

Smithsonian Institution

Statement of Work (SOW)

Technical Professional, Non-personal Services

The Office of Education, Outreach & Visitor Experience (EOVE) at the National Museum of Natural History (NMNH) has a requirement for a summative evaluation of a multi-year project that was funded by an internal education grant. The project is titled, “A Community-Based Approach to Culturally Responsive Science Education.” The duration of the award will be five months, commencing around Oct. 1, 2025.

BACKGROUND

The Smithsonian’s National Museum of Natural History (NMNH), located at 10th Street and Constitution Avenue, NW, in Washington, D.C., is one of the most-visited natural history museums in the world. Opened in 1910, the museum is dedicated to maintaining and preserving the world’s most extensive collection of natural history specimens and cultural artifacts. It fosters significant scientific research, educational programs, and exhibitions that present opportunities for public audiences to engage with science and culture.

The Smithsonian’s Arctic Studies Center (ASC) is a program of NMNH that conducts research on northern lands, environments, cultures, and with its people using Smithsonian collections and field studies to learn about the history and contemporary peoples of the circumpolar region. The Center works closely with Indigenous communities, universities, organizations and government agencies to contribute to the well-being of Northern peoples and to educate the public about the history, arts, and languages of the North. Its scholars publish papers, monographs, and catalogs and prepare exhibitions and educational programs. ASC has an office at the Anchorage Museum at Rasmuson Center where Native peoples, scholars and museum staff work together on a broad range of collaborative research, exhibitions and educational programs.

ABOUT THE PROJECT TO BE EVALUATED

The project titled “A Community-Based Approach to Culturally Responsive Sustaining Education” was active for more than 2 years, beginning in 2022 and concluding in 2025. It has been funded, in part, by a Smithsonian “Together We Thrive” grant, administered by the SI Office of the Under Secretary for Education.

NMNH, the Arctic Studies Center, and the Smithsonian’s National Zoo and Conservation Biology Institute collaborated to implement the project in two geographic locations, Alaska and Washington, DC.

The project aimed to leverage Smithsonian skills and resources in partnership with communities to create frameworks that facilitate the co-production of culturally responsive sustaining-science education (CRSE) experiences and instruction for K-12 science education. The program was intended to support the implementation of community-based projects that utilized culturally responsive framework and to 1) increase informal and formal educators awareness and confidence in implementing and integrating culturally responsive methods

into their teaching practice and 2) explore how Smithsonian educators can support the incorporation of CRSE strategies into instruction.

The project utilized Smithsonian resources in collaboration with communities in Alaska and Washington, DC, to co-produce culturally responsive science education frameworks that would be responsive to community priorities. Through place-based, community-engaged approaches that draw on community knowledge and interests, the project sought to foster understanding and skills-building for more culturally sustaining approaches, aiming to enhance educators' methods and student engagement in science learning environments.

The Alaska and DC Components

The CSRE project in Alaska is called “Woven Together: Taperrnat Research and Art.” The framework for this project involved community members and educators and consisted of three phases of work: 1) researching and harvesting taperrnat (beach rye grass in the Yup'ik language); 2) teaching how to prepare and weave taperrnat; and 3) creating resources for educators and students that could be shared through Smithsonian education networks. In 2024, these three phases took place in King Salmon/Bristol Bay region, Anchorage, and Homer/Kenai Peninsula region. The project has convened Alaska Native Elders, Knowledge-Keepers and artists; promoted intergenerational teaching and learning; has included video and photo documentation; is creating culturally-relevant interdisciplinary curriculum for three grades; is supporting the Alaska Native customary practice of making weaving taperrnat; and learning about the Alaska Native practices of closely observing the environment across seasons for successful harvesting, assessing changes in the climate affecting seasonal materials, and identifying different time periods over one year when it is suitable to harvest taperrnat for weaving.

The CRSE framework for the DC-based project is an immersive model of professional development, a professional learning community (PLC), of Smithsonian museum-educators and DC Public School teachers (high school) who develop culturally responsive teaching knowledge and skills while engaging in group inquiry. The professional development was characterized by in-person learning experiences with community, coaching, and reflection supports for maintaining community and promoting learning transfer. Cultivating a reflective practice among the PLC was intended to build awareness of teaching approaches that led to observable student outcomes through the documentation of “small wins” and promising practices. The content is multidisciplinary and organized around three main topic areas: 1) DC history and culture, 2) Smithsonian science and resources, and 3) culturally responsive teaching. The teachers implemented environmental projects with their students in school year 2024-25 to practice culturally responsive approaches to instruction that integrated Smithsonian science and education resources and experiences.

