

A four-part, project-based learning curriculum for 4th - 6th grade

Volunteer Copy

Developed by:





With Support From:





Your Piece of the Pie: Today's Youth, Tomorrow's Entrepreneurs

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YOUR PIECE OF THE PIE: TODAY'S YOUTH, TOMORROW'S ENTREPRENEURS

CURRICULUM OVERVIEW

Your Piece o the Pie: Today's Youth, Tomorrow's Entrepreneurs is a project-based learning curriculum that is segmented into four, sequential, interconnected (two teacher-led and two volunteer-led) lessons that are approximately 60 minutes each in length. According to the Buck Institute for Education, Project Based Learning is a teaching method where students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging and complex question, problem, or challenge. In Gold Standard PBL, projects are focused on student learning goals and include Essential Project Design elements: key knowledge, understanding, success skills, a challenging problem or question, sustained inquiry, authenticity, student voice & choice, reflection, critique and revision, and public product. In addition to these project elements, the curriculum enables students to learn about entrepreneurial vocabulary and concepts, as well as how entrepreneurs benefit their economy by solving a problem. The curriculum is free and available to 4th – 6th grade teachers in metropolitan Kansas City. All materials are classroom-ready and provided to participating teachers and volunteers.

LESSON OVERVIEW

Optional Vocabulary Activity (teacher led)

This activity, based on the Frayer Model, can be used as a precursor to the lessons depending on the background knowledge of the students. It can serve to help students gain a deeper understanding of essential economic and entrepreneurship concepts addressed throughout the lessons.

Lesson 1 – Your Piece of the Pie: Mama Solves a Problem (volunteer led)

The first part of the curriculum focuses on introducing the concept of entrepreneurship and how entrepreneurs solve a problem through the creation of a good or service. Students listen to a story called *Sweet Potato Pie* and complete vocabulary and economic story map activities, followed by an activity that pairs essential vocabulary with elements of the story.

Lesson 2 – Your Piece of the Pie: Entrepreneurs Solve a Problem (teacher led)

The second part of the curriculum allows students to revisit essential entrepreneurial vocabulary and to learn about real-life entrepreneurs through video and non-fiction informational text. Students apply their knowledge of an entrepreneurial concept through a game and in cooperative groups, describe factors that real-life entrepreneurs address through their business.

Lesson 3 – Your Piece of the Pie: What Problem Will You Solve? (teacher led)

The third part of the curriculum concentrates on the development of a business model outline based on the students' original entrepreneurial ideas. Students will work in small groups to develop a product and complete a business model outline that details the problem their product will solve, the productive resources needed to develop their product and other key steps in creating a business.

Lesson 4 – Your Piece of the Pie: Becoming An Entrepreneur (volunteer led)

The fourth part of the curriculum emphasizes the presentation of the students' entrepreneurial ideas to their peers along with a peer review of others' ideas. Students share key elements about their product and their business plan outline and vote on their favorite business idea.

Lesson 1:

Your Piece of the Pie: Mama Solves a Problem

Lesson Description:

Introduces the concept of entrepreneurship and how entrepreneurs solve a problem through the creation of a good or service. Students will listen to a story called *Sweet Potato Pie* by Kathleen D. Lindsey and complete an economic story map activity, followed by an activity that pairs essential vocabulary with elements of the story.

Grade Level:

4th – 6th grade

Concepts:

- Business
- · Capital Resources
- Entrepreneur
- Goods
- Human Resources
- Incentive
- · Income
- Market
- Natural Resources
- Profit
- Risk
- Services

Objectives:

Students will be able to:

- · Define key vocabulary associated with entrepreneurship and economics
- Explain how natural, human and capital resources are used in production
- Analyze how an entrepreneur combines productive resources to create a good or service to solve a problem
- · Describe the relationship between a series of events and related economic concepts
- · Identify cause/effect within the context of problem-solving

Success Skills:

Students will demonstrate the skills of:

- Comprehension
- Critical thinking
- · Identifying cause and effect
- Listening
- Predicting
- Problem solving
- Sequencing
- Writing

Essential Question:

How do entrepreneurs in our community create and /or innovate to solve problems?

