Note: This document has not been localised for SA at this stage.

Sample Unit Plan

Grow a Business

Classroom Information

Subject Area

Social Science, Mathematics, Language Arts

Grade Level(s)

3-5

Unit Summary

Fourth-grade students develop business skills by marketing flowers for Mother's Day. Students conduct market research, determine product potential, seek funding, and market and sell their product. They survey schoolmates to determine flower popularity and use their knowledge of market price and profitability to "grow a business" and reach their sales goal. The *Visual Ranking Tool* helps students to set priorities, debate differences, and make correlations in order to reach consensus about which flowers to sell.

Building the Foundation

Habits of Learning Taxonomy

Analyzing perspective

Problem solving

Creative thinking

Thinking and communicating with clarity and precision

Analysis — debate, compare, order

Standards and Benchmarks

Social Science-Economics (National Standards - Grade 4)

NSS-EC.K-4.1 SCARCITY

Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

- People who make goods and provide services are called producers. People whose wants are satisfied by using goods and services are called consumers.
- Entrepreneurs are people who organize other productive resources to make goods and services.

Standard 7: Markets — Price and Determination

Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

- A price is what people pay when they buy a good or service, and what they receive when they sell a good or service.
- A market exists whenever buyers and sellers exchange goods and services.

Standard 14: Profit and the Entrepreneur

Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure.

Building the Foundation (Continued)

Standards and Benchmarks (Continued)

- Entrepreneurs are individuals who are willing to take risks, to develop new products, and start new businesses. They recognize opportunities, like working for themselves, and accept challenges.
- Entrepreneurs often are innovative. They attempt to solve problems by developing and marketing new or improved products.

National Council of Teachers of Mathematics: Grades 3-5 Data Analysis and Probability

Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer.

- Design investigations to address a question and consider how data-collection methods affect the nature of the data set;
- Collect data using observations, surveys, and experiments;
- Represent data using tables and graphs such as line plots, bar graphs, and line graphs;
- Recognize the differences in representing categorical and numerical data.

Develop and evaluate inferences and predictions that are based on data.

 Propose and justify conclusions and predictions that are based on data and design studies to further investigate the conclusions or predictions.

Understand and apply basic concepts of probability.

- Describe events as likely or unlikely and discuss the degree of likelihood using such words as certain, equally likely, and impossible;
- Predict the probability of outcomes of simple experiments and test the predictions;
- Understand that the measure of the likelihood of an event can be represented by a number from 0 to 1.

National Council of Teachers of English Communication Strategies

Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes. *Evaluating Data* — Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their

Learning Objectives

Students will

- Gather data by conducting a school-wide survey to determine product popularity and sales potential
- Summarize findings, draw conclusions, and rank items based on survey and research data
- Present their findings in a proposal letter to the school parent group
- Market and sell a product in the attempt to earn a profit

discoveries in ways that suit their purpose and audience.

Curriculum-Framing Questions

Essential Question

Why take the risk?

Unit Questions

How do we grow a business? How do you convince others?

Content Ouestions

What is the difference between a producer and a consumer? In what ways can surveys help us to make decisions? What is marketing? What is profit?

Student Assessment Plan

A variety of questioning strategies help to tap students' prior knowledge, prompt student thinking about making informed business decisions, and guide teaching. Students use the student version of the project rubric to help them guide the creation of their business plan and their marketing research, and self-assess their work. The project rubric assesses student team effort, writing, and mathematical reasoning. Students participate in a peer review to give and receive feedback while writing their persuasive letters. The summary of What We Learned assesses what students learned about the class average in comparison to their own *Visual Ranking* list. The What I Learned assessment assesses what students learned from their school-wide survey results.

Assessment Timeline

Before Project Work Begins	While Students Work on Projects	After Project Work Ends
Questioning	Student Rubric Questioning Peer Review	Summary of What We Learned Student Rubric Project Rubric What I Learned Questioning

Visual Ranking Elements

Visual Ranking Project Title

Grow a Business

Project Description

Mother's Day is coming! Everyone has a hard time finding the perfect gift for his/her special mom. Our class needs to earn money for an upcoming field trip. Put the two together and what do you get? An opportunity! You will be involved in researching, planning, marketing, and selling flowers for Mother's Day. You, as a member of the class, are now a business partner and you have many important decisions to make so that your business is successful. Think carefully about all that is involved in this business venture so that we can make a profit. Let's grow a business!

Project Prompt

Which flower(s) should we sell for Mother's Day? Consider price, profit, and popularity as you rank them.

Visual Ranking Elements (Continued)

Sorting List

Carnations, Daffodils, Daisies, Irises, Lavender, Lilies, Mums, Orchids, Roses, Tulips

Unit Details

Approximate Time Needed

8-10 class periods, 1 hour each

Prerequisite Skills

Addition and subtraction; basic word processing and desktop publishing skills; ability to enter data into a spreadsheet

Procedures

Setting the stage

To set the stage for the project, inform students that Mother's Day is approaching and that this might be a great time to hold a class fund-raiser for an upcoming field trip (or other event/equipment desired).

