

# Evaluation Summary - 2023 Programs



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## 2023 PROGRAM OVERVIEW

ISEA educators facilitated a total of 293 programs during 2023, including 109 Schoolship programs, 20 ROV Engineer and Explore programs, 40 Watershed Exploration (WE) programs, 30 Public Ticketed sails, 48 chartered programs, 36 outreach events, 4 overnight sails, and 6 educator professional developments. These programs spanned five ports, the Thomas M. Kelly Biological Station campus, and Leo Creek Preserve, included countless community partners, and served over 6,700 participants. The table below summarizes organizational reach in 2023, both in number of programs and participants reached, and compares it to past years.

Program Type	Programs and Participants, Past Years (prog, part)			2022		2023	
	2018	2019	2021	Programs	Participants	Programs	Participants
Schoolship Programs (inc Det)	109, 3006	118, 2733	43, 1403	106 /37%	2,647 37%	101/34%	2467/36%
Detroit Fall Schoolship	—	—	—	11 4%	261 4%	8/3%	190/3%
ROV & Engineer and Explore Programs	33, 716	33, 991	19, 396	33 12%	832 12%	20/7%	480/7%
Watershed Exploration	—	—	—	21 7%	269 4%	40/14%	536/8%
ISEA Public Programs	50, 1328	23, 609	29, 647	21 /7% (incl. 2 deck tours)	530 7%	30/10%	794/12%
Overnight Sailing Programs	5, 38	6, 56	4, 36	5 2%	30 <1%	4/1%	33/<1%
Single-Day Sail Programs (all charters)	25, 553	37, 970	45, 995	42 15%	926 13%	48/16%	1035/15%
Inland Seas Away Ports	2 ports	2 ports	8 ports	4 ports	-	5 ports	-
Inland Seas Tall Ship Festival Ports (every 3rd year)	—	2 ports (28 sails), 1018	—	2 ports (32 sails counted for total/ 11%)	1,133 16%	-	-
Teacher Professional Development Programs	Varied, 26	Varied, 197 (includes youth)	3, 54	3 1%	55 <1%	6/2%	86/1%
Programming on location and Outreach (estimates)	7, 175	No records	13, 405	19 7%	757 11%	36/12%	1691/25%
<b>Total</b>	<b>229, 5971</b>	<b>276, 11366</b>	<b>156, 3427</b>	<b>282</b>	<b>7,179</b>	<b>293</b>	<b>6,776</b>

Programs are evaluated using quantitative and qualitative questionnaires that are aligned across programs and compared internally and externally with past years. Questionnaires are presented digitally and/or physically to group leaders, public parties, teachers, and youth and designed to monitor continued program fidelity while also assessing the effectiveness of new initiatives. This document summarizes the experiences as perceived by participants through external evaluation and demographics in 2023, and, when relevant, compares to past year information.

Program evaluation was conducted in the following ways: 1) teachers who participated in schoolship (SS) and ROV programs were invited to complete an evaluation form digitally or in-person with a physical evaluation sheet provided upon arrival for their program, 2) watershed exploration (WE) participating teachers were invited to complete a digital evaluation form from ISEA, or if participating with Hagarty grant partner Cranbrook, their digital evaluation form, 3) dorm users were invited to complete a physical feedback form and were digitally solicited after their trip, and 4) Detroit youth were targeted for feedback during the fall Detroit schoolship programming. Digital and physical evaluation responses were integrated and synthesized between November - December, 2023.

