

Goole College

Enhancing the employability of vocational learners with technology (February 2017)

Summary

Goole College, part of the Hull College Group, has found technology-enhanced learning can prepare learners effectively for the workplace. Software applications such as virtual welding and apps for the mobile phone have given learners on levels 1-3 vocational courses the chance to progress faster in their studies, while the college's employability passport scheme enables these future employees to be one step ahead in terms of work readiness.

The college's **employability skills passport scheme** is based on the seven Confederation of British Industry (CBI) skills. These skills and competencies that support successful employment include self-management, team working, communication and business awareness. In 2016, the Group's employability passport became the first scheme of its kind to be validated by the Humber Local Enterprise Partnership.

Combined with the benefits of digital learning and teaching at the college, the employability skills passport is improving the life chances of local learners.

Organisation

Goole College is part of the large Hull College Group, which in total offers 1000 courses to over 18,000 students each year. All colleges and training facilities in the Group place a high priority on preparing learners for the world of work; as a result, developing employability skills runs hand in hand with studying for a qualification for Goole College's 300 learners. High-quality facilities and routine use of technology in learning are further features of NVQ and BTEC courses offered at the college. These range from construction and engineering to health and social care and hairdressing.

The college footprint is widening. More students from different areas are travelling to study at the college which is situated within the M62 corridor and linked to a new bypass in a prominent development and industrial site. Goole, as the furthest inland port in the UK, is dedicated to industrial and commercial growth, bringing both trade and employment into this fast-growing commercial area. As a consequence, meeting the local enterprise partnership (LEP) priorities for the area is of strategic importance for the college. Just as vital is developing the skills fundamental to the progression and career fulfilment of local people.

The challenge

The expectations of the 'Millennial' generation of learners – the first to grow up with mobile phones and, in many cases, a computer in the home – are of routinely embedded use of technology in learning, equalling their experience of technology in their everyday lives.

As well as meeting learners' expectations for high-quality digital learning, colleges operating in a difficult financial climate have to ensure that they meet the needs of local employers, and recruit and retain learners successfully through to the completion of their courses. These challenges for course and curriculum leaders apply particularly in vocational areas, such as engineering, where there is a shortage of skilled workers.

One reason for the shortfall is that vocational learning can be both costly for providers and laborious for learners. On courses such as NVQs and BTECs in engineering, which have 50% practical assessments, Goole College learners previously had to spend many hours in the workshop acquiring the skills to manipulate welding tools at the right angle and speed. Learning to weld using real metal components was also wasteful, and avoiding potential hazards more often than not slowed down the rate of progress and took away the pleasure of learning. In addition, learners often struggled with the theoretical components of their courses.

The solution

Use of innovative software and online games and activities delivered to learners' smartphones have helped to reduce these barriers, enabling learners to be better supported while they acquire levels of competence and skill acceptable to employers. From the provider's perspective, these learners are more likely to complete their courses if the learning process is enjoyable and risk-free, and if use of expensive consumables is reduced, more can be admitted on to courses.

For the last two years, the engineering department has enjoyed a successful partnership with **Weldability SIF** to provide virtual welding at Goole College. Using the simulation software, learners can work in safety and at their own pace on a computer screen before 'doing it for real' – the lifelike recreation of welding comes without any of the usual health and safety implications or budget constraints regarding consumables. Learners are 'immersed' in the experience of welding and can gradually feel their way into the right movements and positions as a built-in camera detects motion and relays this on to the screen with the correct hand positioning visible in green. They can even receive feedback on their welding skills via illustrated print outs.

The ability to practise in this way without the pressure of making damaging mistakes means faster progress, greater confidence and improved motivation. Learners in a group enjoy competing with one another to see who has obtained the best results on the print-outs.

"It shows you the different angles and settings required to achieve a good standard of welding."

Sheldon Smith, level 3 learner, Goole College

Because of its virtual nature, learners are able to start at a younger age. Goole's 14-16 College offers a programme of learning for school leavers who wish to choose a vocational pathway from 14+ while also taking GCSEs in core subjects such as English and maths. These young learners have the benefit of being taught by staff with industry experience and, if successful, can take advantage of the college's links with local industries to move more seamlessly into employment or higher levels of study in their chosen area. If they have selected engineering as their vocational pathway, learners on the 14-16 programme could be trained in the use of the Weldability SIF software while still working for qualifications at level 1 or 2, enabling them to progress faster once they join a level 3 course in engineering.

