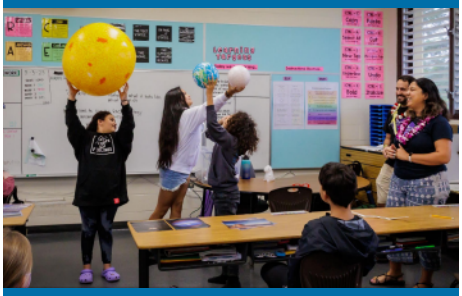
Journey Through the Universe
Feedback Summary

Journey Through the Universe is a local education and outreach program led by NSF's NOIRLab, the Hawai'i Department of Education Hilo-Wai'kea Complex Area, and the Thirty Meter Telescope International Observatory. The program promotes science education in Hawai'i Island school districts and inspires students to explore Science, Technology, Engineering and Math (STEM) fields by developing literacy in science. *Journey* endeavors to foster curiosity and wonder about our Universe, and the cutting-edge research and technology that is allowing us to understand our place in the cosmos like never before. The success of *Journey* Through the Universe over the past 19 years is evidence of the support from our local community partners across government, business, astronomy and higher education, and our foundational partnerships.



Evaluating the Impact of the Program

Celebrating its 19th year, from 27 February to 2 March 2023, *Journey Week* included in-person classroom presentations and career panels. This Feedback Summary is a collection of the data obtained from *Journey Through the Universe* teacher and astronomy educator 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 our 20th year even better!

Journey Through the Universe Deliverables

Connections
Journey Week establishes effective relationships between STEM professionals and local teachers and their students.

STEM Careers
Career Panels and STEM professional presentations in classrooms provide opportunities for students to explore a variety of careers in STEM.

Scientific Literacy
Classroom presentations support grade-level standards and provide a space for practicing science skills.

Wonder
Journey Week's hands-on experiences for students foster curiosity and wonder about our Universe and our place in space.

Journey Through the Universe 2023 Reached

11 schools

160+ classes

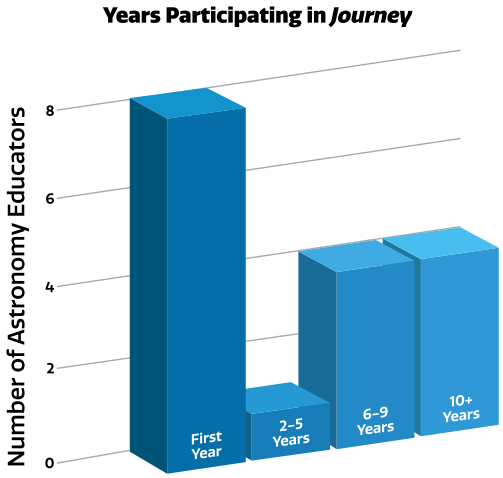
3100+ students

150 teachers

Astronomy Educator Results

Astronomy educators volunteer to visit classrooms during *Journey Week* and offer 30–60-minute hands-on presentations and/ or participate in career panels for various grade levels. Astronomy educators differ in their professions, as astronomers, engineers, information and technology services, outreach specialists, and more. Seventeen astronomy educators submitted feedback for their entire *Journey Week* experience. While the majority of the astronomy educator's feedback was positive, their valuable responses have led the *Journey* Team to focus on developing new strategies to better prepare all presenters for *Journey Week*.

Developing Lasting Relationships (Astronomy Educators)
How many years have you been involved with *Journey Through the Universe*?

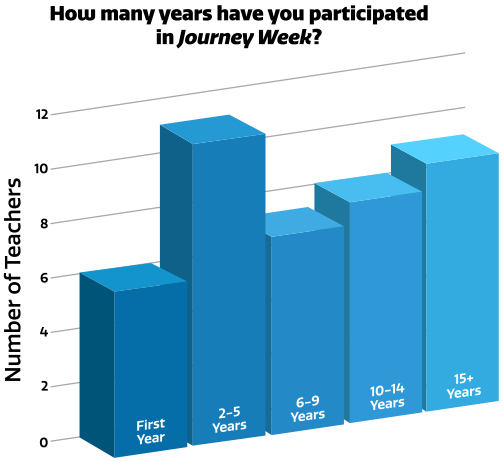


100%
of astronomy educators would like to participate again next year

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. About 155 teachers took part in *Journey* 2023, of whom 49 completed the feedback form.

Developing Lasting Relationships (Teachers)
How many years have you participated in *Journey Through the Universe*?



Overall Satisfaction with *Journey*
My overall satisfaction with the *Journey* program is...

Developing Positive Attitudes in STEM
Journey Week helped my STUDENTS to develop positive attitudes toward STEM careers.

98% **Agreed or Strongly Agreed**

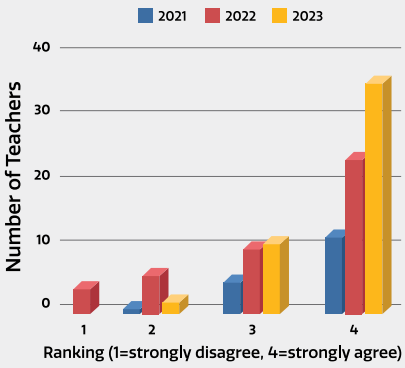
Mahalo to Everyone Involved!

For the full summative evaluation report including recommendations for the future, visit this document. For a highlight of all activities during *Journey Week* visit this report. Additional information can be found on the Journey website.

Comparing Feedback From 2021–2023

Journey 2023 went back to in-person activities after two years of virtual experiences. In 2021, 5515 students participated in the virtual *Journey Week*, compared to 8000 in 2022. Fewer students participated in *Journey Week* 2023 (3100+ students) compared with the virtual years, a result of going back to an in-person format. However, **results from the feedback forms show the educational impact and overall experience were greater in 2023, with both engagement and grade-level appropriate presentations being scored higher. We attribute this increase to the in-person experiences and emphasis from the Journey Team for the astronomy educators to provide a hands-on experience.**

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



I would encourage other teachers to participate in *Journey Through the Universe*