

# STUDENT PERCEPTION OF WORKSHEET IMPLEMENTATION

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## TOPIC

- Does the manner in which the worksheets are implemented have an impact on how students perceive them?
- Three different courses were surveyed to determine if there was a relationship between implementation style and student perception of worksheets.

## QUESTION & HYPOTHESIS

- How does worksheet implementation affect student perception on course learning?
- By examining students' perceptions of worksheets, it can be determined if one method of worksheet implementation is more favorable than another for the courses being surveyed.

## RATIONALE & BACKGROUND

- Active learning is instrumental in the development of skill and the ability to apply knowledge. It fosters interest and engagement in the curriculum and produces better prepared students (Sivan A. et al., 200).
- The use of worksheets as a valuable active learning tool can help to achieve some of the positive outcomes of active learning in large, traditionally lecture based classes such as Anatomy & Physiology and Statistics.
- In Advanced Anatomy & Physiology (BI 331) worksheets are implemented daily. They are used in conjunction with lecture and a considerable amount of feedback is given.
- The lower level Anatomy & Physiology (BI 231) uses worksheets primarily on Fridays and the entire class period is dedicated to working on the worksheets. Feedback is limited to check-in "Clicker Questions" and worksheets are not included in the student's grade.
- Statistics (ST 351) implements worksheets in yet a different way. Groups of students use the last ten minutes of class to complete the worksheet. They are turned in and become a component of the student's final grade.

## RESEARCH METHODS

### Who:

- When investigating how different methods of worksheet implementations affects student perceptions of course learning, three different courses including BI331, BI231, and ST351 were used in the analysis

### What & How:

- We spoke with Dr. Devon Quick about how students perceptions of worksheets could be different depending on how the worksheets are implemented during a class period
- A 7 question multiple choice survey was administered online as an optional extra credit quiz in each of the three courses
- Students were asked to take this survey at the midpoint of their term so they had sufficient exposure to in class worksheets

### Survey Questions:

- Worksheets should be worth points towards my overall grade
- The worksheets I receive are too long for the allotted time
- I receive sufficient feedback on my worksheet

## RESULTS & NEXT STEPS

- There are pros and cons to each implementation method.
- Perceptions of implementation may differ greatly between subjects. It is difficult to pinpoint a single implementation method that is best to use.
- It is important for the professor to determine what student perceptions are most important to maintain when designing a worksheet and how to implement it.
- It may be worth studying if there is a correlation between exam scores and student perceptions of worksheets. Perceptions may be more negative if the individual's exam score is low.

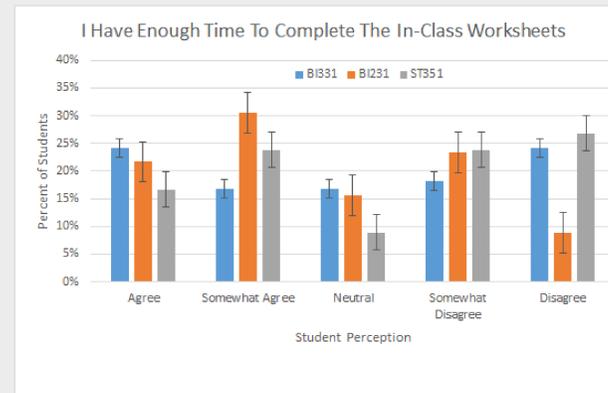


FIGURE 1

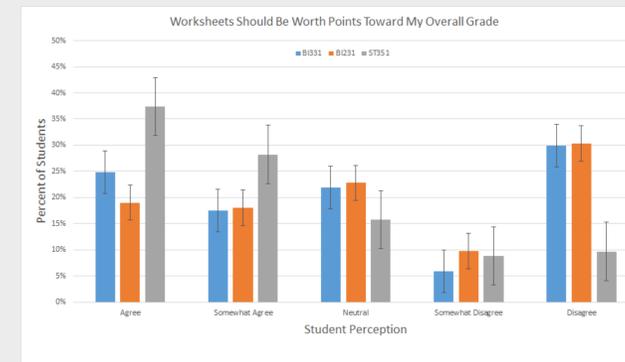


FIGURE 2

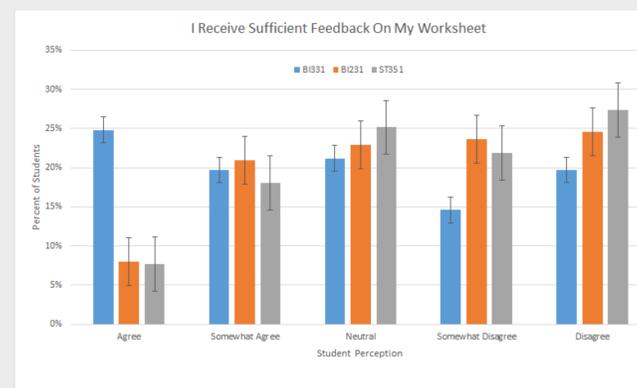


FIGURE 3

## DATA FINDINGS

- In figure 1, students of BI 231 were 1.5 times less likely to disagree that enough time was provided to complete the worksheet when compared to BI 331.
- 52% of the BI 231 class agreed there is enough time to complete the worksheet.
- BI 331 had the least significant results from this question due to similar proportions of agreeableness (41%) and disagreeableness (42%) among the students.
- In figure 2, ST 351 had the largest proportion of students who agreed that the worksheets should be worth points towards the overall grade, with 66 % of the class in agreement and 19% in disagreement.
- Around 40% of the students in BI 231 disagreed to some degree that there should not be any points associated with the worksheets. A similar disagreeableness was shared between BI 231 and BI 331.
- In figure 3, both ST 351 (49%) and BI 231 (48%) had a higher percentage of students who disagreed that sufficient feedback was received on worksheets. Similar percentages were found in the students that agree as well.
- BI 231 had 29% of the students agree to some degree, as well as 26% in ST 351. BI 331 differed by having a larger percentage of students who agreed (45%) versus those who disagreed (34%).

## REFERENCES

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