"The virtual welding software we use is an easy system to navigate through and it shows you exactly what you will have to do to carry out the tasks which make the welding easier in the workshop."

William Woods, level 2 learner, Goole College

Digital curriculum

Goole College, along with its partners in the Hull College Group, has taken up the FELTAG challenge of providing 10% of learning online. All engineering courses have resources on Moodle, including the course workbook, videos, technical drawings, **Kahoot** games and quizzes, which are used in a variety of ways in and out of the classroom.

More and more frequently, teachers are 'flipping the classroom' by setting challenges via email for learners to complete on their mobile phones before they come into class, for example, by using **Nearpod**, an app which enables teachers to assemble sequences of videos, presentations and multimedia resources to share with a class group. Learners interact with the resources and respond via any device (PC, Mac or mobile); the results can then be recorded and monitored on an individual or aggregate basis for progress monitoring.

"Learning this way is so much more interesting, but learners also expect it. We would be wasting our time if we didn't make use of the technology that's out there."

Michael Grundy, engineering programme leader, Goole College

Aurasma is another tool that teachers use at Goole College to create sequences of activity. In particular, staff have found this app valuable for promoting discussion in a fun and positive way when teaching British values.

In recent years, the college has focused considerable effort on developing the capabilities of teaching staff so that they can take advantage of the immediacy and interactivity of digital tools for learning. Ways of 'working smarter' are particularly valued. For example, 'five-minute fix' slots on the college intranet give staff the chance to share and demonstrate their discoveries. Being part of the large Hull College Group has been an advantage in this respect, as the range of potential 'discoveries' is greater. Courses also compete for gold, silver and bronze awards for their Moodle sites. Encouraging competition between departments in this way has proved more effective in promoting digital know-how and achievement than setting mandatory targets for online content.

Employability passport

In a similar way to their teachers, learners across the Hull College Group, including those at Goole College, are inspired to acquire and record the skills they need in employment by working for gold, silver or bronze-award **employability passports**. The passport scheme aligns with the CBI's key employability skills to ensure that learners are work-ready on completion of their courses. Under the scheme, all full-time 16-18-year-old learners, and some 19+ students, take part in activities that demonstrate a range of employability skills, working their way up levels in the manner of the Duke of Edinburgh's Award.

This approach to learner development draws on the rich and purposeful activity that occurs naturally in the college's study programme. Learners access their passports through the college's e-ILP software, Pro Monitor, regularly completing exercises which hone their skills in word processing and online research, including interpreting and synthesising the outcomes into PowerPoint presentation or posters. Topics to choose from range from mental health to researching the skills needed for local and nationally advertised jobs.

"Everything we do here is about employability."

Julie Duffy, head of curriculum, Goole College

Impact

- Learners make faster progress and have greater confidence in learning practical skills when using simulation software
- Learners using virtual welding are better prepared for employment in industries where 'virtual' may be part of the 'real' job – for example, marine engineers using robots controlled from a screen to repair ships and underwater structures
- Difficult terminology and theoretical content is easier to recall and understand when it is introduced first through virtual activities, online games or apps
- The Hull Group's employability passport was noted by Ofsted to be 'a highly effective way of helping learners track the skills they are achieving'

Key points

Julie Duffy's tips for technology-enhanced, employability-focused learning and teaching:

- Make opportunities for staff to share good practice and show one another tools and technologies they have found valuable. This way, good ideas can go viral
- Encourage innovation by giving internal awards to celebrate achievement rather than insisting on targets
- Foster an environment and a team culture in which it's safe to try new things
- Use competition to motivate staff and learners
- Look for small investments in technology that have a big impact, particularly when they enable learners to progress at their own pace or make learning fun
- Embrace learners' preferences for virtual and digital technologies. If used effectively, these can enable learners to progress more rapidly into employment or higher levels of study

More information

Contact: Julie Duffy, head of curriculum, Goole College

Email: Julie.Duffy@hull-college.ac.uk

Web: www.goole-college.ac.uk

Read more about Goole College's [employability and enterprise projects](#)

Watch Goole College's [video](#) on virtual welding