The Institute of Coding: A University-Industry Collaboration to Address the UK's Digital Skills Crisis
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Why did the UK spend £20M on an Institute of Coding?

- Government: "CS graduates have 11.7% unemployment, unlike STEM as a whole (8.4%)"

- So we need an intervention

- Shadbolt review: actually after you allow for background etc., there's no difference

- But in the 21st century, shouldn't CS graduates be much *more* employable

- And employers keep moaning about the digital skills shortage.

Institute of Coding: planned 2015

- Change of Government (during which it morphs from UK to England, and needs matched funds)

- Open Competition

- Announced Davos January 2018, to a consortium of 20 universities led by Bath

- We wanted to call it "Institute of Digital Skills" but "A minister had chosen the name"

5 Themes (=organisation)

1. University learners
2. The Digital Workforce
3. Digitising the Professions
4. Widening Participation
5. Knowledge Sharing and Sustainability
   1. Observatory
   2. Sustainability
   3. Marketing
   4. Central administration (ouch!)

University Learners

- Sharing ideas and producing draft curricula in two new areas: Data Science and CyberSecurity

- Sharing ideas on employability: internal software houses; "industry-like" work environments and practices; "industrial boot camps" etc.

- Fresh look at accreditation "what can graduates do immediately" as well as "have the education necessary for a chartered professional"

- Microcredentialling and digital badges

The Digital Workforce

- Separately, there has been a push towards "Degree Apprenticeships", where students work 4 days a week and study 1 day, with the idea that the two are closely related.

- Can study for a BSc or an MSc this way *provided* there's an appropriate apprenticeship

- Bureaucratic, and most universities were scared

- "Digital Technology Solutions" was an apprenticeship, and IoC, and its funding, turned out to unlock this.

Diversity and Inclusion

- In the UK, Computing does much better than most other STEM in terms of most diversity.

- Outcomes and employability could be better

- However, gender diversity is very poor

- Major project with Deloitte to investigate:

1. The perception of the industry;

2. the lack of clear signposting in terms of education and careers;

3. the lack of visibly tailored and flexible learning.

What have we achieved

- Almost 200,000 people have taken our courses, mostly the online taster courses. Numbers growing during the lockdown period

- Degree apprenticeships have taken off in over half the partner universities (and some are moving to run other subjects as well)

- Theme 1 is rethinking accreditation: "what does the graduates know, can they do, *now*"

- Significant research into *why* digital doesn't appeal to women: poor perception and poor signposting

Any questions?