should not stop us from doing something about it.

Mr McGimpsey: I am astonished to hear that DEL's attitude is that the apprenticeship scheme is only for big companies.

Ms McKenna: Also, members from Digital Circle give up their time to go and talk to young people in schools and encourage them to think about a career in the digital creative industry. We always tell them that there is nothing to stop them from starting a business straightaway, that they do not need permission but can go ahead and get started now, because they do not need to go to university. We do that with schools in Northern Ireland all the time, without waiting for government support.

Mr McGimpsey: You are doing it, but clearly not at a rate or a level that satisfies the demand. You said yourself that your trained, or skilled, workforce is diminishing because of retirements and that you are losing more people than you gain. Is there some untapped potential? I have been in business all my life, and one of the ways in which we addressed the issue was through apprenticeships. Youngsters came in, and three years later you had a bricklayer, electrician, plumber, or whatever. Is it possible to do it that way?

Mr Johnston: Yes.

Mr McGimpsey: Or do young people require training and qualifications in the hard subjects?

Dr Graham: You need to have an aptitude. Programming is, typically, a mathematically intensive exercise, so you need to have the right people. Once you have the right people, you can use apprenticeships or traditional educational routes into the sector, but the key element is talent. We must not ignore the fact that we can compete globally if we have world-class talent. If we are to hold our heads up in world terms and compete globally, it is essential to create that level of talent

Mr McGimpsey: I do not want to labour the point but, in the building business, for example, youngsters spent year 1 in training schools. Those were wiped out 20 years ago, and that is why we do not have a skilled building workforce. We need Polish joiners and Ukrainian plumbers because we do not have anyone who is trained. The youngsters spent year 1 learning the skills and year 2 on the site. In years 1 and 2, they were paid directly by government, and, in year 3, some of their wages came from private firms. You got a virtually free operative: they got the skills, you got the benefit and government gave the support. Could that system be adapted? Perhaps not, but there is a huge pool of youngsters. We all hear the same thing: in my constituency office, for example, I hear about large numbers of youngsters who, effectively, leave school aged 12, 13 or 14, but they are not stupid kids. Is there a way to tap into those youngsters and, by paying them a wage, allow them to go and work with you and learn the skills that will be of some benefit? I know that you are not a charity and that you guys are in this for the bottom line. Would that help your bottom line? Would that be a way forward, or does it have to be done in the traditional way, through ICT O levels, A levels, Queen's University and beyond?

Mr Johnston: Two people recently hired by local companies are 17 years old. One has gone in full-time, and the other is staying at school to finish his A levels, but will work evenings and weekends. Aged 17, he is commanding a salary that is much higher than the private sector average and exceeds the public sector average. That is because he has a talent and an aptitude.

There are very young people who could show aptitude for this line of work. The issue is that they are being sent down the traditional routes because of the perception that the safe jobs are there.

Mr McGimpsey: That is the way in which the system directs young people, whether there is a safe job or not.

Ms McKenna: It is also about parents' awareness that this line of work is a viable option in comparison with becoming an accountant, lawyer or doctor.

Mr Johnston: We train 600 lawyers, for example, and to study law you have to be incredibly intelligent and highly motivated.

Dr Graham: We are offering people who have done a law degree or some other degree the opportunity to retrain. Through the colleges, we have been running 30-week conversion courses for non-IT graduates, and that is likely to continue. We need a number of channels: apprenticeship schemes, traditional university education, college schemes and conversion schemes. The lack of ICT skills is a European-wide problem. Recently, Mr Bruton announced that, each year, 14 institutions in the Republic of Ireland would convert 700 students with qualifications in other subjects. The Republic of Ireland sees conversion as one of the key elements, and so do I. We need various channels to increase the flow of skills into the sector, and apprenticeship is certainly one of them.

Mr Johnston: I would start with formal education at 11 years old — as soon as children enter secondary school. I think that programming should sit alongside maths as an essential subject. If pupils do not have an aptitude for, or do not enjoy, programming, by all means let them drop it in later years, just as I got rid of history. However, they have to be introduced to it, because there are talented young people out there, and we are missing them.

Mr Irwin: I apologise for not being here for the entire presentation. We all talk about there being no jobs, so it is good to hear that more people are needed in this field. I would have thought that the general public needed to know that and see that it is a viable option, especially parents with children of that age. Probably, many parents have not regarded it as such. The nature of programming means that you need young people who are motivated and creative. An individual can learn something, but

cannot become an expert in the field unless he or she is motivated and creative. Have you any idea of the numbers needed in Northern Ireland?

Mr Johnston: Skillset reckons that there will be a demand for 9,000 jobs between now and 2015 if we keep pace with the global economy. I believe that the Science Park published its knowledge-based index and reckons that there will be the potential for around 25,000 jobs.

