# Truckin' Through Economics 

$4^{\text {th }}$ Grade
28 Students
6 weeks


## Abstract/Overview

My unit, Truckin' Through Economics, was conducted with my $4^{\text {th }}$ grade, self-contained class over a 6-week period. It was an interdisciplinary unit which included literacy, math, and economics. The students read a chapter book and picture books, participated in teachercreated economics lessons, created their own 3D taco truck models, and participated in a taco restaurant and food truck festival for our entire school.

April 15 - (Pretest) Econ is Key activity - I put the terms on cards with a key attached and the definitions on other cards with locks attached. The students worked with a partner to match the term to the correct definition (unlock the lock - self checking) within a 5-minute time period. None of my students were able to complete this task at the beginning of the unit. This is what I expected. I knew they hadn't been exposed to these terms before this year. (supply, entrepreneur, economic wants, services, goods, producer, opportunity cost, human resource, capital resource, natural resource, demand, scarcity, profit, competition, price, money, markets, human capital, consumer, trade, interdependence, specialization, assembly line)

April 16-23 - Book Study - The Lemonade War The students read the book and participated in daily discussions on the economics terms in each chapter. They completed a teacher-created book guide with comprehension questions and examples of the economic concepts for each chapter. (partnership, competition, value-added, location, profit, marketing, franchise) The students also created their own stand where they decided what to sell. They also decided on a good location and if they wanted to have a partner or not. They designed the stand and marketing and explained their other decisions.

April 25 - Food Truck Fest - (goods/services, consumers/producers, markets) Students listened to the book about a family that visits a food truck festival. We discussed all the goods/services and producers/consumers in the book. Then the students participated in an activity where each group had a set of cards that had to be sorted into either good or service. We made a chart on the board together to check their understanding.

April 26 - Dragons Love Tacos - (natural resource, human resource, capital resource) Students listened to the book, and we discussed the definitions of the economic terms. I asked students to give examples from the text used in the making of the tacos. The students then worked in groups to play a game of concentrations with cards I created. Some cards said, "natural resource," "human resource," or "capital resource." The other cards had pictures of the productive resources used in the making of tacos. Half the students played the game of concentration, matching the term to the correct picture, and the other half of the students worked on math task cards. The task cards were teacher created based on a taco truck menu. Then the groups switched activities.

April 30 - The Little Taco Truck (scarcity, supply/demand, markets) Students listened to the book. I asked them to tell me what economic concept they thought I wanted to teach with this book. Happily, they easily came up with scarcity! We talked about the scarcity of space in the story. We also discussed the demand for food trucks in the story and how that affected the
supply. The students then participated in a teacher created activity where they had to design a food truck with very limited space. This scarcity of space created the need to make many decisions. (see more in the activities section)

May 1-8-3D Taco Truck Models -(scarcity, marketing, markets, supply/demand, entrepreneur) I used a resource found on Teachers Pay Teachers that was intended as a math activity, (area/perimeter) but I saw the perfect opportunity to use it in our economics unit. In addition to creating the 3D models, the students also created the menu for their taco truck and designed the marketing. The students were told that their trucks would be displayed together and all the teachers in the building would have $\$ 3$ of our class dollars to vote for their taco trucks. Many students came up with marketing gimmicks and ways to add value to try and draw votes. We discussed how this is exactly the way it happens in the real world. Supply and demand comes into play and consumers "vote" with their dollars. (May 15) I also showed my students YouTube videos of some food trucks to build background knowledge because many weren't familiar with the inside of a food truck.

May 9 - Interdependence Web (interdependence, human resource, producer/consumer) The students all wore a card around their neck with a human resource. The ball of yarn was passed from student to student as they explained why they needed that human resource. Once every student was involved in the web, I introduced problems that could occur, and those students dropped their yarn. This was a great way for students to see how we are all dependent on each other.

May 10 - Dragons Love Tacos 2 Salsa Taste Test using the PACED Decision Making Guide (PACED decision making guide, opportunity cost) The students listened to the book, and I explained the steps to the PACED Decision Making guide. Students were given a form to fill in their criteria for salsa. The students tasted all 4 salsas and filled in their form to make a decision. (see Activity section for more details.)