Note: If you do not already have a specific item in mind, have students brainstorm their own list of classroom wants and needs and together decide what the goal item should be for the fund-raiser. (Although not a part of this particular project plan, deciding what to buy for the classroom by ranking options in order of class preference could be a way to introduce students to the *Visual Ranking Tool*.)

Tell students that in order to raise the money, they will be taking on the role of young entrepreneurs and their task will be to start up and successfully run their own company. Post the following Unit and Essential Questions: *How do we grow a business?* and *Why take the risk?*

Divide students into small discussion groups and have them brainstorm ideas on how to build and run a successful company. Assign one student to record responses. Bring the groups back together and have them share their answers with the entire class. Record and save these initial responses for later reflection and analysis.

Next, tell students that in order to grow a business they must first have a product or service to sell.

Ask students to come up with gift ideas for Mother's Day. Divide the class into small groups and have them generate a list of things that "mothers like" (i.e., perfume, flowers, jewelry). After a few minutes of discussion, have the groups revisit their list and delete items that would not work well for a class fund-raiser.

After they have finished, bring the groups together and discuss the activity as a class. Ask questions to prompt student thinking, such as:

How did your list change?

How did you decide which items would or would not be good fund-raisers?

Then have each group share the final list with the whole class. Discuss similarities and differences among the lists. Although another product could be chosen when this unit is implemented in the classroom, for the development of this unit, we will assume students have chosen to sell flowers.

Discuss Business Decisions

Discuss the concept of making informed business decisions and build a Web diagram to capture student thinking. Use questions such as these to stimulate discussion:

Procedures (Continued)

Discuss Business Decisions (Continued)

- How should group business decisions be made?
- How do you convince others?
- Does everyone have to agree?
- How do you know if you've made the right decision?
- What do producers need to know about consumers in order to make good business decisions?
- What else needs to be considered?

Discuss the challenge of making group decisions, especially ones that can affect an entire business. Remind students that poor decisions put companies out of business every day, and that you do not want that to happen to them and their fund-raiser.

Create a Market Survey

Introduce the terms: producer, consumer, marketing, and profit. Define each using simple language that students can understand. To dig deeper into unit content and help students understand the importance of marketing research, post the Content Question: In what ways can surveys help us to make business decisions? Elicit and record student responses to the question. Next, tell students that they will be conducting their own marketing research to help ensure business success. Pass out the student version of the project rubric and discuss the criteria the students will be assessed on during this unit of study. Allow for questions and make sure that students understand all aspects of the rubric. Provide students with a list of flower choices available from local vendors. Distribute flower samples and have your students take digital photos of them. Together, create a market survey to use to poll the entire school. Photos help students understand what they are voting on. Make sure to include a question or two asking whether students will support your fund-raiser and buy flowers from your business.

Conduct a poll

Divide students into teams of 3–4 members and assign each team to poll one grade level using the market survey form. Make a spreadsheet template with fields or separate pages for each grade level. Make fields for the flowers and the classes at each grade level. When they complete the survey, show students how to tally the results and enter data into a spreadsheet. Have them create at least one chart or graph from their one grade's data, and share their interpretations with the class. Once students input their data, combine the data into a single spreadsheet to show schoolwide results. Use this opportunity to demonstrate how spreadsheets can be sorted in order to interpret data. Sort total number of student votes in descending order and then discuss the results.

Understanding Cost and Profit

Have students use the *Seeing Reason Tool* to identify factors that might contribute to the cost of flowers. Then, invite a local florist to visit to talk about the flowers that were on the top of the survey list and discuss "wholesale" vs. "retail" and what is involved in setting those prices. Instruct students to take notes during the visit and to ask any additional questions before returning to update their causal maps.

Rank Priorities

Build a project in the *Visual Ranking Teacher Workspace* and create and distribute a *What We Know* handout that includes the number of schoolwide votes received, sale price, and profit margin for each flower they will be ranking. Have students log in to their *Visual Ranking* team space. Point out the prompt: Which flower(s) should we sell for Mother's Day?

Procedures (Continued)

Consider price, profit, and popularity as you rank them. Have each team categorize the items with these criteria in mind. Have them use the *Comments* feature of the tool to explain why they placed the flowers in that particular order. Make sure teams refer to the *What We Know* handout as they rank and defend their choices. As students sort their lists, listen to their discussions and ask questions to help teams negotiate, make choices, and express their thinking.

Compare and Discuss

Once teams have finished ranking and commenting, have them compare their lists and read each other's comments about why they placed items in that order. Suggest that they identify the teams that ranked items most and least like they did. Have similar and dissimilar teams meet to discuss their rankings and rationale behind the order. Some teams may want to revise their ranking based on what they learn from discussions with other teams.

