


**USING ONLINE DISCUSSION FORUMS TO  
ENHANCE STUDENT ENGAGEMENT**

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# OUTLINE

- Background
  - Issues
  - Intervention
  - Results
  - Future goals
  - Questions
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# BACKGROUND

- South University is an open-enrollment private institution.
  - Many students work full time during the day, and take night classes to advance their credentials.
  - Non traditional students , who start studies after being absent from school for a long time.
  - 11-weeks courses.
  - Day classes meet twice a week, and evening classes meet only once a week.
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# ISSUES

- Night classes meet only once a week, 6 – 9:50pm.
- Some student cannot come to campus for help due to their work schedules.
- Teachers find it difficult to cover all the material in fast pace classes.


# INTERVENTION

- Started Online discussion forums in a Statistics class.
  - Students could earn two extra credit points by posting a question in the discussion area, or by answering their class mates' questions.
  - Students participated very actively to ask questions, help each other, and schedule study sessions.
  - Most students asked questions and answered their class mates' questions on the weekends.
  - It helped instructor to identify the concepts that were challenging for the students.
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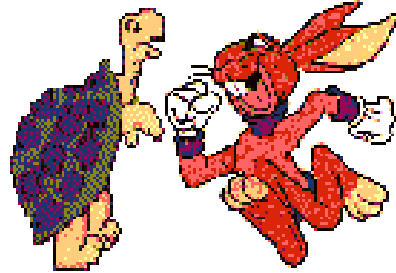
# RESULTS

<u>Statistics course</u>	<u>Final Exam Average</u>
Summer 2012 (without Discussions)	69.6%
Fall 2012 (with Discussions)	78.1%

# TEACHERS' TRAINING ON ONLINE DISCUSSIONS

- In Fall 2012, 22 teachers received one-hour training on how to create online discussion forums.
  - Five teachers started using the discussion in their classes.
  - Two math teachers started collaborating with each other.
  - Relevant puzzles and brain-teasers were added in Algebra discussion forums.
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# DISCUSSIONS QUESTION IN INTERMEDIATE ALGEBRA CLASS



Haretown and Tortoiseville are 32 miles apart. A hare travels at 7 miles per hour from Haretown to Tortoiseville, while a tortoise travels at 1 miles per hour from Tortoiseville to Haretown.

If both set out at the same time, how many miles will the hare have to travel before meeting the tortoise en route?

<http://www.syvum.com/teasers/>





Eight dashing knights are in love with kingdom's princess. Starting on January 1, the first knight visits the princess every day. The second knight visits the princess on January 2 and every second day thereafter. The third knight visits the princess on January 3 and every third day thereafter. The pattern continues for each of the 8 knights. What is the first day on which all 8 knights visit the princess?

