



# *EarthScope Education and Outreach Implementation Plan*

*EarthScope – Revealing Earth's Secrets!*

*2006-2011*

Approved by  
EarthScope Education and Outreach Committee  
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## MISSION STATEMENT

*“To use EarthScope data, products, and results to create a measurable and lasting change on the way that Earth science is taught and perceived in the United States.”*

## EXECUTIVE SUMMARY

EarthScope explores the geology of the North American continent at all spatial and temporal scales. Education and outreach (E&O) play a central role in its scientific, educational, and societal impact. An effective, efficient, and inclusive E&O effort from Earthscope will 1) implement/execute strategies for recruitment of the next generation of Earth scientists, 2) inform the public of current breakthroughs in earth science research, 3) aid in placing seismic and geodetic instruments across the continent into over 2000 locations in a period of 15 years, 4) provide for innovative education opportunities, The EarthScope Education and Outreach Program (EarthScope E&O Program) must create opportunities for educational and scientific discovery by connecting potential users with the appropriate EarthScope data, products, and results. The EarthScope E&O Program must identify key audiences and help facilitate a diverse audience understanding of Earth processes.

The EarthScope E&O Program bases its effort on previously defined objectives stated in the white paper *EarthScope: An Unprecedented Opportunity for Education and Outreach in the Earth Sciences* (EON Committee, 2002), with the following goals:

**Goal 1:** *Create a high-profile public identity for EarthScope that emphasizes the integrated nature of the scientific discoveries and the importance of EarthScope research initiatives.*

**Goal 2:** *Establish a sense of ownership among scientific, professional, and educational communities and the public so that a diverse group of individuals and organizations can and will make contributions to EarthScope.*

**Goal 3:** *Promote science literacy and understanding of EarthScope among all audiences through informal education venues.*

**Goal 4:** *Advance formal Earth science education by promoting inquiry-based classroom investigations that focus on understanding Earth and the interdisciplinary nature of EarthScope.*

**Goal 5:** *Foster use of EarthScope data, discoveries, and new technology in resolving challenging problems and improving our quality of life.*

The EarthScope E&O Program mission statement, defined by The EarthScope Education and Outreach Steering Committee (EEOSC), encompasses the broad scope of these goals: *To use EarthScope data, products, and results to create a measurable and lasting change on the way that Earth science is taught and perceived in the United States.* The EEOSC has developed this Implementation Plan to achieve the goals and mission statement that honors both local and national needs. This plan defines key audiences and each goal with associated objectives and actions. Each action must be addressed and executed by the E&O community (EEOSC, researchers and educators, managers, and facility personnel). The goals of this plan will not change over the lifetime of the project, but specific actions and the status of each action will change over time as each is completed.

## INTRODUCTION

EarthScope ([www.earthscope.org](http://www.earthscope.org)), a National Science Foundation (NSF) initiative, will explore the structure and evolution of the North American continent at all scales and the physical processes controlling earthquakes and volcanic eruptions. It is an unprecedented experiment in earth science that has far reaching scientific goals; it will spur multidisciplinary research and help foster unique collaborations and interdisciplinary science and education methodologies. Furthermore, the EarthScope project will touch almost every county in the U.S., thus presenting a unique opportunity to engage all communities.

NSF funds the EarthScope facility through NSF's Major Research Equipment and Facilities Construction Account (MREFC). The facility construction, which began in 2003, will be built over 5 years at a cost of \$219 M and will continue through 2008; the National Science Foundation anticipates EarthScope facility operations to continue for an additional fifteen years. Its main infrastructural elements include:

1. The San Andreas Fault Observatory at Depth (SAFOD): a deep borehole observatory that will directly measure the physical conditions under which plate boundary earthquakes occur. This component is managed by a group of scientists at Stanford University and the USGS.
2. The Plate Boundary Observatory (PBO): an array of Global Positioning System (GPS) receivers and borehole strainmeters designed to study the deformation across the active boundary zone between the Pacific and North American plates in the western United States. This component managed by UNAVCO.
3. USArray: a continental-scale seismic observatory designed to provide a foundation for integrated studies of the structure of the continent and the deep Earth. There will be permanent seismic stations, as well as others that will move gradually across the entire U.S. This component is managed by IRIS<sup>1</sup>.

