Providing Educators Authentic Scientific Research Opportunities through Integration of Research Content and Technology with GLOBE Teacher Workshops Using an Integrated Model of Professional Development

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Authentic Professional Developments

- Integration of Established Programs
  - GLOBE

- Incorporation of Multifaceted Technologies
  - iPads (Data collection, Training modules, field visualizations)

- Connection to current and relevant research in the field
  - LIDAR, USGS Waterway Mapping, Soils, GIS
Established Programs

GLOBE:

– Pre-made Curriculum
– Support Mechanism
– Recruitment Factor (Wide Audience)

(Globe.gov, 2013)
Multifaceted Technologies

• Modules
  – Self-paced

• Real-time data collection
  – In the Field (Portable)
  – Universal tools in one Device
  – Visualizations in the Field (DEM)

(Miller, Krockover & Doughty, 2013)
Connections to Research

• Authentic

Connections to Current Research

– Platform for Broader Dissemination

– Increases Teacher Content