

UTILIZING LAB WRITTEN HW TO FOSTER INTERACTION BETWEEN STUDENTS AND THE LEARNING ASSISTANTS IN FINITE MATHEMATICS

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FINITE MATHEMATICS (MGF 1106) AT FIU

Non-STEM track students

~300 students each semester

Modular curriculum

Typically freshman

No prerequisite

COMPONENTS OF FINITE MATHEMATICS

Hybrid format

Math Lab component

Pre-class assignments

Online HW assignments

Learning assistants (LAs)

MASTERY MATH LAB



2 HOURS OF MATH
LAB ATTENDANCE
REQUIRED EVERY
WEEK



STUDENTS ARE
EXPECTED TO
WORK ON THEIR
MATH
ASSIGNMENTS



OVER 100
COMPUTERS AND
STAFFED WITH
LEARNING
ASSISTANTS TO
PROVIDE ON-
DEMAND HELP





WHAT MOTIVATED THE CHANGE?

- Math Lab attendance dropped
 - Class attendance dropped
 - Homework completion dropped
 - Passing rates dropped
 - Lack of interaction with the LAs
 - Students struggling to navigate through the various elements of the course.
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WHAT WAS THE INNOVATION?

Written homework was added in as a weekly assignment



LAs were instructed on how to deal with the assignment



Students picked up the worksheet in the Math Lab.



They worked on it individually or in groups and then discussed it with an LA



LA signed off on the assignment

WHY THIS INNOVATION?



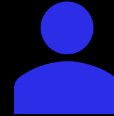
Appreciation of the
Math Lab



Encouragement to ask
for help



Require interaction
with LAs



Value of written HW
over computerized
HW



Instantaneous
feedback



Build confidence
communicating math

WHAT DOES A
LAB WRITTEN
HOMEWORK
ASSIGNMENT
LOOK LIKE?

