

# The Earth Science by Design Program

## *Earth Science by Design brings Understanding by Design to Earth Science.*

Developed by TERC and the American Geological Institute with funding from the National Science Foundation, ESBD is a year-long program of professional development for middle or high school teachers based on the Understanding by Design approach pioneered by Grant Wiggins and Jay McTighe. ESBD has been field-tested by staff developers in eight sites nationwide.



### **FIND OUT why teachers said:**

"I will never teach the same way again."

"ESBD helped me become the teacher I thought I was."

"I have had a major paradigm shift... I have been teaching for 25 years, and this is the most logical design I've seen."

### **For more information on workshops or to order your ESBD package contact:**

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### **ESBD helps teachers:**

- Teach for deep and enduring understanding of the "big ideas" in Earth science
- Use "backward design" to create curriculum units and lessons that are engaging, rigorous, and aligned with national, state, and local standards
- Design effective classroom assessments and rubrics
- Incorporate powerful web-based Earth science visualizations and satellite imagery into an Earth system science approach

### **A Complete Professional Development Package for staff developers, including:**

- The ESBD Handbook—everything you need to offer the program, including detailed workshop lesson plans
- The ESBD Web Site—where you can advertise your program, register your teachers, and where teachers can develop curriculum units online
- Online resources for Earth science teaching and learning
- PowerPoint presentations for workshops
- DVD video of teacher reflections

### **Workshops for teachers and leaders:**

- TERC offers leadership workshops to support staff developers in the implementation of ESBD

