

EXHIBIT 9

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EDUCATION INEQUITY IN MISSISSIPPI

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EXECUTIVE SUMMARY

The purpose of this report and study is to better understand the potential impact of the Mississippi Adequate Education Plan (MAEP), which has recently received full funding from the Mississippi State Legislature. It is also intended to help identify inadequacies in the education reform system and implications for further education reform efforts. The MAEP is the latest effort to improve education in Mississippi, which has only recently centered on desegregation, adequacy and equity. Yet, these efforts and their impact can only be fully understood in the context of race and class cleavages, which have hampered the development of an effective and impartial education system benefiting all Mississippians. Reform efforts have not eradicated education disparities based on race and class because they have not addressed sufficiently the structural relationship between racism and classism.

To understand the potential impact of the MAEP, it is critical to understand the context of education in Mississippi both historically and currently. Therefore, this report examines the long history of white opposition to education for African Americans, including the white power elites' willingness to sacrifice educational opportunity for white Mississippians to maintain African American segregation and subordination. It also examines the economic context of education and its relationship to maintaining a low-wage labor pool. This is particularly important as it relates to the Mississippi Delta region. The Delta is becoming more African American. It, like the rest of the country, is also losing higher paying, goods producing jobs, while lower paying service sector jobs are on the rise.

The report examines existing research on the state of education in Mississippi, and examines 2000 data collected from the Mississippi Department of Education with a focus on teacher quality, financing and curriculum. The data, disaggregated by race and class, reveals important disparities. Specifically, it demonstrates that Mississippi schools are still highly identifiable by race. Majority African American schools are also concentrated poverty schools, suggesting that white students are less likely to live in concentrated poverty. The African American high poverty schools have disproportionate numbers of teachers without advanced degrees or with emergency certification, are less likely to offer Advanced Placement courses and have higher drop-out rates.

There is no statistically significant difference in per pupil spending or teacher salaries across the state. Nonetheless, money is an issue in improving educational outcomes because it impacts teacher quality. African American poor schools have higher administrative costs, which reduce the dollars available for the classroom. Poor and largely African American districts remain more reliant on federal funding than their white counterparts. It is clear that the skill level of teachers impacts student achievement. The lack of local revenue appears to affect the ability of predominantly African American districts to pay more for highly skilled teachers.

As the study shows, there are important racial disparities in the Mississippi educational system that are masked if one does not disaggregate a range of data by race and free lunch eligibility to see the relationship between financing and other variables. No conclusions could be drawn regarding budgetary decisions, the relationship with Title I spending, and an explanation of the higher administration costs in poor African American school districts.

Nonetheless, the study demonstrates, when viewed in the context of Mississippi's history, that financing is an important issue. It does not appear that financing "equity," if equity is defined as equal state spending without regard to race and class, will not sufficiently improve educational outcomes, particularly for poor African American students. Currently, African American poor schools actually receive slightly more education dollars, probably due to Title I expenditures. Having long suffered under funding and given the poverty levels of many students in these schools, they may require *more* resources than other schools to achieve equity in educational outcomes.

Furthermore, it is evident that the MAEP funding formula is flawed. It arbitrarily sets the standard for educational adequacy at that of a level III accredited school (accredited on a scale of I to V). A related problem with the formula is that it assumes that level I or level II accredited schools (poor performers) need only the funding of an existing level III school to *become* a level III school. This may well prove to be an incorrect assumption. Also, as a poorly performing state, level III may be too low an achievement goal for meaningful improvement of student achievement and may not eliminate racial disparities in outcomes.

Considerations for strategies to create a quality education for all students should consider the need for a paradigm shift in thinking on education and its relationship to the global economy. To compete in the new global economy, Mississippians must develop their technological fluency and have a sufficient educational base to reinvent themselves in a constantly changing, technology-driven economy. Educational quality and high student achievement must be seen as an imperative for the economic future of the state. It should be connected to an economic reform vision based on a high wage, high skilled work force that can fully participate in the global, information-driven market place. And it must dismantle the structures created to prevent African Americans from educational opportunities.

I. CONTEXT

Race and poverty are inextricably linked in the United States. Mississippi exemplifies this link. According to the 2000 Census, 36.3% of the population is African American. Yet, 44.1% of all African American children in Mississippi live below the federal poverty level, compared to 12.4% of white children in Mississippi.

Racialized poverty is not just a condition; it is a structural arrangement. In the South, the institutionalization of racism has taken many forms: explicit post Civil War labor controls that attempted to keep African American farm labor in debt and working on farms; explicit race discrimination in mill work hiring; illegal withholding of federal subsidies to African Americans during the New Deal; intentional segregation and many other forms of structural and institutionalized racism. The structural nature of racialized poverty is particularly reinforced by and pronounced in public education.

A. History of Education in the South and Mississippi

1. End of the 19th Century

The history of the South generally, and Mississippi in particular, is one of unique resistance to “modernity” – technological advancement, the economic interdependence it created and the critical social analysis that began to accompany it. The post Civil War and Reconstruction South became obsessed with the preservation of all that embodied the old South – a deep commitment to white racial supremacy, myths of individualized self-reliance that both wealthy and poor white landowners developed through the plantation system and its slave dependence, and all this justified by the word of God.¹

A social order that stifled critical thinking and dissent within the Southern ranks was a marked component of the post Civil War South.² As W.J. Cash described the post reconstruction period in his seminal work, *The Mind of the South*:

Tolerance, in sum, was pretty well extinguished all along the line, and conformity made a nearly universal law. Criticism, analysis, detachment, all those activities and attitudes so necessary to the healthy development of any civilization, every one of them took on the aspect of high and aggravated treason.³

¹ W.L. Cash, *The Mind of the South*, Vintage Books (1941), 32-33.

