igloo

Preparing students for digital careers with an Igloo immersive classroom

UA92 use a 360° immersive room to engage students, teach digital skills and work with industry partners to close the digital skills gap

UNIVERSITY
ACADEMY 92
MANCHESTER

Highlights

University Academy 92 (UA92) uses an Igloo immersive space for teaching and outreach in its Digital Academy. The space plays a key role in fulfilling UA92's mission of providing digital education that is accessible to all, through groundbreaking, disruptive teaching, working with industry partners and advanced technologies.

The Igloo is helping UA92 to push the boundaries of immersive education and is used for:

01
Exploring digital twins and UA92's very own metaverse

02
Sports science analysis and coaching using 360° visualisation

03
Collaboration with industry partners including Microsoft, THG, Manchester United, TalkTalk and KPMG

UA92 is also:
The first UK education institution to use **Igloo Core Engine (ICE)**, the operating system for immersive rooms by Igloo Vision

AV AWARDS 25 YEARS 2023

Education Project of the Year at the AV Awards **Finalist**

About University Academy 92

University Academy 92 (UA92) is a groundbreaking higher education institution committed to making higher education accessible to all, through its founding principles of accessibility, social mobility and inclusivity.

Founded by Lancaster University and Manchester United's Class of 92 and launched in 2019, UA92 offers a range of degree programmes, apprenticeships and skills bootcamps.

All courses at UA92 are developed in close dialogue with UA92's many industry partners, including Microsoft, THG, TalkTalk, Manchester United and KPMG. These partners play a key role in developing the curriculum and supporting students in their careers.

igloo

UNIVERSITY ACADEMY 92 MANCHESTER

UA 92 UNIVERSITY ACADEMY 92 MANCHESTER

The situation

Greater Manchester is one of Europe's fastest growing tech hubs, with Manchester-based companies collectively raising over £1.8 billion in venture capital funding in the past five years.

As part of its mission to develop digital talent which supports and benefits from this growing sector, UA92 launched the Digital Academy, a new facility supported by a £2million-pound grant from the Office for Students. The facility includes teaching and study space to support 600 students, collaborative learning spaces, AR/VR capabilities in classrooms and digital media labs, as well as the 360° immersive room.

UA92 approached Igloo looking for a flagship piece of technology for the Digital Academy, which would demonstrate UA92's innovative ethos and could be used for partner events and learning across UA92's four core subject areas: Digital, Media, Business and Sports.

The solution

Retrofitted immersive room

After consulting with our education team, UA92 opted for a 7x6-metre retrofitted immersive room, kitted out with Igloo's IMPII (Immersive Media Player) and eight 5000-lumen projectors, which make for a seamless, bright immersive display. The IMPII is ideal for handling the wide range of different types of content used by UA92 and can manage multiple content layers without compromising performance.

The large room is perfect for teaching and engagement and can easily accommodate groups of up to 20 people.

In 2023, UA92 became Igloo's first UK education client to install Igloo Core Engine (ICE), the new operating system for immersive rooms by Igloo Vision. ICE builds on Igloo Vision's extensive experience in the immersive room sector, and makes them easier to set up, easier to build and easier to benefit from.

igloo core engine

ICE includes all of Igloo's specialist software tools for displaying VR and 360° content with blended projection, accurate warping and true perspective, and has a range of industry-standard integrations for displaying BIM and CAD models, simulation tools, game engine content, and metaverse applications, making it the perfect software platform for UA92's wide range of content choices.

Unlike other immersive software, ICE has a user experience that is designed for the everyday user of digital content, with intuitive and familiar interfaces. It's ideal for educators because any staff member can easily upload their teaching content to the system and control it from inside the Igloo via ICE Control Panel and Canvas UI. As well as their pre-existing content, ICE also gives educators access to any immersive content available on the web, including YouTube 360°, Google Streetview and online repositories of digital models, allowing for dynamic and exploratory teaching, something UA92 does excellently.

