



## Using a Team-Based Online Simulation to Promote Undergraduate Student Learning Outcomes

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# About Me

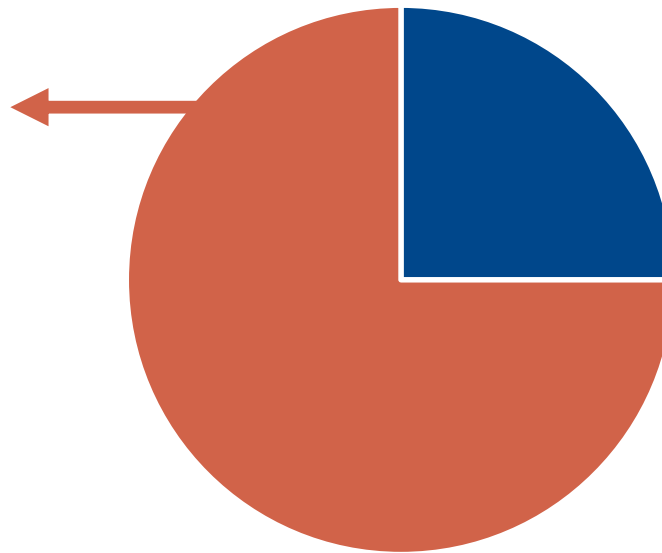
- Jonathan Orsini – PhD Student in Ag. Ed. And Communications
- University of Florida, College of Agricultural and Life Sciences
- Specializing in Leadership Development
- Used the Recurrence Signature Case Study (RSCS) in Fall 2018 and Spring 2019
- AEC 4434 – Communication and Leadership in Groups and Teams



# RSCS Purpose and Learning Objectives

Purpose of this study was to use an already existing Team-Based Online Simulation (marketed for MBA students) and determine if it could be applied towards teambuilding and leadership development.

**Appropriate business strategies to maximize customer, employee, and shareholder satisfaction**

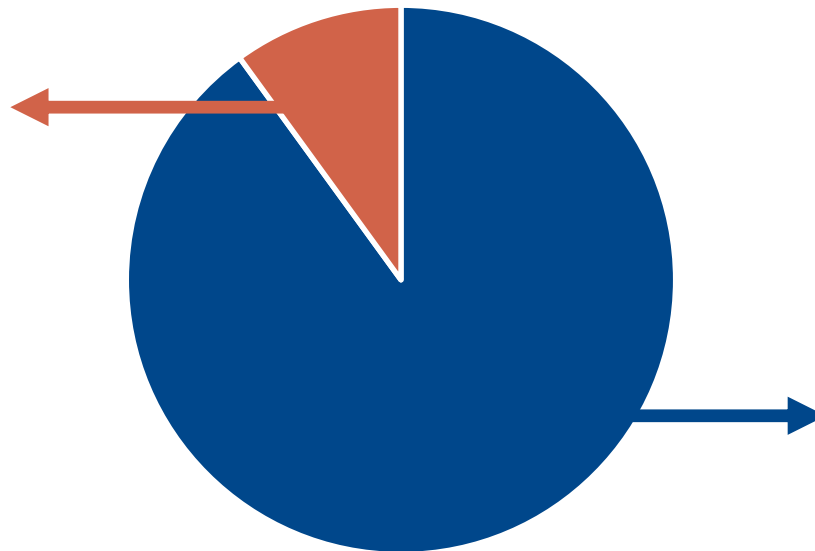


**Leadership skills and understand leadership styles**

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**Appropriate business strategies to maximize customer, employee, and shareholder satisfaction**



**Leadership skills and team cohesion**

# Class Structure

- Groups formed based on answers to short questionnaire designed by course instructor
- Groups stay together all semester
- In-class activities = cohesion
- Lectures on teamwork (based on 2 required text sources)
- Individual reflections
- Group projects



# What is the RSCS



## SELECT A ROLE

### CHIEF EXECUTIVE OFFICER

*The CEO is the highest-ranking officer in corporate management.*

### CHIEF OPERATING OFFICER

*The COO is responsible for the daily operation of the company.*

### CHIEF HUMAN RESOURCES OFFICER

*The CHRO is responsible for personnel management and internal communications.*

### CHIEF FINANCIAL OFFICER

*The CFO is responsible for managing a company's finances.*

### CHIEF MARKETING OFFICER

*The CMO is responsible for marketing and public relations.*

# Online Gameplay

- Student exercises
  1. Managing Crisis
    - a) Labor strike
    - b) Plane crash
    - c) Fuel shortage
    - d) Hostile takeover
  2. Budget allocations
  3. Support projects
- Time control