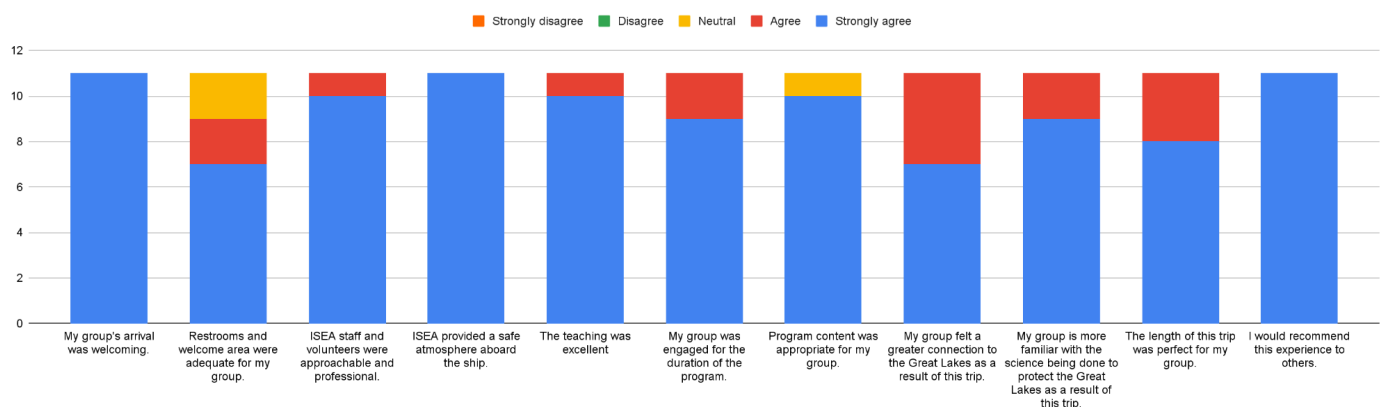
### *K-12 Program Financial Support*

Of the 109 Schoolship programs held in Traverse City, Suttons Bay, and Detroit, 70 were partially or fully funded, a 64% scholarship rate. Of twenty ROV programs, 8 were partially or fully funded for a 40% scholarship rate. All WE programs were fully funded through a combination of Great Lakes Fisheries Trust, Brookby Foundation, and Hagarty grant dollars. Thus, 169 targeted school age programs were subsidized, meaning that 70%, of total K-12 programs received at least partial scholarship.

### *SCHOOLSHIP PROGRAMMING EXTERNAL FEEDBACK*

Combining spring, fall, and Detroit Schoolship programs, **ISEA delivered 109 Schoolship programs to 2,657 participants.** Teachers and other group leaders were invited to fill out an evaluation either digitally or physically. Questions on both forms were identical, but digital feedback forms had additional questions about planning their trip and invited them to share thoughts on ROV if they participated in both a sail and an ROV program. Eleven digital and fourteen physical feedback forms were received in 2023.

Feedback on ISEA Schoolship Program



Teachers' favorite station remains plankton, but all stations were mentioned at least once by respondents, including two who listed the new Great Lakes Challenge station as a favorite. Qualitative responses about the new station highlight the reasons for its success. Much of that can be attributed to the synthesis of shipboard content being geographically applied to all Great Lakes, offering a larger perspective on the value of the experiences students were having in real time, and its connection to authentic scientific reports on the lakes. That information is shared on page 9 of this document.

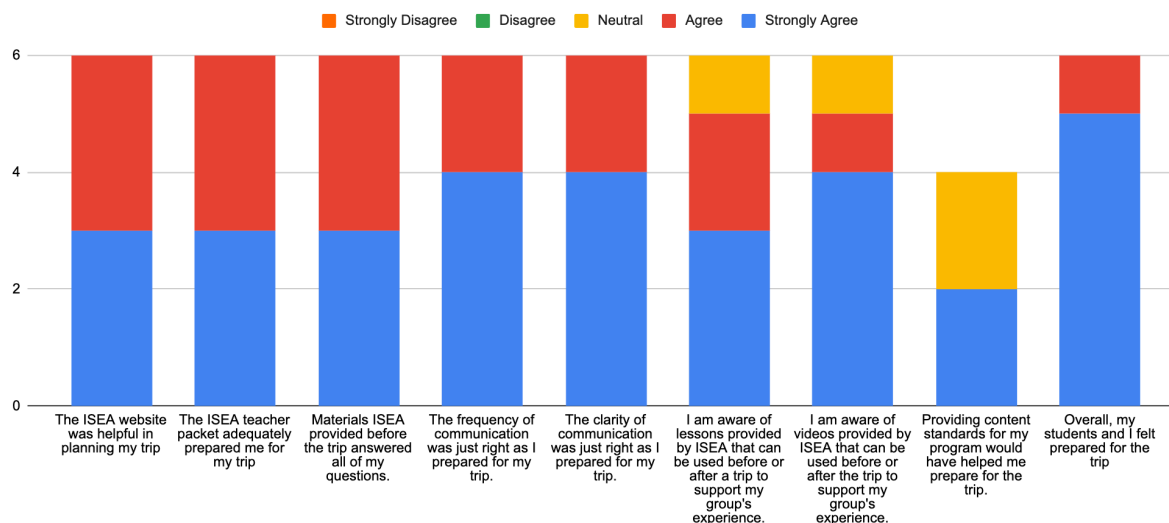
As regularly observed, teachers mentioned hands-on opportunities and the uniqueness of sailing, as well as authentic science, and observing different student dynamics as excellent components of their experience. Neutral rankings and negative comments, as well as anecdotal observations of concerns from teachers, were not noticed in the same ways they were in 2022, which may be the result of adding the new Great Lakes Challenge station and additional intern support during spring schoolship. Significant resources in the off-season were placed in cultivating this unmanned station and identifying funding sources for internships. Evaluation of this station was also conducted, results follow.