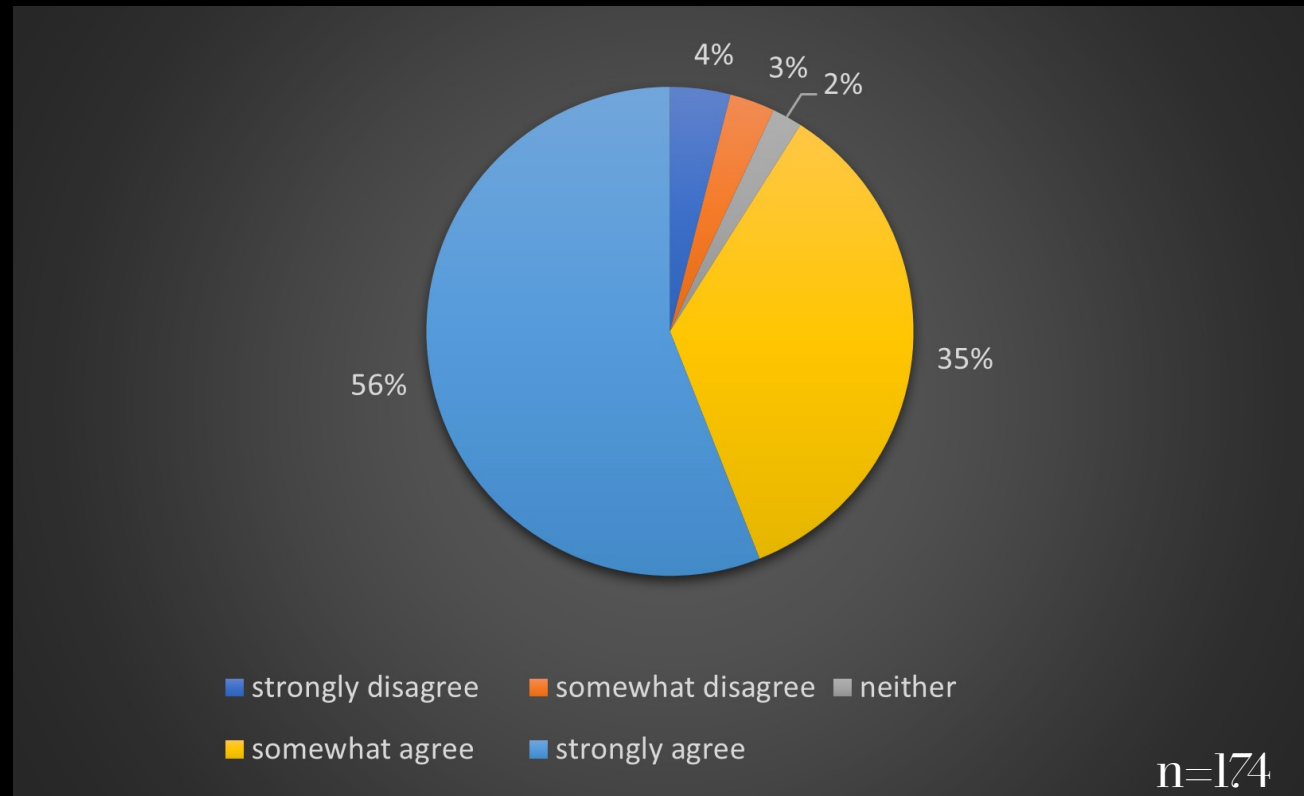


WHAT RESULTS DID WE SEE?

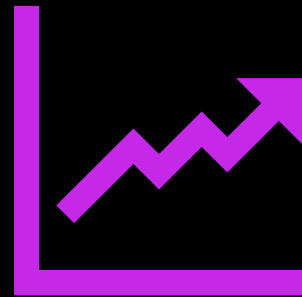


Increased interactions with LAs in
the Math Lab

Working with LAs on the Math Lab assignment helped me better understand the course content.

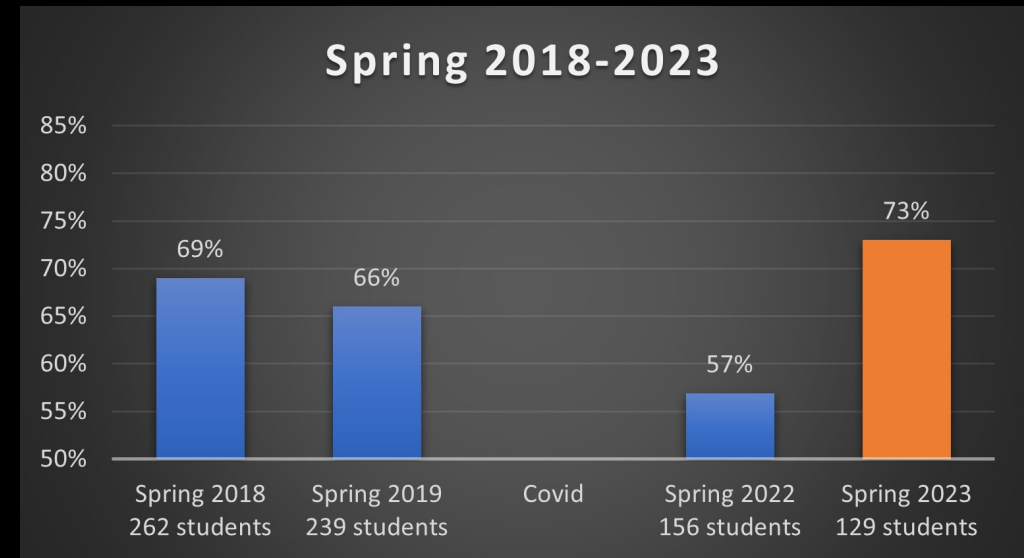
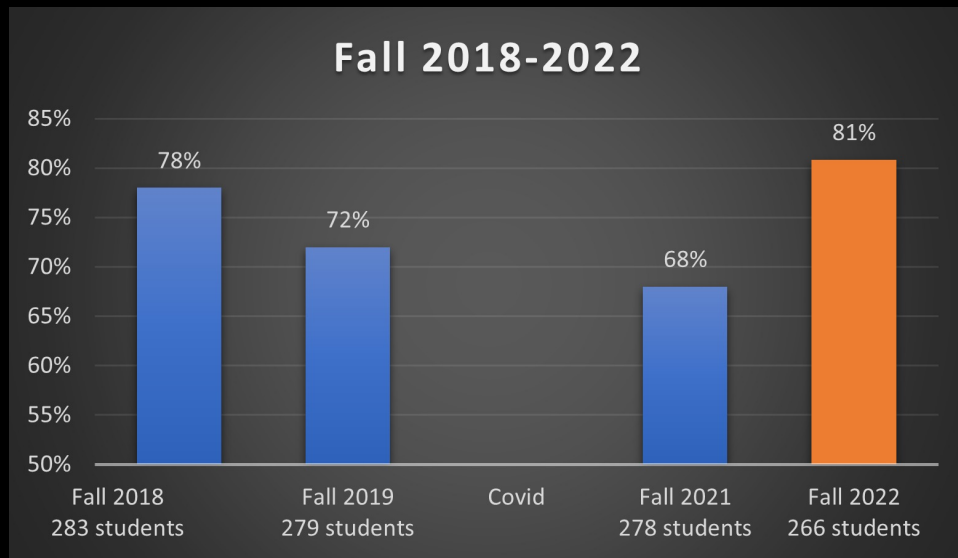