NSF encourages mutually beneficial partnerships to develop EarthScope science and education in order to maximize the impact of this unprecedented Earth science project. Earthscope, both in its interdisciplinary approach and scale to Earth science, has the potential to create a fundamental change in Earth science education and general public understanding of Earth processes and science.

EarthScope applies a *systems* approach to understanding the active tectonics and geologic history of the North American continent at all spatial and temporal scales. By integrating scientific information derived from geology, magnetotelluric, geochemistry, seismology, geodesy, and remote sensing, EarthScope will yield a comprehensive picture of the continent (including a time range from milliseconds to millions of years) beyond that which any single discipline has been able to achieve. EarthScope includes new observational technologies in seismology, geodesy, and remote sensing that will be linked through high-speed, high-performance computing, and telecommunication networks accessible to everyone.

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<sup>1</sup> See Appendix 1 for acronym definition.

The precision of EarthScope's networks will permit the public to begin to encompass a full understanding of Earth's dynamic nature, in their hometown and around the country. EarthScope provides an opportunity for diverse communities to participate in the experiment itself and to recognize their local areas as components of larger Earth systems. Dissemination and use of EarthScope data, discoveries, and new technologies will help resolve challenging problems and improve our understanding of the processes that underlie potentially hazardous geologic events. In turn, we can reduce risk to life and property and enhance our quality of life.

The EarthScope project is an unprecedented opportunity to attract and inspire the next generation of Earth scientists and citizens, in general, by enhancing the relevance of Earth sciences to broader and more diverse audiences. As EarthScope observatories are installed at over 3,000 geographical locations across the nation, educational and local communities will be introduced to scientific questions and to the role their region plays in understanding the formation of the North American continent. EarthScope can be a compelling example of how advances in scientific understanding expand/thrive as new data become available and new hypotheses are tested. Earthscope can also help improve science literacy in the U.S. by nurturing interest in the geosciences through a comprehensive EarthScope E&O Program extending across the country and continuing throughout and beyond the lifetime of EarthScope.

To accomplish these goals, EarthScope must develop and coordinate educational activities, provide science and data products that are accessible to educators and students, and facilitate the creation of modules that will allow EarthScope resources to be incorporated into an inquiry-based learning experience consistent with national educational standards.

## CURRENT STATUS OF THE EARTHSCOPE EDUCATION AND OUTREACH PROGRAM

Since Earthscope's initiation, education and outreach have been recognized as key elements in its success (*EarthScope: Scientific Targets for the World's Largest Observatory Pointed at the Solid Earth* (EarthScope Working Group, 2002)). Without effective outreach, placing the instruments in over 3,000 locations across the continent over a period of 15 years would be difficult at best. Without education, the generation of Earth scientists needed to analyze and use the data would be lost. The EarthScope Education and Outreach Program, as outlined in this document, calls for close collaboration and interaction of four groups: a Steering Committee, researchers and educators, a manager, and facility personnel (UNAVCO, IRIS, SAFOD). The role and the importance of each group is listed below:

- The EarthScope Education and Outreach Steering Committee (EEOSC) gathers information from the community on program needs and identifies new directions for educational efforts. It also makes recommendations and sets priorities with regard to quality assurance and program assessment. The EEOSC brings to the attention of an EarthScope Education and Outreach Manager the needs of local and regional partners throughout the country, and ensures that these needs are properly addressed. The EEOSC includes representations from the EarthScope scientific and education community, partner organizations, alliances, and target audiences.
- Researchers and educators are the main driving force of the Education and Outreach activities. Researchers actively utilize the EarthScope facility and are in a unique position to communicate their findings to the public, educators, and students. Researchers also

engage in E&O by sharing their scientific findings and/or by partnering with others to formally organize and lead E&O activities. Educators use EarthScope information and data products in their didactic activities. They are active participants in workshops and are essential partners in some proposed E&O activities.

