

Lauren Bailey
Social Studies
September 25, 2006

Unit Introduction

Grade Level: 5

Theme: Inventors

Goal: The students will learn about the impact inventions make on the world.

Rationale: It is important for the students to see how history fits together. The inventions made 500 years ago affect them today, both in good and in bad ways. The students need to see why this is important because they will also be creating things that affect the future of the world.

Standard: Social Studies 5.5.6 – Read accounts of how scientific and technological innovations have affected the way people lived in the early United States and make predictions about how future scientific and technological developments may change cultural life.

Objectives: The students will learn the names of the inventors, what the invention was, and how it has impacted us today.
The students will learn that they can also create inventions that will have an impact on society in future years.
The students will compare and contrast what life would be like without some of the inventions that have been created.

Name _____

Date _____

**Tell Me:
What do you know about inventions?**

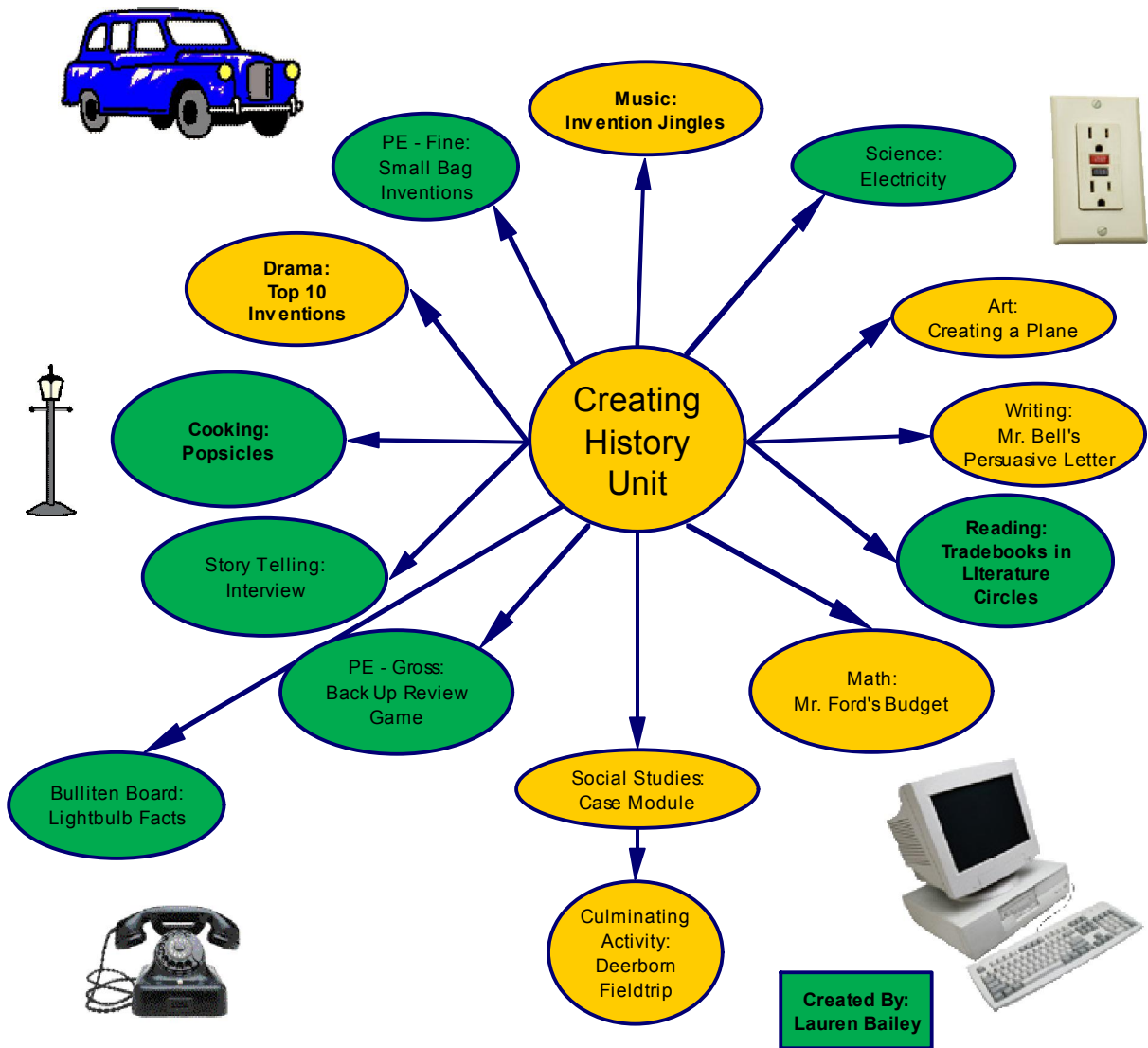
1. What is an invention?