# Reviewing Student Decisions

## CEO DECISION - Olivia Stultz:




For more than 18 months, you have been trying to reach a contract settlement agreement with the ramp workers, whose job is to handle baggage and guide planes to and from terminal gates. High fuel prices, four years of losses, and stiff competition from low-cost carriers warrant decisive action. It has been tough times for the company. Last August, it cut 250 management positions in order to save \$45 million. A month later, your airline closed its Ozark maintenance facility, laying off 850 employees. Last month, an arbitrator decided on a contract with the pilots' union. Pay was slashed by 26 percent and employee health care contributions were increased. Liberty expects to save \$90 million to \$100 million. Ramp workers cost the company \$13 million annually. Their union has informed you they are done negotiating and will strike tomorrow. It is 9:30 p.m., and the executive team has been discussing options for the past 10 hours. There is a standing offer from RampWorks, a temporary staffing agency, to provide workers on short notice.

- A. **Cost: \$671,165 - Union Concession** ⓘ
- B. **Cost: \$286,732 - Strike and Stand** ⓘ
- C. **Cost: \$2,300,000 - Lay Off Ramp** ⓘ

### REASONING:

It's kinda cheap and helps brand image.

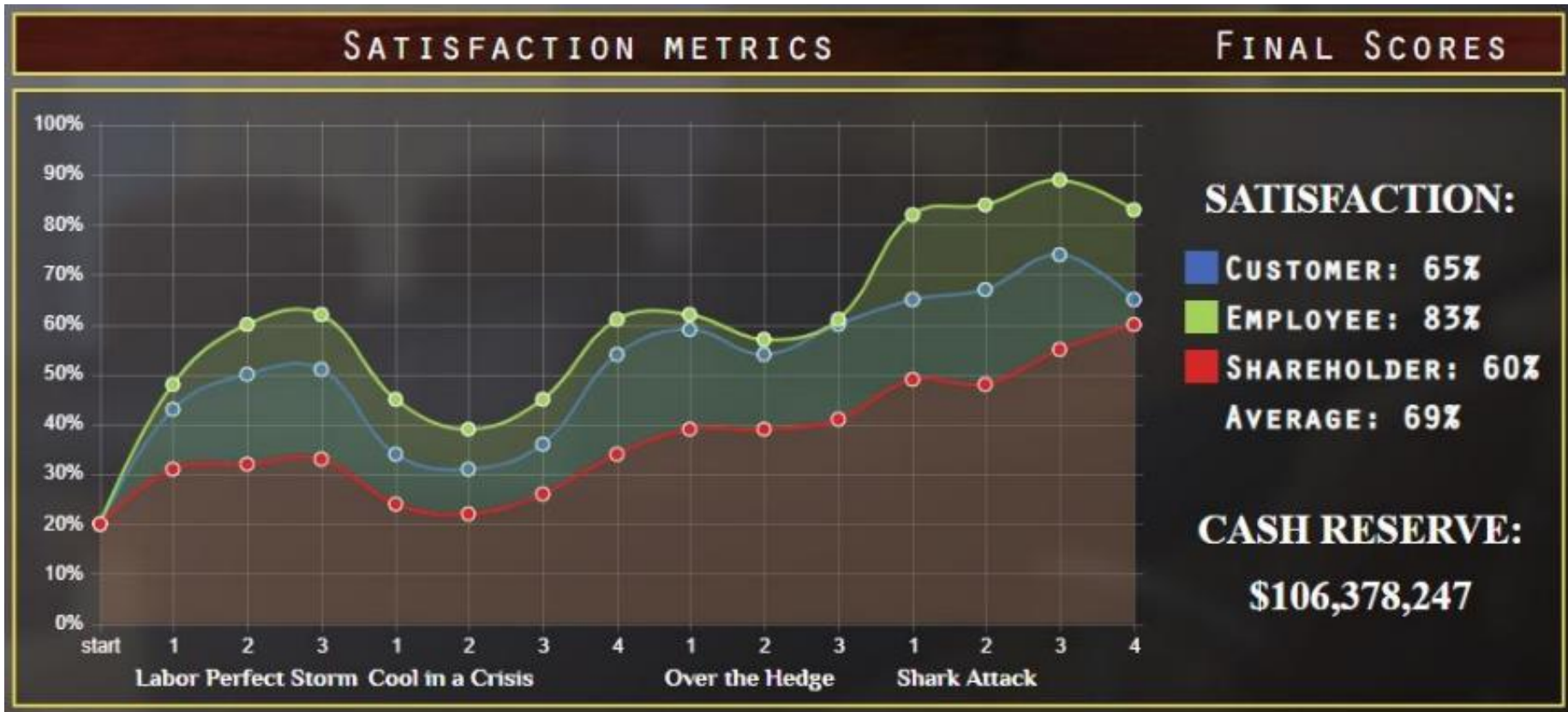
### OUTCOME:

 CUSTOMER: 26% (6%)       EMPLOYEE: 31% (11%)       SHAREHOLDER: 19% (-1%)

CASH RESERVE: \$104,328,835



# Tracking Performance



# Experiential Gaming Model

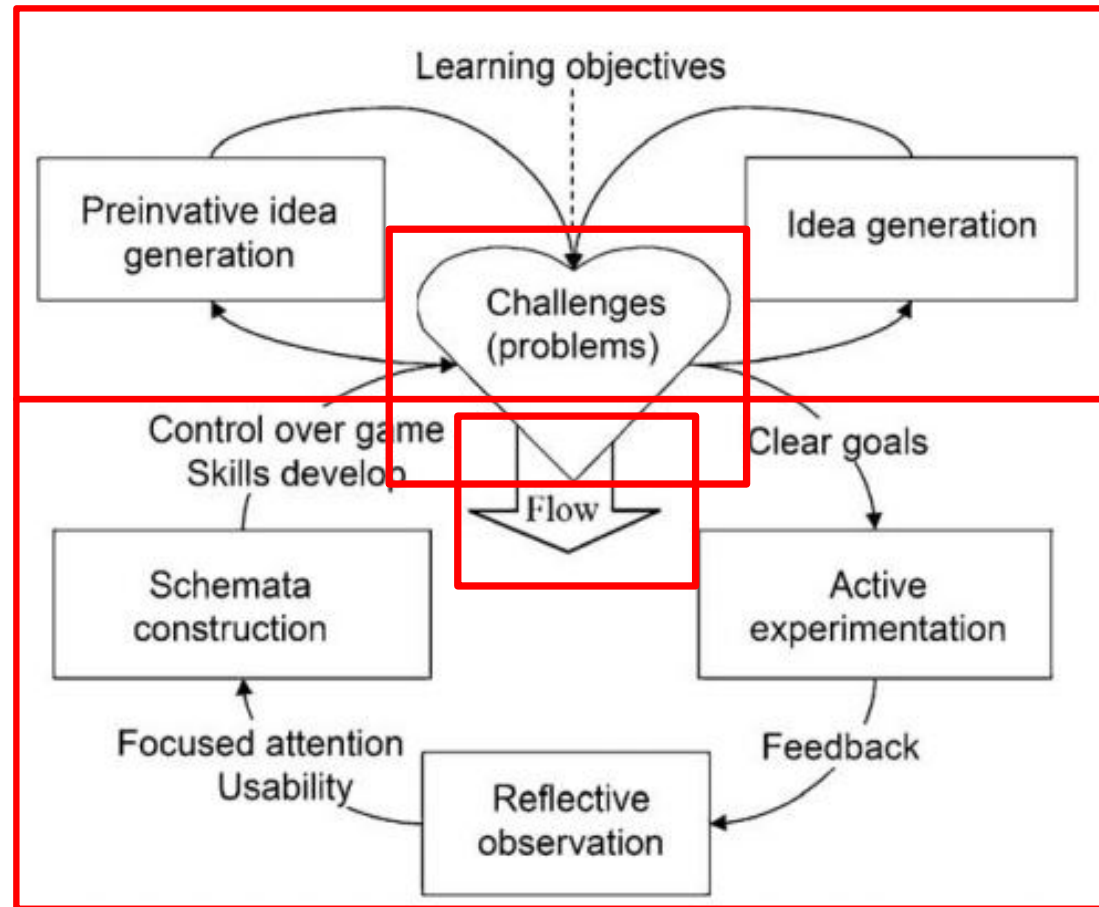
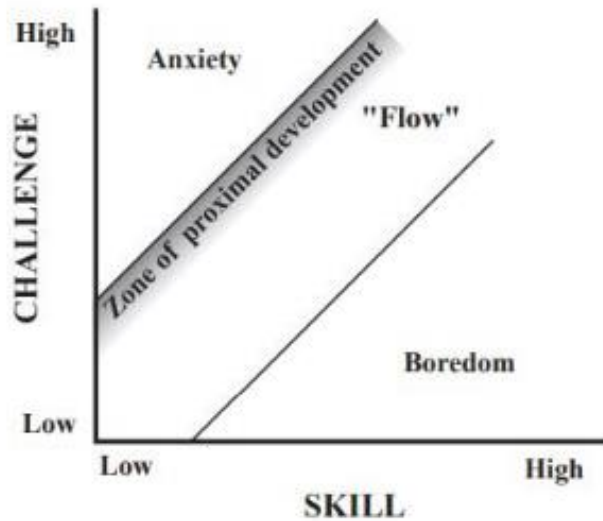