May 13 - Trade Bags (trade, interdependence, utility) Each student chose a paper bag from the counter without looking inside. First, I allowed them to look inside and rate their happiness (utility) with that item. Then I allowed then to trade with the people at their table. Next, we opened trade to half the room. Finally, I opened trade to the whole room. At the end of the activity, the students rated their happiness again. We discussed how trade and interdependence leads to increased happiness (utility).

May 15 - Food Truck Models Display Day - The students did an amazing job creating their menus and constructing their trucks. They really thought about the marketing that would bring customers to their business. We displayed the trucks and menus and the teachers placed their dollar votes. The students got to keep the class money that their business received.

May 10-16 - Market Production - (assembly line production, specialization, human capital) My students used an assembly line to produce items made from duct tape to be sold at our food truck festival. They made rose pencils and wallets. They quickly learned who was better at certain parts of the job, and they worked to improve their human capital through training and practice.

May 17 - Taco Truck and Food Truck Festival - The week before, my students took orders from the adults in our building. We sold two options -2 Tacos with chips/salsa or supreme nachos for $\$ 5$ per lunch. We set up our workstation in the hallway to simulate the size of a food truck. (I'm lucky that my room is on the end of the building with our own hall going to the end door.) Students did all the jobs including cooking the meat, chopping the tomatoes, packaging the guacamole and sour cream, assembling the lunches, and delivering them to the adults in the building at their requested time. After the lunches were served, we sat up our food truck festival outside. My students sold nachos, sold the handmade duct tape items, planned activities for our customers, helped younger students find places to sit, brought student groups to and from the festival, and cleaned up. I was overwhelmingly proud of my students for putting all their new knowledge into action. They did it all! Our food "truck" and festival were hugely successful. We raised $\$ 500$. We then discussed that when we earn money, we have decisions to make. We should spend some, save/invest some, and give some. The class brainstormed ideas and came to a decision. We spent some on ice cream cones when we took a walking fieldtrip to Andy's Custard to reward ourselves for our hard work. We also spent some on supplies for a couple of STEM projects - making ice cream and the Pringle's circle challenge. We invested some in education by purchasing lock boxes and locks that can be saved to use for break-out activities for many years to come. The final part of our earnings was given. First, my students made more of the duct tape rose pencils for patients at Arkansas Children's Hospital. We also bought lots of small toys and put them into treat bags for those patients. We hope that these small gifts will bring a little happiness to them. I took 5 of my students, after school, to deliver the gifts to the hospital. Then, I took those students to Wal-mart and let them choose treats which we delivered to the fire department near our school. They were very excited to receive these treats. The final portion of our giving wen to two classmates. These two classmates were chosen to attend a very special youth leadership program this summer in Washington DC. They must raise the funds for this trip, so we donated to each of their trips. My students were very excited to be able to make all these gifts.

May 20-22 - Entrepreneur Break-Out Boxes and Reading Comprehension (entrepreneur, decision making) The students participated in teacher-created activities using the Food Dude and Toy Trailblazer book series about entrepreneurs and inventors. The students read the books and completed a reading comprehension worksheet. They then had to solve the clues to open the locks on the box to get to their reward. Each box represented a different book/entrepreneur. The groups then traded to read another book and solve a different breakout box. They really enjoyed learning about these people/products and working together to open the box, and they learned so much about the decisions and sacrifices entrepreneurs make.

May 24 - Econ is Key Vocab Activity - Just as we did at the beginning of the unit, pairs of students worked to match all of the economic terms to the definitions and unlock the locks in the 5 minute time frame. At the beginning of the unit, none of the pairs were able to complete the task. At the end of the unit, EVERY pair was able to complete the task, most with time to
spare! They really knew the concepts! Not only were they able to match the definitions. They were able to give me real world examples.

May 28 - Walking Field trip to Andy's Custard for ice cream cones and deliveries to Arkansas Children's Hospital and Rogers Fire Dept, Olive Street Station.