### External Evaluation of New Station - Great Lakes Challenge

In an effort to evaluate the effectiveness of the newly developed and participant-operated station, the Great Lakes Challenge station, teachers were asked about the station with one quantitative question and space to share their thoughts qualitatively. When asked if the GL Challenge station was a valuable addition to the program, all digital respondents **agreed or strongly agreed that the station was valuable**. Those with additional thoughts discussed the value of being student-led, geography-focused, and summative of their shipboard experience. These comments are shared at the end of this document. Of note, many positive comments about student engagement came from elementary teachers, suggesting that this is as engaging for younger students as it is for older students, at least when the weather is fair. Importantly, and not captured by evaluation, is the staff observation that youth engagement dropped significantly when the weather was poor.

Six of the eleven respondents chose to offer feedback on planning a trip with ISEA. Of them, most agreed or strongly agreed that the materials, website, and communication was helpful

Feedback on ISEA Pre-Trip Support

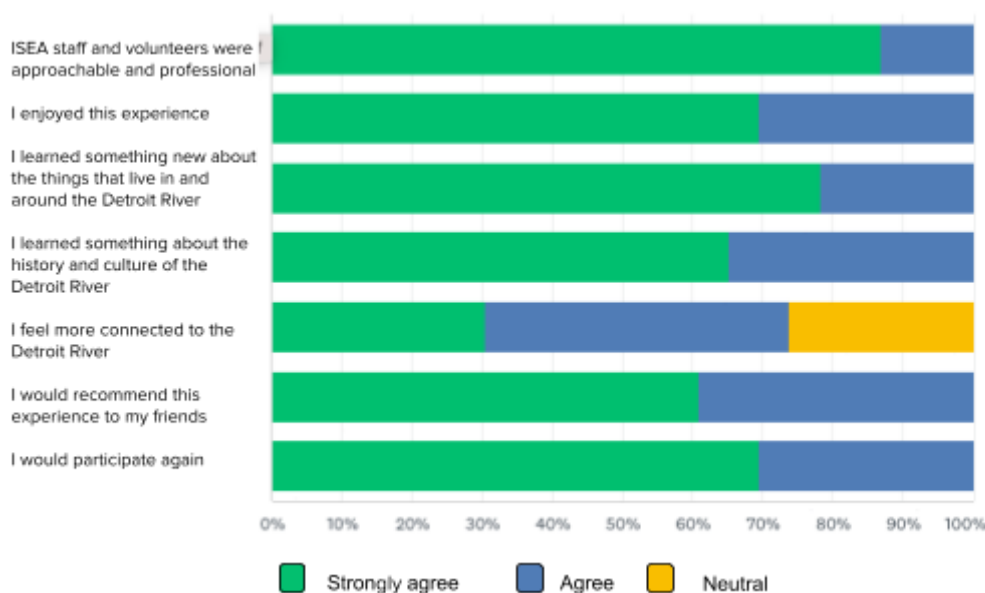


in planning their trip. Some indicated that they were not aware of lesson plans and videos that could extend the impact of their learning from the field trip. All agreed or strongly agreed that they and their students were prepared for the trip. All respondents agreed or strongly agreed that staff and volunteers were professional and approachable, the teaching was excellent, ISEA created a safe environment, and that the group had a better understanding of Great Lakes science and a greater connection to the lakes after the trip.

### Youth Evaluation - Detroit Schoolship

Three Detroit schools were approached to complete youth feedback surveys after completing a sail in the fall. Two of these schools returned surveys from a total of 23 students. Questions that were asked of youth mirrored the teacher feedback surveys for ISEA schoolship programs. These programs were identified by ISEA staff as important to obtain youth feedback because 1) they differ from our normal NextGen program, featuring cultural components of the Detroit River from guest instructors, and 2) they are an audience distinct from those which ISEA has served historically.

