



HiEST Academy

Hawaii Excellence through
Science and Technology



HiEST Academy

- Hawai'i Excellence through Science and Technology (HiEST)
- *Purpose:* Engage the “neglected majority” of high school students in an academy program focused on STEM and STEM-related careers through a cohesive series of integrated courses in math and science



HiEST Academy

- Intended outcomes:
 - Transition to college
 - Reduced need for postsecondary remediation
 - Pursuit of STEM or STEM-enabled careers
- Student population:
 - Middle fifty percent; “neglected majority” of students who are concrete learners



Contextual Approach to Academics

Center for Occupational Research and Development (CORD)

○ **Physics:**

Physics in Context, Principles of Technology (PT)

- Used in all 50 states
- Aligned to national standards and 24 state standards

○ **Biology/Chemistry:**

CORD Biology, Applications in Biology/Chemistry (ABC)

- Used in 35 states
- Correlated with national standards and 8 state standards

○ **Mathematics:**

CORD Bridges, Algebra 1, Geometry, (Algebra 2)*

- Used in all 50 states
- Correlated with national standards and 26 state standards

Recommended Academy Course Sequence

<i>Grade:</i>	9	10	11	12
<i>Science</i>	Physical Science in Context	Applications in Biology and Chemistry	Physics in Context	Further Science Elective*
<i>Math Option A</i>	Bridges to Algebra and Geometry	Algebra I <i>Math in Context</i>	Geometry <i>Math in Context</i>	Algebra II <i>Learning in Context</i>
<i>Math Option B</i>	Algebra I <i>Math in Context</i>	Geometry <i>Math in Context</i>	Algebra II <i>Math in Context</i>	Further Math Elective*

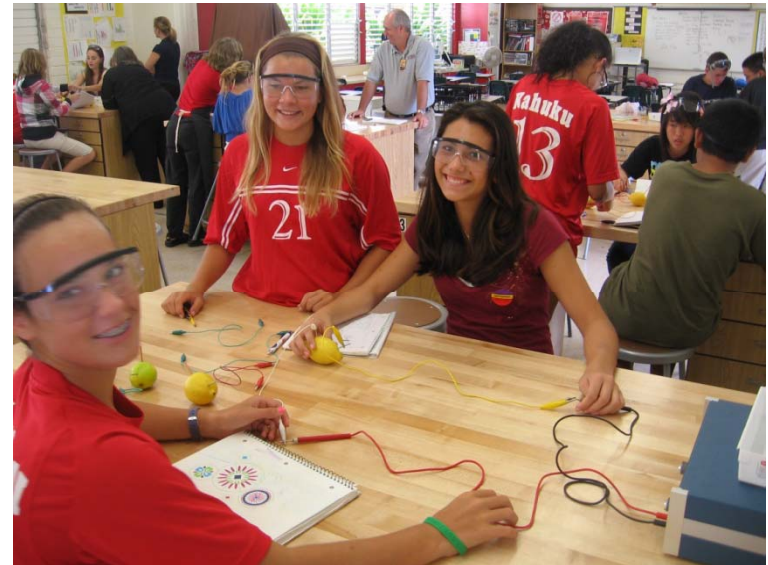


Implementation

- Piloted at Waipahu High School in SY 2007-08
- 6 additional schools joined the HiEST Academy in SY 2008-09
 - Kahuku Waialua Olomana
 - Campbell Baldwin Kau
 - Math: 408 students
 - Physical Science: 630 students

Implementation

- Teacher Training
June of 2008
- Math Teacher
Training October 08
- Equipment and
Curriculum delivered



NEXT STEPS

- Establish the assessment to track student achievement
- Hire community college faculty to partner with high school programs



NEXT STEPS

- CORD staff modify Biology/Chem curriculum to address all HIDOE biology science standards
- Recruit schools for SY 2010-11
- Conduct training for all areas in the summer of 2010

