What Works Best to Motivate Students in Introductory Economics Course

Dr. Sakib Mahmud
University of Wisconsin-Superior

Background

There is a general perception among undergraduate students with non-economic majors' background to treat economics as a difficult subject with adverse and undesirable outcomes on their overall academic performance (Bartlett, 1995; Andreopoulos and Panayides, 2011).

Contemporary literature on undergraduate economic pedagogical research reveals that the style and methods of teaching as well as the course content are mainly responsible in creating the negative perceptions on introductory level economics courses (Jensen and Owen, 2003; Bartlett, 1995)

Regarding the methods of teaching of economics, there is less emphasis on active and cooperative learning environments (Watt and Becker, 2008; Yamarik, 2007).

However, there is a research gap in identifying what student-centered techniques might work to develop interest, increase attention, and generate motivation among non-economic majors to complete a general education introductory economics course with focus.

Research Objective

Considering the research gaps on student motivation of treating economics as an interesting subject matter, the learning goal of my research is to find *what works best* to engender positive learning experience for students dealing with serious motivational issues towards a subject that initially appears difficult, counter-intuitive, or alien to them.
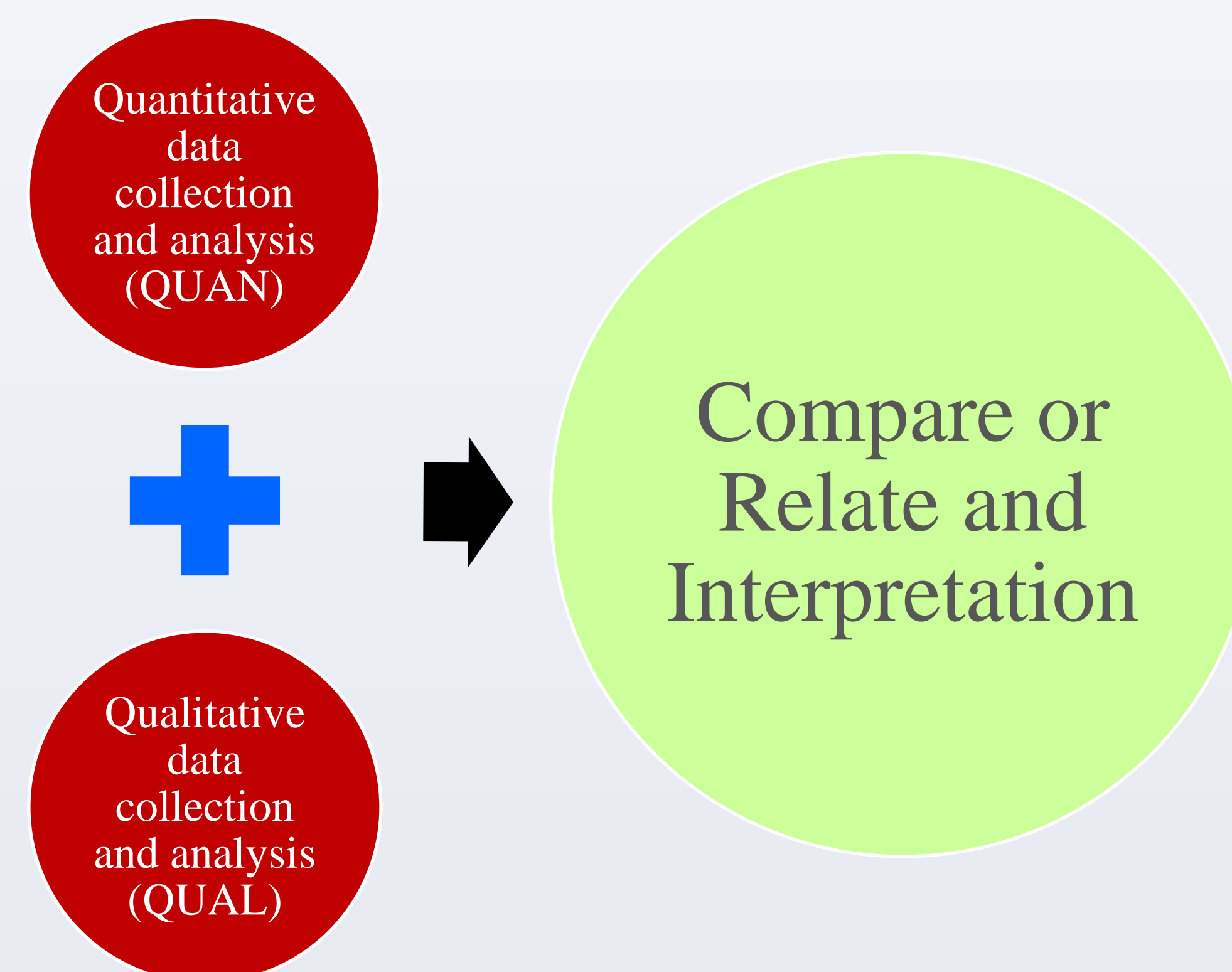
Research Design

