

Digital Skills Strategy

2018-2020



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The image shows the Ayrshire College logo on a glass building facade. The logo consists of the words "Ayrshire" and "College" stacked vertically in a bold, sans-serif font. To the right of the text is a stylized arrow pointing to the right. The background is a warm, orange-to-purple gradient.

**Ayrshire
College**

Our Ambition

Our ambition is to empower our learners, staff and communities to thrive and prosper in the digital age by equipping them with the digital values, skills and knowledge necessary to fulfil their potential.

By doing so, we will help raise aspirations, inspire achievement and increase opportunities.

by **2020**
nearly all job
roles will require
digital skills

72% of 12-15
year olds
have a social
media profile



Digital Life Wheel

At the heart of our Digital Skills Strategy is the Digital Life Wheel. This wheel identifies the components essential in the creation of confident, responsible Digital Citizens who will live, learn and work in the digital age.



Digital Life Wheel



Roll over the
wheel to reveal
the key components



Digital Citizenship Model

Our Digital Citizenship model identifies three milestones that determine the level of digital capability of an individual.



Roll over to reveal more about each milestone

.....
MILESTONE

3

.....
MILESTONE

2

.....
MILESTONE

1



Strategy

Our Digital Skills Strategy has five key Strategic Aims



Roll over to
reveal more



By 2020, as a result of implementing our Digital Skills Strategy:

Our learners, regardless of their chosen career pathway, will all be confident Digital Citizens, inspired to develop their own digital skills

Our learners will have opportunities across the curriculum areas to develop higher level digital skills progressing to Digital Users or Digital Creators

Our staff will be highly skilled Digital Users embracing new technologies in the delivery of our learner experience

Our communities, will have access to digital skills training through innovative partnership delivery models thereby addressing digital exclusion

Ayrshire College, steered by the delivery and development of the Digital Life Wheel, will have the agility to respond to emerging digital skills gaps



CODERDOJO
AYRSHIRE



Case Study

Young People Changing our Digital World

CoderDojo Ayrshire was launched at Ayrshire College in November 2014, and has been gaining momentum ever since, with the College running over 80 coding sessions to date.



The hugely successful club has introduced hundreds of young people to computer science and technology in a fun, thought-provoking and inspiring way, and encourage young people to consider

studying computing at school, college or university. They raise awareness of the rewarding opportunities available in the rapidly expanding ICT and digital technologies sector.



There are many benefits to the club. In collaboration with external partner, CoderDojo Scotland at the Glasgow Science Centre, young people gain first hand exposure to what a career in ICT offers, while developing the skills and confidence they need to become a great programmer in a safe, fun and sociable environment.

As well as staff mentors at the College, the project involves ICT students acting as mentors. Charlotte Johnson age 13, from Irvine, is a regular at the Ayrshire CoderDojo. She recently attended the CoderDojo EU Dojo in the

European Parliament in Brussels, and was the first young Scottish coder to attend. She got the opportunity to showcase her coding and technology skills that she has gained at the Ayrshire club.

She credits Ayrshire CoderDojo as her inspiration and said "the club is always really interesting and up-to-date. The conference was good as I got to meet other young coders from different countries. I even had two MEPs ask me questions about coding!"

Business and Computing Curriculum Manager, Loraine Johnston said "The driving

force behind CoderDojo Ayrshire are the volunteers and mentors from technology and education backgrounds who wish to inspire the next generation of digital content makers."





“ The driving force behind CoderDojo Ayrshire are the volunteers and mentors from technology and education backgrounds who wish to inspire the next generation of digital content makers. ”

Loraine Johnston
Business and Computing
Curriculum Manager



Ayrshire Bytes

Ayrshire Bytes is our annual campaign that aims to enable people, businesses and communities to have the skills to take advantage of the potential of digital technologies.



[Click here to view our conference video](#)

Our ambition for Ayrshire is to enable its people, businesses and communities to have the skills to take advantage of the potential of digital technologies.

Last year, 150 people from the private, public and education sectors took part in our Ayrshire Bytes: Data Changes Everything conference at our Kilmarnock Campus. Leading figures from a range of industry sectors shared their views on how data and digital are changing everything we do.