Time Required:

50 - 60 minutes

Materials:

- · Sweet Potato Pie book by Kathleen D. Lindsey ((provided by volunteer during training)g training
- Economic Story Map activity handout, one per student (provided to teacher during training)provided to teacher during training
- Economic Story Map answer key ((page 11)
- Lesson 1 PowerPoint presentation (provided on jump drive to teachers and via email to teachers and volunteers)
- Story and Vocabulary Connections Reference Guide ((p.13-15)
- · Vocabulary Concepts (provided on a set of flashcards given to teacher during training
- Sweet Potato Pie: Choose Your Own Adventure handout (page 17 in this booklet and page 7 of student booklet)a

*All handouts, except for the Economic Story Map are provided in the student workbork, given to the teacher in advance. Lesson materials, excluding the book, youth entrepreneur excerpts and videos, are in Dropbox, available at http://tinyurl.com/j4hdrbg.

Procedures:

- 1. Introduce yourself and your organization.
- 2. Tell students that you are visiting to share a program about entrepreneurship. They will learn about entrepreneurs, real and fiction, and get a taste of becoming an entrepreneur. Each group will present their own business ideas.
- 3. Show the cover of the book to the class and ask them to predict what the story is about.
- 4. Write their predictions on the board or have them write on page 6 of their workbook. *Note: Ask the teacher which he or she would prefer.
- 5. Read *Sweet Potato Pie* to the class and show illustrations throughout.
 - *Note: The illustrations in the book are very rich and help tell the story.
- 6. After reading the story, ask the teacher to bring up the PPT on the screen while you introduce the economic story map activity. *Note: The PowerPoint presentations are available in Dropbox, http://tinyurl.com/j4hdrbg, and emailed to teachers and volunteers after training.*
- 7. Inform students that together you will review key details and vocabulary from the story using the PowerPoint (PPT) presentation and an "Economic Story Map" activity.
- 8. Distribute a copy of the "Economic Story Map" handout to each student and ask them to complete it as you walk through the PPT together. Use the Lesson 1 PowerPoint presentation to review how the story illustrates entrepreneurship and related concepts.
 - *Note: Teachers should have copies of the Economic Story Map activity, one per student, provided during training. Key vocabulary is introduced through the PPT although not used within the story. The PPT and the activity are intended to help students associate economic vocabulary terms with key events from the story. You might review the Story and Vocabulary Connections Reference Guide on pages 14-15 in advance of facilitating the lesson. An Economic Story Map Answer Key, page 11 provides guidance while walking through the PowerPoint presentation and directing students to complete their story map handout.

- **9. Slide 1** Ensure all students have an "Economic Story Map" handout and writing utensil before advancing.
 - *Note: Several questions are embedded within the slides for students to answer, as noted with a question mark. As you advance through the slides, questions will be on one slide and answers will be revealed on the following slide. This method will enable students to ideate responses to questions before answers are provided by the volunteer.
- **10. Slide 2**—Review the directions and inform students that the answers to their Economic Story Map will be provided as you go through the PowerPoint slides together.
- **11. Slide 3** Economic Story Map visual. Let students know that you will remind them to write the correct information from the slide onto the appropriate section of their Economic Story Map.
- **12. Slide 4** Question: "What does the book cover tell us now that we've read the story?" (Answers may include: people are buying and selling pie/food; the people are at a market place; it's the fall season because of the kind of pie shown; Sadie is promoting her pie) Note: Compare their answers to the predictions they provided before listening to the story.
- **13. Slide 5** Question: Sweet Potato Pie is a story about what? *Note: Slides may contain quotes from the story to prompt recall. These are shown in ORANGE.*
- **14. Slide 6** Answers may include: a family who lived on a farm; a family who had a problem to solve; solve; a family who made and sold pies.
- **15. Slide 7** Question: Can you describe the problem in the story?
- **16. Slide 8** Answers may include: the family couldn't repay their bank loan; the family needed money quickly; the family did not have \$75
- 17. Slide 9 Question: What was the cause of the problem in the story?
- **18. Slide 10** Answers may include: without rain the crops couldn't grow; answers may include: their crops failed and so they had no income; they had to find another way to earn money
- 19. Slide 11 Question: What was the effect of the drought?
- 20. Slide 12 Answers may include: the crops failed and there was no income; they had to find another way to earn money
- 21. Slide 13 Question: How did the farm provide an income for the family?
- **22. Slide 14** Answers may include: they sold their crops; they could sell resources from their animals such as milk from the cow and goat and eggs from the chicken
- **23. Slide** 15– Read the definition and the question: What are the examples of a natural resources from the story.
- 24. Slide 16 Answers may include: land; animals; plants; crops; milk
- 25. Slide 17 Review the definition and read the question: What are examples of human resources?
- **26. Slide 18** Answers may include: Mama made pies, Papa and the boys fixed the wagon; Sadie and Jake gathered eggs, flour, and milk; Martha helped Mama in the kitchen

