# Mobius Science Center Outreach

 Purpose: The purpose of the Mobius Science Center Outreach Project is to expand mobile outreach of science, technology, engineering, and mathematics (STEM) education to underrepresented student populations in rural, tribal, and low-income communities.
 Additionally, the purpose is to build general awareness of STEM and NGSS science initiatives in the local schools and communities, and to build capacity for STEM science teaching and learning in the region.

### 2. Description of services provided:

- Educational programs including classroom workshops and science demonstrations for school groups. STEM-integrated workshops fit into existing, grade-appropriate learning goals at each school. Science demonstrations are also grade-level appropriate, and engage a larger audience using broad science themes.
- Community engagement at evening programs (STEM Night or Science Night), are a collaborative effort with local organizations. Mobius brings STEM-themed, hands-on activities to engage students and their families.
- This year, Mobius Science Center provided "Come & Play" passes to 750 students who participated in STEM workshops at their school. These passes provide access for families to visit the science center in downtown Spokane. The purpose is to provide access to families who, due to financial constraints, may not otherwise be able to visit the science center. So far, 48 guests have taken advantage of this opportunity and we expect that number to continue to grow throughout the summer.
- Teacher support was important in our programs during the 2017-18 school year, as
  we received feedback from partners that past programs were difficult to fit into
  existing lesson plans. We met with teachers to find meaningful STEM activities that
  would complement NGSS learning goals at each grade level. We also supported
  existing programs, such as the Trout in the Classroom project at Roosevelt
  Elementary School in Spokane.
- 3. Criteria for receiving services and/or grants: Those receiving services from Mobius Science Center are from underrepresented populations in Northeast Washington school districts. The criteria used for school partnerships include Title I, rural and tribal schools. We have opened up further communication using the ESD101 network, meeting with teachers in the elementary and secondary science leadership group.

## Beneficiaries in 2017-18 School Year:

# of School Districts: 11
# of Schools: 19
# of Students: 2412

Other: 365 (additional family at community events)

# of OSPI staff associated with this funding (FTEs): 1.5
# of contractors/other staff associated with this funding: 1

FY18 Funding: State Appropriation: \$100,000

Federal Appropriation: \$0.0
Other fund sources: \$0.0
TOTAL (FY18) \$100,000

4. Are federal or other funds contingent on state funding? No

5. State funding history:

Fiscal Year	Amount Funded	Actual Expenditures
FY18	\$100,000	\$100,000
FY17	\$100,000	\$100,000
FY16	\$100,000	\$89,600
FY15	\$100,000	\$99,997

6. Number of beneficiaries (e.g., schools, students, districts) history:

Fiscal Year	# of Districts	# of Schools	# of Students
FY18	11	19	2412
FY17	5	7	982
FY16	5	7	1660
FY15	5	7	1951

- 7. Programmatic changes since inception (if any): FY18 brought a dramatic increase in school partnerships, widening our reach in ESD101. We more than doubled the number of school districts served and nearly tripled the number of schools served. We feel that these partners will be sustainable, by serving particular age groups each school year, and creating a consistent impact at various grade-levels throughout these communities.
- 8. Evaluations of program/major findings: The FY18 evaluation is currently underway, as a third-party assesses our educational programs for NGSS alignment. The evaluator will provide feedback and suggest room for improvement in our STEM workshops. We hope to expand our programming, enhance standards-based curricula, as well as support teachers who need to fill in gaps in lesson plans.
- 9. Major challenges faced by the program:
  - This year has seen major transitions at Mobius Science Center, including a new CEO and several new education staff.
  - Training was required for new education staff to provide programming to our partner schools and work was needed to improve upon the existing programs.
  - Summit Valley and Evergreen School District contact left their position in the school system, and without a new on-site coordinator, this partnership has not continued.

10. Future opportunities: The educational programs provided by Mobius Science Center continue to grow and improve, using best practices and standards-based design. We have plans for more professional development of our education staff in FY19. Our relationship with ESD101 continues to be strong, and we intend to keep our current commitments to districts and steadily increase our presence in the area.

#### 11. Statutory and/or Budget language:

Budget Proviso: SSB 5883 Section 501(18) - \$100,000 of the general fund--state appropriation for fiscal year 2018 and \$100,000 of the general fund-state appropriation for fiscal year 2019 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 Science Center has developed strong relationships with partner schools in FY18, and one of our key partners, Progress Elementary, has plans to transition into a STEM-focused school in FY19. We look forward to this exciting development, right here in our area, and will continue to participate in their growth.

Our education staff also ended the school year with a planning retreat for FY19, developing three new workshops that will meet the needs of many interested teachers. Coding and robotics have been requested by some partners and continues to be an emerging topic.

13. List of schools/districts receiving assistance: See OSPI website.

#### 14. Program Contact Information:

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