

# Income Effects on Concurrent Enrollment Participation

**The Case Study of  
UConn Early College Experience**

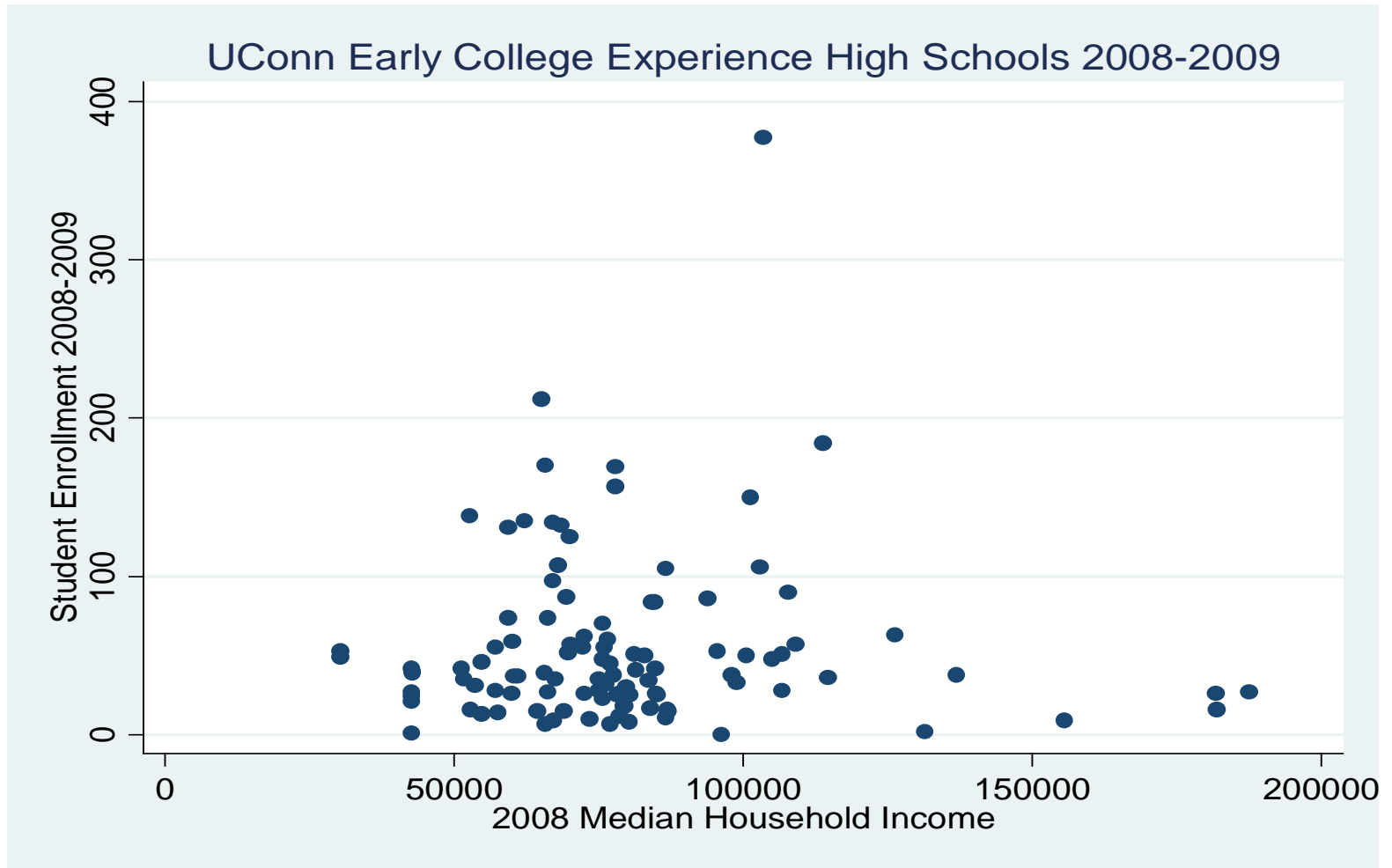
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# Income Affects on Educational Opportunities

- Scholarship says...
  - Less Affluent translates to few opportunities
  - More Affluent translates to more opportunities
  - The More Affluent the household, the stronger the culture for academic participation, competition, and achievement (Blossfeld & Timm 2003, Breen & Goldthorpe 1997, Breen & Jonsson 2005, Kerckhoff 1995)
- So, this must be the same for concurrent enrollment, right?
- Actually... No, it's not...

