

# Understanding the Nature of the Teacher Shortage in Mississippi

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# Problem

- 48 critical shortage districts in Mississippi (Mississippi Dept. of Education, 2014)
  - 98 mathematics vacancies
  - 70 science vacancies
  - In a state with fewer students than Las Vegas district
- Retention of teachers
- High number of TFA and Mississippi Teacher Corps (high turnover and not from MS)
- Geographic areas of surplus and need (Darling-Hammond, 2014)
- Inequitable distribution of highly qualified teachers



Teacher shortage



1. Teachers not properly licensed teaching core courses and/or

2. Reduced or cancelled courses resulting in less students taking core courses



College choice as reported to ACT at time of testing	20-23	24-27	28-32	33-36
University of Alabama	31%	18%	16%	2%
University of South Alabama	32%	21%	10%	1%
Louisiana State University	28%	19%	11%	1%
Mississippi State University	28%	15%	7%	1%
University of Mississippi	30%	19%	9%	1%
Southern Mississippi	26%	14%	5%	0%

Potential brain drain of eligible preservice teachers

### Lower ACT Scores

2012 Composite ACT	Core or More	Less than Core
MS Mean	19.4	16.9

#### Mississippi 2012 Graduates

Course pattern	Course value added to ACT
Eng 9, Eng 10, Eng 11, Eng 12, and Other English	3.8
Alg 1, Alg 2, Geom, Trig, & Calc	3.6
4 years of social science	3
Bio, Chem, Phys	4.1

8,486 (5%= 424)

21 ACT for teacher education programs

28,288

(1,505 or 5% indicated education as planned major)



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# Rural context- Population

- Slow population growth centered
- Relationship between population growth and economic development.

County	% Change 2000-2008
Adams County	-11.45
Bolivar County	-11.18
Coahoma County	-13.87
Sharkey County	-21.37
DeSoto County	+127.87
Rankin County	+61.66
Mississippi	+14.20

(Mississippi Development Authority, 2009)



# Model Summary

Chi Square= 4.679, sig.= .031

Observed			Predicted		
			Shortage		Percentage Correct
			No	Yes	
Step 3	Shortage	No	103	3	97.1
		Yes	8	39	83.0
Overall Percentage					92.7

Significant predictors in the model:

% Black: Exp (B)= **479.955**

Geographic location (Delta): Exp (B)= **114.717**

Local Revenue: Exp(B)= **.0001**



# Our Findings

- **According to this model, in Mississippi, teacher shortage is a function of race, geography, and local funding.**