“ Ayrshire Bytes began as an official fringe event of DataFest17, a week-long festival of data innovation which showcased Scotland’s leading role in data on the international stage. ”

Our Ayrshire Bytes podcast brings together an eclectic mix of people to share their experiences and advice on all things digital...



Case Study





Crash Test Dummies

This project will ultimately improve the first aid skills of students, training them in a virtual environment, helping to save lives.

Ayrshire College designed this innovative project in partnership with the Scottish Fire and Rescue Service in South Ayrshire to raise awareness of road safety.

The Health and Social Care department at Ayrshire College had a critical role in helping to achieve Scotland's Road Safety Framework 2020. The aim is to have a 'steady reduction in the numbers of those killed and those seriously injured, with the vision of a future where no-one is killed on Scotland's roads, and the injury rate is much reduced.'

The department introduced the very successful 'Crash Test





Dummies' initiative in response to this vision. As part of the Care students' First Aid unit, they worked with firefighters from Ayr Community Fire Station, helping them to prepare for real-life scenarios assisting with road traffic collisions and the aftermath.

The initiative also involved other departments within the College with students from the drama department and make-up artistry courses participating in the scenario planning, preparation and execution stages.

Footage of the simulated collision was recorded via the College's Learning Technology department using a state of the art 360 degree camera. This allowed students to watch the incident using Virtual Reality (VR) goggles and assess what actions should be taken in relation to First Aid and the treatment of injuries of the road traffic collision scenario.

The Crash Test Dummies project will be rolled out further in 2018, following the success of this pilot project. This will ensure that partners can develop and maximise learning opportunities for both Ayrshire College students and Strathclyde Fire and Rescue staff.

We invested in virtual desktop infrastructure and IGEL technology to support the move to our new campus in Kilmarnock.

“ Students love the new system. Now everything is a lot quicker and they get the same experience irrespective of the device. ”

David Keenan
ICT Team Leader,
Ayrshire College’



Case Study





Citrix

The Citrix platform creates an environment where students can log in from wherever they are to access their own personal desktop profile and applications.



[Click here to view our IGEL story and the impact this new technology has had on the College.](#)

Ayrshire College has purchased IGEL multimedia UD3 thin client terminals for 12 classrooms and Universal Desktop Converter software to run on 400 new laptops. By converting laptops into thin clients, applications start up quicker and battery life has been boosted such that a full teaching day can be delivered from a single charge.



The technology is perfect in a classroom context as they are compact, quiet, produce minimal heat and consume less power which helps with the College's green initiatives.

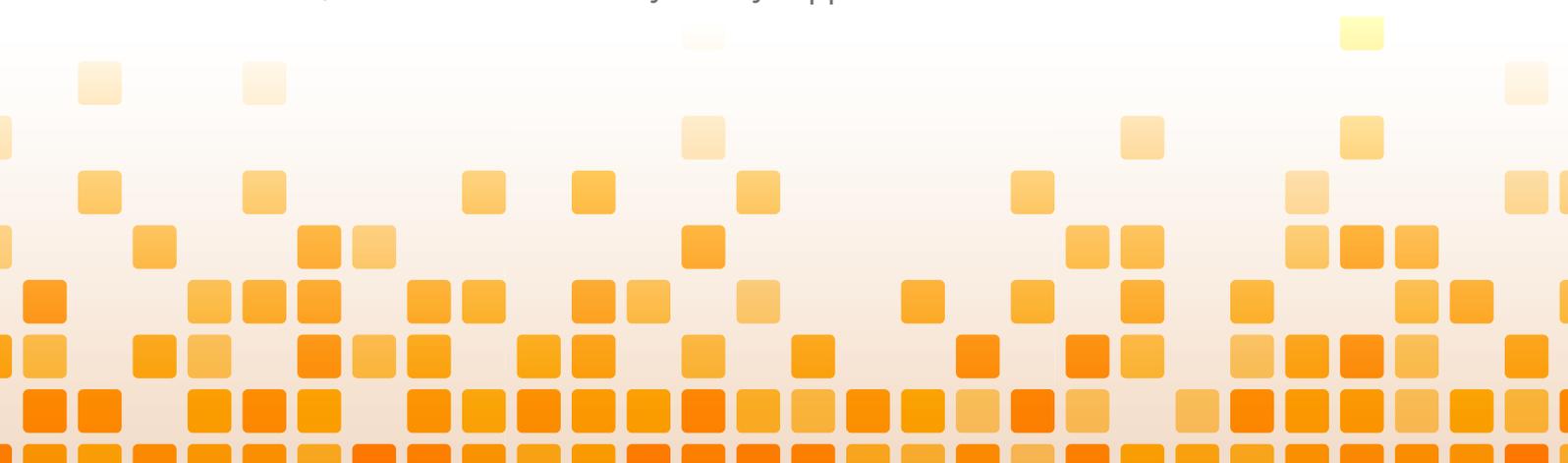
When a student logs into their virtual desktop, they get access to a web browser, Microsoft

