

Education and skills

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Conclusions from 2030 Vision

- Despite some high-flying institutions, the region's schools are, by national standards, under-performing.
- Good practice must be spread to develop intellectual curiosity, the capacity to learn, be socially adaptable and able to work collaboratively.
- Greater value must be set on non-academic skills.
- Links need to be established with the world of work, from primary level onwards.

Children need to be equipped to get jobs, and the skills shortage urgently needs addressing

Big problems for Cambridge

The supply and retention of teachers in schools is a central concern for the city and the region. Compared to the national average, secondary school teachers in Cambridgeshire are more likely to:

- earn a salary within lower pay ranges
- work part-time
- work under fixed-term or temporary contracts
- face high housing costs

In 2014 there were 139 STEM teachers retiring in Cambridgeshire compared to 81 new STEM teacher entries

(Rand Europe)

- Over 46% of the Cambridge workforce have a higher education qualification, more than twice the national average of 26%.
- There is global competition for highly-qualified staff. Cambridge must be kept attractive if we are to recruit and retain them.
- As AI progressively takes over, there will be a continual need for re-training

“Nobody in schools knows anything about the world of work”

Extreme shortage of people with technical skills:

- work sophisticated farm machinery

- double the expansion of ARM and our biotech campuses

- drive HGVs

- construction

Is it good that this year a record number of students are going to university?

Extra-curricular activities are important

- Need something to talk about at job interviews
- Drama clubs overcome shyness

Some good initiatives

Cambridge Launchpad

- Initiated by the Marshall Group
- helping on a local level to address the woeful lack nationally of young people choosing to study STEM
- works through local schools, with young people between the ages of 8 and 18, as well as their families and teachers
- talks in school from LaunchPad ambassadors, visits to Marshall and a series of activities/competitions aimed at piquing some interest in engineering
- eg: teams of eleven-year-olds making weight bearing bridges out of balsa wood and glue which had to span a metre-wide gorge

University Technical College

- UTCs are technical schools for 14-19 year olds which offer students more than the traditional GCSE and A Level curriculum
- backed by employers and a local university who work with staff to develop a curriculum that gives students first-hand experience of what life is like after school
- superbly equipped
- start at 8:30am and end at 5:00pm – like at work, do “homework” there
- 9-week projects ending with reports and presentations, eg checking the water in Hobson’s Brook with help from Anglian Water and Environment Agency
- BUT: recruitment problems

<http://www.formthefuture.org.uk/>

Open students' eyes to a wide range of possibilities in our region to challenge them to think broadly and divergently about their future career options and pathways.

Bring schools and businesses together so students can learn about opportunities in our region and develop the skills to be successful

Work with all ages from primary school through sixth-forms and FE

Challenges for education

- Growth of local population puts significant stress on schools
- New tech continually demands new skills
- Need to expose young people more to jobs that are interesting
- And to keep older people an effective part of the workforce
- Prime need is to teach people:
 - to think
 - that they can do anything if only they try
- A culture has grown up that one cannot do something until one has been trained to do it – does one really need training in Microsoft word?

Where to find more skilled people?

- Encourage girls to consider sciences, technology, engineering and maths as a careers option
- Resolve the problems with university technical colleges
 - ideal training
 - but big recruitment problems
 - age 14 start
 - previous schools reluctant to advise transfer
- Make better use of older workers – if everybody worked 1 year longer the GDP would increase by 1%
(10% of the workforce is over 65, doubled in 20 years
Daily Telegraph)

Discussion to be led by Mal Schofield:

- **Where do you disagree with what I have said?**
- **What have I omitted that is important?**
- **What should the local authorities and other local bodies do now to prepare for 2050?**