² See *Generally*, James B. Cash, *The Education of Blacks in the South: 180-1935* (2000); Neil McMillen, *Dark Journey, Black Mississippians in the Era of Jim Crow* (1989).

³ *Id.*, *supra* note 1, at 135.

The role that education played in the “new” South can only be understood in connection with the economics of the region. The economic structure of the region and its wages, as well as the racial hierarchy, had specific implications for how white elites viewed, structured and financed the newly forming public education system. To the extent that the South sought to industrialize to compete with the North, it did so in a way that supported the existing agricultural system. Desperate to regain economic position through cotton production, it doubled production between 1875 and 1890 and then tripled it between 1890 and 1900. This merely sunk the region deeper into economic debt given the expense of its production and the collapse of cotton prices.⁴ In the antebellum south, plantation owners found new ways to abuse former slaves – sharecropping, tenancy, oppressive contracts and laws to keep them on the farm.

Yet there were also new opportunities for newly freed slaves. Reconstruction brought some schools for the children of freed slaves. This angered many whites, who could not get an education.⁵ Given the shattered southern economy, particularly the fall of cotton prices, many poor white farmers lost their land and became cheap farm labor.⁶ Poor whites increasingly saw their slight racial privileges eroded in the face of their competition with former slaves, sometimes even being required to work beside them.⁷ They also lacked political power due to their lack of education. Literacy requirements for voting rights disenfranchised large numbers of white poor because they could not read and write.

Many whites were uneducated because the South’s white elites had, historically, frowned upon and opposed compulsory public education. This attitude changed after the Civil War. Whites, even poor ones, had to have distinct privileges from African Americans.⁸ The white elite decided to finally and more formally embrace public education.⁹ Education was an explicit part of the Southern white power elites’ vision for the rebuilding and strengthening of the South, while preserving the racial hierarchy, as well as the social caste system that racist order supported.¹⁰

Antebellum legislation enabled counties to use local funds to provide “common” schools. Local discretion for creating public schools included important factors such as: defining school districts; selecting appropriate curriculum; determining teacher credentialing; and controlling school facilities and

⁴ *Id.* at 146-147.

⁵ *Id.* at 67.

⁶ *Id.* at 169-170.

⁷ Jones, *The Dispossessed: America’s Underclasses From the Civil War to the Present*, Basic Books (1992) at 107.

⁸ *Id.*

⁹ *See, supra* note 1, at 174.

¹⁰ *Id.* at 175-182.

the length of the academic year. Importantly, localities were not required to establish a public school system. In fact, the state legislation mandated a majority vote in each township within the county before taxes could be levied for education. As a result of this decentralized, fragmented school system, Mississippi had 3952 school districts. It remained highly fragmented until 1953 when the state created a special commission to reorganize the 3952 school districts into 151. The current number of districts is now 152.

During the era of Reconstruction, Black legislators attempted to create a more uniform education system through a series of state constitutional revisions. These changes included: the provision of free public schools available to children between the ages of 5 and 21; the creation of a modest state tax for school financing; and the requirement of a minimum four month academic year. Additionally, constitution revisions mandated separate schools for African American and White children – six years prior to the infamous *Plessy v. Ferguson* Supreme Court decision, permitting school segregation.

2. The Early 20th Century

The further impoverishment of whites and the need to maintain dominance over the “Negro” led to the growth of factories to create white jobs, but jobs still linked to the cotton industry – cotton mills.¹¹ This form of industrialization did not dismantle the labor abuse and low-wage structure that oppressed many poor whites. By the early 1900’s as many as a quarter million whites were working in factories in the South, towns were growing and with cotton prices advancing there were fewer farm vacancies. But the new-found Southern prosperity relied on cheap labor – its only “advantage” in the new industrial order. Southern mill workers were paid half of what New England mills paid and could not support a family. The Southern factory had the same social and economic order as the Southern plantation.¹²

This industrialization had a dramatic impact on the growth of cities and towns in the South. During the growth of industry in the South, from 1900 to 1910, Jackson, Mississippi tripled in size and Meridian doubled. African Americans were almost completely excluded from factory jobs – they were to remain sharecroppers and tenants. Southern states and towns began the race to the bottom – giving tax exemptions, free land for new mills and their company villages and subsidies from public coffers.¹³ By 1930, two million people were employed in Southern mills – white people. Between 1920 and 1930 the total urban population of the South increased by 25%.¹⁴ These economic policies

¹¹ *Id.* at 173.

¹² *Id.* at 198-200.

¹³ *Id.* at 217-218.

¹⁴ *Id.* at 257-262.

could not have left much public money for public education, even if the white elite had been inclined to spend it on education.

By the early part of the 20th century, Mississippi had developed a few more uniform education standards. The state created a special Board of Examiners to certify and license teachers. The legislature also passed a law in 1904 to provide a consistent standard for the selection and determination of subject matter of textbooks to be used in the public system. Finally, in 1918, Mississippi became the final state in the union to pass a compulsory school attendance law. This law, however, was poorly implemented due to whites' fears that forced attendance to public school might threaten the practice of segregation.

In the early 20th century education financing consisted of use of local funding, modest state taxes, and federal matching grants. Legislators accommodated racist fears of publicly funding a school system which would benefit a predominantly African American student population. Whites spent state and local monies raised for education on textbooks and school construction in rural White communities. African American school districts had to rely heavily on private funding (e.g. Rosenwald Fund, Jeanes Fund, Slater Fund) for education resources.

