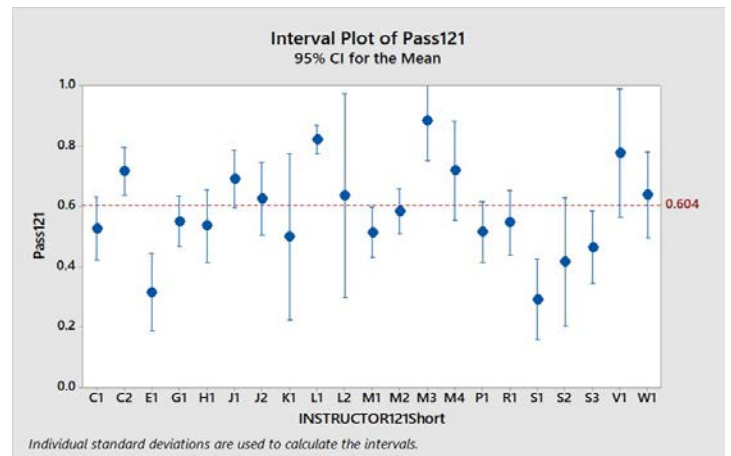
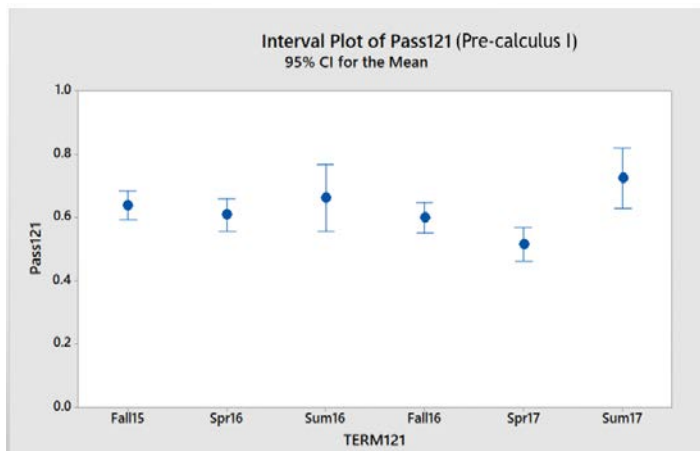


