



AREA 9

INNOLYTICS

Powered with Innovation, Driven by Analytics

February 2021

Latest and Greatest in the World of Innovation

Welcome to the second edition of the HQ AETC/A9 Innovation Newsletter, *Area 9 Innolytics*. We are excited to share how the command is incorporating emerging technologies, expanding capabilities, and transforming the way we learn. Our team is committed to advancing innovation by continuing to provide avenues to connect the AETC innovators with one another, as well as provide opportunities for partnerships with academia, industry, and resources. AETC continues to elevate innovation driven by pandemic challenges and building bridges to accelerate change.

Col. William Mamourieh
Director, HQ AETC Analysis and Innovation

\$\$\$\$ iChallenge \$\$\$\$

Air Education & Training Command (AETC) has an open campaign with the Air Force Ideation platform [IdeaScale](#). The AETC 2021 iChallenge aims to recognize innovations which directly align to at least one of the CSAF Action Orders or AETC Strategic Action Plan (SAP) Priorities. The campaign provides an opportunity for an innovation idea to be recognized and awarded up to \$75,000 to advance your idea or project. Don't miss out on the chance to showcase your idea in one of 3 categories:

The **Accelerate Change Award** will be given to the two ideas that are most impactful in supporting the CSAF Accelerate Change or Lose Policy and Action Orders.

The **Torch Award** will be given to the two ideas that are most impactful in supporting the AETC Strategic Action Plan Priorities.

The **Adapt Award** will be given to the two ideas that were attempted/implemented and did not meet desired results, but lessons learned support progress toward full implementation.

Ideas and projects must align to at least one focus area in the Accelerate Change or Lose Action Orders or AETC SAP Priorities categories.

Innovator Spotlight

TSgt Aaron Parker: On his own initiative and drive HQ AETC/A9's own TSgt Parker conceived and developed the new, updated, dynamic AETC Innovation



dashboard. TSgt Parker's site allows anyone from junior Airmen, to unit leaders, to AETC Senior Leaders to access and analyze the 6,262 data elements across the 348 innovations reported in the semi-annual innovation activities data call. Aiming at full empowerment of AETC airmen and a heightened user experience (UX), he created a seamless web application with dynamic charts and tables that connects innovators to other innovators, and provides HQ AETC/A9 staff the ability to connect innovators to the resources they need to take their concepts from ideation to full implementation. TSgt Parker's initiative exemplifies the pioneering spirit of AETC airmen and without a doubt will inspire others to do the same. Thank you, TSgt Parker!

The Innovation dashboard can be found via the AETC All Partners Access Network (APAN) at <https://community.apan.org/wg/aetc/>.

Funding Efficiency Across Keesler AFB (2nd Air Force)

Every year, Keesler AFB squadrons compete for Squadron Innovation Funds by submitting an application fulfilling requirements to the 81 TRW Innovation Working Group.

The funds are provided by the Air Force to support initiatives aimed at mission effectiveness improvements in the areas of innovation, such as modernizing technology and processes. If awarded, squadrons receive the funding in addition to their normal budget. In fiscal year 2020, up to \$450,000 in funds were awarded to the 81st Training Wing Staff Agencies for a flatbed printer and digital archival backup storage, and the 81st Training Group for virtual reali-

ty laptops, goggles and sensors, equipment tracking system, a student information kiosk and interactive whiteboards and projectors.

