

The impact of a blended course format
on student learning and attitudes in a
Quantitative Literacy Course.

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Outline

- Background
 - Set up of the traditional and blended formats for a Problem Solving course
- Data
 - Self reported time spent on tasks
 - Attitudes towards the course
 - Desire to learn in blended format
 - Traditional vs. Blended formats progress on learning outcomes
- Future
 - Next steps

Traditional Format

- 100% face-to-face class meetings
- Collaborative work
- Common syllabus, textbook, assignments and projects

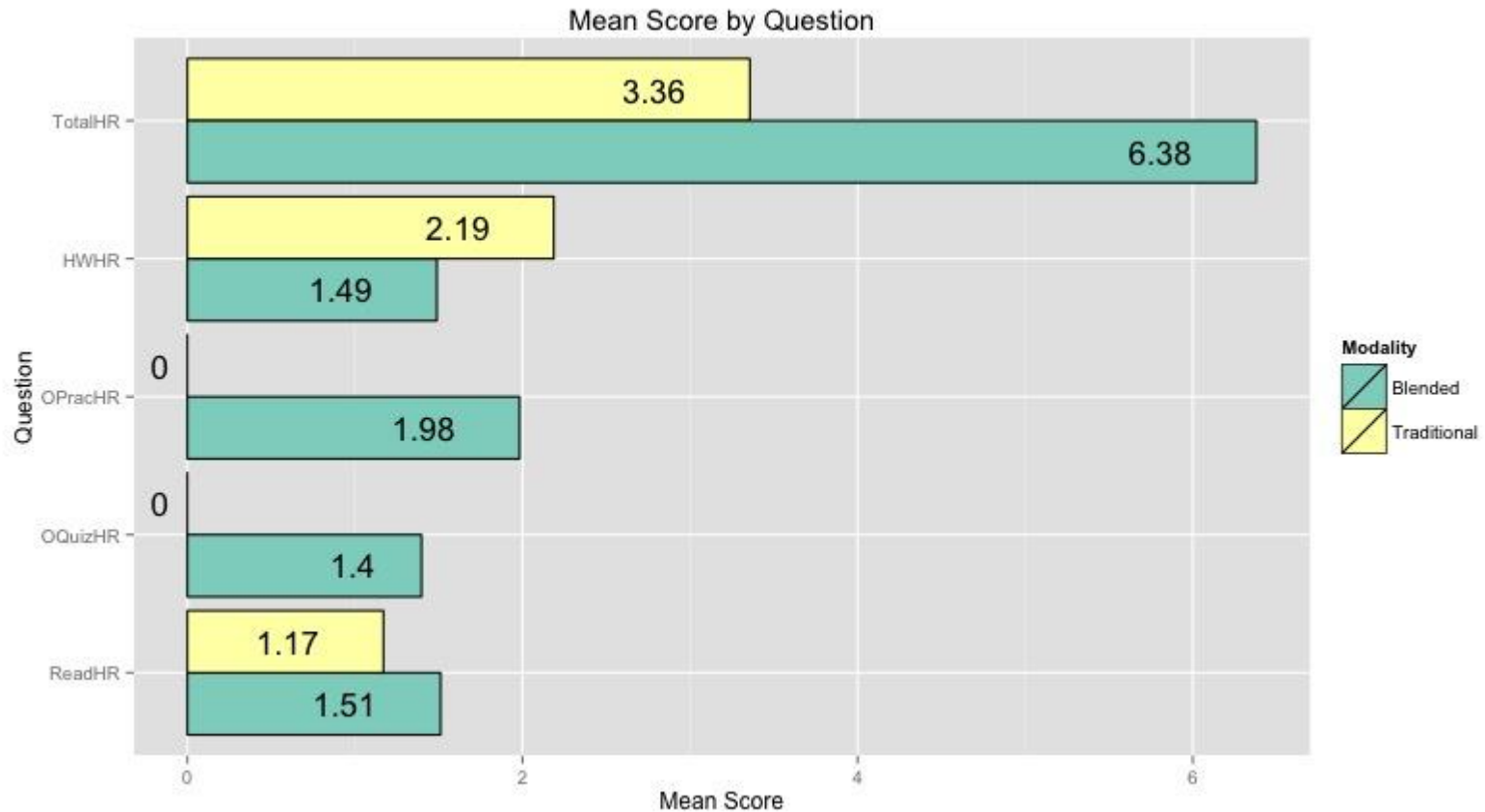
Blended Format

- 50% face-to-face class meetings, 50% online activities
 - One lab meeting per week (optional)
- Common assignments for all blended sections
- Same book, projects as traditional

