Ethical and Moral Issues in the World of Dr. Frankenstein
A STEM Read lesson based on *Frankenstein* by Mary Shelley
and *The Dark Descent of Elizabeth Frankenstein* by Kiersten White

**Overview**

Many studies have been conducted over the years on the psychology behind Victor Frankenstein. Many believe he was a pathological narcissist, while others believe he had multiple personality disorder brought on by underlying mental illness and years of isolation. In this theory, Victor was in fact the monster. Either way, the experiments he conducted pushed the boundaries of ethical and moral norms. In this PBL, students will research a variety of medical issues and the ethics behind them. They will choose a final product in which to report their findings and present it to the class.

**Grade(s):**

- P
- K
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

**Suggested Time Frame:** Three to four sessions

**Standards**

| PDH 23.B.5a | Understand the effects of healthy living on individuals and their future generations (e.g., not using alcohol, tobacco, and other drugs during pregnancy). |
| SEL. 2C.4a | Evaluate the effects of requesting support from and providing support to others. |
| SEL 3A.5a | Apply ethical reasoning to evaluate societal practices. |
| SS.Psy.2.9-12 | Evaluate the conclusions made by psychological research, including ethical concerns. |
| MA:Pr4.1.II | Integrate ideas from various arts, media arts forms, and other resources into unified media arts productions, considering the reactions and interactions of various audiences. |
| WHST.9-12.1 | Write arguments focused on discipline-specific content. |
| WHST.9-12.7 | Conduct short as well as more sustained research projects to answer a question (including a self-generated questions) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple resources on the subject, demonstrating understanding of the subject under investigation. |
Objectives

At the conclusion of the lesson, students will know or be able to

- Collaboratively research and discuss a current ethical issue in medicine.
- Create a final product either presenting arguments about the ethicality of an issue or creating a campaign spreading awareness of mental illnesses.
- Include supporting evidence in the final product.
- Present their product to the class or other stakeholders.

Key Terms

N/A

Materials

- Cardboard of various thicknesses
- Straws
- Craft sticks
- Twine
- Toothpicks
- Paper towel and toilet paper tubes
- Wooden dowels or skewer sticks
- Pipe cleaners
- Scissors
- Hot glue gun
- Hot glue sticks
- Various types of tape
- Body part cards (attached)

Procedure

1. In groups, have students research a topic related to one of the prompts provided (attached).

2. Students should use the Design Cycle to generate driving questions, ask more questions based on their research into the driving questions, and brainstorm solutions.
3. Students need to utilize four or more quality resources. Students can share their research notes with the teacher for feedback on research strategies.

4. Using what they learned through their research, students should then brainstorm how they would solve this problem or address the issue presented. Students should document the brainstorming process.

5. In their groups, students will select a solution to explore. Students should document their decision-making process and justify why they chose to explore the selected solution or design.

6. Groups will then outline their solutions and produce a final product that will communicate their findings. They can share draft versions of their final product for review.

7. Each group should present their solution using the product of their choice. (See Final Products section for ideas, attached.) They should answer any questions posed.
Extensions

1. Encourage students to follow through on their action steps.

2. Writing prompt – You discover that your sibling or close friend is collecting body parts. You are on a mission to find out what is happening before others discover this dark secret.

3. Arrange for a guest speaker to address issues of mental health that are especially relevant to teenagers.

Considerations

English learners should be encouraged to read resources in their native language.

Assessments

Use or adapt the attached rubric.
<table>
<thead>
<tr>
<th></th>
<th>Exceeds (3)</th>
<th>Meets (2)</th>
<th>Partially Meets (1)</th>
<th>Does Not Meet (0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Worked well with others and discussed ideas in a fair, respectful, encouraging way and was considerate of the feelings of others.</td>
<td>Worked okay with others and discussed ideas in a fair, respectful way, but may not be encouraging. Considered the feelings of others.</td>
<td>Worked with others, but did not contribute a fair share of work OR was discouraging and did not consider the feelings of everyone.</td>
<td>Did not participate or discussed ideas in an unfair, disrespectful way.</td>
</tr>
<tr>
<td>Research</td>
<td>Five or more resources were correctly cited.</td>
<td>Four resources were correctly cited.</td>
<td>Two or three resources were correctly cited.</td>
<td>One or fewer resources were correctly cited.</td>
</tr>
<tr>
<td>Final product</td>
<td>Final product included more than the required elements, was extremely detailed, well organized, and respectfully written.</td>
<td>Final product included all the required elements, was detailed, organized, and respectfully written.</td>
<td>Final product did not include all of the required elements, lacked enough detail, and was a bit disorganized.</td>
<td>Final product did not include required elements, was not detailed, and was disorganized.</td>
</tr>
<tr>
<td>Presentation</td>
<td>Student presented material clearly and coherently with eye contact and was enthusiastic and convincing.</td>
<td>Student presented material clearly, coherently, and made eye contact.</td>
<td>Student presented material, but either did not make eye contact or was not clear or coherent.</td>
<td>Student did not present material.</td>
</tr>
<tr>
<td>Knowledge of Content</td>
<td>Students clearly and precisely demonstrated an understanding of the content that was researched; was able to answer all questions confidently and correctly.</td>
<td>Student clearly and precisely demonstrated an understanding of the content that was researched.</td>
<td>Student demonstrated a basic understanding of most of the content that was researched.</td>
<td>Student did not demonstrate an understanding of the researched content.</td>
</tr>
<tr>
<td>Total N/15</td>
<td></td>
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Frankenstein and The Dark Descent of Elizabeth Frankenstein Prompts

