#### PE1603/DD

Scientists for Global Responsibility (SGR) Letter of 17 January 2017

# **About Scientists for Global Responsibility**

SGR is an independent UK-based organisation, whose membership includes about 750 natural scientists, social scientists, engineers, and other professionals in related areas. We promote science, design and technology that contribute to peace, social justice, and environmental sustainability.

We have long-standing ethical concerns about the large-scale of military influence on science and technology, including school education. This is one of the reasons why we have set up our own programme of educational activities, Science4Society Week.

For more details, please see our websites: www.sgr.org.uk and www.s4s.org.uk

There are a number of key reasons for our concerns about the involvement of the armed forces and the arms industry in science and technology education activities in schools. These are as follows.

### **Balance and misrepresentation**

Military activities are the only areas in which science and technology are intentionally directed towards acts of violence towards other humans. As such, any teaching in this area requires particular sensitivity to the unique ethical issues that are raised compared with other fields. We are especially concerned that, in trying to make science more 'exciting' for young people, military applications are provided uncritically as examples for school children, e.g., visits to military aircraft bases<sup>1</sup> or MoD laboratories to see armoured vehicles<sup>2</sup>. Here the science and technology tends to be explained without an adequate explanation of context surrounding the uses to which they may be put, and the harm that can be caused to other humans by their use. This we regard as a serious lack of balance.

#### Recruitment and public relations

While the armed forces officially claim that their actions in schools are not recruitment, in reality this is not the case and has been contradicted by the MoD themselves on numerous occasions<sup>3</sup>. Crucially, the 2011 Youth Engagement Review states that armed forces' activities in schools "should meet two clear Defence outcomes: An awareness of the armed forces' role in the world and the quality of its work and people, in order to ensure the continued support of the population; and recruitment of the young men and women that are key to future sustainment and

<sup>&</sup>lt;sup>1</sup> RAF (2015). The Red Arrows Team News. July.

http://www.raf.mod.uk/reds/news/index.cfm?storyid=54240E8C-5056-A318-A8DA71BD1F8F3A4F

<sup>&</sup>lt;sup>2</sup> Defence Science and Technology Laboratory (2014). Inspiring students to sign up to science.

October. https://www.gov.uk/government/news/inspiring-students-to-sign-up-to-science

<sup>&</sup>lt;sup>3</sup> Forces Watch (2015). The recruitment agenda behind the UK armed forces 'engagement' with students in schools and colleges.

http://forceswatch.net/sites/default/files/ForcesWatch\_recruitment\_in\_schools\_evidence\_briefing\_May 2015.pdf

success." Logically the STEM activities in schools run by the MoD and armed forces must also have the same outcome. SGR are concerned about this for two main reasons.

Firstly, there are serious problems with large organisations using the teaching of STEM as a tool for public relations and recruitment. We think that to use it in such a way is likely to lead to a view of science and engineering in society which is markedly biased in favour of those organisations and could be used to deflect legitimate criticism of those organisations and their activities. Our research on STEM activities run by, or carried out in partnership with, the armed forces suggest that much of the engagement presents a one-sided and uncritical view of their work. The activities and materials that we have observed give a very sanitised picture of the MoD and the armed forces, especially because of a focus on topics such as disaster relief and the avoidance of the controversies surrounding war-fighting, weaponry and other military technologies.

Secondly, we are concerned about the apparent lack of regulation covering the activities of external organisations in schools. We also have concerns about the government education guidance and some of the methods it uses to encourage the involvement of employers. Evidence of this can be seen from a government briefing where it states that one of the benefits of engaging with schools is in "promoting a positive awareness of your business"<sup>4</sup>. This can lead to related problems in the materials provided by STEM enrichment providers<sup>5</sup>. Without improved guidance and monitoring, there is the real potential that large organisations such as the armed forces can use school activities primarily as a public relations exercise with the STEM educational benefit being secondary.

## **Disproportionate access**

We are concerned that organisations from or representing the armed forces and/ or the arms industry are given disproportionate access to school children, especially in areas of social deprivation. This access includes visits and provision of teaching materials. By disproportionate, we mean at levels much higher than other employment/ industrial sectors of a similar size. For example, only 4.7% of engineering and technology graduates are employed in the area categorised as 'public administration and defence; compulsory social security'<sup>6</sup>. This makes it one of the smallest categories of employers of engineering and technology graduates. Yet, from anecdotal evidence from teachers and organisational websites, it seems that the armed forces are among the larger providers of science education activities and resources. We would like official education bodies to collect data to test whether our impression is robust (see 'Transparency' below). If it is, then this undermines the

<sup>&</sup>lt;sup>4</sup> Education Scotland (2015). Developing the Young Workforce, School/Employer Partnerships, Guidance for employers. September. http://www.gov.scot/Resource/0048/00485674.pdf

<sup>&</sup>lt;sup>5</sup> Hopscotch Consulting, the PR company behind many industry school programmes advertise that their programmes will "clearly convey your organisation's marketing, PR or CSR [corporate social responsibility] message." http://www.hopscotchconsulting.co.uk/what\_we\_do

<sup>&</sup>lt;sup>6</sup> EngineeringUK (2016). The state of engineering. http://www.engineeringuk.com/\_resources/documents/EngineeringUK-Report-2016-Full-Report\_live.pdf The real figure for number of graduates going into defence is likely to be lower as this category also includes a number of other public areas such as 'fire service activities' and 'general public administration activities'

claim that a high level armed forces STEM engagement in schools is advantageous as it could actually skew children's knowledge about the range of available career opportunities.

### **Conscientious objection**

The right to withdraw from a lesson on ethical grounds is not made available to school children in this area, as far as we can ascertain. In recent years, school children have been given the opportunity to conscientiously object to, for example, taking part in lessons involving dissection of animals. We think this right should be extended to include any activities involving the armed forces/ arms industry and that, in order to make a considered decision, parents/guardians and pupils should be informed of armed forces' activities in advance.

# **Transparency**

Transparency is lacking regarding the access that the armed forces have within science and technology education in Scottish schools. No official data is collected/published on this topic. To attempt to create some accountability it is important that consistent, regular data should be collected and made publicly accessible. SGR also calls for greater transparency in the content of activities, resources and materials provided by the armed forces in their school engagement. Transparency in this area would allow for better monitoring and increased accountability, reducing the potential for the possibility of bias and lack of balance.