Type of Student

- Math G.E. requirement- non science majors.
- Pre-requisites:
 - Elementary Algebra
 - Junior or Senior standing by completed units
 - (at least 57 out of ~120)

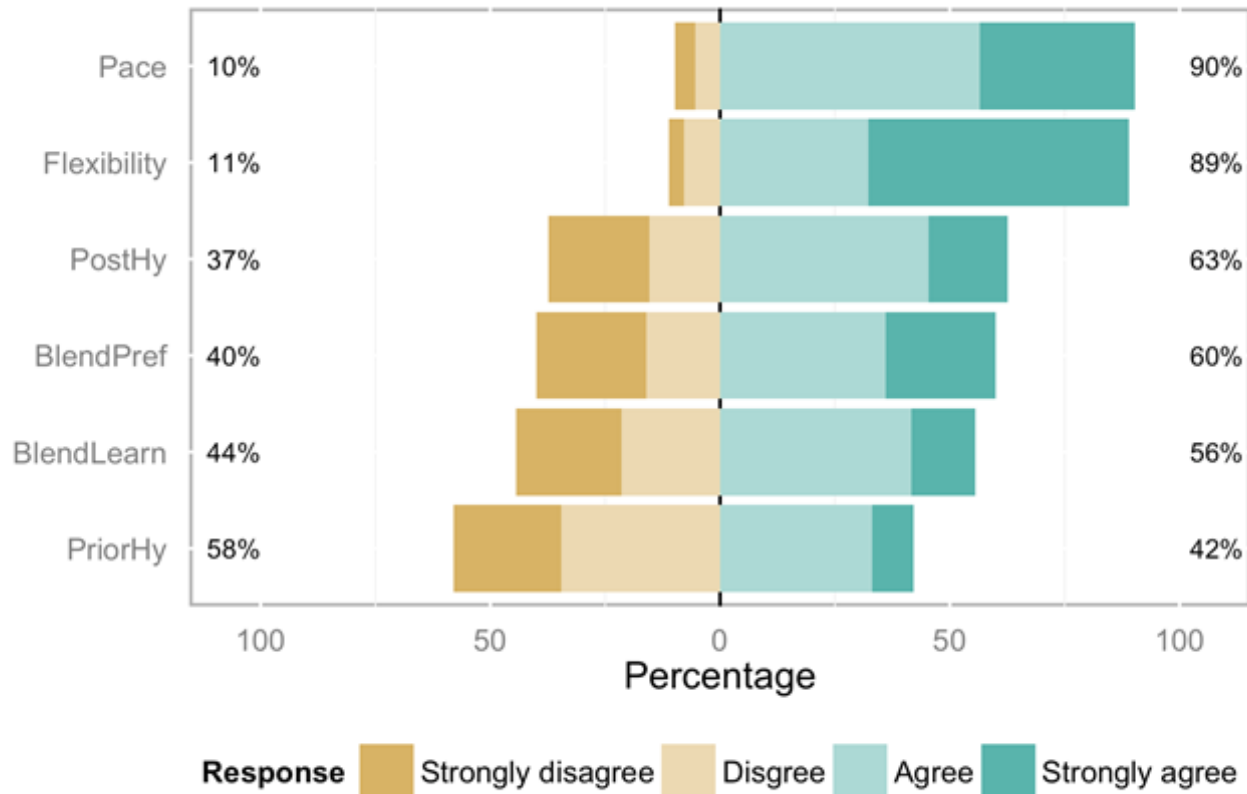
Self-Reported Time on Task



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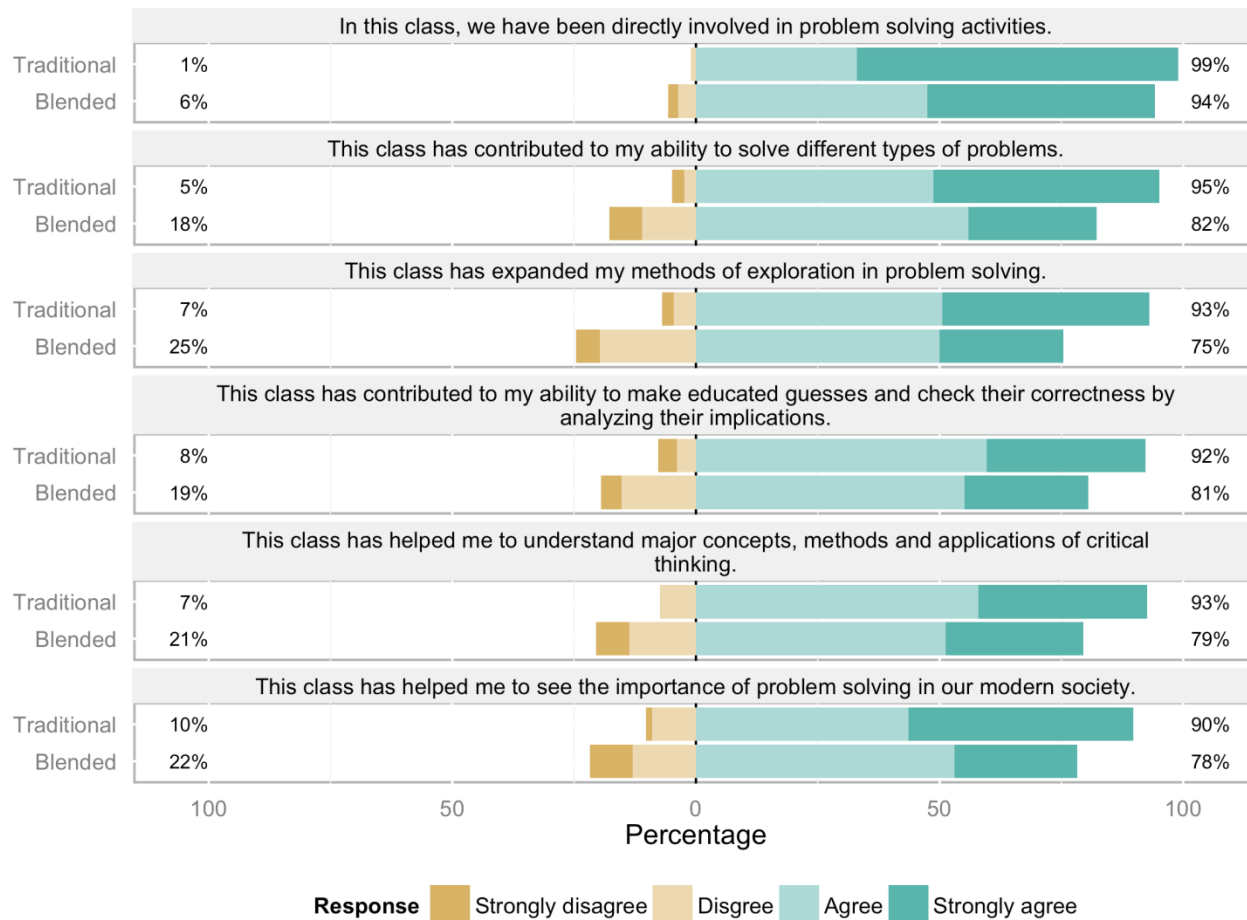
- Percent responding that they typically work in one long session as opposed to multiple short sessions:
- Traditional format: 67% Blended format: 77%
- -Not a significant difference
- Attitudes about what helped:
- Significant differences between blended vs. traditional in the helpfulness of reading, homework and in-class