The surveyed area in which youth reported the least growth was in “I feel more connected to the Detroit River,” though the combination of agree and strongly agree is above 70%, indicating that established goals for the program were met. A compilation of qualitative responses to what each student enjoyed best about the program can be found at the end of this document. Some youth best enjoyed guest instructor stations, some enjoyed steering the boat, and some mentioned plankton. One even mentioned two minutes of silence as their favorite part. It is clear that this program gives a wide variety of experiences that these audiences haven’t before experienced. Detroit students are in awe of interacting with the Detroit River in a new way. This underscores the intention of ISEA’s schoolship program. The utilization of a sailboat for Great



Lakes educational programming results in a once-in-a-lifetime experience that builds a connection between youth and the Great Lakes. Many local groups who utilize ISEA for a field trip have students for whom sailing or boating is not

foreign, so receiving such positive feedback from students outside our normal demographic is uplifting and defining of the mission.

### Schoolship Demographics

The age range of Schoolship participants in 2022 and 2023 can be found below. Anecdotally, audiences have been skewing older in recent years. This speaks to the quality of ISEA programs, as it is more difficult for MS and HS teachers to coordinate trips, yet they continue to do so for Schoolship. It also means that more teachers show interest in Diving Deeper. This invites a new suite of hurdles in planning for, scheduling, and staffing, programs, especially across two vessels.

Grade Distribution	Schoolship		ROV	
	2022	2023	2022	2023
K-3	6	2	1	0
4-5	48	30	7	9
Middle School	27	35	16	4
High School	19	21	7	6
Adult	n/a	5	1	0

Grade distribution of schoolship participants, 2022 and 2023.

The distance groups traveled for Schoolship is also shifting. In 2023, the vast majority of groups traveled less than one hour for programs. Detroit programs are included, and all 8 traveled less than thirty minutes to attend. In the future, watershed exploration program travel will also need to be assessed to identify the audiences who have valued WE programming and market to more, similar organizations.

Distance from ISEA	# Schools in 2023
Less than 1 hour	58
Between 1-2 hours	11
Between 2-3 hours	6
Between 3-4 hours	4
Greater than 4 hours	6

Distance traveled by schoolship participants.

### *WATERSHED EXPLORATION PROGRAM SUMMARY*

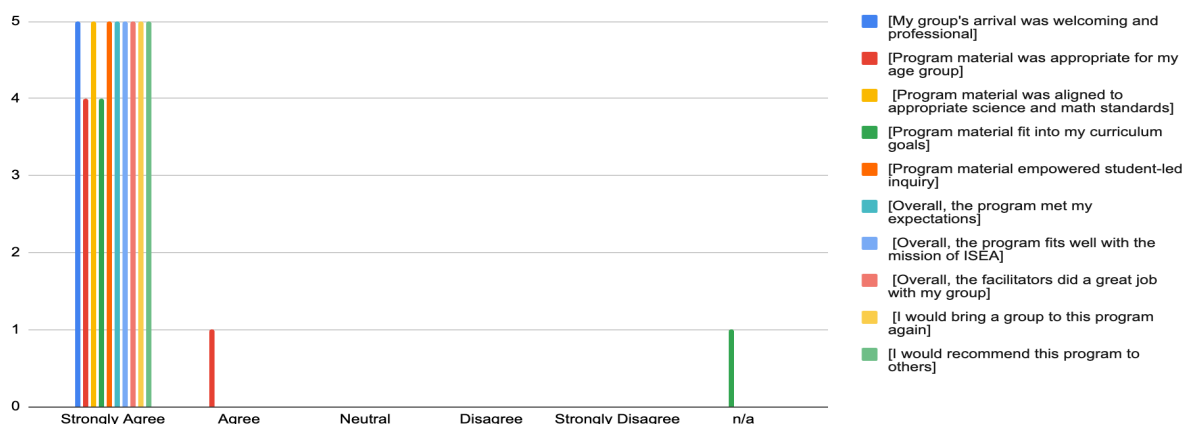
The bulk of the year's 40 Watershed Exploration (WE) programs were completed in the early spring, prior to the start of schoolship, although a small number of new programs, and a summer camp program conducted with partner LIFT, as well as a shoreside teambuilding

program with Green Door Initiative Youth were facilitated during the sailing season. Fall WE included one on campus, overnight WE, as well as five programs delivered to sites, a new development in 2023. Educator feedback named school timing as the biggest factor in choosing program length and time (most respondents selected half-day programs). Despite leaving the pilot phase of the WE program, ISEA staff continue to experiment with program delivery, timing, and interest with different groups of students to best meet audience needs.