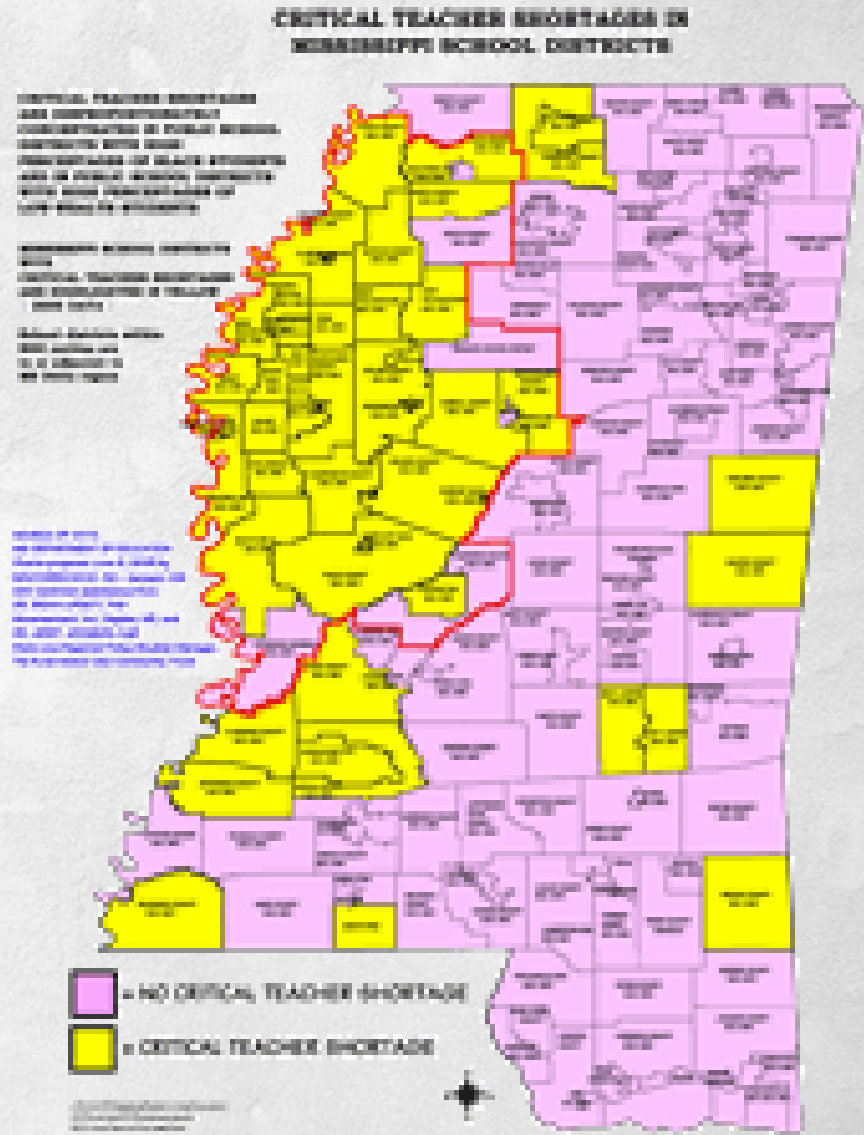
# Shortage as a function of race

District	Black	Teacher shortage
North Pike	30%	No
South Pike	83%	Yes
North Panola	97%	Yes
South Panola	55%	No
Winona (Montgomery Co)	57%	No
Montgomery County	90%	Yes
Madison County	39%	No
Canton City (Madison Co)	94%	Yes
Tate County	37%	Yes
Senatobia (Tate Co)	47%	No



# Shortages as a function of geography

From <http://southernecho.org/s/>



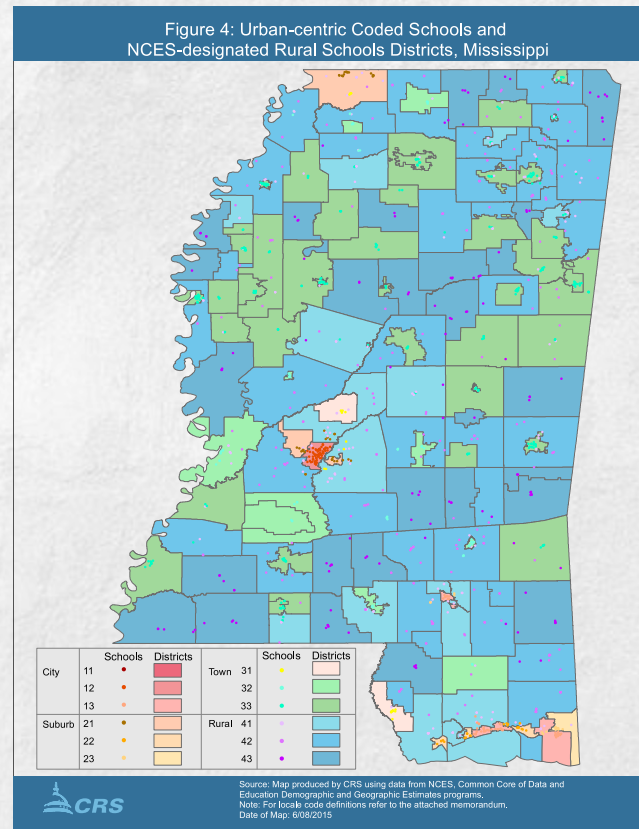
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# Districts Designated as Rural by US Department of Education