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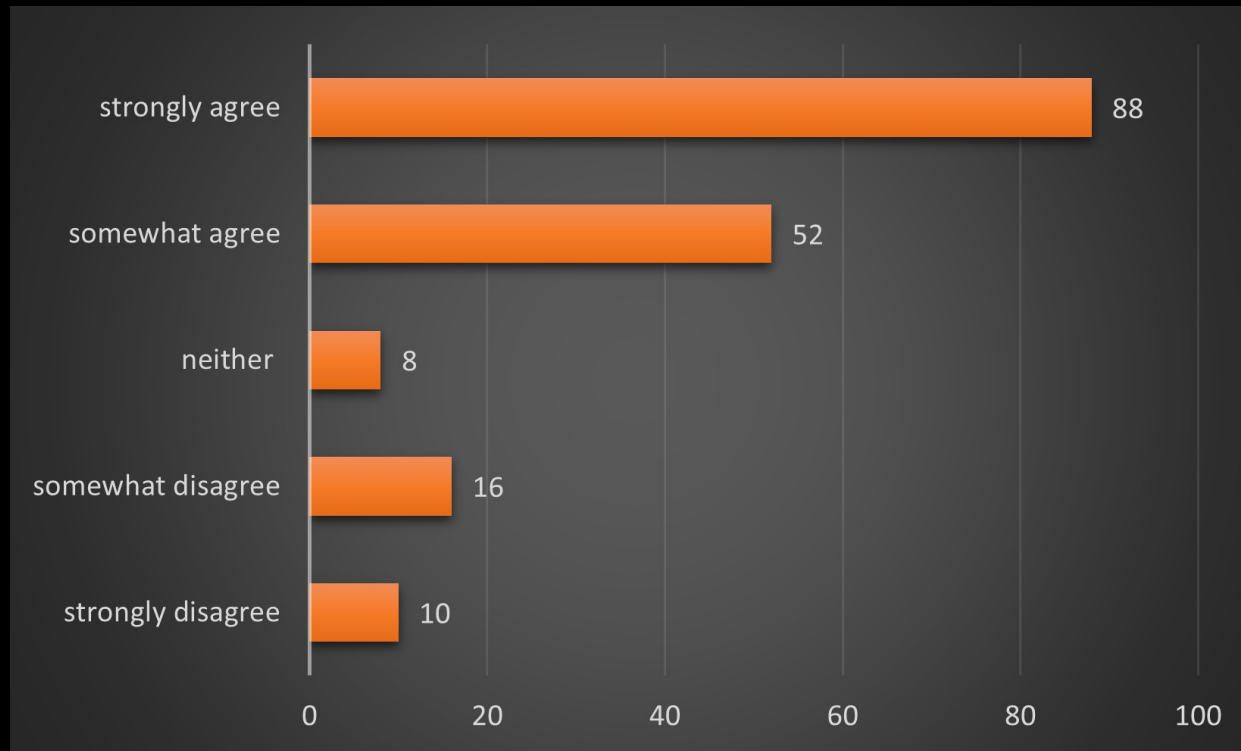


Increase in Math Lab attendance

Lab Grade Averages



The main reason I went to the Math Lab was to complete the lab assignment.