Desire to Learn in the Blended Format



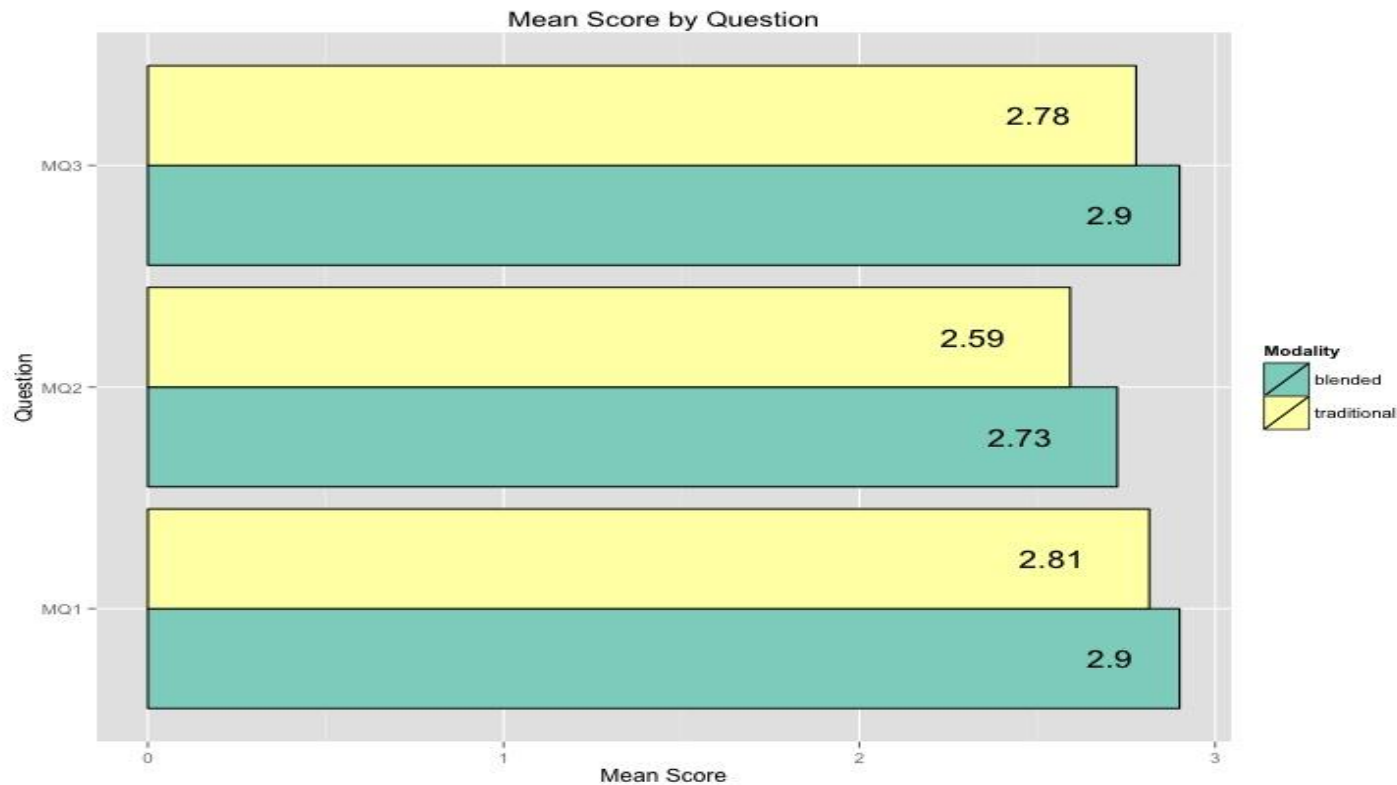
Significant increase in their desire to take courses in this format.