# Hindrances to recruiting teachers in rural areas

- Salary and benefits
- Highly qualified requirements
- Entrance requirements into teacher education
- Geographic and social isolation
- Housing options

(Brown & Schafft, 2011; Dessoiff, 2010)



# Approaches

1. Distance alternate route programs
2. Mississippi Excellence in Teaching Partnership
3. Focused curriculum redesign
4. MDE Equity plan



# Distance alternative route programs

- Goal- recruit, train, and place teachers for rural districts
- Partnership with districts
- MAT program
  - MAT-S- Secondary license 7-12
  - MAT-M- Middle level license 5-8
  - MAT-X- Special Education mild and moderate inclusion.
- These are the only programs in the state offering licensure and/or a degree completely online.



# MAT Degree Program

- 36 credit hours
- Earn degree while teacher of record
- Two semesters internship – support during first year of teaching to help with retention
- Structure of online courses
  - Job and family considerations
  - Internet capacity in rural communities
  - Synchronous and asynchronous models used
- Courses focus on assessment, management, content methods, reflection, research, special education etc.



# MAT Recruiting

- Partnerships with rural schools
  - Goal is for schools to identify potential teachers
  - Includes professional development for all teachers in the district
- Goal to identify eligible “locals” and support their work in the community
- Assistant teacher
  - Good demographic for retention
- Relationships with principals making a big difference
  - Helps break down initial concerns about alternate route certifications
  - Identify potential teachers
- Work with district personnel offices to fill vacancies



# Placement of teachers by type of district

District profile	Total	Districts with at least one teacher placed	% Districts	MAT teachers placed 2009-2014	% of teachers placed (of 335)
Partner	80	46	57.50%	202	60.30%
Shortage	47	23	48.94%	60	17.91%
Delta	33	14	42.42%	36	10.75%

## Placements by district profile overlap

District profile	Total	Percent
Partner and Shortage	30	37.50%
Partner and Delta	27	33.75%
Partner and Shortage and Delta	23	28.75%

Partnerships result in greater impact in shortage districts (100% increase).



# So what have we learned?

- Alternate route programs increased number of teachers certified at MSU by 20% from 2009-2016.
- Alternate route programs had a greater impact than the traditional program in critical shortage subjects.
- The partnership model in the alternate route programs resulted in greater impact in geographic shortage districts and the Delta.
- Alternate route programs prepare teachers (stayers and returners) where they live in the critical shortage districts and in critical shortage subjects.





# Mississippi Excellence in Teaching

- Goals:
  - Recruit the best and brightest into teaching
  - Raise the profile of the teaching profession
- Scholarship program
  - University collaboration—MSU/U-M
  - Leadership of presidents
  - Funded by Hearin foundation



# Mississippi Excellence in Teaching

- Components of the program
  - Full scholarship for four years
  - High achieving math and English students
  - Cross campus experiences
  - Cohort model with leadership training and field experiences
  - Study abroad to visit schools outside the US— currently in Vancouver, CA
  - First cohort will graduate in Spring 17



# Focused Curriculum Redesign

- Science and foreign language both major shortage areas in state
- Science education: redesigned undergraduate curriculum so that all graduates earn two licensure areas
- Foreign language education: redesigned curriculum to promote education as a double major and/or minor so that more foreign language majors earn licensure
- Examining similar efforts in other majors



# MDE Equity Lab

- US Department required states to create plan to address inequitable distribution of teachers
- MS plan focuses on raising the profile of the profession, ensuring retention through cultural understanding and mentoring, and recruitment, including increasing high school Educators' Rising and other



# USDOE Equity Lab

- USDOE hosted nation's first "equity lab" in MS in April 2016
- Designed to assist state in implementation of equity lab
- Priority districts with 40-50% of teachers on expert citizen license
- Collaboration with national foundations, educators, MDE, and community stakeholders
- Investigating innovative ways to support recruitment and retention in rural districts
- More this year!



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