# Enrollment/Household Income Distribution – Left Skewed Distribution



# The Research Question...

- Looking at Household Income in Connecticut, as income increases in the upper quartile student participation decreases exponentially.
- Why does this occur?
  - We will see in due time
- But that's not the end of the story...
- In the middle and lower quartiles, household income does not have any affect on participation.
- Why does this occur?
  - Again, in due time, so don't leave my presentation yet 😊

# UConn Early College Experience

- Oldest continually active CEP in the United States
- One of the largest programs in the U.S. too
- During 2009-2010 AY UConn ECE had:
  - 139 Partner High Schools
  - Over 7,600 students
- Over the last five years the program has doubled in size
- Works with 25 different University departments
- Offers 50 different courses

# Student Access to the Program

- UConn ECE boasts “access to, and preparation for higher education”
- Access means open access - academic and financial
- GPA and SAT restrictions fell away in 2000
- In 2005 course offerings broadened to attract different types of students
- Financial restrictions?
  - Low cost - \$25 per credit
  - Fee waivers for students on Free & Reduced Lunch
  - All students waived at schools where 85% of students on Free & Reduced Lunch

# Educational Decision-Making: Our Quest for Answers Starts Here

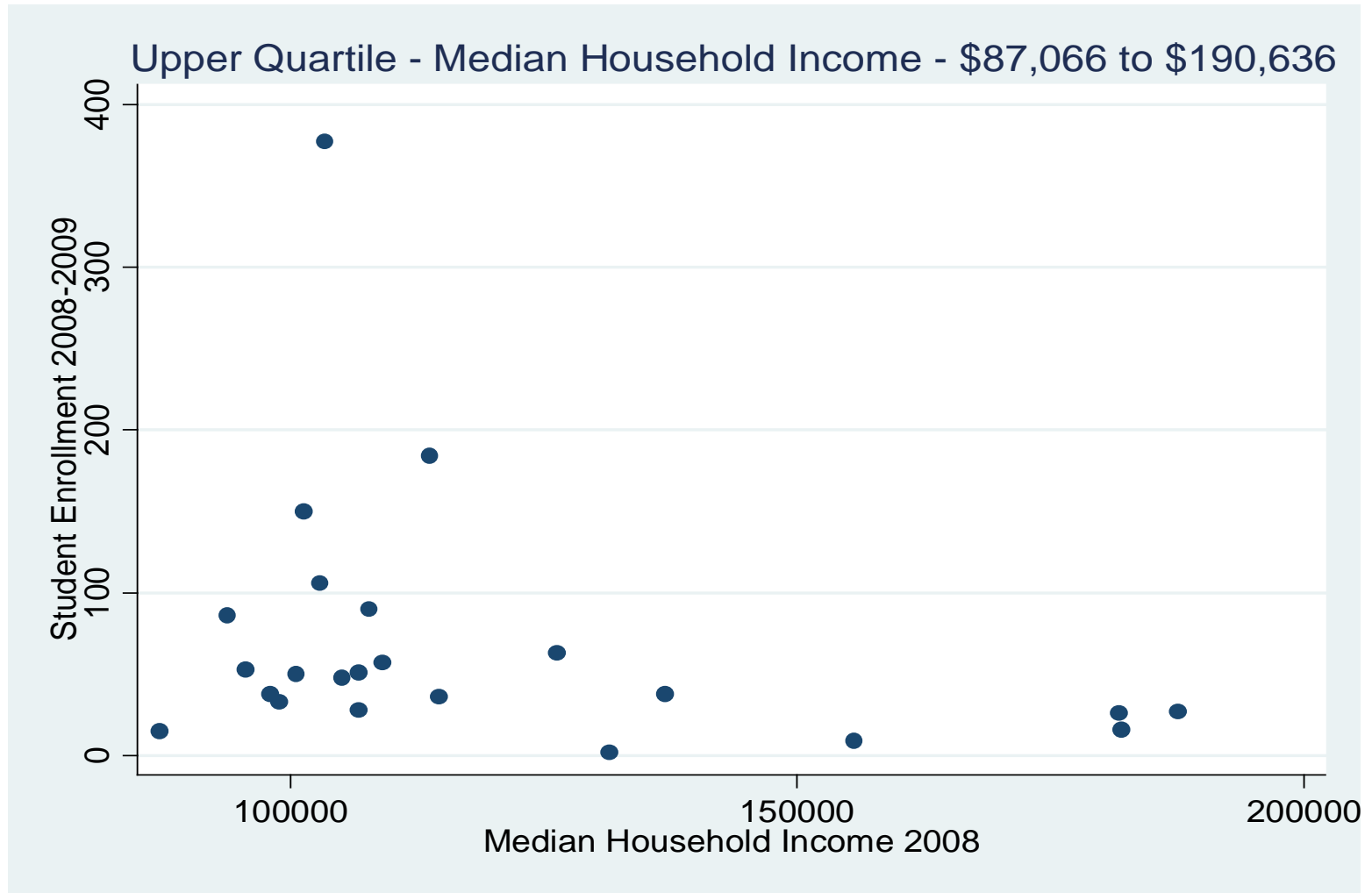
- How do people make decisions?
  - Let's pilfer "game theory" from the social scientists
- Let's also look at what's written on affluence and education
  - Educational Differentials - Breen & Goldthorpe (1997)
  - Parent socioeconomic status and cultural assets & networks - Duncan & Brooks-Gunn (1997) and Breen & Jonsson (2005)
  - Social class and attending college - Karabel & Astin (1975)

