TUTORING IS BAD

Gus Lipkin

PROBLEM AND ANECDOTE

PROBLEM

The tutoring system at Florida Poly is bad

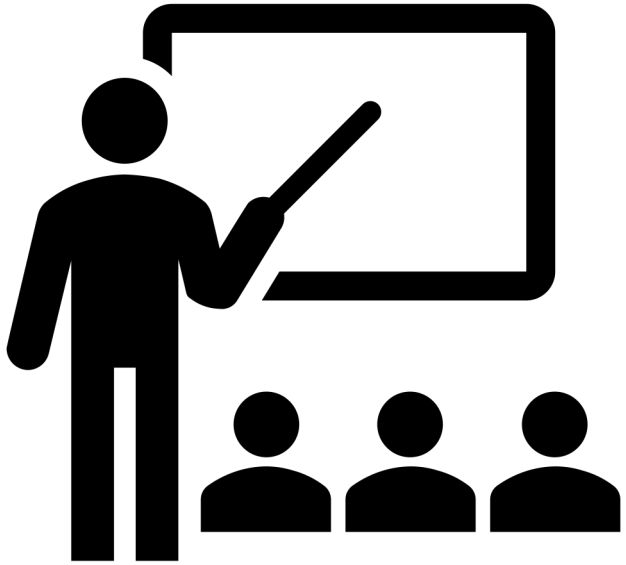
- Tutors make their own schedules
- There is not a tutor for every class
- Tutoring sessions can become crowded

ROOT CAUSE

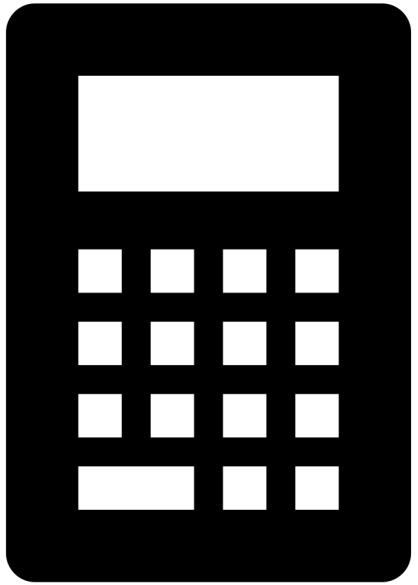
Each department pays their own tutors

- Each department is trying to maximize class coverage in their own department
- Each department is trying to maximize the number of students that can attend tutoring
- No department wants to pay for tutors for another department