2. Name three inventors, as well as the item(s) they invented.

3. Pick an invention. Tell me in a few sentences how your life would be different without that invention.

4. How do inventions influence the world?

5. How do people find out about inventions?



MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Invention Mistakes (Cooking Lesson) Length: 35 minutes

Grade Intended: Fifth Source: Me & <http://www.beaconlearningcenter.com/Lessons/2872.htm>

Academic Standard:

- Social Studies – 5.5.6 – Read accounts of how scientific and technological innovations have affected the way people lived in the early United States and make predictions about how future scientific and technological developments may change cultural life.

Performance Object: Given a topic, the students will orally summarize how their food was invented with 100% accuracy.

Assessment: I will give each group of students the opportunity to summarize how their particular food was invented. I will give them a copy of the book *Mistakes that Worked*, by Charlotte Foltz. I will listen carefully to make sure that each group has summarized the main points presented in the book.

Advanced Preparation by the Teacher:

- Bring Popsicles for the entire class
- Bring paper towels
- Bring 11 copies of *Mistakes that Worked*
- Split the students into 11 groups

Procedure:

Introduction/Motivation:

- Walk to the front of the classroom eating a Popsicle. (Visual Spatial Intelligence)

Step-by-Step Plan:

- Allow time for students to respond.
- Ask students if they know that sometimes things are invented or created by mistake.
- Explain that the Popsicle is one such invention.
- Split the students into 11 groups.
- Give each group a food to read about from the book *Mistakes that Worked* by Charlotte Foltz Jones. (Interpersonal Intelligence)
- Have each group to give a two-minute oral summary of why their mistake worked. (Verbal-Linguistic Intelligence)
- Explain to students that we will be starting a unit on inventions.
- Share with students that several inventions were started out as “mistakes”, like these foods did, and that we will be exploring these inventions throughout the unit.
- Questions to ask throughout:
 - Describe what would happen if this invention were not created. (Evaluation Question)
 - Why do you think this product was created? (Analysis Question)
 - Explain what the product was that was created. (Knowledge Question)

Closure:

- Share a Popsicle with each student. (Bodily/Kinesthetic Intelligence)

Adaptations: I will carefully place students in groups (low-achieving students with high-achieving students) allowing them the opportunity to succeed.

Enrichment: As an enrichment, I will allow students to explore other inventions that were accidentally created from this book, as well as other books provided by the library.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Creating an Invention (Fine Motor Lesson) Length: 45 minutes

Grade Intended: Fifth Source: Me & <http://www.beaconlearningcenter.com/Lessons/2872.htm>

Academic Standard:

- Social Studies – 5.5.6 – Read accounts of how scientific and technological innovations have affected the way people lived in the early United States and make predictions about how future scientific and technological developments may change cultural life.

Performance Object: Given a group of objects, the students will create a new invention with 100% accuracy.

Assessment: I will formatively assess each new invention as each group of students present their invention to the class.

Advanced Preparation by the Teacher:

- Bring a large bag of “normal” objects
- Split the students into groups of three
- Bring each group a baggy of “normal” objects

Procedure:

Introduction/Motivation:

- Pour out a bag of “stuff” onto a table and ask students to help you come up with different ideas of things that you could use this “stuff” for. (**Visual-Spatial Intelligence**)
- Create a list of ideas on the blackboard.

Step-by-Step Plan:

- Tell students that today they will get an opportunity to be inventors.
- Divide students into small groups & give one bag with everyday objects to each group. (**Interpersonal Intelligence**)
- Allow ten to twenty minutes for students to examine the objects and create a new useful product from their everyday objects. (**Bodily-Kinesthetic Intelligence**)
- Walk around the classroom asking the students:
 - Demonstrate how your new invention will work. (**Application Question**)
 - Tell me how this invention will influence the world. (**Synthesis Question**)
 - Explain how this invention is different than another invention. (**Comprehension Question**)
- After creating a useful object from the contents of the bag, each group then decides upon a name for the invention and prepares to tell how that invention could be used.
- Each group will orally share their invention, its name, and its use. (**Verbal-Linguistic Intelligence**)

Closure:

- The class will vote on the one invention they think is best and give that group an award.

