

Project 1: Apple Unit

Directions: Use this template as a guide for this lesson. While we are looking to see your ideas for all three of the UbD stages, we want you to focus on Stage 1—identifying the desired results. Stage 2 and Stage 3 only need to be your rough ideas; you do not need to fully develop an assessment or the activities, only roughly sketch them. Again, use this template and the guiding questions we provide in the template to inform your work.

Stage 1—Identify Desired Results	
Big Idea: Identity the big idea—this should just be a few words.	
Why should we believe the myth “an apple a day keeps the doctor away?”	
6 Facets of Understanding: What could a possible understanding be through the lens of each of the six facets? You don’t have to use them all, but consider what an understanding could look like through multiple perspectives. This is a way to carefully think through the why/enduring understanding(s).	
Explanation <ol style="list-style-type: none"> 1. What do we want the students to understand? 2. What is an apple good for? 3. How can we prove that apples are good for one's health? 4. How are apples connected to health? 5. How should we eat apples? 6. Is there an info-graphic or diagram to explain the benefits of an apple? 7. What would happen if someone does not eat an apple? 8. What are the different parts of an apple? 9. What are examples of different kinds of apples? 10. Who can benefit from an apple? 11. When is a good time to eat an apple? 	Perspective <ol style="list-style-type: none"> 1. How do different cultures view apples? 2. What nutrients don't you get from apples? 3. Is it reasonable to believe organic apples are healthier than non-organic apples? 4. Can pesticides impact the quality of apples? 5. How do less privileged countries view an apple's nutritional value? 6. What is acceptable evidence of an apple's nutritional value? 7. Is the answer to the previous question enough evidence?
Interpretation <ol style="list-style-type: none"> 1. Why does it matter? 	Empathy <ol style="list-style-type: none"> 1. No one explained to me the benefits

<ol style="list-style-type: none"> 2. How do apples relate to us? 3. How is an apple not like an orange? 4. How is an apple like the human body? 	<p>of apples when I was growing up because we did not have an abundance of them. What would it be like if I grew up here?</p> <ol style="list-style-type: none"> 2. How do students feel about apple? 3. How can we reach an understanding pertaining to the benefits of apples? 4. If you don't have the luxury of going to a store that sells apples (like in the Philippines) how can you buy apples? Is it a luxury item for them? 5. How can someone grow apples without pesticides or fertilizers (for people living in countries who are privileged enough to have pesticides or fertilizers) 6. Can we grow apples in a tropical area?
<p>Application</p> <ol style="list-style-type: none"> 1. How and when can we use this knowledge? 2. What different health goals are people trying to achieve here? 3. How is the nutrition of apples applied to the larger world? Can apples solve the world's food crisis? 4. How can we use apples to overcome daily nutrition deficiencies? 	<p>Self-Knowledge</p> <ol style="list-style-type: none"> 1. Would I not buy an apple just because it is ugly or bruised? Am I prejudiced or biased toward beautiful apples? 2. Does where an apple grows impact its nutritional value? 3. Does it mean smaller (apples) are better? 4. What's the relationship among different varieties of apples? For example, does the nutritional content of apples vary between fuji and gala? 5. Is genetic modification good or bad for apples? 6. Is it a myth that organic apples are healthier than non-organic apples? 7. What is the acceptance criteria for deciding what is healthy and unhealthy when it comes to an apples nutritional value? 8. How should I consume an apple? For example, can it be consumed whole, juiced, or made into desserts? 9. How can I educate myself about apples?

	<p>10. How can I best show my interest in apples? By baking apple goodies, writing about them, etc?</p>
<p>Why/Enduring Understanding(s): Frame your big ideas as understanding statements. What do you specifically want students to understand? What meaning do you want them to construct? What ways of thinking do you want to promote? What gaps in understanding or misunderstandings might you need to address?</p>	
<ol style="list-style-type: none"> 1. What are the health benefits of apples? 2. Is it absolutely necessary to always use organic apples? 3. When apples are used in a recipe, do we have to worry about its quality (like organic or non-organic)? Student activity: Making apple sauce. 4. How do other countries view apples? Student Activity: Circle the places on a map where you can grow apples. Cover temperature, weather and geography. 5. What is the proof of an apple's nutritional benefit? Should we follow FDA guidelines? Should we believe them? 6. Why should I eat an apple? How should I eat an apple? What fruit alternatives to apples are available? 	

Stage 2—Determine Acceptable Evidence

What can students do or show to provide evidence that they really understand what you have identified in Stage 1? List your rough ideas in this box.

1. Show how apples can play part in nutrition – how does it work? Students can use models or draw pictures.
2. How can apples help our body?

Stage 3—Plan Learning Experiences

What does the journey look like from start to finish as students develop these understandings you identified in Stage 1? Provide a bulleted/numbered list of your rough ideas in this box.