### Spring Watershed Exploration Programs

Spring WE programs consisted of a combination of eighteen Watershed Exploration programs held overnight and as day programs during the months of March and April, as well as partnered delivery of eleven of Cranbrook School's Freshwater Forum programs to classes in Northport and Suttons Bay during the month of February. Multiple groups participating were repeat visitors who had come for a program in the past, suggesting they find value to the program in their courses. A single, guided hike was led to Leo Creek Preserve for a class that wished to have an hour-long program before bussing back to school in May. Partnered content with Freshwater Forum was used in the fall by ISEA staff at SEEDS after school locations across the region. External partners conducted Cranbrook program evaluations.

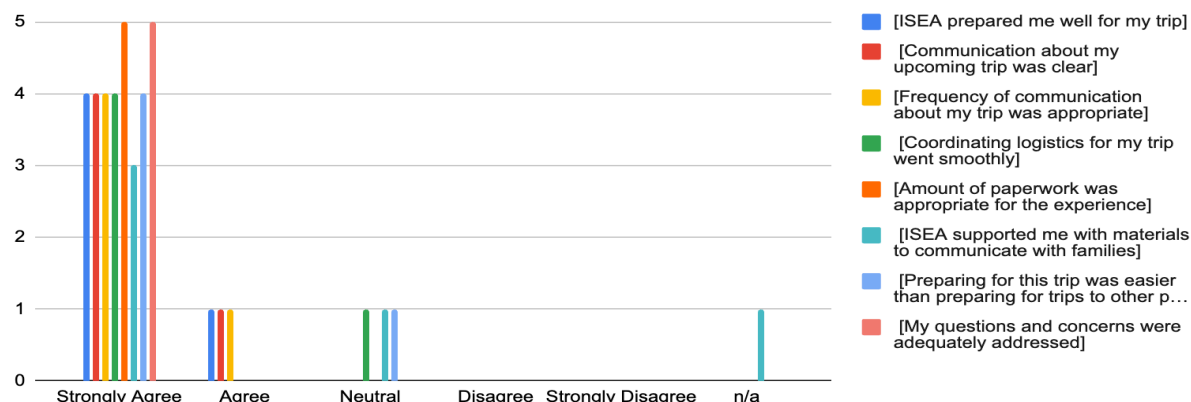
Six Watershed Exploration participants offered responses; select questions are shared below and are nearly universally positive. In preparation for their trip, most were very happy with the communication and support ISEA offered. Areas of improvement include materials to share with families, logistics support, and general preparation for this program as compared to others they've done. These are known areas of improvement and are an area of focus for the program coordinator in the future.



Their experience also matched their expectations and nearly all responded 'Strongly Agree' when prompted about program quality, engagement, alignment with course goals, and whether they'd recommend or repeat the program. Educators graciously offered their feedback on why they selected the content and program length, offering that the length of the school day was the highest motivating factor in choosing a half-day program, followed by the time of the year. They also mentioned a positive prior experience with ISEA as an important factor in

