Industry-Higher Education engagement: the case of high-tech creative industries

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NESTA Making Innovation Flourish

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=> **But has slipped from 3rd to 6th place in global development rankings in just two years**

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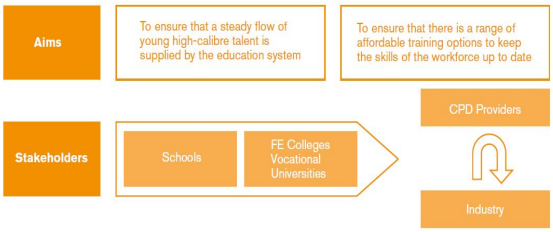
=> **Turning down £ millions in business each year**

Skills gaps and shortages: the stakes

- Video games and visual effects are bellweathers for wider high-tech, creative industries
- The Creative, Digital and IT industries contribute over £100 billion to UK GVA, and employ 2.5 million (source: CIHE, 2010)

=> The stakes are high!

Figure 1. The talent pipeline



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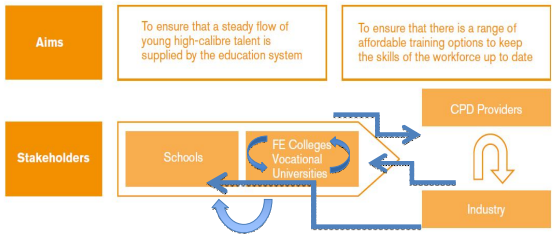

Universities and FE colleges

Too many specialist games courses producing too many graduates that are not fit for employment in the video games industry

- Around 1,500 graduated from over 140 games specialist university courses, 2008-2009
- Only 12% find job within six months of graduating
- At same time 58% video games employers struggle to fill positions for recruits straight from education

Why?
- Only around 25% of the courses teach maths
- Patchy technology teaching eg less than one-third C++ and less than 5% Flash
- 35% of video games workforce say course lacked industry-relevant skills
- 68% of graduates complain course was weak in teaching commercial skills and over 50% say it was weak in teaching project management skills

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=> Graduates from Skillset-accredited courses three times as likely to find jobs in industry

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Given poor specialist courses, employers also recruit a lot of general STEM graduates

⇒ 48% of video games workforce studied STEM degrees (including computer science)
⇒ 20% studied video games programming, games art or games design

Universities and FE colleges

Absent in the market for CPD?

•Next to no employers in games or visual effects look to universities and FE colleges to meet their training needs (2% in the case of visual effects and less than 4% in the case of video games)
• Yet, they commonly complain about high costs of training from private sources

Universities and FE colleges

- Develop kitemarking schemes, building on Skillset accreditation
- HEFCE treat industry-accredited specialist courses as Strategic and Vulnerable that in future still warrant some direct funding. Industry commits through industrial scholarships and CPD support for lecturers
- Give university applicants access to meaningful information about courses
- Workplace simulation in industry-accredited courses
- Leading universities and FE colleges sponsor high-tech creative industries University Technology College, with clear progression routes into HE
- Skillset Creative Media Academies and e-Skills UK's National Skills Academy for IT work with industry to develop specialist CPD training for video games and visual effects industries