Fig. 3. Experiential gaming model.

# Experiential Gaming Model

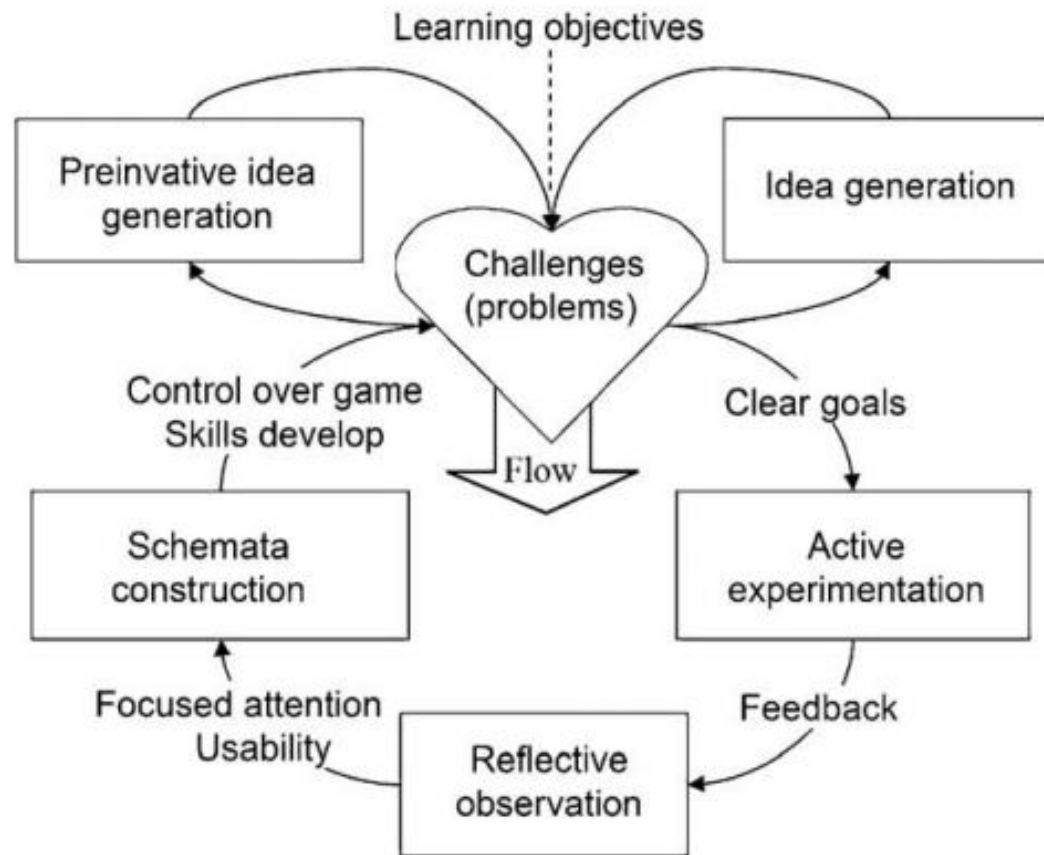
