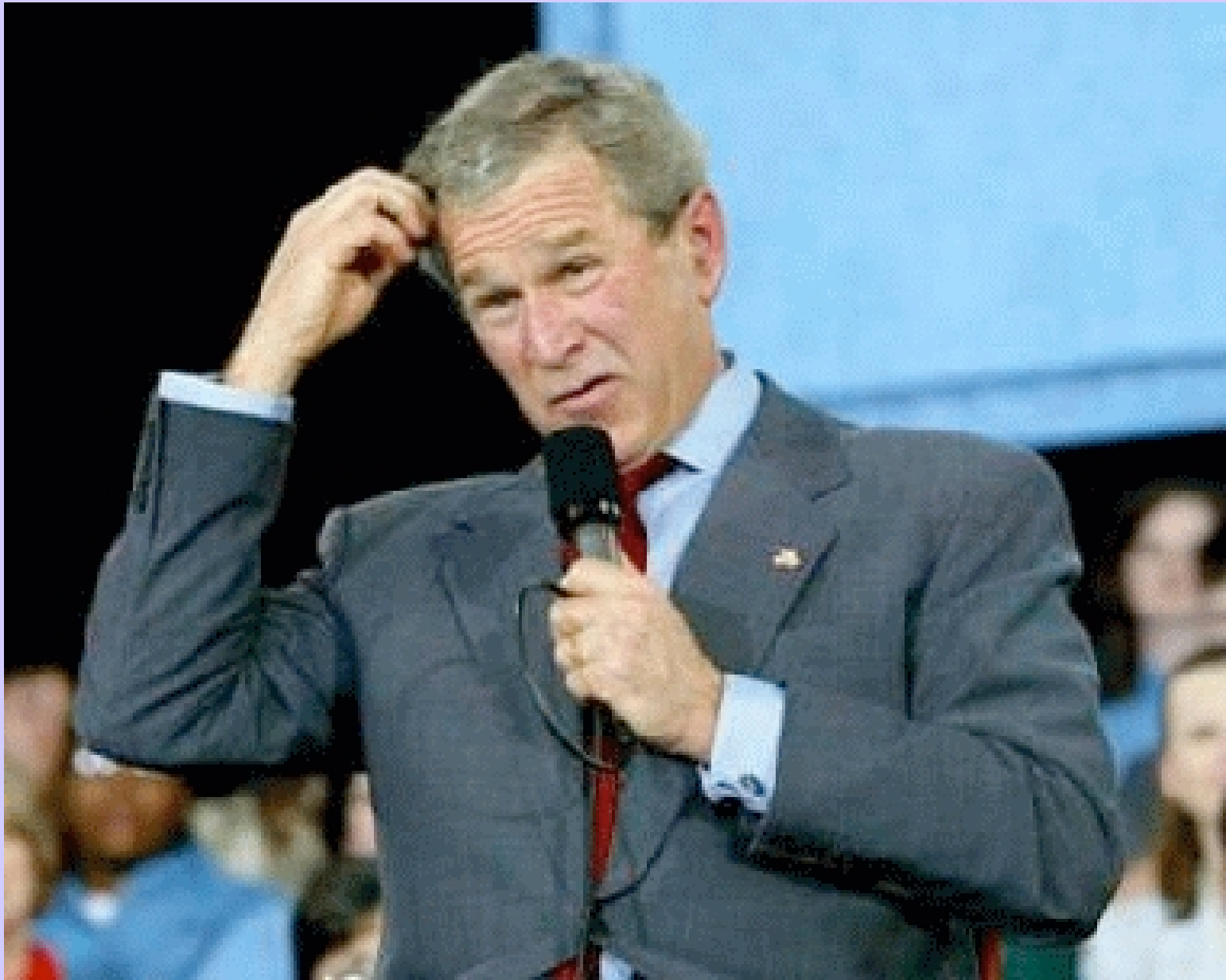


# Can students evaluate their own understanding?



Jessica Watkins  
Mazur Group  
AAPT summer meeting  
July 25, 2006



# Outline

Motivation

Methods

Results

Conclusion

# Motivation

*We thought...*

Clear lectures: good

Confusion: bad

*But,*

Interactive teaching methods = more ?'s

**“to wonder is to begin to understand”**

# Methods

Use the following scale to rate your comprehension of \_\_\_\_\_.

