**Project:** Assessing Teacher Learning About Science Teaching (ATLAST)

Type: MSP RETA

Lead Institution: Horizon Research, Inc.

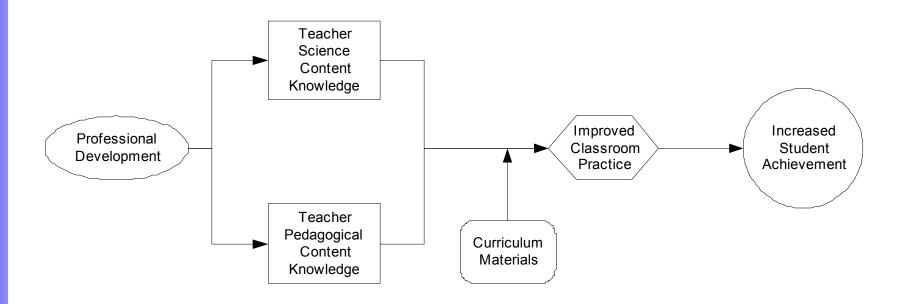
**Core Partner:** Project 2061 (AAAS)

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## Implicit Theory of P.D. (guides P.D. but is as yet untested)





#### Goals of ATLAST

- Create and validate instruments to measure each component of the theory
- Codify procedures for creating instruments
- Provide T.A. to MSPs on using the instruments
- Disseminate instruments



#### Content Areas

- Force and motion
- Processes that shape the Earth
- Flow of matter and energy in living systems



#### **Instruments**

- Teacher opportunity to learn (TOTL) instruments
- Teacher science content knowledge (SCK) assessment
- Teacher pedagogical content knowledge (PCK) assessment
- Student opportunity to learn (SOTL) instruments
  - Curriculum materials analysis
  - Classroom observation protocol
  - Teacher interview
  - Teacher log
- Student science content knowledge assessment



#### Technical Assistance

- Invited conference for 15 MSP PIs and evaluators in Year 3
- One-on-one TA with same 15 MSPs in Years 4 and 5
- Web-based handbook for instrument use



#### Dissemination

- Invited conference in Year 5
- Summer interns from CLTs beginning in Year 3
- Journal articles, papers, and workshops
- Project website



# Connections to MSP Key Features



## Evidence-based designs and outcomes

- ATLAST will produce tools that MSPs can use to document quantitatively the outcomes of P.D.
- Data can be used in designing and revising P.D. approaches



### **Teacher Quality**

ATLAST will create tools that can be used by MSPs to assess teacher quality in terms of science content knowledge, pedagogical content knowledge, and classroom instruction.



#### ATLAST

Assessing Teacher Learning About Science Teaching