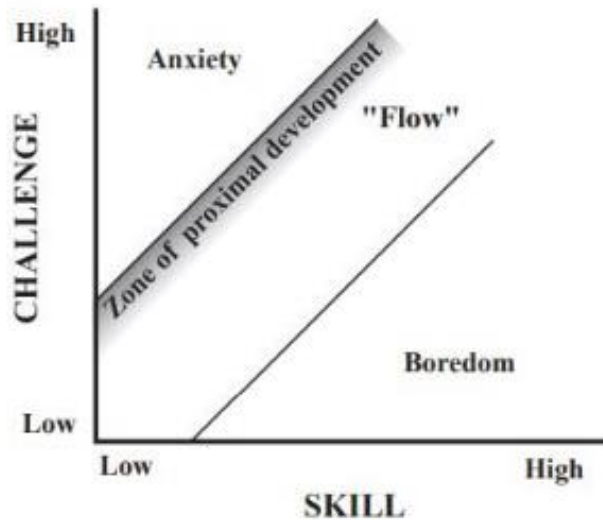
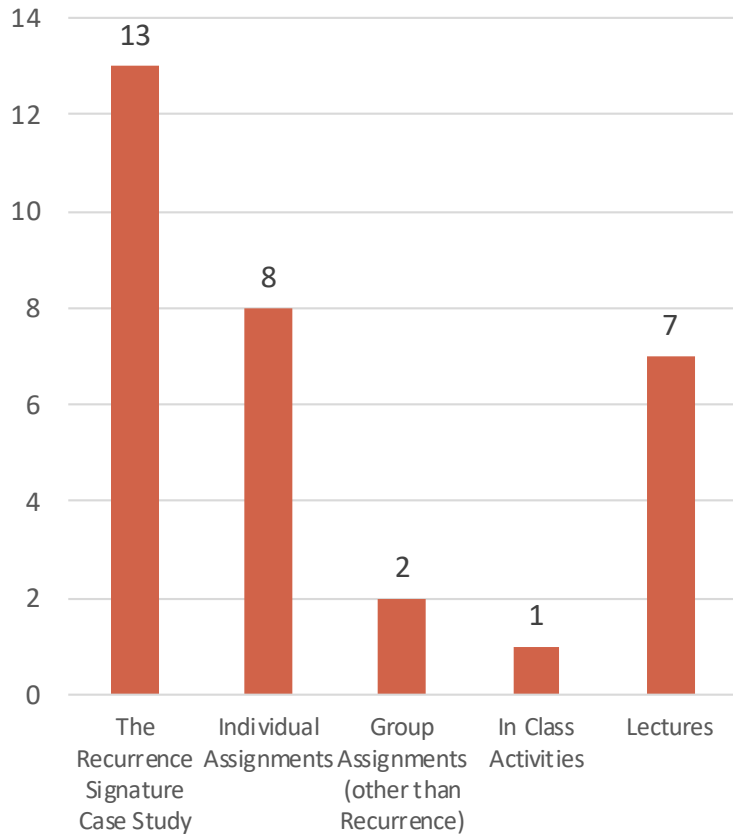