# USING DATA TO IMPROVE CURRICULUM ... AND EQUITY

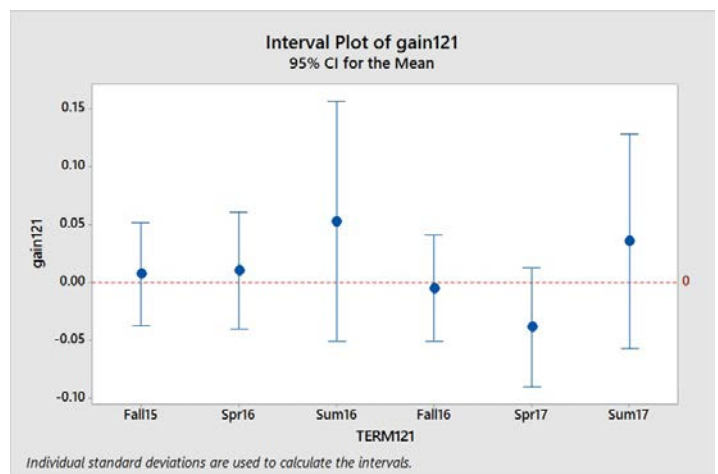
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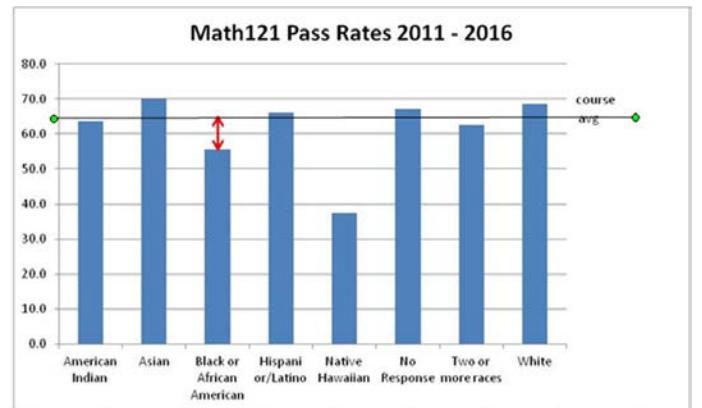
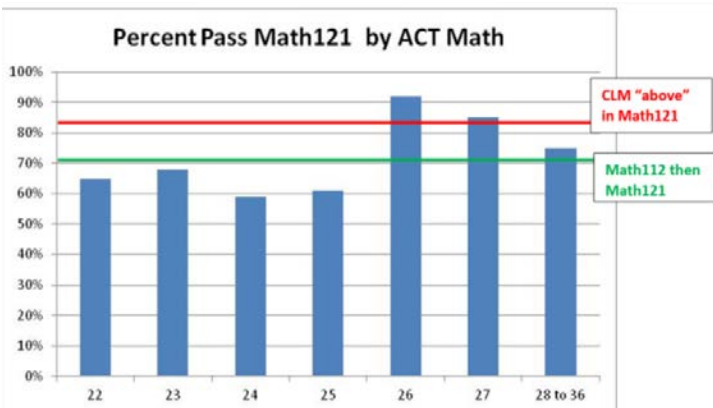
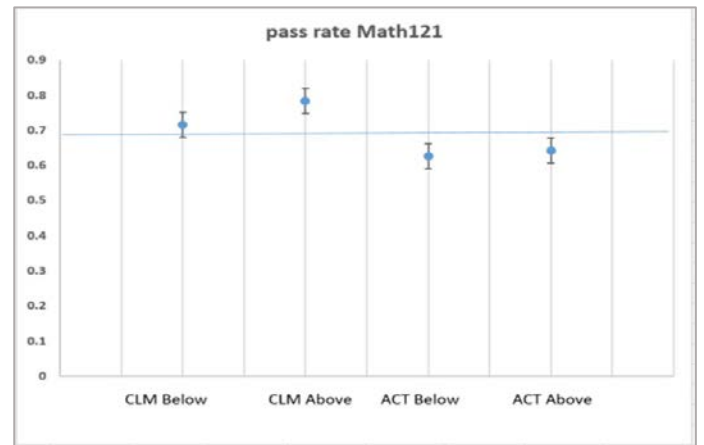