Adaptations: I will model the assignment for the class at the beginning of the lesson. I will also allow lower-achieving students to work with higher-achieving students.

Enrichment: As an enrichment, I will allow the students to create a marketing campaign for their new product.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Back Up (Large Motor Lesson) Length: 35 minutes

Grade Intended: Fifth Source: Me & <http://www.beaconlearningcenter.com/Lessons/2878.htm>

Academic Standard:

- Social Studies – 5.5.6 – Read accounts of how scientific and technological innovations have affected the way people lived in the early United States and make predictions about how future scientific and technological developments may change cultural life.

Performance Object: By asking two questions of each student, the student will figure out which inventor (invention) they have on their back with 100% accuracy.

Assessment: I will see if the students are able to correctly identify which inventor is on their back by asking their classmates twenty questions about that person. I will also formatively assess the class discussion about the inventors at the end of the lesson.

Advanced Preparation by the Teacher:

- Create large pieces of paper with names of inventions/inventors for every student
- Bring tape
- The student will bring paper and a pencil

Procedure:

Introduction/Motivation:

- Walk to the front of the room with a piece of bright colored paper on your back. Tell students they will play a game to review the inventors. (*Visual-Spatial Intelligence*)

Step-by-Step Plan:

- The teacher will tape a card with the name of a significant inventor/discoverer on the back of each student.
- Each student numbers a piece of notebook paper from 1-20 and takes the paper and a pencil with him/her. (*Linguistic Intelligence*)
- The students walk around the room and ask questions that can only be answered with yes or no of other students to try to figure out who is on the card taped to the student's back. (*Bodily-Kinesthetic Intelligence*) (*Inter-personal Intelligence*)
- The students can only ask 2 questions of any one student and 20 questions altogether.
- All students who guess who is on the card within the twenty-question limit are winners. The teacher will walk around the room and monitor student participation, providing guidance and formative feedback when needed.

Closure

- When time is up, have students share their experience and designate the winner(s).
- Students take turns reading the name of the inventor/discoverer on their index card, identifying the invention/discovery, and the impact of the invention/discovery.
- Questions to be asked throughout will include:
 - Explain the impact your invention had on society. (*Evaluation Question*)
 - What was the invention/inventor of your inventor/invention? (*Knowledge Question*)
 - What time period was that invention created? (*Knowledge Question*)

Adaptations: I will allow these students to ask more than 20 questions to figure out which inventor is on their back.

Enrichment: As an enrichment, I will ask the students to create a review game of their own for their peers to play.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: How Can You Construct a Circuit in Which a Bulb Lights? Length: 35 minutes

Grade Intended: Fifth Source: Activities for Teaching Science as Inquiry – Page 125-126

Academic Standards:

- Science 5.5.6 – Choose appropriate common materials for making simple mechanical constructions and repairing things.
- Science 5.1.5 – Explain that technology extends the ability of people to make positive and/or negative changes in the world.

Performance Object: Given materials, the students will put together an electrical circuit with 100% accuracy.

Assessment: I will observe the students putting together an electrical circuit as they work in pairs. I will also check the drawings they turn into me to see if they understand the concept of how a circuit works.

Advanced Preparation by the Teacher:

- One flashlight bulb for each group
- One battery for each group
- One 15-25 cm wire/foil for each group
- One bag to put materials in for each group

Procedure:

Introduction/Motivation:

Engage Stage:

- Give each group of student a bag of materials. (Bodily-Kinesthetic Intelligence)
- Tell students a story about hikers losing their flashlight in a dark cave and ask, “Can you help them light the bulb so they can get out of the cave”.

Step-by-Step Plan:

Explore Stage:

- Allow students to find a way to light the bulb. (Inter-personal Intelligence)
- As students light the bulbs, ask, “Can you find another way to light the bulb?” (Application Question). Give students a second wire and ask, “Can you make the bulb light using two wires?” (Application Question)
- Ask students to draw pictures of what they did to light the bulb on their bag. (Visual-Spatial Intelligence)

Explain Stage:

- Have students explain their drawings to one another. Ask, “What two places must you touch a bulb for it to light? Where must the battery be touched?” (Comprehension Questions)

Elaboration Stage:

- Talk about Benjamin Franklin and how he influenced the electricity phenomena in the 1700s. (Linguistic Intelligence)

Closure

Evaluation Stage:

- Ask students to draw a picture showing you how electricity gets from the electrical plant to their bedroom.