My students had not experienced much economics teaching before coming to me. They were intimidated by the terms when I first introduced them. The hands-on activities that were fun and engaging allowed my students to overcome their fear of the concepts. They loved reading the books and participating in the simulations. They didn't even realize how much they were learning. They were able to then apply what they learned to new situations and finally, our own taco truck business.

I believe that this approach to learning/teaching is the reason for the success of this unit. Hands-on, engaging lessons leads to learning. My students LOVED this unit. They loved the hands-on activities and retained the information they learned. I also believe the unit being interdisciplinary makes it more successful. The mix of literacy, math, economics, art, and realworld skills meant that all my students had a chance to be successful in an area in which they were strong. Finally, I believe that giving them power and ownership over the experiential learning of the taco "truck" and festival lead to higher learning. When we give students responsibility, they usually exceed our expectations. My students definitely exceeded my expectations for this unit. I could not be happier with the results.

## Resources

1. Teacher created activity - Economics is Key matching activity (supply, entrepreneur, economic wants, services, goods, producer, opportunity cost, human resource, capital resource, natural resource, demand, scarcity, profit, competition, price, money, markets, human capital, consumer, trade, interdependence, specialization, assembly line)
2. The Lemonade War by Jacqueline Davies and teacher created comprehension packet (partnership, competition, value-added, location, profit, marketing, franchise)
3. Food Truck Fest by Alexandra Penfold and teacher created sorting game (goods/services, consumers/producers, markets)
4. Dragons Love Tacos by Adam Rubin and teacher created concentration game (natural resource, human resource, capital resource)
5. The Little Taco Truck by Tanya Valentine and teacher created scarcity lesson (scarcity, supply/demand, markets)
6. Run A Taco Truck, A Project Based Learning Activity (PBL) by Digital Divide and Conquer on Teachers Pay Teachers
7. YouTube video - Food Trucks Documentary-Food on Four Wheels https://www.youtube.com/watch?v=Eti5xAfUirA
8. YouTube video - Food Truck Tour https://www.youtube.com/watch?v=SitxVbYPARk
9. Interdependence Web cards and yarn (interdependence, human resource, producer/consumer)
10. Dragons Love Tacos 2 by Adam Rubin and teacher created lesson for salsa tasting using the PACED decision making guide, chips and salsa
11. Trade Lesson from Economics Arkansas workshops, paper bags, small treats inside the bags (1 per student) (trade, interdependence, utility)
12. Books from the Toy Trailblazer series and the Food Dudes series along with teacher created reading comprehension pages and break-out box activities for each book (entrepreneur, decision making)
13. Teacher created vocabulary posters (supply, entrepreneur, economic wants, services, goods, producer, opportunity cost, human resource, capital resource, natural resource, demand, scarcity, profit, competition, price, money, markets, human capital, consumer, trade, interdependence, specialization, assembly line)


## A. Little Taco Truck Scarcity lesson (teacher created)



1. Read Little Taco Truck to students. I didn't tell my students which concept I was trying to teach with this book. I told them to try to figure it out. They immediately knew that this book was teaching scarcity. After reading the book and reviewing scarcity, I showed this YouTube video- Food Truck Tour https://www.youtube.com/watch?v=SitxVbYPARk
2. Give students the Plan/Reflect page. Have them fill in the Plan side of the page to decide what type of food truck they will create.
3. Give students the blank truck page and the equipment pages. They will choose the items for their truck. These pieces will be cut out and glued onto the blank page. All pieces must be glued on so that the words are horizontal. Students will have to make choices about which pieces of equipment are the most important.
4. Have students complete the Reflect portion.
5. Discuss how scarcity of space played a role in choosing the equipment for their trucks. Discuss how this effects real food trucks as well.
6. What kind of food truck will you have?
7. What foods/drinks will you sell?
8. What equipment will be needed to prepare those items?

## After: Reflect

1. How did scarcity of space create a problem for your food truck?
2. How did you decide which items to put in your truck?
3. How did you decide which items to leave out of the truck?
4. How does scarcity of space effect the business of a food truck?