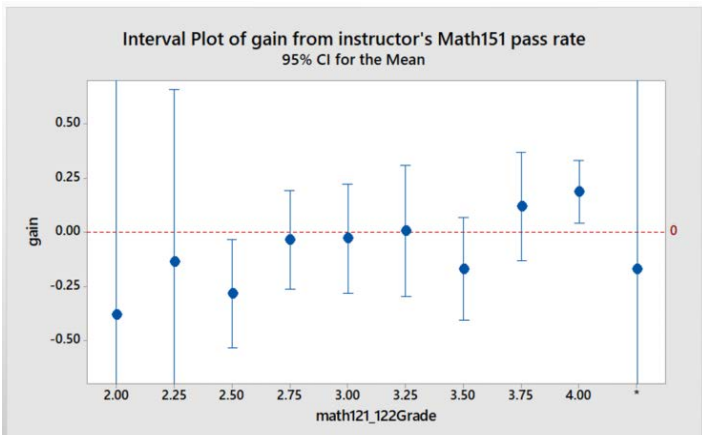
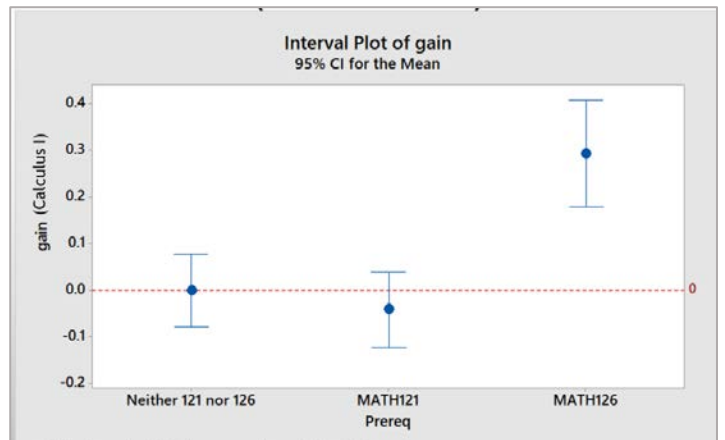
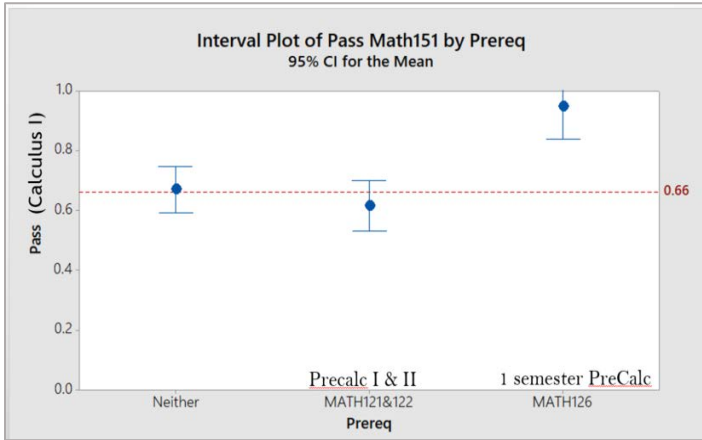
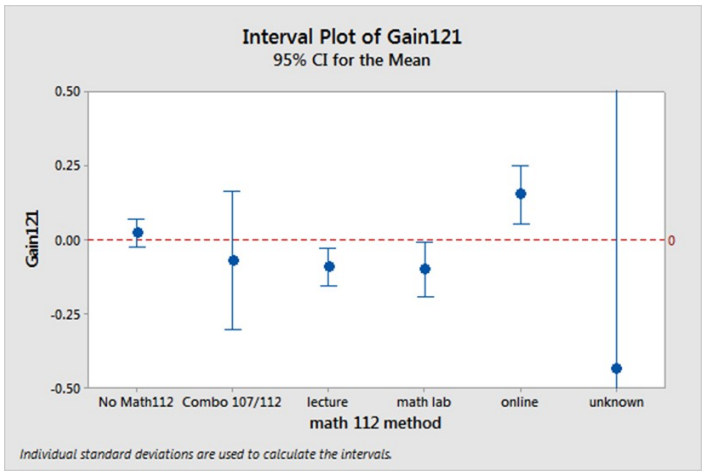
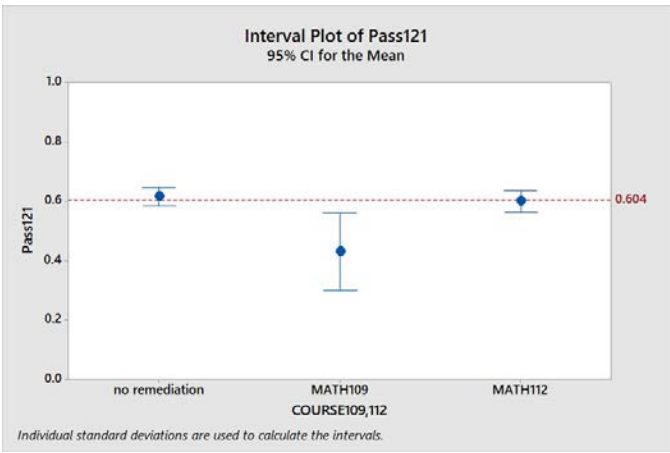
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NOVEMBER 10, 2017