Adaptations: I will carefully guide these students during the exploration stage so they are successful by giving them helpful hints about things to try with the light bulbs and the wires.

Enrichment: As an enrichment activity I will ask students to do further explorations with their bulbs, like the examples in the explore stage above or ask them “Can you use more than one bulb and wire to make a light bulb light?”

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Inventor Interview (Storytelling) Length: 2 Weeks

Grade Intended: Fifth Source: Me & <http://www.beaconlearningcenter.com/Lessons/2872.htm>

Academic Standard:

- English 5.4.5, 5.5.6, 5.5.3, 5.7.4, & 5.7.5
- Theatre 5.8.2 – Create and present an age-appropriate character in a real-life situation.

Performance Object: Given an invention topic, the students will create a project representing the invention with 100% accuracy.

Assessment: I will formatively assess the students as they complete their research each day. I will use a rubric to assess their final project that they present to the class on the eighth day of this lesson

Advanced Preparation by the Teacher:

- Provide invention topics for each student.
- Find guests that would be willing to be interviewed.
- Find possible materials that the students may use for their projects.
- Provide forms for students to answer questions for their interview and research on.
- Provide “light bulbs” for students to put pertinent information on about their invention.
- Provide research materials for students.
- Provide computers for student research.
- Talk to librarian about research.
- Provide a section of the classroom for the Invention Gallery.
- Write a letter to parents about this project.

Procedure:

Introduction/Motivation:

- There are so many inventions and inventors. So, I was trying to figure out how we could learn about all of them. Then it dawned on me. If each member of our class became an expert on one inventor, and they shared with us their knowledge, we could learn about several inventors.

Step-by-Step Plan:

Day One:

- Go over the daily schedule by talking about the interview, research, and project.
- Pick an invention topic.
- Find a person to interview about the impact the invention made on their lives, the teacher will provide people if students cannot find someone at home to interview.
- Interview questions will be created by the class, but could include:
 - How has this invention changed your life? ([Synthesis Question](#))
 - What are you able to do now as a result of this invention that you would not have been able to do before? ([Application Question](#))
 - What had to happen to make this invention possible? ([Synthesis Question](#))

Day Two:

- In class, tell teacher who you will interview, and talk about and start research.
- At Home, interview person

Day Three:

- Continue research, project reminder

Day Four:

- Continue research, get project okayed by teacher. Projects may include (but are not limited to): an oral report from inventor, a written report from the inventor, a rap song sung by the inventor, a commercial starring the inventor, a newspaper ad written by the inventor, a replica of the inventor and invention, a jingle written by the inventor, a

reenactment of the interview with the inventor, a visit from the inventor, an art project create by the inventor, or others approved by the teacher. (All Intelligences)

Day Five and Six:

- Work on project

Day Seven:

- Work on presentation, fill out light bulb form with information about their topic (the light bulbs will be placed with their project and will include title, invention topic, inventor, date invented, and a short summary of the impact of the invention), find out presentation day

Day Eight:

- All materials will be turned in, presentations begin

Day Nine and Ten:

- Presentations continue

Closure:

- The class will create an Invention Gallery for students, teachers, and parents to examine the projects created.

Adaptations: I will provide interviewees for students who are not able to interview someone at home. I will also scaffold students by helping them think about interview and research questions to answer about their invention. I will also give students an adapted project timeline if necessary.

Enrichment: Students can go as in depth as they would like to go on this project. I will push these students to find out as much information as they can about their topic.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Mr. Bell's Persuasive Letter (Writing) Length: Two 35 Minute Periods
Grade Intended: Fifth Source: Me

Academic Standard:

- English 5.5.4 – Write persuasive letter or compositions that state a clear position in support of a proposal, support a position with relevant evidence and effective emotional appeals, follow a simple organizational pattern, with the most appealing statements first and the least powerful ones last, and address reader concerns.

Performance Object: Given a topic, the students will create a persuasive letter with 100% accuracy.

Assessment: The students will create a persuasive letter, from the point of view of Alexander Graham Bell, trying to persuade his family and friends to purchase a telephone for use in their homes. I will assess the final copy of their persuasive letter to see if it meets the requirements of a persuasive letter that we talked about in our class discussion.

