

14th June 2024

Exploratory: XR Technologies in support of Education & Skills for Mental Health Practitioners: Insights from the DHI and NES Workshop

Setting the Scene

On 6th June 2024, the Digital Health & Care Innovation Centre (DHI) hosted an exploratory workshop at its headquarters in Glasgow as part of its strategic collaboration with NHS Education for Scotland (NES). The workshop introduced the use of XR technologies within other training & education contexts to assess transferability potential for healthcare. It also sought to support knowledge exchange and surface key challenge opportunities in supporting education, training and skills development for mental health practitioners.

“I never thought I would learn this through a headset!”

Participant Quote

The strategic partnership between DHI and NES was formalised in August 2023 and is centred around five key themes:

- workforce development, education and training.
- research and innovation.
- strategic level engagement with other organisations.
- developing and deploying innovative technologies.
- remote and rural centres of excellence.

This workshop focused on acknowledging the current state of education and training in mental health, before exploring the potential of XR technologies and defining specific key challenge opportunities for collaboration in the research and innovation space.

Mapping Current Opportunities

Following introductions and context setting, the exploratory introduced working definitions of Innovation and XR technologies.

- Innovation: 'the introduction and implementation of a new or significantly improved product, service, process, or method with the purpose of helping to solve societal challenges or delivering economic growth.' (Source: Scotland's National Innovation Strategy – April 23)

- XR: defined by UKRI as referring to "Extended Reality and covers Augmented Reality (AR), Mixed Reality (MR), Virtual Reality (VR), haptics, interfaces, platforms and software and will often be referred to as immersive technologies".

This was then followed by mapping sessions designed to surface key challenges and opportunities. Several themes surfaced during the mapping including:

The need for a shift in culture

Two groups were involved on the day, each working on several 'Opportunity Scenarios' relating to the integration of XR technologies in support of Education & Skills for Mental Health Practitioners. All participants identified the need for a shift towards an 'acceptance attitude' with respect to embracing a different, innovative way of working.

Training – when and in what format?

It was clear that additional training would be required, and discussion centred around whether this should take place during training associated with a particular role or addressed as part of continued professional development. The point was also made that training would not only need to relate to the hardware and 'experiential' elements associated with XR but also to the data and insight generated by a new engagement paradigm.

The potential to gather insight

Participants suggested that through the integration of XR with appraisal systems and personal portfolios it would be possible to generate rich, meaningful information related to users learning journeys.

Positive impact on staff

Another aspect raised by both groups was the potential for the technology and 'investment in innovation' to improve staff wellbeing. The groups felt that the backing of XR technologies, which has the potential to improve outcomes in a safe, supportive, environment would represent a welcome investment in them as professionals.

The need to prove effectiveness

There was recognition across both groups that XR (as an extension/blended deployment of AR and VR) is still viewed as a 'gimmick' which in turn impedes acceptance and confidence within a professional care context. The resulting chicken/egg situation is that deployment of XR in a controlled, evaluated care context is perhaps required before widespread adoption can be realised.

“Use AI to enhance the capacity of supervisors and assessors to foster meaningful development and conversations with learners across the Health and Social Care workforce.”

Attendee Quote

Immersive XR Experiences

Facilitated ably by the Digital Energy Group, a small Scottish company, (<https://www.digitalenergygroup.com/>) participants donned headsets for a practical introduction to various XR simulations, including a walk through the African savannah, a dive into a deep blue ocean, and a visit to a peaceful beach. This was designed to enable them to familiarise themselves with the technology and acclimatise themselves within an immersive space. These experiences were both engaging and fun, with attendees observing wildlife, marine life, and serene landscapes as if they were truly there. The visual and sensory involvement was noted as providing a safe and immersive environment, leaving participants thoroughly impressed.

Bodyswaps (<https://bodyswaps.co/>) simulations then allowed participants to experience training and education scenarios from different perspectives including interview techniques, and mental health assessments. This hands-on (or heads-on) experience introduced the potential of XR to enhance impactful learning and streamline training processes.



Defining the Challenge

Discussions on the day honed in on specific challenges which XR technologies could help address. Participants considered:

- The need to reduce time demands on mental health practitioners while ensuring comprehensive training and support.
- The potential role of AI in helping to standardise assessments.
- The cultural shift needed to integrate these technologies effectively within current processes and practice.

Final Reflections and Next Steps

As the workshop concluded, participants shared their reflections. One participant compared their thoughts on an “Amazon for Education”, highlighting the potential for delivering personalised and on-demand learning resources. A senior NES colleague summed up the workshop's value as “an opportunity for exploration of potential XR application in the context of the specific Mental Health workforce, helped along by skilful facilitation in the exploratory sessions”.



The workshop sparked varied trains of thought within the mixed-disciplinary team. Given the existing challenges, the focus on the day was leaning towards maximising the impact of training on workforce readiness whilst ensuring efficiency in how such education and training is delivered.

Following initial feedback, NES & DHI have agreed to further refine and identify a key problem statement that could be collaboratively addressed; assess what else is out there that could be relevant; and establish a small, short-life joint working group to develop a proposition for future R&I funding with potential partners from industry and academia.

Looking Ahead

This workshop marks a pivotal step in the collaboration between DHI and NES, paving the way for innovative approaches to the delivery of education and skills for mental health practitioners. The potential of XR technologies provides a huge opportunity to make education and training more immersive, efficient, and impactful, also providing extended reach for those working in remote and rural locations.