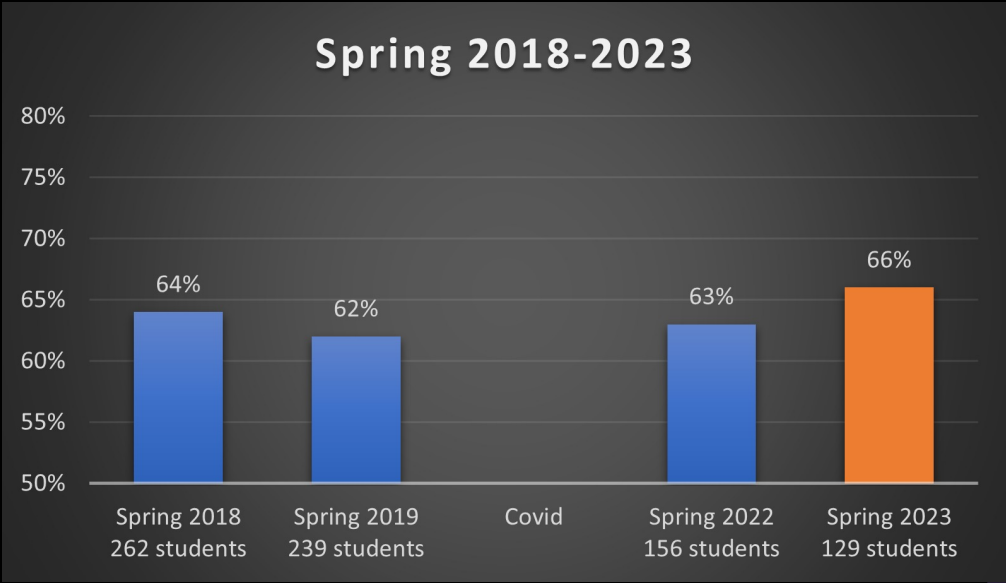
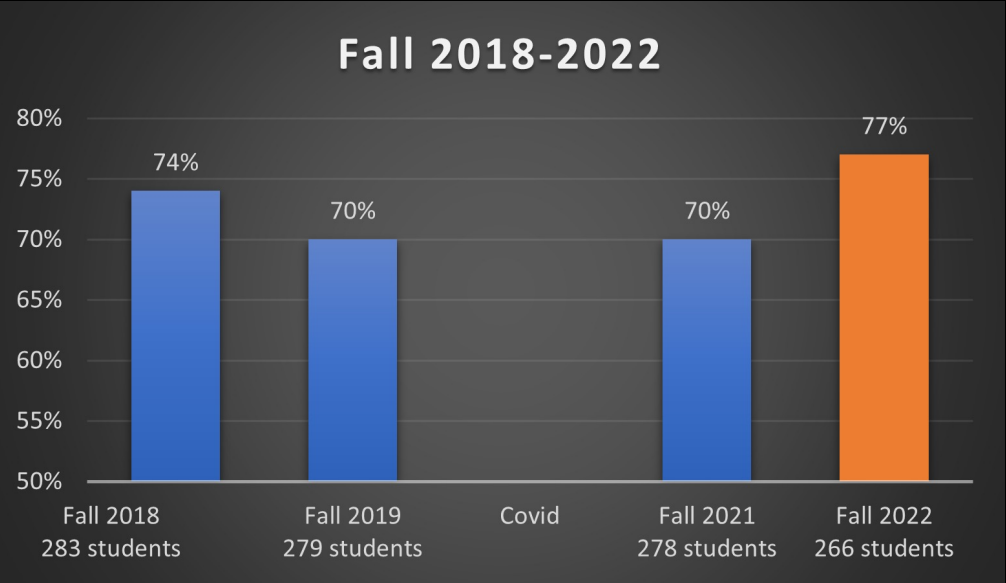


