

## An introduction to Further Education

(for pupils)

One of the key decisions for you at 16 will be whether to stay at school or college full or parttime or to pursue a work-based learning route such as an apprenticeship or a non-apprentice job with training. If you are staying in school or college, then you will need to think carefully about whether to study at a Further Education (FE) college or an (FE) sixth form college or to stay in your school's sixth form if it has one. You can also take up an apprenticeship or attend an FE college at age 17, 18 or later.

If you are thinking of studying subjects that you have studied at school, as a general rule, it is best to study subjects that you are good at – and enjoy. So far so obvious. When considering careers in science, engineering, design & technology, ICT and maths (STEM), entry requirements can be fairly specific, so it is important to check the routes you are considering before deciding on your courses.

The great thing about the STEM subjects is that they can be used in so many ways to enter a very wide range of jobs. As you will see if you look at the case studies, all the learning routes open to you can lead to higher education – even if you don't decide you'd like to do that until much later. Some STEM courses, such as engineering, are vocational, that is they are about a particular career.

## Vocational and A level courses at FE

FE colleges offer vocational courses such as BTEC First or BTEC National Diplomas, Higher National Certificate (HNC), Higher National Diploma (HND) or a Foundation Degree. The last three are Higher Level courses and may also be offered at universities and can be part-time (whilst you are working) or full-time. You can do AS and A level subjects, or equivalents, at FE too – for example, about a quarter of science A levels are taken in FE/Sixth Form Colleges.

In England, new (14-19) Diplomas have been introduced. These may be school or college based, are full-time and offer a route that is more vocational than A levels but less so than apprenticeships. They include work experience and will help you understand more about an area of work you may be interested in as well as study for GCSEs and Functional Skills – or additional subject areas post-16. Fourteen Diplomas at three levels are available at selected schools and colleges. See <a href="http://yp.direct.gov.uk/diplomas/">http://yp.direct.gov.uk/diplomas/</a> to get the latest information.

It is important to find out how FE colleges and sixth forms differ as places to study. Some students feel that FE colleges have a greater difference from school than sixth forms, but it is a personal decision. Watch our video case studies to hear what those students think and talk to your Connexions personal adviser or careers adviser if you are in doubt as to the best direction to take.

In Northern Ireland, Scotland and Wales there have been recent changes to further education, but the courses available remain broadly the same.

Your next step towards a further education course will be to find out about the courses available. Good starting points are:

England: Your local area prospectus, go to: http://local.direct.gov.uk/LDGRedirect/index.jsp?LGSL=1145&LGIL=8

Northern Ireland: A home page which will takes you to FE college sites is: http://www.delni.gov.uk/index/further-and-higher-education/further-education/fecolleges.htm

In Scotland, a good place to start is at: <u>http://www.careers-</u> scotland.org.uk/Education/FurtherEducation/FurtherEducation.asp

Wales: Go to: https://www.careerswales.com/youngpeople/choices17/16to19\_fe.asp

## For more information on qualifications and apprenticeships see:

http://www.futuremorph.org/14-16/next\_steps.cfm



## **UK Skills Needs – Technicians**

Previously much of the discussion about STEM skills has focussed on the need to produce more science and engineering graduates. However, a number of influential organisations including the CBI (Confederation of Business and Industry) have pointed to a worrying shortage of technicians.

In the 2010 National Skills Audit, the UK Commission for Employment and Skills identified a demand for:

associate professional and technical roles in a broad range of sectors, particularly manufacturing, process sectors, including oil, gas, electricity, chemicals, life sciences and pharmaceuticals, automotive, engineering, and broadcasting.

They are likely to be required in large numbers, will require breadth as well as depth of knowledge including generic product lifecycles and manufacturing techniques, and are essential to survival if competitive strategies of moving into higher value added markets are pursued. In particular, one of the most striking themes to emerge from the Audit is the growing importance of technicians, especially in specialist STEM areas – workers with the ability to apply an in-depth understanding of a particular field in a practical setting. Demand is rising for technicians across a range of sectors driven by:

growing technological complexity – driving up skill levels across the production sectors;

the growing attention given to higher value added product market strategies – accentuating the need for higher and intermediate vocational and technical skills;

changing skill mix in some professions, for example in the public and professional services.

In the education context we tend to think of technicians as being the enabler for practical work in schools and colleges. But as the UKCES report identifies technicians have a vital role to play in the UK economy, using their knowledge of science, mathematics and IT to set up, operate, and maintain laboratory instruments, monitor experiments, solve problems and help invent and improve products and processes.

A recent Engineering UK survey found that "*The technician role was most commonly viewed* as a helpful, supportive, practical function" however it also found that "*There was widespread* lack of knowledge about technicians, especially among younger people and females".

We hope that these resources will help you to help your students gain a better understanding of some of the routes to becoming a technician and the role that they play.