

2030 Vision for the Cambridge sub-region

Topic summary: Education and Skills

This topic focused on education below degree level and on skills training. These were the areas which it had been agreed presented the greatest challenges in the sub-region.

Strengths and (mainly) weaknesses

- Maths teaching tends to focus on tests – but the steady shift towards jobs requiring problem-solving and management ability requires an education that encourages children to be taught to ask the right questions and understand how to use and apply knowledge.
- School-leavers' manual dexterity, beyond that for the keyboard or console, is poor and health and safety requirements unreasonably obstruct work experience. Schools are focused on attainment – too many students lack a passion for something.
- There are excellent secondary schools but there are also weak ones where teaching is strictly to the curriculum – rather than around it – and where too many students are not individually assessed, mixed ability is the norm and the range of subjects is not broad enough. Inspiration, praise, support and encouragement are in short supply.
- Employers are well represented on the governing bodies of some schools but schools and FE colleges are generally not well informed of employers' needs. Careers guidance at all levels is variable in quality and the Connexions service has been ineffectual.
- The UK has been in gradual economic decline for 150 years partly because of its lack of an effective system of technical education. As the Wolf report of March 2011 observes, many qualifications have no market value and most are too industry-specific. English and maths do not get enough attention and employers' views are excluded.
- The sub-region is highly successful in high-tech but the jobs in this sector are inaccessible to weaker students (and their families). There is a preponderance of small firms unable to afford significant training costs.

Improving conditions in the sub-region: 2030 vision

- Every student should be individually assessed in respect of needs and aspirations. If they develop their own particular interests they acquire portable skills more swiftly.
- Students should acquire mental and social skills such as problem solving and team working. The Maths Challenge and Duke of Edinburgh Awards should be exploited.
- Nationally, the syllabus should be broadened to encourage creativity and foster the ability to cope with rapid changes in technology. Early specialisation should be resisted.
- Students should be encouraged to develop communication skills and gain an insight into employment possibilities through undertaking voluntary work in the community. 6th form committees can play a significant role in bringing employers and students together.
- Inspirational teachers, preferably with employment experience outside the educational sector, are needed at all levels. Undergraduates should be encouraged to consider a teaching career. Well-qualified teachers should be attracted to the sub-region through a programme enabling them to engage with outstanding local businesses.
- Risk-taking – teaching around subjects, rather than strictly to the syllabus, should be encouraged. Nationally, the teaching profession needs less central micromanagement.
- Role models from the world of employment should be brought into schools and colleges to inspire and inform both students and teachers. Local frameworks should enable this.
- Existing structures (eg school governors) and practices facilitating a two-way flow of information and understanding between employers and schools and colleges should be exploited to the full and provide models for those areas where these are not yet developed.
- Collaborative education/employment initiatives, such as the successful Fenland Engineering Skills Centre at Chatteris and the Addenbrookes apprenticeship scheme and technical training school, are required to develop locally-needed skills.
- From its internationally-rated older University to its academies and village colleges, the sub-region has an impressive education infrastructure. The challenge is to build on this, to strengthen the engagement between the worlds of education and employment and to ensure that every student, at every stage, is fully motivated and informed and prepared for what will almost certainly be a multi-faceted career.