" *There's no point having all of this fabulous technology, these great tools and opportunities to engage people in immersive experiences if educators can't use the software. ICE takes away all the difficulty, simplifying everything into one easy app where you're able to create different sessions for different subject areas so everything is ready to go for immersive education."*

Aaron Saxton,
Director of Disruptive
Learning, UA92

Why UA92 chose to partner with Igloo on its immersive space

Before purchasing the Igloo, UA92 explored a range of other options including VR headsets. It was decided that headsets would be more appropriate for individual learning or smaller group sessions and less suited for collaborative learning in the classroom.

After looking at other immersive room providers, UA92 chose Igloo because of the versatility and useability of its software. ICE is capable of displaying almost any immersive or standard digital content and includes a range of industry-standard integrations that are always evolving, meaning UA92 can display the latest immersive content in perpetuity.

UA92 was also impressed by Igloo's track record for innovation and client support, which gave it confidence that a partnership with Igloo would support its future innovation plans involving the metaverse and Azure Kinect cameras.

" *Success comes through great relationships and Igloo and its team commit an awful lot of energy to understand who you are, what your vision is, and what your goals are."*

Aaron Saxton,
Director of Disruptive
Learning, UA92

www.igloovision.com

How UA92 maximises the use of its immersive room

The Digital Academy launched in September 2022 with an event attended by major partners and keynote speaker Mayor of Manchester, Andy Burnham.

Since then, the immersive classroom powered by ICE is helping UA92 achieve its mission of offering future-thinking teaching in disruptive technologies whilst providing an important hub for engagement with industry partners and the wider enterprise community in Greater Manchester.

Immersive teaching

How immersive learning is being used to enhance teaching and research at UA92.

Exploring the metaverse
In 2023, UA92 released its own 'world-first' metaverse platform in partnership with Digisomni. The UA92verse is a digital twin of the UA92 campus which can be displayed in full 360° inside the Igloo. It's used to extend and enhance learning beyond a person's geographical location, with the added advantage of enabling remote users to connect to the Igloo and their classes using their own devices.

Performance analysis
Sports students have used the immersive room to analyse sports performance. Using the Igloo to visualise video and training data to help improve an athlete's performance.

Virtual anatomy
Sports Science students use the Igloo to explore immersive and interactive digital models of the human body, using Elsevier Complete Anatomy to improve their understanding of the muscular-skeletal and cardiovascular systems.

Virtual field trips
The Igloo has been used to take students on virtual field trips to sports stadiums, data centres and through various digital models. Staff make use of Igloo's Google Streetview and YouTube 360° integrations to take groups of students on virtual tours. International students have also been using the Igloo to introduce their fellow students to their hometowns.

Exploring immersive media and journalism
Students in Media and Journalism have been creating a range of immersive content using UA92's 360° cameras and displaying this inside the Igloo as part of their assessments.

Immersive coding
Digital students use the Igloo for collaborative coding, where they can display working code such as html on one section of the canvas and watch realtime updates of a website on another.

Network visualisation
DevOps apprentices use the immersive environment to map out network pathways, allowing them to visualise and collaborate on incredibly complex networks in a single immersive environment.

Community engagement and partnership collaboration

The Igloo is one of UA92's flagship presentation spaces, used for open days and outreach and for various projects with UA92's industry partners. It makes a strong statement about UA92's digital ethos and its commitment to doing 'deliberately different' education with the technologies of tomorrow.

Some examples of engagement and outreach include:

Careers days with Greater Manchester Chamber of Commerce
Greater Manchester Chamber of Commerce has used the Igloo and the Digital Academy to introduce teenagers to careers available in the region.

Hackathons hosted by Microsoft
At UA92 open days, Microsoft has hosted hackathons to inspire students interested in furthering their education in digital.

Workshops with Manchester United Academy and THG
This project involved Manchester United scholars using the Igloo to design, develop, and pitch golf t-shirts. The best product was selected by Apprentice contestant, Aaron Willis, before being manufactured by THG, a global eCommerce technology group, based in Greater Manchester.

Introducing secondary school girls to coding and digital careers
This partnership event between UA92 and Cyber Girls First used the Igloo as a learning space to introduce seventy Year 8 girls to coding and careers in the tech sector.

