Pacific Resources for Education and Learning

Building Capacity through Education
Ten Entities and Beyond

• 1960's - 1980's - Regional Educational Laboratory Program begins; NWREL serves the Pacific area
• 1983 - 10th laboratory authorized
• 1985 - Transition from NWREL to Pacific-based organization begins
• 1990 - Pacific Regional Educational Laboratory (PREL) independently funded
Indigenous Knowledge/Western Science

Traditional
Native Knowledge
- holistic
- includes physical & metaphysical world linked to moral code
- emphasis on practical application of skills and knowledge
- trust for inherited wisdom
- respect for all things
- practical experimentation
- qualitative oral record
- local verification
- communication of metaphor & story connected to life, values, and proper behavior
- integrated and applied to daily living and traditional subsistence practices

Common Ground
Organizing Principles
- universe is unified
- body of knowledge stable but subject to modification
Habits of Mind
- honesty, inquisitiveness
- perseverance
- open-mindedness
Skills and Procedures
- empirical observation in natural settings
- pattern recognition
- verification through repetition
- inference and prediction
Knowledge
- plant and animal behavior, cycles, habitat needs, interdependence;
  - properties of objects and materials;
  - position and motion of objects;
  - cycles and changes in earth and sky

Western Science
- part to whole
- limited to evidence and explanation within physical world
- emphasis on understanding how
- skepticism
- tools expand scale of direct and indirect observation & measurement
- hypothesis falsification
- global verification
- quantitative written record
- communication of procedures, evidence and theory
- discipline-based
- micro and macro theory (e.g. cell biology & physiology, atomic theory, plate tectonics, etc.)
- mathematical models

FRAMEWORK:

Indigenous Sociocultural Setting & Physical Place

Ethnomathematic & Ethnoscientific Knowledge

Life-interactions between individuals

Discipline-based STEM Knowledge & Formal Education Settings
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