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Dreaming of Fire: The feasibility of a wood-fired kiln in public education.

The Challenge of Fire

Art Educators at every level are under fire. While their importance in schools and in the lives of students has not diminished, the perception of art as a non-essential part of a student's development has grown. Uninformed and misguided groups are cutting the arts in schools due to funding concerns and an increased focus on core subjects. Art educators are not only functioning with less money, but are also expected to deliver a cross-curricular, standards-based curriculum in less face-time with students. These constraints with money and time can dampen an educator's enthusiasm, but inspiration and excitement is still out there, and projects too large for a program's budget are possible. A school may not have the ability to fund it, but that doesn't mean an idea or project is dead.

Wood-fired pottery is a style that dates back as early as pots were made, and was continually used for thousands of years. This method was used out of necessity, as wood was the only source of heat in order to dry and fire pottery. As Japanese people refined the method in order to increase both the temperature and the durability of the ceramic work, a method of firing very similar to today's method was born (Kusakabe and Lancet, 2005, p. 16). While wood fueled firing occurred throughout these times all over the world, it was the Japanese potters that refined wood-fired pottery to what we know today. The United States ceramic movement as a whole didn't adopt the wood firing process until the 1970s, when oil prices soared, and new alternatives were sought for firing ceramics (King, 2009, p. 99). From coast to coast, wood kilns began getting built, and the process of wood firing grew and evolved in kilns and communities throughout the United States. This firing method is one that generally resides only at colleges, art centers, and professional pottery studios. While this process is deeply rooted in the history of ceramics, as well as the history of civilization as a whole, wood-fired kilns do not exist at the high school level of art education. Building a wood kiln is a costly and complicated task, but not one that should be considered unobtainable for educators who teach high school ceramics. With the proper planning and fundraising, a wood-fired kiln built within the public education realm can be a realistic, feasible project, funded outside the school district's general funds.

Benefit to the School

Wood kilns at the high school level are rare, and for the most part, nonexistent. High school kilns in the United States are electric or gas, and provide the predictable, basic techniques developed in the last century. Kilns fired with wood don't exist because most programs shy away from the planning, preparation, and knowledge base necessary to execute such a plan. Clay Cunningham, an artist and instructor that accomplished the building of a wood-fired kiln at an Iowa high school wrote "Other potters said that it just wasn't done at the high school level while administration voiced concerns over several issues. But the students expressed surprise for the most obvious reason—excitement" (Cunningham, 2009, p. 41). The building of a kiln will not only provide excitement for those that fire in the kiln, but also for those that support the school that built it. The kiln will be a source of pride for the school district, existing as a point of envy for all the surrounding districts. The envy would not only come from a sense of competition between schools, but would come from a place of judgment in the quality of art education.

Aside from the competition, the kiln could be a place for collaboration. This idea not only benefits the teachers and students involved, but also the home district for the kiln in a way that everyone supports—financially. Wood kilns often pay for themselves through the rental of space to local artists, art centers or professional artists. Wood kilns can be costly with up-front costs, but can pay for themselves within a few years if properly funded and executed (Thies, 2013). This idea of using a kiln as a source of revenue is often utilized by art centers and professional potters, but not utilized in the public education setting. A kiln of comparable design, but larger in size is the Noborigama kiln at the Baltimore Clayworks, which charges \$1500 per firing (Dugan, 2013). While this kiln is large in scale, it demonstrates the possibility of revenue production that Baltimore Clayworks uses on a weekly basis. Even when subtracting the cost of wood and the cost of instruction and monitoring by the kiln manager, the possibility for revenue generation is immense.

