# 5. Milestones and Achievements through June 2006

## The General Program

- 3,620 Grade K-13 Educators Trained on inquiry-based, handson lessons in the Earth and space sciences, and aeronautics and astronautics, at 56 professional development workshops (an average of 64 educators per workshop.)
- JOURNEY through the UNIVERSE

- School Programs by 114 Visiting Researchers and 9 Visiting Educators from 38 research institutions nationally:
  - 1,554 schools visited across 13 communities (an average each year of 25 schools per community.)
  - **4,657 programs conducted** in grade K-20 classrooms.
  - 196,700 grade K-13 students participated in classroom programs (an avg. of 40 students per classroom program; an annual average of 3,600 students per community.)
  - 7 NASA field centers & institutes, 11 colleges & universities, 7 corporations, and the Smithsonian were among the home.

## Annual Impact at a Glance Current and Projected

#### **Classroom Programs**

*Currently:* 36,000 students in 250 schools

across 10 communities (per year)

In 5 Years: 180,000 students in 1,200 schools

across 50 communities (per year)

#### **Educators Trained**

<u>Currently</u>: 600 (per year) <u>In 5 Years</u>: 3,000 (per year)

### **Programs for Families and the Public**

Currently: 8,000 parents, students, and teachers

(per year)

*In 5 Years*: 40,000 (per year)

and the Smithsonian were among the home institutions of the Visiting Researchers and Visiting Educators.

- 95 Family/Public Events conducted for a combined 34,400 parents, students, and teachers, corresponding to an average of 360 attendees per event.
- 47 Journey through the Universe Weeks conducted across 13 communities nationally.
- Program models developed and assessed over a wide range of environs, including: underserved rural communities with both large and small geographic footprints; inner-city urban areas with high minority populations; a multiple school district model; school district-led, science center-led, and university-led initiatives; a single grade level model across a large school system; and a comprehensive grade preK-20 approach in smaller school districts.
- Development of grade K-13 lesson packages comprehensive enough to be adopted by a school district as the Earth and/or space science curriculum, as was the case for sixth grade in Washington, DC, in 2000.

## Community Achievements—A Window on Customization

A community's *Journey through the Universe* program is meant to reflect the strategic needs, capabilities, and 'personality' of that community. Programming in each community is therefore unique:

- In Washington, DC, the educational lessons were adopted as Earth and space science strands of the 6<sup>th</sup> grade curriculum in the District of Columbia Public Schools (DCPS). Programming targets 6<sup>th</sup> grade educators and 6<sup>th</sup> grade students and their families. A Compendium of lessons was developed for DCPS that specifically targeted the DCPS 6<sup>th</sup> grade Standards of Teaching and Learning, which were based on the NRC National Science Standards and Project 2061 Benchmarks for Science Literacy.
- In Marquette, Michigan, Dickinson-Iron-Menominee, Michigan, and Moscow, Idaho, programming extended over a large geographic footprint (over a 50 mile radius) allowing *Journey through the Universe* to serve as an educational bridge between many rural communities, each overseen by its own school district.
- Governor Linda Lingle declared *Journey through the Universe Week* across the state of **Hawai'i** in each of the last three years. **Washington**, **DC**, Mayor Anthony Williams declared *Journey through the Universe Week* in the District of Columbia in each of the last four years.
- On the Big Island of Hawai'i, 22 astronomers working at the observatories located atop Mauna Kea were trained to present to audiences of all ages as a means of sustaining the program for years to come.
- In Muncie, Indiana, the Local Team included Ball State University. The University placed strong emphasis on training pre-service educators, particularly those enrolled in elementary science methods classes.
- **In Nogales, Arizona**, the Santa Cruz Excellence in Education Foundation (SCEEF), a non-profit organization, was established to provide long-term sustainability for local *Journey through the Universe* efforts.



NCESSE science educator Betsy Miller talks to a class in Hilo, Hawai'i, January 2006.

- The initiative in San Diego, California, was the largest to date. A team of six Visiting Researchers and one Visiting Educator conducted over 125 programs for 12,000 students.
- Martinsville, Virginia, conducted a *mini-Journey Week* in Year 1 to grow community interest first in a small school district. The excitement generated prompted surrounding counties to request expansion to their districts starting in Year 3.
- Family/public science events in Labette County, Kansas, and Kansas City, Missouri/Kansas, each exceeded 1,000 attendees. In Nogales/Rio Rico, Arizona, attendance exceeded 2,000.

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We believe that to continue the legacy of scientific exploration, every generation must be inspired to learn what we know about our world and the Universe, and how we have come to know it.

We also believe that it takes a community to educate a child...

and that it takes a network of communities to reach a generation.