- 1 - I am totally lost (I really have no clue at all)**
- 2 - I am pretty confused -- many things don't make sense to me**
- 3 - Some aspects confuse me, but it's beginning to make sense**
- 4 - I understand it mostly, but I still have some questions**
- 5 - I think I have a solid grasp of the concept**

# Methods

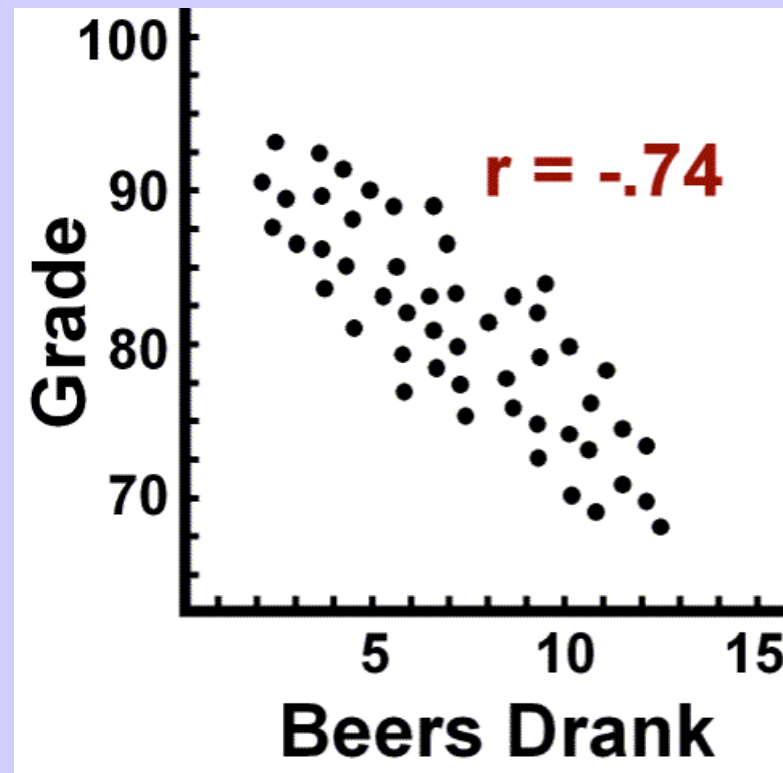
- Students rate their understanding throughout the learning process

- 2x {
- Pre-class reading
  - Lecture
  - Tutorial
  - Homework
  - Exams

- Compare rating with understanding

# Methods: Correlation

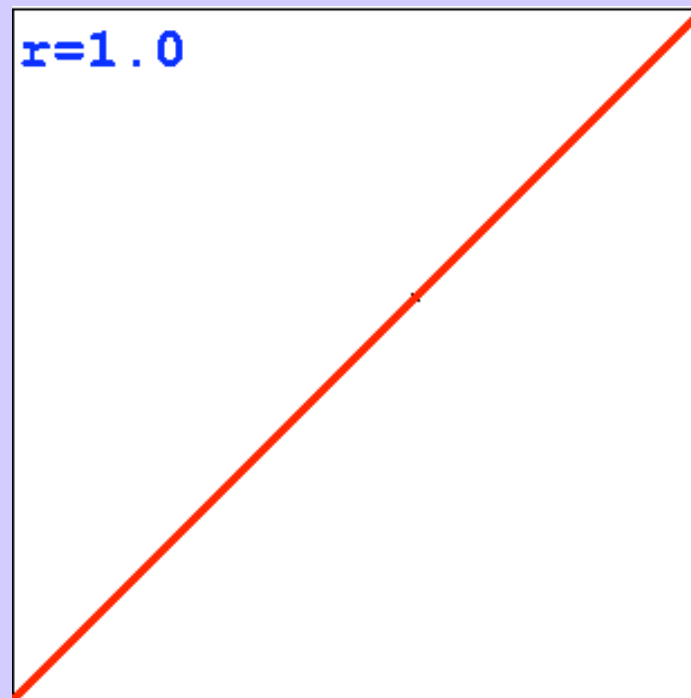
- Indicates strength and direction of a linear relationship