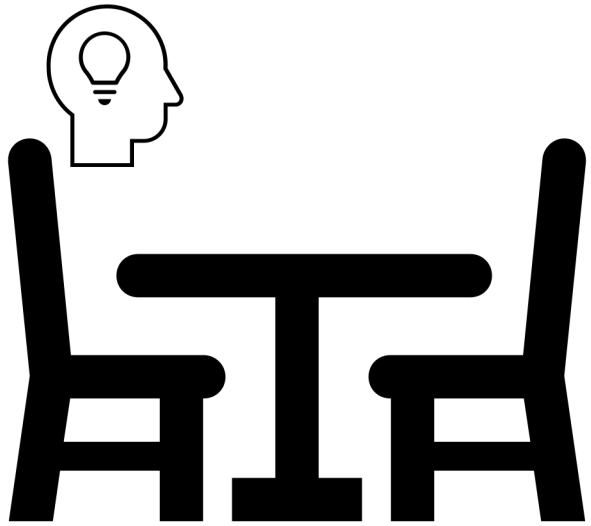
ANECDOTE



THIS IS GUS TAKING STATS I



THIS IS GUS ONE WEEK BEFORE HIS MIDTERM



THIS IS GUS AT TUTORING
EIGHT HOURS
BEFORE THE EXAM

THIS IS GUS ASKING DR BUNN WHERE THE STATS TUTOR HAS BEEN

THIS IS GUS TAKING A CRASH COURSE IN STATS I FROM DR BUNN

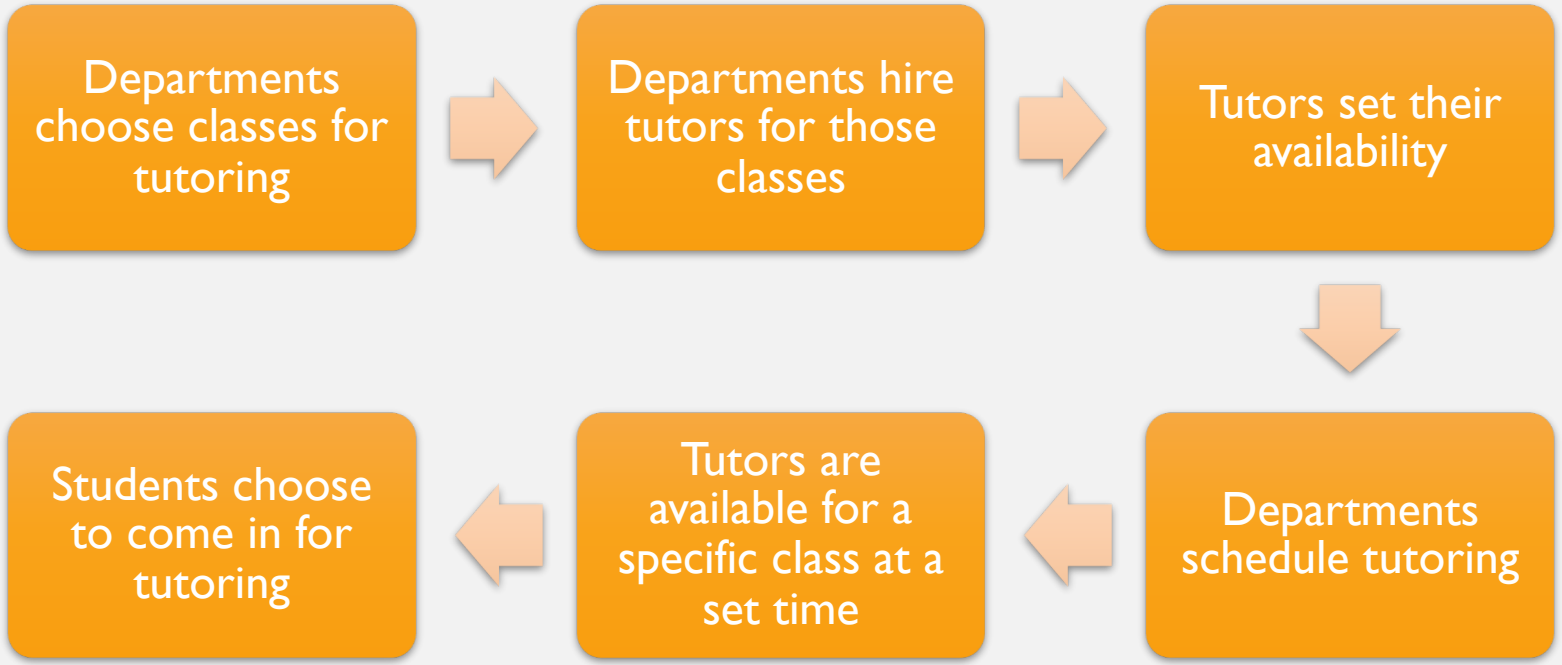
THIS IS GUS BARELY PASSING HIS EXAM

THE STATE OF TUTORING TODAY

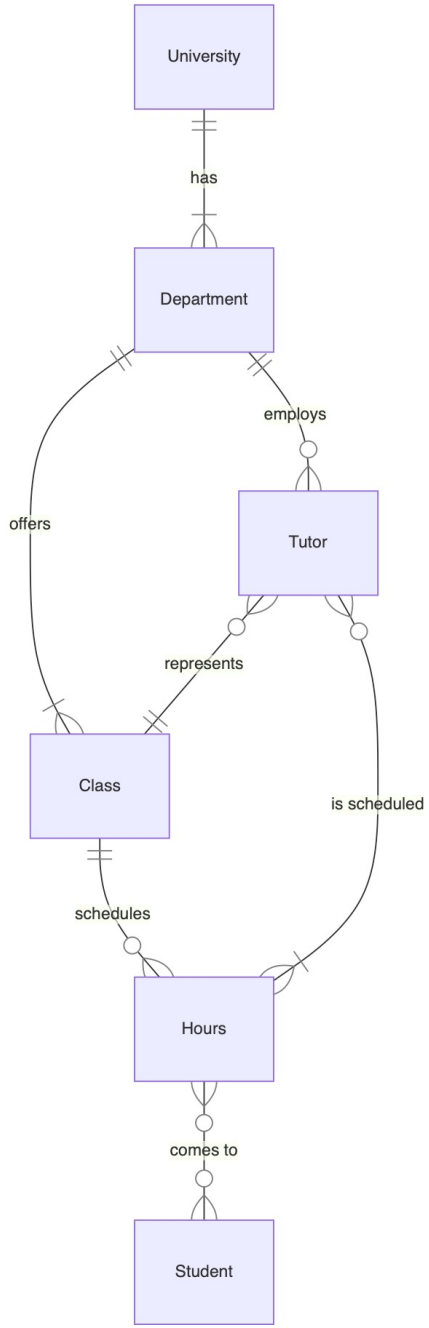
DESCRIPTION

- Some courses offer pre-scheduled group tutoring with tutors

THE CURRENT TUTORING MODEL



AS AN ENTITY RELATIONSHIP DIAGRAM



ICKY MATH

- $C = 10dc_d t_c h_t = \sum_1^d \sum_1^c \sum_0^t 10h_t$
- $TH = {}^{10h_t}/_{B_d}$
- $SH = {}^{\sum_1^c \sum_0^t 10h_t}/_{\sum_1^d B_d}$