This same period witnessed the expansion of public education. By 1914, every state in the region had a uniform school system. State universities and colleges more than tripled in number from 1900 to 1914.¹⁵ But African American rural schools were much worse off than white rural schools. African American teacher salaries often did not even support room and board with local residents.¹⁶ The one room classrooms might only have had a table, a couple of chairs, oilcloth or painted wooden squares to serve as black boards and 90 students. The teachers were "home girls," who were committed to "the upliftment of the race" but few of whom had much education themselves.¹⁷ A 1933 US Department of Education study showed that, during the 1930-31 school year, only 55.7% of African American teachers and 66.7% of White teachers had any college education -- between six weeks and two years of college. More than 22.5% of African American elementary teachers had not gone beyond high school. Just under 6% of white teachers lacked a high school diploma. The smaller the community the African American teacher served, the lower the level of academic training.¹⁸

¹⁵ *Id.* at 219.

¹⁶ Fultz, *Teacher Training and African American Education in the South, 1900-1940*, *The Journal of Negro Education*, Vol. 64, No. 2 (1995) at 197.

¹⁷ *Id.* at 196.

¹⁸ *Id.* at 197.

During the depression, the gap between levels of schooling for African American and white rural teachers in the South remained.¹⁹ But the situation actually improved slightly. By the mid-1930s more African American and white rural teachers had better than an elementary school education.²⁰

Mississippi, however, was not improving and had the worst record of teacher quality in the region. Between 1930 and 1935 Mississippi was the only southern state to *increase* the number of African American teachers with lower levels of training in one-teacher schools. Just over 92% of its African American teachers in one-teacher schools had four years or less of post elementary education. Not only were African American teachers less educated in Mississippi than in other Southern states, they were less educated in dramatic numbers. In 1940, 84.7% of Mississippi's African American teachers had completed less than two years of college. The Southern state with the dubious distinction of having the second worst record in this regard was Arkansas at 48.7% -- a 36% difference. In 1940, only 9.1% of Mississippi's African American teachers had four or more years of college. Alabama had the second worst record but twice as many -- 18.6% -- of its African American teachers had at least four years of college.²¹

The depression era in the South saw the growth of "progressive" education. Progressivism in the South, however, was explicitly intended to maintain separate and unequal conditions. Southern states began adopting core curricular and activity-oriented courses of study. The improvement of teachers during the 1930s was due to Southern reform of teacher education, greater centralization of state control of schooling and the development of regional professional organizations.²² For the national progressive movement, standardization of curriculum was to mean that African American children would have the same curriculum as whites. Progressivism also called for education to reflect the life of the community. In the South, progressivism was twisted into a mechanism to teach African Americans their place in the segregated South. They were to be prepared for menial and subservient jobs and to properly respect whites and the government. African Americans were to be made more

¹⁹ *Id.* at 199. For example, in Arkansas, 41.3% of African American teachers had only a high school education or less while only 5.9% of white teachers had this relatively low level of education.

²⁰ *Id.* at 197. Almost 40% of the African American teachers were in single-teacher schools. The number of African American teachers in these schools who had only four years or less of education after elementary school dropped from 71.6% in 1930 to 41.2% in 1935.

²¹ *Id.* at 198-99.

²² Goodenow, *Paradox in Progressive Educational Reform: The South and the Education of African Americans in the Depression Years*, *Phylon*, Vol. 39, Iss. 1 (1st Qtr., 1978), 49-65, at 50.

productive and less dangerous.²³ The Northern “progressive” thinkers supported the South’s unique brand of “education” for African Americans because they believed that technological and industrial development was more important than educational justice and would ultimately end racism and the caste system.²⁴ They were wrong.

3. Brown v. Board of Education

African American education in Mississippi remained segregated and of poor quality through out the twentieth century. In 1954, when the United States Supreme Court in *Brown v. Board of Education*, 347 U.S. 483 (1954), ruled that “separate” education was “inherently” unequal and ordered the integration of schools through out the country “with all deliberate speed,” the South in general vowed to oppose integration.

Mississippi, in particular vehemently opposed it. Prior to the 1954 decision, the Mississippi legislature had been in special session attempting to pass legislation to equalize teacher salaries and improve school facilities for African Americans. Their intent was to influence the Supreme Court. Separate might be permissible if it appeared more “equal.”²⁵ When the decision was handed down, Mississippi’s senior senator in Washington said, “We will not obey nor abide by the decision of the Court.”²⁶ The state Attorney General decided that the opinion did not apply to Mississippi because it was not a party to the lawsuit.²⁷ It was so deeply committed to segregation that, after the *Brown v. Board of Education II* decision, the Mississippi State Legislature passed a constitutional amendment allowing it to abolish the public education system, if necessary, to preserve the practice of segregation and the legislature repealed the compulsory school attendance law. It did not re-instate the law until 1987.

The white power elite immediately created the infamous “White Citizens’ Council,” a private organization with county-based chapters, to promote “the advantages of segregation and the dangers of integration” on the southern social system. Closely aligned with the White Citizens’ Council was what one journalist, Bill Minor, once called the “KGB of the cotton patches” -- the Sovereignty Commission. Formed by the Mississippi legislature in 1957, the state-funded

²³ *Id.* at 51-52.

²⁴ *Id.* at 56.

²⁵ Bender, *The Status of Educational Desegregation in Mississippi*, The Journal of Negro Education, Vol. 25, Iss. No. 3 (Summer 1956) 285-88, at 285.

²⁶ Bender, *Desegregation in the Public Schools of Mississippi*, The Journal of Negro Education, Vol. 24, Iss. No. 3 (Summer 1955) 287-92, at 287.

²⁷ See, *supra* note 25, at 285.