Advanced Preparation by the Teacher:

- Locate the book *Bell and the Science of the Telephone*.
- Find examples of persuasive letters to share with the students.
- Create a list of pros and cons to talk about with the students.
- Provide each student with final copy paper for their letters.

Procedure:

Introduction/Motivation:

- Read *Bell and the Science of the Telephone* written by Brian Williams. (Verbal-Linguistic Intelligence)
- Have a class discussion about the book, asking, “What invention did Alexander Bell create?” (Knowledge Question), “What types of communication did people have before his invention was created?” (Knowledge Question), “How did his invention impact society at that time?” (Evaluation Question), and “How would his invention impact society in the future?” (Evaluation Question) (Interpersonal Intelligence)

Step-by-Step Plan:

- Talk about the change in communication that Alexander Bell was making by creating the telephone instead of writing letters.
- Talk about what the part of a persuasive letter, by sharing examples on the overhead. (Visual-Spatial Intelligence)
- Create a list with the students of the pros and cons of the telephone compared to writing letters. (Visual-Spatial Intelligence)
- Have students create a rough draft of a persuasive letter, written by Alexander Bell, to persuade friends and family to purchase and use the telephone in their homes. (Intrapersonal Intelligence) (Verbal-Linguistic Intelligence)
- Have students peer edit their letters and create a final copy of their letters.

Closure:

- Have the students share their letters with the class.

Adaptations: I will provide a list of pros and cons for the students to include in their persuasive letter. I will also provide each of these students with a basic outline of a persuasive letter.

Enrichment: These students can have the option of writing a letter in opposition of Alexander Bell's new invention. Have a discussion with these students about resistance in the marketplace when new things are introduced.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Literature Circle (Reading) Length: Two Weeks
Grade Intended: Fifth Source: Me

Academic Standard:

- English 5.3.2 – Recognize main ideas presented in text, identifying and assessing evidence that supports those ideas.

Performance Object: Given a trade book, students will share through a project how an invention has impacted society with 100% accuracy.

Assessment: Students will develop projects about how the invention they read about impacted society.

Advanced Preparation by the Teacher:

- Put together a book talk about each book.
- Put students into book groups.
- Assign student roles in each literature circle.
- Provide project ideas for students.
- Provide supplies for student projects.
- Locate enough books for each student.

Procedure:

Introduction/Motivation:

- Give “Book Talks” about each book, and ask students to choose the book group they would like to be in. (Verbal-Linguistic Intelligence)

Step-by-Step Plan:

- Have children participate in literature circles by reading one of the following books over the course of two weeks (Interpersonal Intelligence):
 - *In Their Own Words: Thomas Edison* by George Sullivan
 - *The Wright Brothers: How They Invented the Airplane* by Russell Freedman
 - *In Their Own Words: Benjamin Franklin* by George Sullivan
 - *Mr. Bell Invents the Telephone* by Katherine Shippen
 - *Before I Made History: Let’s Drive, Henry Ford* by Connie and Peter Ropp
- Assign students roles in the literature circles for each session.

Closure:

- Have the groups create a project about their book (All Intelligences) by answering the question, “How did this invention impact society?” (Evaluation Question)
- Have each group present the project to the class. (Verbal-Linguistic Intelligence)

Adaptations: Students will be given a copy of the book on tape if necessary. Students will also be placed into groups that they will succeed in.

Enrichment: Students will be given the chance to read accelerated books of their choice.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Budgeting with Mr. Ford (Math) Length: 45 Minutes
Grade Intended: Fifth Source: Me

Academic Standard:

- Math 5.7.8 – Decide whether a solution is reasonable in the context of the original situation.

Performance Object: Given a price list, the students will create a budget proposal with 100% accuracy.

Assessment: I will collect their budget proposals to see if they understood why mass-production is better than producing cars one-by-one.

Advanced Preparation by the Teacher:

- Get the book *Henry Ford and the Model T*.
- Create a worksheet with prices about how much a car would cost.
- Each student will need a calculator, paper, and a pencil.