Fig. 3. Experiential gaming model.

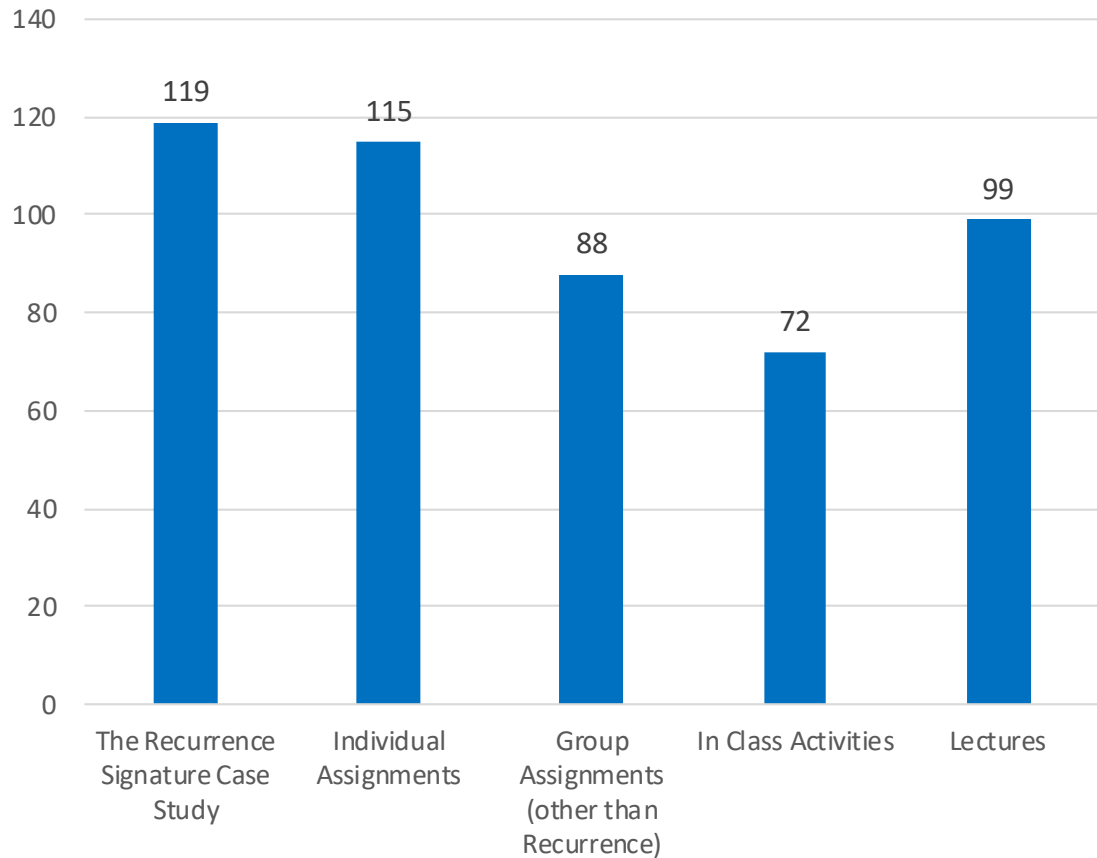
## Student Perceptions of the RSCS – Fall 2018 and Spring 2019

<p style="text-align: center;"><b>Questions</b></p> <p>1=Strongly Disagree, 2=Disagree, 3=undecided, 4=Agree, 5=Strongly Agree</p>	<p style="text-align: center;">Fall 2018 Post Test N=24</p>	<p style="text-align: center;">Spring 2019 Pre test N=33</p>	<p style="text-align: center;">Spring 2019 Post Test N=35</p>
I wish that more of my classes used simulations like the RSCS	75.0%	34.4%	54.3%
RSCS provided me insights into the challenges of working in teams	79.2%	87.9%	77.1%
RSCS strengthened the ability of my team to work together to solve problems	79.2%	87.9%	74.3%
I enjoyed participating in the RSCS	83.3%	78.9%	80.0%
RSCS helped me understand concepts discussed in AEC 4434	75.0%	66.7%	51.4%

### Student Number One Ranking by Assignment Type



### Cumulative Student Ranking Based on Perceived Importance of Task to Learning Outcomes in AEC 4434 Spring 2019



# Conclusions

- Further evaluation is needed to improve our understanding of RSCS impact
- Student feedback indicates that:
  - RSCS may contribute to building team cohesion
  - RSCS may help practice effective teamwork
  - Students self-report satisfaction with the RSCS experience
- Must connect material from class to RSCS – reflections, discussions, etc.
- Cost impacts student satisfaction
- Beware prior participants – reduces challenge

# Thank You!

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# Spring 2019 Student Feedback

- “The RSCS was a fun and unique program, different from anything else I have experienced in my four years of undergrad. **It helped by more easily put into practice the things that I was learning in class!**”
- “Very fun and good I really enjoyed The Recurrence Signature Case Study. **It allowed our team to develop closer relationships and put the class concepts we learned during lectures into play.** I got to know my teammates on a more personal level and enjoyed making decisions with them!”
- “I don't feel like I learned much from the case study itself, but **I certainly learned things trying to get it done.**”
- “Personally, I don't feel like I gained anything besides a good letter grade from playing this game. **The best part was getting together to hang out with my teammates.**”
- “I really enjoyed this class, but the case study seemed unnecessary at times. **Not everything was clear how it connected to what we are learning,** Because of this, it seemed silly and to lack relevance. **It did bring me closer to my team and helped us grow so it was beneficial in that aspect.**”
- “My honest opinion on the Recurrence Case study was that it was extremely **expensive** for not helping at all. I felt that I learned way more in class doing unique activities compared to the case study. With **very little effort,** our group was able to achieve the highest scores in the class, yet we have all agreed that it did not make us a better team, or better communicators.”