How the use of iPads in Motor Vehicle studies has transformed curriculum delivery

Summary

An LSIS project at Loughborough College allowed the purchase of 11 iPads to explore ways to enhance the learning experience of Level 3 Motor Vehicle Studies learners and develop their independent learning skills in a practical workshop environment.

Learners generated their assessment evidence much more easily, as they gathered it as they went along, and completed their qualification faster. This transformed curriculum delivery method has subsequently gained support from the programme area manager and others in the senior leadership to support further expansion of the use of mobile devices to support teaching and learning.

About Loughborough College

Loughborough College is a general further education college located in the Borough of Charnwood in Leicestershire. It shares a large educational campus with Loughborough University and the RNIB College Loughborough. It offers qualifications from pre-entry to Higher Education level.

Loughborough College has a long standing reputation for providing high quality education and training across Leicestershire. Established in 1909 the college is proud to have recently celebrated its centenary.

The challenge

Previously, curriculum delivery for Motor Vehicle studies had been fairly traditional with theory lessons and practical sessions in a workshop environment although there had been some use of technology to capture images/video.

Mark Hucker, a lecturer in the Motor Vehicle department, wanted to explore new ways to engage learners, develop their independent learning skills and improve the learner experience. To help instigate this Mark successfully applied to the LSIS Regional Responsive fund.
If Mark was going to make this work he knew that he needed a single device that would have access to a camera, note-taking tools and the opportunity for research.

He investigated different tablets and eventually settled on purchasing 11 iPads for the project so that learners could each have access to an iPad whilst on the College premises, for all sessions.

There was concern about possible damage to iPads in a workshop environment; however this was overcome by purchasing Griffin's Survivor Military-Duty Cases, designed to protect the iPad from extreme conditions such as dirt, wet, shock, vibration and a host of other environmental factors.

The activity

A key challenge was the lack of experience using Apple products for Mark and his students too. However he enlisted the help of Mel Toal, a learning technologist intern at the college to support both him and the students with the use of devices in the classroom. Mark had the vision of how he wanted the iPad to be used by learners in the classroom and Mel had the experience and IT skills to be able to make it happen.

A trial and error approach was adopted with learner feedback being used after each activity to shape what happened next. QR codes and QR code readers on the iPad were used to link learners to tasks on each vehicle with hyperlinks to support their research.

Learners would then use the camera and note-taking tools as well as carry out research, using the hyperlinks provided, to complete their tasks and
assessments. Often notes were recorded using the microphone in Evernote, rather than written.

**Evernote** is an app that proved vital to the learner experience, as it allowed them to continue working seamlessly as they transferred from a practical session in the workshop, to a theory lesson, on either a PC or a laptop in College and at home.

**Mahara** was used to post resources, tasks and assignments and to track learner progress. This was always available to learners via the iPads so they were in control of their learning.

**Educreations** was an app that was used to create notes.

**The outcomes**

Learners had more control over what they learned and how they learned both in and out of the classroom. They were more engaged with their learning and had access to working documents on Mahara which they could share with their tutor and each other, to learn from each other.

They also developed their independent learning skills and confidence with effective use of technology to manage their own learning.
The impact

Mark found that the learners generated their assessment evidence much more easily as they gathered it as they went along via images, video, notes from their own research. The use of images was particularly effective as a trigger to remind them of what they had done. This made it much easier to complete assignments.

Retention and attendance have been maintained and learners continued to work on their assessments from home via Evernote and transfer work to their e-portfolios, completing assignments in a more timely manner.

During a recent inspection, although Mark was not inspected, he encouraged and supported another member of staff to let the learners use iPads in the workshop for their project and this resulted in an improved inspection grade for this member of staff.

The lessons learned

Technology can be a barrier, both for staff and learners. As neither Mark nor the students had prior experience of using the iPads, Mel Toal was essential to the success of the project, in terms of advice, guidance, support and troubleshooting.

Students did not like extensive note taking on the ipads and preferred to take brief notes then complete tasks on a PC or laptop via a keyboard.

The project has demonstrated an effective way of engaging learners and an alternative curriculum delivery model. It has enhanced the learner experience and the programme manager and senior managers have been impressed by the impact on learning and the learners.

They are keen to support further projects and explore the use of technology to enhance teaching and learning. There are plans to cascade and disseminate the project both within the Motor Vehicle department and across the College, as this is a transferable curriculum delivery model.

Useful links

Insight 2013 presentation – including webinar recording

NLN materials to support underpinning knowledge for Physics and Mathematics

Evernote

Mahara

Educreations
Griffin Survivor protective iPad case

Jisc Regional Support Centre website

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