Office, Adobe PDF packages, applications specific to their course and an online learning tool from Moodle, as well as unlimited storage space.

The infrastructure provides a platform for the future, is easy to set up, configures remotely and day-to-day support

requests can be responded to quickly.

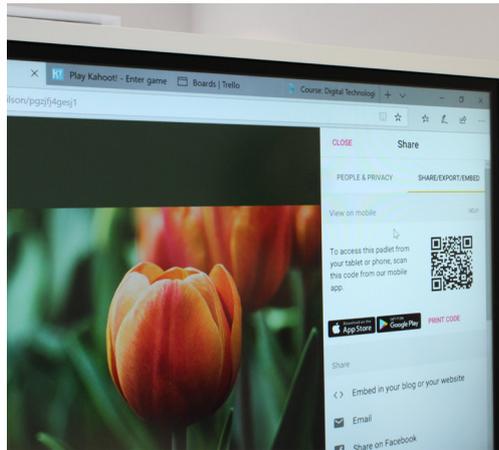
The College has been recognised nationally by being shortlisted in the Best Not for Profit Sector IT Project UK IT Awards 2017 for its delivery of the technology.





Innovation Sessions

As part of our work to promote the Flexible Workforce Development Fund, a number of organisations have visited the College to view the learning technology that the College is using to enhance teaching and learning.



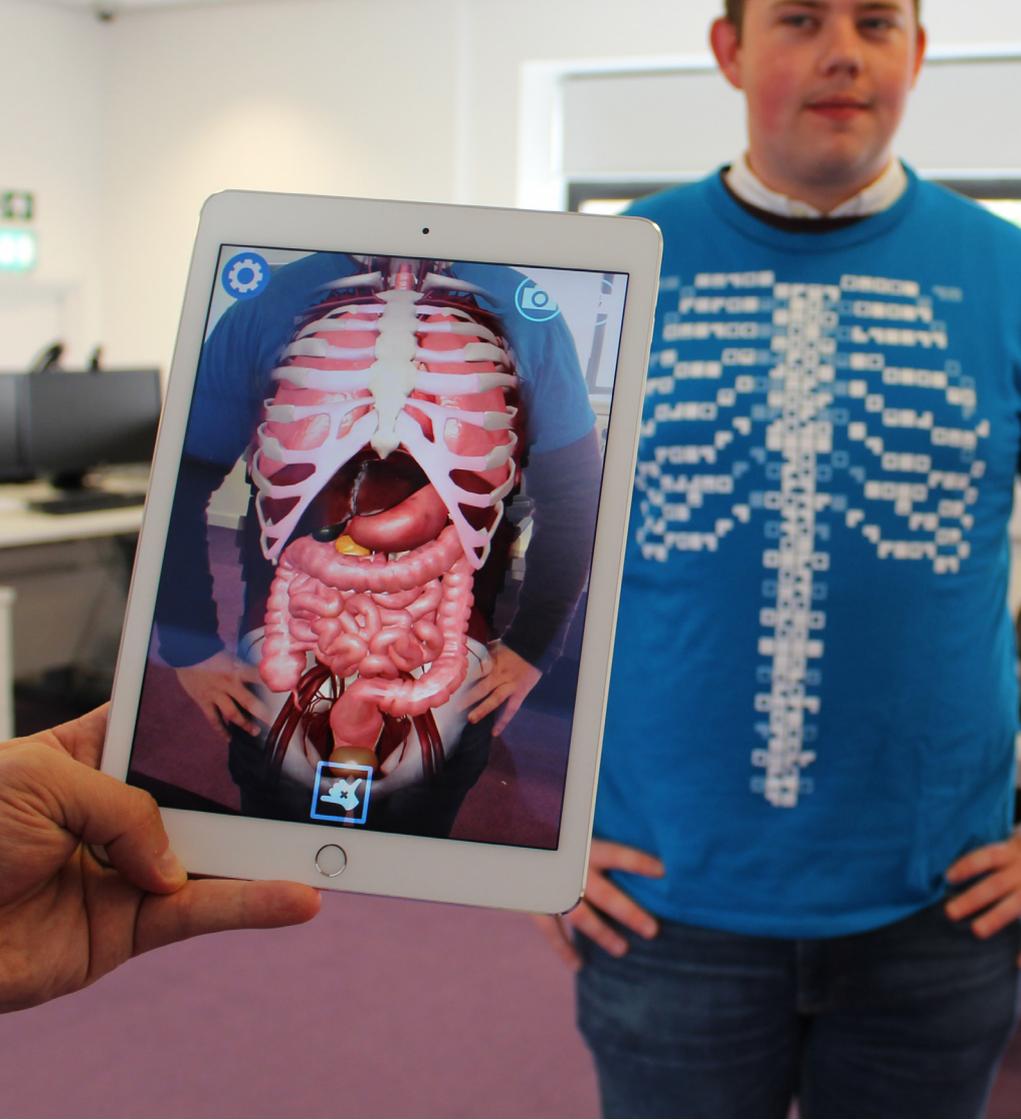
The College's Learning Technology team has worked alongside Business Solutions to demonstrate technology such as Augmented Reality (AR), Virtual Reality (VR), 360 photography equipment,