Sovereignty Commission was a spy organization whose main purpose was to preserve racial segregation. It was not disbanded until 1977.²⁸

So effective was Mississippi's recalcitrance where integration was concerned, by 1965, more than a decade after the Supreme Court mandated school integration, Mississippi had the lowest integration rate in the South – a mere .6%. By the 1966-67 school year that figure nudged up to 2.5% -- still the lowest in the region. A federal district court decision ordered the desegregation of all grades in Mississippi by the fall of 1967. Mississippi had barely inched up to 10% in 1969. President Richard M. Nixon told the U.S. Department of Justice to slow down the crawling pace of desegregation and gave Mississippi another year to “prepare” to desegregate. The Supreme Court overturned the slow-down in 1969 in *Alexander v. Holmes County Board of Education*.²⁹

The system of education financing continued to play a significant role in perpetuating poor educational outcomes for Mississippians. Financing remained largely a responsibility for localities up until the late 1980's and 1990's. In 1953, the Minimum Education Program was established and it developed a formula for education funding at the district level. Because this formula relied largely on local resources, it institutionalized longstanding education inequities. In the 1920s, the NAACP conducted studies of school expenditures for white and African American students in several southern states and found that the ratio in Mississippi was five to one.³⁰ In 1947 African American students in Mississippi

²⁸ Crofton, Gregory, *Sovereignty Files Reveal Persecution of Former DM Staffer*, The Daily Mississippian (April 21, 1998). After 20 years of litigation, most of the Sovereignty Commission files were finally made public in March 1998.

²⁹ 396 U.S. 19 (1969), *rehearing denied*, 396 U.S. 976 (1970). The Supreme Court reversed the 5th Circuit Court of Appeals ruling, which allowed 30 Mississippi school districts to slow desegregation plans. See *generally* Comment, “Integration Now:” A Study of *Alexander v. Holmes County Board of Education*, 45 Notre Dame Law Rev. 489 (1970). *Alexander* was at this time consolidated with a number of similar cases, including *United States v. Hinds County School Bd.*, 417 F.2d 852, 855-56 (5th Cir. 1969), *cert. denied*, 396 U.S. 1032 (1970). In *Hinds County* the Fifth Circuit reversed a Mississippi district court's approval of the continued use of a “freedom of choice” plan. The Circuit Court noted that under the plan approved by the district court a white student had never attended a traditionally African American school in any of the questioned school districts, while only a maximum of 16% of the school systems' African Americans had attended the white schools in any district. Methods other than freedom of choice, such as zoning and pairing, were suggested by the circuit court to achieve racial integration in the districts' schools. Later the circuit court granted a delay when the school boards professed an inability to meet the court-ordered integration time table. *United States v. Hinds County School Bd.*, Nos. 28030 & 20842 (5th Cir., filed Aug. 28, 1969).

³⁰ Haskins, *Separate But Not Equal: The Dream And The Struggle* 82-83 (1998).

were receiving 30% of what was spent on white students for education. This remained the tool for allocating education funds for more than forty years. By 1982, the state instituted its first major comprehensive school reform legislation which included increased funding at the state level (from sales, use, corporate, and individual income taxes) for financing public education and increased teachers salaries.

As this history suggests, equity in education has been a relatively recent focus of school reform activities in Mississippi. The Mississippi Adequate Education Act of 1994 not only legislated an increase in education spending, but changed the way state funds are allocated to districts, mandating appropriate pupil-based funding designed to provide schools with monies consistent with the costs of operating at an “adequate education level” – defined as the average performance of a level III (on a I to V scale) accredited school. The Mississippi State Legislature did not make appropriations for the implementation of this bill until 1997, and then it only partially funded it. Full funding of the Mississippi Adequate Education Program was approved early in 2003 for implementation in the upcoming school year.

The current context of education in Mississippi reflects entrenched problems stemming from the state’s historic reluctance to create and enforce an effectual school system for all Mississippians.

B. The State of Mississippi Public Education Today

Mississippi is a very poor, rural state. It is 50th in the nation for gross state product per capita at \$21,062 per person.³¹ It is even at the bottom in a very poor region: Mississippi is 14th in the South in gross state product per capita. According to 2000 census data, slightly more than half the population of Mississippi is in rural areas. Its poverty is, in part, due to its long tradition of the myth of individual achievement, the perpetuation of a reliance on very low-paid, marginalized labor and its failure to create meaningful and effective economic growth planning. Equally fundamental to this analysis is the fact that it largely did so to maintain African American subordination. Its large impoverished white population has largely participated in the maintenance of the failing economic status quo by its desire to maintain its white racial privilege over African Americans.

It is also a state that has undergone some important demographic shifts over the past decade. The counties of the Mississippi delta region have always been majority African American, thanks to the history of slavery, employment discrimination and other factors. But between 1990 and 2000, the African American population in the delta has grown 7.3% -- significantly more than the

³¹ *Invented Here: Toward an Innovation Driven Economy*, a project of the Southern Technology Council/Southern Growth Policies Board (June 2000).

white population in the Delta (2.9%).³² Researchers expect this trend to continue. At the same time, the employment patterns in the region have been following national trends. Goods production jobs (farm, agricultural services, mining, manufacturing and construction) have declined in the delta region by 5.4% since 1990. Service production jobs (transportation, public utilities, wholesale and retail trade, finance, insurance, real estate, government and government enterprises) have increased 4.5% since 1990. This means lower paying jobs. In 1999, service production paid between \$15,000 and \$21,000, while goods production paid between \$25,000 to \$31,000. Manufacturing jobs are the highest paying.³³

Mississippi, like the rest of the country, is now operating in a new global economy that Manuel Castells has termed “information capitalism.” Information capitalism is defined by flexible, competitive production, capital freely crossing national borders to take advantage of low-wage labor and driven by “networks,” which require a wide range of different working arrangements. It also is defined by the differentiation of labor into two classes: 1) generic labor, which may have “skills”, but not sufficient education to learn new skills as the technology changes; and 2) “self-programmable” labor, which has the education and access to resources to constantly learn and reinvent themselves to adapt to the constantly changing economy.³⁴ It is the new engine behind the old caste system.