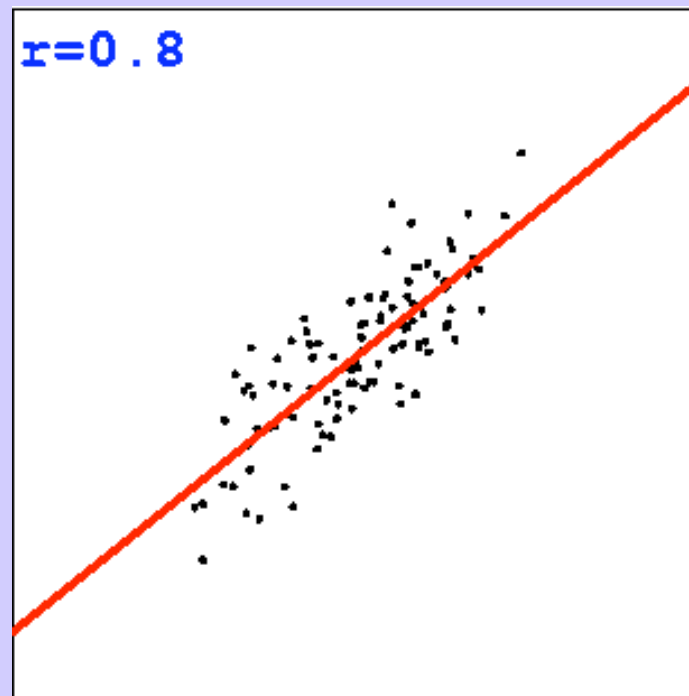
# Methods: Correlation

- Indicates strength and direction of a linear relationship



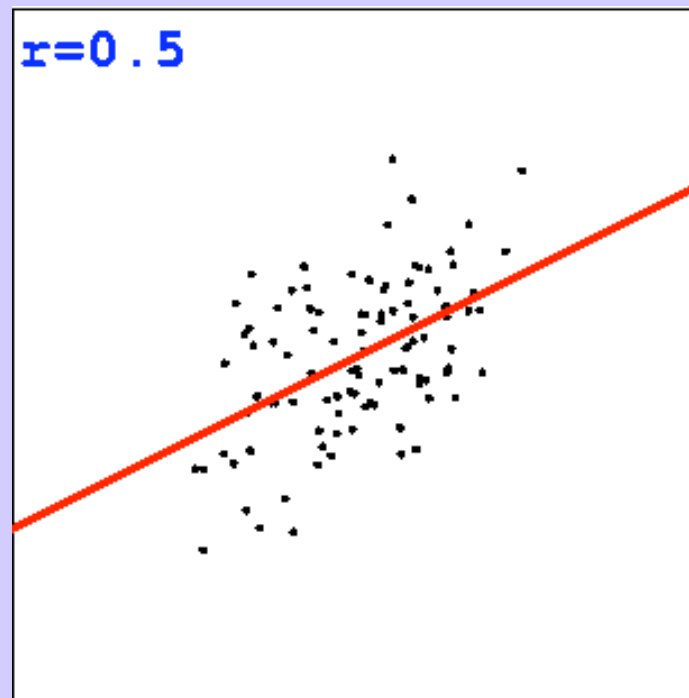
# Methods: Correlation

- Indicates strength and direction of a linear relationship



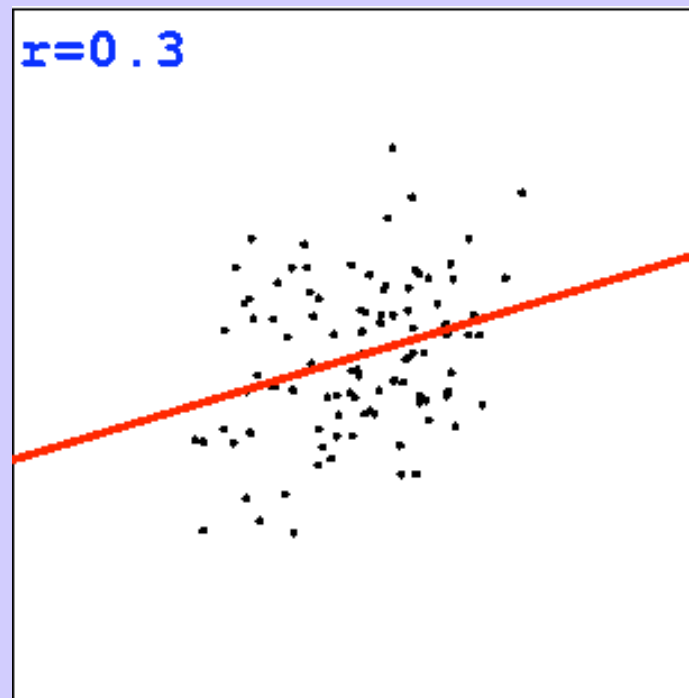