Procedure:

Introduction/Motivation:

- Read *Henry Ford and the Model T* by Michael O’Hearn. (Verbal-Linguistic Intelligence)
- Have a class discussion with the students, asking, “What did Henry Ford do for America?” (Knowledge Question)

Step-by-Step Plan:

- Talk to students about Henry Ford and mass production. (Interpersonal Intelligence) Ask students, “How was mass production more efficient than building one car at a time?” (Application Question)
- Give students (Intrapersonal Intelligence) a worksheet with the prices making creating a car would include. (Visual-Spatial Intelligence)
- Ask students, “How much it would cost to mass produce a car compared to how much it would cost to build one car at a time?” (Knowledge Question) and “Explain which method of car building would be more cost effective.” (Application Question) (Logical-Mathematical Intelligence)
- Have students create a persuasive proposal paragraph telling which option would be more cost effective and why. (Verbal-Linguistic Intelligence)

Closure:

- Have the students share their paragraphs in small groups. (Interpersonal Intelligence)

Adaptations: I will strategically place the students into groups where they will be successful. I will provide them with a calculator and a pricing sheet. If necessary, I will put more explanations on their pricing sheet, so they understand how to figure out their budget.

Enrichment: I will have these students create a list of other inventions that helped consumers because they were more cost effective.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Invention Awards (Drama) Length: Four 30 Minute Periods
Grade Intended: Fifth Source: Me

Academic Standard:

English 5.7.4 – Select a focus, organizational structure, and point of view for an oral presentation.

Performance Object: Given an invention, the students will orally explain its importance to society with 100% accuracy.

Assessment: For the awards show, the students will write acceptance speeches as the inventor. I will summative assess their speeches and listen for the importance this invention played in society.

Advanced Preparation by the Teacher:

- Get video cameras for each group.
- Put students into groups.
- Get a television.
- Get costumes and props for the students to use.

Procedure:

Introduction/Motivation:

- We have been learning so much about inventions. I thought we would try to name the top five/ten inventions of all time.

Step-by-Step Plan:

- Put students into groups (**Interpersonal Intelligence**)
- Give instructions
- Have students create a list of top inventions
- Answer the questions, “What does this invention do for the world?” (**Knowledge Question**) and “How has this invention improved life?” (**Evaluation Question**)
- Have students choose 2 character roles for the Awards show.
- Write a script for the show. (**Linguistic Intelligence**)
- Practice the show. (**Bodily-Kinesthetic**)
- Tape the show.

Closure:

- Watch each video with the class (**Visual-Spatial Intelligence**).

Adaptation: I will strategically place these students into groups. I will allow these students to choose inventions they are familiar with to write acceptance speeches for the awards show.

Enrichment: I will challenge these students to look for the most unique inventions possible to give awards to at the awards show.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Invention Jingles (Music) Length: 65 Minutes
Grade Intended: Fifth Source: Me

Academic Standard:

- Music 5.5.3 – Perform or sing an original composition.

Performance Object: Given a product, the students will create an appealing jingle with 100% accuracy.

Assessment: I will develop a rubric that shows the students what the components of a successful jingle include. I will then listen to their performance to see if they have include all of the components within their jingle.

Advanced Preparation by the Teacher:

- Put a variety of commercials on one tape for students to watch.
- The class should have already done the “Small Bag Inventions” lesson prior to this lesson.
- Provide musical materials students will need to write their jingles (i.e. instruments, paper, pencils, props, etc.).
- Create a rubric for a successful jingle.

Procedure:

Introduction/Motivation:

- Have students watch a variety of commercials on a video tape. (Visual-Spatial Intelligence). Have the students write down three interesting features about the commercials and share them with the class. (Verbal-Linguistic Intelligence)
- Ask the students, “Explain what made this commercial appealing to consumers.” (Analysis Question) and “How was this commercial a successful marketing tool for the company?” (Analysis Question).

Step-by-Step Plan:

- Talk about the success of jingles with the class and the variety of types of jingles. (Interpersonal Intelligence) Make a list on the board of reasons why jingles have been successful marketing tools (Visual-Spatial Intelligence)
- Put students into pairs. (Interpersonal Intelligence) Tell the pairs to choose one of their small bag inventions to write a jingle to market their small baggie invention. (Musical Intelligence) (Verbal-Linguistic Intelligence).
- Share with students the rubric of what a successful jingle will look like.
- Have students work on their jingles.

Closure:

- Allow students to perform their jingle for the class. (Musical Intelligence).
- Ask students to vote on the product they would purchase because the jingle was so appealing.

Adaptation: I will provide these students with tapes of background music to popular songs (i.e. Christmas songs, kid songs, television theme songs, etc.) to put the words to their jingle with.

