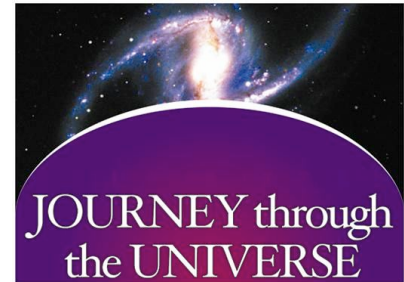


2. Journey through the Universe Week One Approach to Programming

Journey through the Universe programming is conducted in your community by a National Team of scientists, engineers, and educators (the Visiting Researchers and Visiting Educators) from public and private Earth and space science research organizations across the nation. Programming can be conducted throughout the year, or as a single, large-scale, and celebratory week of activities—*Journey through the Universe Week*.



Goals: *Journey Week* can serve as a kick-off event for *Journey through the Universe* in the community; build community-wide awareness; and establish community-wide involvement in programming.

Journey through the Universe Week includes:

Professional Development for Grade K-13 Educators: half-day to day-long workshop(s) for up to 200 pre- and in-service educators on lessons comprehensive enough to be adopted as a school system's curriculum in the Earth and space sciences, and delivered by an educator/scientist team. A community can opt to hold the workshop(s) in advance of *Journey Week*, and can customize the workshop(s) to grade level.

Goals: *to provide training on a comprehensive suite of high quality, inquiry-based lessons directly relevant to the curriculum; mobilize the education community in support of Journey Week; provide educators ownership in the Learning Community Model; and detail the resources available to them throughout the year.*

Typical Journey Week Impact

A community is visited by a National Team for a week. The Team includes: a NCESE educator, a NCESE researcher, and three Visiting Researchers from national research organizations. The Team delivers:

- *120 classroom presentations to 4,000 grade preK-20 students, one classroom at a time.*
- *A 1-day professional development workshop for 10-20 master science teachers.*
- *A 1-day professional development workshop for 100 grade K-13 educators.*
- *At least one family/public event for 500 attendees.*



Middle school educators in Muncie, Indiana conduct a weightlessness lesson during a workshop in April 2000.

Master Teacher Workshop: for the master science teachers on the Local Team. Held in advance of the educator workshop(s), it is required only if attendance at an individual educator workshop exceeds 60.

Goals: *train master teachers on inquiry-based activities so they can help facilitate these activities during high attendance educator workshops; and provide added training for master teachers so they can serve as a local resource in the community.*

Researcher Visits to Grades preK-20

Classrooms: by the Visiting Researchers providing personal and personable conversations with typically 1,500-4,500 students—one classroom at a time—through 50-150 presentations. Presentations to two classes at a time are also acceptable. Presentations are not lectures, but rather engage audiences through dialog, and inquiry-based and hands-on interactions.

Goals: provide students a window on research in terms of process, content, and human experience; and an understanding of the pathway to a research career.



Visiting Researcher Dr. Ursula Gibson, Professor of Engineering, Dartmouth College, facilitates a hands-on activity in a classroom in Kansas City, March 2004.



Family event at the Smithsonian's National Air and Space Museum, as part of Journey through the Universe in Washington, DC.

Family and Public Science Events: one to three daytime or evening events at local science centers and auditoria. Each event includes an interactive presentation—more accurately described as a performance—by a Visiting Researcher, and is appropriate for family learning, is curriculum-relevant, and typically attended by 100-1,000. Events are advertised in the community at individual schools as a school function, and as a public event in the media.

Goals: engage parents in the education of their children; foster educational conversations between parent and child for weeks after the program; and build a bridge between the schools and the public they serve.

Donated Educational Materials: posters, lithographs, multimedia packages, etc., as available, that are donated by Earth and space science research and education organizations across the nation for distribution to *Journey through the Universe* communities. A donation package is provided to each school and informal science organization represented at the educator workshop(s).

Goals: provide educators visually exciting materials that are meant to engage students in the content associated with the *Journey through the Universe* program.

<http://journeythroughtheuniverse.org>

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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.