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Editorial Team Dr. P. K. Raju Journal of STEM Education

Dear Dr. Raju and Editorial Team members,

We are submitting a manuscript to the *Journal*, entitled "Engaging High School Girls in Native American Culturally Responsive STEAM Activities." This is not a revised version and it has not appeared in conference proceedings. Two photos (Figures 1 and 3) were used in a press release, and Figure 2 is on the cover of the related activity booklet for the project, referenced in the manuscript as a teaching aid. If you would like to have us use other photos, we can do that. We have the rights to those photos and the figure at SDSU.

Our qualitative research paper has a small number of participants and is not in the positivist tradition. The paper helps to fill a gap in the literature where a paucity of research exists: bringing STEM to Native American girls, in a unique collaboration with a Native American Federal boarding school and three PhD's authors from our state's largest university, including an Engineer, a Biological Scientist who specializes in ethnography, and an Anthropologist who is Native American.

The project and this research paper have limitations which are noted in the manuscript. The project leaders were determined to move forward despite the many rules and regulations under which we operated, a delicate subject that we explained as best we could in the paper without causing undue upset for those involved. Some of those include rules at the partnering Federal boarding school that conflicted with our original agreement with them when the project began—such as working with the same group of 30 girls at each meeting, of key importance to us. There were substantial constraints imposed by our own professional ethics and South Dakota State University's IRB regulations. Our policy, throughout was non-abandonment of the boarding school students—something we learned from Oglala Lakota College, a Native American community college with whom we also collaborate. It is their standard policy for students at their school, and we are indebted to them for sharing this promising strategy.

We have an activity booklet for teachers, as a supplement to this manuscript. It is at SDSU's free on-line repository, Open Prairie. Teachers can easily access that booklet for examples of some of our culturally relevant activities, particularly recipes using plant parts and berries that were traditionally important to the Dakota/Lakota and remain so today, especially on reservations in South Dakota and the region. We prepared plant vouchers for the high school's newly founded herbarium, but we also refurbished their campus with native plants of importance to the tribes, and we used traditional recipes, since we cooked and ate the berries when we could obtain them. These published activity notes were generated and used during this research project: Kant, J. M., Burckhard, S. R., & Meyers, R. T. (2016b). *STEaM Girls activities, Flandreau Indian School, Flandreau, SD*. South Dakota State University, Civil and Environmental Engineering Faculty Publications. Paper 1. Retrieved from http://openprairie.sdstate.edu/cvlee_pubs/1

We hope that you will be interested in publishing this highly unique paper, and in including future articles about bringing STEM education to Native Americans.

In submitting this case to the *Journal of STEM Education: Innovations and Research* for widespread distribution in print and electronic media, I (we) certify that it is original work based on real events in a real organization. It has not been published and is not under review elsewhere. Copyright holders have given permission for the use of any material not permitted by the "Fair Use Doctrine." The host organization has signed a release authorizing the publication of all information with understandings of confidentiality.

Sincerely,

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