# Methods: Correlation

- Indicates strength and direction of a linear relationship



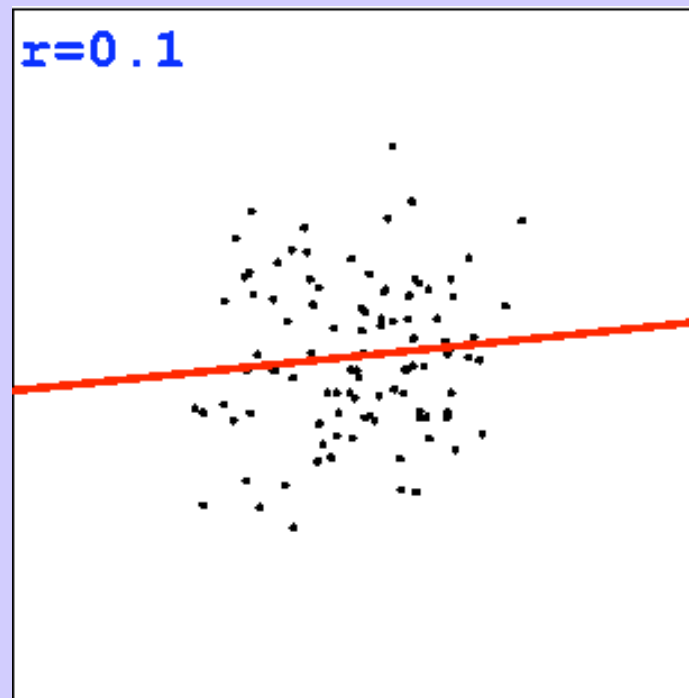
# Methods: Correlation

- Indicates strength and direction of a linear relationship

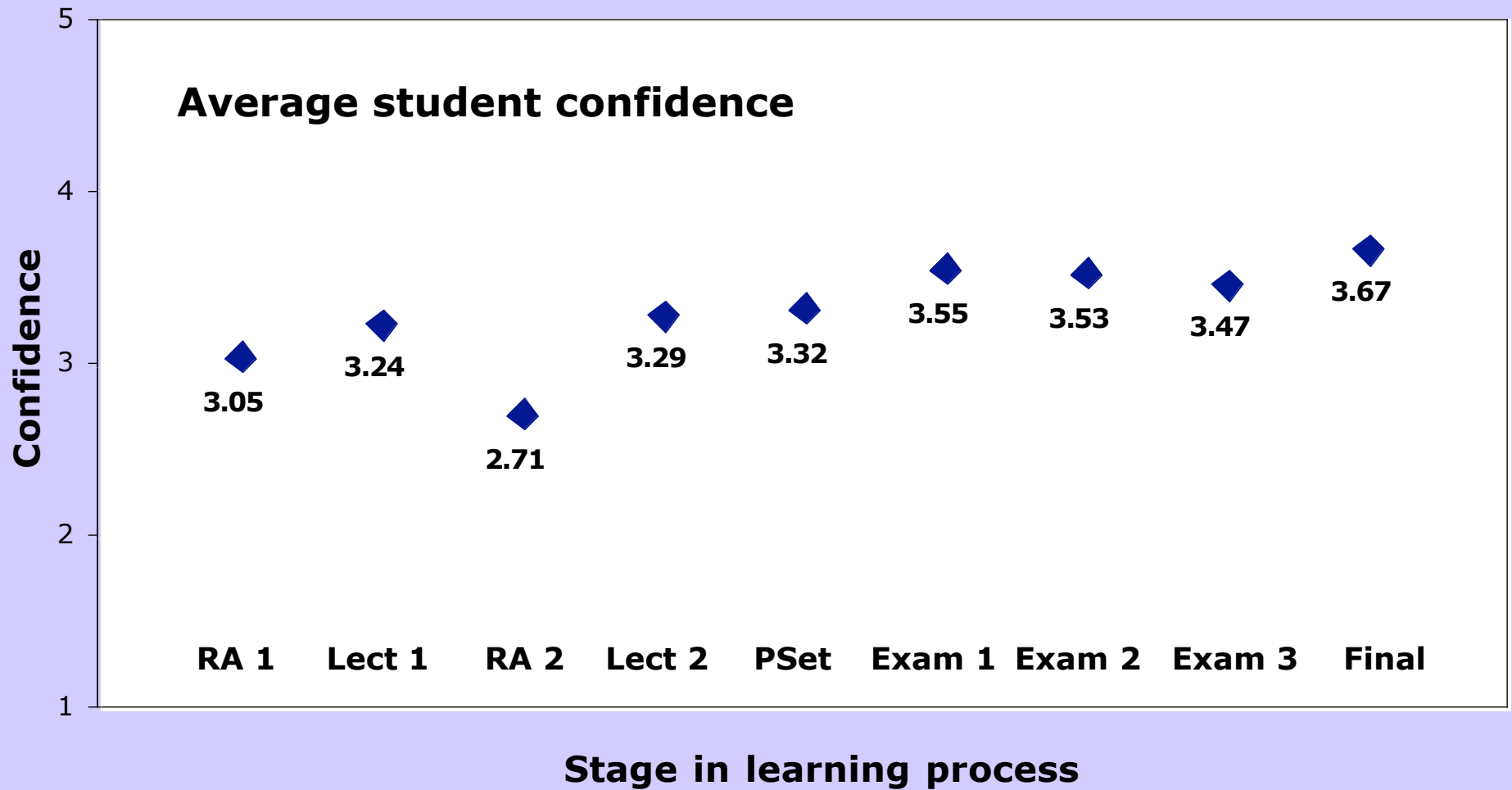