My research design is based on the *convergent parallel mixed methods* (Creswell, 2014) using the quantitative pre-and-post anonymous online questionnaire surveys and the qualitative short reflection notes.

The selected course for my study is ECON 235, Economics in society, a three-credit general education introductory economics course offered every fall and spring semester through the Department of Business and Economics of the University of Wisconsin at Superior (UW-S).

The course is taken by undergraduate non-economics major students as part of their general educational requirement and taught by me. Average class size usually revolves around twenty-five (25) students each semester.

As part of my 2013-14 CETL SOTL project, I was able to collect data based on my fall 2013 class after getting the Institutional Review Board (IRB) Approval.

Convergent Parallel Mixed Method

Quantitative data collection and analysis (QUAN)

+

Qualitative data collection and analysis (QUAL)

→

Compare or Relate and Interpretation

Data Collection

In the quantitative pre-and-post anonymous online questionnaire surveys, the study gathered information on student feelings, interest, and motivation related to the course along with which learner-center techniques that the students considered to be most effective in motivating them to learn more in depth about the subject matter.

For the qualitative part of the survey, there are three (3) anonymous short reflection notes taken after the 2nd, 8th, and 13th week of the semester. In the qualitative surveys, student reflections were gathered through open-ended questions format on self-reported type of learner, self-developed strategies to excel in the course, overall expectations from the course, students identified self-developed strategies that were helpful (and not helpful) for the course, students plan to excel in the course once they have identified the strategies that were helpful, and students plan to motivate themselves to achieve their learning goals.

Results

**1. Quantitative Analysis of pre-and-post questionnaire survey:**
Preliminary findings from the quantitative analysis of the pre-questionnaire survey reveal that students 'strongly agree' that they are more motivated to learn if they are intellectually challenged (35%) and exposed to new aspects of the subject as well as to new ideas (35%). However, learning-techniques emphasized in the course (35.71%) also become the major reasons behind student motivation in the post-questionnaire survey. In both pre-and-post surveys, most students 'agree' on the considerable effort that they put in to learn the material from the course (75% for pre-and 71.43% post).

