



Odyssey 2019

Presentation to School Committee
August 30, 2017

A Historical Look at Odyssey

- Originated in 1971: Vermont/Hike Pico/Killington/Ascutney. Few students went.
- All of 4th grade at Haynes only, which created a division in town.
- 1989: ALL 4th graders in Sudbury went on Odyssey. Vermont Farm and Wilderness Quaker camp. Trip revolved around Science standards. Parents drove children. Teachers drove themselves. No showering/limited bathrooms.
- “Sudbury Odyssey”: moved from Vermont to New Hampshire for student needs. Three nights & four days. Coach buses used for transportation.
- Camp Wicosuta, NH: Science standards changed, trip moved closer to home and realigned with new standards.
- Camp Bauercrest, MA: 8 years, move closer to Sudbury and added outdoor adventure. Began day trip option.

Odyssey 2017 Program Review

Surveys

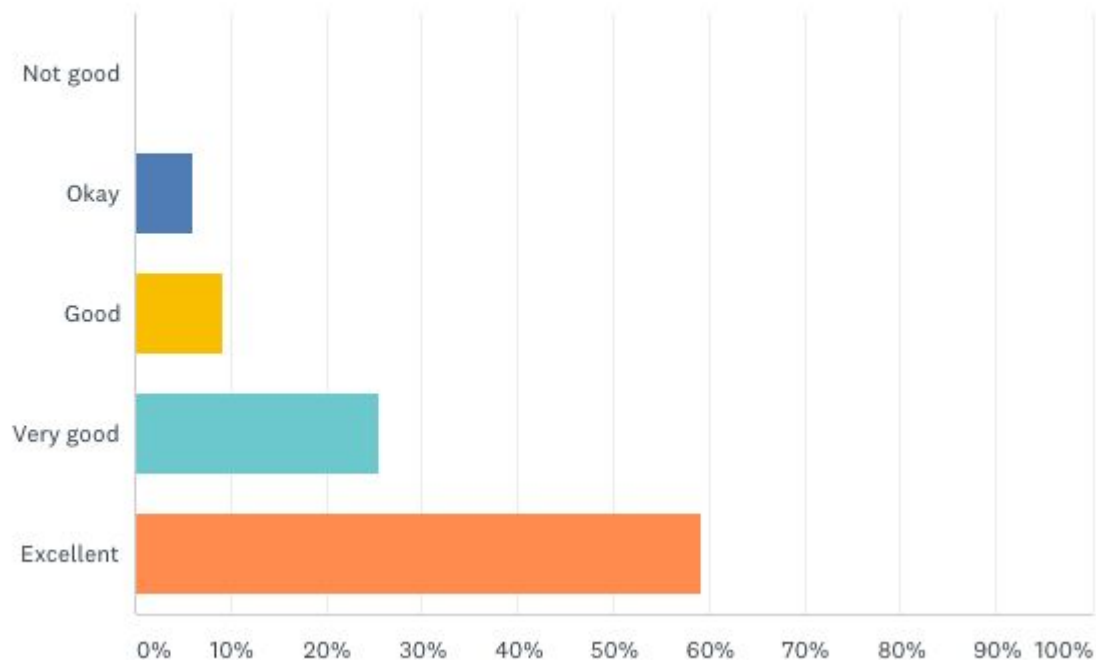
- Parents, chaperones, teachers, and students
- Questions about successes, challenges, affordability, favorite activities
- Ratings and open response

Odyssey Planning Team Program Review

Parent Feedback

Overall, how would you rate the Odyssey experience for your child?

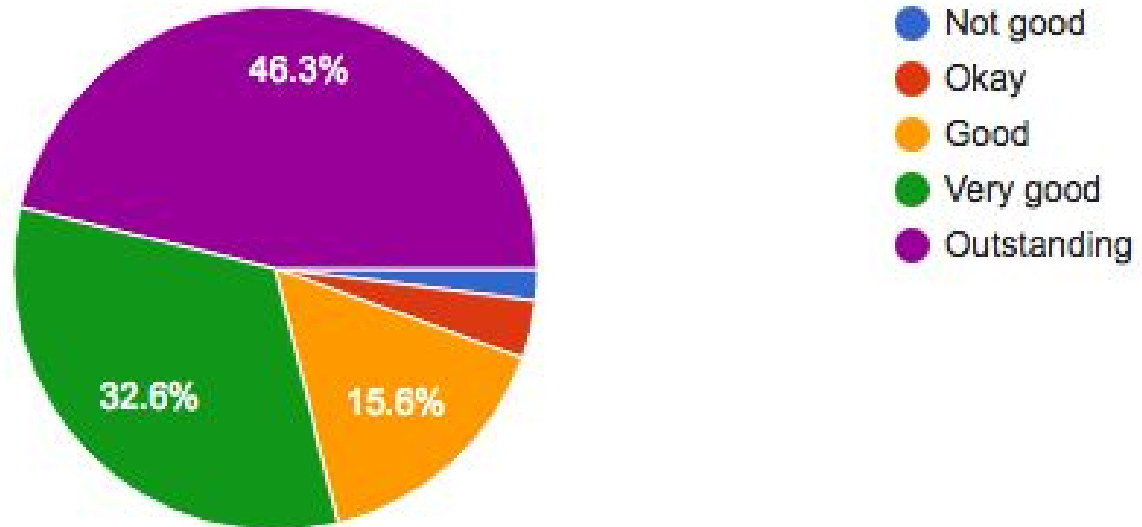
Answered: 98 Skipped: 2



Student Feedback

Overall, how would you rate your experience at Odyssey?