# Methods: Correlation

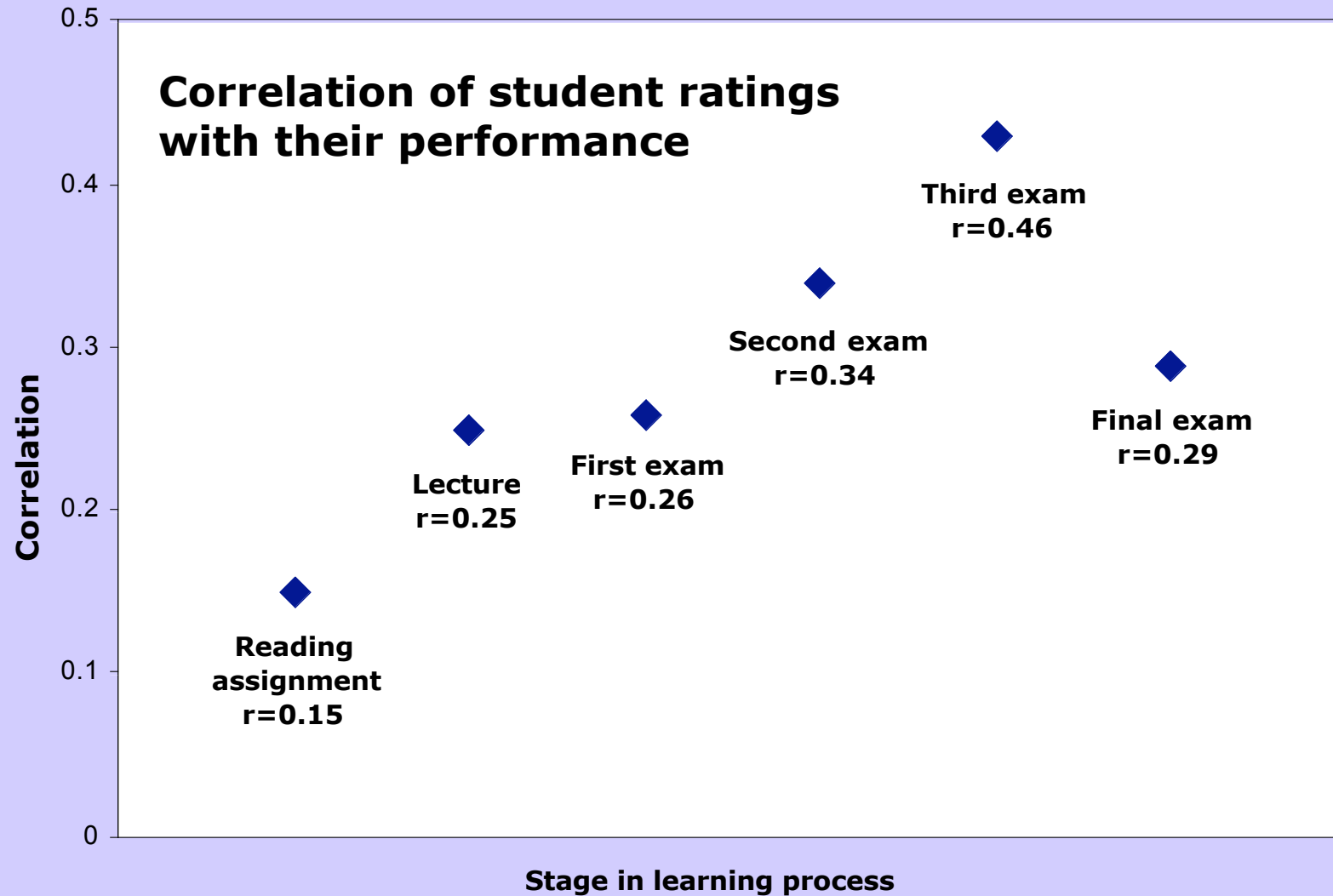
- Indicates strength and direction of a linear relationship



# Results



# Results



# Conclusion

Students are not good at evaluating their own understanding,

BUT, they get better with greater knowledge and more feedback!