# Methods & Data

- **What is Student Participation?**
  - Student Enrollment
  - Courses Offered per High School
  - Students per Course
- **Median Household Income Data**
  - By school not necessarily by town
  - Connecticut Economic Resource Center
- **Regression Analysis**
  - STATA 10
  - Who likes statistics – show of hands



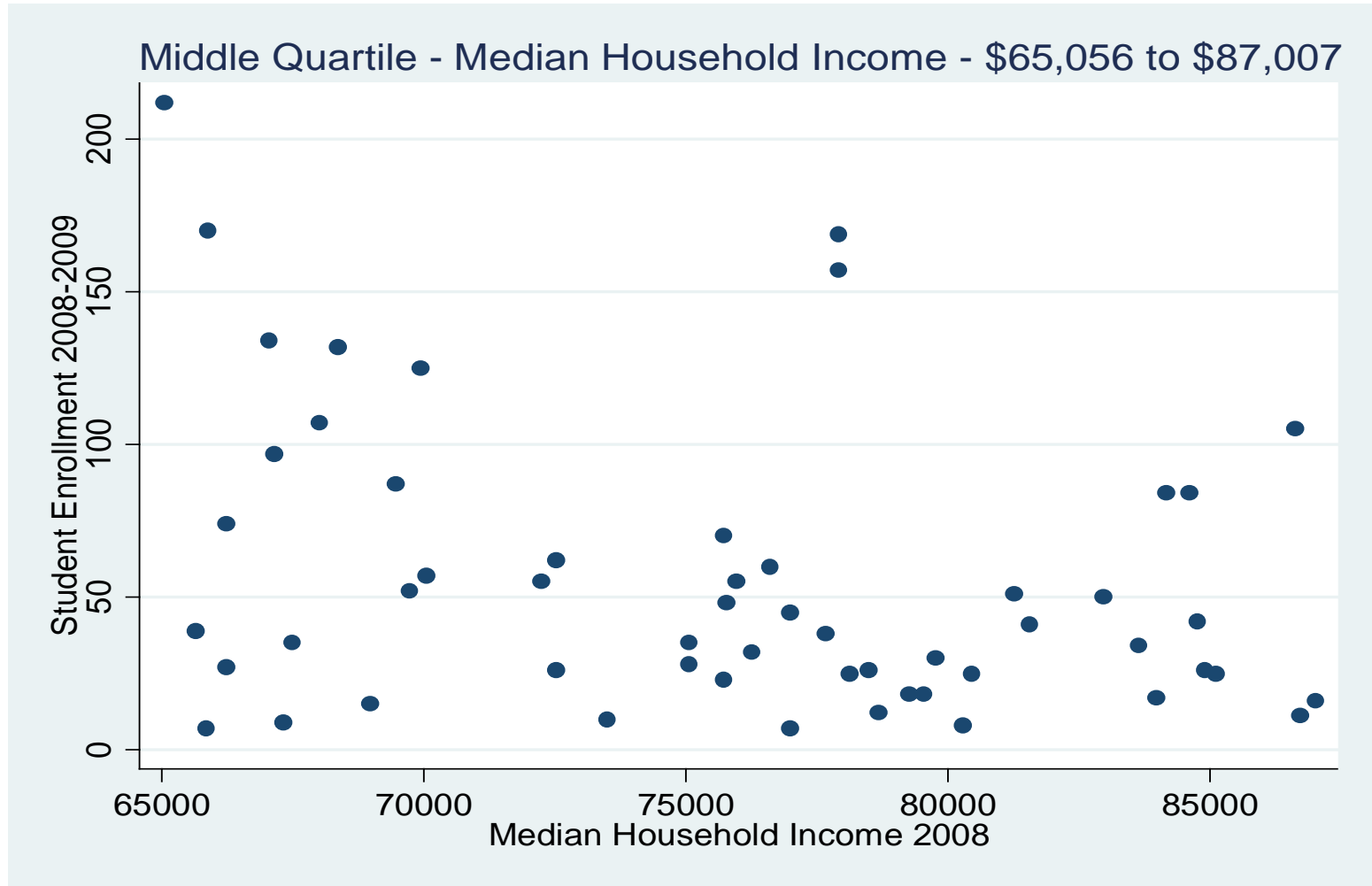
# Upper Quartile



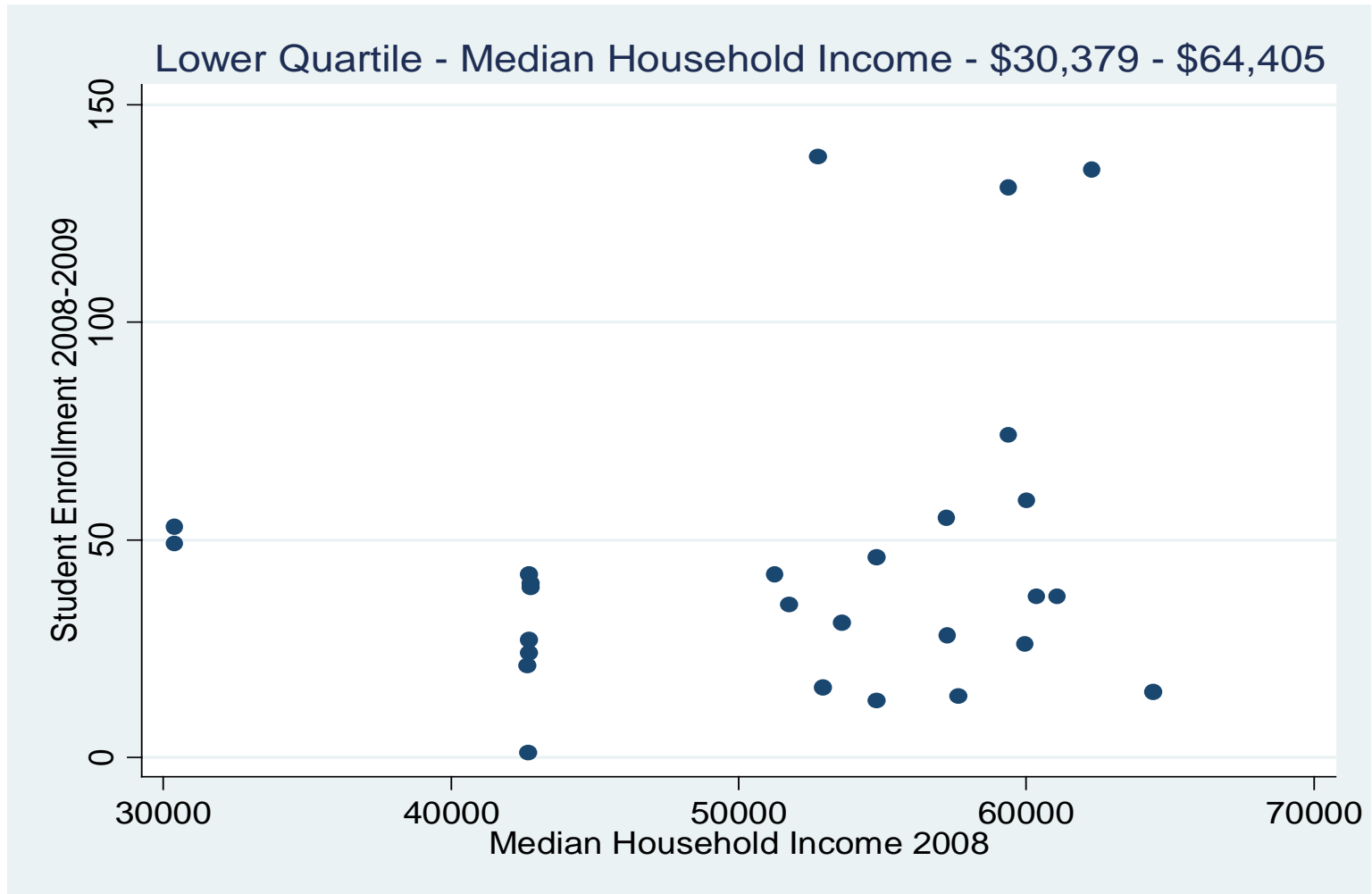
# For those of you who like math

Variables	Log Student Enrollment
Avg. Students per Course	.0695783 * (.0128906)
Number of Courses per HS	.1408301 * (.0342958)