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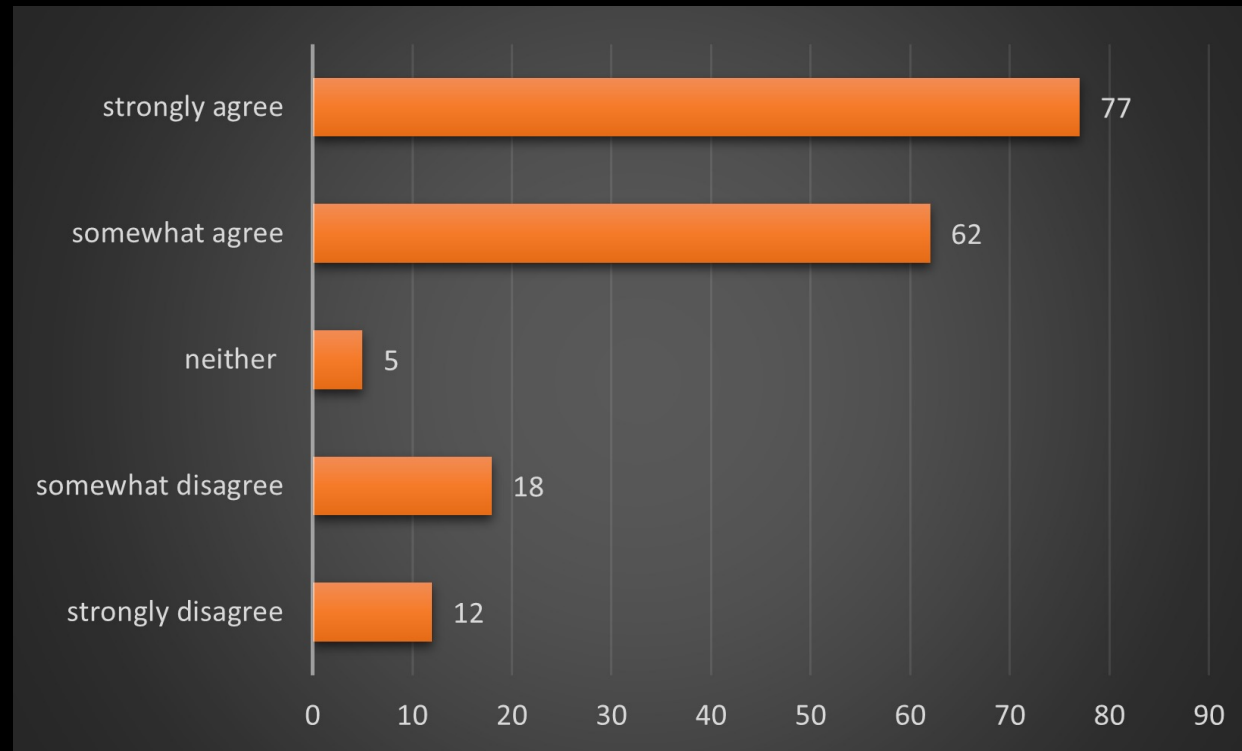


Increased passing rates

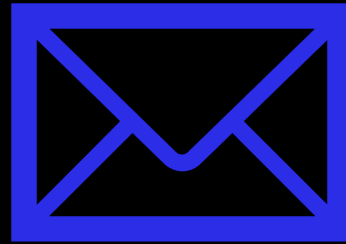
Passing Rates



The Math Lab assignment helped me prepare for the written portion of the exam.