Enrichment: I will challenge these students to create a commercial to market their product, and ask them to include the jingle within their commercial.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Airplanes (Art) Length: 80 Minutes
Grade Intended: Fifth Source: Me

Academic Standard:

- Art 5.5.1 – Identify problems or puzzles in a work of art or aesthetic issue, construct a hypothesis, and evaluate alternate hypotheses.

Performance Object: Given supplies, the students will create an airplane that will fly an 8-foot distance with 100% accuracy.

Assessment: I will formatively assess what the students know about flight during our class discussion. I will allow the students to create a rubric to assess their performance on their group's airplane creation. I will continue to watch the students use the materials they are given during their creation of the airplane. Then I will summatively assess what the students have learned when I read their reflections they write at the end. I will look for two ideas in each paragraph they write.

Advanced Preparation by the Teacher:

- Locate the book.
- Prepare the rubric for each group.
- Provide each group with a plastic bag of materials including 5 pieces of printing paper, five straws, a sheet of saran rap, 5 paper clips, scotch tape, and scissors.
- Find a place in the school to fly the student's airplanes.
- Tape will be needed to mark the flight distance of each plane.
- Each student will need a piece of paper and a pencil.

Procedure:

Introduction/Motivation:

- Read *The Wright Brothers Take Off* by Jon Buller. (Verbal-Linguistic Intelligence)
- During a class discussion, ask, "What do airplanes need to be successful in flight?" (Synthesis Question) (i.e. wings, thrust, fuel, engine (propulsion), navigation, etc.). I will put these ideas on the board.

Step-by-Step Plan:

- Split students up into small groups of two to three students. (Interpersonal Intelligence)
- Tell students that each group will create an airplane.
- Have the class help you create a rubric the airplanes will be graded off of on the board. Then transfer the rubric onto the computer so each group will be able to have a copy of the rubric. The rubric should probably include explanation of design, distance of flight, use of materials, group dynamics, and written reflection. (Visual-Spatial Intelligence)
- Tell the students their airplane should fly at least 8 feet from the starting point in the classroom. Inform the students that they will be able to have at least three tries to get their airplane to fly.
- Give each group a plastic bag with 5 pieces of printing paper, five straws, a sheet of Saran Rap, 5 paper clips, scotch tape, and scissors. Coloring materials will also be available for the groups to use. (Kinesthetic Intelligence)
- Allow the students to create their airplanes.
- Have each group explain the reason for their particular airplane design. (Verbal-Linguistic Intelligence)
- Have students fly their airplane, marking on the floor how far their airplane flew.
- Give an award to the airplane that flies the furthest distance.

Closure:

- Have the students write a two-paragraph reflection to answer the questions, "What made my airplane design really successful?" (Evaluation Question) and "What would have made my airplane design better?" (Evaluation Question). (Intra-personal Intelligence)

Adaptation: These students can create a bulleted list in their reflection instead of two paragraphs.

Enrichment: These students will be able to recreate another airplane with the modifications they suggested for their plane to see if their planes would be more successful.

Self-Reflection:

MANCHESTER COLLEGE

LESSON PLAN by: Lauren Bailey

Lesson Title: Case Module (Social Studies) Length: 15 Minutes/explanation, free time/1 week

Grade Intended: Fifth Source: Me

Academic Standard:

- Social Studies 5.5.6 – Read accounts of how scientific and technological innovations have affected the way people lived in the early United States and make predictions about how future scientific and technological developments may change cultural life.

Performance Object: Given a computer module about inventors, the students will answer 80% of the module worksheet questions correctly.

Assessment: I will use this activity to pre-assess what the students know about inventors and their inventions. The module will help increase their current knowledge about inventors and their inventions. I will collect the worksheets they complete about the module to see what I need to focus my mini-lessons on in the future.

Advanced Preparation by the Teacher:

- Each student will need to have a piece of paper and a pencil.
- The teacher will need to have a computer with a projector so the students can see the first case module.
- A classroom computer will be needed.
- A class list and the website will need to be placed near the classroom computer

Procedure:

Introduction/Motivation:

- Tell students that there are several different ways they can find out new information. Explain that the Internet is one way they can find new information.