- 27. Slide 19 Reveiew the definition and read the question: Who was an entrepreneur in the story?
- **28. Slide 20** Answer: Mama had the idea to use their available resources to produce pies.
- **29.** Slide 21 Review the definition and read the question: What capital resources did the family use to produce pies?
- **30. Slide 22** Answers include: Sadie used a hoe, wagon, bucket, basket, mixing bowl, spoon and oven. *Note: Encourage students to use critical thinking and infer responses.*
- **31. Slide 23** Review the definition and read the question: Did the family in the story produce a good or service?
- **32. Slide 24** Answer: They produced a pie, which is a good.
- *Note: Delivering the pies, which was implied to happen after the story would be a service.
- **33. Slide 25** Review the definition and read the question: What was the family's incentive to make the pies?
- **34. Slide 26** Answers may include: they needed money to pay back the bank loan; they owed the **bank** money; they were going to lose their farm
- **35. Slide 27** Review the definition and read the question: How would the family know if they made a profit from selling pies?
- **36. Slide 28** Answer: They would have enough money to cover what is cost to produce the pies plus extra money.
- **37. Slide 29** Review the definition and read the question: In what market did the family sell their goods?
- **38. Slide 30** Answers may include The Harvest Celebration; shop owners in town.

Note: Be sure students understand that the market doesn't have to be a physical place but could be online or anywhere buyers and sellers meet.

- **39. Slide 31** Review the definition and read the question: What risks did the family take to produce pies? Was it worth the risk?
- **40. Slide 32** Answers may include: the pies might not have sold; they might not have sold enough of the pies; they used resources that could have been used elsewhere.

Note: It was worth the risk because they earned enough money to save the farm. The main point is that when a resource is used in production for one item or one service, that same resource is not available to be used to produce a different good or service. Help the students understand that when the sweet potato crop was used to make pies, then those same sweet potatoes were not available for any other use. Papa could have been busy finding other work to make money, but instead his time and effort went towards providing a way (fixing the wagon) for the family to take the pies to the Harvest Celebration.

- **41. Slide 33** Read the summary statement on the slide that ties all of the vocabulary concepts together. Invite students to read it with you after you've read it once.
- **42. Slide 34** If desired, share the information about the author.

43. Slide 35 - Read the slide describing the Wrap Up Activity, providing examples as needed, and ask students to work with those seated closest to them to retell the story using vocabulary from their completed Economic Story Map.

Note: You can let students know that it's not imperative that they conduct this activity in the same order in which it was done when completing the Economic Story Map, just as long as all terms within the map are included.

Closure:

- 1. Ask students to return to their seats and turn to page 8 of their workbook (page 17 in this booklet) entitled Sweet Potato Pie: Choose Your Own Adventure.
- 2. Let students know that they'll have an opportunity to create *Sweet Potato Pie Part II* by selecting one of the options on their handout and completing the writing prompt using at least 5 of the vocabulary terms they've learned today.
- 3. Remind students that they can use their completed "Economic Story Map" handout for a list of vocabulary terms.
- 4. Inform students that they'll have an opportunity to learn more about entrepreneurs in the next lesson and then they'll be able to develop and design their own entrepreneurial ideas and present them to you on your next visit.
- 5. Wish students luck with their business creation and confirm the date of your second visit with the teacher.

Assessment:

• The completed "Sweet Potato Pie: Choose Your Own Adventure" handout can be used as an assessment for this lesson.

Extension:

- Check with your school or public library for more books on the topic of entrepreneurship or starting a business. Many suggested books are easily found at http://www.kidseconposters.com/literature-connection/.
- Entrepreneurship in the Classroom the Federal Reserve Bank of Kansas City has developed a suite of entrepreneur-related classroom resources for a variety of grade ranges. The suite includes an Entrepreneurial Self-Assessment Survey, a video series of real-life entrepreneurs, children's literature-based lesson plans, role play lesson plans and more. These resources are available at www.kansascityfed.org/education/entrepreneurship.