Log Median Household Income	-1.238437 *** (.6663778)
Constant	16.38114 ** (7.870349)
N = 23 R <sup>2</sup> = 0.7083	* p<.01 ** p<.05 *** p<.10

# Middle Quartile



# Lower Quartile



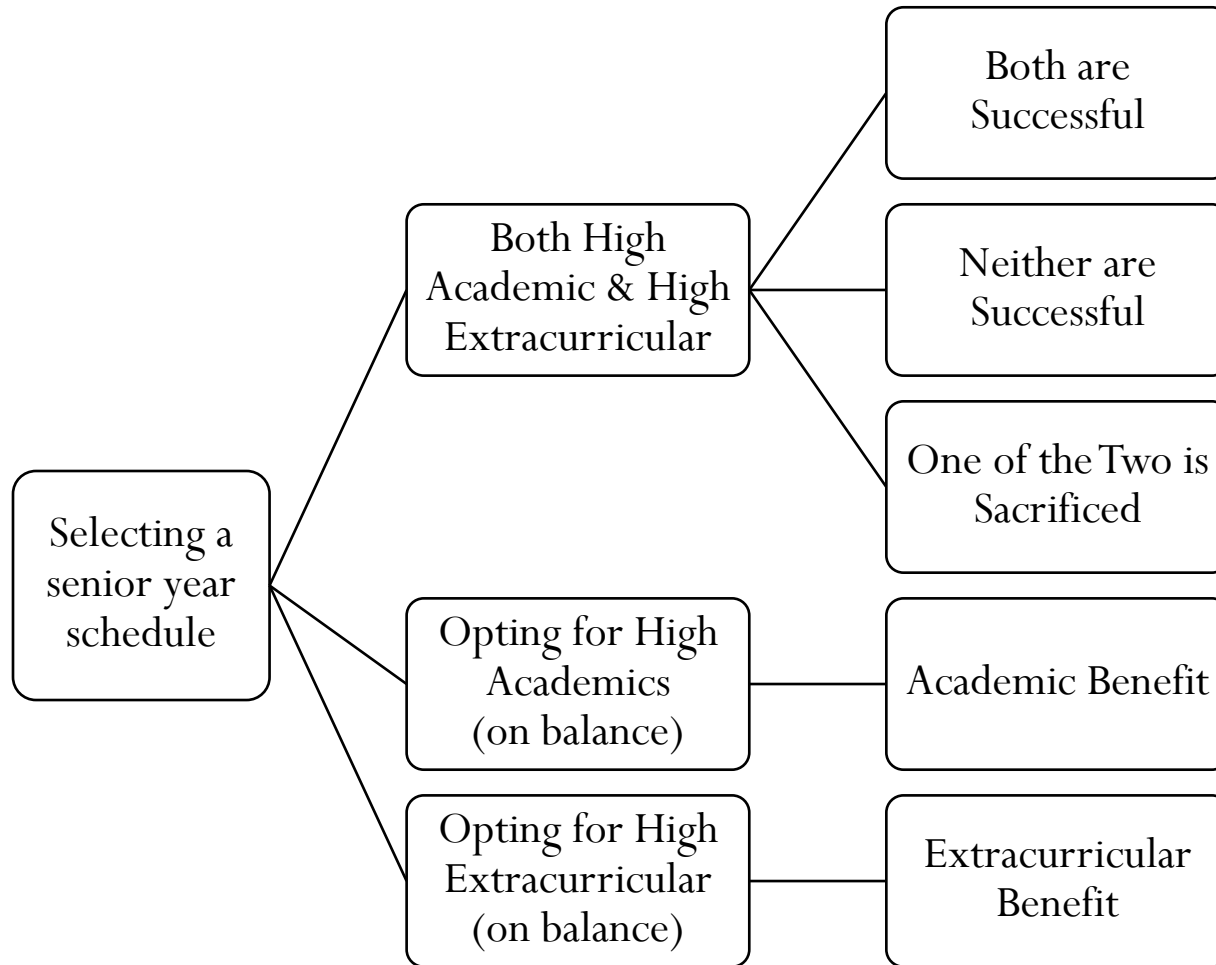
# Analysis – What does this all mean?