Once teams finish ranking and discussing, meet as a class to reflect on the process by answering some of these questions:

- 1. How did your group decide ranking order? Was everyone in agreement? If not, how did you resolve the conflict?
- 2. How did your list compare with that of other groups, and what did you learn from it?
- 3. Was your group able to convince others to consider changing their ranking order or were others able to convince you to change yours? Why? How?
- 4. When considering popularity, price, and profit, was one factor more important than the others in deciding your ranking order? If so, how might this same factor affect businesses if they, too, consider it the most important factor?

After comparing group lists and discussing learning outcomes, have students return to the *Visual Ranking Tool*. Give them a few minutes to adjust their ranking and comments as needed. Next, have each group compare its list with the "class average." Have them print a report of this comparison and attach it to a summary of what they learned. Their summary should communicate mathematical reasoning and what they learned from considering other teams' rankings. To assess each individual's ability to understand and interpret data representations, create a worksheet that contains a pie chart depicting the schoolwide survey results. (To make the data easier to read and interpret, include only the flower choices that students ranked.) The individual report should communicate mathematical reasoning and the student's explanation of their decision-making processes.

Ask students to refer to the student version of the project rubric to help guide their writing. After students finish writing, gather together and discuss the pie chart and *Visual Ranking* class average. Revisit the Content Question: *In what ways can surveys help us to make decisions?* Help students draw conclusions and decide which flowers to sell.

Inform and Persuade Others

Once you have decided what products you will sell and have determined a sales goal, have students write a letter to the parent group asking for start-up money to help launch the fund-raiser. Begin the process by reminding students that before they can actually sell the flowers, they need to buy their inventory. Because they have no money to fund their business up front, they will need to borrow it. Let them know that the school parent group is willing to help, but they need to be convinced that your class fund-raiser is worthwhile and that there is very little risk involved in funding your business venture.

Post the Unit Question: *How do we convince others?* Ask students to come up with a list of ideas that should be mentioned in the letter. Main elements should include an explanation

Procedures (Continued)

of your purpose, your funding needs, market research and analysis, sales goals, and expected profits.

Once you have a comprehensive list of what should be included in the letter, discuss how the letter should be organized and written. Discuss using persuasive language that will make it impossible for the parent group to refuse your request. Pass out a writing process rubric for the students to use as they write their letters and post the list of the main elements the class has decided to include. Give the students time to write, peer review, and then revise their letters into final draft form. Have the students share their completed letters in small groups. Ask the groups to combine the best pieces from the individual letters into one letter to send to the parent group. The individual letters can be assessed using the project rubric.

Advertise and Sell

In addition to persuading the parent group to help fund their business, students also need to persuade their schoolmates to buy their product. Have students create flyers to distribute and post around the school to market their product. In advance, decide as a class on language and content for the flyer. Have students use desktop publishing software to create a professional-looking flyer or provide them with paper, markers, paint, and crayons for a more home-made effect. Prior to Mother's Day, have students put up their posters and promote their fund-raiser during the morning or afternoon announcements. Assign a different set of students and parent volunteers to be responsible for each day's selling. Allow time for students to practice giving correct change and tracking flowers sold. Finally, have students take turns staffing the flower booth and keeping track of money received. Make sure each day that the sales information is entered into a spreadsheet that will give the overall picture of profit/loss and types of flowers sold. Hold a celebration activity to reveal the results.

Measure Success

To wrap up the unit, revisit the Essential Question: Why take the risk? and the Unit Question: How do you grow a business? Together, review your original goals, business plan, research, funding efforts, marketing strategies and profit. Help students to draw their own conclusions about whether or not their efforts to grow a business paid off and were worth the risk.

Materials and Resources Required for Project		
Printed Materials	Flower catalogs and books	
Supplies	Computers, Digital Camera, Spreadsheet development software, Word processor, Desktop publishing software, Internet browser	
Internet Resources	www.floral-express.com www.theflowerexchange.com/shop/Scripts/default.asp www.onlinewholesaleflowers.com/Thumbnailcatalog.html www.mainecottagegarden.com/pricelist.html http://rubistar.4teachers.org/index.php	
Outside Participation	Guest visit by a local florist; ranking flowers by principal; parent volunteers to help pick up flowers to sell	
Other:	Walking field trip to local florist	

Accommodations for	Differentiated Instruction
Resource Student:	Make classroom modifications as expressed in the student's IEP. Present instructions in a variety of ways. Include checkpoints and positive reinforcement throughout the unit and assigned projects. Select helpful class partners who can support his/her needs. Allow extra time to complete assignments.
English Language Learner:	Enlist the help of bilingual students to help with translation and interpretation of concepts. Provide more templates and graphic organizers for students to fill in. Select class partners that are best suited to work with this student and address his/her language needs.
Gifted Student:	Have them attend the next parent group meeting to deliver the class letter in person and present a short oral presentation to help persuade the group to consider your class proposal. Have them create a short commercial or jingle to promote your fund-raiser and ask them to present it over the PA system during morning or afternoon announcements. Have them conduct research to locate local and/or Internet vendors who sell flowers. Have them create a spreadsheet listing possible items for your class to sell and comparing vendor prices.