YOUR PIECE OF THE PIE ECONOMIC STORY MAP ANSWER KEY

This can be used as a guide for volunteers while walking through the Lesson 1 PowerPoint presentation and directing students to complete their Economic Story Map handout. Each section of the Economic Story Map is represented within the table below, including the slide number in which the answer is provided. Direct students to use the text provided on the slide to fill in that section of their Economic Story Map.

Section of Story Map	Slide #	Answer
Problem	8	Family could not pay back loan
Cause	10	Drought; crops did not have rain
Effect	12	Crops failed; family was not able to earn money
Income	14	Sweet potato crop
Natural Resources	16	Gifts of nature used to make goods and services
Human Resources	18	Workers who make goods and provide services
Entrepreneur	20	A person who solves a problem by developing or designing a business idea
Capital Resources	22	Goods made and used to produce other goods and services
Goods	24	Something that satisfies people's wants
Services	24	An activity that satisfies people's wants
Incentive	26	Something that influences the behavior of people
Profit	28	When a business sells a good or service for more than it costs to produce the good or service
Market	30	Exists whenever people buy and sell goods and services
Risk	32	Chance of financial loss

YOUR PIECE OF THE PIE STORY AND VOCABULARY CONNECTIONS REFERENCE GUIDE

This 3-page reference guide can help to more clearly identify the connections between the Sweet Potato Pie story and key economic and entrepreneurship vocabulary concepts. Key vocabulary is delineated in bold and shown in the right-hand column.

Section of the Book	What Is Happening in the Story	Key Vocabulary
Cover	Market scene	Market
First Sentence	Identifies the <i>cause</i> of the problem facing the family. <u>Drought</u> , wrinkled vegetables, and finally rain to save the sweet potatoes	
Page 2	Papa tells the family that the bank is going to take away the farm if they can't pay back the \$75 he owes the bank. (Problem: no income)	Income
Page 3	Papa looks out the door and all that is left in the garden are sweet potatoes. (Papa: Human Resource; sweet potatoes: Natural Resources)	Human Resources Natural Resources
Page 4	Mama serves something sweet when there are troubles and Papa expresses how much he loves her pie. The 5 children eat all of the sweet potato pie on cracked plates and drink tea from chipped cups. (Plates and cups: Capital Resources)	Capital Resources
Page 4-5	Pictures showing the family in the kitchen.	
Page 6	Mama has an idea! Sell pies at the Harvest Celebration the next 2 days. She tells the family that everyone will need to help. Papa and 2 oldest boys go to fix the wagon. (Problem of needing to pay for the loan for the farm: Incentive; pies: Goods; wagon: Capital Resource)	Incentive Goods Capital Resources
Page 7	Mama's facial expression: She has the idea and thinks about all there is to do.	
Page 8	"Jake and me fetch sweet milk from the cow, Lizzy." Lizzy started mooing, Sadie started singing and dancing to entertain her. (Jake and Me: Human Resources; Lizzy: Natural Resource)	Human Resources Natural Resources
Page 9	Picture of the piglets running through and the bucket of milk splashing everywhere. (bucket: Capital Resource)	Capital Resources
Page 10	Sadie takes a basket to gather eggs and is met by the bossy rooster, Rastus. Jake distracts Rastus with corn but Rastus sees Sadie coming out of the henhouse with eggs and he chases her causing some of the eggs to fall out of the basket. (basket: Capital Resource; Hens: Natural Resource)	Capital Resources Natural Resources