307 responses



Challenges with Current Program

1. Equity and inclusion - access to all aspects of the program
2. Social - emotional impact on students
3. Health and safety concerns
4. Curricular

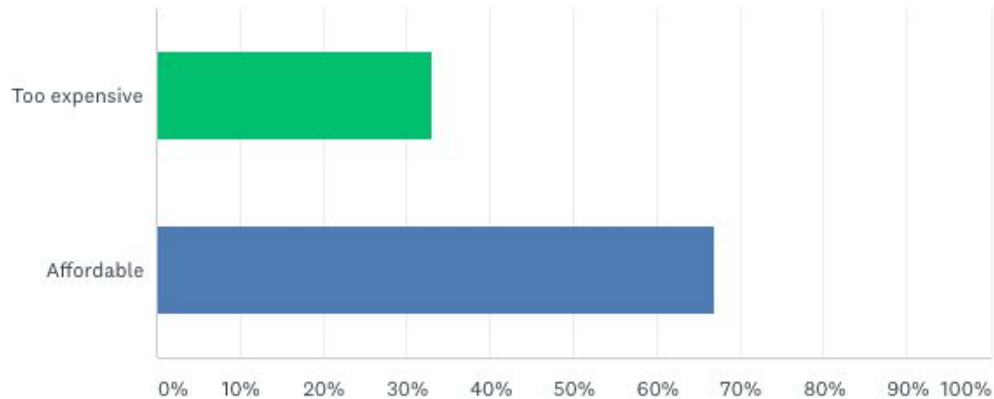
1. Equity & Inclusion: Access to All Aspects of Program

- Student tuition
- Chaperones
- Location
- Program design

Equity & Inclusion: Access to All Aspects of Program

In your opinion, how affordable is the Odyssey trip?

Answered: 97 Skipped: 3



ANSWER CHOICES	RESPONSES	
▼ Too expensive	32.99%	32
▼ Affordable	67.01%	65
TOTAL		97

Equity & Inclusion: Access to All Aspects of Program

Chaperones:

- Incur fee to chaperone and for fingerprinting background check
- Take time off work
- Increasingly difficult to secure the number of chaperones needed

Location:

- Distance from Sudbury and onsite parking limits family engagement
- Campsite is physically challenging

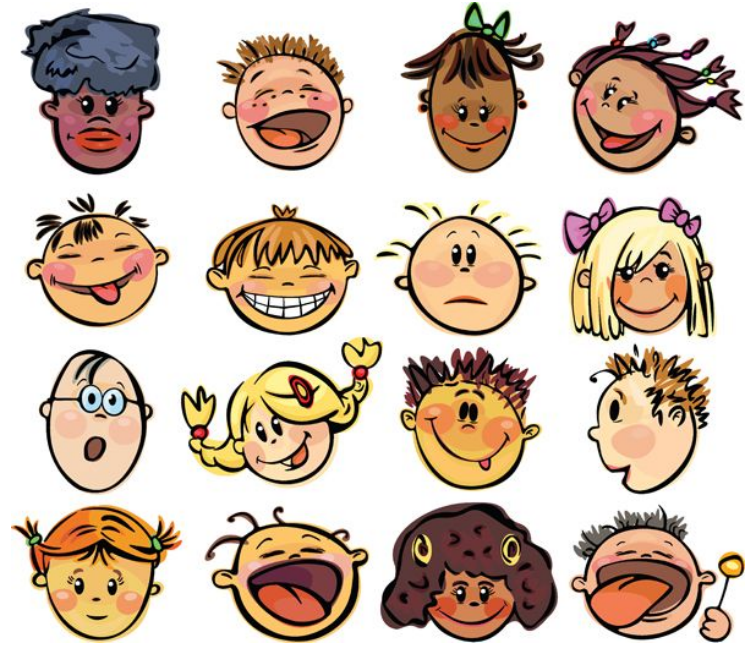
Equity & Inclusion: Access to All Aspects of Program

Program Design:

- Sleepover poses problem for some students
- Students as day trippers
- The challenge: impossible to make the late afternoon and evening activities inclusive for ALL students

2. Social - Emotional Impact

1. A year of stressful feelings
2. Clinical Anxiety
3. But what if I...
4. It's not fair if...
5. Under Pressure



**26% of parents used the words
anxiety, nervous, or anxious in open response**

anxiety anxious arrangements assistance away
balls bathrooms belongings buy cold concerned cost covering deciding details dirty duct
eater etc food gather hard home imagine impatience kids list
losing meals minutes months needed nervous night
nights overnight pack packing parents picky points
sleep sleeping smooth stuff supplies trash unknown windy
worried

