

Family Recipe to Family Business

by The Bui

Several months ago on a Friday afternoon, a student of mine told me that his family was going to be selling food later that night and that I should drop by because his grandma was going to be the one cooking. I was sold when I heard the words *grandma* and *cooking*. So later that evening, I arrived and proceeded to order one of everything within a few seconds and then I started wondering if my student could have done the math behind this:

- *Would he have known how to calculate prices?*
- *How about calculating a reasonable profit?*
- *What are some basic elements of running a business?*
- *How will they deal with factors like fixed costs and unexpected costs?*

I went home that night and wrote up a unit of study, which I simply called the “Food Truck Project”. The first step is to have students go home and interview their parents or relative about a family recipe and then record that recipe as precisely as possible. Students were also required to include an origin story for their recipe because I wanted to learn a little bit of family history as well. Next, students had to convert their recipe for 100 servings for situations like making food for a shelter or throwing a big family party. Then they had to adjust it again for 650 servings as if they were selling food at a festival for the day. At this point, I revealed to the students that they were going to be starting their own food truck and then they were given time to design and build little models of their food truck and of course, film a commercial. All the while, they had to calculate things like cost/serving, profit/serving and price/serving. Students are then to ask their parents how much they’d sell each serving for and then they’d compare their two answers.

After they determined price for their serving and how many servings they would have to sell in order to make a living and have a life, I had them form food truck teams to compete against each in our first Food Truck Face Off. Competing teams will set up their “food truck” during recess and try to convince as many other students as possible to order from them in the form of placing a ticket in a tip jar. As a group, students are responsible for writing a detailed plan outlining individual responsibilities, a schedule of how they are going to complete their tasks, formulate a marketing and advertising plan including a commercial. So far, students have only completed the commercial stage but at this point there are several options for students:

- Compete in mock food truck competition
- Conduct independent research projects on international street foods as through the lens of an economist.
- Create a webpage for their company
- Contact a local food truck vendor and have kids ask them questions about the mathematics behind starting and running a business

This is a project intended give kids the opportunity to practice and experience proportional reasoning through a variety of experiences crafted to give them a taste of entrepreneurship. It is also meant to teach them terms like *lease*, *insurance*, *profit* and *health code*. The greater purpose here is to teach them that math can fun and powerful at the same time.