

CATS: Anatomy of a Superhero discussion assignments for BIO201.

I created a series of discussion assignments for my BIO201 courses titled Anatomy of a Superhero for the purpose of prompting students to think about human anatomy and physiology from a different perspective and to help reinforce the principles of normal human anatomy and physiology.

At the beginning of the course students were asked to name or create their favorite superhero and describe at least two of their superpowers. At the end of each unit, students post to a discussion board an explanation, that applies concepts covered in the unit, of how their superhero's anatomy and physiology is different that allows them to have their super powers. Students are encouraged to be creative in their explanations as long as they describe how the changes in their anatomy and physiology would enhance the abilities of the superhero. They must also read and comment on other student's submissions in order to earn full credit for the assignment. The subjective value of these assignments was assessed at the end of the semester using the following survey questions:

Survey Questions for CATS on the Anatomy of a Superhero:

1. These assignments prompted me to think about human anatomy and physiology in a different way:
2. These assignments helped me better understand normal human anatomy and physiology:
3. Reading other students' submissions helped me with my understanding of anatomy and physiology:
4. These assignments increased my interest in anatomy and physiology:
5. I enjoyed completing these assignments:
6. These assignments were a valuable addition to the BIO201 course:
7. I would like to see similar assignments in other Biology courses:
8. Please provide any other feedback regarding these assignments you feel is important:

Below is a summary of the survey results from 3 sections of BIO201, a total of 52 respondents:

1. These assignments prompted me to think about human anatomy and physiology in a different way:

Strongly agree/agree: 96%
Neither agree nor disagree: 2%
Disagree: 2%

2. These assignments helped me better understand normal human anatomy and physiology:

Strongly agree/agree: 87%
Neither agree nor disagree: 11%
Disagree: 2%

3. Reading other students' submissions helped me with my understanding of anatomy and physiology:

Strongly agree/agree: 83%
Neither agree nor disagree: 15%
Disagree: 2%

4. These assignments increased my interest in anatomy and physiology:

Strongly agree/agree: 73%
Neither agree nor disagree: 21%
Disagree: 6%

5. I enjoyed completing these assignments:

Strongly agree/agree: 81%
Neither agree nor disagree: 19%
Disagree: 0%

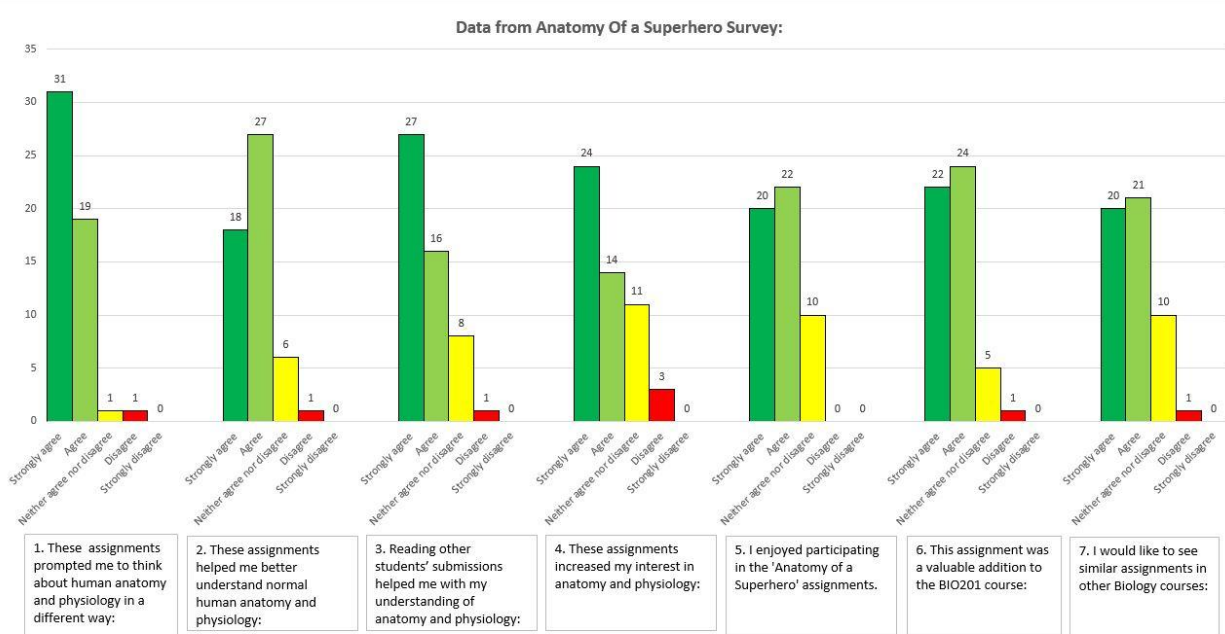
6. These assignments were a valuable addition to the BIO201 course:

Strongly agree/agree: 88%
Neither agree nor disagree: 10%
Disagree: 2%

7. I would like to see similar assignments in other Biology courses:

Strongly agree/agree: 79%
Neither agree nor disagree: 19%
Disagree: 2%

No students selected strongly disagree for any question.



The survey results clearly demonstrate that students enjoyed and valued applying A&P concepts to super powers in these assignments. The data suggests that applying these principles to superheroes and reading other student's submissions helped students better understand these concepts and prompted more engagement between students. Based on the data above, these assignments will be continued in future BIO201 classes.