Journey Through the Universe is a local education program led by Gemini/NSF NOIRLab in partnership with the Hawai‘i Department of Education Hilo-Waiakea Complex Area. The program promotes science education in Hawai'i schools grades preK – 12 and inspires students to explore Science, Technology, Engineering and Math (STEM) fields. Journey endeavors to foster curiosity and wonder about our Universe, and the cutting-edge research and technology in Hawai‘i and beyond that is allowing us to understand our place in the cosmos like never before.

The success of Journey Through the Universe over the past 20 years is evidence of the support from our local community partners across the sectors of government, business, astronomy and higher education.

Evaluating the Impact of the Program

Celebrating its 20th year, from 5 to 9 February 2024, Journey Week included in-person classroom presentations, career panels and three public events. Additionally, Gemini’s StarLab Portable Planetarium traveled to local prekindergarten through second-grade classrooms during the school year. This Feedback Summary is a collection of the data obtained from Journey Through the Universe teacher, Journey educator, and public surveys. Every year we collect and evaluate these data to find new ways to improve our program; we hope this summary will help to make the future of Journey even better!

Journey Through the Universe Deliverables

Connections

Journey Week establishes effective relationships between the community, STEM professionals, and local teachers and their students. Each year, the Hawai‘i Island Chamber of Commerce hosts the Journey Through the Universe welcome event.

Scientific Literacy

Classroom presentations support grade-level standards and provide a space for practicing science and engineering skills. Students at Hilo High are pictured creating their own spectrometers.

STEM Careers

Career Panels and STEM professional presentations in classrooms provide opportunities for students to explore a variety of careers in STEM. Anniek Gloudemans, a Gemini Science Fellow, is pictured here sharing her career journey with students at Waiakea Intermediate School.

Wonder

Journey Week’s hands-on experiences for students and visits from the Gemini StarLab foster curiosity and wonder about our Universe. During this particular visit, students had the opportunity to make mini-robots and learn about engineering careers with professionals from NASA.

The 20th Anniversary of Journey Through the Universe Reached...

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<td>schools</td>
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**Journey Educator Results**

Journey educators volunteer to visit classrooms during Journey Week and offer 45–60-minute hands-on presentations and/or participate in career panels for grade levels 3 to 12. Sixty Journey educators participated in the 20th Anniversary of Journey and differed in their professions, as astronomers, engineers, information and technology services, outreach specialists, and more. Thirty-one Journey educators submitted feedback for their entire involvement with Journey Week. The Journey Team uses their valuable responses to improve the overall experience for new and veteran Journey educators.

**Journey Educator Workshop**

Each year, the Journey Team hosts a Journey Educator Workshop at the Gemini North Base Facility in Hilo. This workshop equips Journey Educators with the necessary skills and resources for their presentations and Journey Week.

**Overall Satisfaction with Journey**

My overall satisfaction with the Journey program is...

- **Very Satisfied** 90%
- **Satisfied** 10%

**Teacher Results**

Every teacher is asked to complete one survey per presentation done in their class. The teacher feedback form was designed to obtain quantitative and qualitative feedback from participating teachers. Over 120 teachers took part in this year’s Journey, of whom 62 completed the feedback form.

“Our fifth graders had a wonderful time. Many came back the next day saying how they told their families about what they learned and that they got to touch actual pieces of the moon and Mars.”

— Fifth Grade Teacher

**Student Results**

Over 500 students completed a survey about their experience with Journey Week. Students were asked what they learned, what the best part of their experience was, and recommendations for how Journey could improve.

The following word cloud was created from a compilation of all students’ answers to the question, “One Thing I Learned Was...”
Public Engagement Results

Responding to the desire for increased public interaction expressed in previous teacher surveys, the Journey Team organized two public events to take place during Journey Week. These included a public lecture, From Hollywood to the Moon and Beyond, and a free screening of the independent film, Space, Hope, and Charity. Following these events, 20 people completed the survey to provide feedback on Gemini Observatory’s effort toward supporting community engagement in astronomy.

Comparing Results

The results from the Journey evaluations are compared with previous years to measure improvement and determine the effectiveness of program changes. Based on the 2023 results, the Journey team decided to enhance the resources available to the Journey educators leading up to Journey week. This year, Journey educators were equipped with a resource library containing a variety of sample lessons. Many Journey educators utilized lessons from the library or expressed that it aided in developing their own presentations. Designing these additional resources, not only fosters a sense of support among Journey educators but improves the quality of classroom presentations and promotes hands-on engagement during Journey week.

Journey Educators

The Journey Team prepared me (logistically) to deliver my presentation.

Teachers

The presentation was appropriate for this grade level — content and vocabulary supported student understanding.

The presenter(s) successfully engaged students (students were attentive, excited and asked questions, etc.).

Mahalo to Everyone Involved!

Additional information can be found on the Journey website.