The PLC examined two central questions based on data from the “Woven Together: Taperrnat Research and Art” and DC-based projects: 1) How can teachers leverage Smithsonian's resources to advance culturally responsive teaching and science learning? 2) In what ways can the Smithsonian adapt how it serves teachers, students, and community to better support learning?

SCOPE OF WORK

The Contractor will provide professional, technical, non-personal services to design, implement, and deliver a summative project evaluation. The evaluation should focus on identifying the factors and features of the project that supported the project goals and any unintended outcomes. It is recommended the evaluation include five levels of evaluation per the Kirkpatrick evaluation model: participants' reactions to the program, their learning, organizational support and context, use of new knowledge and skills, and participants' perceptions of student learning and engagement. The influence of the content, process, and context of the PLC experience on project goals and outcomes should be considered within the evaluation.

DELIVERABLES

- The contractor will deliver an evaluation design and plan, including format, methods, timeline, and data analysis strategies within 4 weeks after the award.
- The contractor will provide weekly email updates to designated EOVE staff
- The contractor will schedule monthly check-in meetings with designated EOVE staff
- The contractor will conduct semi-structured interviews that could explore the five levels of evaluation previously described and outcomes specific to the ways in which the project content, contexts, and processes supported positive outcomes for learners.
- The contractor will conduct interviews with up to 8 DC public school high school teachers who are part of the PLC to gather perspectives on their experiences.
- The contractor will interview up to 8 “Woven Together” project participants who participated in grass observations, weaving workshops, and narrative photography project to gather their perspectives and experiences. (Following cultural courtesies, interview questions will be provided in advance to stakeholders.)
- The contractor will conduct interviews with up to 8 collaborators from NMNH, ASC, and the National Zoo and Conservation Biology Institute to assess their role and perspective on project outcomes.
- The contractor will submit a draft final report for review by designated EOVE staff by February 2, 2026, including:
 - A section summarizing the synthesis of educators' reflections and lessons learned recorded throughout the process, presenting key themes and patterns in the context of the project outcomes and goals.
- Interview data collection and analysis along with protocols for PLC members, community collaborators, and museum personnel. This should include anonymized interview transcripts.
- A synthesis of findings that address alignment with broader institutional goals and objectives; performance metrics; return on investment; stakeholder feedback; and comparative analysis.
- The contractor will deliver a final report in both Microsoft Word and PDF formats with recommendations from EOVE staff 45 days after delivery of draft report.

DATA AND RESOURCES

The following data sources are available to the Contractor:

- Teacher reflections on small wins related to promising practices for culturally responsive teaching (DC participants only)
- Surveys from grass outings, weaving workshops, and narrative photography activities (Alaska)
- PLC reflections: There are 90 reflections from the PLC cohort of 11 people, each vary in length from 40-400 words, with most around 100-200 words. Offeror may propose a sample size for analysis.
- Project documents, including the proposal and interim reports.

Please note: The evaluation design and methods will be subject to review by the Smithsonian Institutional Review Board (IRB) and Privacy Office. The Contractor will coordinate with Smithsonian staff to provide all relevant information, methods, and protocols as required and provide proof of active CITI human subjects research training.

WORK LOCATION/TRAVEL

Work will largely be performed at contractor's place of business and it is anticipated most meetings and interviews will be conducted on Zoom or Teams. The Smithsonian will not be furnishing a regular workspace or network access for the contractor.

Offeror may wish to propose travel to Washington, DC to conduct some meetings and interviews in person. The quote should explain the Offeror's reasons and itemize transportation costs and travel allowances (per diem) of personnel authorized to undertake out-of-town, overnight travel under this purchase order.

PERIOD OF PERFORMANCE

All work under this order shall begin on or about Oct. 1, 2025 and conclude by March 2, 2026. Offeror may propose a schedule of milestones and delivery provided that all final work is completed and delivered by March 2, 2026.

PAYMENT SCHEDULE

Payments shall be in installments according to a schedule of proposed milestones and acceptance of work as required herein and receipt of proper invoices.