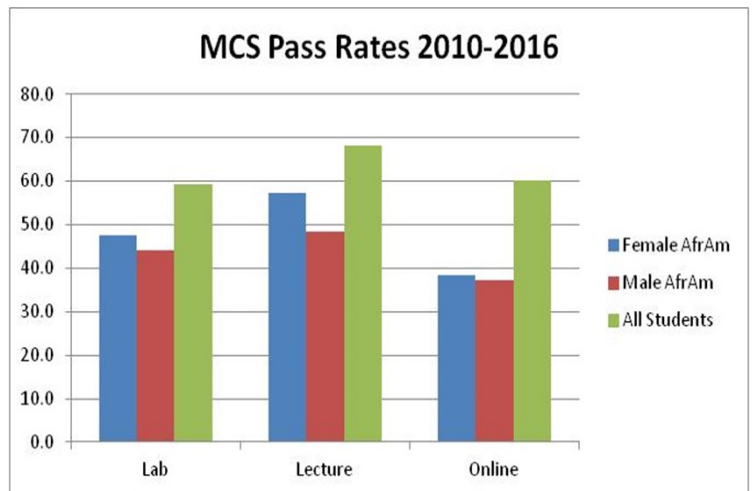
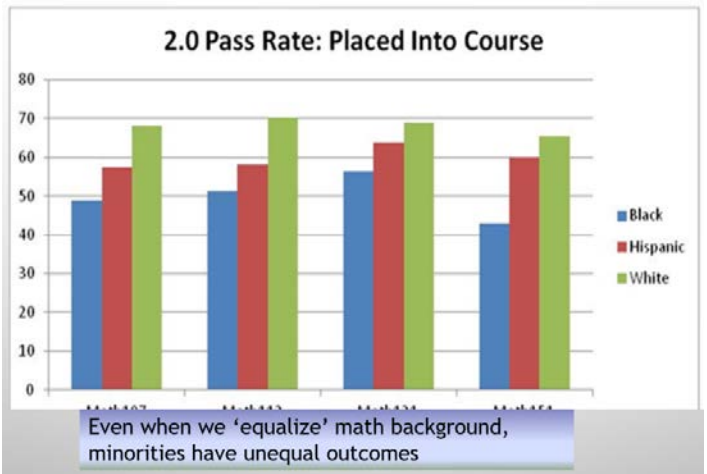
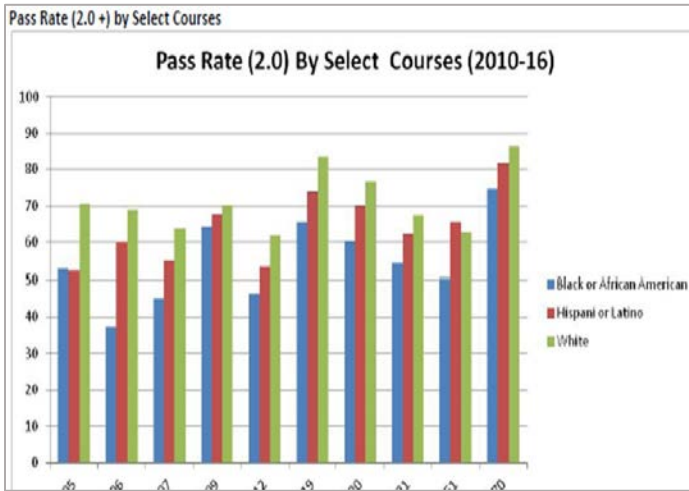