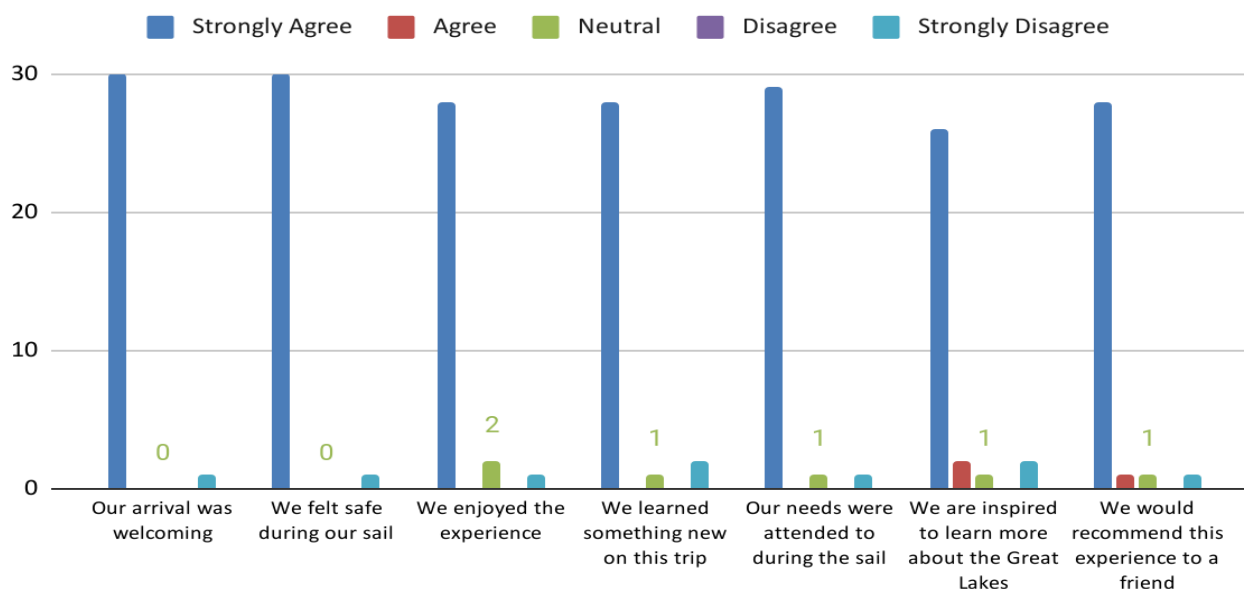


participation. These should help ISEA staff continue to refine offerings to entice future participation.



### TICKETED PUBLIC PROGRAMS, UNIVERSITY PARTNERS, AND EDUCATIONAL CHARTERS

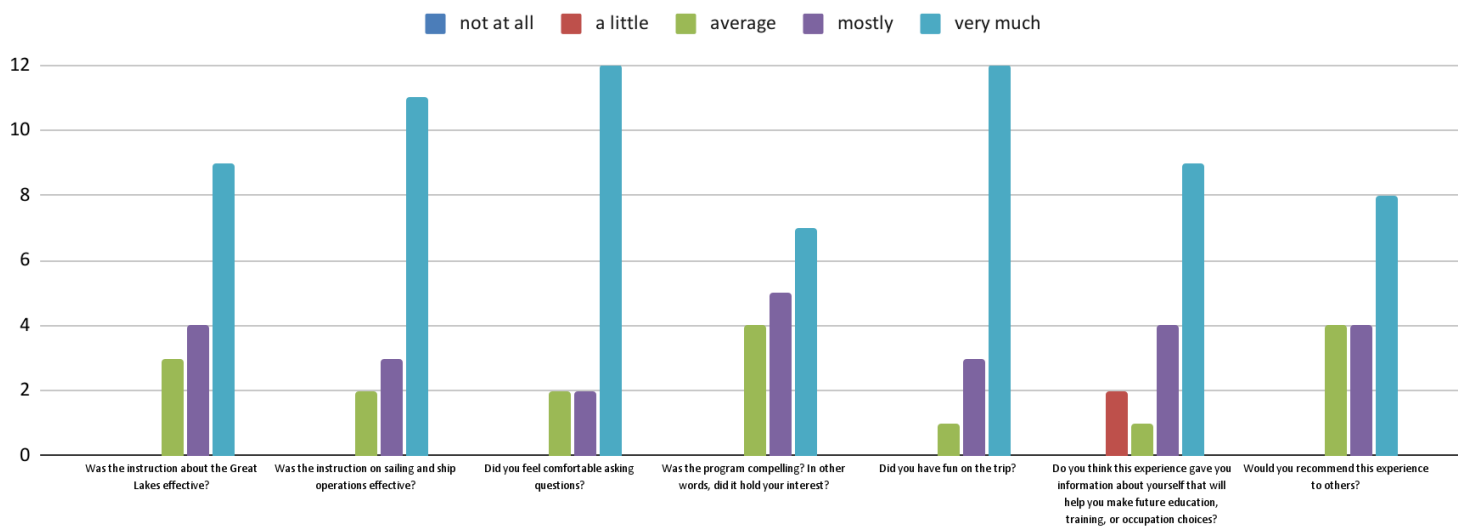
The summer sailing season spanned 81 calendar days, from June 16 to September 4. The *S/V Inland Seas* was available for all of those days, and the *S/V Alliance* joined in program delivery beginning on July 14 for an additional 53 sail days, for a total of 134 sail days. During this time, education staff delivered 104 shipboard programs to 2168 participants. Program reach over the summer was slightly less than in 2022. Thirty-one individuals who participated in ticketed public programs responded to requests for feedback. Their responses are recorded in the graph. One respondent marked ‘Strongly disagree’ to each question on the list but had positive feedback in the qualitative questions, suggesting that they intended to mark ‘Strongly Agree.’ Otherwise, results were overwhelmingly positive to all questions posed.



