Online Community Project

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I am not a rock. I am not an island. As I pursue my calling as a teacher, I want to be the kind of professional who can contribute to the wider community of educators and, in turn, open myself to being challenged and improved by that community. In this essay I will reflect on my experience as a contributing member of “[Rhino in Education: a place to shine a light on the work of students and teachers](http://rhino3du.ning.com/).”

I have two degrees, both of them in English. My English studies have benefited me in a variety of fields, including teaching. As a beginning teacher, my main challenge lies in the fact that I do not teach English. Of the five non-English subjects I teach, the one that makes me feel the most like a fish out of water is STEM (science, technology, engineering and mathematics). Nevertheless, I am committed to providing my students with the best learning experience I can, and so I set out to learn more myself.

One of my early steps was to attend a weeklong training in Seattle whose focus was Rhinoceros (Rhino), a world leading 3-D modeling software platform. The training was inspiring and helpful, but I knew I would need ongoing support. Therefore, I sought out and joined Rhino’s online community for educators.

I check in with this community from time to time, and I am often challenged and inspired by what other STEM and Vocational Educational programs are doing. One of the most provocative dynamics I see in this community is its collaborative spirit. Teachers and students in Sitka are involved in projects with other learners in places like Wrangell, Alaska, and Sherwood, Oregon. These projects range in scope from remote-control cars and drones that utilize wheels and gear ratios, to designing and producing parts for small aircraft companies. These dynamic, collaborative endeavors are the kind of meaningful, cutting-edge work that I want to incorporate into my own program.

While I have not had the opportunity to contribute directly to this online community as much as I would have liked, I have used my Rhino-based connections with other STEM educators to work my way into a Design and Fabrication workshop (included below). Held in Sitka this coming March (2016), the workshop’s purpose is to equip educators like me with the skills and knowledge necessary to incorporate Rhino modeling and advanced technological tools into their curricula. Our main project likely be the construction of an electric guitar; this is something that my students have expressed specific interest about, as well as something that brings me personal joy. Furthermore, as the program brochure states, “a major emphasis of this year’s training will be how to respectfully integrate Native art forms into the fab lab curriculum.” I am always looking for new and innovative ways to connect my teaching with Alaska’s Standards for Culturally Responsive Schools, and this seems like a great way to do that.

This community of educators continues to help me grow as a teacher and as a person, and I am certainly on the cusp of great advancements as a STEM and Vocational Education teacher. These advancements would not have happened without my online community.

**Design and Fabrication Professional Development 2015-2016**

This professional development opportunity for selected participants has two phases: Rhino level 1 training offered via distance delivery in October/November and a hands-on, four day workshop in Sitka in March. You may participate in the Rhino course and not attend the spring training but you may not attend the spring training without a basic skill set in Rhino or some other 3D design software approved by the project coordinator.

**Costs**: The only cost to participants for any of the training activities is for travel, housing, and meals for the four day training in Sitka. To help with this, participants who bring a student will be given a $1,000 travel stipend. UAS 593 credit is available at a cost of $90.

**The Sitka Workshop**

**March 2-5, 2016**

In this training, John Niebergall of Sherwood High School, near Portland, Oregon, and Cory Torppa, of Kelso, Washington, will demonstrate how to use Rhino generated designs to manufacture things using 3D printers, laser cutter/engravers, CNC vinyl cutters, CNC routers, and plasma arc cutters. Both instructors have been using Rhino and other software to solve design problems and manufacture things for more than a decade. Participants will be given lots of time to do things on their own with the tooling. Districts are encouraged to send one teacher and one student if possible. Teachers who have done this training in the past are welcome to repeat.

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**Follow this link to a video** which will explain more about why your district should consider developing a Design and Fabrication program:

<http://sitkaschools.org/domain/533>

**For more information or to enroll**, contact Randy Hughey

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