# Thank you

Mercedes Lorenzo

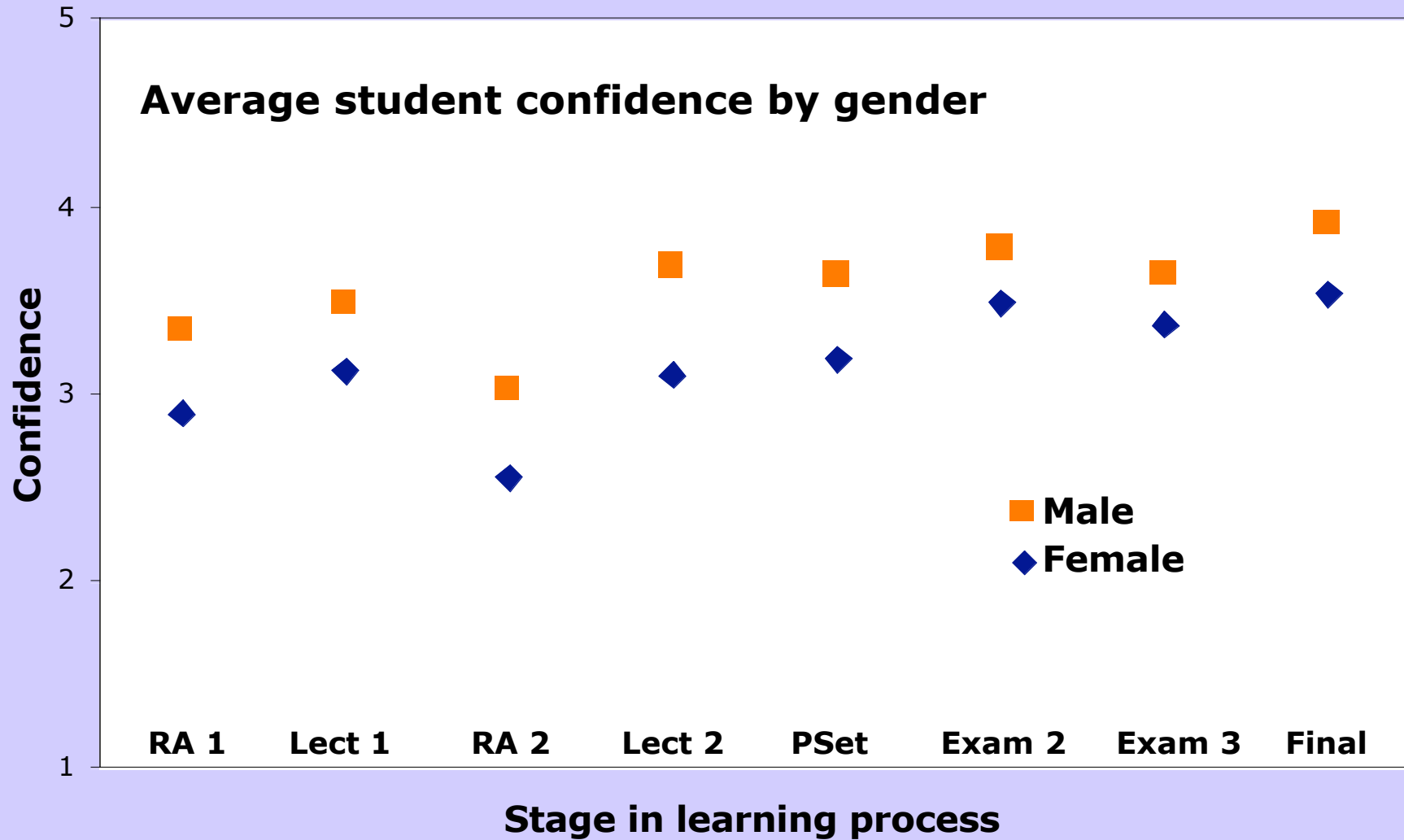
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# Results



# Results