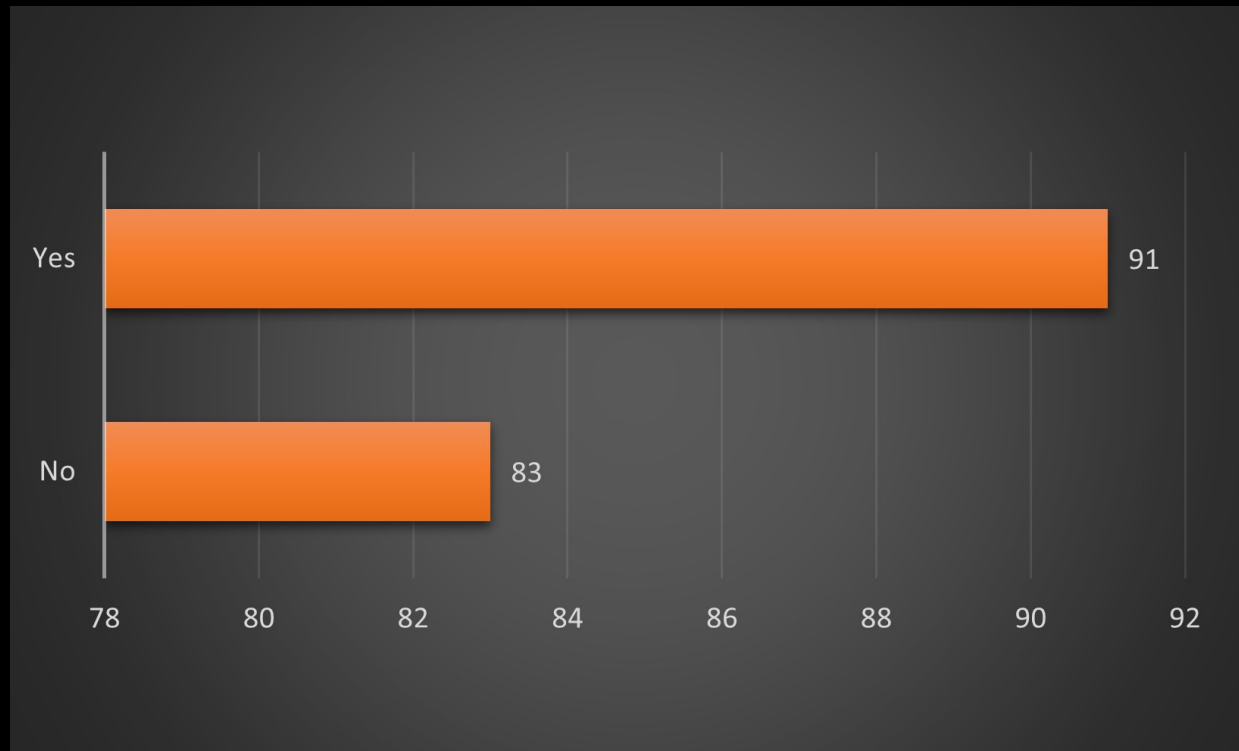


WHAT RESULTS DID WE SEE?



Boost of confidence for students in
their mathematics ability

Working with LAs on the Math Lab assignment helped me consider becoming an LA.

