MATH REVIEW STUDY TABLES: FOSTERING CONSTRUCTIVE STUDY BEHAVIORS

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LEARNING OUTCOMES

Students who engage in **Student Affairs** programs, activities and services will…

> ….acquire and use cognitive and practical skills that will enable them to live healthy, productive, and purposeful lives.

Students who engage in the programs, activities, and services provided by **Residential Services** will [or will be able to]…

> …examine personal needs, interests, abilities, growth areas, and identities and use this knowledge to inform their personal and professional goals.
> …demonstrate self-awareness and empathy in their relationships with other students that will contribute to a positive sense of community within their residential neighborhoods.

Students who participate in **review study tables** will [or will be able to]…

> …collaborate with peers to increase comprehension of course material.
> …recognize the efficacy of collaboration and seek out facilitated study resources.

TEACHING STRATEGY

Relying on research conducted by the Searle Center for Advancing Learning & Teaching, the Calculus program in the Math Department replaced traditional, lecture-hall review sessions with instructor-facilitated, peer-driven review sessions in dining halls. Rather than answering individual questions for largely passive students, instructors now facilitate the work of dynamic groups of collaborating students.

ASSESSMENT STRATEGY

Attendance was taken at exam review study tables for multiple courses in the Calculus program beginning in winter 2014. Students received a survey invitation that addressed both review study tables and a separate peer tutoring program with a residential component. The survey included questions about students' mindsets and behaviors with respect to review study tables.





MAJOR FINDINGS

n = 188	Agree	Disagree
I am comfortable asking questions of other students.	61.3%	16.5%
Working with others helped me better understand the course material.	61.5%	5.5%
I was able to help other students.	57.1%	16.5%

n = 188	Agree	Disagree
Hearing other students explain problems in their own words when working, helped me to learn.	71.4%	8.8%
Discussing problems with other students helped me to better understand the subject matter.	71.4%	8.8%
I was more aware of my misunderstandings and/or difficulties.	70.3%	8.8%

QUALITATIVE DATA

Students could **watch another student work on a problem** he or she was struggling with and help them understand it with the help of the mediator, thereby improving everyone's understanding of the topic.

It was **helpful to sit with someone as I did some of the harder homework assignments** where I may have otherwise given up!

I think **if I had gone to more tutoring and office hours** and had a better comprehension of the material, the study tables would have been very useful. As it was, they helped some, but not enough.

NEXT STEPS

After four quarters of experimenting with review study tables, the model is largely set. Next year, the goal is to refine the assessment strategy in one or more of the following ways:

- Conducting a pre-survey of students about collaborative study practices
- Linking attendance data from review study tables with participation in other support programs (resource rooms with peer tutors, Peer-Led Undergraduate Study, other review study tables)
- Correlating attendance data with student performance and persistence in Calculus coursework
- Creating a follow-up survey about students' evolving study practices
- Expanding review study tables to other departments that have significant enrollments (e.g., Chemistry)

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