



Northern Ireland
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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: DE
Briefing

28 June 2012

NORTHERN IRELAND ASSEMBLY

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Inquiry into Maximising the Potential of the Creative Industries in Northern Ireland:
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Members present for all or part of the proceedings:

Mr William Irwin (Deputy Chairperson)
Mr Dominic Bradley
Mrs Karen McKeivitt
Mr Oliver McMullan
Mr Cathal Ó hOisín
Mr Robin Swann

Witnesses:

Mr Adrian Arbuthnot	Department of Education
Ms Sharon Lawlor	Department of Education
Mr Russell Welsh	Department of Education

The Deputy Chairperson: I welcome to the Committee Adrian Arbuthnot, Sharon Lawlor and Russell Welsh. I ask that you make your presentation.

Mr Adrian Arbuthnot (Department of Education): Thank you very much.

The Department of Education has an important role to play in supporting the Executive in achieving their key priority of strengthening the local economy. The Department aims to raise standards in schools and deliver improved outcomes for all pupils. We seek to help every learner fulfil his or her potential in achieving qualifications in chosen subjects and taking their place in the world of work.

Underpinning the education system in our schools is the revised curriculum, which applies to all 12 years of compulsory education. The curriculum incorporates creativity in all aspects of teaching and learning from year 1 onwards. There is greater emphasis on developing the skills pupils need, including the fundamentals of literacy, numeracy, and information and communication technology (ICT), as well as other skills, such as creativity, problem-solving and working with others. For example, at foundation stage, which is years 1 and 2, pupils should be able to develop their creativity through imaginative play. At post-primary level, in the area of learning for life and work, the employability strand includes creativity and entrepreneurship. Creativity, therefore, is central to the curriculum, and runs through all 12 years. Its principal focus is in the context of the "being creative" strand of the thinking skills and personal capabilities framework, which is a statutory element of the Northern Ireland curriculum from foundation stage through to Key Stage 3.

The work of our schools is closely aligned to the needs of employers and the economy in general. The revised curriculum has a strong emphasis on instilling entrepreneurship and a knowledge and understanding of the world of work. Through the theme of learning for life and work, pupils learn about

career opportunities, and can engage with programmes that connect the classroom with the workplace. The role of the careers officer is a central feature of how schools prepare their pupils for life beyond the classroom. Through contact with the careers officer, schools can access labour market information and pupils can make informed decisions on subject choices.

The Department provides funding for a number of third-party delivery partners, with the aim of increasing pupils' engagement with employers and work. Many of the initiatives promote innovation, creativity and entrepreneurship through challenging and exciting experiences linked with the world of work. One example is the Company Programme delivered by Young Enterprise Northern Ireland. A short time ago, pupils from Wallace High School won the 2012 competition with a fashion entry that involved getting interactive design input from customers and selling online throughout the world. The promotion of science, technology, engineering and mathematics (STEM) subjects is important for rebalancing our economy and future economic growth. The Department recognises the need to invest in STEM subjects in school-based education, particularly in maths and physics, areas that can help support the growth of the creative industries. The Department's STEM interventions appear to be having a positive impact, with an increasing number of pupils choosing to study STEM subjects.

Before concluding, I must also refer to the introduction, from 2013, of the entitlement framework for pupils at Key Stage 4 and post-16. The aim is to ensure that all post-primary schools offer a wide range of applied and general qualifications so that pupils from the age of 14 can access a broader balanced range of courses and pathways relevant to their needs and interests. In short, schools must put the needs and interests of their pupils first when it comes to their curricular offer. That development will better facilitate pupils to pursue their career aspirations and not be limited by what a school may choose to offer. Through reforms such as the revised curriculum, STEM and the entitlement framework, the Department is helping to develop creativity in our young people and open up their horizons to career opportunities in the creative industries and in other sectors of the economy.

The Deputy Chairperson: Thank you. There has been a recurring theme in our inquiry that there needs to be a greater emphasis on understanding the skills required for the creative industries at primary and secondary school level. As you said, the Department has been trying to deal with that. Can any more be done, because there seems to be a big gap in that area?

Mr Arbuthnot: Sorry; could I clarify: there is a big gap in what?

The Deputy Chairperson: There needs to be a greater emphasis on understanding the skills required for the creative industries at primary and secondary school level. We have found that gap during our inquiry.

Mr Arbuthnot: It is a general role for the Careers Service, which is run by the Department for Employment and Learning (DEL). Careers officers form a very important link between employers and the schools, and they will bring information that is relevant to young people in making their career choices. All schools are very heavily engaged in participation in business education partnerships and in industry-led initiatives of one sort or another. It is very important for employers from the creative industries to get involved more and more with those sorts of initiatives so that young people can hear at first hand about the opportunities from people who practise in an industry. Careers officers make that important link, but schools and employers form partnerships and promote career opportunities in the sector.

