

This good practice example has been withdrawn as it is older than 3 years and may no longer reflect current policy.

Augmented reality: Shrewsbury College

URN: 130798

Region: West Midlands

Remit: Further education and skills

Provider background

[Shrewsbury College of Arts and Technology](#) (the college) is a medium-sized general further education college that serves Shrewsbury, much of north Shropshire, parts of the south of the county and Telford. The college has over 10,000 learners, a significant proportion of who attend the college full-time and are aged between 16 and 20. Most study vocational courses. The largest subject areas are the construction, engineering, care and creative industries.

Brief description

The use of emerging technologies, particularly augmented reality (AR), is well established in the college. AR is the process of superimposing computer-generated content over a live view of the world. Learners use a range of digital devices, including mobile telephones, to:

- scan images that enable them to view practical demonstrations performed by their tutors
- receive visual feedback from tutors
- reinforce their learning.

This good practice example shows how learners are encouraged to use AR to learn independently and at their own pace, inside and outside the classroom and workshop, preparing them well for progression into higher education and employment. They are able to consolidate their previous learning and work on their areas for improvement from teachers' feedback and their own self-evaluation. As a

result, learning responds to learners' individual needs more fully, and learners make more rapid progress.

The good practice in detail

At its inspection in June 2014, the overall effectiveness of the college was judged to be good. Inspectors reported that:

'students benefit from the good and often innovative development and use of information and learning technology (ILT) in lessons and around the college more generally; this augments both their learning and their communications with teachers about their work. More recently, college staff have made very good progress in pioneering the use of an innovative application of "augmented reality" software as well as social media, as tools for the promotion and extension of learning outside of the classroom.'

Integrating technology into everyday learning

Managers have carefully planned and implemented a strategy to support independent learning at the college. Staff encourage learners to bring their own electronic devices to college or provide learners with devices from the college. Learners are given ample, well-designed study space. Learners receive a flexible learning experience. As a result, they are highly motivated to learn, develop life-long learning skills, make good progress on their course and achieve their qualifications. This involves teachers using a wide range of learning and assessment strategies and the innovative use of technology to enhance the learning that takes place in classrooms, at home and in the study spaces at college.

Using AR to enhance lessons

Teachers integrate the use of ILT, and particularly AR, in teaching, learning and assessment in many ways.

Online learning

Teachers encourage the use of online learning in lessons and workshops, in all social areas of the college and at home. Learners say that they find online learning motivating and that it helps them to make rapid progress. They appreciate the opportunity to access subject-related video footage from the internet.

Storyboards and posters

Teachers produce storyboards that provide learners with additional information regarding the topics and units in their course. The posters are displayed inside and outside classrooms, in the learning centre and in study areas. Learners frequently scan the range of images available on the posters, and use the information to support and enhance their learning. Scanning gives them access to a wide range of

materials, including video footage of practical tasks, teacher-led presentations and practical demonstrations by teachers and assessors through the AR software that they download onto their phone. Learners use the information to continually recap, support and enhance their learning in their own time.

Learners say that they find this technology easy to use and value the opportunity to review previously recorded lessons and practical demonstrations, which enables them to consolidate and extend their learning in their own time.



Learners studying bricklaying and painting and decorating follow tutors' pre-recorded visual instructions or demonstrations when, for example, building a wall or painting a door. They also use these pre-recorded instructions to self-assess and critically analyse their practical work against the high standards set by their teachers. Learners therefore quickly improve the quality of their practical work and develop good employability skills.



One of the AR posters displayed

Additional learning

AR provides the opportunity for learners to attend additional workshops outside timetabled lessons and work independently using the teachers' recorded instructions and demonstrations. As a result, many learners make more rapid progress and complete their course ahead of the planned completion date.

Teachers plan, develop and use a wide range of online activities in lessons based on each learner's prior attainment and progress. Learners work independently at their own pace and in a sequence that helps to improve and consolidate their learning. This enables teachers to have surplus time for one-to-one support and to give feedback on progress in lessons.