Ms McKenna: Yes, it is around that figure.

Mr Johnston: If we achieve half of those 9,000 jobs, I would be relatively happy; if we achieved 9,000, I would be very pleased; and achieving 25,000 would make an absolute difference. None of those jobs come with low-level salaries.

Dr Graham: High-value jobs then contribute to other parts of the economy.

Mr Irwin: I noted what you said earlier, and I agree that it is vital that we look after ourselves, whether in business or as a country. Most countries do, it must be said.

Mr Johnston: Our options are to start training people in ICT or start teaching Eastern Europeans English and bringing them over here because they have a skill base that we can use. As long as they pay tax here, I do not care.

Mr McMullan: I am amazed that your submission mentions taking examples from England and Scotland, but there is very little mention of the South of Ireland. It is quite clear from your presentation that the South of Ireland is way ahead of us. Do we not need to put down in a report the comparatives to show how we are losing out — a line in the sand, basically — and how we can tap into the examples of what it has done? The Programme for Government talks about 25,000 jobs. How will you influence how many jobs you can gain through that? I saw one reference to that in your submission, but I did not see how you were going to take that forward. However, I see the South of Ireland as one of the leaders, and that is also quite clear from what you say. How do we tap into that? Is our branding wrong here? Should we be branding this in a bigger market?

It worries me a bit when you talk about retraining solicitors or lawyers who have come through the system. Would that not leave the others whom you mentioned at a disadvantage? As you would be picking the cream of the crop, that would be elitist. Mr McGimpsey talked about young people who have the necessary talent. Without qualifications, how would they ever get on to that conveyor belt? If you retrain lawyers, you will obviously take the cream of the educational crop.

Mr Johnston: To be fair, one of our members is a company called Training By Choice. I believe that the company demonstrated outside Stormont after its funding was cut. So we have companies that do what you suggest, and we take in young people on placements and do as much training as we can. However, about 90% of our members are very small businesses. They work in a very small economy and are trying to grow their businesses. Taking on people and helping them is one thing, and we do what we can in that respect. Our interest in being here is to find out what else can be done. How can we change the way things are done, and how can we accelerate the process?

Mr McMullan: I agree with that.

Mr Johnston: We do not spend a lot of time on comparisons with the Republic of Ireland because it is a sovereign nation with a very different tax structure. We spend more time on comparisons with Wales and the north of England.

Mr McMullan: If I may stop you there, sorry, but is the tax structure pivotal to what you do?

Ms McKenna: No, most of our companies are too small to pay tax.

Mr Johnston: They pay income tax, but not VAT.

Dr Graham: Certainly, the bigger Momentum companies regard corporation tax as a major driver for growth. That was the one initiative in the Republic of Ireland that resulted in Intel and Google setting up European headquarters in the region. Corporation tax is not a magic bullet from the perspective of the bigger companies and will not solve everyone's problems. Other initiatives are needed, but it is a very important element in rebalancing the Northern Ireland economy. Momentum believes that 110%.

Mr McMullan: What about social clauses?

Mr Johnston: Social?

Mr McMullan: Are social clauses included that require firms coming in to take on so many people? You talked about France as a model for buying at home and not going anywhere else. You also referred to Invest NI buying from North America. What clause is included so that more must be done at home?

Mr Johnston: One reason why we do not think that corporation tax will be a magic bullet is the recent changes in the US, where the Administration plan to repatriate profits, so corporation tax will become less important to the big multinationals.

You mentioned the social side of hiring people. People need to have skills to be hired. My approach to attracting foreign direct investors and multinationals and addressing the social need for jobs would be to train x amount of people. Training people who have talent is not elitist. If they show talent and interest but have no qualifications, let us train them. There has to be an intervention at each stage. So we have to intervene in schools to spark interest early. We intervene in other ways through companies such as Training By Choice, which deal with people not in education, employment or training (NEETs). We also deal with the high end, so it is not an elitist approach.

Dr Graham: Also, it must be open to all. I talked about government procuring locally to help to stimulate the growth of indigenous companies. However, many who look at the history of Silicon Valley would say that it was built on the back of Chinese and Indian immigrant labour. So it is not just a matter of using local people. We need to be inclusive if we really want to expand this opportunity, and if we need people from outside Northern Ireland, bring them in.

Mr McMullan: That is not a problem.

You also talked about 300 students coming through each year. Where do they go?

Mr Johnston: Some of them leave.

Mr McMullan: That is my point. Are they being headhunted, for want of a better word, by the bigger, global companies and taken out of here to America and Europe?

Mr Johnston: We do not have precise figures on that. We know that 25% of all graduates do not work in the area in which they trained and that 20% just leave. Graduates either do not necessarily see an opportunity in Northern Ireland, or they have been trained in the wrong thing.

