

Title: Biotechnology

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Grade Level: 9-12

Subject/Content: English/Science Fiction/"Jurassic Park" by Michael Crichton

Summary of Lesson: Students are introduced to the genre of science fiction and the theme of biotechnology within that genre.

Focus Question: How does the theme of biotechnology in science fiction apply and impact your world and future?

Databases(s): *Opposing Viewpoints In Context*

Procedures :

Teacher Preparation Planning:

- This lesson may be taught in conjunction with a science course studying biotechnology and DNA or independently in an English course studying science fiction.
- Using the school library's magazine databases, find and print five articles regarding science fiction.
- Arrange class into five groups and make enough copies of each article so every student will be reading one of the five.

Day of Lesson:

- Steps/Activities by teacher: Deliver content information on the origins, intentions, and history of the science fiction genre.
- Focus on common themes: concern with the impact of change on people-consequences for the human race, current social trends by showing how they may affect the future, emphasis on human struggle with technology, and the problems that can arise when humans play god.
- Cover common subjects of science fiction: the future, travel through space and time, life on other planets, and the crisis created by technology.
- Group students and give each member of each group a copy of their article.
- Instruct students to individually read, highlight and note places in the article that discuss how science fiction addresses real world issues and problems.

- Instruct students to share their notes with their group members.
- Instruct students to choose one spokesperson from their group to share important information and passages with the class.
- Introduce biotechnology as a pertinent field of study and employment.
- Discuss some of the controversy surrounding biotechnology in such areas as cloning, stem cell research, and genetically altered foods.
- Connect discussion to the main themes of science fiction.
- Have students access *Opposing Viewpoints In Context*, search for, read and take notes on one article supporting cloning and one article opposing cloning.
- Instruct students to generate a list of five points supporting cloning and five points opposing cloning.

Steps/Activities by student(s):

- Read and take notes on teacher selected articles.
- Discuss important information with small and large group peers.
- Access *Opposing Viewpoints In Context*.
- Search "bioethics" or "cloning."
- Choose one article in support of cloning and one article that express opposition towards cloning.
- Read selection and take notes for five key points from each selection.
- Use these points to fuel discussion and debate while reading "Jurassic Park" by Michael Crichton.

Outcome: Students will be introduced to the genre of science fiction and the theme of biotechnology. They will use this information to guide them while reading "Jurassic Park" by Michael Crichton.

Related Activities: Homework: Students access *Student Resources In Context* and search for "Jurassic Park" and Michael Crichton. Students should read an author's biography of Michael Crichton and plot summary of "Jurassic Park."