Apprenticeship assessment days
UA92's apprenticeship programme works with companies such as JD Sports, Pixel Kicks and THG. The Igloo plays a key role in the apprentices' education as it can be used to simulate a range of working environments environments.

Strategy meetings
The Igloo is frequently used by UA92 staff to host strategy meetings on course development with their industry partners. The Igloo allows UA92 to bring a range of content into the space and to develop ideas and get creative with its 'deliberately different' pedagogy.

Available for hire
The immersive room is also available for hire and has been used to host a range of corporate events and away days, providing UA92 with an additional service to offer to partners and the community.

"The Igloo room is truly a special place, the immersive environment lets you experience different interactive apps, games, videos etc. It's amazing 360° view provides a truly amazing space for others to collaborate and educate themselves. The entire room can be controlled via an app on your phone, which is damn impressive. UA92 has done very well with providing state of the art facilities, seriously cool."

Kenan Marshall, Level 4 DevOps
Apprentice at Pixel Kicks

"The Igloo brings education to life in new, exciting ways. You step inside and all of a sudden you're surrounded with a 360° canvas that could take you anywhere in the world. You could be in space, on top of mountains, travelling through the human body, playing an incredible VR game, or you could just be doing a presentation using PowerPoint and web content to bring your assessments and education to life. It's really taking education to a new level, a whole different direction that we never thought we'd experience here at UA92."

Aaron Saxton,
Director of Disruptive Learning,
UA92

Evaluating the impact

UA92 is making regular use of the immersive room and are extending its rollout across all courses. It's been popular with staff and students and certainly brings a "wow" factor when working with industry partners.

Reactions to the Igloo

"The UA92 campus is an amazing space with plenty of group and individual learning areas; my favourite room was the Igloo, a 360° digital immersive experience - a long way forward from the TV they used to wheel around my classrooms at school!"

Oliver Metcalf, Senior Global Leader,
THG

"Whenever we take students or business partners into the Igloo they're blown away by the technology."

Sara Prowse, CEO of UA92

"

So we've had the likes of THG up here, Microsoft, Andy Burnham, the Greater Manchester Chamber of Commerce, Manchester United, JD Sports, you name it, if you're a big employer in Manchester they wanted to come up here and capitalise on this incredible space to enhance their project, their education, or their service."