The Deputy Chairperson: Do you feel that the curriculum is in place to deal with that?

Mr Arbuthnot: The curriculum has a very broad-based approach and has cross-curricular themes that last from the beginning right through to Key Stage 3. It promotes learning for life skills, entrepreneurship and creativity as well as the important key subjects of numeracy, literacy and ICT. All those themes run through the curriculum and make it very effective.

We do not dictate to schools how they deliver the subjects; it is down to school leaders and teachers to determine what is best for the pupils in their school and create the opportunities that will fulfil their obligations under the curriculum. However, we have a very broad-based, effective curriculum that teaches the cross-curricular skills that we are all looking for in our young people.

The Deputy Chairperson: The digital sector has repeatedly reported that there is a skills shortage in that sector. That seems to be an issue.

Mr Arbuthnot: I do not think that we can get to the stage where we, as a Department, dictate to young people what subjects to study. That would be totally wrong and counterproductive. It is important that young people are engaged at a very early stage of their school career by people who know the industry and can give proper insights into the challenging opportunities there. There is a heavy onus on employers in the industry to make sure that they promote careers opportunities effectively with young people. That will inspire young people to make the sort of careers choices that will lead to the qualifications that your industry sector needs.

Mrs McKeivitt: Thank you for coming to the Committee to give us your short presentation. I want to touch on something that the Deputy Chair said. In our creative industries inquiry, it was suggested that there could be a gap of knowledge for those who might have an interest in going into the digital sector or the gaming sector or going from ICT to a university course. With the times that are in it, there is a lack of jobs, but, in the Programme for Government, our Government has seen an opportunity where creative industries can increase tourism and job potential. It has come across that there seems to be a gap between careers teacher information and knowledge of what exams might be needed to guide the pupil and the parent, who also has a say about what the child is going to study.

I should declare an interest, as I have children who are at the age where they are trying to pick subjects, others are doing exams, and there are children coming at the other end of it. There seems to be a gap in the careers end where they are not given the knowledge that maths and ICT might be needed to go into the digital field or into the creative industries. The children are getting the expertise from the teaching end, but, from our inquiry, it seems that there is a big gap of information and knowledge from careers advisers that maths might be needed or they are encouraged to take on maths.

Mr Arbuthnot: I would be disappointed if that is the case. Our Department works very closely with the Department for Employment and Learning to develop the effectiveness of the Careers Service and careers officers. If there are shortcomings, we would want to address them. An effective careers service is absolutely essential to ensuring that young people can fulfil the potential that I talked about at the beginning of my presentation and can take their place in the world of work. I cannot overemphasise the importance of careers advice, and, if there are deficiencies or shortfalls there, you can rest assured that my Department will raise them with the Department for Employment and Learning and seek to address those shortcomings.

Mr Swann: Thanks for your presentation. Our education system is concentrated on STEM at the minute because that is where we see Northern Ireland's economy going. We were being told that the emphasis should include the arts, therefore, becoming STEAM. Does the Department intend to look at that across the curriculum so that we can extend that creativity through learning from years 1 and 2 throughout the entire 12 years?

Mr Arbuthnot: My first thought is that, if everything becomes a priority, nothing is a priority. As far as STEM is concerned, the subjects were picked out by the Executive and the STEM strategy has been endorsed by the Executive. If that needs to be broadened out in any way, it would be important for the Minister of Culture, Arts and Leisure to go back and argue the case to expand the scope of STEM to STEAM. However, I wonder whether including arts is absolutely necessary because I think the STEM subjects provide the building blocks for so many career opportunities, including the creative industries. I am thinking of maths, physics, technology and engineering. Is the Committee absolutely sure that those subjects are not adequate to meet the needs of the creative industry sector and whether it is important to change the policy?

Mr Swann: As Karen said, we were hearing that STEM is enough as the building block but that there needs to be the arts as well and more emphasis on the creative branch because, when it comes to computer gaming and app design, there is as much now in being able to draw as there is in the hard science and the hard computer programming behind it. By concentrating on the STEAM subjects, those who are involved in the creativity side of the arts subjects are maybe not getting enough support or emphasis through your current curriculum.

Mr Arbuthnot: I know that I am repeating myself, but the STEM strategy has been endorsed by the Executive. So, if the Committee feels strongly about expanding STEM into STEAM, the case would have to be made, including demonstrating where STEM is deficient for the needs of the creative industry sector.