3. Health and Safety Concerns

- Food allergies and dietary restrictions
- Increasingly complex medical issues
- Preparation by nursing staff: documents & medication

4. Curriculum

- 2016 MA Science and Technology/Engineering Curriculum Framework shifts the content and increases emphasis on science and engineering practices
- 5E Instructional Model increases student engagement and understanding
- More authentic problem-based learning experiences that will integrate science, engineering, and other disciplines and allow students to ask questions, research, design, test, redesign, and explain their thinking
- Opportunities for reflection, and making student projects and learning public

Odyssey 2019

- Interdisciplinary, standards-based program with “Energy” as the big idea
- Implemented in spring over the course of several weeks
- Variety of learning activities, including field trips and on-site workshops
- Students carry a “passport” documenting travel and learning experiences
- Capstone experience to include problem-based learning challenge and school-based celebration/showcase with parents/guardians invited

Techsploration - Exploring Science and Technology

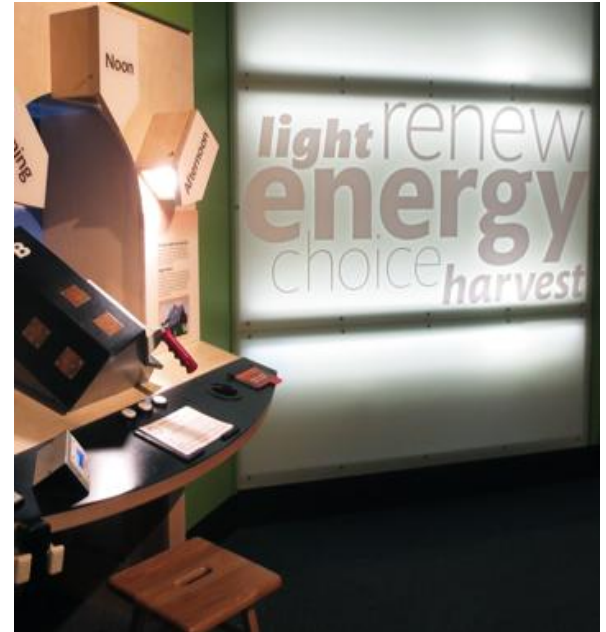
Mag Lev – Trains Of The Future Workshop



- Design and **build a magnetic levitation racer.**
- Build a prototype out of high density foam.
- Design and build a wind propulsion system for their racer.
- Test vehicles on an electronically timed mag-lev track.
- Analyze data collected to determine how well their vehicle worked.

Boston Museum of Science - *Energized!*

- Focuses on sunlight, wind, moving water, and other self-replenishing sources that generate cleaner energy with fewer negative side effects.
- Hands-on interactives, models, videos, and other activities designed to increase understanding about renewable energy, innovative energy technologies, and today's energy choices.



Science Workshops

Acton Discovery Museum - *Keeping Cool: Green Engineering*

- Teams of student scientists and engineers work together on a hands-on, group challenge.
- They must think creatively to develop and test possible solutions to an insulation design problem, discovering how design and engineering choices relate to energy conservation.



Lowell Mills - Waterpower

Power to Production

- Teams of students test for solutions to the problem of harnessing waterpower.
- Test water wheels' speed and strength and use data to determine which wheel works best.
- Design and build a mill-and-canal system.
- Explore how water's potential energy was transferred to kinetic energy to power Lowell's machines.
- Examine how energy is transferred from water to loom in the historic Suffolk Mill.
- Utilize an app to digitally collect and analyze the data for their waterwheel tests

Lowell Mills - Immigration

Yankees and Immigrants

- Role-play an immigrant who traveled to America during the Industrial Revolution
- Explore the “Mill Girls and Immigrants” exhibit at the boardinghouse
- Debate a controversial issue as part of an 1831 town meeting
- Examine cultural artifacts



How to Build Cooperative Learners Through L.E.E.P.

Brings learners and experiences together. The L.E.E.P. program kickstarts the project based learning experience through cooperative participation and experiential learning activities.

- Increase and enhance team communication and performance
- Improve creative problem-solving skills
- Develop effective conflict-resolution skills
- Establish a greater sense of team camaraderie
- Create an atmosphere of cooperation, trust and encouragement
- Help participants discover and effectively capitalize on group resources.
- Support of P.E. State and National Standards (2.7, 2.15, 2.26, 2.27)

L.E.E.P. Guiding Philosophies

- Full-Value Contract
- Learning-by-Doing Model
- Challenge-by-Choice
- Have some Fun!



L.E.E.P. Daily Overview

- Full-Day Off-site Teambuilding Experience
- Low-ropes Initiatives
- Large & Small Group Experiences
- Communication Fundamentals
- Respect and Responsibility Driven Design



Timeline for Odyssey 2019

- 18 month implementation plan
- Curriculum development
- Comment period for stakeholders
- Public presentation of Odyssey 2019 in June 2018