Chartered overnight program youth participants also provided feedback to ISEA. This figure shows the responses from 17 participants. The vast majority of the responses received responded



## Youth Overnight Sails Feedback



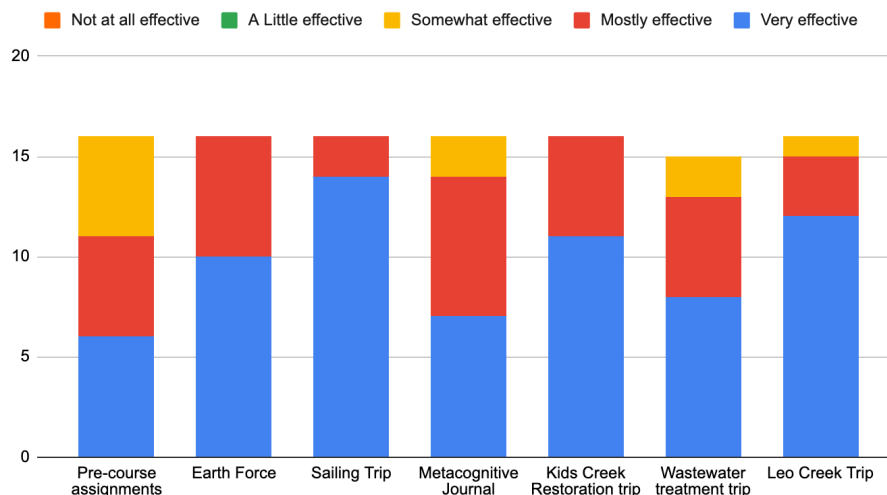
‘Very Much’ to the prompts, suggesting that, overall, youth had amazing experiences during overnight programs. Surprisingly, the least positive responses were for the question ‘Was the program compelling?’ as only 7 respondents strongly agreed that it was. Weather was a factor in two of these sails, which may have impacted the response. Youth noted that instruction was at least average on every program, and considering the sailing theme of the programs, we are not surprised that Great Lakes instruction scored lower than sailing. Two respondents felt that they didn’t learn much about themselves that would inform their future education, careers, or occupational choices, but most were impacted positively.

## EDUCATOR PROFESSIONAL DEVELOPMENT

The Great Lakes Watershed Field Course was run for the fifth time in summer, 2023. Participation was down, with only 19 individuals attending, despite over 30 applicants, which indicates that interest in the program remains high and that other factors impacted participation.

Feedback from the experience was generally very high, with all teachers ranking the components of the field course well. The most appreciated components were the sailing trip and the day spent at Leo Creek Preserve.

## Effectiveness of Field Course Components



Areas to consider improvement include pre-course assignments and metacognitive journaling, though those areas tend to be well reviewed in cohort meetings, and pre-course assignments allow the program to have increased breaks, something that was identified as important in past year surveys. Support for these teachers continues through June, 2024.

### *QUALITATIVE FEEDBACK FROM PARTICIPANTS - ALL PROGRAMS*

Participants completing feedback forms are invited to offer written feedback to complement the quantitative evaluation. Select responses from all participant groups are found below.

#### *Schoolship Feedback from Teachers*

##### *Best Part of this experience for my students was:*

"All of it. They really enjoyed it. The staff and crew were excellent."

"Being able to participate hands-on."

"Being able to experience the Great Lakes for more than just recreation."

"The next day at school my students couldn't stop talking about their experience. They had more questions than answers, which was perfect. We spent the day drawing and writing about the trip. Students made great connections on/off schooner."

"Being on the lake doing hands-on science."

"Learning about the bay in their own backyard was a highlight. Students were amazed at what they learned."

"Being citizen scientists."

"Being on the water and trying new things."

"Their wonder at never having been out on a boat before."

"Students' faces light up at new discoveries."

"Putting up the sail, touching the fish, and the park next door."

##### *Best Part of this experience for me as a teacher was:*

"The high level of participation and organization. We can't wait to come again."

"All of it, best field trip ever."

"Seeing how excited my students were through the entire experience."

"I was ecstatic that my students got actively engaged while on the schooner. The real life experience allows them to be natural learners and curious."

"Just being with my students and seeing them have fun."

"I enjoyed seeing the students take interest in science."

"Seeing students experience newness."

"Finding out what I need to focus on in the future."

"Watching students work together to learn and solve problems with real life experiences."

"I appreciate the opportunity for my students to use equipment and devices they wouldn't otherwise have access to. I also love that they can experience a schooner trip--how many students in the country get to do that?? The volunteers are kind, patient and prepared. I really appreciate that."