- The E&O Manager facilitates and coordinates the E&O activities for EarthScope. He/She works closely with all EarthScope components in producing, compiling, and disseminating materials that can be used by others to understand the objectives and results of EarthScope.
- EarthScope is being built in close collaboration with other institutions that have active E&O programs (including, but not limited to, UNAVCO, IRIS, Stanford, and the USGS) and they play an important role in the success of the E&O activities for EarthScope. These partnerships enhance the capabilities of any one program and avoid duplication of efforts. The collaboration of EarthScope E&O includes sharing resources, working together to produce materials, and co-organizing workshops, among other activities.

## EARTHSCOPE AUDIENCES

An effective EarthScope E&O Program will create many opportunities for diverse communities to engage in scientific learning and discovery, and through this experience develop a sense of their own understanding of the importance and relevance of EarthScope. It is the intent of the EarthScope E&O Program to be able to connect potential users with the appropriate EarthScope data, products, and results, and to point out ways to improve the experience.

EarthScope education and outreach products reach a diverse set of audiences, ranging from members of the general public to professional research scientists. There are five audience segments for EarthScope education and outreach:

- 1 — General Public**
- 2 — Formal Educators and Their Students** (universities, colleges, and K-12)
- 3 — Informal Educators and Their Audiences** (educators and interpreters; museum education staff, agency education and interpretation staff, etc. and their audiences)
- 4 — Partners** (see Table 1)
- 5 — Technical Specialists and other Professionals** (media professionals; engineers; other federal, state, and local agencies; planners, land/resource managers; insurance professionals; technical consumers/specialists; applied science professionals; technical application specialists; and technical data users)

**Table 1:** Current and Potential Partners in the EarthScope Education and Outreach Effort

<b>Current Partners</b>
Active EarthScope Researchers
Incorporated Research Institutes for Seismology (IRIS)
UNAVCO
United States Geological Survey (USGS)
National Aeronautical and Space Administration (NASA)
Department of Energy (DoE)
Professional Organizations (AGI, GSA, AGU, Professional Surveyors)*
State Geological surveys
JOI

Land owners hosting EarthScope facilities National Park Service (NPS) K-12 Teachers Digital Library for Earth System Education (DLESE) National Geography Alliance (NGA) Science Museums
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<b>Potential Partners (not exhaustive list)</b>
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Local School Districts Teacher Associations (NAGT, NESTA, NSTA) Professional Associations (NABGG, SACNAS, AWG) Science and Technology Centers Other E&O programs of relevance (e.g. SCEC, NEES)
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\* see Appendix I for acronym definition

## GOALS, OBJECTIVES, AND ACTIONS

The EarthScope E&O Program outlines an implementation plan that honors local needs while meeting national goals. These goals were first described in the white paper *EarthScope: An Unprecedented Opportunity for Education and Outreach in the Earth Sciences* (EON Committee, 2002):

**Goal 1:** *Create a high-profile public identity for EarthScope that emphasizes the integrated nature of the scientific discoveries and the importance of EarthScope research initiatives.*

**Goal 2:** *Establish a sense of ownership among scientific, professional, and educational communities and the public so that a diverse group of individuals and organizations can and will make contributions to EarthScope.*

**Goal 3:** *Promote science literacy and understanding of EarthScope among all audiences through informal education venues.*

**Goal 4:** *Advance formal Earth science education by promoting inquiry-based classroom investigations that focus on understanding Earth and the interdisciplinary nature of EarthScope.*

**Goal 5:** *Foster use of EarthScope data, discoveries, and new technology in resolving challenging problems and improving our quality of life.*

Each goal has its own objectives that must be met through actions by members of the E&O community (EEOSC, EarthScope researchers and educators, E&O manager, facilities personnel, partners and/or the general public). The goals will not change over the lifetime of the project, but specific actions will change over time, as will their status. Outlined below is each goal, objective, action, and current status. Each objective and action is ranked according to level of importance as defined currently by the EEOSC. This ranking will also change over the duration of the project, especially as targeted opportunities become available.

