

The background of the slide is a green chalkboard. In the lower-left quadrant, two pieces of pink chalk are positioned diagonally. The chalkboard is covered with faint, white chalk markings, including a large 'V' shape and some curved lines. The overall lighting is soft, creating a slight vignette effect.

Missouri School District Funding & School Quality

MATH 3220
By Nicole King

Outline

- Introduction
- Objective
- Hypothesis
- About Missouri School Districts
- The Datasets



Outline

- My Methodology
- Missouri Education
- Featured School Districts
- Conclusions



Introduction

- Let's take some....
 - *Raw Data that appeals to us*
 - *Plan an experiment*
 - *Perform the experiment*
 - *And make some opinions of our own!*

Objective

- The **objective** of this experiment is compare Missouri's public school districts' funding per student to the quality of each school district and assess if there is a correlation between these two factors.

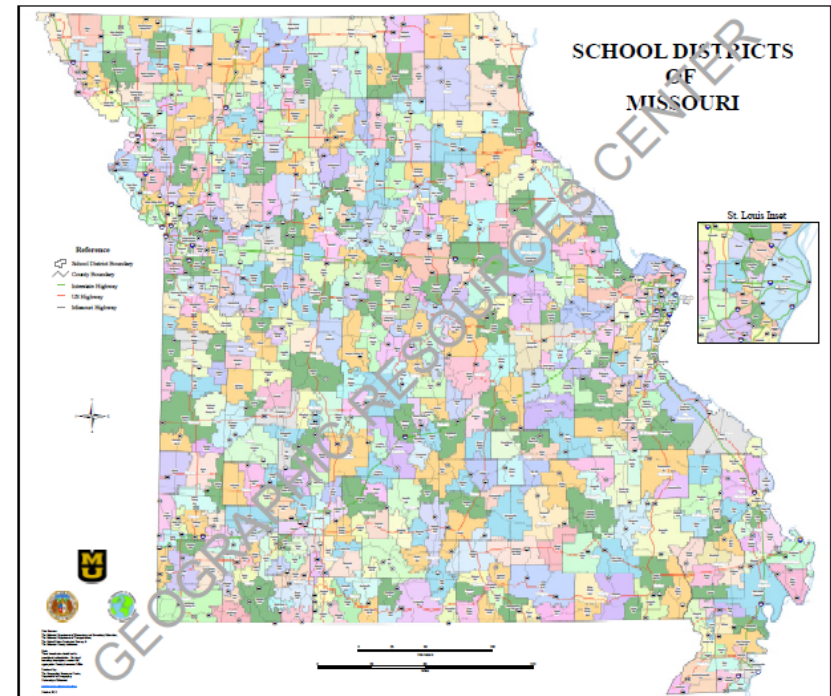
Hypothesis

- If the funding per student is greater, the school will be of better quality. There will be a positive correlation between the funding per student and quality of school.



About Missouri School Districts

- 523 school districts in Missouri in 2007
- Offer kindergarten- 12th grade education without tuition
- Provide regular, vocational, and special services
- School districts are provided federal, state, and local funding
- Funding per student is not monitored



("School districts of," 2012)

The Datasets

- 2007 Datasets utilized:
 1. *Educational funding among states in the U.S.*
 2. *Educational funding within school districts in the U.S.*
 3. *Populations of Missouri school districts*
 4. *Missouri school districts and graduation rates*
- The quality of school metric: graduation rates of school districts (dataset 4)
- Among the four datasets, there is missing data.

My Methodology

1. Research and plan experiment
2. Use first dataset to view Missouri's funding in 2007
3. Focus on school districts in Missouri in 2007
4. Combine all three datasets in an Excel spreadsheet
5. Locate missing data and align all districts
6. Delete school districts containing missing data

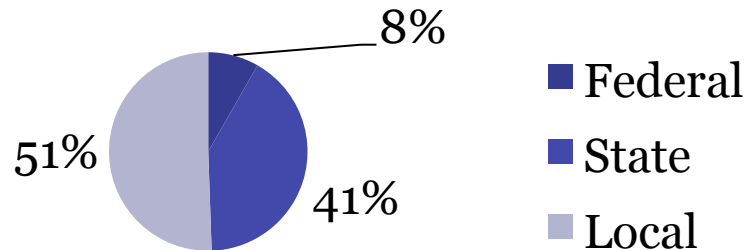
My Methodology

7. Divide total funding by population of district for each school district to identify funding per student
8. Calculate the correlation between the funding per student and graduation rates
9. Identify 20 rural school districts and calculate correlation between funding per student and graduation rates
10. Identify 20 urban school districts and calculate correlation between funding per student and graduation rates
11. Compare your results

Missouri Education

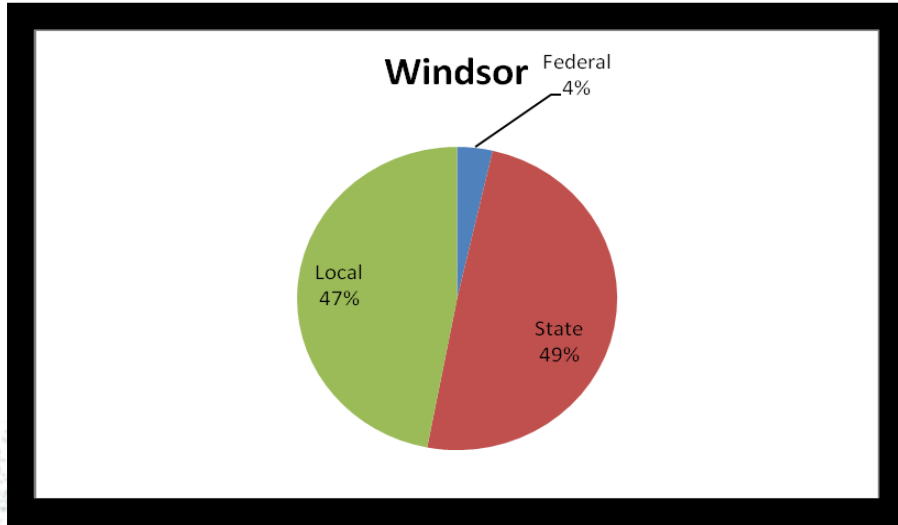
- In 2007, Missouri received \$730,811,000 in funding
- Missouri's average amount of funding per student was \$9,691 which ranked 38th in the U.S.