digital communication tools, collaboration software and holographic technology to organisations including Glaxo-SmithKline, Merck, South Ayrshire Council, Hansel Alliance and Prestwick Airport.

During the sessions the College staff try to encourage local employers to consider how they could use this technology to enhance their own business processes, products, internal training or customer service.

These sessions have been very well received; most participating organisations are inspired to review their current use of technology and implement some of the ideas they have seen demonstrated during the sessions. Moreover, the demonstrations are greatly enhancing the College's reputation as an innovative training partner.





“ We believe that we should assess technologies for the benefit of everyone in a learning environment and work towards reaping these benefits as soon as we can. ”

Russell Wilson
Learning Technologist,
Ayrshire College



Assistive Learning Technologies

Ayrshire College is committed to supporting all students to have a positive learning experience. We aim to empower students and staff to be independent in their studies or role and deliver an accessible environment supporting diversity and equality.

The Inclusive Learning Team at Ayrshire College offers a wide range of assistive technologies to support students in their learning.

These include:

- Read and Write Gold which offers reading and writing support, such as text to speech and functions that assist with studying, such as referencing aids, spelling, dictionary etc.
- Mind mapping software – Mind Manager
- Every PC is installed with My Study Bar which offers reading and writing support.





Students studying at HN level can apply for Disabled Student Allowance (DSA), where they can apply for funding for equipment and software to support their learning.

Inclusive Learning also have various other software packages available for different needs:

- JAWS screen reading software
- ZoomText Magnifier Reader which enhances screen readability
- Dragon Naturally Speaking which is a voice recognition software

In some cases it may be appropriate for a student to use an audio recording device



such as a DVR in class. This allows the student who finds it difficult to take notes in class, the opportunity to record key points and listen again to information at a later stage.

The College also has a stock of equipment which students can

borrow on a short term basis. This includes:

- Laptops
- Digital voice recorders
- Livescribe pens
- AlphaSmart word processors
- Electronic spellcheckers

ACTV is a non-profit network, and original content creator, staffed and run entirely by Ayrshire College Media students.

“ Thank you to everyone on the @ACTVSPACE team in developing our new career videos. The students and staff were excellent throughout the project, and we are delighted with the finished products. ”

Ashleigh Construction



Case Study





ACTV

There has been an undeniable shift with regards to media delivery and consumption in the last 10 years with a move away from traditional formats, such as TV, film and radio, towards new media like YouTube, streaming, and podcasting.

Ayrshire College's media department embraced this shift with the launch of 'ACTV'.