Big Stovetop


| Small <br> Fridge | Soda <br> Fountain | Micro- <br> wave | Small <br> sink |
| :---: | :---: | :---: | :---: |
| Cash <br> Register Small <br> Grill <br> toaster Dish- <br> washer <br> fryer warmer | freezer | Trash- <br> can |  |
| Small <br> stovetop | oven |  |  |


$\square$

Extra pieces for other items needed in your truck

Before: Plan

1. What kind of food truck will you have?

2. What foods/drinks will you sell?

Hamburgers, Cheeseburgers, Hot dogs, 8 drinks - with condiments and toppings.
3. What equipment will be needed to prepare those items? grill, work counter, order win dow, fridge, sink, Storage, $\&$ cash

## After: Reflect $\frac{10}{5}$

1. How did scarcity of space create a problem for your food truck?

It was really tight but, it worked and that the part that counts
2. How did you decide which items to put in

- your truck? because your parent cook ot home so if you did what I did then you would know What to put

3. How did you decide which items to leave out of the truck? because they Weren't nessary for what In selling.
4. How does scarcity of space effect the business of a food truck? Well Small instead of bia and wide at a restrant


## Before: Plan

1. What kind of food truck will you have?

2. What foods/drinks will you sell?

1 ce
50 da

- rootbeer

3. What equipment will be needed to prepare those items? Big FCPZl - roda marhine

## After: Reflect <br> 20

1. How did scarcity of space create a problem for your food truck? all fit so I nadiont stufso I couldggetomove
window.
2. How did you decide which items to put in your truck? My truck was an - Iceuream tuckwi h soda - so I got dig freeze, sodamal hine, and Prep count
3. How did you decide which items to leave out of the truck?
Why would I put it on
some thing warm. It
4. How does scarcity of space effect the business of a food truck?



## B Dragons Love Tacos 2 Salsa Taste Test using the PACED Decision Making Guide (teacher

 created)
## Teacher Directions

PACED Decision Making Model economics lesson based on the books, Dragons Love Tacos and Dragons Love Tacos 2.

* I use this lesson as part of a bigger unit with a taco/food truck theme.

1 Read the book(s). I usually use the first book for another lesson and the $2^{\text {nd }}$ one for th's lesson Go over the PACED Decision Making Model with students. Explain to them that this model helps us to make good decisions. We can use it for making many dfferent kinds of decisions. Today, we will use it to make a decision about which salsa is the best. (for our dragon party, of coursel) $\quad P=$ State the Problem $\quad A=$ List the Alternatives C= Identify Criteria E=Evaluate Alternatives based on criteria D = Make a Decision
2. Give students the blank guide. Have the students decide on the criteria they think is important (color, chunky or not, spicy or not, price, etc) and fill in their forms. I always have my students do price, and I tell them the prices at the end.
3. Before class, prepare salsa for tasting. Choose 4 different brands of salsa of various prices. I label condiment cups 1-4 on the lids, and I fill the cups so that I have one of each number for each table. Do not tell the students which brand belongs to each number.
4. Show the students the 4 empty salsa jars and have them choose the one they would pick in the grocery store.
5. Tell students to carefully examine each salsa and fill in the PACED decision making guide with numbers for each.
6. Tell the students the price of each salsa so they can fill in the price column.
7. Add up each column to decide on the winner.
8. Discuss and record the winners on the board. Did they choose the one they thought they would choose? How does using the PACED decision making guide help them make better decisions?
9. Extension (homework) - Give the students a blank guide and have them use it to make a decision with their family while teaching them how to use the guide. (example - game to play, movie to watch, restaurant, etc)

## PACED Decision Making Model



## P State the Problem

A List the Alternatives
C Identify Criteria
E Evaluate Alternatives based on criteria
D Make a Decision


Problem: I need to find the best salsa for the dragon taco party.

| Salsa |  |  |  |  | Total |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| 4 |  |  |  |  |  |

Taste each salsa and rate it 1-4 $(1=: 84=(\cdot)$ My choice is :

## PACED Decision Making Model

 P State the ProblemA List the Alternatives
C Identify Criteria
E Evaluate Alternatives based on criteria
D Make a Decision
Problem:

| Criteria <br> Alternatives |  |  |  |  | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Consider each alternative and rate it 1-4

$$
(1=: 2=4=()
$$

My choice is :

# PACED Decision Making Model 

P State the Problem
A List the Alternatives
C Identify Criteria
E Evaluate Alternatives based on criteria D Make a Decision

Problem: I need to find the best mild salsa for the dragon taco party.


