Cross Party Group on Science and Technology

Minute of meeting of 12 December 2017

1. Attendance:

MSPs: Clare Adamson; lain Gray.

Non-MSPs: Bristow Muldoon; Dr Liz Lakin; Alistair MacGregor; Ian Wall; Alison McLure; Alison Freeman; Iain Hunter; Sandy McIntosh; Heather Milton; Iain Hunter;

Kathleen Hill; William Hardie; Joan Davidson

2. Presentations:

The meeting received presentations from Dr Liz Lakin (Initial Teacher Education, University of Dundee and Royal Society of Biology) and Alistair MacGregor (Chief Executive, SSERC – CPD providers for science and technology teachers and primary teachers). These focussed on the Scottish Government STEM Strategy, including the training, recruitment and CPD of science teachers.

Dr Liz Lakin welcomed the lifelong learning aspect of the Strategy and also that many points had been incorporated from comments made in the consultation period by members of the scientific community.

She commented on the need to ensure that mathematical and statistical skills needed a greater emphasis from the earliest stages as everyone benefits from having good numeracy skills in their day to day life even if they did not work in a STEM occupation. There is a need for a connectivity between the economic and social imperatives of a STEM education for all in society.

The Scottish Government has an aspiration to reduce the attainment gap between the poorer and wealthier in society. Part of the way in which this can be achieved is through encouraging young people in disadvantaged areas to study STEM subjects to examination level as these do provide opportunities to rewarding careers. There also remains a gender issue in some subjects, particularly physics, engineering and computing. Even in some disciplines where women participate in high numbers the most senior positions are still largely filled by men – there is a need to take account of the family commitments that are still largely fulfilled by women.

In terms of teaching some disciplines are currently finding it difficult to recruit enough trainees. This issue being a particular issue for again for computing science and physics. The vibrant employment markets in these disciplines being a key issue. The issue of whether there should be differential pay for teachers in priority subjects was raised from the attendance.

Mr MacGregor explained the CPD programme delivered by SSERC on behalf of both the Scottish Government and local authorities. This includes both direct CPD and access to disciplinary development as well as access to health and safety guidance. Professional scientific organisations also provided support. He emphasised that science experimentation can not be done without suitable financial investment.

Alistair fully supported the Scottish Government STEM Strategy. He emphasised the importance of the teaching of science initial training and CPG to primary teachers, as well as the importance of the measurement of progress.

Among discussion after the two presentations issued raised by Clare Adamson MSP, lain Gray MSP and external attendees included: the importance of recruiting suitably qualified computing science teachers; accessing the CPG material provided by scientific societies; the need to retain women with scientific qualifications in both the education and industry sectors; engineering and technology needs to be supported as well as the pure sciences and medicine; and there needs to be a recognition that STEM training at school, college and university is more expensive than all other subjects.

Meeting closed at 1930