Mobius Science Center

Statutory and/or Budget Language

\$100,000 of the general fund—state appropriation for fiscal year 2024 and \$100,000 of the general fund—state appropriation for fiscal year 2025 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.

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.

Description of Services Provided

- Outreach workshops continued to bring science education "on the road" to serve communities throughout the Spokane and Eastern Washington area. Through outreach, Mobius taught STEAM education to 820 students in their classrooms. Mobius also hosted STEAM workshops at the Mobius Discovery Center, reaching another 178 students with workshops.
- Mobius educators worked with underserved students in the Yakima school district where 221 students received Mobius STEAM Kits and 76 of those students also received inperson instruction for their STEAM Kits. In all, Mobius delivered 1,171 STEAM kits to underserved students.
- For the 2023 Eclipse, Mobius hosted a first-ever STEAM event for local Title 1, rural, and tribal schools. This event included hands-on STEAM activities relating to the Eclipse, and partnerships with science experts including NOAA and NASA. For this, Mobius also developed and delivered 254 Eclipse STEAM Kits. These kits were delivered to teachers and students unable to attend the Eclipse event due to difficulties arranging transportation.
- In the spring of 2024, Mobius Educators led STEAM science nights at Spokane Title 1 schools and at GLOW/Lumen High School. Educators also brought activities to STEAM Nights hosted by Gonzaga University for Title 1 students, and a family night at Riverside Elementary. Throughout the year, Mobius served 1,181 students and families through these events.



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 49.5-90.5% low-income populations according to the most recent OSPI data.

Beneficiaries in the 2023-24 School Year

Number of School Districts	11
Number of Schools	36
Number of Students	5,565
Number of Educators	40
Other (Families)	808

Are Federal or Other Funds Contingent on State Funding? No

State Funding History

Fiscal Year	Amount Funded	Actual Expenditures
2024	\$100,000	\$100,000
2023	\$100,000	\$100,000
2022	\$100,000	\$100,000
2021	\$100,000	\$100,000
2020	\$100,000	\$99,931

Number of Beneficiaries Per Fiscal Year (e.g. School Districts, Schools, Students, Educators, Other)

Fiscal Year	Number of Beneficiaries
2024	47
2023	49
2022	49
2021	24
2020	18

Programmatic Changes Since Inception (If Any)

Inspired during the Pandemic, Mobius developed STEAM kits to distribute to students and families. This component has proven to be highly successful and has increased access for those who cannot attend programming in-person. Mobius has continued to develop and grow this aspect of the program.

Program Evaluation or Evaluation of Major Findings

Mobius partnered with Robert Idsardi, PhD to evaluate Mobius' educational programs via survey. 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 STEAM careers, and overall value of the provided programs.

Overall, the programs in 2023 and 2024 were very successful with teachers and stakeholders overwhelmingly agreeing that the program content, pacing, and alignment to NGSS's standards kept students interested and engaged.

Areas where Mobius Educators can improve in the future is adding content for teachers to extend learning beyond the workshop, adding explicit learning goals in our talks with students, and adding more representation in our staff and volunteers. These are all achievable goals which Mobius Educators will pursue for the 2024-2025 school year.

Major Challenges Faced by the Program

Difficulties in transportation for schools in the beginning of the year impacted Mobius's ability to host all interested students for the Eclipse STEAM Day and other workshops. Interest surveys were sent out at the end of the school year in 2023, and marketing was sent to teachers in August of 2023, Mobius educators discovered that bussing was just not possible for many schools. Out of 10 schools contacted, only 2 were able to attend the event. However, because of contact with stakeholders, Mobius Educators were able to pivot time and materials to creating and distributing Eclipse STEAM Kits with similar activities to 254 students.

Cost of supplies has impacted workshops, STEAM events, and STEAM kit production, however Mobius Educators have pivoted towards reusable materials and bulk supply ordering when possible, to reach as many students as possible.

Future Opportunities

Mobius will continue to seek new ways to connect with underserved youth in the area, including maintaining and creating new relationships with community partners. Community stakeholders at ECEAP programs have increased the breadth to serve students, sometimes who are experiencing science education for the first time. Mobius Educators will develop and strengthen existing workshops in alignment with feedback from teachers and students. Additional funding would support growth in programming and in schools served by the program.

Other Relevant Information

Mobius Discovery Center website

Schools/Districts Receiving Assistance

Click here to see a list of all OSPI grant recipients in the 2024 Fiscal Year.

Program Contact Information

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