Mr Swann: I am not saying that STEM is not meeting the needs; it just needs a wee bit more put into it.

Mr Arbuthnot: A bit more nuancing?

Mr Swann: A bit more nuancing at that finer end of it.

Mr Russell Welsh (Department of Education): Adrian mentioned the employability strand in the revised curriculum, and the Department recognises that extra activities need to be delivered to assist schools. We referred to that in the response from the Minister to your Committee. The programmes that are aligned to that are generic in nature and are designed that way specifically so that they cover all sectors of industry. Adrian used the example of the Young Enterprise Company Programme, and there are other examples. Young Enterprise runs an Industry Masterclass programme. This year, it asked schools to develop their ideas on an app development as a business concept, which went through to marketing and selling. That is part of the creative industry. Last year, the format was setting up a music festival as a business idea. Our business partners are very conscious of and keep themselves informed of the current job trends. Young Enterprise has specifically designed its programmes on that over the past two years in relation to that. That was simply because we are identifying those areas as having the greatest job potential. By being generic, we can cover everywhere, but we focus on areas of need.

Mr Swann: When you see the need for development to create a job in a certain area, how quickly can your curriculum respond to meet that need?

Mr Welsh: The creativity issue is completely embedded in the curriculum. The programmes that I am talking about are additional programmes that the Department funds based on the curriculum but outside the curriculum.

Mr Swann: Is it up to individual schools to do that?

Mr Welsh: The programmes are advertised to schools, and schools can elect to have them delivered to them. We can respond fairly quickly. For instance, the programmes that we mentioned are delivered annually and change each year. So, we can respond fairly quickly, but it is embedded in the curriculum the whole way through. It is up to teachers, as Adrian said, to determine what resources to use to deliver and what way to deliver. That depends on the teacher, but it is flexible.

Mr Swann: Do the same schools pick up those additional projects all the time? Is there maybe a lack of ability in schools to apply? From talking to headmasters in my constituency, I know that enough paperwork comes in daily to keep a school running from 9.00 am to 3.00 pm without picking up the additional subjects. Sometimes, the schools that are most in need of the additional programmes fail to apply.

Mr Welsh: We are proactive in that regard. The answer could be yes, because schools that engage with the programmes realise their benefits, and they will always keep applying. We instruct all our delivery partners, including Young Enterprise, Sentinus and others, to target schools that are, for instance, in areas of social need and schools that are not engaged. Sentinus has been developing an escalator measurement over the years that it uses to rate schools that engage with it from 1 to 5. For example, in relation to STEM, schools that have a 5 are totally engaged and are using STEM, and schools that only have a 1 are not engaged. We asked Sentinus and Young Enterprise to target those schools. So, we try to spread it out to make sure. We cannot afford to fund every school; that is not the idea of this. However, we try to make sure that every school gets the opportunity.

Mr Arbuthnot: I will add to that. At the higher level, the Department's underpinning school improvement policy is Every School a Good School. Certain characteristics of a good school relate to the leadership of the school and the quality of the teaching. One of the other pillars we look to see in a school is good connections with the local community and local employers. It would be a characteristic of a good school to make those connections with the local community, including employers.

Mr D Bradley: I apologise for being late. Sorry for missing your presentation. I hope that I do not cover any ground that has been covered. I am sure that the Deputy Chair will let me know if I do.

Among the various stakeholders in the creative industries, there seems to be a view that ICT in schools does not match the requirements of the industry, that the nitty-gritty of programming is not covered in schools and that the emphasis is on what might be called the more superficial aspects of ICT. In my area, in Newry, a private digital hub provides lessons for schoolchildren in the harder aspects of programming. Some parents are sending their children for those lessons on Saturday mornings. Is there a shortfall in the curriculum in so far as the programming needs of the industry are not being matched by the provision in the curriculum?

Mr Welsh: We would not say that there is a shortfall, but we are very aware of the point you make. We are represented on the DEL ICT action group, in which those issues have been rehearsed and well discussed. As Adrian said, the curriculum here has been designed specifically to provide flexibility. ICT is embedded; it is a mandatory, cross-curricular skill. The ICT qualification offered by the Council for the Curriculum, Examinations and Assessment (CCEA) at the minute, at GCSE and A level, is recognised as being a good qualification. It suits the needs of the majority of pupils. It does not suit the needs of those pupils who want to go into computer sciences or the needs of the industry, which wants system and software developers. Computer sciences and software development already exists in the curriculum. The qualifications are already there. If schools want to teach that to their kids, they can. We fully accept and recognise that more needs to be done to try to encourage pupils and make them more aware of the potential and availability of future jobs. I am sure the argument has been rehearsed to the Committee: the potential is there, and, for some time, the software sector has been crying out, saying that, if it could get more systems managers and developers, it could expand at a faster pace than it is at the minute.

