Cooking Spaghetti Task Analysis and Lesson Plan

Cooking Spaghetti

1. Prior to cooking spaghetti it is important to make sure you have all the necessary ingredients. We must have all the following ingredients and equipment on-hands:

**Equipment needed:**
- Large Pot
- Medium Saucepan
- Colander
- Measuring Cup
- Measuring Spoons
- Cutting Board
- Knife
- Wooden Spoon

**Ingredients Needed:**
- 1 lbs fresh ground turkey or ground beef
- 1 28 oz can of Tomato Puree
- 1 6 oz can Tomato Paste
- 1 14 oz can Petite Dice Tomatoes (with garlic & olive oil)
- 4 cups chopped seasoning (1 chopped onion, 4 celery stalks, 1 bell pepper, 4 chopped garlic cloves)
- 4 Tablespoon olive oil
- ¼ cup Sugar (we use organic cane sugar)
- 3 Tablespoon Italian Seasoning (oregano, basil, & thyme)
- 3 Bay Leaves
- 1 cup Water Sea Salt (to taste)
- 16oz Organic Spaghetti
- Parmesan cheese
- 1 cup chopped mushrooms (optional)

2. We can begin with a task analysis. Students can watch the teacher cook the way it is supposed to be done and write down each step as he or she does it. In addition, we can find already written directions for cooking spaghetti on the teacher’s webpage. We can test them out, and modify them if necessary.

3. Pour roughly 1 quart (4 cups) of water per serving (85 g) of pasta into your large pot.
4. Add 2 tablespoons of Italian Seasoning to the water.
5. Add 4 tablespoons of Olive oil to the water cover and set on medium temperature to boil.
6. While the water is boiling chop your vegetable. Place your cutting board on a flat surface.
7. If there is a chopper available, students my substitute a chopper for the knife and cutting board.
8. Chop the onion, celery stalks, bell peppers, and garlic into small pieces. (mushrooms optional)
9. When the water is boiling, add the pasta as quickly as possible and sprinkle in 2 teaspoon of salt.
10. With a wooden spoon, stir immediately to separate the pasta pieces.
11. Push the spaghetti against the bottom of the pot until you feel it lose its rigidity. Keep pushing until it's all below the surface of the water.
12. Leaving the lid off the pot, reduce the heat (medium to medium-high) and cook the pasta 6-9 minutes. The pasta will cook more quickly and evenly with the heat lowered and the lid off. **Failure to remove the lid will lead to the pot boiling over or the pasta overcooking.**

*Take this time to begin preparing your spaghetti sauce and the serving bowl you will be using. You should be able to prepare this meal in 30 minutes.*
13. Cooking times vary, depending on the quality, freshness and shape of the pasta. Please refer to the cooking time legend below.

- Fresh pasta cooks in roughly 3-5 minutes.
- Thin dry pasta (shells, rotini, spaghettini) cooks in roughly 6-9 minutes.
- Thicker dry pasta (penne, ziti, linguine) cooks in roughly 12-15 minutes.

14. When the test piece is to your personal preference (firm, not hard, or falling apart), drain the entire pot into a colander in the sink. If you swirl the warm water around the colander before the pasta hits it, it will heat it so the pasta does not cool or stick. **Do not drain completely. This will cause the pasta to dry out, and any excess pasta water will add flavor and texture to your pasta sauce.**

15. Return the pasta to the warm pot (placed on a cool element to avoid burning) but don't keep it there for long as it will start to stick together and cool.

16. Continue preparing the spaghetti sauce.

**Spaghetti Sauce**

1. Preheat the saucepan on medium heat for one minute
2. Pour 1.5lbs of your selected meat of choice into a medium or large saucepan.
3. Add 4 cups of chopped seasoning (chopped onion, celery, bell pepper, garlic & parsley) to the saucepan.
4. Use the wooden spoon to continuously stir the meat. It should be stirred from the bottom of the pan.
5. Once all the meat is browned (no pink is visible), add tomato puree, tomato paste, diced tomatoes, and ¼ cup of sugar.
6. Add 3-4 teaspoons of sea salt. Remember less is best because not everyone has the same sodium tolerance.
7. Add the undrained water from the pasta into the sauce. Stir in all the added ingredients and lower the heat to low-medium. Allow the newly added ingredients to simmer for 15-20 minutes stirring the sauce every five minutes.
8. Your sauce is now ready to serve.

