



# Washington Office of Superintendent of **PUBLIC INSTRUCTION**

## *Mobius Science Center*

### 1. **Purpose:**

The purpose of the Mobius Discovery Center Outreach Project is to expand science, technology, engineering, art, and mathematics (STEAM) education to underrepresented student populations in rural, tribal, and low-income communities. The project provides STEAM outreach and field trip opportunities to build general awareness of STEAM and NGSS science initiatives in the local schools and communities, and to build capacity for STEAM teaching and learning in the region.

### 2. **Description of services provided:**

Mobius Discovery Center provides professional learning, outreach to schools and communities via in-person workshops, and hosting student visits to the Discovery Center. The outreach sessions take place in schools, parks, and recreation centers. Mobius also creates and distributes STEAM kits to schools, providing 1,704 kits to students in the 2023 year. The Center supports families as well by providing family passes to visit the Science Center, distributing 860 passes in the 2023 year.

### 3. **Criteria for receiving services and/or grants:**

Those receiving fully-funded services from Mobius Discovery Center are from underrepresented populations in Northeast Washington school districts. The criteria used for school partnerships includes Title I, rural and tribal schools. Low-income rates are also used to identify underrepresented populations with served schools ranging from 28.5% - 100%, according to the most recent OSPI data.

#### **Beneficiaries in the 2022-23 School Year:**

<b>Number of School Districts:</b>	12
<b>Number of Schools:</b>	49
<b>Number of Students:</b>	6,603
<b>Number of Educators:</b>	126
<b>Other: Families</b>	860

### 4. **Are federal or other funds contingent on state funding?**

No



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## 5. State funding history:

Fiscal Year	Amount Funded	Actual Expenditures
2023	\$100,000	\$100,000
2022	\$100,000	\$100,000
2021	\$100,000	\$100,000
2020	\$100,000	\$99,931
2019	\$100,000	\$100,000

## 6. Number of beneficiaries (e.g., school districts, schools, students, educators, other) history:

Fiscal Year	Number of Schools
23	49
22	49
21	24
20	18

## 7. Programmatic changes since inception (if any):

In 2022-2023 Mobius reignited STEAM events for large scale groups after the COVID-19 pandemic. This led to large scale events such as career fairs, family engagement nights, and more which were an incredible way to impact a larger community. Mobius also offered field trips with educator led workshops to schools who were excited to travel outside of their school, along with our normal outreach workshop and STEAM kit opportunities. The portable planetarium is successfully back into outreach rotation now that COVID-19 spacing requirements at most schools are no longer a barrier.

## 8. Program evaluation or evaluation of major findings:

Mobius continued the partnership with Robert Idsardi, PhD to evaluate Mobius' educational programs. A survey was developed by Robert Idsardi, PhD, which was sent to teachers and leaders in community partnerships. Stakeholders were surveyed on student engagement, student enjoyment, support by Mobius staff, curriculum alignment to Next Generation Science Standards, program pacing, student self-efficacy, relevancy, connection to STEM careers, and overall value of the provided programs. 23 responses from teachers and community partners were gathered. Of these 23 responses, 100% of participants responded "strongly agree" or "agree" when asked if the program format was engaging for students. 22 respondents found the content to be enjoyable for their students, with one respondent neither agreeing or disagreeing. In the survey, most respondents agreed that content aligned with NGSS standards, with 17.4% being unsure. This may be explained by Mobius' partnership with non-traditional education settings, such as community centers serving youth outside a traditional classroom.



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Feedback from stakeholders and community partners was encouraging and positive, with stakeholders agreeing that the experiences were well paced, well supported by Mobius staff, and increased student's interest in STEM and STEM careers. Some feedback from teachers includes recommending that Mobius educators use the education space during outreach to their advantage by moving students from sitting on the floor to desk space to distinguish between direct instruction and hands-on learning time. Mobius educators have already implemented this change to great success, demonstrating the importance of the relationship between stakeholders and educators.

## **9. Major challenges faced by the program:**

During 2023, one educator in the Mobius team was on maternity leave which impacted scheduling during January-March of 2023. However, the education team was still able to create STEAM kits, teach some outreach workshops, and host STEAM nights at partner schools. Other challenges included supply chain issues—for example, owl pellets were difficult to buy for some time which limited opportunities for some community partners.

## **10. Future opportunities:**

Mobius will continue to grow our audience, seeking new ways to connect with underrepresented youth in our area, including maintaining and creating new relationships with community partners. Community stakeholders at afterschool community center programs have been incredibly excited about our relationship, and we will seek to maintain a recurring relationship with these groups.

## **11. Statutory and/or budget language:**

\$100,000 of the general fund—state appropriation for fiscal year 2022 and \$100,000 of the general fund—state appropriation for fiscal year 2023 are provided solely for the Mobius science center to expand mobile outreach of science, technology, engineering, and mathematics (STEM) education to students in rural, tribal, and low-income communities.

## **12. Other relevant information:**

Mobius programs at North East Youth Center, Central Valley Family Engagement Center, and local Boys and Girls Clubs helped serve students from multiple schools and districts. It is challenging to tally the exact impact of these programs in terms of schools, districts, and teachers served; however, we do know that by providing programming to these community partners, Mobius was able to extend our reach further. We hope to continue these efforts as a valuable experience for students in underrepresented populations, and to support the hard-working staff and stakeholders at these locations.



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**13. Schools/districts receiving assistance:**

[preliminaryfy23state-fundedprovisograntawardsupdated-42823.xlsx \(live.com\)](#)

**14. Program Contact Information:**

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