#### *Schoolship Feedback from Detroit Students*

##### *Best part of this experience:*

"Opening the sails"

"I really liked the station where we talked about wildlife around the detroit river"

"Being able to steer the boat"

"Seeing plankton under the microscope"

"Sailing the boat"

"Driving the boat"

"When we got to learn about what keeps the boat from sinking"

"Getting to steer the boat and watch the calm waters"

*"Everything"*  
*"Getting on the boat"*  
*"Enjoying the view"*  
*"Look at the jellyfish"*  
*"The china jellyfish"*  
*"Being to see tiny animals from the Detroit River"*  
*"Finding new species in the Detroit River"*  
*"Raise the sails"*  
*"Getting to see all the plankton through a microscope"*  
*"The 2 minutes of being in the moment on the water"*  
*"Putting up the sails:*  
*"When the boat traveled"*  
*What do you wish you had more time to do?*  
*"Just sit at the front of the boat and learn about the boat"*  
*"Talk about wildlife around the detroit river"*  
*"Learn more about the detroit river and stay there a little longer"*  
*"Look at the plankton"*  
*"Steer the boat"*  
*"Do more activities"*  
*"Drive the boat"*  
*"Just sit quietly and listen to the river sounds"*  
*"Enjoy the river"*  
*"Look at the water under the microscope"*  
*"Stay on the boat"*  
*"Learn about the river:*  
*"See more things from under the water"*  
*"Do more activities"*  
*"See more animals"*  
*"Learned more about the history and the things that live around there"*  
*"Learn more about the marine animals"*  
*"Honestly, to be on the boat for longer"*  
*"Participate in each session"*  
*"Sail"*  
*"See the river more"*

#### Great Lakes Challenge Station

##### Share your thoughts on the Great Lakes Challenge station:

"It was very well thought out. It was hands-on; the students had to think and collaborate, and then there was the timer which made it even more exciting when they compared their time with other groups from the school."  
 "Very embarrassing for parents to see their offspring fail at basic geography. Hilarious. "  
 "This was a fun activity that brought awareness of the water quality to reality in a way they will remember."  
 "In a perfect world it would fit perfect at the end of the trip. I loved how it tied the health of the great lakes into one concise summary. Sometimes the students walk away learning a great deal but not always making the connection as clearly as they do within that station."  
 "The children were engaged and enjoyed the work."  
 "I miss the chemistry station, if that was replaced by the puzzle."  
 "Kids loved it and learned a lot of new information."  
 "Fun, challenging, interesting, and exciting for the students."  
 "I was surprised how many students couldn't identify the Great Lakes. Students liked it and learned."  
 "This was excellent and allowed students to find out about topics and places they were not clear on!"

“It was a good opportunity to talk about not only the geographic location of the lakes, but also how their connectedness impacts each other.”

#### ROV Engineer and Explore

##### Best part of the experience:

“Getting to build and drive the ROVs”

“That we got to build and challenge the kids, too!”

“The different level of challenges they could decide to participate in.”

“Watching some students really come out of their shell and be a leader.”

“Trisha and her team were AMAZING!”

## 2023 PROGRAM EXTERNAL EVALUATION SUMMARY

2023 saw record programming across an increasingly wide variety of formats, including shipboard, educator professional development, watershed programs on campus and in classrooms, and outreach programs. Program breadth is increasing to meet the needs of both audience and ISEA: teachers need more support and have less bussing and substitute resources, and outreach programs invite new volunteers into ISEA. These programs are valuable and well perceived by participants. The addition of the Great Lakes Challenge station alleviated many of the issues ISEA grew aware of in 2022, though it is still in need of revision to work during all components of the sail and when weather conditions are poor.

More opportunities exist to solicit feedback from participants, especially in campus-based programs. Systems to increase response rates in all programs should be considered across all programs, including those that are currently evaluated by external parties, to ensure program fidelity.

Feedback from all external partners, including youth, new and returning teachers, and participants in educator professional developments are consistent in their opinions about the quality of programming provided by ISEA, and are supportive of the kinds of efforts ISEA is making to grow programs year-round.

Bussing, administration, and financial support remain consistent hurdles in participating in programs, and these are reflected in the demographic shifts observed through schoolship participation, as well as the number of groups utilizing scholarship support across all programs. Traveling to away ports reduces but does not eliminate these hurdles. Continued efforts to grow partnerships outside of the traditional K-12 formal education system should continue to bolster non-schoolship participation, along with additional financial support of all programs, will continue to reduce hurdles, increase interest, and provide educational value for all participants.