***Code Orange* PBL Scenario**

You are part of a team from the Centers for Disease Control (CDC) that has been called in to work with the World Health Organization (WHO) to identify and contain a level four contagion spreading through the West Texas area.

Patient Zero was admitted through the emergency room at Covenant Hospital presenting the symptoms of

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(list the symptoms of the level 4 contagion you are choosing to use for this PBL) Now there are 28 casualties, 80 people quarantined in Medical Intensive Care, and approximately 200 people in Covenant ER presenting symptoms as well as another 227 in the Texas Tech University Health Sciences Center ER also presenting symptoms.

Your CDC team as well as the WHO team are to complete the following tasks:

1. Identify the possible level 4 contagion that is running rampant in the community.
2. Identify how Patient Zero contracted the contagion.
3. Identify how the contagion spread through the West Texas area.
4. Decide on the best way to contain and eradicate the contagion.

What you will need to know to complete this PBL:

1. The level 4 contagion details for the PBL (research)
2. The CDC protocols for contagion containment (research)
3. The WHO protocols for contagion containment (research)
4. The Covenant Hospital protocols for contagion containment (research/interview)
5. The TTUHSC protocols for contagion containment (research/interview)
6. The possible resources available at TTU Environmental Health and Safety Department (research/interview)

***Welcome to the Ark* PBL Scenario**

**Task 1**

You are the assigned therapists and counselors to a small group of four kids who were just admitted to this facility. Each new patient has a file that contains a variety of medical documents, notes, letters, messages, and original writings that will give you insights into them. Analyze the file, highlighting and taking notes in order to identify symptoms, triggers, and possible disorders. Based on the information presented in the file, what is the probable diagnosis for each patient? How do you know? These kids have all been involuntarily admitted to this program for a variety of reasons; how does this factor into the possible diagnosis for the patient?

**Task 2**

Take a variety of personality and behavioral tests from the perspective of each character to see what else can be revealed about them, the symptoms, and possible disorders for them. How do these results reinforce or negate the information from each patient’s file?

**Task 3**

Develop a treatment plan for each patient that includes a variety of approaches and interventions for each patient.

What you will need to know/do to complete this PBL:

1. Identify the symptoms and disorders for each of the four new patients by analyzing a variety of information from their files.
2. Take a variety of personality and behavioral tests from the perspective of each of the patients.
3. Analyze the results of the various tests and make a diagnosis. (research/interview)
4. Confirm the results with a member of the Psychology Department at either Lubbock Christian University or Texas Tech University or another approved resource (interview)
5. Research and select various treatment approaches using a variety of resources. (research/interview)
6. Confirm the recommended treatment plan with a member of the Psychology Department at either Lubbock Christian University or Texas Tech University or another approved resource (interview)

***The Compound* PBL Scenario**

Your GT teacher has volunteered her students to take part in an experimental study for the United States Department of Education. They want to see if students, when given the opportunity, can not only design but maintain a living facility for a full calendar year as well as stock and furnish said facility to meet the needs of all students involved in the experiment. The students are also to create and enforce a set of clear behavior and conduct expectations for the group to follow and self-govern; they are also to continue their education, academic, athletic, and electives so that they are not behind once the experiment has ended. The GT teacher will oversee all discipline, education, and daily living activities for the students for the entire year, keeping detailed documentation of all interactions, lessons, and daily life.

Your class is to complete the following tasks:

1. Devise a letter explaining the experiment to the parents of the GT students that includes the list of behavior and conduct expectations for the students.
2. Devise a form for students and parents to complete that includes their current class schedule, medical and dietary needs, and other important information that would be necessary for living away from home for a full calendar year.
3. Sketch and build a scale model of the facility.
4. Based on the information in the returned forms, supply the bunker for a complete year.
5. Design student quarters in a way that the space will fulfill a variety of daily living needs.
6. Implement a variety of renewable life sustaining systems that will provide the students and teacher will clean air, power, and clean water.

What you will need to know to complete this PBL:

1. Sources of renewable energy and the way it works (research/interview)
2. Compact living design (research/interview)
3. Bunker design (research/interview—Discovery Channel Doomsday Bunkers)
4. How to calculate the amount of supplies needed

***The Testing* PBL Scenario**

**Option 1:**

The concept of standardized testing is having unnecessary adverse consequences on thousands, if not millions, of children in the United States. Parents, teachers, and administration try to emphasize that while performing well on the standardized tests is important, it does not define for the student is at this moment, what they can achieve, or what they can be in the future. Everyone involved in education is attempting to find alternatives to the testing that can still measure students’ progress but be a fair assessment to all levels of student intellectual/academic ability.

Your team is to complete the following tasks:

1. Perform the research and/or interviews necessary to understand standardized tests.
2. Compose a plan to modify or replace the current standardized testing system in either the state and/or the nation.
3. Create a proposal for either the Texas Commissioner of Education or the Secretary of Education for the United States that details the plan as well as the reasons why it should be changed.
4. Present this proposal to a group that includes students, parents, teachers, administration, and politicians that could bring about the change as well as sending the plan with a cover letter the heads of both organizations.

What you will need to know to complete this PBL:

1. The background of standardized testing in Texas and the United States (research/interview)
2. Any laws involved in measuring student disabilities (research/interview)
3. The intents of standardized testing (research/interview)
4. Alternatives to testing (research/interview)
5. Ways to modify standardized testing to be a fair measurement for all students no matter their intellectual ability (research/interview)

**Option 2:**

As the global population increases as well as the environmental changes due to global warming continue to negatively impact natural resources, living conditions, and the production of agricultural resources, people need to figure out how to not only heal the environment but to use the natural resources effectively to support the amount of life on the planet.