1. Make simple recipes such as apple sauce.
2. Dissect or cut an apple in half.
3. Taste an ugly apple.
4. Blind testing – organic and non-organic apple.
5. Take a field trip to a science or food lab.
6. Research multiple varieties of apples.
7. Experiment on nutrition? How do apples play a part in nutrition? Do a fun exercise or watch fun videos.

Block 1 Notes

Group 11

Cameron Olshansky - Recorder

Dolphia Nandi - Chief Equity Officer and Checker of Understanding

R Forston - Leader

Stage 1: Identify Desired Results

Ideas for “big picture” -

Why should we believe the myth “an apple a day keeps the doctor away?” - D

Other Ideas

- Agriculture - US History perspective, option to fill out more points/answer more questions/
- Nutrition - How apples benefit your body, etc., “What are the health benefits of apples?” - R

Enduring Understandings:

- The health benefits of apples and how it affects human body and nutrition
- Gaps: What myths exist? GMOs are bad. Is this a moral issue? Do I use an organic apple in a recipe or does it matter?
- Differences of opinions about nutritional values of an apple

Stage 2 - For time's sake, we are focusing on stage 1

Stage 3 - For time's sake, we are focusing on stage 1

6 Facets:

Explanation:

1. What do we want these students to understand? Nutrition
 - a. Nutrition is year round
 - b. What is the apple good for? “Apple a day keeps the doctor away”
 - c. Percentages of vitamins that an apple contributes to the 2000 calories per day
- i. diagram or infographic - how it affects skin or hair
- ii. Alternatively, if you lack x amount of fiber for example, x negatively impacts your health

Interpretation:

1. Why does it matter?
 - a. How is an apple like an orange? How is an apple like the human body? - Activities: dissect an apple, how is it formed, whatever nutrients, the stems and how they represent the veins of the human body

Application:

1. How and when can we use this? Sounds very basic but people struggle with it their whole lives. Lifelong journey!

2. Different health goals: just to be healthy, to lose weight, be a more successful athlete and what the different types of nutrition will do for them

Perspective:

1. How do different worlds look at apples? Countries that maybe aren't as privileged?
2. Why is China so obsessed with watermelon, for example
3. What nutrients are you *not* getting from an apple?
4. What is the standard acceptance criteria? Which one should people go by?
 - o A good assignment for this would be to research, experiment, and maybe make the choice for themselves
5. Different regions of the world that focus on different things: Mediterranean diet focuses on different things. The French like bread and cheese, for example. This affects the limits
6. Preparation standpoint: pesticides and how this impacts health
7. Those from other countries may not get the nutrients they need whereas in Western culture, we may have too much of certain things like processed foods and sugar

Empathy:

- D- No one explained the benefits of apples, didn't grow up with the *abundance* of apples
 - o Who is Johnny Appleseed?!
- Use an example like a farmer or Johnny Appleseed as an individual. Why was it so important to him go and plant a bunch of apple trees?
- If you can't go to the store and buy XYZ and you rely on growing your own food (Philippines - harvesting their own rights) - they grow or trade them. Is this a luxury?
- What if different countries don't have pesticides/fertilizers? Can they safely grow apples?
- Hard to grow apples in not tropical areas - they only grow in mountain regions where

Self-Knowledge:

- Ugly apples, malformed apples: do I not buy it because it's ugly? Is it less nutritious because it's bruised or ugly?
- Does where an apple grow affect its nutritional value? Does a smaller apple mean it's better or worse for you?
- Different varieties? What is the relationship behind it?
- GMO - we do this in science. Is this more nutritious? What do you think about that? Do you think it's good or bad?
- Is it a myth to buy organic? What are the health factors of buying non-organic apples?
- What is the proof? Why do I believe that what is said about GMOs are true? Acceptance criteria?

Other things we mentioned:

- Do we tell them to make a pie? Can we use parts of a whole? How much does the apple contribute to the entire nutritional value? Includes math, etc
- What kind of alternatives are there for apples? How does this change the nutritional value?
- Apple juice rather than the whole apple is maybe a common **misconception**? Might not necessarily be good for you. Do other juices have more significant nutritional value than other fruit juices?
- Make apple sauce - easy one day thing

- Are there better kinds of apples that have more significant nutritional value?
- Seasonal - apples grow at different times of year in different countries. Go the route of economics and trade
- Is there a substitution? An orange? Etc
- Should we follow an FDA guideline? What is the standard/evidence for this?
- Activities: circle the places where you can grow an apple! Covers temperature, weather, geography

Things we did well:

- Communicated effectively, allowed everyone to speak. Everyone was very open-minded, allowing us to really put perspective into play.

Things to improve:

- We could have all had a better understanding of project's requirements in general, but I think that was mostly because this was our first big project and we're still getting used to where to find everything we need.