- Regression of Upper Quartile shows a relatively high correlation and significant variables.
- What does this all mean?!?
- In the Upper Quartile, as the median household income increases \$1,000.00, student participation decreases over 8 students!
- Because the model is elastic the rate is not linear.
- As the median household income increases \$10,000.00 participation decreased over 11 students.

# Analysis – What does this mean for the rest of the students?

- There is no relationship between median household income and enrollment in middle and lower quartiles.
- This is still very important!
- This means there are no economic barriers to participation in middle and lower income America.
- It does not show us a reason why, but it contradicts the scholars who say money and academic participation are linked.
  - Maybe we could say economics and economics are linked???

# Educational Decision-making and Outcomes Based on Student Priorities



# Surveying the Site Representatives

- I surveyed the Site Representatives to find out why their school's participation in the program has grown or declined
- 79% of respondents have a growing program
- 18% have a declining program
- 3% were first-year programs
- From the total Respondents (98) 65% say their program has grown because students earn UConn credits
- 86% reported the UConn credits to transfer well
- It's interesting that more people are happy with the transfer rate than there are growing programs...



# Surveying the Site Representatives

- After the singular importance of credits and transferability...
- In growing programs, 50% said instructor interest has impacted the positive growth.
- In declining programs, 38% said the instructors were not interested, and 19% said it was too difficult to get certified.
- Combining the afore mentioned, 64% of program change – positive and negative – hinges on Instructor Interest.
- The responses were nearly identical regardless of county.

# Conclusions

- It's a positive indication that there is no relationship between income and participation in the middle and lower quartiles.
- Low or no economic barriers.
- Diverse course offerings that attract a variety of students.
- They are participating because they want to get a head start.
  - Increase their chances for college admission
  - Reduce time and tuition
- Regardless of region, there is a clear understanding of UConn ECE benefits and credit transfer confidence is high.

# Conclusions (continued)

- In the upper quartile, the focus is somewhere else
  - Either conflicting opportunities
  - And/or confidence in a culture of college regardless of cost
- In affluent areas, do students not take advantage of academic advantages because they don't need them?
- Look at the differences... Our eight poorest high schools have a higher enrollment than our eight wealthiest!
- We can see a possible shift however, the upper quartile is not a purely homogeneous block.

# Soap Box Conclusions

- As I have you cornered, with only a few minutes left, it's really too late for you to leave, so...
- This study should be expanded to more states... Any takers?
- Also, there is an immediate need to ask interesting questions on the impact of our CEPs.
- Let's try to publish, it benefits us as professionals, it benefits our institutions, and it benefits NACEP.

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...I needed to include  
at least one fun picture...