You are to select am environmental issue that is a top priority on a regional, state, national, or global scale and develop a possible solution based upon research, interviews, and/or experience.

Your team is to complete the following tasks:

1. Perform the research and/or interviews necessary to understand the environmental issue.
2. Compose a plan to restore that natural resource and/or use renewable energy in order to reduce the environmental impact.
3. Create a proposal for the Texas Environmental Protection Agency or the federal EPA that details the plan you have devised.
4. Present this proposal to a group that includes students, parents, teachers, administration, and politicians that could bring about the change as well as sending the plan with a cover letter the heads of both organizations.

What you will need to know to complete this PBL:

1. The background of environmental issue selected (research/interview)
2. Any laws involved in protecting the environment (research/interview)
3. The various organizations committed to the protection of the environment—both governmental and private (research/interview)
4. Renewable energy and/or conservation measures (research/interview)
5. Ways to enact real change or influence on this environmental issue (research/interview)

***The House of the Scorpion* PBL Scenario**

**Option 1:**

Drug trafficking is helping to create a health issue of epidemic proportions through the issue of addiction. You are to research the international issue of drug trafficking, looking for patterns of transportation, the major types of drugs involved in the transportation, and measures to block drug trafficking. Determine if these measures are effective or not as well as why. Based upon the information you have put together, what is an alternative solution to the problem of drug trafficking and why.

Your team is to complete the following tasks:

1. Perform the research and/or interviews necessary to understand the issue of drug trafficking.
2. Compose a plan to modify or replace the current measures in place to control the drug trafficking issue in either the state and/or the nation.
3. Create a proposal for either the Office of National Drug Control Policy, the National Association of State Controlled Substance Authorities, and/or the Drug Enforcement Agency that details the plan as well as the reasons why it should be implemented.
4. Present this proposal to a group that includes students, parents, teachers, administration, and politicians that could bring about the change as well as sending the plan with a cover letter the heads of both organizations.

What you will need to know to complete this PBL:

1. The background of drug trafficking on a variety of scales (research/interview)
2. Any laws involved in controlling drug trafficking (research/interview)
3. Alternatives ways to intercede in drug trafficking (research/interview)

**Option 2:**

Human trafficking is an international issue of epidemic proportions. You are to research the international issue of human trafficking, looking for patterns of transportation, the major groups involved in the transportation, and measures to block human trafficking. Determine if these measures are effective or not as well as why. Based upon the information you have put together, what is an alternative solution to the problem of human trafficking and why.

Your team is to complete the following tasks:

1. Perform the research and/or interviews necessary to understand the issue of human trafficking.
2. Compose a plan to modify or replace the current measures in place to control the human trafficking issue.
3. Create a proposal for the multiple federal agencies and private organizations that detail the plan as well as the reasons why it should be implemented.
4. Present this proposal to a group that includes students, parents, teachers, administration, and politicians that could bring about the change as well as sending the plan with a cover letter the heads of the organizations you feel would have the largest impact on this issue.

What you will need to know to complete this PBL:

1. The background of human trafficking on a variety of scales (research/interview)
2. Any laws involved in controlling human trafficking (research/interview)
3. Alternatives ways to intercede in human trafficking (research/interview)

**Option 3:**

Cloning, human or animal, has been a subject of not only great controversy but compelling fiction. In this day and age, however, human cloning or stem cell generation of certain tissues or even organs is a very startling reality. There are advantages and disadvantages to this medical advancement for the whole of humanity, but is the risk worth the questionable ethics?

You are assuming the role of a medical ethics board who is having to decide whether or not to allow a researcher to continue with the project of medical cloning. What problems does the research expect to solve with cloning or stem cells. What is the reasoning for this research to embark upon such a questionable task? How will the research positively impact all people? What protocols, expectations, and limitations need to be in place to keep this project within ethical limits?

Your team is to complete the following tasks:

1. Perform the research and/or interviews necessary to understand the issue of human cloning and/or stem cell use.
2. Decide which specific health problems could be solved through the practice of cloning and/or stem cell use.
3. Create a set of protocols, expectations, and limitations that detail the guidelines as well as the only health solutions to be impacted by cloning and/or stem cell use.

What you will need to know to complete this PBL:

1. The background of human cloning and/or stem cell use (research/interview)
2. Procedures that could be improved to impacted by cloning and/or stem cell use (research/interview)
3. Examine current ethics surrounding cloning and/or stem cell use (research/interview)

***Ripper* PBL Scenario**

You are part of a law enforcement team that has been assigned to investigate a series of murders in New York that closely resemble the series of murders that took place in the Whitechapel area of London, England. The perpetrator there and here is still unknown, but there are multiple suspects in these murders. Your task is to examine the evidence in the context of 19th century forensics, the original Jack the Ripper case, and the case presented by the novel.

There are changes in victimization, MO, and such that will need to be addressed and explained. Suspects will need to be eliminated, letters and handwriting examined, evidence compared and correlated, and an indictment created.

Your CDC team as well as the WHO team are to complete the following tasks:

1. Examine and analyze the letters from both cases.
2. Develop the MO for both cases.
3. Develop the victimization profile.
4. Analyze the settings of both cases.
5. Develop and narrow down a list of suspects.
6. Using the evidence, create an indictment for your primary suspect.

What you will need to know to complete this PBL:

1. Background of the original case (research)
2. What is acceptable in 19th century forensics (research/interview)
3. Analyze new developments in the original case (research)
4. Interview the author and/or a forensics professor about any unanswered questions from research.