This new paradigm has particular relevance to education reform at the state level. It is an economy driven by technology. Those excluded from

³² Beaulieu, *A Profile of the Mid-South Mississippi Delta Region*, Southern Rural Development Center, Mississippi State University (March 2002). The non-delta African American population has grown more rapidly – 13.5% -- during the same period. The same is true for growth in the white non-Delta population – 5.1%. *Id.*

³³ *Id.* While the number of African Americans living below the federal poverty level has decreased in recent years, this only takes income into account in defining poverty; not asset accumulation. Poverty cannot be accurately measured by income alone. Asset accumulation is an important component to financial security. Making a living and adequately supporting a family requires asset accumulation, not just income. If we stop receiving a paycheck because we are laid off or become ill, will we have the assets to support ourselves and our families? For a huge number of Americans, the answer is no. In 1998, 25.5% of all American households had insufficient net worth to sustain living at the federal poverty level for three months if they stop receiving their paychecks. Few of these Americans -- less than 13% of households -- were identified as poor in 1998. In the South, the number is probably higher, particularly for African Americans. Mississippi ranks 45th in the nation for mean net worth (including savings, investments, home ownership, etc.). Center for Enterprise Development State Asset Development Report Card, www.sadrc.cfed.org/states/ms.php.

³⁴ See, Castells, Manuel, *The End of the Millennium*, (Second Ed. 2000) African Americanwell Publishers Inc, at 372-373.

educational opportunities historically are suffering greater social, economic and political exclusion. The service sector required to support information capitalism provides low-paying, unstable jobs and little hope of acquiring skills necessary to improve one's economic condition. This in turn excludes the large class of marginalized people from capital and information networks. These networks are as important to politics and policy as to economic benefits of the new economy.

African Americans have historically been excluded from information technology. During Jim Crow, African Americans were far less likely than whites to have telephones. White controlled telephone companies wired affluent and middle class neighborhoods first. African American neighborhoods in the rural South were the last to be wired and the monthly costs of service were often prohibitive. Job applicants who could not leave a telephone number for contact were at a disadvantage. They were less likely to get overtime or special projects.³⁵ Mississippi is ranked 47th nationally in the proportion of households with telephones. In 1998 90.3% of households had telephones.³⁶

Today, the computer and the modem are central tools of information capitalism. But in 1989 only 10.6% of African American children between the ages of 3-17 had access to a computer at home, compared to 26.7% of white children. By 1995, according to a special census report, 14% of African American households reported having a home computer, compared to 27% of white households. Nearly half of white children in school used a computer, compared to only 35% of African American students.³⁷ In rural areas the gap is much more significant. Only 6.4% of African Americans in rural areas report having a home computer, compared to 24.6% of whites in rural areas. Therefore, rural African Americans, unlike their white counterparts, are far more disadvantaged in access to technology.³⁸ Mississippi ranked last in internet access and home computers. Only 13.6% had internet access and only 25.7% had computers.³⁹

Not surprisingly, the computer gap in schools is also huge. A 1997 Educational Testing Service report found that, on average, schools have one computer for every ten students. But African American schools (90% African American) had only one computer for every 17.4 students. Predominantly white schools (75% white) have one computer for every nine students. Even when schools have computers, African American schools are more likely to have the

³⁵ African Americans as the Have-Nots of the Information Age, *Journal of African Americans in Higher Education*, Vol. 0, Issue No. 21 (Autumn 1998), 18-21.

³⁶ See, *supra* note 31, at MS2.

³⁷ See, *supra* note 35, at 19.

³⁸ *Id.*

³⁹ See, *supra* note 31, at MS2.

computers sitting unused in a closet because teachers do not know how to use them.⁴⁰

At the college level, historically African American colleges have many fewer computer resources than their white counterparts. In the South there are 3-6 times as many computer terminals allocated to predominantly white state schools as there are available to predominantly African American state schools. In Mississippi in 1998, Alcorn State, a 96% African American college, had 50 computer terminals for all its students. There was one computer terminal for every 60.8 students. The University of Mississippi, on the other hand, which was only 8% African American, had 950 computer terminals – 9.3 students per computer terminal.⁴¹

In the age of information capitalism, the consequences of this discrimination, is severe. Computer literacy correlates with wages, according to a Brookings Institution study. It found that workers who used a computer on the job earned roughly 20% more than those who did not directly use a computer at work. The study controlled for education, experience and other factors.⁴²

It is important to note that disparities such as computer terminals and computer literacy exist because of funding disparities between traditionally African-American and traditionally white state funded colleges and universities in Mississippi. On average, historically Black colleges and universities (HBCUs) receive 40% of their revenue from the state. In Mississippi, HBCUs receive only 28% of their revenue from the state. Predominantly white colleges and universities in Mississippi receive 38% of their revenues from the state.⁴³ If one examines per student appropriations, Mississippi still appropriates more dollars per student in predominantly white colleges and universities than in HBCUs -- \$3143 compared to \$2618.⁴⁴ Despite such funding disparities between HBCUs and predominantly white colleges and universities in Mississippi and its finding that Mississippi maintained segregated state colleges and universities (based mission designations, admissions requirements and duplication of programs), the US Supreme Court refused to order additional funding to upgrade HBCUs.⁴⁵

Of course, African Americans are not even getting to college in sufficient numbers. Nationally, the number of African American high school graduates attending college has dropped. The rate of African American high school

⁴⁰ See, *supra* note 35, at 19.