## MEASURING “INSTRUCTOR EFFECT”

- WITH SIGNIFICANT DIFFERENCES ... WE NEED A MEASURE OF THE EFFECT
- EACH INSTRUCTOR HAS A PASS RATE (OVER TIME) IN EACH COURSE ... THIS IS THE ‘EXPECTED VALUE’
- LOOK AT THE ‘GAIN’ (STUDENT OUTCOME VS EXPECTED VALUE)
- **EXAMPLE: HAD INSTRUCTOR WITH MEAN PASS RATE .62**  
**STUDENT WHO PASSED ... GAIN=+.38**  
**STUDENT WHO DID NOT PASS ... GAIN=-.62**

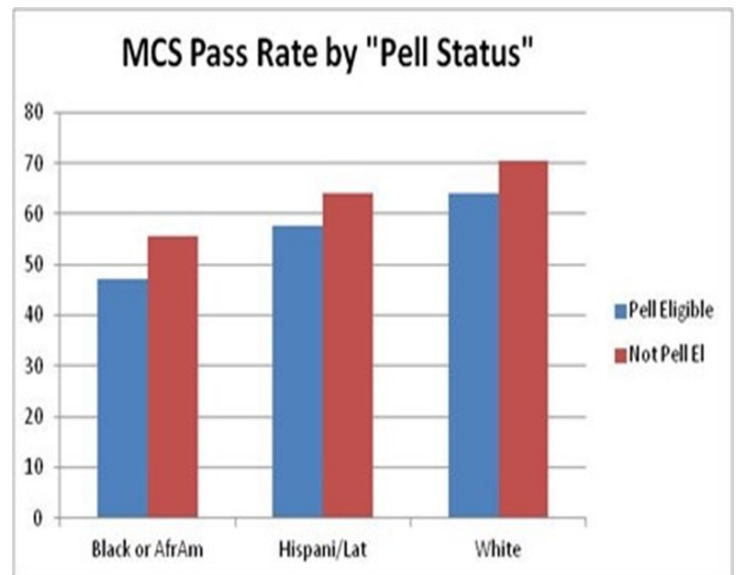






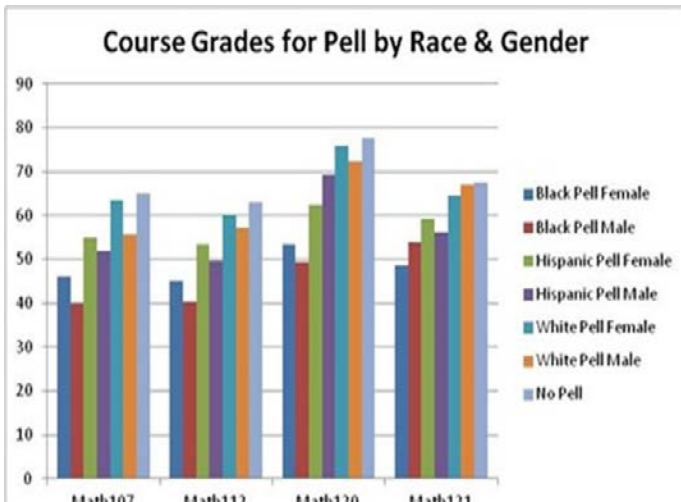
### WHY? FACTORS IN LOWER PASS RATES ...

- CULTURAL ... 'CRITICAL RACE THEORY' MIGHT HELP US UNDERSTAND THAT
- STEREOTYPE THREAT ... IS REAL, BUT IS VALIDATED ON INDIVIDUAL ASSESSMENTS (VERSUS COURSE LEVEL)
- POVERTY ... PLACES STUDENTS AT HIGHER RISK
- WE DON'T HAVE DIRECT MEASURES OF 'POVERTY'; THE VARIABLE WE HAVE IS "PELL ELIGIBLE" (FILED FAFSA AND HAD LOW OR NO INCOME)



## RESOURCES NEEDED

- A GOOD DATA EXTRACTION TOOL  
DATA EXTRACTION (DATA WAREHOUSING) IS AN INSTITUTIONAL COMMITMENT
- SOFTWARE FOR COMBINING SPREADSHEETS
- SOFTWARE FOR STATISTICS
- A STARTING LEVEL OF EXPERTISE
- SOME TIME (PROBABLY MORE THAN YOU THOUGHT BUT LESS THAN YOU WORRIED ABOUT)



## WRAP-UP

- OTHER QUESTIONS?
- JACK ROTMAN [ROTMANJ@LCC.EDU](mailto:ROTMANJ@LCC.EDU)

This handout AND the entire set of slides available  
at: <http://www.devmathrevival.net/?p=2872>