Attitudes Toward the Course



For statements 1, 2, 3 and 6, the differences are significant

Learning Outcomes (Spring 2014)



None of these differences were significant due to sample size (n=20 blended, n=27 traditional)

Learning Outcomes (Spring and Fall 2014)



n=60 blended n=37 traditional

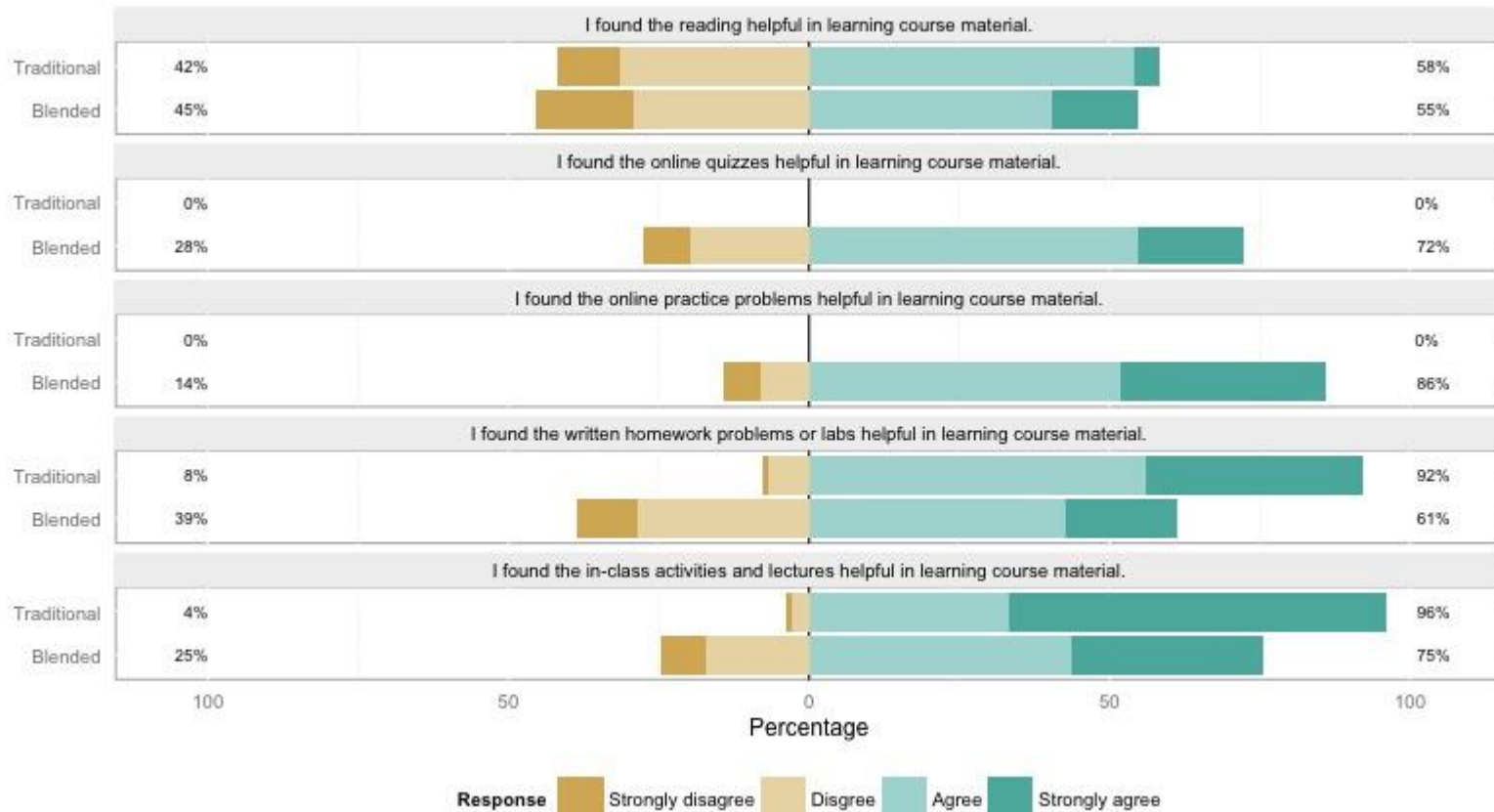
Future: What is Next?

- More data!!!
 - Compare actual time on task versus self-reported data
 - We need more longitudinal learning outcomes data
- Modifications to Blended Format
 - Help students “feel” like they can solve problems

Thank You

- Questions?

Attitudes Towards what was Helpful.



Significant differences between blended vs. traditional in the helpfulness of reading, homework and in-class