[Click here to view ACTV's HND Fashion and Design promo video](#)

This project utilises a number of Web 2.0 sites such as YouTube, Twitter, Instagram, and Squarespace to produce and promote the creative work of media students and the creative department, while also engaging students and teaching them applicable video skills.



The original goal was to create a shared video portfolio of student short films that had been produced for assessment purposes. As understanding of the platform grew, guided by the students, the project began to evolve.

Content was created specifically for ACTV. The response to the first video, 'Students Talk: Star Wars', which was shot and edited in an afternoon, was great. In two days it had received more views than any other video we had uploaded. This told us something that we didn't expect, that people

outside our media department bubble had been watching.

Peter McClurg, Lecturer in Visual Communication, ran a competition with HND Visual Communication students to design an ACTV logo. This was followed by a Twitter and Instagram page to guide traffic to the YouTube page.

Content was created specifically to appeal to an Ayrshire College audience – In this case we targeted staff members. We then designed the website www.ACTV.Space using Squarespace, a website builder

that utilises templates to make website design simple. The website functions as a showcase for our best work, with the goal being to attract external corporate clients.

ACTV has been a successful project for the department. Both staff and students are deeply invested in it.

[Click here to visit the ACTV website](#)



Ayrshire College Helps to Design New Construction App

The ambitious energy and climate targets for 2020 demand an increasing effort from the building industry to reduce greenhouse gas emissions, increase the share of renewable energies and improve the energy efficiency of buildings using innovative technologies.



A construction project, known as the ELITE Erasmus (Energy Links and Integration Tools for Efficiency) and Building Information Model (BIM) project has been running over the past year with partners from France,

Italy, Portugal, Scotland and Estonia taking part. The Erasmus plus project aims to raise awareness in Building Information Model (BIM) and Energy Efficiency for students and industry. Its main aim is to



upskill the construction workforce and train students in the field of energy efficiency and raise awareness of the BIM approach.

Part of the project involved each partner designing and creating an Augmented Reality project which is to be made available in the education sector.

Barry Kerr, a Construction Technology Lecturer at Ayrshire College, was integral to the design of an innovative construction app as part of the project.

The newly developed Construction Augmented Reality App was launched in France

in May 2018 as part of the Erasmus Project. Ayrshire College Construction students now use the app during their course.

The College also developed an ELITE Energy Efficiency education unit, which will be made available on the ELITE portal.

The project will promote 'energy literacy', including integrated design, management practices and increased digital skills which are necessary in the increasingly digital construction sector.





“ I am delighted to have been involved in piloting this Augmented Reality project with Ayrshire College students prior to the software being released to Scotland’s Colleges. Our students were very impressed with this which will certainly enhance the curriculum.”

Barry Kerr
Construction Technology Lecturer
Ayrshire College



SmartSTEMS

Ayrshire College works in partnership with SmartSTEMS, a charity established to encourage more girls into science, technology, engineering and mathematics.



Working in partnership, SmartSTEMS are invited to several events during the College year, where female pupils get the opportunity to see and experience technology in a whole new light, learning from leading companies about the exciting and diverse opportunities that STEM offers, as well as the many high value jobs which they can aspire to.

Pupils from primary 7 and secondary school level hear from inspirational speakers, take part in interactive workshops run by companies, learn to code at CoderDojo Ayrshire and explore interactive exhibits at event such as





#ThisAyrshireGirlCan Technology Workout and Girls into STEM events.

The events are an integral part of the College's wider #ThisAyrshireGirlCan campaign.

Our #ThisAyrshireGirlCan campaign helps girls and women to learn about and try out exciting learning and career opportunities in areas like digital technologies, science and engineering.

Working with organisations like SmartSTEMs enables us to tap into a wide range of expertise in these areas.

#THISAYRSHIREGIRLCAN

[Click here to view our #thisayrshiregirlcan video](#)





Case Study

“ At the moment only one in four people working in core STEM industries in Scotland is a woman but we are committed to changing that through partnerships and campaigns like SmartSTEMs and This Ayrshire Girl Can, as well as our own Pretty Curious programme. We hope events like those at Ayrshire College will inspire more girls to consider pursuing a career in science, technology, engineering or maths.”

Colin Weir,
Station Director,
Hunterston B Power Station





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