Integrated Project-based Learning: Combining PTE Standards and Academic Standards

Use this template for planning and sharing ideas for projects. This template is based on the *6 A’s*:

*Authenticity\* Academic Rigor\* Applied Learning\* Active Exploration\* Adult Connections\* Assessment*

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| **Project** |
| **Title of Project** | **What is in your body?** |
| **Project Developed by** | Gary Showers, Patti Tucker |
| **E-mail Address** | showersga@tfsd.org; tuckerpa@tfsd.org |
| **School** | **Twin Falls High School** |
| **Pathway / Small Learning Community/Academy** | **Health Occupations** |
| **Course Title(s)** | **Health Occupations, Biology II, Medical Terminology** |
| **Time Frame** | **4 days minimum** |

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| **Authenticity** |
| *Briefly describe your project. Include the key question and provide an overview of what students do and learn. Tell why the question is meaningful to the students and where one might see a similar question tackled by an adult in the workplace.* |
| **Key Question** | **Why is proper terminology important in the medical profession?**What are the planes of the human body used in anatomy?What are the proper terms for indication position in the human body?What are the five body cavities referenced in anatomy? |
| **Overview** | **Chapter Objectives:****Students will be able to do the following:** Understand the importance of using proper vocabulary when communicating in the scientific community.Learn standard positioning of the body used to describe locations of its anatomy.Describe organs of the body in relation to the plane, region or cavity of location.Understand consequences of incorrect medical communication |

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| **Vocabulary/Key Terms** |
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|  | anterior, posterior, lateral, medial, proximal, distal, coronal, transverse, sagittal, thoracic cavity, abdominal cavity, pelvic cavity, cranial cavity, spinal cavity, supine, prone, quadrant |
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| **Active Exploration \* Applied Learning \* Adult Connections** |
| **Classroom Activities**  | **Community** **Activities** | **Career** **Activities** |
| **Introductory activity: anatomic direction project.****Lesson on anatomical terminology****Students will model anatomical vocabulary using an ELF cookie and a toothpick.****Students will create a life sized silhouette demonstrating the anatomical position. Students must sketch and label organs.** | **Best silhouette will be presented in the hallway for observation.** | **Students will break up into groups, research and present case studies documenting medical communication mistakes.****www.sciencecases.lib.buffalo.edu** |

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| **Academic/PTE Rigor** |
| **Standards** *Use the space below to list the state content standards and PTE industry standards addressed by the project. (A list of the content standards is available at* [*http://www.sde.idaho.gov/ContentStandards/default.asp*](http://www.sde.idaho.gov/ContentStandards/default.asp)*. This page, which includes selected high school level standards, is designed to let you easily create a list of standards you are addressing. You may then copy and paste the list into this template.)* |
| **PTE Standards:** **<http://www.pte.idaho.gov/pdf/Health/Curriculum/OrentationHealthProfessionsSecondaryAndFundamentalsHP133.pdf>** 10.01 Cells, Body Planes, Cavities, and Diseases: 10.011 Introduction: A. Define the terms anatomy and physiology. 10.012 Structure and Function:. C. Describe the relationship between organs, and body systems.. E. List examples of body organs and body systems. F. Identify terms relating to body regions, planes, cavities and directions. G. Label a diagram of the body cavities. **College & Career Ready Skills demonstrate in this project: independence, build strong content knowledge, comprehend as well as critique perspectives and yet question assumptions using sound reasoning, value evidence, and use technology and digital media strategically and capably.****Idaho Core Standards:** [CCSS.ELA-LITERACY.RST.11-12.4](http://www.corestandards.org/ELA-Literacy/RST/11-12/4/)Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 11-12 texts and topics*.[CCSS.ELA-LITERACY.RST.11-12.7](http://www.corestandards.org/ELA-Literacy/RST/11-12/7/)Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.[CCSS.ELA-LITERACY.RST.11-12.10](http://www.corestandards.org/ELA-Literacy/RST/11-12/10/)By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently.

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| **Student Goal(s) Once the project begins, ask students to generate one or two personal goals.** |
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| **Assessment** |
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| 1. Students will be tested on anatomical positioning and key terms using a gingerbread figure
2. Student created silhouettes will be graded for accuracy
3. Students will be assessed on group presentations on medical communication mistakes
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| **Recommended Resources / Sample Products** |
| **Software or Materials Needed***(Examples*) | [**www.sciencecases.lib.buffalo.edu**](http://www.sciencecases.lib.buffalo.edu)**, ELF cookies, toothpicks, napkins, roll paper, markers** |
| **Teacher-Developed Materials** *(Examples of materials that can be shared with other classes. Please attach samples.)* | **Gingerbread men with (and without) injuries,** |
| **Student-Developed Materials** *(Examples of products that can be shared with other classes. Please attach samples.)* | **Silhouette posters** |
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| **Final Words** (In a sentence or two, highlight your project’s overall value.) | **Students will understand the importance of specific anataomical terminology regarding location and position by looking at case studies, they will then learn the proper terminology** |
| **Teacher Tips/Extensions** (Use the first person to share a useful idea that helps with implementation and ensures success. Make it chatty, informal.) | Intro activity - have students sit back to back and have one student attempt to describe injury location on the gingerbread body (before instruction). Have other student attempt to record injury location. |
| **Extensions** *(List any ideas for students who may want to go deeper into the learning standards.)* | Students may look further into case studies and importance of proper terminology. |

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| **Timeline** |
| ***What sequence of teaching and learning experiences will equip students to develop and demonstrate the PTE standards and the Academic standards?***  |
| * Intro gingerbread activity
* lesson on anatomical position and vocab
* ELF cookie lab
* Case Studies
* Case study presentations
* Gingerbread activity - using proper terminology
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(Adapted from the Boston Public Schools Signature Projects.)

Gingerbread man



Gingerbread Man with Injuries

