

Cross-Party Group on Skills

Friday, 19 May 2023 (1000-1100)

Minute

Present

MSPs

Pam Gosal MSP
Stephen Kerr MSP
Sharon Dowey MSP

Invited guests

Heather Thomson, The Data Lab
Professor Liz Bacon, Abertay University
Joanna Campbell, Dumfries & Galloway College.

Non-MSP Group Members

Nicola Smith, SCQF Partnership
Niall Evans, Lantra Scotland
Derek Young, Institute of Physics
Joanne Buchan, Colleges Scotland
James McKean, Colleges Scotland
Claire Vekic, Colleges Scotland
Aimee Logan, Universities Scotland
Claire Bannister, Universities Scotland
Wendy Burton, STUC
Tommy Breslin, STUC
Lauren Pennycook, CITB
Sharon Drysdale, Scottish Funding Council
Sanjana Mehta, (ISC)² Ltd
Anne Galbraith, SECTT
David Coyne, Skills Development Scotland
Claire Gillespie, Skills Development Scotland
Keith Geddes, Pagoda PR
Kristoffer Getchell, Fife College
Maureen Hendry, College Development Network
George Brown, SQA
Nathan Taylor, West College Scotland
Simon Williams, NHS Education for Scotland
Keith Robson, Open University
Fiona Harper, Select

Shona Matthews, Chartered Banker Institute
Alison McLure, Institute of Physics
Claire Carney, City of Glasgow College
Stuart McKenna, Scottish Training Federation
Boab Thomson, Abertay University
Fiona Stewart, Skills Development Scotland

Apologies

Beatrice Wishart MSP
Claire Baker MSP
Michael Marra MSP
Pauline Ratcliffe, SCQF Partnership
Kirsty Conlon, Universities Scotland
Liz Baron-Majerik, Lantra Scotland
Moira Houston, Chartered Banker Institute
Stuart Farmer, Institute of Physics
Maureen Douglas, CECA Scotland
June Deasy, British Psychological Society
Ishabel Bremner, EDAS
Kerri Haynes, SSERC
Andy Witty, Colleges Scotland
Tom Hall, Colleges Scotland
Ian McCulloch, ITC Academy
William Hardie, Robert Gordon University

Welcome and Apologies

The group's Convener, Pam Gosal MSP, opened the meeting. Apologies were also noted.

Minutes of the Previous Meeting

The minutes of the meeting held on 10 February 2023 were approved.

Presentations

The topic for this meeting was 'what AI means for skills in Scotland'. Presentations were heard from:

- Heather Thomson, Director of Skills & Talent, The Data Lab
- Professor Liz Bacon, Principal, Abertay University
- Joanna Campbell, Principal, Dumfries & Galloway College.

Discussion

Heather Thomson gave a presentation on behalf of The Data Lab. She emphasised the pace of change with the emergence of new technologies by highlighting that online companies such as Netflix and Twitter took years to establish whereas now services such as ChatGPT are only taking days to reach one million users. She said there are a growing number of mainstream systems now freely available being used by increasing numbers of people but without consideration of possible unintended consequences.

Ms Thomson said that skills development and artificial intelligence (AI) is not just a concern for those working in AI but that is also important across society. The Data Lab has recently launched a new free online course – living with AI – to give people an introduction to AI and how it is impacting the world around us.

She also highlighted the skills gap and noted that by 2030, 375m workers – 14% of the global workforce – may need to switch occupation as a result of automation. She said that The Data Lab is currently analysing what this means for Scotland but said there would be a significant demand for data skills in the future and a need for continuous training, not just in functional skills but in adding value beyond what automation can achieve and adapting to new ways of working and emerging occupations. Ms Thomson also encouraged anyone interested in AI to join The Data Lab's [community](#).

Professor Bacon highlighted that Abertay University were early adopters of digital with courses in courses such as games development and cyber security which are preparing graduates for digital careers.

She noted the increasing number of conversational chatbots available – over 1,000 – such as ChatCPT which can generate content and write essays, poems and novels with some able to talk in 95 languages. These are powerful tools and moving at a fast pace. She added that they have turned education upside down as they have passed master's exams and are causing educators to rethink how we assess students work.

Professor Bacon said that although there are ethical considerations around the use of AI, we will need to learn to work with AI – workers will require constant upskilling and digital skills will be vital for economic growth. Wide adoption of AI predicts GDP increase of 26% by 2035. She also noted that education will struggle to deliver for the economy without a review of funding.

Joanna Campbell spoke on behalf of the college sector, highlighting that every year colleges train around 17,000 students in digital subjects ranging from Data Science to Software Development with 22% at higher education level. She said that a number of colleges are doing some innovative work with industry to address skills shortages and are working closely with The Data Lab to develop future talent.

Ms Campbell said that colleges are now starting to prepare for generation Alpha – who will be the most digitally literate generation – which will have implications on what and how we teach and the skills needed for jobs that don't yet exist. She said that colleges are already using ChatGPT, for example, to assist with lesson planning.

She noted that much of implications of platforms such as ChatGPT were reported in terms of plagiarism and cheating but said that academic integrity is not new and that colleges and universities have procedures in place to deal with dishonesty.

Ms Campbell said that AI will mean less reliance on exams, it will free up more time for supporting students and provide a personalised student experience. She noted that in order to do that there will need to be an investment of time and resource.

A question and answers followed. Stephen Kerr MSP asked whether AI has the potential to undermine the emphasis currently placed on academic knowledge and a question around ethics.

Professor Bacon said that the biggest challenge is around assessment and how we assess students in how they will use knowledge and skills in their careers. She said that that Abertay University are asking staff to do more in-person discussion and assessments with students as that will then become the test of knowledge – a ‘show your workings’ approach. In terms of ethics, she noted that it is mostly in the hands of the technology companies and that intellectual property is complex.

Heather Thomson added to that, saying that regulation is difficult and that the key will be to raise awareness of the level of risk and be encouraged to make decisions themselves on what the potential consequences are. She said that education has a role to play in helping people to understand how AI works so they can make the decision whether to use it.

Derek Young highlighted the importance of soft skills and also inclusion. Ms Thomson agreed and said that the Edinburgh City Deal is developing a skills framework and there will be a core level of skills that people will need in future. Joanna Campbell added to that, saying that it is important to embed these skills across the curriculum and that colleges are already doing this as they recognise the value of transferrable skills. She also said that technology is evolving so quickly that traditional qualifications are not keeping up so colleges are working with employers to develop bespoke qualifications to meet the needs of industry.

Professor Bacon said that one of the biggest issues with AI is bias and stereotyping because it is trained on content currently available. She emphasised the need for critical thinking skills – to not just accept AI’s answers.

Pam Gosal MSP asked what the biggest ask would be of government. Joanna Campbell stated the need for more room for growth and more resource to meet the needs of the economy and support the National Strategy for Economic Transformation. Professor Bacon stressed the need for as much investment in digital estates as physical estates, saying if we don’t get investment now, Scotland will be behind in the near future. Heather Thomson added that investment will be key to keep up with other countries and retain a skilled workforce.

Close

With no other business to conduct, the meeting was brought to a close. It was noted that the next meeting would be held after the summer recess.