***Goal 1. Create a high-profile public identity for EarthScope that emphasizes the integrated nature of the scientific discoveries and the importance of EarthScope research initiatives.***

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*Objective 1.1: Build a Strong Network for EarthScope Research and EarthScope E&O Program*

**Actions:**

- 1.1.1 Create an asset map to function as an inventory of relevant and existing educational materials, including those of EarthScope partners (e.g. UNAVCO, IRIS, USGS, NASA, DoE, etc) and all EarthScope funded research projects. Utilize existing DLESE services including the DLESE Collections capability. [Ongoing]
- 1.1.2 Be an active contributor to the EarthScope website. <http://www.earthscope.org> [Ongoing]
- 1.1.3 Facilitate access to existing national standards so that researchers can transform their materials into an educational perspective. [Planned]
- 1.1.4 Provide suggestions annually to NSF Program Officers to have EarthScope E&O priorities included in program activities (e.g. solicitation, panels). Look into collaborating with other NSF programs and initiatives that work in the field of pedagogy, informal education, etc. [Ongoing]
- 1.1.5 Coordinate with National EarthScope meeting committee to highlight educational and outreach activities (e.g. have a graduate student contest, etc). [Ongoing]
- 1.1.6 Disseminate EarthScope information and materials at national meetings to generate awareness of available educational opportunities such as presentations, educational research, graduate student contest, etc. Establish an EarthScope town hall meeting venues at professional meetings. [Ongoing]
- 1.1.7 Continue “teachable moment” series flyers for different natural processes and update regularly. <http://www.earthscope.org/education/tm/index.php> [Ongoing]
- 1.1.8 Encourage and support community outreach by geoscientists and educators. [Ongoing]
- 1.1.9 Identify exemplars of E&O activities and/or opportunities that can be utilized by PIs for their projects. Create templates for PI use as guides to develop EarthScope education projects. [Ongoing]
- 1.1.10 Create and maintain “EarthScope Wiki.” (Note: A Wiki allows users to create and edit any page in a Web site, encourages self-governing use of the Web, and promotes content composition by users.) [Planned]

*Objective 1.2: Develop a national identity for EarthScope research and education.*

**Actions:**

- 1.2.1 Develop and distribute “press pack” of information to aid PIs and others when interacting with the media. Identify and establish national, regional, and local outlets for media and press interaction. [Ongoing]
- 1.2.2 Be an active contributor to the quarterly EarthScope newsletter(s). Distribute hard copy and electronically to EarthScope community. [Ongoing]



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- 1.2.3 Distribute information products (maps, news articles, brochures, posters, fact sheets) on EarthScope project plans and results using packaging strategies that address multiple needs and audiences. [Ongoing]
- 1.2.4 Broadly announce a timetable of EarthScope events to encourage participation and promote awareness. [Ongoing]
- 1.2.5 Assist and collaborate with E&O Programs in the facilities to develop materials used during instrument deployment advances. [Ongoing]
- 1.2.6 Assist and collaborate with partners to develop video segments and generate interactions with the public and media representatives. [Ongoing]
- 1.2.7 Create an interactive partners web page. [Planned]
- Develop an EarthScope slogan to be used in all branded products. [Completed]
- EarthScope Identity – Establish an EarthScope identity and a signature look on all resources associated with the experiment. [Completed]

*Objective 1.3: Develop template-type media that could easily be adapted to museums, parks, schools, and community centers.*

