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## Pocket Watch – Developing the computing skills of the future

### Introduction

There's been considerable interest in IT and computing skills recently. First Ed Miliband announced the creation of an independent Digital Skills Taskforce to offer advice to future Governments on provision and training in this area and second, the Education Minister, Elizabeth Truss used a recent speech to set out some of the changes happening to computing at a subject level. Broadly there are two themes to this latest activity. One is the need to improve the pipeline of local skills and talent in an industry that is now worth *"more than a £100bn a year to the UK"* but one relying heavily on importing skill. And the other is the need to refresh and update a school/college subject that has failed to excite let alone develop the skills of modern generations. Two sides of a similar coin in other words.

### A new Digital Skills Taskforce

Ed Miliband's foray last month into how far companies should recruit from abroad without equally investing in developing indigenous talent raised a few eyebrows but is particularly pertinent for an industry like IT which relies on a constant flow of new talent. O2 recently argued, for instance, that Britain would need a further 750,000 digitally skilled workers in the next five years but as the Labour leader noted, the number of IT apprenticeships has *"slumped over the last year"* while according to the eSkills sector council, the proportion of under 24 yr olds working in the UK IT industry has halved over the last ten years. The net result is that companies have had to turn to offshoring to recruit the talent they need while little has been done to train up a future workforce.

Ed Miliband therefore called on employers to take a stronger lead in training up young people particularly through a revamped, employer-led apprenticeship system and appointed Maggie Philbin to head up a new taskforce dedicated to addressing this skills gap and able to offer advice in this area to any future incoming Government. It will report before the 2015 election.

### Computing on the curriculum

Nurturing future 'computing' talent is something that the Government has been concerned about as well and has led to considerable developments at a school level notably since Michael Gove's BETT speech in January 2012 and subsequent disapplication of the old ICT programme of study. The aim has been to develop computing under the new curriculum as *"a rigorous, fascinating and intellectually challenging subject."* It means that the new programmes of study for instance will require primary pupils to be able to *'design, write and debug programmes'* and to *'select use and combine a variety of software'* while at secondary school 11-14 year olds should be able to use two or more programming languages, understand several key algorithms and *'understand how data of various types can be represented and manipulated digitally.'*

In addition, computer science will be included in accountability measures as part of the EBacc from next year, access to new resources and materials are being opened out and teachers encouraged to be more *'innovative in how to teach.'* And so that teachers themselves don't feel left behind, bursaries and the Network of Teaching Excellence for Computer Science teachers are also being provided to help provide them with some support, particularly if as the Minister put it: *"our children are to be active creators in a world turned upside down by technology."*

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