Aaron Saxton, Director of
Disruptive Learning, UA92

igloo

UNIVERSITY ACADEMY 92
MANCHESTER

UA92 UNIVERSITY ACADEMY 92 MANCHESTER
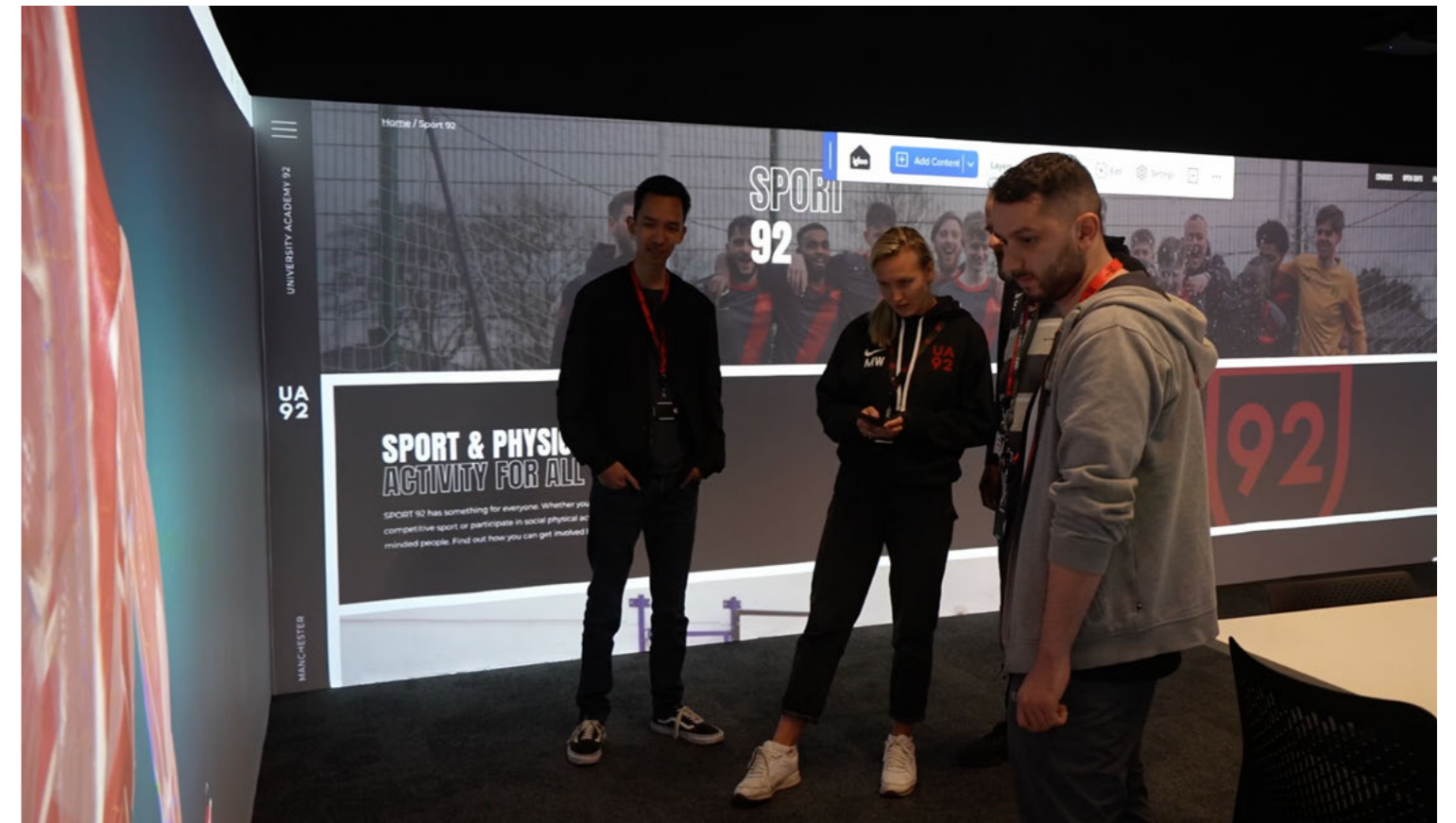
On Igloo Core Engine (ICE)

ICE has made the whole process of interacting with the space much more seamless and much more accessible for teaching and education. The True Perspective feature has been revolutionary in terms of enhancing imagery and media to make it feel more immersive and more real.
We also like the dashboard feature and being able to create multiple dashboards for different departments so they can come into the space and instantly immerse themselves in their own domains."

"There's no point of having all of this fabulous technology, these great tools and opportunities to engage people in immersive experiences if they can't use the software. ICE takes away all the difficulty, simplifying everything into one easy app where you're able to create different sessions for different subject areas so everything is ready to go for immersive education."

"Igloo makes creating a 360° experience look incredibly easy. I don't pretend I know the maths that drives tools like True Perspective but it's incredibly challenging in a square room to make something look and feel like the real world. But with ICE and True Perspective all you need to do is take your content, drop it into ICE, set the position and it knows exactly how to manage the curvature so all the angles appear correct, enhancing the immersive experience."