As business is a driving force for so many people in the education system, students' education should not be lost in the focus of this project. This project does not only benefit students firing ceramic pieces, but also gives real world applications to many cross-curricular lessons. With a creative mind, no subject area can be ignored in the planning and building of this project. From the history of the kiln as a source of life, commerce and tradition, to the writings of

poetry and prose that have come from the inspiration of a dancing flame, history and language arts can be addressed. The science and chemistry of firing provide a real look at the periodic table of elements, as chemicals change and chemical reactions occur. Architecture, design, and technology education students have real project to plan, participate in, and execute as the kiln must be built to exacting standards in order to produce the necessary results. This kiln would be real. Students in all subject areas would feel its impact, and the work associated with it would be fascinating. Educators are constantly asked to engage their students in activities that provide an investment in thought, and an attachment to reality. This kiln project is exactly that.

Benefit to the Community

Students are not the only recipients of the benefits of a wood kiln. With the availability of instruction through workshops, adult education, and kiln rental, the community at large will have the opportunity to learn and utilize a historic ceramic process. With community support, the kiln would not only symbolize support for the arts, but also support for local artists. Artists that live in the local, as well as surrounding communities would be able to use the facility as a place to extend their craft, elevating the quality of art the community offers to the larger art community. The wood-fired kiln has always been a gathering place, as the process of firing requires a crew of many individuals in order to fill the necessary shifts. This interaction produces a communal mentality, and stories and knowledge are not only shared about ceramics, but about culture, community, and education. As our society has become detached through the use of social media and technology, the wood-fired kiln provides an opportunity to practice an age-old art, the art of face-to-face communication.

Making it happen

Having an idea is one thing, but implementing the idea is another. While the largest concern may appear to be financial, the public school system has liability and insurance concerns that can stop a large project at any stage. Concerns about student safety, pollution, property value, and renter liability can cause concerns at multiple levels in the planning process. A carefully executed plan can cover the above concerns, which then leads to the most obvious concern with any large project.

Fundraising is a concern with any project, large or small, but utilizing traditional as well as contemporary resources for money can be the key to putting a project into motion. Traditional resources, as simple as monetary donations can be utilized, but in times where money is tight,

and skepticism about public schools is growing, this avenue for money could be a difficult sell. Events pertaining to the project have the chance for success in the form of pottery sales, silent auction events, and a new format for fundraising, online auctions. Donations of artwork, services, general goods or vouchers for businesses can be collected from the willing participants in the community. Using both traditional and social media, an audience can be gathered toward an online website that will provide an auction of these items for a designated amount of time. Websites offering these services vary slightly with the options associated with an online auction, but the fees associated with these websites vary greatly. Below is a selection of popular auction websites available.

Table 1

Comparison of Online Auction Websites

<u>NAME</u>	<u>WEBSITE</u>	<u>FEES</u>
Bidding for Good	www.biddingforgood.com	Approximately 15% of total raised
Fundly	www.fundly.com	4.9% + 3% Credit Cards
MissionFish (eBay)	www.missionfish.org	Minimal costs
Benefit Events	www.benefitevents.com	10% of the total online winning bids up to \$25K and 5% of such bids above that amount (Auctions whose total online bidding is less than \$3500 pay a flat fee of \$350.)
32auction	www.32auction.com	flat rates from \$0-\$150

Innovative methods of fundraising will help draw attention to the project, but more traditional methods such as education and art grants can also be utilized in order to secure funds. No method is a guarantee for success, so the use of a variety of ideas will be essential to raise the necessary funds.

The Payoff

Large projects in difficult economic circumstances can happen. Art educators are working with less and being asked for more, but with creative thinking and an enthusiastic community, these big ideas can come to life. A wood-fired kiln is a rare facility available to students and educators at the high school level, but by generating enthusiasm through the idea of a community kiln, as well as raising funds outside of the public education budget, this rare facility can become a reality. In a time when art education is being pushed to the side in favor of

core subjects and their test scores, a large-scale project showing both progressive thinking and historical value can carry a lot of weight in the eyes of the local community, as well as serve as an example for the greater arts community. Communities supportive of the arts are still wide spread, and in those communities, it is the educators' responsibility to take advantage of the blessing of support to create an example of success for others to follow.

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