Aquaponics in Education

Rigor, Relevance & Relationships
Ipu Waiwai Kula – ‘AE

sisHawaii ...the power of one plus one
Our Partner Schools:

- Highlands Intermediate
- Kanoelani Elementary
- Keoneula Elementary
- Manana Elementary
- Nanakuli Intermediate
- Palisades Elementary
- S.W. King Intermediate
- Wai‘anae Intermediate
Our Project Partners:

- HIDOE Leeward District
- UH Mānoa College of Tropical Agriculture
- Healing Arts
- Hapa Farms
- Tapiki LLC
Why Aquaponics?

Sustainability: Address issues of:

- Climate Change
- Alternative Energy
- Water Quality
- Water Use
- Land Use
- Food Security
Why Aquaponics?

Rigorous Science

- Digital Testing
- Litmus Testing
- Life Sciences / Biology
- Chemistry
- Earth Science
- PK-21+

This project is funded by the US DOE Native Hawaiian Education Program
Why Aquaponics?

Interdisciplinary and Inquiry-Based

- Scientific Method - Investigation
- Students ‘uncover’
- Relevant and Engaging
- Incorporation of:
  - Math
  - Language Arts
  - Science
  - Social Studies
  - Other Disciplines

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What is culture-based education (CBE)?

• Shared ways of being, knowing and doing
• Teaching and learning about (indigenous):
  • Values / Norms
  • Knowledge
  • Beliefs
  • Practices
  • Experiences
  • Language
5 Elements of CBE

• Hawaiian Language Terms
• Family and Community
• Context Learning
• Content Learning
• Culturally Responsive Evaluation & Assessment
Model of Culture-based Evaluation

**A'o**

**CONTENT**
- Knowledge
- Practice
- Language
- Values

**RELATIONSHIPS**
- Haumāna
- Teacher
- Evaluator

**Pili**

**Observe**
**Listen**
**Reflect**
**Speak**
**Teach**

**LEARN**

**Honua**

**CONTEXT**
- Family
- Community
- Place
- World

**LIVE**
MAHALO!

For more information, please visit us on-line at

www.isishawaii.org

www.stemhawaii.com

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