

Montana Tech—InQuizitive and Introduction to Sociology



Instructor: Michael Masters

Course Materials: *You May Ask Yourself*, Fourth Edition and InQuizitive

Background

I used InQuizitive in Sociology 101-02—Introduction to Sociology, an online class taught at Montana Tech in Fall 2015. Sociology 101 is an elective course taken by a broad range of majors, often to satisfy a social sciences requirement. It is also a required prerequisite for entering the nursing program and fulfills a social sciences requirement for students in the liberal arts department. As such, there is consistently a broad diversity of students who take the course.

The section in which InQuizitive was used was capped at 35 students, and maintained a relatively high retention rate throughout, ending with 34 students in total.

Course Challenges

One of the biggest challenges I face when teaching this course is that such a broad diversity of majors take the class. Some students seem to have a hard time with elements of the course that involve integrating material from the hard sciences, such as evolutionary biology or math, while other students from hard science disciplines struggle with aspects of sociology that are more theoretical and lack rigorous scientific evidence to support these theories. As the class is taught online, it's more difficult to gauge which aspects of the course students might be struggling with.

Another challenge is figuring out how to get students to keep up with the course material, read their textbook, and use the supplemental course materials. Generally, my goal is to get them to fully engage with and comprehend the material in a more holistic way beyond simply memorizing content and answering questions on exams.

Implementation

During the Fall 2015 semester, I assigned InQuizitive to get students to interact with the weekly content in a way that would help them better understand course topics and study for my weekly quizzes. The InQuizitive assignments counted as 20% of their overall course grade. Because it was possible to get a 100% each week by reaching each InQuizitive assignment's target score, if students completed all of the InQuizitive activities on time throughout the semester, it was relatively easy for them to receive all possible points for this part of the class.

COURSE AT A GLANCE

- Introduction to Sociology
- Taken by broad range of majors
- Taught online
- 34 students in Fall 2015

“Another challenge is how to get students to keep up with the course material, read their textbook, and use the supplemental course materials.”

Results

Student Performance

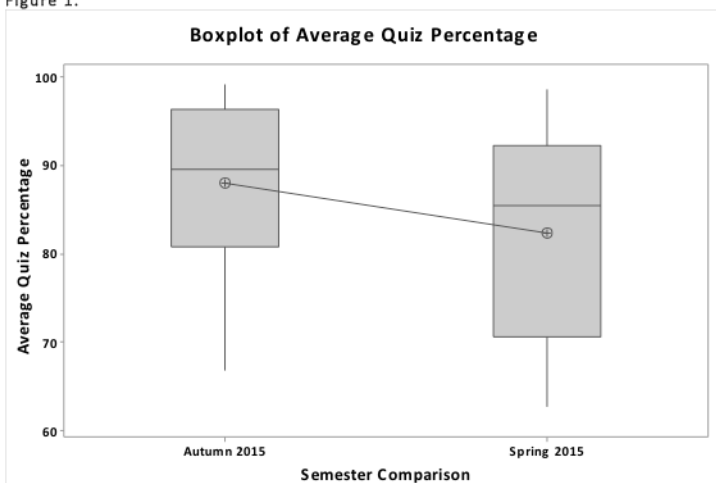
Methodological Note: *Students who did not complete at least 5 quizzes during the semester (who had effectively dropped the course) were removed from the dataset.*

Data below comes from a simple comparison of student weekly quiz results and overall grades from a section taught in Spring 2015, a semester in which InQuizitive was not used, to my Fall 2015 section in which InQuizitive was assigned.

Comparison of Weekly Quiz Scores Across Semesters

The results of a two-sample t-test investigating the difference in average quiz grades between Autumn (87.96%) and Spring (82.4%) 2015 semesters shows that the semester in which InQuizitive was used (Autumn 2015) is associated with significantly higher average weekly quiz scores across the 14 quizzes given ($t(56) = 2.13, p = 0.037$). While small sample sizes make it difficult to draw definitive conclusions from this data, the quizzes that were given in each of the two semesters were exactly the same, eliminating a number of confounding variables that may have biased this result.

Figure 1.



SCHOOL AT A GLANCE

- Four-year institution
- Roughly 2,800 undergraduates

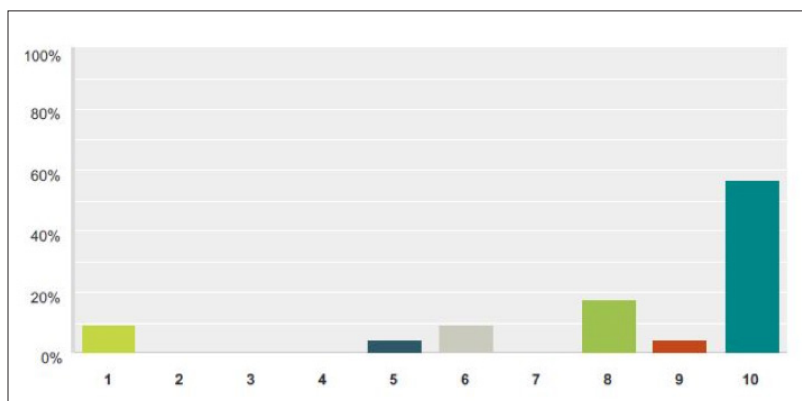
“With InQuizitive, students are incentivized to read the chapter and complete the corresponding InQuizitive activity by the due date, which led to higher quality class discussions this semester.”

Student Survey Results

Students were offered extra credit to complete an InQuizitive student feedback survey, which received 23 responses, representing 67.7% of the students enrolled in the class. Select survey questions and responses are below:

SURVEY QUESTION	RESPONSES
Do you think working in InQuizitive helped you review and better understand content for class?	91.3% said yes / 8.7% said no
Did you like InQuizitive’s game-like elements?	78.26% said yes / 17.39% said no / 4.35% were indifferent
Would you recommend InQuizitive to other students taking this course in future semesters (1-10 scale with 10 being strongest positive response)?	56.2% responded with a 10

Breakdown of student responses for survey question: “Would you recommend InQuizitive to other students taking this course in future semesters (1–10 scale with 10 being strongest positive response)?”



Instructor Feedback

I found InQuizitive to be easy to set up and integrate with Moodle, the online learning management system used at Montana Tech. Integration enabled automatic grade transfer of InQuizitive grades to my Moodle gradebook and single sign-on between Moodle and InQuizitive for students. I also completed some of the activities and found it to be very easy to use and understand how it would help students to interact with the material in a way that is fun and educational. InQuizitive seems to contribute to understanding of the content beyond simply memorizing key words and ideas and regurgitating them for an exam.

The statistical results and student responses on the survey also provide evidence that it is a good resource. Overall, I think it is a valuable resource that could help mitigate challenges faced in a number of different disciplines by many instructors and students, in particular those instructors and students teaching and learning online.

RESULTS AT A GLANCE

- Grades on weekly quizzes improved in Fall 2015, the semester in which InQuizitive was used.
- Over 90% of students who completed an online survey said InQuizitive helped them better understand class content.

“Overall, I think it is a valuable resource that could help mitigate challenges faced in a number of different disciplines by many instructors and students, in particular those instructors and students teaching and learning online.”