MR Pedagogical Tools and Methods used to Engage Students in Designing MR Systems, Services, and Devices Brian O'Keefe, Farmingdale State

We present innovation processes and outcomes of the Blended Interactions Workshop 2018 (BIW2018). BIW2018 is an international design thinking and mixed reality research project between the Interaction Design Program at Farmingdale State College and the Centre for Interaction Design, Edinburgh Napier University, UK. Faculty and undergraduate students participated in an eight-day interdisciplinary workshop to document the process of student learning and human-centered problem solving on the NYC High Line. The NYC High Line is a 1.5 mile New York State neighborhood park.

We will showcase our pedagogical process by introducing new mixed reality tools and methods used to engage our students. We uncovered, that instead of students being consumers of mixed reality educational services, our students became inventors of emerging mixed reality experiences that thoughtfully blended technology into NYC High Line physical environments.

After the workshop, students and faculty showcased three main workshop outcomes at a public art gallery exhibit. (I) A large NYC High Line poster table with six 360 VR High Line video locations, the goal of this outcome was to enable gallery visitors to virtually visit the NYC High Line. (II) Four individual mixed reality illustrative storyboards, the goal of these outcomes were to showcase new student mixed reality innovations and solutions. (III) Ten individualized augmented reality coded t-shirts, the goal of these wearable outcomes enabled gallery visitors to visually augment and explore student design thinking, while speaking to each student. This project is supported by a \$400,000 New York State Regional Economic Development Grant.