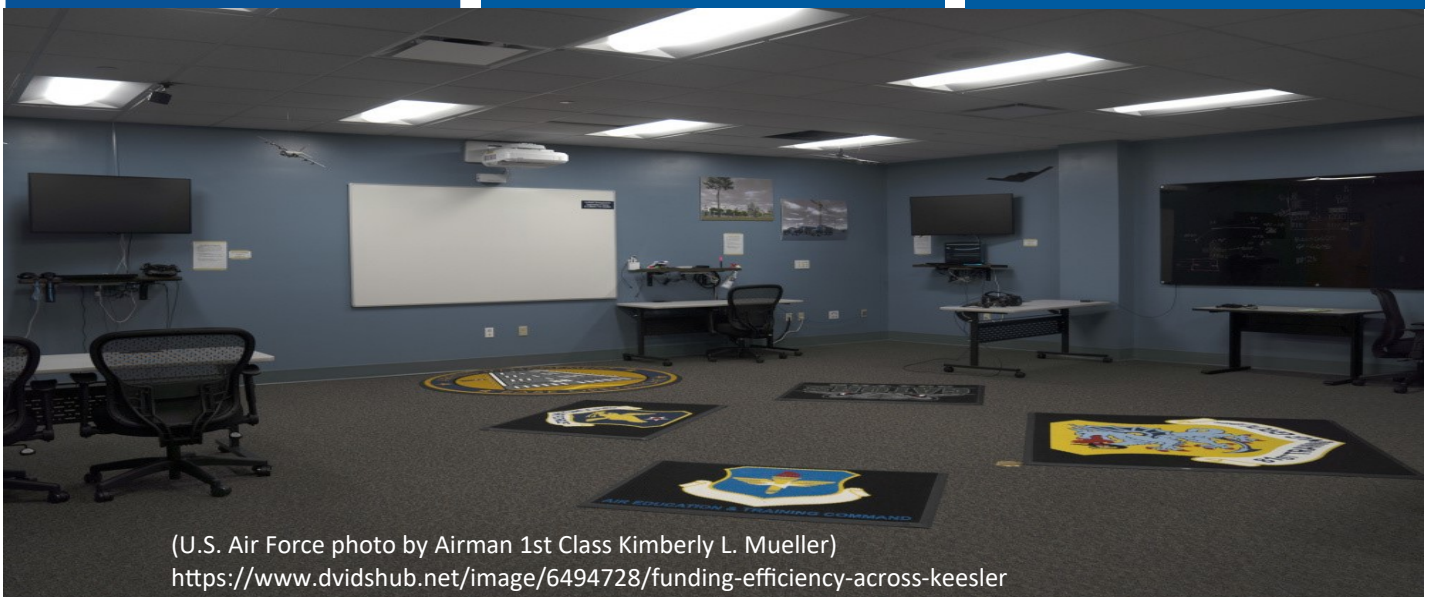
The 334th Training Squadron trains an average of 900 students a year and has had a 10 to 15 percent increase in scores for training at the third skill level with virtual reality equipment. "If we could receive additional funds and expand the program, we could cover a lot more of the curriculum and include training for our seventh and ninth skill levels," said Staff Sgt. Braden Moore, 334th TRS airfield management instructor.

The funds also went to the 81st Contracting Squadron for expansion of electronically secured joint use rooms, 81st Lo-

gistics Readiness Squadron for birds-eye view vehicle cameras, 81st Security Forces Squadron for a StreetSmarts virtual reality training room and customer queue kiosk.

"Having the ability to modernize equipment for the base is essential for us to continue to lead as the world's best Air Force," said Col. James Kafer, 81st TRW vice commander.

"The unique challenges we faced in 2020 brought everyone together to continue to carry out our mission in an environment of uncertainty. These innovation funds will help us continue this as we progress into 2021, while training the future leaders of the Air and Space Forces."



(U.S. Air Force photo by Airman 1st Class Kimberly L. Mueller)
<https://www.dvidshub.net/image/6494728/funding-efficiency-across-keesler>

The 334th Training Squadron used innovation funds to modernize airfield maintenance training through virtual reality equipment. In fiscal year 2020, up to \$450,000 was awarded to the 81st Training Wing Wing Staff Agencies, 81st Training Group, 81st Contracting Squadron, 81st Logistics Readiness Squadron and 81st Security Forces Squadron for technology and process improvements.

Expanding Learning Beyond Traditional Walls - AU Squadron Officer School Mixed Reality Learning Experiences (MRLx)

(Article 1 of a 3 part series from Air University)

Squadron Officer School's (SOS) long tradition of developing future Air Force leaders continues today as students engage in an array of team-building and problem-solving virtual learning experientials. While leveraging emerging learning technologies, SOS creates realistic, human-domain, and student-centered experiences. Real-world experiences translate to immersive learning experiences that offer students opportunities to work through these difficult and relevant situations. With mixed reality, these immersive learning role-play scenarios have transformed into SOS's Mixed Reality Learning Experiences (MRLx) to support student learning well into the 21st century! "MRLx is based on research focused on empathy. At SOS, we use the immersive experience as a pathway to generate rich discussion and thoughtful reflection," shared Toni Hawkins-Scribner, SOS's Director of Learning Sciences and Technology.

