

Aloha & Welcome!
Maui Economic Development Board
Leslie Wilkins

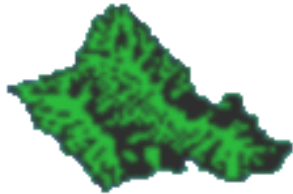
September 12, 2013

Hawaii

Kauai



Oahu



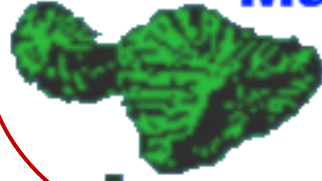
Molokai



Lanai



Maui



Hawaii



Since 1982....

MISSION

To provide leadership and vision in our community for the responsible design and development of a strong, diversified and sustainable economy

VISION

A future in which abundant opportunities for rewarding employment are met by a qualified, resident workforce in Maui County, a community which honors its cultural heritage and natural environment

We are world class....

- 1 of top 5 viewing locations in the world
- Suite of 11 Air Force and University of Hawaii telescopes
 - - AEOS: largest optical telescope in DoD system
 - - Faulkes Telescope
- Deep and near space applications, orbital debris tracking, Near Earth Asteroid Tracking, world-renowned solar research
- World-class industry in design, research, custom production of optics and sensors
- Imaging, simulation/modeling
- Maui High Performance Computing Center
- Pacific Disaster Center
- Multiple Growing Seasons
- Beta Site for Renewable Energy

Science City atop Haleakala





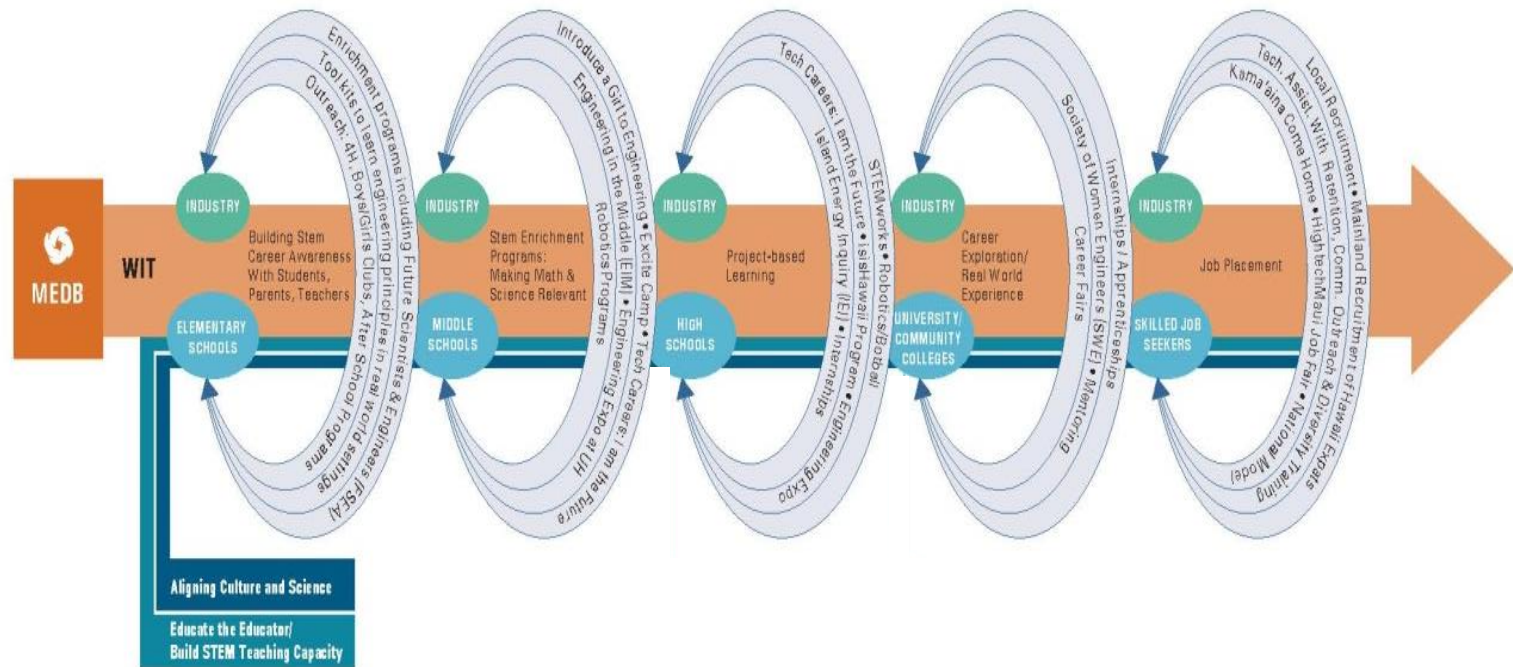
ATTRACT, NURTURE, EXPAND, RETAIN

Helping targeted businesses to
navigate and thrive in Hawaii

EDUCATION FOR JOBS

Preparing residents to compete for
today's jobs - and tomorrow's

Building the STEM Pipeline - K to Careers



A Module for Inclusion

STORM
WORKS™

Download Knowledge. Upload Service.