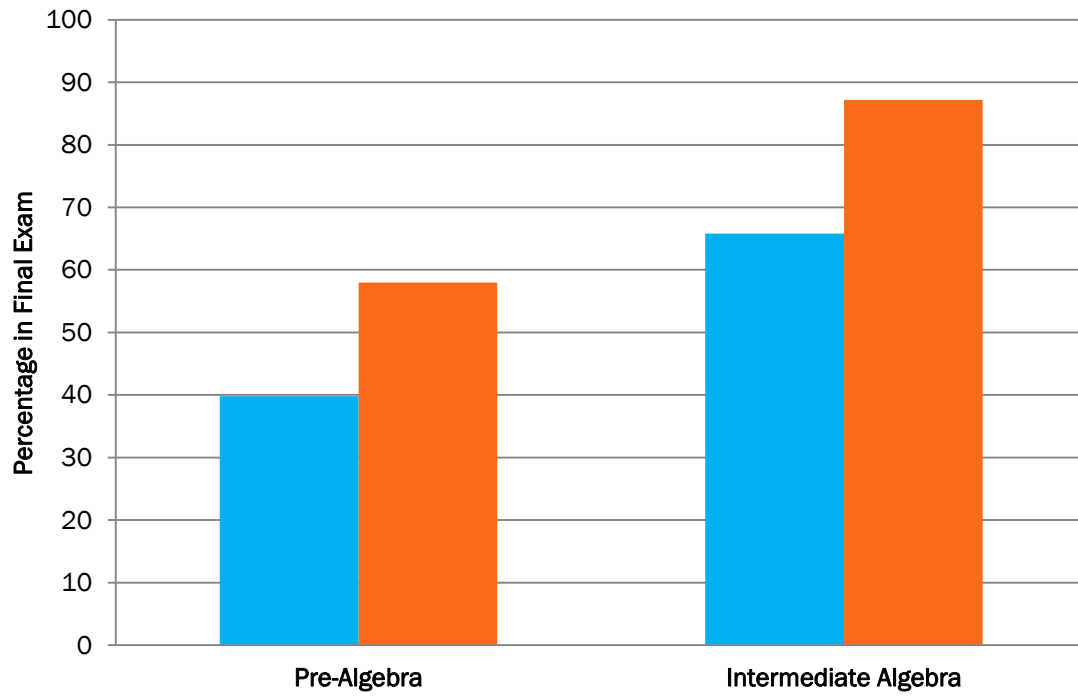
# DISCUSSION FORUMS IN INTERMEDIATE ALGEBRA CLASSES

<u>Intermediate Algebra Course</u>	<u>Final Exam Average</u>
Spring 2012 (Without discussions)	61.6%
Summer 2012 (Without discussions)	65.0%
Fall 2012 (Without discussions)	68.8%
Winter 2013 (With discussions)	87.2%

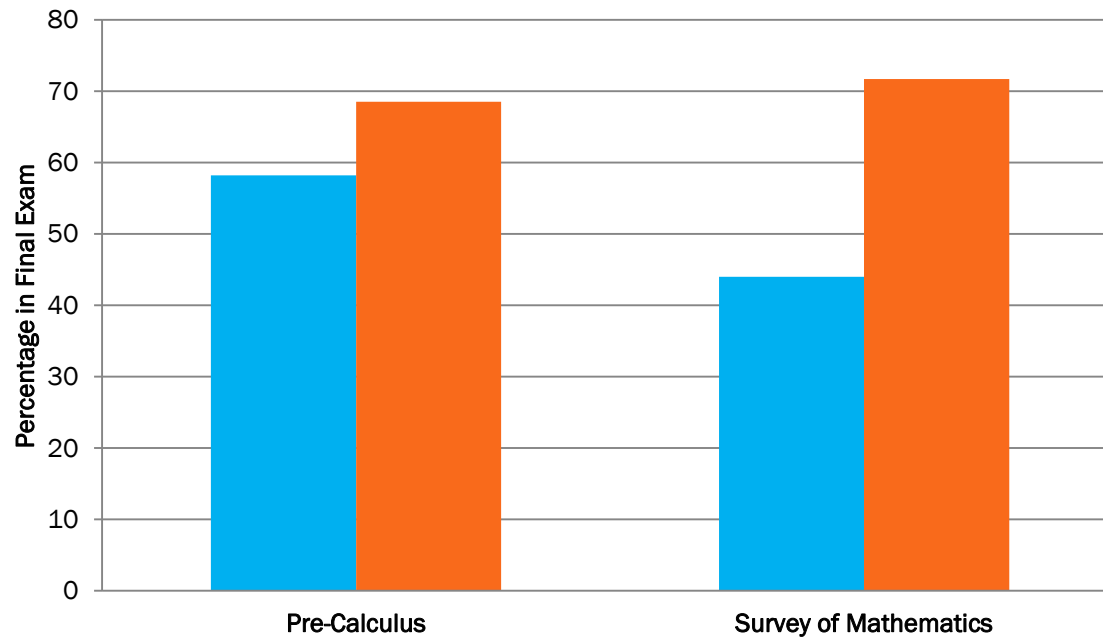
Discussion areas that included brain teasers, had higher participation rate.



## Instructor A



## Instructor B



## DISCUSSION FORUMS IN PRE - ALGEBRA AND PRE-CALCULUS CLASSES

- Student participation was low in both classes.
- Discussions forums did not include brain teasers and puzzles.
- Pre-Algebra students had log-in issues.



# CONCLUSIONS

Class discussion enhance students' engagement and achievement.

Students were more involved when discussions forums included relevant brain teasers, puzzles and pictures.

They like to see the applications of classroom knowledge in their everyday life, area of study, and work.



# FUTURE DIRECTION

Create interest in in-class and online discussions.

Help remedial students with log-in issues.

Determine if the results are consistent for all the teachers.



**COMMENT ON SYMMETRY OF TAJ MAHAL. CAN YOU FIND THE AXIS OF SYMMETRY IN THIS PICTURE?**





**ANY QUESTIONS AND/OR IDEAS?**



$$\lim_{n \rightarrow \infty} (\textit{Thank you!})^n$$