⁴¹ *Id.*

⁴² *Id.*

⁴³ G. Thomas Sav, *Separate and Unequal: State Financing of Historically Black Colleges and Universities*, *The Journal of Blacks in Higher Education* (Spring 1997), at 101.

⁴⁴ *Id.* at 103.

⁴⁵ *United States v. Fordice*, 505 U.S. 717, 743 (1992).

graduates attending college in 1973 was about 30%; that rate rose steadily until it peaked at 48% in 1977, when it was virtually equal to the attendance rates of white high school graduates.⁴⁶ Since then, however, the college attendance rate of African Americans has fallen continuously, and in 1986, only 36.5% of African American high school graduates entered college immediately after graduation. In comparison, the college entry rate for whites has risen almost continuously from 48% in 1973 to 57% in 1984.⁴⁷

In Mississippi only 12% of Delta residents have a bachelor's degree and only 18% have some college experience. Almost 60% of African Americans over 25 years of age have less than a high school diploma, compared to just over 20% of whites.⁴⁸ These numbers are not surprising when one considers that Mississippi ranks near the bottom of the list in state educational achievement and has a long tradition of discrimination against African Americans. According to a 2002-03 study, Mississippi ranked 48th out of 50.⁴⁹ Only Louisiana and New Mexico ranked lower.

Educational attainment impacts earnings. A college degree has been shown to increase African American incomes by 127% compared to incomes of African Americans with only a high school diploma and by 86% compared to whites with a high school diploma. African Americans with a high school diploma earn \$11,328 per year on average. African Americans with a college degree earn \$25,663 per year on average.⁵⁰ Of course, a college degree does not eliminate race discrimination. In Mississippi, whites with college degrees earn substantially more than African Americans with college degrees -- \$34,439 and \$21,540, respectively. This is the largest pay difference by race of college graduates in the nation.⁵¹

II. OVERVIEW OF STUDY

⁴⁶ A Common Destiny: African Americans and American Society 58 (Gerald D. Jaynes & Robin M. Williams, Jr., eds., 1989) at 338-39.

⁴⁷ *Id.* at 339. African Americans also lag far behind whites in college completion rates. In 1960, less than 6% of African American men and women had completed college. *Id.* While that figure rose to 11% of African American men and 12% of African American women in 1980, it still is dismal when compared with completion rates of white men and women in 1980, which were 25.5% and 22%, respectively. *Id.* at 340.

⁴⁸ See, *supra* note 35, at MS2.

⁴⁹ *Education State Rankings, 2002-2003: PreK-12 Education in the 50 United States*, Morgan Quitno Press of Lawrence, Kan. (2002-03)

⁵⁰ Slater, *The States Where Higher Education Offers African Americans the Greatest Rewards*, *The Journal of African Americans in Higher Education*, Vol. 0, Issue No. 7 (Spring 1995) 59-67.

⁵¹ *Id.*

The current context of education in Mississippi reflects entrenched problems stemming from the state's historic reluctance to create and enforce an effectual school system for all Mississippians, and for African Americans in particular. Poor student performance and low graduation rates are related to long-standing issues of quality teaching standards, successful curriculum strategies, and appropriate resource allocation. African American and poor students, particularly those located in the rural Delta districts, have fared far worse over time in the school system. These students demonstrate lower school performance rates (e.g. attendance, graduation, college preparation) and suffer more inferior education conditions (i.e. fewer qualified teachers and advanced courses) than their counterparts. This study reviewed 2000 Mississippi Department of Education data to explore the relationship between education conditions and outcomes, especially in poor and African American communities.

This study analyzed education at the school district level including a range of relevant variables representing: student demographics, teacher quality, curriculum provision, and school expenditures. Initial analysis revealed the following statistically significant observations:

- School districts are racially segregated ($p = .000$). The majority of districts (82 of 152 or 54%) have a majority of African American students with a statewide district average of 56% African American students.
- Districts with high concentrations of African American students tend to be associated with high concentrations of poverty ($p = .000$). More than 80% of the Delta districts have above average concentrations of African American students *and* above average student eligibility for the free lunch programs (average percent eligible for free lunch 61%).
- Districts with higher poverty rates and larger percentages of African American students tend to have fewer teachers with advanced degrees ($p = .002$) and greater percentages of teachers with emergency licenses ($p = .000$).
- Although per pupil expenditures tend to be higher in majority poor and majority African American districts (probably due to a greater likelihood of receiving federal funds), these districts also tend to have higher administration (non-instructional) costs. (All of these relationships are significant at the $p = .000$ level).
- Largely African American and poor school districts are less likely to have advanced placement (AP) courses and more likely to have lower graduation rates ($p = .000$). However, the only demographic variable correlated (negatively at the $p = .030$ significance level) with the percent of college prepared students (represented by the % of high school seniors taking ACT tests) was the percent of free lunch eligible students. Predictably, the more AP courses offered and the teachers with advanced degrees in a school, the

more likely it was to have a college prepared students. College preparedness was positively related to the following: the number of AP courses offered ($p = .000$); the percent of teachers with advanced degrees ($p = .002$); and the graduation rate ($p = .000$).

- District averages of instructional personnel salaries ranged from \$28,200 to \$38,700, with a mean of \$32,700. There were no statistically significant relationships between student demographics at the district level and average instructional personnel salaries. That is there was not a statistically significant difference between teacher salaries in schools with poorer students versus schools with wealthier students. But there is an important correlation. Teacher salaries were positively correlated with state and local per pupil spending ($p = .000$) and negatively related to percent administrative expenditures ($p = .000$). This means that salaries are higher in schools with higher per pupil spending and lower in schools with high administrative expenditures. Also, as expected, these salaries were positively correlated at the district level with the % of teachers holding advanced degrees. These findings suggest that although there are no obvious discriminatory patterns of salary disparities, school districts are at an observable advantage to the extent they can attract and pay for highly educated teachers.