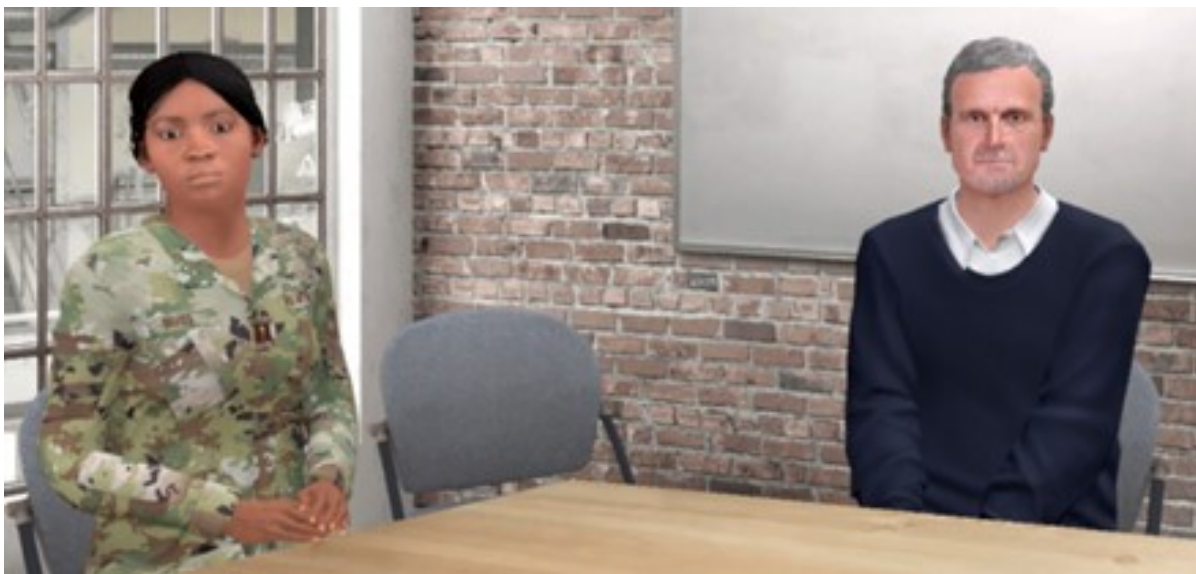
Emerging learning technologies have matured enough over the years that authentic experiences are possible to fuel student and faculty learning. Inspired by officers' real-world experiences, and designed by SOS faculty, MRLx scenarios directly support SOS's program outcomes and mirror real-world situations USAF and USSF leaders will encounter. Although



2 Empathy: Body Language

each scenario has a general leadership challenge to resolve, the scenario adapts in real-time to the student's words and actions – just as in real life. Likewise, the academic environment offers a safe, dynamic learning experience to revisit student's actions and learn from each other.

Topics include undermining authority, conflict



Multiple Avatars: Workplace Situations

resolution, and leading-up and -down. MRLx challenges students to address workplace conflict and implicit bias. Inspiration for overall scenario designs is from authentic experiences by AF leaders and SOS students.

AETC Tech Expo

Air Education & Training Command (AETC) is taking the command's innovation efforts to the next level by executing the first AETC Tech Expo. The intent is to provide AETC's innovative Airmen a chance to showcase what they can do -- no PowerPoint; no fluff; just First Command Airmen showing their hardware and ideas in action. This event is being co-hosted by Maj Gen Tullos, 2AF/CC, and Maj Gen Wills, 19AF/CC, with the HQ AETC/A9 team assisting with coordination across the command.



F35 Communication Cable Rebuild Prototype (19th Air Force)
US Air Force Photo

The Chief of Staff of the Air Force has tasked each of us to keep our eyes toward accelerating change; there is no doubt that AETC Airmen have stepped up to out-think, out-perform, and out-innovate others driving meaningful change for our Air Force. This event is scheduled to take place at Joint Base San Antonio in the near future, subject to COVID-driven constraints. The Tech Expo planning team is hard at work, working with AETC innovators to design the most effective event to showcase their ideas. The most valuable asset in the First Command are our people and the AETC Airmen demonstrate that daily—AETC's first Tech Expo will give them one more way to showcase that value!

Innovation Summit: Immersive Learning

In an effort to fuel collaboration amongst Air Education and Training Command innovators and highlight progress in immersive learning efforts, AETC's Analysis and Innovation Directorate (HQ AETC/A9) hosted the Command's third virtual iSummit on 21 January 2021.

The primary goal of AETC's quarterly Innovation Summits is to allow innovators across the command to share knowledge, learn from others' experiences, and hear about unit successes and challenges. Lt Gen Webb, AETC/CC, provided opening remarks for the January 2021 event, with more than 130 individuals participating.



Integrated Technology Platform HQ AETC
US Air Force photo

The theme was "Immersive Learning and Training Transformation." Experts from AETC units discussed successful immersive learning innovations, specifically Linguist Next and the Crew Chiefs Fundamental Course, as well as the winning Spark Tank innovation. Immersive learning continues to be a hot topic across AETC as innovators are providing successes and best practices toward training transformation. Virtual Reality and Augmented Reality projects account for the largest reported area of investment across AETC.