13   Deputy K.F. Morel of the Minister for Education regarding gender equality in computer studies: [OQ.181/2018]

With 111 males and 2 females currently studying computing at Highlands, will the Minister advise the Assembly as to the measures she is taking, if any, to encourage young women to choose to study computing and thereby to ensure Jersey's future digital sector is fully representative of the Island's population and not just dominated by men?

Senator T.A. Vallois (The Minister for Education):

These numbers are disappointing but I am pleased to advise the Deputy that the take-up for G.C.S.E. (General Certificate of Secondary Education) computer studies is much more promising with 40 per cent of this year's cohort being girls up from 32 per cent last year. Female role models are an encouragement for the take-up of computing in this year at Le Rocquier School, the launch of a new industry standard digital design G.C.S.E. course called D.E.C. (Design Engineer Construct), which has seen 25 per cent of the 21 students being girls. A local female undergraduate studying engineering at Bath met with students and parents during the launch. In September, one of the U.K.'s most influential female advisers on cybersecurity spoke at Beaulieu School to over 150 students about the exciting careers in cyber, and especially why girls are particularly valued in this field. There are a wide range of initiatives, past and future, that I hope will encourage more young women to study computing and go on to successful careers in the digital sector. Three of our secondary schools entered teams in the U.K. Cyberfest girls' competition and this continues to be promoted by the department each year.

4.13.1   Deputy K.F. Morel:

If the Minister looks at statistics for all Highlands College courses, she will find that there is a clear division with men studying male jobs and women studying female jobs, little evidence of breaking down these barriers. Does the Minister agree that there is a cultural problem within the education sector that teaches boys and girls that they are only fit for certain types of work?

Senator T.A. Vallois:

I think I would go further than that. I think there is a cultural issue in our society in terms of the way women and men were deemed to be able or not able to do certain things within the remits of their capabilities. I think it is a western world issue personally, and it is something we have grown up with and we need to start breaking down those barriers. So I think, yes, absolutely it is in education, but it is also across society. But we need to look at all the different initiatives that are being done in various different areas of the world that we could possibly bring on board and use as a better way to change that point of view of people and encourage breaking down that divide and encouraging women and young girls in terms of addressing the S.T.E.M. (Science, Technology, Engineering and Maths) subjects in particular.

4.13.2   Deputy G.P. Southern:

The list of initiatives goes on and that is very admirable but is she aware that, of these 2 females at Highlands College, one, who had successfully passed the second stage of her online security qualification, found out that the level 3 that she wanted to progress to was not being run this particular year and has left the Island as a result of that in order to seek somewhere where she can continue her skills and her training and one of 2 we lost.

Senator T.A. Vallois:

No, I was not aware of it, but I thank the Deputy for bringing it to my attention. I will of course take it on board and particularly ask my Assistant Minister to closely look at the offers on at Highlands College as he has delegation; Deputy Maçon has delegation with regards to Highlands and further and higher education.

4.13.3 Deputy L.M.C. Doublet:

The Minister referred to the demographics of the G.C.S.E. cohort in I.C.T. (information and communications technology). Does she have the figures for the demographics of the A-Level cohorts in this subject and is she aware whether the subject is being offered at A-Level, especially in the single-sex private schools?

Senator T.A. Vallois:

I do not have that number in front of me for A-Levels but I can get it to everyone. I will make sure the department sends it around to all States Members. I believe there is a course in terms of A-levels but I will clarify that in the email. So I will get the department to send an email around to all States Members to inform them of where we are with regards to that higher education level.

4.13.4 Senator S.C. Ferguson:

Has the Minister any idea of the numbers of pupils at primary school level learning to code and what the sort of male/female division - if I am allowed to say that, I do not know - what the gender division is at that level?

Senator T.A. Vallois:

I do not have that figure for primary school. In terms of coding for primary schools, it is something that I am particularly interested in making sure that we have some form of standard across all schools so that all children are experiencing a similar level of provision. But I have first-hand seen the provision they provide at St. John's School. I can tell you it is a very close 50/50 in terms of the children that are taking part, but I can only say that from what I have seen first-hand. But I can certainly ask the department to get those figures and apply it to the same email with regards to the A-levels so everyone can see that information.

4.13.5 Senator S.C. Ferguson:

Does the Minister not think that provided the girls and boys at that age at primary school level… provided the girls realise they probably can do the subject better than quite a lot of the boys, then the whole sort of discrimination structure will start to just fall away, does the Minister not agree?

Senator T.A. Vallois:

I am not about to start a gender war here in terms of who is better and who is not better, but we are all equally different and we are capable of all doing different things. One of the most encouraging things that I saw in terms of the coding is where these children are having extra participation lessons in terms of supporting each other. So you have children who are advancing themselves above each other and then going to support each other in terms of how they move forward that coding programme. That is both boys and girls. It is just something that should not be an issue. I do not think we should be seeing females as incapable of doing any particular jobs but in the same way I do not think we should be seeing males as being incapable of doing any jobs, such as the modified known caring and nursing and all those types of female-dominated working areas, but there are men that do that too. We are slowly closing down those barriers but it does take a lot of effort, a lot of work to do that, but I think everyone recognises it.

4.13.6 Deputy K.F. Morel:

I am pleased that the Minister mentioned the initiatives that are ongoing at the moment. As the C.E.O. of Flybe recently stated: "Young women cannot be what they cannot see." So, without these initiatives, we really will get nowhere in changing things. I just wanted to ask the Minister whether she understood the importance in the digital sector of breaking down these gender barriers because of the way technology shapes our society immediately. At the moment we have had 50 years of a digital sector, which is entirely shaped by men, and shaped by men of one particular ethnicity. Senator Ferguson is shaking her head and I do agree there are notable exceptions to my statement but it has, in the main, at the commercial level, been shaped by men. The technologies we use today, social media, *et cetera*, are principally shaped by men. Because of that, the way we interact via these technologies and the way we are shaped as a society is being affected and without women being there on the 50/50 basis we will continue to have our digital society shaped in one particular way. I just wanted to understand if the Minister understood the importance of that particular sector.

Senator T.A. Vallois:

I absolutely do. I think it is the same for most industries but I completely understand the digital industry side of things. From my point of view, as Minister for Education, education opens up a world of opportunities for anybody that wants to be able to do any particular areas and, like the Deputy states, they cannot really go into it if they do not know about it and they do not have the opportunities to be able to get on to that ladder. In terms of the digital industry side of things with Digital Jersey and the women in tech now as well who are bolstering and moving forward with things like the B.I.M.A. (British Interactive Media Association) D-Day event that they hold at the Fort Regent that will be coming up. It becomes more of a known event, it becomes more of a norm in society, and the need for any industry to have both participation of male and female I think is intrinsically important because we all think differently - I hope we all think differently - and we all challenge each other in different ways. Women sometimes come at it from a different point of view, but men do also, so I do recognise that issue. But we are moving forward, but I think we need to move forward as a society and engage with each other in terms of the different types of opportunities that we can take on board.