In order to more fully examine education disparities, statistics in this study have been disaggregated by race and class. The data were divided into four race and four class categories and examined both in full and across divisions. (See Appendix for category listings of school districts.) The categories represent data by quartiles allowing above and below average, as well as inter-quartile comparisons.

<i>Factor Variable</i>	RACE (% African American)			CLASS (% free lunch eligible)	
	Category	Range	Mean	Range	Mean
	1	3.1 – 30.2%	16.8%	16.4 – 44.4%	35.1%
	2	31.5 – 53.4%	42.1%	44.4 – 59.6%	50.7%
	3	53.9 – 85.4%	69.5%	60.1 – 80.4%	70.3%
	4	85.9 – 100%	96.1%	80.5 – 95.4%	88.1%

Again, inadequacy of education in Mississippi, while affecting all students, has had been especially detrimental for African American and poor students, demonstrating the need to understand educational outcomes as subgroups of the entire population experience them. Although the study did not find statistically significant differences along rural divisions, some of the data results will focus on education indicators for the 36 school districts in the 19 rural Mississippi Delta counties.

- | | | |
|--------------|---------------|------------------|
| 1. Bolivar | 8. Issaquena | 14. Tallahatchie |
| 2. Carroll | 9. Leflore | 15. Tate |
| 3. Coahoma | 10. Panola | 16. Tunica |
| 4. DeSoto | 11. Quitman | 17. Warren |
| 5. Grenada | 12. Sharkey | 18. Washington |
| 6. Holmes | 13. Sunflower | 19. Yazoo |
| 7. Humphreys | | |

The data results are presented in three categories: teacher quality; curriculum; and finance.

III. TEACHER QUALITY

A. Introduction to Existing Research

Good teachers make a difference in student achievement. A 1998 study by the Education Trust showed that students who had several effective teachers in a row made large gains in achievement. Those who had even two ineffective teachers in a row lost significant ground: ground that they may never recover. Students who have achieved at the same level in third grade may be as many as 50 percentile points apart three years later based on the quality of their teachers.⁵²

In order to measure teacher quality, research has looked at several factors. Some of the main factors include: 1) subject area certification; 2) college majors and minors; and 3) teaching experience.

- Subject area certification

Many secondary school teachers lack state certification to teach the subjects they are teaching. As many as 30 states allow new, uncertified teachers to begin teaching. These teachers are mostly assigned to poor schools. Students attending high poverty schools (at least 75% poor) are twice as likely to be taught by teachers not certified in their fields, compared to low poverty schools (less than 10% poor). The same is true of majority African American schools (at least 90% African American) and majority white schools (at least 90% white). African American students in predominantly African American schools are more than twice as likely to have a teacher uncertified in the field he or she is teaching.⁵³

- College majors and minors

The deeper a teacher's familiarity with the subject area being taught, the better he or she teaches it. Research shows that out-of-field teaching is a significant barrier to student achievement. (See e.g. Webster 1988). The definition of in-field teaching includes a major in the subject matter one teaches in *and* subject-specific education. For example, an in-field math teacher will have majored in math in college and taken math education majors. A teacher must

⁵² Haycock, *Good Teaching Matters*, Thinking K-16 (Summer 1998), Education Trust.

⁵³ *Honor in the Boxcar: Equalizing Teacher Quality*, Thinking K-16 (Summer 2000), Education Trust, at 5.

know the substance and learn how to teach it. One researcher has estimated that more than four million secondary students nation-wide are taught core academic subjects by teachers with neither a major nor a minor in the field being taught. The problem is pronounced for high school students. Twenty-two percent of high school English teachers lacked a major or a minor in English. Twenty-eight percent teaching math lacked a major or minor in math. Eighteen percent of science and social studies teachers lacked a major or a minor in those fields.⁵⁴ Out-of-field teaching is common in rural areas in particular.

- Teaching experience

Nationally, children in high-poverty schools are more likely than students in low-poverty schools to be taught by inexperienced teachers (those with 0-3 years of experience). The same patterns hold true when the data are examined by race.⁵⁵

These problems, as the Education Trust has pointed out, are cumulative. If a quarter of the teachers in a school are uncertified, it does not mean that the other three-quarters are adequate performers in the classroom. In fact, if the school is poor and/or largely non-white, the likelihood is that the certified teachers are inexperienced, teaching out of their field or low-performers on the licensure exam. Researchers in both New York and California found differences in teacher quality *between* even otherwise similar schools. There are, in other words, significant numbers of schools that are essentially dumping grounds for unqualified teachers.⁵⁶ The same may be true within a particular school based on ability grouping or “tracking” of students. Teachers who teach Advanced Placement and Honors courses are usually experienced and certified in the field in which they are teaching with a major or minor in that field.⁵⁷

Out-of-field teaching, emergency licensed teachers and other teacher quality ills are often attributed to teacher shortages. National research based on US Department of Education (SASS) data has found that there is not a “teacher shortage” in the way it is usually discussed – a problem of attracting a sufficient number of people to the profession. The problem is keeping them in the profession: vacancies are the result of teachers moving from or leaving their jobs. (Ingersoll 1995).

As a result, the programs designed to attract new candidates into teaching do not necessarily address the problem – teacher retention. The research on

⁵⁴ *Id.* at 7, citing Ingersoll, Richard “The Problem of Underqualified Teachers in American Secondary Schools” *Educational Researcher*. Vol. 28 Number 2, March 1999 (based on 1993-94 data).

⁵⁵ *Id.* at 10.

⁵⁶ *Id.* at 11.