Step-by-Step Plan:

- Take the students to the computer lab (or a place where the students can see the computer screen on a large projection screen). (**Interpersonal Intelligence**)
- Show the students the website with the case module. (Website Address: <http://www.beaconlearningcenter.com/weblessons/maxmavis1/default.htm>) (**Visual-Spatial Intelligence**).
- Work through the website as a large group, having the students answer the questions throughout the case module. Explain that when they do the second case module on their own, they will be writing their answers on a worksheet.
- Explain to students that they will have one week to complete the second case module during their free time.
- Remind the students that they need to complete the worksheet and turn the paper into the correct folder.
- Also tell the students they need to check their name off of the class list when they complete the activity.
- Put the class list and the website (<http://www.beaconlearningcenter.com/weblessons/maxmavis2/default.htm>) near the classroom computer.
- Remind the students throughout the week during free time to complete the case module on the classroom computer. (**Intra-personal Intelligence**) (Questions include **Knowledge Questions**, **Application Questions**, & **Evaluation Questions**)

Closure:

- Have the students turn in their answers sheet to the correct folder when they are done with their work.

- Have a class discussion at the end of the week to see what the students learned about the different inventors on the case module. (Verbal-Linguistic Intelligence) Answer any remaining questions.

Adaptation: Instead of writing down their answers throughout the case module, these students can write down five things they have learned throughout the case module and five things they would like to learn in the unit about inventors in a bulleted list.

Enrichment: These students can choose one of the inventors the computer module talks about to do an Internet search for more information about the inventor. Then they can create a project of their choice about that inventor.

Self-Reflection:

Technology Plan

I will use technology at several points throughout this unit. At the beginning of the unit I will have the students complete an online case module (web quest) to help them learn about various inventors. Then I will have the students use the Internet to complete research their invention project they will present to the students. I could also have the students type their friendly letters or their persuasive paragraphs on the computer. In each assignment I will model how the students should use this technology since many of the students may not know how to use to computer. I will also use the television when I show the students examples of different commercials during our jingle research. We will also be talking about technological inventions that have had a huge impact on our society throughout the unit.

Literature Plan

1. *In Their Own Words: Thomas Edison* by George Sullivan
2. *The Wright Brothers: How They Invented the Airplane* by Russell Freedman
3. *In Their Own Words: Benjamin Franklin* by George Sullivan
4. *Mr. Bell Invents the Telephone* by Katherine Shippen
5. *Before I Made History: Let's Drive, Henry Ford* by Connie and Peter Ropp
6. *Mistakes that Worked* by Charlotte Foltz Jones
7. *Bell and the Science of the Telephone* written by Brian Williams
8. *Henry Ford and the Model T* by Michael O'Hearn
9. *The Wright Brothers Take Off* by Jon Buller
10. *Brainstorm! The Stories of Twenty American Inventors* by Tom Tucker
11. *Great Inventions* by Richard Wood
12. *So You Want to Be an Inventor?* By David Small

Field Trip Plan

I planned this unit around a field trip my fifth grade placement is already going on during my student teaching time. The entire fifth grade class will be going to Greenfield Village and the Henry Ford Museum in Dearborn, Michigan for two days. The students will take a charter bus up to Michigan with the teachers, chaperones, and the principal. The first day the students will visit Greenfield Village where they will be able to see exhibits like Henry Ford's Model T, Edison at Work, and Working Farms. They will spend the night in a local hotel. The next morning we will visit the Henry Ford Museum. Here they will be able to see exhibits like Heroes of the Sky, Genius at Work, and Automobile in American Life. This culminating experience will be a wonderful opportunity for the students to see first hand the impact inventors have had on America. The museums in Dearborn will be able to show the students evidence from the past that I would not be able to show them in the classroom. I am looking forward to seeing how the students respond to this experience.

December 1, 2006

Dear Parents,

We are starting our Inventors Unit today. This unit will be a wonderful opportunity for the students to see what an impact history makes on the world. In the classroom we will be taking a look at individuals like the Wright brothers, Thomas Edison, Benjamin Franklin, Henry Ford, and Alexander Graham Bell. Please try to ask your child about what he/she has learned about each of these people.

We will also need your support during this unit. The students will have an interview project they will be working on for a few weeks. During the interview project they will be asking you questions about various inventions. With your interview, and the research we will do in class, the students will be completing a project about that invention. The projects will be on display during our conference week. Be sure to stop by our hallway and see the display.

As the final event for our unit we will be taking a field trip to Greenfield Village and the Henry Ford Museum in Dearborn, Michigan. This will be an exciting experience for the students to see artifacts from the inventors we will be studying. Please look for more information about this two-day field trip in the near future.

We are looking forward to this learning experience. If you have any questions, please feel free to contact me at school.

Thank you,

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