### **Actions:**

- 1.3.1 Collaborate with partners to develop resources that engage and educate a broad and diverse audience at venues such as museums and parks. [Ongoing]
- 1.3.2 Create resources and implement mobile outreach programs and displays for schools, libraries, community centers, state fairs, conferences, National Parks, and meetings that promote EarthScope, Earth science, and careers in science. [Planned]
- 1.3.3 Adapt existing inquiry activities for use at informal education venues by using activities cataloged in initial asset mapping. [Planned]

*Objective 1.4: Develop an evaluation strategy to best communicate EarthScope goals and priorities.*

### **Actions:**

- 1.4.1 Encourage evaluation components (front-end evaluation, formative evaluation, and summative evaluation) to be written into all EarthScope E & O efforts that focus on education and outreach. [Ongoing]
- 1.4.2 Develop or leverage resources for building a pool of highly qualified/competent evaluators in the formal and informal education evaluation arena. [Ongoing]
- 1.4.3 Develop best practices procedures and internal evaluation of the effort to create high profile project. [Planned]

***Goal 2. Establish a sense of ownership among scientific, professional, and educational communities and the public so that a diverse group of individuals and organizations can and will make contributions to EarthScope.***

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*Objective 2.1: Promote professional development opportunities for researchers, educators, students, and technical specialists.*

**Actions:**

- 2.1.1 Establish “Distinguished Lecture Program” for EarthScope. [Ongoing]
- 2.1.2 Maintain speaker resources. [Ongoing]
- 2.1.3 Provide complementary EarthScope materials to professional development workshops held by IRIS, UNAVCO, and other groups. [Ongoing]
- 2.1.4 Encourage use of NSF Research Experience for Undergraduates for EarthScope undergraduate research. [Planned]
- 2.1.5 Hold regular regional EarthScope Materials Development Workshops to create materials that integrate EarthScope data into the classroom. [Ongoing]
- 2.1.6 Rewrite, craft, and disseminate publications or other materials that showcase how data can be used in an interactive manner. [Planned]
- 2.1.7 Recruit interns for EarthScope programs. [Ongoing]

*Objective 2.2: Promote educational and local community involvement in EarthScope.*

**Actions:**

- 2.2.1 Provide content based information to aid local education and outreach alliances in resource development. [Ongoing]
- 2.2.2 Collaborate with EarthScope projects that promote involvement of community organizations and schools by installing equipment and assisting with information on how technology and data are used as educational resources. [Ongoing]
- 2.2.3 Develop school partnerships and encourage use of Research Experience for Teachers to provide field and lab research experiences to science teachers. [Planned]
- 2.2.4 Fund pre-service/in-service teachers to attend NSTA and the EarthScope National Meeting. Create criteria for selection of candidates. [Ongoing]

*Objective 2.3: Develop an evaluation strategy to assess community participation.*

**Actions:**

- 2.3.1 Promote evaluation components (front-end evaluation, formative evaluation, and summative evaluation) to be written into all EarthScope E & O efforts that focus on outreach and community involvement. [Ongoing]
- 2.3.2 Develop or leverage resources for building a pool of highly qualified/competent evaluators in the informal education evaluation arena. [Ongoing]
- 2.3.3 Develop best practices procedures and internal evaluation to assess community participation. [Planned]

***Goal 3. Promote science literacy and understanding of EarthScope among all audiences through informal education venues.***

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*Objective 3.1: Develop a variety of outreach venues for informal education/interpretive opportunities for the general community and specific audiences.*