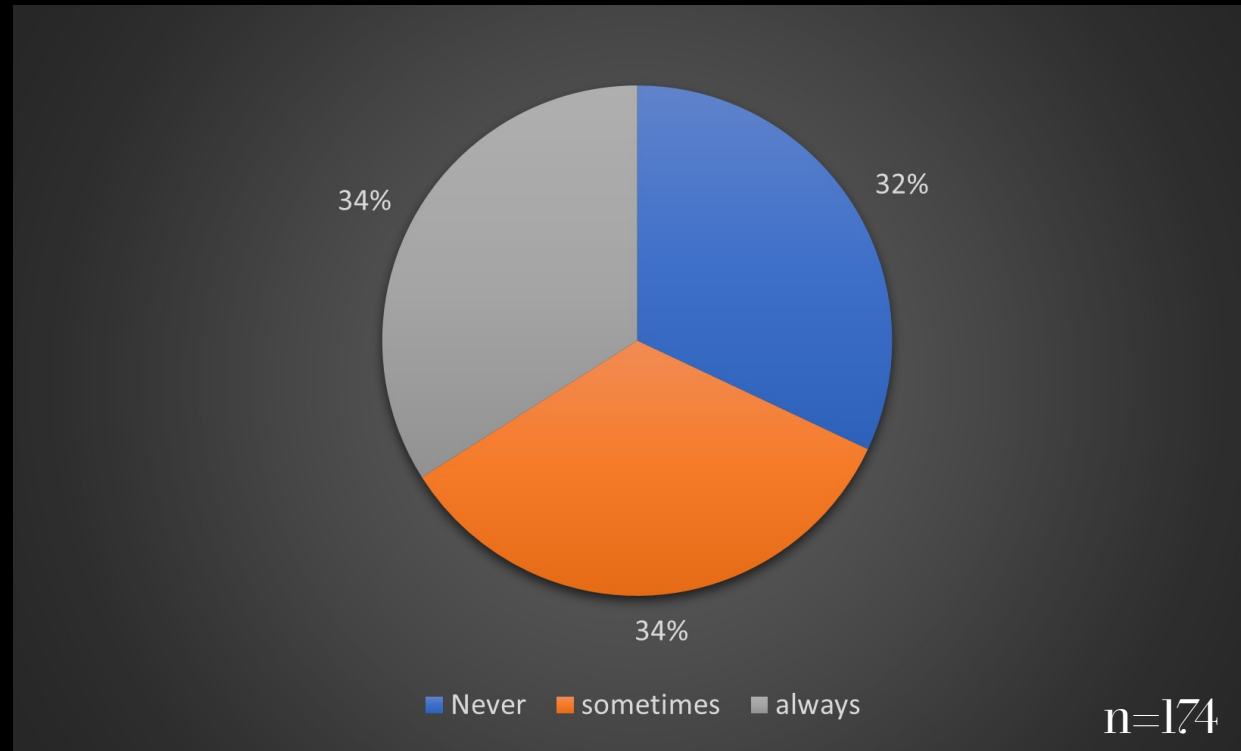


WHAT RESULTS DID WE SEE?

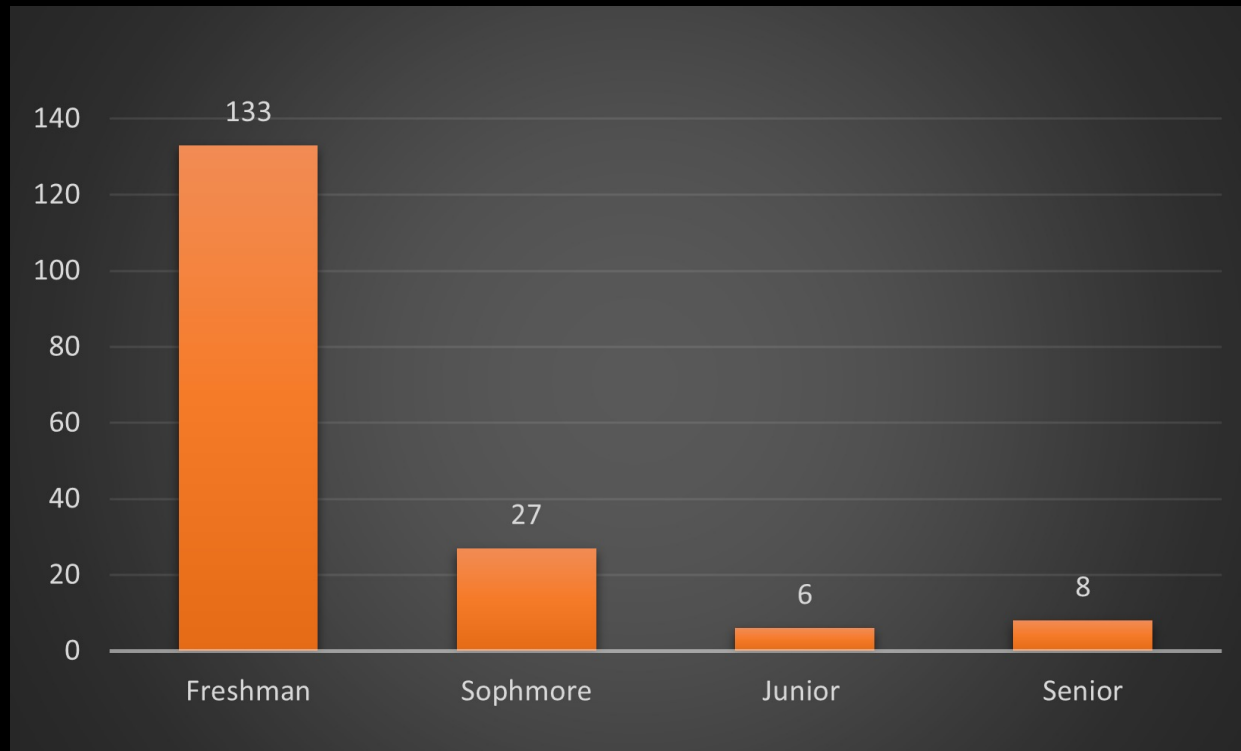


Fewer emails to faculty

When working with LAs, we often had discussions on things other than math that were helpful.



What is your current year?



ADDITIONAL CONSIDERATIONS

- Data from only two semesters.
- Students may have just gotten over the behavioral inertia from covid.

QUESTIONS?
SUGGESTIONS?



THANK YOU