**Preparing the dish**

1. To a warmed plate add a small amount of your spaghetti noodles.
2. Top the noodles with the prepared sauce.
3. Add parmesan cheese to the top of your prepared dish as desired.
4. Using a fork, you may now eat your spaghetti.
Analyze Learners

Class: Family & Consumer Science 9-12

The classroom consists of 27 students, 8 male and 19 female. The students range in age from fifteen to sixteen years old. Two students are known to be in the gifted/honors program. There are eight students that are known to have learning disabilities, three of the students are reading disabled and five have Attention Deficit disorder. From other lessons, it has been observed that most students have a positive attitude regarding this class. The majority of the students have prior knowledge about cooking. The lesson also includes the safety guidelines for the kitchen. A small number of the students have already learned about the basic kitchen safety in a previous Nutrition and Wellness class.

The learning styles that are presented in this lesson will reach all learning styles. The classroom is primarily divided into three major categories, visual, auditory, and kinesthetic, (40%) of the learners are primarily visual learners, followed by 20% auditory and 40% kinesthetic.

State Objectives

ELA11LSV1. The student participates in student-to-teacher, student-to-student and group verbal interactions.
NFCS14.3.1. Apply various dietary guidelines in planning to meet nutrition and wellness needs.
CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.
NFCS 9.1. Analyze career paths within food science, dietetics, and nutrition industries.

Select Media, Materials, and Methods

- Projector for opening the task analysis online and reviewing various spaghetti recipe sites.
- Class textbook.
- Classroom computers (6 available) for Internet research use.
- Large poster for display of group work

Utilize Media, Materials, and Methods

The projector is to be used for the opening task analysis and cooking presentation that introduces the lesson. The presentation is designed to last approximately twenty minutes, and preps must be prepared beforehand. During the presentation, the concepts for the lesson will be introduced and a brief background on cultural and ethnic differences in the recipe. The presentation is a way to attract students to the culinary arts, and the students will gather more information later in the period. The projector must be analyzed previous to the lesson time to ensure that it is working properly. There is no preview of the material necessary; the teacher will cook a pot as an example.

Students use the class text after being divided into groups. The class analysis serves as a reference for cooking spaghetti. In groups, students must use Galileo and other resources to gather information about the history of spaghetti.

Each group must include five facts about the history and the development of the recipe they used on an index card. This information will come from the Internet. Several websites are chosen prior to the lesson, and the teacher evaluates the quality of content and information. This material must be previewed beforehand, and students are only allowed to gather information from the approved sites. The web addresses may be accessed on the teacher’s webpage. The links will also be written on the board to better facilitate learner preparation.

Each group may use Microsoft Word to alter or create a new recipe using researched information. The teacher must ensure that the recipe contains the pertinent information.
Lastly each group will prepare their recipe and present the facts while creating serving for each group to taste. Presentation will be part of the grade. Each group member must present to a table.

**Require Learner Participation**

The introduction of the lesson is provided by the task analysis and cooking demonstration. The demonstration allows for the teacher to introduce the content in a visual way to accommodate the large number of visual learners. The demonstration also provides a way to ensure that students are paying attention, because the information given is essential to the activity to follow. The final goal for the activity is that students will understand concepts of cooking cross over into other subjects like math and science. Students are then divided into groups of five (and two groups of six) randomly based on last name. All students play an important role in the development of the recipes, cooking, and presentation of the meal. Each student must find information concerning the history of spaghetti.

The groups must engage in conversation to decide the exact measurements to include in the recipe and monitor food safety.

Before the food is prepared, students must research the history of spaghetti and select the recipe to use. As mentioned before, this will require students to use the in-class computers. Students will need to communicate with each other to reach a consensus on what ingredients to include. Every student must find several facts by themselves, and then the group will collaborate to select the facts that are to be presented on the index card. The computer research step should take between fifteen and twenty minutes.