Learners studying level 3 coaching and mentoring use AR to support peer learning. They interview other learners on their programme, asking questions about previous coaching sessions and record the responses, which they use to reflect on their own practice and inform future practices.

Using AR to develop interactive resources

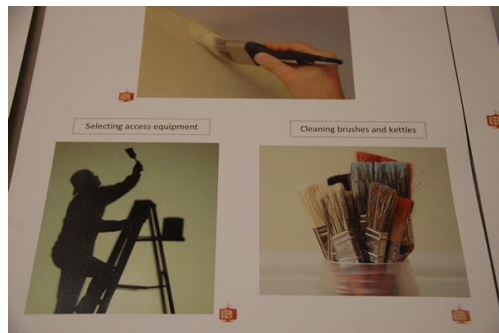
Teachers use AR to provide learners studying painting and decorating with an interactive record of the feedback on their written assignments and practical work. Teachers scan the feedback into a feedback template that learners can listen to and watch at any time. Learners use their mobile devices to scan an image on the posters displayed, which gives them access to an online record of their work and to the verbal and visual feedback provided by teachers. This feedback helps learners plot their progress.

Experience augmented reality by following the steps below:

1. Download the free SC TV App for your mobile device by searching for 'Shrewsbury College' in the App store or Google Play



2. Point your device at an image that has the SC TV logo to trigger the video content or media.



3. Content will automatically load and be viewable

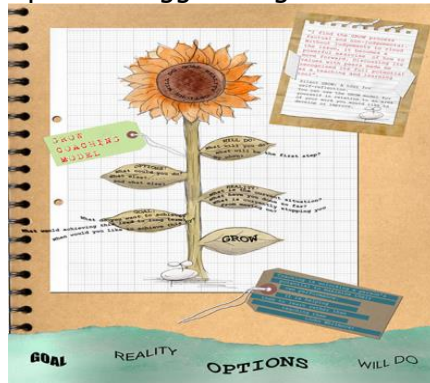
Learners studying A-level art use AR creatively to promote their artwork to potential buyers and employers. They record themselves, explaining the concepts and practices used, when creating their artwork. This enables them to communicate virtually and directly with the person viewing the artwork when they scan the AR image. Good practice of this nature helps develop employability and enterprise skills.

Trainee teachers on a Post-Graduate Certificate in Education course are encouraged to produce high-quality AR classroom resources as part of their professional development. In doing so, they hone their ILT skills and produce increasingly creative and innovative lessons.

To create an AR resource, follow these four simple steps:

Content can be added to make 'auras' (a term for an AR experience), the AR actions that appear when you point your phone or mobile device at an image.

1. Upload a trigger image.



2. Upload an overlay image or video.



3. Create a channel for your auras to go in.
4. Add the finished aura to your channel.

Performing arts learners record themselves undertaking a self-reflective scaling exercise of their performances. They use the recordings to set specific targets and to measure their progress and against their career ambitions.

Teachers record one-to-one tutorials with their learners. They provide learners with detailed, high quality feedback on their progress and achievement. Learners use this feedback to inform their target-setting and to build on their skills and knowledge. Learners can choose to share the recorded tutorial feedback with parents, carers and employers.

AR is incorporated into much of the college's work, including pre-course advice and guidance for learners, parents and carers; and academic and pastoral support. It also prepares learners for higher education and work. Additionally, AR resources effectively provide learners with information, advice and guidance on topics such as equality, diversity, safeguarding, finance, health and well-being.

The impact of the effective use of emerging technologies

College managers and staff have created a learning culture that fosters independence and contributes well to preparing learners to progress to higher education or employment and for life-long learning.

The strong focus on developing teachers' ICT skills and their use of emerging technologies has helped increase the development of learners' ICT and independent learning skills.

The high quality feedback learners receive from tutors through a range of emerging technologies has improved learners' progress and increased the number passing their courses.