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Lesson Plan Title: Education through Entertainment	State: MN
Lesson Time Frame: 5-6 class periods	Inspired by an Earthwatch Expedition: Maternal and Child Healthcare in India
Student Level: High School	

Human Anatomy and Physiology Chapter 18 in <i>Essentials of Anatomy and Physiology</i> - Martini & Bartholomew	Education through Entertainment A lesson on Nutrition
Time Allotment	3-4 days for preparation in class by student, 1 day for performance, 1 day for assessment= 5-6 class periods
Academic Standard Addressed	Minnesota Academic Standards, Grade 9-12 Life Science Standard-The Human Organism.
Abstract	The best way to learn a concept is by explaining that information to others. It is with this reasoning that this lesson is developed. Students will take the information they are given about nutrition, and produce a skit that conveys that information to an audience of 3-4 th graders. Their presentations will be 7-10 minutes in length, and will contain at least 10 pieces of information about nutrition that they have learned in class. Students will assess the effectiveness of their messaging by doing a pre and post questionnaire with their audience. They will then review those questionnaires to determine how effective their performance was.
Goal	The goal of the lesson is two-fold: to gain a better understanding of the material by the students who will present it through entertainment, and to educate younger students about the importance of good nutrition for growth and development.
Performance Indicators	Students will select 10 different pieces of information from the chapter on nutrition, which may include such things as number of servings per day from the food groups, the importance of different nutrients for development and growth, foods that contain certain nutrients, and avoiding foods that are not healthy. Those different pieces of information will be integrated into a performance of which the group will determine the storyline. Students will also conduct pre and post

	questionnaires to determine effectiveness of messaging.
Background information	Students will need to have already covered the information about nutrition. They will need to have an understanding of the food pyramid, serving sizes, the role of different vitamins and minerals in the functioning of the human body, content of vitamins and minerals of different foods, etc. Students in the Anatomy class will use their books for reference, as well as various internet sources.
Materials	<i>Essentials of Human Anatomy and Physiology</i> textbook (Martini and Bartholomew), computers with internet access, props necessary for the production of the plays (will vary from group to group), video camera to tape performances for self critiques and improvements before performance.
Technology	Internet access for information is required in addition to information from the text. Other optional technology might be a video camera so students can assess their own performance before and afterwards, and also so the instructor can assess at a later time.
Instructional Procedure	<p>Intro: We will spend 3-4 days covering the information on nutrition. Then students will be told that rather than take a test on the information, they will have an opportunity to showcase their knowledge to a younger audience.</p> <p>Activity: Day one- Students will take the information they have learned, select ten pieces of information they believe to be the most important or most interesting, and develop a skit that incorporates that messaging. Students will be broken down into small groups of 3-4 students. They will have a brainstorming session to first decide what information they will include in their skit. Once that is established, they will brainstorm ideas for the storyline of their skit. It could be based on situations that easily lend themselves to the discussion of nutrition, such as a group of friends discussing an upcoming test in the lunchroom. It could also take the form of something that would require a bit more creativity, such as a brother and sister sitting in the backseat of the family car on the way to Grandma's for Thanksgiving dinner. The students will need to keep in mind that their audience is about 9-11 years old, so topics should be age appropriate and appealing to this level.</p> <p>Day 2-3- They will be writing and practicing their</p>

	<p>performances.</p> <p>Day 4- They will videotape the performance so they may watch it and self assess to make improvements and check the length. When they are done making adjustments to the performance, they will create a ten-question survey to be given before and after the performance.</p> <p>Day 5- Students will sit down one-on- one to ask a third or fourth grader the questions from the questionnaire. After 10-15 minutes, performances will begin. When all the performances are complete, the same students will ask the same 3rd or 4th grader the questions from the questionnaires.</p> <p>Closure:</p> <p>The following class period will be spent going through the pre and post questionnaires to determine if there is any significant difference in answers. Their final task is a self-critique about what they felt went well and what they would change or improve if they were to give the performance again.</p>
Assessment	See attached Assessment form
Connection to Other Content Areas	Possible connections could be to an English course or Creative Writing, in which the students would write their scripts or storylines, or to the theater class which would help them develop their acting skills. Could also be applied to a speech class.
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