For learning-centered techniques, active learning based on in-class activities and exercises turned out to be the most effective motivational tool for the students (28% for pre-and-for post). Although concept map (18%) is the second-most effective tool following the pre-questionnaire survey, it became less effective in the post-survey (6%). Rather, quizzes or exams (28%) and group project (16%) turned out to be the next best effective techniques in the post-survey following in-class activities and exercises.
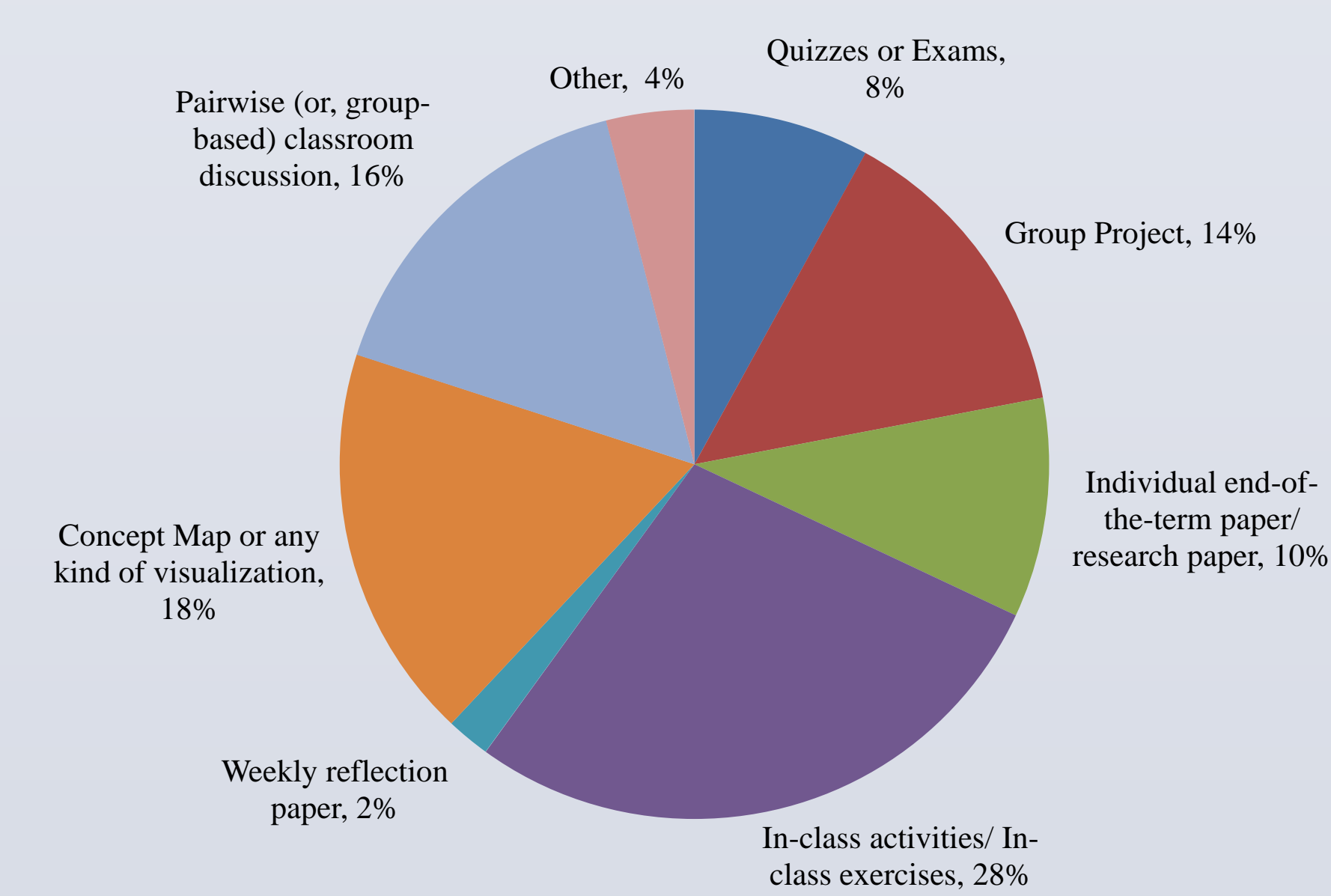