Taste each salsa and rate it $1-4(1=(2) 4=(\cdot))$ My choice is :


## PACED Decision Making Model

| P State the Problem <br> A List the Alternatives <br> C Identify Criteria <br> E Evaluate Alternatives based on criteria <br> D Make a Decision <br> Problem: I need to find the best mild salsa for the dragon taco party. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Salsa |  | Smooth | Spice | price | Total |
| $1$ |  |  |  |  |  |
| $2$ |  |  | $\bigcirc$ |  |  |
| $\begin{gathered} 3 \\ 2.99 \end{gathered}$ |  |  |  |  |  |
| $1.4$ |  |  |  |  |  |

Taste each salsa and rate it 1-4 (1=: 8 4=(3) My choice is :


## Evaluation/Assessment

I know that this unit was incredibly successful because I saw so much growth and heard my students using the concepts they learned. I hung posters of each concept on the board in our room as we learned about them. Each day, we reviewed the ones we had already learned. Each time I introduced a new picture book, I asked my students to identify the economics in it, and they were able to do this easily. We went on a fieldtrip to watch a Naturals baseball game during this unit. While waiting for the game to begin, I quizzed them, asking for examples of natural, human, and capital resources. They came up with many. Different times during the unit, my students would make comments using the concepts correctly. They did an amazing job running our business, using what they learned.

At the beginning of the unit, I used a teacher-created vocabulary activity to gage students' knowledge of the terms in this unit. At the end of the unit, pairs of students worked to match all of the economic terms to the definitions and unlock the locks in the 5 minute time frame. At the beginning of the unit, none of the pairs were able to complete the task. At the end of the unit, EVERY pair was able to complete the task, most with time to spare! They really knew the concepts! Not only were they able to match the definitions. They were able to give me real world examples.


My students were able to construct their own 3D models of taco trucks, using what they had learned. These models were displayed and teachers voted (with our class dollars) on the best trucks.


Every lesson had either a reflective discussion or questions to be answered. The answers given during these reflections allowed me to check for understanding and growth during the unit. Many of the lessons also included a sorting or matching activity. It was easy to assess understanding based on completion of the activity.


The biggest assessment came at the end of the unit - application of learning! My students used their learning to conduct our very own taco "truck" and food truck festival. They did all of the job, including: marketing, taking orders, food prep, delivery, festival games, production of duct tape crafts, selling duct tape crafts, clean-up, and host/hostess. We were SO BUSY! 400 plus students attended our festival, and we fed 40 teachers from our food "truck." The students were amazing!!! I was busing scooping nacho cheese all day, and my students did everything else. It went off without a hitch and the guests all had a great time. We raised $\$ 500$.

I truly believe that application is the best gage of understanding. My students hit it out of the park!


ABOVE: These photos are from the taco truck for teachers. We put our knowledge of productive resources and assembly lines into good use!

BELOW: These photos are from our food truck festival. The students really used their knowledge of producers/consumers, goods/services, and specialization during our festival. We had groups of students specializing in each job. In the first photo, you see our duct tape craft sellers. The second photo shows part of our assembly line for nachos. These boys specialized in putting the chips into the paper boats. The last photo shows the games crew. These students specialized in entertaining our guests. If everyone does their job properly, the whole festival goes well. They proved this to be true.


Today 10:53 AM


Thank you 4th grade!!!

To: Amy Mileham;
Dear Mrs. Mileham's class, I just wanted to let you know how impressed I am with you. You were all very professional when you came to take my order and when you delivered the food. I made my order special by asking for no taco shells and you did it perfect! It was delicious and presented very nicely. You all did a great job and should be very proud of yourselves!