**Actions:**

- 3.1.1 Create education and outreach fact sheets for current EarthScope science discoveries. [Ongoing]
- 3.1.2 Build on IRIS's "Museum Lite" using EarthScope data. [Ongoing]
- 3.1.3 Collaborate with the National Park Service and museums to develop EarthScope resources and services for visitor. Provide training and workshops for staff to better serve visitor needs. [Ongoing]
- 3.1.4 Develop Native American contacts to aid in executing the best practices for siting equipment in their communities. [Ongoing]
- 3.1.5 Establish numerous educational venues that will promote the involvement of underserved groups. [Planned]
- 3.1.6 Create human interest articles for EarthScope (press release). [Planned]
- 3.1.7 Showcase projects by students, educators, and community members at national meetings. [Planned]
- 3.1.8 Promote two-way open communication to identify opportunities and mechanisms for the community to contribute to education and outreach. [Planned]
- 3.1.10 Promote partnerships that create resources to engage families in science and promote life-long learning such as educational television segments on EarthScope discoveries, a roadside geology travel log, or natural history and geology maps of popular vacation sites (e.g., Goggle EarthScope). [Planned]
- 3.1.11 Develop family science guide and sponsor family science nights at local community centers. [Planned]
- 3.1.12 Create regional EarthScope guidebooks for schools and families. [Planned]
- 3.1.13 Hold science community meetings in conjunction with science and educational society meetings. [Planned]

*Objective 3.2: Develop an evaluation strategy that assesses science literacy.*

**Actions:**

- 3.2.1 Encourage evaluation components (front-end evaluation, formative evaluation, and summative evaluation) to be written into all EarthScope E & O efforts that focus on science literacy. [Ongoing]
- 3.2.2 Develop or leverage resources for building a pool of highly qualified/competent evaluators in the informal education evaluation arena. [Ongoing]
- 3.2.3 Develop best practices procedures and internal evaluation to assess the effectiveness science literacy effort. [Planned]

***Goal 4. Advance formal Earth science education by promoting inquiry-based classroom investigations that focus on understanding Earth and the interdisciplinary nature of EarthScope.***

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*Objective 4.1: Provide opportunities in which EarthScope contributes to formal education.*

**Actions:**

- 4.1.1 Support and/or conduct district-wide and region-wide K-16 teacher workshops. Teachers workshops should emphasize the connection of activities to national standards, curriculum development, and data use. [Ongoing]
- 4.1.2 Make EarthScope data, technology, and discoveries comprehensible, useful, and exciting to K-16 students in ways that promote effective instructional strategies and research opportunities. [Ongoing]
- 4.1.3 Hold “cross-training” workshops to link science and education communities. [Ongoing]
- 4.1.4 Establish partnerships with two-year and four-year colleges to connect research universities and K-16 schools and students. [Planned]
- 4.1.5 Encourage the use of EarthScope data, by students, in science fairs. [Ongoing]
- 4.1.6 Encourage development and or adaptation of EarthScope education materials using Universal Design for Learning techniques. This program emphasizes participation by all students in the general curriculum and is intended to focus on making accommodations and adjustments as necessary for disabled children to access the general curriculum. [Planned]
- 4.1.7 Improve current web-list of educational resources by providing information on education level and standards. [Ongoing]

*Objective 4.2: Provide opportunities for technical specialists and other professionals to contribute to the EarthScope formal education.*

**Actions:**

- 4.2.1 Partner with companies and agencies to train more users of data for commercial purposes (e.g., baseline surveying, hazard estimation.) [Planned]

*Objective 4.3: Develop an evaluation strategy to assess formal educational efforts.*

**Actions:**

- 4.3.1 Encourage and promote that evaluation components (front-end evaluation, formative evaluation, and summative evaluation) be written into all EarthScope E & O efforts that focus on formal educational opportunities.
- 4.3.2 Develop or leverage resources for building a pool of highly qualified/competent evaluators in the formal education evaluation arena. [Ongoing]
- 4.3.3 Develop best practices procedures and internal evaluation to assess formal education efforts. [Planned]

***Goal 5. Foster use of EarthScope data, discoveries, and new technology in resolving challenging problems and improving our quality of life.***

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*Objective 5.1: Promote the use of technology to identify hazards and assist community planners.*

**Actions:**

- 5.1.1 Develop museum exhibits and demonstrations based on regional geology and its impact on local land use issues. [Planned]
- 5.1.2 Support regional workshops that address hazard identification and resource use. [Planned]
- 5.1.3 Interact with community planners to help them identify geologic hazards and other land use issues. [Planned]
- 5.1.4 Integrate EarthScope data/results in geospatial planning related to geologic hazards. [Planned]
- 5.1.5 Assist in the development of geospatial-based exercises that identify associated hazards, costs, and benefits. [Planned]
- 5.1.6 Produce fact sheet to showcase successful applications of EarthScope products. [Planned]

