

Comparing TEK and Western Science

(from Barnhardt and Kawagley 2005)

TEK

- Oral tradition
- Holistic approach
- Learned from observation and experience
- Environment as part of social and spiritual relationships
- Based on cumulative, collective experience

Western Science

- Written tradition
- Reductionist
- Taught and learned mostly analytically
- Hierarchical and compartmentalized organization
- Based on laws and theories

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TEK

- Mainly qualitative
- Data generated by resource users
- Long time within one location
- Integrated and applied to daily living and traditional subsistence practices

Western Science

- Mainly quantitative
- Data collected by specialists or experts
- Short time-series over a large area
- Hypothesis falsification and model building

Common Ground

(from Barnhardt and Kawagley 2005)

- Knowledge is always subject to modification or improvements
- Empirical observations in natural settings
- Pattern recognition
- Verification through repetition
- Inference and prediction