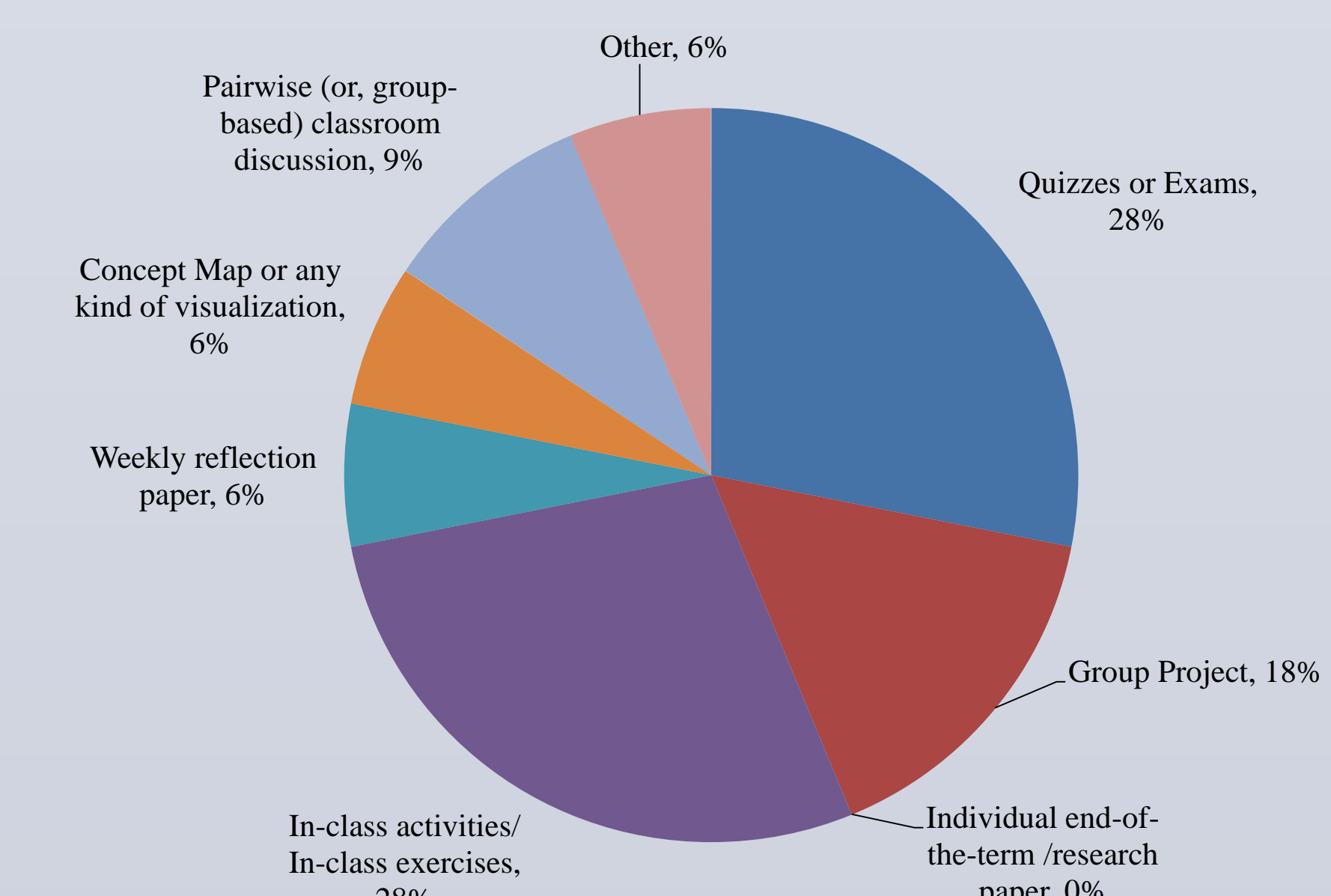### Pre-Survey Response: Student feelings, interests, and motivation
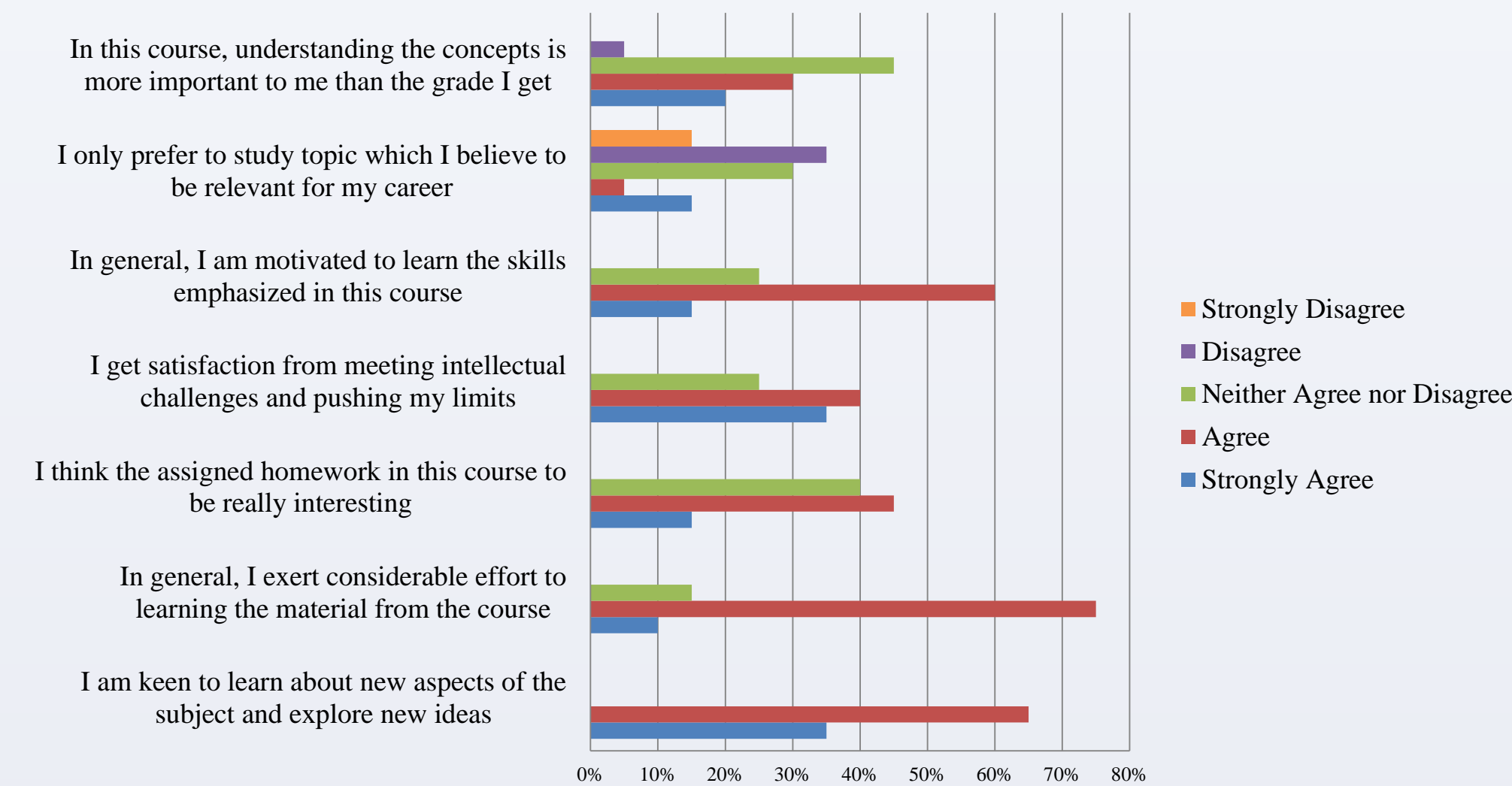
Post-Survey Response: Student feelings, interests, and motivation
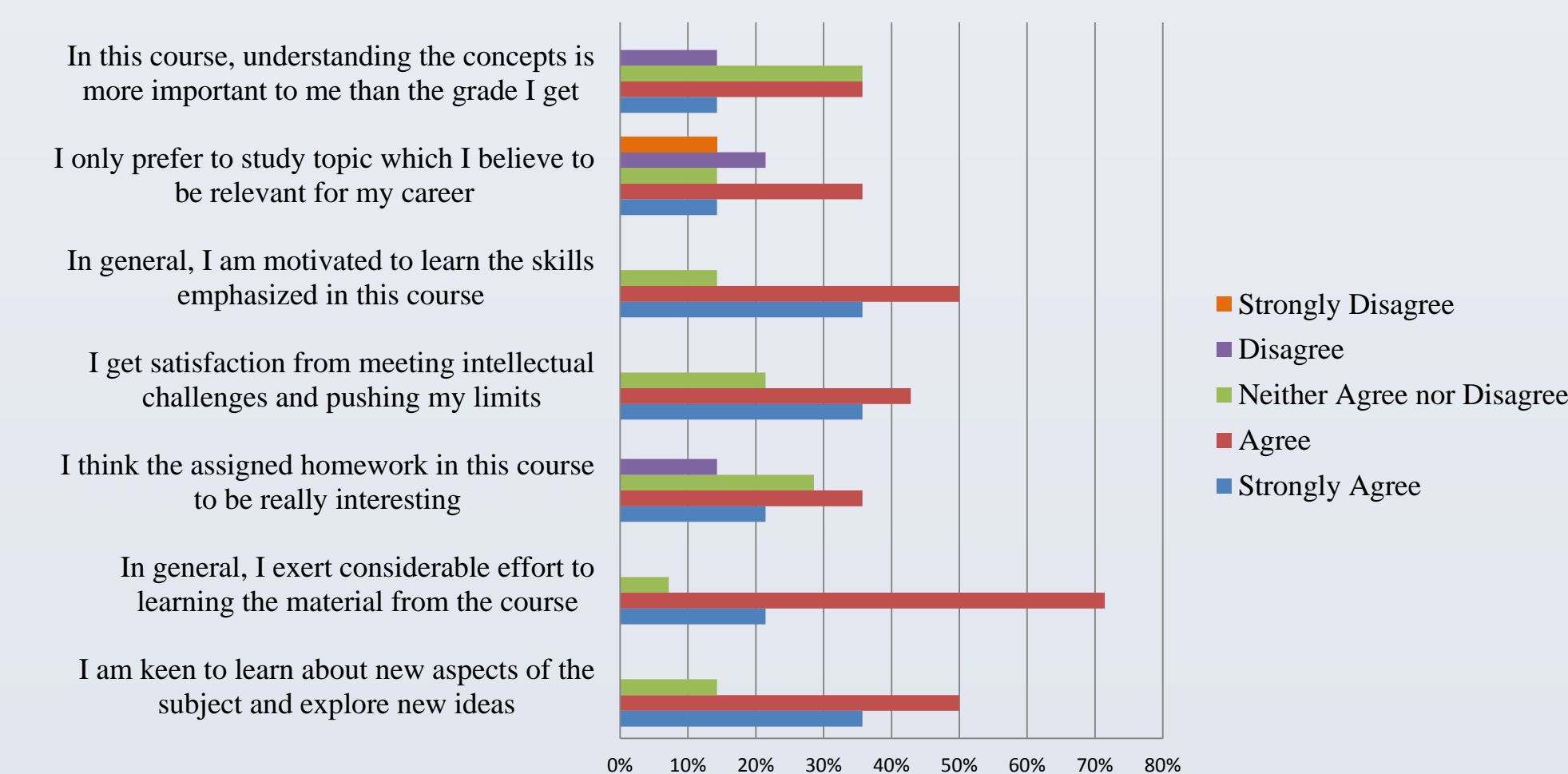
Pre-Survey Response: Preferred Learner-centered Techniques

