

August 27, 2024

Browning Public School District 129 1<sup>st</sup> Ave SE Browning, MT 59417

RE: Request for Approval and Collaboration on NSF ATE Grant Proposal

GALLATIN COLLEGE

MONTANA STATE UNIVERSITY

Department of

**Earth Sciences** 

## Dear Rebecca Rappold:

We are in the process of applying for a National Science Foundation (NSF) grant for a project that we believe holds significant educational and community benefits. The proposed project aims to enhance geospatial literacy, skills, and curriculum at Browning Public Schools, potentially serving as a model for other regions. By focusing on curriculum design, implementation, and professional development, this initiative seeks to equip students and teachers with valuable geospatial competencies essential for various professional fields.

This project empowers institutions to develop and control their own specialized geospatial data and educational resources, ensuring that educational programs respect and preserve cultural heritage, support community planning and development, and foster self-determination in how lands and resources are documented and understood.

We are enthusiastic about the potential positive impact it may have, particularly through collaborative efforts with Browning Public Schools. As part of our commitment to respectful and meaningful partnerships with Native communities, we are reaching out to seek your formal approval and collaboration in this project. Your input and guidance will be invaluable as we aim to ensure that the project aligns with the educational and cultural priorities of your community.

We propose the following activities as part of the project:

- 1. Provide mentored professional development opportunities in geospatial curriculum for high school teachers at Browning Public Schools.
  - a. Organize professional development workshops focused on geospatial technology and curriculum development for high school teachers. These workshops will be led by experienced GIS professionals and educators who can provide hands-on training and mentorship.
  - b. Establish teacher mentorship programs that will pair high school teachers with experienced mentors from the field of geospatial education. These mentors will offer ongoing support, including one-on-one coaching sessions, classroom observations, and feedback on lesson plans and teaching strategies to ensure the effective integration of geospatial curriculum into the classroom.
- 2. Development of a GIS course with culturally specific labs and information
  - a. Design and implement a GIS course tailored specifically to incorporate culturally relevant case studies, data sets, and project work that reflect the indigenous knowledge and heritage of the community. This activity honors and preserves cultural heritage, ensuring that the education provided is relevant and respectful of the community's traditions and knowledge. It also empowers students to apply GIS skills in ways that benefit their own communities.

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- 3. Provision of pre-college support and skills development to collaborate with educational institutions, mentorship programs, and community organizations to provide students with the skills and knowledge required for successful admission into college, with a focus on GIS and related fields. Develop a curriculum that includes preparatory courses, workshops, and certifications to enhance college readiness. This objective directly addresses the educational needs within the community by preparing students for higher education, leading to increased college admission rates and academic success. It ensures that students receive comprehensive support that aligns with college requirements, fostering academic growth and self-confidence. By equipping students with essential pre-college skills, they can seamlessly transition into higher education while remaining connected to their community and preserving cultural values.
- 4. Incorporate GIS courses into school curriculum
  - a. Integrate the newly developed GIS courses into the existing school curriculum, ensuring they are offered regularly and become a staple part of educational offerings. By embedding these courses into the curriculum, schools can sustain and perpetuate geospatial education, producing graduates who are well-equipped with in-demand skills. This bolsters the school's educational capabilities and supports long-term community growth and self-sufficiency.

We are committed to upholding the principles of respect, mutual benefit, and cultural sensitivity throughout this project. We believe that by engaging in this partnership, we can collectively enhance educational opportunities and foster a spirit of shared knowledge and growth.

We are eager to hear your thoughts and incorporate your recommendations to ensure the project's success and alignment with your community's goals.

Thank you for considering this request.

Sincerely,

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