Students should connect with one another to develop a plan for the recipe and presentation of the food. This step should take approximately ten minutes.

The groups then divide up the tasks for the preparation of the ingredients. Every student must contribute to the final product. The presentation should be colorful and attractive, as well as provide detailed information regarding the history of spaghetti. This step should take around ten minutes.

After the student groups complete the recipes, the groups will present their recipes to the class, the class will vote on which recipe is the best looking and contains the most nutrition ingredients. The group that wins will receive five bonus points to their grades for the activity. The winning team will be put on display on a classroom bulletin board. This step should take around ten minutes.

By keeping the structure of the entire class varied, students will not get bored as easily than with a lecture format lesson. The several students with Attention Deficit Disorder may find it easier to learn the information through groups and an activity that requires the active contribution from all students. The lesson accommodates the large number of kinesthetic and visual learners, because the end product of the lesson is a cooked dish.

**Evaluate & Revise**

**Student Performance**

A rubric will be designed to grade the group concept maps. Because the lesson is designed around group completion, the complete grade for the lesson will be a combination of the group work and the completion of the student worksheet. The worksheet will be graded on a 100 point scale and will count as 25% of the total lesson grade. The group completion of the recipe will account for the rest of the total grade. The rubric will be designed around three central components. The rubric will be designed on a 100 point scale as follows:
<table>
<thead>
<tr>
<th>Criteria</th>
<th>weight</th>
<th>Exemplary</th>
<th>Accomplished</th>
<th>Developing</th>
<th>Beginning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipe</td>
<td>40%</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cooking area clean Organized recipe Food is well prepared in a safe manner</td>
<td>Mostly clean Mostly organized Food under or over cooked but in safe manner</td>
<td>Partially clean Partially organized Unsafe cooking</td>
<td>Cooking area not clean Recipe Not detailed Unorganized Unsafe cooking techniques</td>
</tr>
<tr>
<td>Verbal Skills</td>
<td>20%</td>
<td>Speaks clearly Projects voice Pronounces all words correctly No vocalized pauses (uh, um, well)</td>
<td>Speaks clearly most of the time Projects voice most of the time Pronounces words correctly most of the time 1-5 vocalized pauses</td>
<td>Speaks somewhat clearly Projects voice somewhat Pronounces some words incorrectly 6-9 vocalized pauses</td>
<td>Speaks unclearly Weak voice projection Incorrect pronunciation 10 or more vocalized pauses (uh, um, well)</td>
</tr>
<tr>
<td>Non-Verbal Skills</td>
<td>20%</td>
<td>Utilized eye contact well Appropriate facial expressions (smiles, appears interested) Exhibits good posture</td>
<td>Some eye contact Some appropriate facial expressions Exhibits good posture most of the time</td>
<td>Rarely uses eye contact Very few facial expressions Poor posture most of the time</td>
<td>Does not look at audience Expressionless Sits, slumps, sways</td>
</tr>
<tr>
<td>Mechanics/Visual Aids</td>
<td>20%</td>
<td>Correct grammar; usage Correct spelling Graphics and pictures are attractive and support theme</td>
<td>Correct grammar most of the time 1-2 spelling errors A few graphics are unattractive</td>
<td>Sometimes uses poor grammar 3-5 spelling errors Graphics and pictures are unattractive</td>
<td>Uses poor grammar 6 or more spelling errors Graphics and pictures detract from presentation</td>
</tr>
</tbody>
</table>

Media Effectiveness
To evaluate the effectiveness of the media used in this project, the instructor must try to decide first if the demonstration helps the student understanding of the lesson. Communication with the student groups during group work can be a gauge if the demonstration was effective. The other type of media used in this lesson is the computer for research. To determine if this media is effective for student learning, the teacher can evaluate understanding of the history of spaghetti.

3. Instructor Performance
The instructor performance is evaluated based on the overall understanding of the safety precautions and completion of recipes.