Post-Survey Response: Preferred Learner-centered Techniques

2. Qualitative Analysis following Short Reflection Notes
Majority of the students identified learning strategies such as paying attention to lectures, working on group-based and pair-wise homework projects, and reviewing uploaded lectures notes, homework solutions, and study guides at D2L to be the most helpful to perform satisfactorily in the course. Interestingly, reading chapters ahead of class (20%) and taking notes (18%) were the strategies most of the students thought should work for them to excel in the course at the beginning of the course. Among the strategies that did not work, prominent among them were relying on taking notes or listening to lecture only (26%) and last minute studying before the test (17%).

Regarding motivation, students initially revealed that their desire to learn about economics and how it affects society (33%), and the practical applications of the economic concepts (30%) were the most salient motivational factors about the course. However, getting good grades (41%) became the major motivating factor for most of the students following the middle of the semester short reflection notes data. Only about a third of the class revealed themselves as self-motivated learners (31%).

3. Compare or relate and Interpretation:
Comparing the results from the quantitative and qualitative databases,
1) **Regarding student motivational factors:**
   - During the beginning of a regular semester, there are *convergences* between the two sources of information regarding the student motivational factors.
   - By the end of the semester, *divergences* between the two sources of information become more prominent.
2) **Regarding preferred student-learning techniques:**
   - Active learning based on in-class discussion and exercises, group project, and pair-wise homework assignments are considered to be most effective in motivating students.
   - Quizzes or exams became the most effective motivational factor at the end-of-the-semester. This could be associated with students concern about their expected 'final grade,' which is evident from student self-reported short reflection note after the 8th week of the semester.

References

Andreopoulos, G. C., & Panayides, A. (2011). Teaching Economics To The Best Undergraduates: What Are The Problems?. *American Journal of Business Education (AJBE)*, 2(6).

Bartlett, R. L. (1995). Attracting "Otherwise Bright Students" to Economics 101. *The American Economic Review*, 85(2), 362-366.

Creswell, J.W. (2014). Research Design: Quantitative, Qualitative, and Mixed Method Approaches. Sage Publications, Inc., 2014.

Jensen, J.E., and Owen, A. (2003). Appealing to Good Students in Introductory Economics. *Journal of Economic Education*, 32, 299-325.

Watts, M., & Becker, W. E. (2008). A Little More than Chalk and Talk: Results from a Third National Survey of Teaching Methods in Undergraduate Economics Courses. *The Journal of Economic Education*, 39(3), 273-286.

Yamarik, S. (2007). Does cooperative Learning Improve Student Learning Outcomes?. *The Journal of Economic Education*, 38(3), 259-277.

Acknowledgment