Awesome job Mrs. Mileham you did great preparing them!

Danielle Hollis, RN<br>Grace Hill Elementarv

To: Amy Mileham;
Mrs. Mileham and class, I really enjoyed the great lunch you prepared today. I don't think any restaurant could have done it better. The food was delicious and the service was super polite!! I really was impressed with how you learned to run a successful business. Way to go!!!!

Shelby Whalen
Physical Education
Grace Hill Elementary

Today 4:33 PM
Thanks for putting together the food truck event! My kids were so excited! They loved it and had a great time! Students were so professional and polite. Great job!! I'm sure you're exhausted! Enjoy your weekend!

Sue Grassbaugh Jordan
I was amazed! Any 4th grader I interacted with, or my students interacted with, acted very responsible and
knowledgeable about what we were to do, or where to go.
Often, a fourth grader would come up to me and ask what they could help me with... Take over watching my students, could they find a student for me etc. What a wonderful experience for my students, and your students!! Well done!


April $25^{\text {th }}$ lesson - goods/services sort - students had to look at the pictures and sort them into categories. We then made a list on the board
 together to check understanding.


April $26^{\text {th }}$ lesson productive resources concentration game. Half of the students worked on this, while the other half worked on taco truck math task cards.



April $30^{\text {th }}$
Little Taco
Truck scarcity lesson
Students had to decide which pieces of equipment to include in their food truck.



Taco Truck 3D models I purchased this lesson from Teachers Pay Teachers. The students had to create a menu, design the menu, design and construct their taco truck model. This was a wonderful way to tie math (area/perimeter) into our economics unit. The students
learned so much about marketing, scarcity, and being an entrepreneur with this activity.


May $9^{\text {th }}$ - Interdependence Web - The students each wore a card for a different producer. They had to create a situation in which they would need a different producer and throw the yarn ball to them.


May $10^{\text {th }}$ - Dragons love Tacos - PACED Decision Making Guide lesson (Salsa taste-testing)



PACED Decision Making Model
P State the Problem
A List the Alternatives
C Identify Criteria
E Evaluate Alternatives based on criteria
D Make a Decision


Taste each salsa and rate it $1-4(1=$ : $24=4)$ My choice is : $\qquad$ -.


May $13^{\text {th }}$ Trading bags lesson. Students were each given a bag with something inside. They were allowed to trade 3 times.



Market Production - we learned a lot about assembly line, specialization, and increasing our human capital!


## Left Field Taco Shack



We opened our taco truck and served lunch to the staff of our school. My students took all of the orders.


Home of the World Famous
Home-Run Taco Box and Grand Slam Nachos!

| Home Run Taco Box \$5 (2 tacos + chips/salsa |  |  |
| :---: | :---: | :---: |
| Tacos (circle) | Hard | soft |
| Lettuce |  |  |
| Tomato |  |  |
| cheese |  |  |
| Grand Slam Nachos \$5 All come with chips, meat, cheese |  |  |
| tomato |  |  |
| Sour cream |  |  |
| Extras! | \# | \$ |
| Sour cream, side cup (\$050) |  |  |
| Guacamole, side cup <br> (\$1) |  |  |
| Choc Chip cookie <br> (\$1) |  |  |
| drink (coke, sprite, diet coke. water) \$1 |  |  |
| Total |  |  |
| DELIVERY TIME: |  |  |
| Name: |  |  |



We set up our food truck in the hall to simulate the scarcity of space inside a real food truck. The students did all of the food prep, cooking, chopping, assembling, and delivering of the lunches.




This is the ONLY thing I did at the festival. The kids did everything else!



Top 2 pics are of our festival. The bottom 3 pics are some of what we did with our earnings. We took a trip to Andy's for an ice cream cone. We made treat bags for the Children's Hospital, and we took snacks to the fire station.


May 20-22 - Entrepreneur Break-Out Boxes

The students worked in teams to read the book, answer the reading comprehension questions, and open the break-out boxes! They learned a lot about entrepreneurs and the decisions they must make to be successful.