Aaron Saxton, Director of Disruptive Learning, UA92
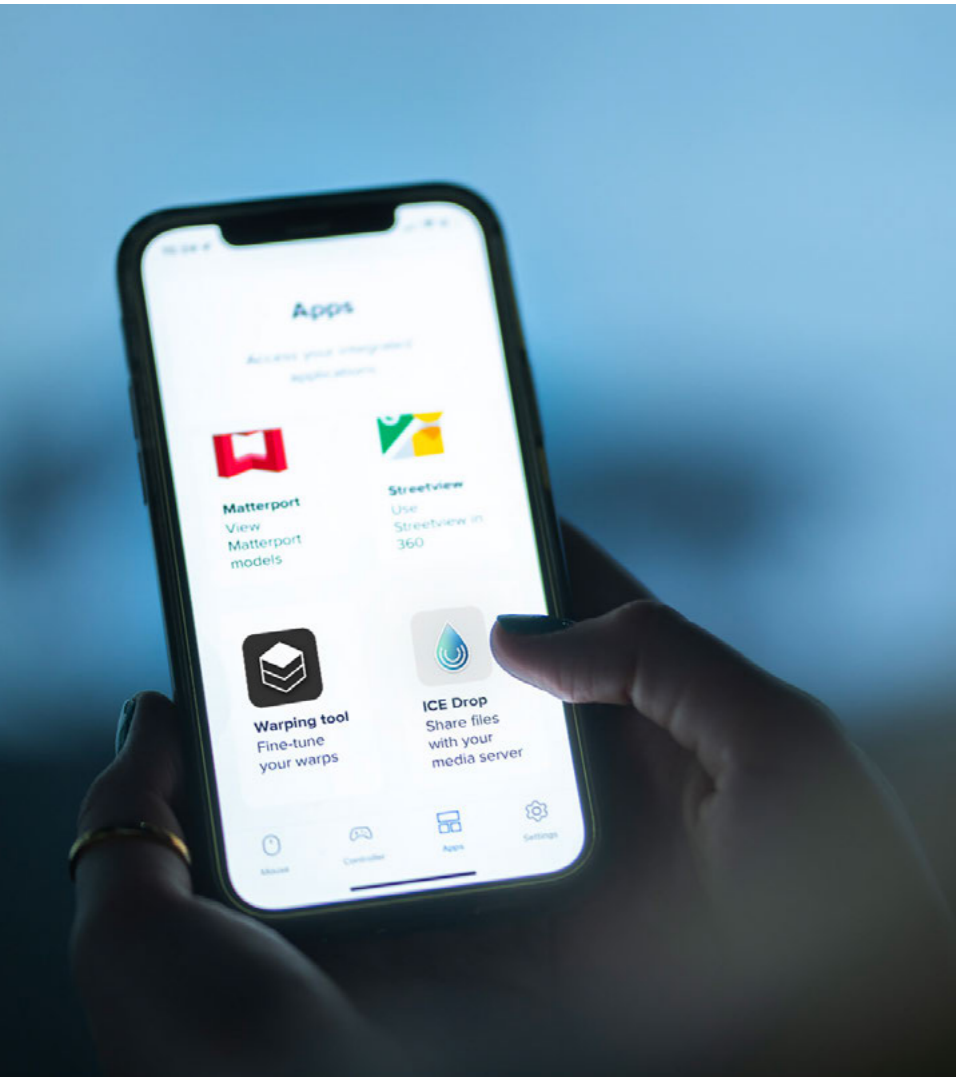
Going forward

Having spent over a year working with Igloo, UA92 is constantly looking to enhance the capabilities of immersive technology, and continue to push the boundaries of immersive education. Some exciting projects include:

01

Motion tracking for sports performance

UA92 is integrating Azure Kinect motion tracking cameras into the Igloo. The system will be used to capture a range of detailed data related to sports performance, including heat maps, pin clouds that can isolate muscle group and reaction times.

This data can then be visualised inside the Igloo for coaching and to discover and develop performance improvements for students and professional athletes. This will initially be used by Sports Science students, with the aim of rolling out use to professional sports teams.

02

Immersive media research

UA92's Head of Media is using the Igloo as part of a research project looking into how immersive content will change the media landscape going forward.

03

Expanding use across UA92

After a year of developing teaching and outreach using the Igloo, UA92 is committed to using the space across all courses so that the Digital Academy fulfils its mission of impacting every student's experience at UA92.

For more information

Igloo Vision is the shared immersive workspace company

We design, develop, and deliver immersive technology and software that takes any digital or immersive content and puts it into a shared immersive space. It's a bit like stepping into a giant VR headset.

From bases in the UK, USA, Canada, and Australia, we work with clients worldwide to help them work faster, smarter, and safer.

To find out more
visit us at www.igloovision.com
email us on info@igloovision.com
telephone us on +44 (0) 1588 673 337

igloo