

Summary Findings



External Evaluation of the K-12 Science Leader Network

The Exploratorium aims to strengthen K-12 leadership for science improvement in diverse local contexts across California. Evidence gathered to date¹ affirms the consistent excellence of the Exploratorium’s [K-12 Science Leader Network](#) for developing science educators’ leadership capacities. Local science leaders list many benefits as a result of their participation, including increased confidence and capacity as well as support to address equity needs in the classroom. The COVID pandemic impacted science education in many ways. The priority of science teaching and progress of NGSS implementation declined. The combination of promising results and ongoing need suggests that the Exploratorium should continue—and even expand—its efforts to develop K-12 science leaders and support their local efforts to improve science.

1. The Exploratorium’s institutes for K-12 science leaders earn consistently high ratings for quality and value for in-person and online professional learning.

| Exploratorium leadership in-person institutes* are— | 2020 | 2019 | 2018 |
|--|------|------|------|
| High in quality | 98% | 97% | 100% |
| <i>Higher in quality than other science professional development</i> | 95% | 92% | 93% |
| High in value | 99% | 95% | 98% |
| <i>Higher in value than other science professional development</i> | 95% | 90% | 90% |

| Exploratorium leadership online workshops are— | 2021 | 2020 | 2019 | 2018 |
|--|------|------|------|------|
| High in quality** | 95% | 89% | 84% | 86% |
| High in value | 97% | 85% | 84% | 88% |

* In-person institutes were not held from March 2020 – July 2021 due to the COVID-19 pandemic.

**2021 data was collected after every workshop. Earlier data is based on an annual leadership survey.

2. The Exploratorium leadership network helps K-12 science educators build multiple capacities for leadership.

| Being part of the Exploratorium K-12 leadership network— | 2021 | 2020 | 2019 | 2018 |
|---|------|------|------|------|
| Has made me a better provider of professional development | 97% | 98% | 95% | 99% |
| Increases my confidence as a leader | 95% | 94% | 91% | 91% |
| Provides an important professional community for me | 92% | 91% | 91% | 95% |
| Gives me stronger ties to local science educators | 89% | 89% | 87% | 91% |

3. In 2021, K-12 science educators reported that the Exploratorium leadership network is meeting their needs to achieve equity in the classroom and in science instruction.

- 94% responded that the Exploratorium's professional learning programs **encourage educators to consider a wide range of potential equity issues facing teachers and students.**
- 91% responded that being part of the Exploratorium Statewide Network **increases their access to ideas and resources for addressing equity issues.**
- 90% responded that the Exploratorium's professional learning programs **encourage educators to consider equity in a more targeted way than other professional learning programs.**

4. Over the past year, ratings dropped for administrators’ commitment to equity and student learning opportunity in science and their valuing of science compared to data prior to the COVID pandemic.

| | 2021 | 2020 |
|--|------|------|
| Commitment to equity and student learning opportunity in science | 56% | 63% |
| Valuing science | 47% | 55% |

¹ Sources of data (2017-2021). Inverness Research (<https://inverness-research.org/>) has served as the external evaluator of the Exploratorium’s initiative to contribute to science improvement statewide. Over four years, Inverness Research has conducted in-person observations and collected participants’ ratings of leadership institutes, on-line workshops, and other core activities; engaged over 100 K-12 leaders in in-depth interviews; and measured network members’ leadership activity and impact across the state through annual surveys.