

United Nations Sustainable Development Goals Open Pedagogy Fellowship "Science Representation in Pop Culture"



Sample Assignment SDG Goal #4: Quality Education

Introduction

Science is infused in our culture and it is integral in our everyday lives (and not just in the technology we use!). Pop culture tells us what a science is and can be through the magic of movies! In this renewable assignment, you will select any movie that prominently depicts a scientific subject related to this course and reflect on what you have seen with a recorded video reflection. You will then watch a documentary on the same scientific topic and examine the similarities and differences between the two films with a second video reflection.

Learning Objectives

- 1. Compare and contrast different film representations of science and the scientific method.
- 2. Critically analyze how science is portrayed in pop culture.

Part 1: Science in Fiction (40%)

Choose any movie that prominently features a topic in the Physical Sciences. Be sure to watch the movie after you have selected it at least once. After you have done so, please record a screencast presentation (*between 3 and 6 minutes*) that reflects on the following questions:

- 1. What movie did you choose? Why did you choose this particular film? What topic does it depict?
- 2. How are the SCIENTISTS depicted in the movie? Examples might include background, body type, gender, personality, skills, etc. How do you think this representation applies to other scientists?
- 3. Select ONE scientific concept from your movie that you would like to know a little more about. This could be something that confused you, something that was really interesting, or something very weird! Briefly research it further on the internet. Tell us about this concept and tell us whether it was depicted correctly in the movie. Be sure to include the correct APA reference for your source at the end of your presentation!

4. How was the SCIENTIFIC PROCESS carried out in the film? How did the scientists collect evidence for their ideas? Does the film distinguish a clear difference between theory and hypothesis?

Part 2: Science in Documentary Film (60%)

Choose a documentary film that is on the same scientific topic as in Part I. After watching the documentary, please record a second screencast presentation (between 3 and 6 minutes) that reflects on these questions:

- 1. What documentary did you choose to watch? Give a BRIEF summary of the film and what you learned from it.
- 2. Describe the SCIENTISTS featured in the documentary or the narrator presenting the data. Do they have any unique stories or backgrounds that you found unusual for someone in science? If so, describe how.
- 3. How was the SCIENTIFIC PROCESS depicted in the documentary? How did scientists or the narrator describe how data was collected to support an idea? Does the documentary distinguish a clear difference between theory and hypothesis?
- 4. Compare and contrast THREE differences in how the facts of your scientific subject were portrayed differently in both films.
- 5. After watching both a movie and a documentary film on science, has your opinion on the scientific topic changed? Why or why not? Why do you think science is portrayed the way it is in the movie you saw?

Example Rubric for GLG101IN: Introduction to Physical Geology

Critical Thinking	20 pts Above & Beyond	18 pts No Issues	16 pts Some Issues	14 pts Many Issues	12 pts Partially Done	0 pts No Credit
Geological	10 pts	9 pts	8 pts	6.5 pts	5 pts	0 pts
Accuracy	Perfect	Minor Issues	Some Issues	Many Issues	Partially Done	No Credit
Science in Fiction	15 pts Perfect	13.5 pts Minor Issues	11 pts Some Issues	9 pts Many Issues	7.5 pts Partially Done	0 pts No Credit
Science	15 pts	13.5 pts	11 pts	9 pts	7.5 pts Partially Done	0 pts
Documentary	Perfect	Minor Issues	Some Issues	Many Issues		No Credit
Scientist	10 pts	9 pts	8 pts	6.5 pts	5 pts	0 pts
Portrayal	Perfect	Minor Issues	Some Issues	Many Issues	Partially Done	No Credit
Scientific	10 pts	9 pts	8 pts	6.5 pts	5 pts	0 pts
Process	Perfect	Minor Issues	Some Issues	Many Issues	Partially Done	No Credit
Summarize & Present	10 pts	9 pts	8 pts	6.5 pts	5 pts	0 pts
	Perfect	Minor Issues	Some Issues	Many Issues	Partially Done	No Credit
APA Formatting	5 pts Perfect Formatting	4 pts Minor Issues	3 pts A couple mistakes	2 pts Many mistakes	1 pts Almost no formatting	0 pts No Credit
Time Management	5 pts Within +/- 15s of time limits	4 pts Within +/- 25s of time limits	3 pts Within +/- 35s of time limits	2 pts Within +/- 45s of time limits	1 pts Within +/- 55s of time limits	0 pts Beyond +/- 55s of time limits

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