• Science of Immortality

Victor Frankenstein was obsessed with overcoming death and decay. He wanted to create life in a laboratory setting, driven by his desire for knowledge and a lifelong curiosity surrounding the workings of the human body. He worked vigilantly and compulsively without regard to the consequences or morality of his actions. Scientists have been striving to increase the longevity of humans for hundreds of years. Some studies suggest that we may one day achieve the goal of immortality.

Possible Driving Questions – Is aging a social construct or natural law? What are ways in which we have figured out how to live longer? What can teens do to increase their chances of longevity? What are the ethical and social implications of human immortality? How would human immortality impact the environment? What ethical or social responsibilities do those who achieve immortality have?

Task – Create a persuasive argument for or against humans seeking and/or achieving immortality.

• Mental Health

Victor Frankenstein and Elizabeth had what we would consider today to be a co-dependent relationship. He was obsessed with feeding his curiosities while she was obsessed with covering up his morbid tendencies. Victor would fall into long periods of despair, was incapable of “normal” socialization, and did not know how to handle any form of stress or anxiety he faced. Elizabeth was a habitual liar, uncaring of the ramifications of her falsehoods, as long as she was able to help Victor. The creature is a cold blooded killer who admits that he was created innately good and virtuous, but through rejection by Victor and the rest of society, he turned to evil. Mental health continues to be a major concern today. We are plagued by depression, anxiety disorders, panic disorders, PTSD, OCD, bipolar disorder, drug and alcohol abuse, among many others.

Possible Driving Questions – What is the difference between genius and madness? What is the difference between psychopathy and sociopathy? What should you do if you think someone is a danger to themselves? How do you identify a toxic and/or manipulative relationship? How can you assist someone who is in a toxic/manipulative relationship? What are some of the ramifications of someone with a mental illness not receiving the help they need? What are some ways to help those who are suffering from mental health issues?
Task – Create a campaign to spread mental health awareness.

- **Future of Science**

  Victor Frankenstein was pushing science to its limits when he created his creature. He ignored the potential negative repercussions of his work. He focused only on his goals of immortality for his loved ones. His success led to a string of negative consequences and deaths that left him riddled with guilt and depression. Those close to him die one by one, his entire world is upended and those around him suffer. What larger societal problems might have occurred if his notes were found and others recreated his experiments? Today, science is pushing medical boundaries as well. Medical advancements have pushed the boundaries of ethics more and more as our technologies have become more advanced.

  **Possible Driving Questions** – What are some of the major ethical issues facing medical science today? What will people think of our medical advancements in 200 years? What medical advancement of today will be looked upon with as much distain as Frankenstein’s creature? To what lengths should mankind go to prevent death? When does medical science cross the line between ethical and unethical?

  Task – Pick a controversial modern medical advancement. Create a persuasive argument for whether or not it is ethical.
Final Products

Choose the best means for communicating your stance on the issue you selected. All final products should include the following –

- Statement of issue
- A list of at least four correctly cited sources
- Summary of research that lead to conclusion
- Description of stance
- Connection to evidence from Frankenstein and The Dark Descent of Elizabeth Frankenstein
- An action step that provides a solution or promotes awareness of the concept or issue.

Optional content –
- Discussions of brainstorming and iterative processes
- Examples of stances discussed by the group but not selected and reasons for not selecting those stances

Examples of final products can include but are not limited to –
- Multi-media presentation – Students use appropriate digital tools to create a stand-alone presentation such as a movie, animation, or narrated presentation.
- Poster presentation– Students present their research and proposed stance on a tri-fold poster with a verbal explanation to accompany it.