Page 11	Sadie's expression as Rastus chases her and eggs are flying out of the basket. She worries that Mama will be upset but Mama told Sadie there were enough eggs left to make the pies. (eggs: Natural Resource)	Natural Resources
Page 12	Nanny, the goat, is hitched to the wagon to take Jake and Sadie to the millhouse for a sack of flour. Taking a short cut home proves to be a disaster when Nanny trips and the flour tumbles down the hill covering Sadie in flour. (Nanny: Natural Resource)	Natural Resources
Page 13	Mama and Martha cook and mash potatoes. They laughed at Sadie covered in flour. Just enough ingredients to make the pies. (Mama and Martha: Human Resources)	Human Resources
Page 14	Everyone is helping in the kitchen. Churning the milk into creamy butter. Pies, pies, pies. They fall into bed after a long busy day. (whole family: Human Resources; churning tool: Capital Resource)	Human Resources Capital Resources
Page 15	All the action in the kitchen	
Page 16	Loading pies in the wagon. (family loading pies:	Human Resources
	Human Resources; wagon: Capital Resource)	Capital Resources
Page 17	Family dressed in Sunday best. Mama packs the wagon just right so there is room for all of the children. (wagon: Capital Resource)	Capital Resources
Page 18	Harvest Celebration and "hardworking people" come to show off what they made with their hands or grew on their farms but no one else brought sweet potato pies. Fruits and vegetables, jams, toys, quilts, cakes and pies and pretty cloth all for sale at the Harvest Celebration. (fruit, vegetables, jams, toys, quilts, cakes, cloth: Goods ; Harvest Celebration: Market)	Goods Market
Page 19	Scene of the Harvest Celebration	
Pages 20-21	The market is full and the band begins to play loudly. No one is paying attention to the "Pies for Sale" announcements from the family. (Band begins to play: Service)	Services
Page 22	Sadie and Jake dance through the crowd with the pies over their heads and sing "Pies for sale, sweet potato pies for sale!" It was the smell of the pies that really got the attention of the crowd who fell in line behind Sadie and Jake and followed them back to Mama's display. She gave the crowd samples of her pie. (Gave the crowd samples to taste: Incentive to buy the pie)	Incentive

Page 23	Ladies bought pies and talked to Mama about the recipe. Jake collected the money and Sadie refilled the table with pies from the wagon. She bragged about her Mama's extra flaky crust too. (pies bought with money: Income)	Income
Page 24	Scene from the judging tent where Papa had secretly entered Mama's pie and it won a blue ribbon. Visiting other stores "in town" brought in lots of orders for pies to be delivered every week. The whole family was happy. Mama seems to have found a way to solve the family's problem and she has started her own business! (won a blue ribbon: Incentive; pies to be delivered weekly: Service; orders for more pie: Business)	Incentive Service Business
Pages 25-26	Mama explains that all the pies sold and that they need to hurry home to bake more for the Harvest Celebration the next day. Mama and children wait in the wagon while Papa goes back to the General Store. Papa brings back a box with something special inside for Mama. It will be a surprise when they get home.	
Pages 27-28	The family is home seated around the table eating sweet potato pie on the new china dishes Papa had bought for Mama. The last of the pies for the next day were in the oven and everyone was very relieved. Papa told Mama she was "clever" to come up with the idea of making the pies to help earn money for the family. Mama exclaimed that it was the hard work of everyone in the family that made it a success. Mama's business made enough money to save the family farm. (money earned above the cost of making pies, enough to save the farm: Profit)	Profit

YOUR PIECE OF THE PIE Can You Guess What the Book Sweet Potato Pie Is About?

<u>Directions:</u> Look at the cover of the *Sweet Potato Pie* book. Use the space below to write what you think the book is about.

YOUR PIECE OF THE PIE SWEET POTATO PIE: CHOOSE YOUR OWN ADVENTURE

<u>Directions:</u> You be the author and write part two of the *Sweet Potato Pie* story. Select one of the three options listed below. <u>Using at least five of the new vocabulary words</u> listed on your Economic Story Map, write your version of *Sweet Potato Pie Part II*.

As an alternative, suggest your own topic and be sure to have your teacher's approval before you write.

Think About.....

- 1. It is one year after the story ended. Write about the family farm and what has happened in the last 12 months.
- 2. Pretend you are one of the main characters. Write five diary entries that reflect on what happened in the story and where this character is today.
- 3. You are the president of the bank where Papa does business. Write what advice you would give Mama and Papa about the farm as a way to support their family.
- 4. Create your own topic and ask for your teacher's approval.





What can you do in the MakerSpace?

- Reserve a 3D Printer
- Work on electronics projects From repairs and wiring to prototyping and building to coding your Arduino or Raspberry Pi, we have tools you need to get started!
- Shoot videos in the Green Room, record vocals and audio, and edit your work in the Sound Booth.
- Make or repair clothes with sewing machines and supplies
- Use laser cutters, engraving machines, and CNC and vinyl cutters to make it easy to create projects with wood, MDF, or other materials.

Learn about our equipment and more - beginners welcome! We host regular events and classes that help you get making!

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