

Northumbria Research Link

Citation: Davenport, Carol (2019) Careers in the curriculum - the difficult fourth benchmark. Education in Science (276). p. 14. ISSN 0013-1377

Published by: Association for Science Education

URL: https://www.ase.org.uk/system/files/13-14_0.pdf
<https://www.ase.org.uk/system/files/13-14_0.pdf>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/39393/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

Careers in the curriculum – the difficult fourth benchmark

Carol Davenport

The Gatsby Careers Benchmarks are now part of the DfE's Careers guidance strategy¹. These 8 benchmarks will ensure that all maintained secondary schools have a stable careers programme for pupils aged 11 upwards, led by a named careers lead. Science teachers might therefore be forgiven for thinking that they don't need to think too much about careers in their situation – it is 'someone else's problem'².

That is not the case. The fourth benchmark, *Linking curriculum learning to careers*, means that including careers in their lessons is now very much the science teachers' 'problem'. Except that it doesn't have to be seen as a problem. There are at least two very good reasons for science teachers to include careers in their subject teaching.

The first is that many students cite their teachers as an important source of careers information and advice³. So, even if teachers don't realise it, their

students may be taking careers advice from what goes on in the classroom and is included in the teaching. By using careers to expand the contexts used to illustrate subject content, students will hear about a wider range of possible jobs obtained through studying science. Science teachers have a real advantage, because everything they teach has a 'real world' link that allows a straightforward link to careers.

The second good reason to include careers contexts in their subject teaching is linked to the changes to the assessment objectives in new GCSE specifications. The increase in marks for application of knowledge (AO2⁴) means that students will be examined on subject content in contexts that they may not have met previously. By introducing different career contexts – jobs, companies or activities – students can get used to looking beyond the surface details and picking out the subject content that they have been taught previously.

In the original North East pilot of the Gatsby Benchmarks, benchmark 4 was the one that all schools and colleges struggled with the most. To help, at NUSTEM we are developing a range of end-of-topic question worksheets, which set subject knowledge questions in a company context⁵, so that students can see where the topic that they are studying

might lead. Elsewhere, I've also described a simple photograph-based activity that teachers can use at the start or end of a lesson to help students make links between what they have been learning and careers⁶.

Other organisations are also developing resources that can be added into lessons, and a good first port of call is the STEM Learning eLibrary⁷.

The fourth careers benchmark is challenging, but it is a challenge that science teachers are more than capable of meeting.

References

¹https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/748474/181008_schools_statutory_guidance_final.pdf

²An idea popularised by Douglas Adams in *Life, The Universe and Everything* when explaining how humans are excellent at ignoring things that they don't understand or want to deal with as being 'someone else's problem'.

³<https://wellcome.ac.uk/sites/default/files/monitor-wave2-full-wellcome-may13.pdf>

⁴AO2: Apply knowledge and understanding of scientific ideas and scientific enquiry, techniques and procedures.

⁵<https://nustem.uk/careers/>

⁶<https://eic.rsc.org/ideas/including-careers-in-the-curriculum/3009375.article>

⁷<https://www.stem.org.uk/stem-careers#subject-resources>



Dr. Carol Davenport CSciTeach is Senior Lecturer and Director, NUSTEM, Faculty of Engineering and Environment.