

# Innovations in Teaching Using Technology Grant –

they are expected to participate in it, and instructors can point out specific things to look for as they gain familiarity with that environment.

In August 2018, I was able to produce a first attempt at this experiential presentation using a 360/VR camera, specifically intended for the education of students in Television Production 1. With the camera positioned in the middle of the studio floor, I directed newscast which involved multi-camera moving



typically don't realize until they're pointed out... and don't record when they frame the behind-the-scenes photos and video! This is much more troublesome to hide in 360/VR.

Going even one step further... with current 360/VR camera technology allowing for live streaming via connection to a personal smartphone and WiFi/data access, students can live-stream in 360 from their shooting locations for realtime instructor feedback or check-in and virtual presence. Obviously there are more variables and challenges in this approach (network connectivity and signal strength, smartphone compatibility, delays, etc.) but it's entirely possible.

### ***SCALABILITY:***

While principally conceived for the studio-based TV Production 1 course, 360/VR can be used in any production course to both 1) introduce students to new environments and operations "on set" – wherever that set may be, using a pre-recorded "demo" production; and, 2) allow instructors to virtually travel to locations and sets that he or she would not be able to physically visit given scheduling restrictions, to review student work on equipment setups and on-set operations/configurations in a post-occurrence (recorded) mode, or live in realtime. With both of these capabilities, instructors can create lessons that put students in these virtual environments, with a range of objectives... from "can you spot the safety issue?" to "are all of the lights set up properly?" to "can you identify who's who on set based on what they're doing or where they're standing?" to so many other possibilities for dynamic Q&A, and learning.

### ***ADAPTABILITY:***

This technology is already being used to create immersive experiences for audiences around the world, with applications for education still being developed. Any environment that students will encounter in the real world, whether as part of their coursework or in their careers, can benefit from initial experience in 360/VR. The ability to actually look around in the space and see different views not obscured by the camera frame is the biggest difference between this technology and a fixed point-of-view camera recording. The type of technology-assisted educational activities being pursued by this proposal could be adapted to work in a variety of disciplines.

### **Description of the Specific Innovation:**

While the range of available 360/VR cameras and capabilities is wide, the specific make and model being sought for use via this grant application is the **Insta360 ONE** for its ease of use, versatility, and relative low cost. The camera can operate in a standalone mode to take pictures and video that is saved on a removable micro-SD memory card. In this mode, it can be set up in the portable mini stand (which doubles as the case/cover) or affixed to a typical light stand or tripod. In an alternattiret[or affix1 the camera can be directly connected to an iPhone (natively) or Android phone (with an adapter) and used to save pictures and video to the phone or use in conjunction with the phone to live-stream video on YouTube, Facebook, Periscope, and other social media platforms. Current retail pricing for the camera is \$300. The manufacturer provides free software (Insta360Studio) for converting images and video from its proprietary formatting to mortiremmon and shareable formats.

**Assistance Needed From IRT Training & Instructional Support:**

There is no specific need for training/support from IRT for the camera itself through this grant, but the software would need to be installed for use on faculty computers and perhaps in select labs or machines in Bozorth Hall (iMacs). I have been ab3)