

Center Overview

Redefining Advanced Technological Education.

NSF Grant #1501695



CA²VES: The Center for
**Aviation & Automotive
Technological Education**
Using Virtual E-Schools

The Center for Aviation and Automotive Technological Education Using Virtual E-Schools, or “**CA²VES**,” provides research-centered resources and evidence-based leadership for community colleges and the broader ATE community by designing and developing state-of-the-art virtual reality-based modules.

4 Overarching Goals guide the objectives, activities outcomes and responsibilities of the center:



Goal 1: Facilitate and Accelerate Distribution and Implementation of the Digital Learning Tools Developed by CA²VES and its Partners



Goal 2: Design and Develop Digital Curricula, E-Schools, and Virtual Reality Teaching for Online and Hybrid Environments, housed on **EducateWorkforce.com**



Goal 3: Increase the Diversity and Quality of the Advanced Manufacturing Talent Pipeline Through Sustainable Pathways



Goal 4: Provide Rigorous Research in VR Development and Become a Sustainable Resource for ATE Centers/2-year Colleges

By the Numbers

2020

Design and Develop Digital Curricula, E-Schools, and Virtual Reality Teaching and Learning

Virtual reality modules | **127**

3D/CAD models | **300+**

Courses | **36**

e-Learning modules | **167**

e-Learning sections | **735+**

eBooks | **9**

Lesson Plans | **11**

Increase the Diversity and Quality of the Talent Pipeline through Sustainable Pathways

Total Collaborators | **201**

ATE Partners **13** • 4-yr inst. **9** • 2-yr inst. **27** • K-12 **57**
Educational **6** • Industry **34** • Government **22**
Regional Board **8** • Clemson University **25**

Presentations & booths | **102**

SC conferences **33**
National conferences **37**
Conference booths **32**

Facilitate and Accelerate Distribution / Implementation of Digital Learning Tools

14,859 | EducateWorkforce Curriculum Users

46 | States using EducateWorkforce

+1065 | Online Class Sections

Provide Rigorous Evidence-based Research and Become a Sustainable Resource for Technological Education

24 | Research Studies

31 | Publications

66 | Grant, contract, and foundation proposals submitted

27 | Proposals funded

\$4,310,443+ | Total funding awarded to CUCWD/CA2VES since NVC 2017

\$2,300,000 | Total Funding from Industry Contracts

