beyond the textbook

# RESTAURANT DESIGN CHALLENGE JENNY ITTNER, CHATTAHOOCHEE ELEMENTARY 

## Unit Overview

During this three week project-based learning unit, students collaborate to design a restaurant. Throughout the unit, students address mathematics standards by managing a $\$ 1,500,000$ budget and designing a blueprint of their restaurant. Students also address English language arts and social studies standards by defining their target market, creating a name and logo for their restaurant, creating a menu, "buying" real estate, opening a business checking account and applying for a business license and launching an advertising campaign. Throughout the unit, students use a variety of apps and browser-based computer programs to carry out all project requirements. At the end of the unit, students present their restaurant plan and serve a dish from their menu to teachers, administrators and parents.

## Standards Addressed

1. ELA.5.SL.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
2. ELA.5.SL.4: Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly and at an understandable pace.
3. ELA.5.SL.5: Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
4. ELA.5.L.3: Use knowledge of language and its conventions when writing, speaking, reading, or listening.
5. M.5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.
6. M.5.NBT.5: Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
7. SS.5.E.3: The student will describe how consumers and businesses interact in the U.S. economy.
a. Describe how competition, markets, and prices influence people's behavior.
b. Describe how people earn income by selling their labor to businesses.
c. Describe how entrepreneurs take risks to develop new goods and services to start a business.

## Day One - Restaurant Challenge Introduction <br> Standards Addressed: 1

1. Inform students they will be working in teams and designing a new restaurant for the community.
2. Divide students into teams of two to four students based on student learning styles and academic strengths. Make sure each group has members who can utilize their talents to successfully perform the required tasks. Inform students that each group member will have one (or more) of the following primary job responsibilities:

- Owner
- Chef
- Architect
- Designer
- Manager
- Marketing Consultant

3. Use the Project Design PowerPoint to review elements of the unit and introduce the challenge.
4. Review the Project and Presentation Requirements and distribute project rubric.
5. Use the remaining time for students to discuss and brainstorm ideas for the project in their groups.

Day Two - Brainstorming
Standards Addressed: 1, 2, 3

1. Have teams work on the Designing a Restaurant Brainstorming Sheet.
2. Allow students time to conduct research using the computer lab, laptops, tablets, or other personal electronic devices.

Day Three, Four and Five - Material Overview
Standards Addressed: 1, 3, 4, 5, 6, 7

1. Distribute packet* of all project materials and planning sheets. This packet should include the Real Estate Activity Sheet, Name and Logo Activity Sheet, Food Activity Sheet, Menu Activity Sheet, Advertising Activity Sheet, Helpful Links and Websites Restaurant Fakebook Template, and Checks and Balance Sheet.
2. Have students begin working on their restaurant plan.

## Day Six - Checkpoint \#1

Standards Addressed: 1, 3, 4, 5, 6, 7

1. Meet with each group individually to assess their progress. During this time, be sure to make sure groups are on track, managing their time appropriately, and appropriately using technology.

## Day Seven through Fourteen - Group Work

Standards Addressed: 1, 3, 4, 5, 6, 7

1. Have students continue to work collaboratively on all elements of the project.
2. Facilitate learning and support of technology use as needed.

## Day Fifteen - Checkpoint \#2

Standards Addressed: 1, 3, 4, 5, 6, 7

1. Meet with each group individually to assess progress and make sure groups are on track and managing time appropriately.
2. Assess compliance with established deadlines and see what elements may need more guidance.
3. Facilitate a class discussion on each group's progress and what they have learned so far.

## Day Sixteen through Nineteen - Final Work Days

Standards Addressed: 1, 2, 3, 4, 5, 6, 7

1. Groups should use the remaining days of the unit to assemble final products and rehearse presentations.
2. Make sure each group reviews the project rubric to ensure they have completed all requirements.

## Day Twenty - Checkpoint \#3

Standards Addressed: 1, 2, 3, 4, 5, 6, 7

1. Meet with each group for a final time and make sure they are ready to present their project.
2. Have each group test the technology they will use during their presentation to make sure there are no glitches.

## Day Twenty One - Presentation Day

Standards Addressed: 2, 3, 4

1. Students will present their final products to parents, teachers, administrators and other guests. Reviewers will score the projects using the Restaurant Review Template.