Missouri's Per Student Funding Sources 2007

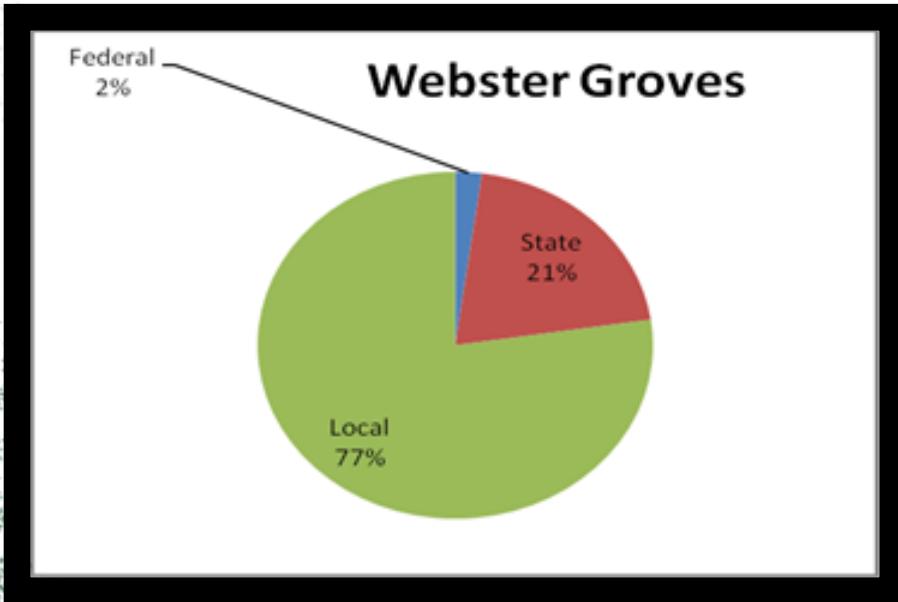


- This compares to the national total public school funding distributions: 8.3% federal sources, 47.6% state sources, & 44.1% local sources

Featured Schools



Key
Blue: Federal Source of Funding
Red: State Source of Funding
Green: Local Source of Funding



Windsor School District receives more state funding while Webster Groves receives more local funding.

Featured Schools

School District	Total Funding	Federal Funding	State Funding	Local Funding	District Population (5-17)	Funding Per Student	Graduation Rates
Fox C-6	104697	5225	53621	45851	12,407	8.43854	90.6
Kirkwood R-7	63466	959	12864	49643	6,493	9.77452	92.6
Lindbergh R-8	56867	1024	10816	45027	6,635	8.57076	93.9
Normandy	56317	5433	32719	18165	7,248	7.77000	60.1
St. Louis City	443778	59992	179131	204655	62,138	7.14181	54.8
Webster Groves	50157	1083	10268	38806	5,312	9.44220	91.6

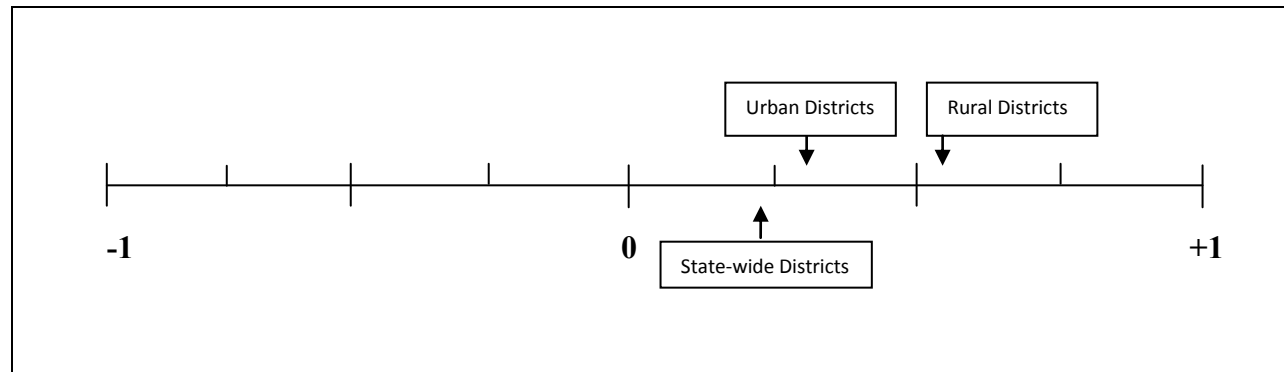
**All money is scaled in thousands.

Conclusions

- Correlation was found between the funding per student and graduation rates (school quality)

Types School Districts	Correlation	Type of Correlation
State-wide Study (431)	0.243973	Weak positive
Rural Study (20)	0.540777	Strong positive
Urban Study (20)	0.295153	Weak positive

Scale to Compare Relationship Among Studies



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References

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Questions?



("Quora," n.d.)