As part of the work we do on the DEL ICT action group, we are trying to develop more awareness programmes in the Department to encourage more kids to take up ICT computer systems. CCEA has already been looking at that. We asked CCEA to look at the idea of developing a new GCE qualification. It has come up with a GCE, which is an A-level qualification, in software and systems development. That is part of the expanded portfolio of applied qualifications that Adrian briefly mentioned when talking about the entitlement framework. The qualification was developed after comprehensive research with stakeholders. That included employers, Invest Northern Ireland and a number of representatives from the ICT sector. The main areas of content in the qualification relevant to computer science and programming are object-orientated development, event-driven programming, systems approaches and database concepts. That is what we have been told the ICT sector requires. It is being rolled out to schools this September, with a view to them starting to teach it next September. The first young people to come through that will qualify in 2015.

We are developing awareness programmes with our business partners that we can roll out to schools to encourage more kids to take it on. We do not agree that the curriculum does not match, but we agree that more needs to be done to make children aware of the opportunities that there are in computer sciences.

Mr D Bradley: There seems to have been a history of mismatching between the ICT curriculum and the needs of various institutions. I remember at one stage that the programming language that pupils learned in school up to A level was not the same language that was being used in the universities. The universities were saying that it would have been better had the students had come with no programming language rather than having to unlearn the one that they had learned and learn a new one. That is in the past, and I hope that it has been resolved.

Mr Welsh: I hope so.

Mr D Bradley: I want to recall some of the points that various witnesses have made to the Committee. One of them mentioned the need for students' awareness and knowledge of programming to begin in primary school. Have there been any moves in that direction?

Mr Welsh: The flexibility exists in the curriculum. Sentinus, which is one of our providers, provides a programming programme for primary schools, on which schools can choose to enrol. As part of the work that we are doing now, we have asked them to look specifically at a module that will provide some simple programming for primary 7 children and make them more aware, rather than the format in which it exists at present, which is as part of an activity that they already do.

Sharon can say something about C2k. The facility is there for schools to be able to do that. We are trying to make the teachers aware as well as the kids.

Ms Sharon Lawlor (Department of Education): C2k has a number of software titles available, such as Scratch, Game Maker and Mediator, which support game development. Some lower-level programming development is also available through C2k. The new C2k contract kicks in from September, which will have a range of services and a new "front end" with a lot of back-end stuff coming in. Teachers and pupils will come into an interface called MY-SCHOOL, which will have a lot of products linking into it.

Some of those products will be in what we would call an app store. I was talking to the director of C2k yesterday about the more sophisticated programming languages. You talked about the mismatch with the universities. We need to be careful about which ones we pick up, but it is C2k's intention, should there be a need for a number of schools to have certain products to develop more sophisticated programming, to put them in the app store, but they would need to know what those products are. That is, maybe, where the schools need to be kept informed by the industry. There may be a bit of work to be done in order to bring those two minds together, but C2K already provides basic applications and so forth.

Mr D Bradley: So, you are saying that the facility is or will be there to place greater emphasis on programming, but that there is no compunction on staff in primary or secondary schools to do that; and that we have to provide greater encouragement for them and, maybe, underline the fact that future jobs in this particular sector will be dependent on students having those skills? There is a need further up the education ladder, as Mrs McKeivitt said, for the Careers Service to emphasise that particular aspect.

I do not know whether it is directly related to this issue, but I see that Mr Arbuthnot is the director of qualifications and standards. Last week in London, the Education Secretary talked about reverting to O levels and abandoning GCSEs. Has that created any reaction in the Department?

Mr Arbuthnot: We were taken quite by surprise at the lack of communication from England on the issue.

Mr D Bradley: There is nothing unusual in that, but anyway. I think a lot of people in London were also surprised.

Mr Arbuthnot: Our Minister has to take account of any changes that are imminent in England. However, I do not think that the O level proposal has been firmed up. We have to wait and see what exactly Secretary of State Gove has planned, whether he will bring forward proposals and how they will meet the needs of the people in Northern Ireland.

Mr D Bradley: I would have thought that it would be a retrograde step to revert to two separate examinations. We saw the disadvantages of that in the past and combined them into one examination. Hopefully, we will not go down that road. However, I understand that you are not in a position to —

Mr Arbuthnot: I can assure you that our Minister will take his decisions in accordance with what he feels is best for the local school population.

Mr D Bradley: I have no doubt about that. Thank you very much.

The Deputy Chairperson: Thank you very much. It was good to have you here. It has been very useful.