Participating STEMworks Schools

HAWAII

Keaau High School
Kealakehe High School

KAUAI

Kapaa Middle School
Kauai High School

OAHU

Castle High School
Farrington High School
McKinley High School
Mililani High School
Roosevelt High School

MOLOKAI

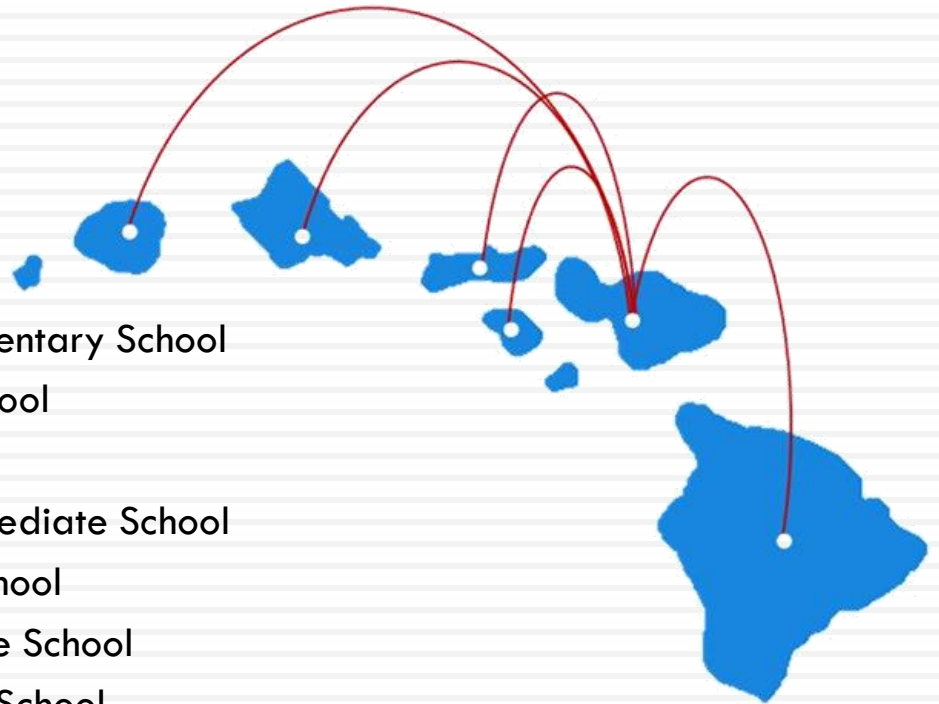
Molokai High School
Molokai Immersion School
Molokai Middle School

MAUI

Baldwin High School
Hana High and Elementary School
Iao Intermediate School
Maui High School
Maui Waena Intermediate School
Lahainaluna High School
Lokelani Intermediate School
Kalama Intermediate School
King Kekaulike High School
Kihei Charter School

LANAI

Lanai High & Elementary School



Download Knowledge. Upload Service.

STEM Skills:



Tech Tools

Geospatial Technologies – GPS, GIS, Remote Sensing

Computer Aided Design (CAD)

Game Design

Web Design

Digital Media

Programming

3D Visualization

Trimble

- ❑ First STEM/service-learning curriculum in Hawaii
- ❑ Project-based/service-based
- ❑ Software training from Industry Professionals
- ❑ Industry connections
- ❑ Internships

- ❑ 23 schools statewide
- ❑ 3,600 middle and high school students annually



Geotech for Hawaii Schools

A statewide initiative to integrate the use of GIS, GPS, and Remote Sensing into K12 Education





Island Energy Inquiry™

www.islandenergyinquiry.org

STEM Skills: Renewable Energy



**Clean Energy
Hawaii STEM HD**



- First Clean Energy Curriculum
- Place-Based, DOE Standards Aligned
- Professional Development for Teachers
- Energy Kits for Classrooms
- First Clean Energy iPad App

STEM Skills: Renewable Energy







**Clean Energy
Hawaii STEM HD**



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Curriculum at a Glance



Grade Level	Unit Title	Essential Question	Unit Lessons	Primary HCPS III Science Benchmark Addressed*
5	Solar Thermal Solutions 	How can solar thermal energy impact Hawai'i energy sustainability?	<ol style="list-style-type: none"> 1. Solar Radiant Energy Transfer 2. Cooking by the Sun 3. Solar Hot Water Heating 4. Hawai'i Energy Use 5. Solar Thermal Outreach 	Benchmark SC.5.6.2 Describe ways that heat can be transferred from one object to another
6	Solar Electricity with Photovoltaics 	How can PV solar energy impact Hawai'i energy sustainability?	<ol style="list-style-type: none"> 1. Photovoltaic Cell Inquiry 2. School PV System Inquiry 3. PV System Components 4. PV System Design for School 	Benchmark SC.6.6.2 Describe the different types of energy transformations
7	Island Energy Use 	How can energy conservation and efficiency impact Hawai'i energy sustainability?	<ol style="list-style-type: none"> 1. A Classroom Energy Audit 2. Hawai'i Energy Use 3. Energy Efficiency Strategies 4. Energy Conservation Plan 	Benchmark SC.7.3.3 Explain how biotic and abiotic factors affect the carrying capacity and sustainability of an ecosystem
8	Island Breezes Blowing Energy 	How can wind energy impact Hawai'i energy sustainability?	<ol style="list-style-type: none"> 1. Wind Power Basics 2. The Earth's Wind Patterns 3. Wind Energy Projects of Hawai'i 4. Wind Turbine Design Inquiry 5. Energy Sustainability for Hawai'i 	Benchmark SC.8.8.6 Explain the relationship between density and convection currents in the ocean and atmosphere

MEDB's Education and Workforce Impacts

ANNUAL STATEWIDE REACH



3,7000 Participants



450 Teachers Trained



4,500 Students
Job Shadow and Mentored



45 Paid Internships

JUMPSmartMaui DC Fast Chargers Location MAP



JUMPSmartmaui
SMART ENERGY. SMART CARS. SMART GRID.

Maui Tropical Plantation



Queen Ka'ahumanu Center



Ka'anapali Beach Hotel



Pi'ilani Village Shopping Center

Maui Ocean Center



-  5 Installed Stations
-  15 Prospective Stations





Asia Pacific Energy Inquiry