- To maximize student hours:
  - Minimize tutor overlap
  - Maximize the number of classes that individual tutors can tutor for

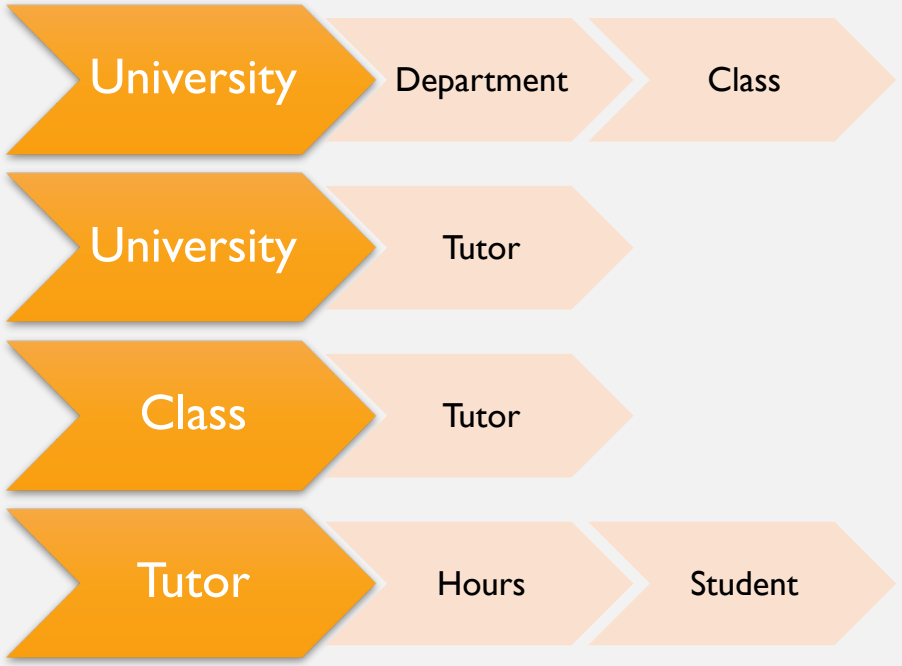
POSSIBLE ALTERNATIVES

A ONE-ON-ONE TUTORING MODEL

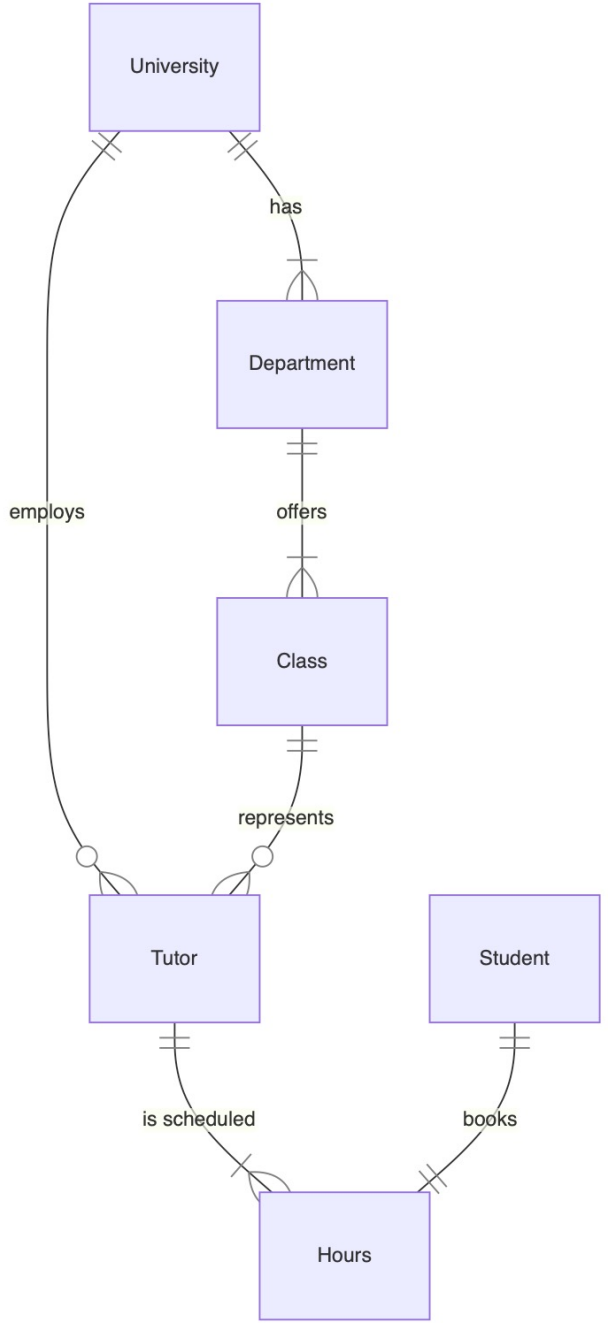
DESCRIPTION

- Tutors are knowledgeable in a variety of subjects
- Students book time with a tutor for a specific class

A ONE-ON-ONE TUTORING MODEL



AS AN ENTITY RELATIONSHIP DIAGRAM



ICKY MATH

- $C = \sum_0^t 10h_t$
- $SH = TH = {}^{10h}/_{B}$

- To maximize student hours:
  - Maximize the number of tutors
  - Maximize the number of classes that each tutor covers

A HYBRID TUTORING MODEL

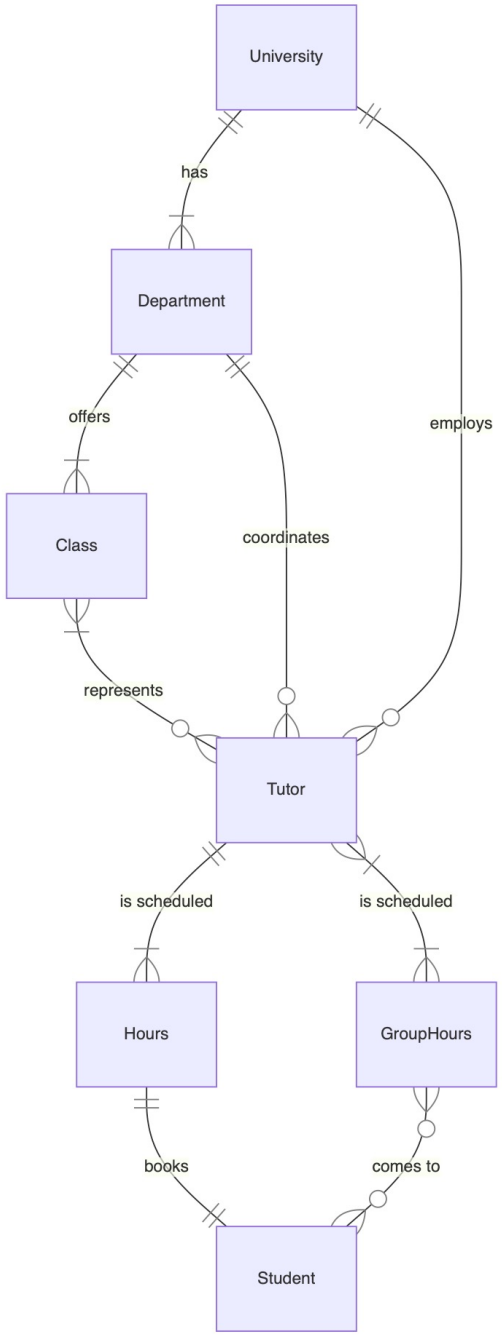
DESCRIPTION

- Combine a group tutoring and one-on-one tutoring model
- For high demand courses, there are scheduled tutoring sessions
- For high and low demand courses, students can schedule time with a tutor

A HYBRID TUTORING MODEL

- I tried to make a flowchart but it's just easier to show you the ERD

AS AN ENTITY RELATIONSHIP DIAGRAM



ICKY MATH

- $SH = {}^{10h_t + \sum_1^c \sum_0^t 10h_t}/_{B}$

- To maximize student hours:
  - Maximize group hours for popular classes such as Calc, Physics, and Intro to Programming
  - Maximize the number of classes that individual tutors can tutor for

CONCLUSIONS

THIS IS A DIFFICULT PROBLEM TO TACKLE

- Without sufficient proof that working together will save money and help students, no departments will want to pool resources
- I don't know how to do enough of the theoretical math to convince anyone

A HYBRID MODEL IS PROBABLY BEST

- You get the best parts of group tutoring and one-on-one tutoring
- It has potential to be at least as efficient as group tutoring

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