Mr McMullan: That leaves you down to roughly 100 students.

Mr Johnston: That applies across the board. It is not possible to knock that down to computing. Most will get jobs in the local industry. The problem is that the rate at which we train is still a lot slower than the rate at which people die, retire or leave the industry.

Mr McMullan: You talked about ICT training in schools. I did not get ICT training when I was at school. Are teachers qualified to the standard that you would like to enable them to teach ICT to 11-year-olds and right through to university? I get the distinct feeling that our teachers do not have that level of qualification to pass on to the students.

Mr Johnston: A figure that I was given recently was that 3,000 teachers qualified in the United Kingdom last year. Of those, three had an ICT background — not 3%, but three teachers. I do not believe that teachers are receiving the right training, and, at the moment, that could not immediately be foisted on them. However, a two-month summer break is coming up during which some teachers could learn something.

Mr McMullan: Mr McGimpsey talked about apprenticeships. I came through an apprenticeship: I studied one day a week at the tech, with a block of teaching every three or four months. The teachers were there to take us through. That has all been done away with. I do not think that the teachers are there at the minute. So instead of starting with young people, you need to start with the teachers.

Mr Johnston: We worked around such issues before. We work with the University of Ulster, for example. As it could not find placements for its students — essentially, a couple of weeks out at work — we put together a programme and brought the industry in. I believe that we can get our industry partners and member companies to bring people into the schools to do what is necessary to run CoderDojo every single week in different parts of the Province. Even if it is not part of the 9.00 am to 3.00 pm schedule for schools, we can do that. It would be nice to be supported in that, which is not the case currently. We do not have to rely solely on teachers; professionals will give their time.

Dr Graham: There are some extremely capable teachers of programming. With e-skills UK, we run the Bring IT On career attractiveness campaign, through which we have engaged with 200 secondary schools this year. We run events and tell students what is involved in a career in ICT and programming. We really are trying to get the message out there. The responses from both universities have been very positive in that the number of applications for places on ICT courses has increased significantly.

Mr McMullan: Thank you. That was very interesting.

Mrs Hale: Thank you for your presentation. I just want to bring together the threads introduced by Oliver, Dominic and Michael. My focus is on post-primary education. Recently, I visited a school in the Chair's constituency and spoke to the maths teachers. They said that they were not aware of jobs other than those in banking or accountancy and that they did not know how to contact people in the creative industries. I told them that I was a member of the Committee for Culture, Arts and Leisure and that they had to contact the creative industries. How would you go about challenging the perceptions of teachers and, more importantly, parents? If schools wanted to invite you to talk to pupils in fifth and sixth year, how would they contact you?

Mr Johnston: So far, we have directly contacted them through Momentum, which is a Bring IT On partner, and we work with 240 schools. On top of that, I give some of my time to the W5 Stemnet project and as much time as asked of me to the Young Enterprise project. Yesterday, I spent all day at Wallace High School, talking to 200 students about opportunities in the digital creative industry and about what Digital Circle and Momentum could do for them. We were also a sponsor of a recent TeachMeet session, which is a social network for teachers interested in using ICT in the classroom. It is also a networking option for teachers so that they get more support from their peers. Every time something appears, we jump on it as a method of communicating with the education sector. Some of our members are teachers. Apart from word of mouth, it is very hard to get into a school. My first involvement was in NI Screen's moving image arts pilot. That is when I started talking to teachers, which was six or seven years ago. We will do what we can and when we see an opening. It is difficult because teachers have their own agendas and full-time jobs. However, the number of teachers who turned up was surprising: two weeks ago, 80 teachers turned up to a TeachMeet session, of which Momentum was the lead sponsor. It gives them time to talk about what they can do. We had a trade stand there, and I spent the evening talking to teachers.

Mrs Hale: Sorry, Matt, but what was the breakdown of those schools? Were they all grammar schools, or were there some secondary schools?

Mr Johnston: It was a complete mix.

Ms McKenna: It is worth saying that Matt is Digital Circle's only paid employee. Everyone else involved in Digital Circle runs their own business as well and volunteers their time. All of us are prepared to go out and speak to schools, and so on, but, at the moment, we have no funding to advertise what we do. If we had a bit of money to do that, we could advertise events and get a lot more teachers right across Northern Ireland to come along. None of us is unwilling to give up our time. We all want to try to make things better for kids coming through the schools. We have loads of people who give up their time to do those things, but where we are stuck is in getting more support from government to help us to advertise, and so on.

The Chairperson: Thank you for coming this morning and taking our questions. It was a very informative session, and I hope that you will find that our inquiry report reflects much of what you said this morning.

Ms McKenna: Thank you for your time.