*Objective 5.2: Provide opportunities for technical specialists and other professionals to contribute to the EarthScope project.*

**Actions:**

- 5.2.1 Partner with companies and agencies to train more users of EarthScope data for commercial purpose (e.g., baseline surveying, hazard estimation.) [Planned]
- 5.2.2 Link student interns with commercial enterprises that use EarthScope data and products. [Planned]

*Objective 5.3: Develop evaluation strategy to promote data use.*

**Actions:**

- 5.3.1 Encourage and promote that evaluation components (front-end evaluation, formative evaluation, and summative evaluation) be written into all EarthScope E & O efforts that focus on data use.
- 5.3.2 Develop or leverage resources for building a pool of highly qualified/competent evaluators in the data use evaluation arena. [Ongoing]
- 5.3.3 Develop best practices procedures and internal evaluation to assess data use efforts. [Planned]

## CONCLUSION

This implementation plan lays the foundation for the EarthScope E&O Program to achieve its mission of *using EarthScope data, products, and results to create a measurable and lasting change on the way that Earth science is taught and perceived in the United States*. The development of long-lasting partnerships and facilitation of regional use foster a vibrant program that honors local needs while meeting national goals.

The EarthScope E&O Program has the potential to fundamentally change how Earth science education is performed in the United States. The equivalent of a NASA mission, in terms of education and outreach opportunities, it combines the interest generated by large-scale experiments with a strong local and regional relevance. The E&O program can also provide assistance with a wide range of products, from elementary education exercises to graduate dissertations and fact sheets, suitable for broad and diverse audiences. However, the merit of this program can only be realized through a strong, well-planned, and coordinated education and outreach effort touching on all aspects of EarthScope.

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APPENDIX I: ACRONYM GLOSSARY

<b>Acronym</b>	<b>Organization</b>
AGI	American Geological Institute
AGU	American Geophysical Union
AWG	Association for Women Geologists
DoE	Department of Energy
DLESE	Digital Library for Earth System Education
GSA	Geological Society of America
IRIS	Incorporated Research Institutes for Seismology
JOI	Joint Oceanographic Institutions
NABGG	National Association of Black Geologist and Geophysicists
NAGT	National Association of Geology Teachers
NASA	National Aeronautics and Space Administration
NEES	Network for Earthquake Engineering Simulation
NESTA	National Earth Science Teachers Association
NPS	National Parks Service
NSTA	National Science Teachers Association
SACNAS	Society for the Advancement of Chicanos and Native Americans in Science
SCEC	Southern California Earthquake Center
UNAVCO	Not Applicable
USGS	United States Geological Survey

## EarthScope Education and Outreach Steering Committee (2006)

<b>Name</b>	<b>Title</b>	<b>Organization</b>
Aaron Velasco	EEOC Chair	University of Texas at El Paso, TX
Norma Neely	Vice Chair	NE Regional Professional Development Center Truman State University, Kirksville, MO.
Jenelle Hopkins	Member	Centennial High School, Las Vegas, NV
Linda Lutz-Ryan	Member	National Park Service, Denver, CO
Debi Kilb	Member	University of California, San Diego, CA
Priscilla Grew	Member	University of Nebraska, Lincoln, NE
Steve Semken	Member	Arizona State University, Tempe, AZ
Jayne Aubele	Member	New Mexico Museum Of Natural History & Science, Albuquerque, NM
Stephanie Stockman	Member	Science Systems and Applications, Inc
John DeLaughter	Non-voting Member	EarthScope, Washington, DC
Susan Eriksson	Non-voting Member	UNAVCO Inc., Boulder, CO
John Taber	Non-voting Member	IRIS Consortium, Washington, DC