⁵⁷ *Id.*

urban schools finds that good working conditions are very important to attracting and keeping good teachers. One study even found that the highest rate of teacher turnover is actually in small, private schools, based on salary (they tend to pay less than public schools). (Ingersoll 1996). Good working conditions-- even more than students' socioeconomic status -- are associated with better teacher attendance, more effort, higher morale, and a greater sense of efficacy in the classroom. These conditions include (Corcoran, Walker, White 1988):

- strong, supportive principal leadership;
- good physical working conditions;
- high levels of staff collegiality;
- high levels of teacher influence on school decisions; and
- high levels of teacher control over curriculum and instruction.

Over time, lack of resources -- whether staff, material, equipment or funds -- creates stress among school staff. (Corcoran, et al., 1988).

A recent Education Week survey on the extent to which states were improving teacher quality graded Mississippi. It got a C-. According to Education Week, Mississippi does the following things right. Mississippi has licensing tests in basic skills, subject matter knowledge and subject specific pedagogy. It provides incentives to earn National Board Certification and sets aside time for professional development and finances it for all local educational agencies.

But it got a low score because it provides no performance assessment for second stage certification. It does not tie teacher evaluations to student achievement (except if the school is identified as a priority school). Only 58% of secondary teachers majored in the subject in which they teach. The national average is 64%. Mississippi has no minimum degree or coursework requirement for the subject area taught. Nor does it discourage out-of-field teaching. The two primary measures Education Week used to make this determination were: 1) Mississippi does not require middle school teachers to have a subject area endorsement; and 2) there is no requirement that parents be notified that their children are being taught by out-of-field teachers.

Only 38% of Mississippi teachers are graduates from NCATE accredited teacher education programs, compared to 67% nationally. Teacher salaries are relatively low. New teachers earn about \$25,388, compared to \$28,986 nationally. The average teacher salary in Mississippi is \$35,652, but the national average is \$43,250.

B. Present Findings

This study incorporates two measures of teacher quality. The variable indicating the provision of high quality teaching skills is the percentage of teachers with advanced degrees. The variable associated with teaching

inadequacies is the percentage of teachers with emergency certification licenses. It is important to note that the state defines “highly qualified” teachers only as those holding regular state certification.

While districts with above average concentrations of African American students had lower than average percentages of teachers with advanced degrees, these districts have significantly more than their fair share of teachers with emergency certifications. The average percentage of teachers with advanced degrees across the districts was 36.8%.

<u>Race Quartiles</u>	<u>Average % of Highly Skilled Teachers</u>
1 st	38.2%
2 nd	38.9%
3 rd	35.2%
4 th	34.8%

This trend appears relevant despite a relatively low degree of statistical significance ($p = .061$). The trend of percentages of poorly prepared teachers (% of emergency certification licensees) was extremely pronounced and statistically significant in districts with high concentrations of African American students.

<u>Race Quartiles</u>	<u>Average % of Emergency Certified Teachers</u>
1 st	5.4%
2 nd	5.7%
3 rd	5.9%
4 th	10.8%

Districts with the largest proportions of African American students (mean =96%) had approximately twice the rate of unqualified teachers in their schools. Delta communities comprise two-thirds of this group (4th quartile) of districts subjected to inadequately skilled classrooms teachers.

In terms of class disparities, the poor school districts are also more likely to have less access to highly skilled teachers and more reliance on emergency certification licensees for their classrooms.

<u>Class Quartiles</u>	<u>Average % Highly Skilled Teachers</u>	<u>Average % Emergency Certified Teachers</u>
1 st	38.9%	4.1%
2 nd	38.8%	6.2%
3 rd	34.1%	6.9%
4 th	35.1%	10.6%

The poorest group of districts, those in the 4th quartile (% of free lunch eligible students average of 88.1%), had lower percentages of teachers with advanced

degrees and more than twice as many emergency certified teachers than the most affluent districts, those in the 1st quartile (% free lunch eligible students average of 35.1%). Again, communities in the Delta made up a large percentage (58%) of the poorest groups of school districts (4th quartile).

These statistical trends are particularly troubling given the significantly positive correlation between the presence of highly skilled teachers in the classroom and indicators of educational success (i.e. higher rates of graduating and college-prepared seniors). In districts with high concentrations of poor and African American students, particularly in Delta communities, the lack of qualified teachers reduces the likelihood for improved student achievement.

C. Strategies for Improving Teacher Quality

There are three general types of programs to attract people to the teaching profession: 1) entice professionals into a mid-career change to teaching; 2) alternative certification programs which allow college graduates to begin teaching immediately without a license; and 3) Peace Corps-like programs such as Teach for America designed to lure the "best and brightest" into understaffed schools. These reforms do not necessarily address the problem of teacher quality or teacher retention. (Ingersoll 1996). Multivariate analyses show that low salaries, rampant student discipline problems, and little faculty input into school decision-making all contribute to high rates of teacher turnover. (Ingersoll 1996; see also *The Condition of Education* 1997, Indicators 34, 41, 48, 49, 56).

Rural schools face some additional problems in teacher recruitment and retention. Recent research on rural teacher recruitment and retention has largely occurred outside the United States. (Murphy & Angelski, 1996/1997 – British Columbia study). The literature suggests that the "ideal" rural teacher is certified to teach more than one subject or grade level, can teach students with a wide range of abilities in the same classroom, is prepared to supervise extracurricular activities, and can adjust to the community (Lemke, 1994; Stone, 1990). In the British Columbia study, teachers stayed because of their principal, spouse employment in the community, and satisfaction with the rural lifestyle (Murphy & Angelski, 1996/1997). The principal reason teachers leave rural areas, according to one study, is isolation--social, cultural, and professional. Collins, *Attracting and Retaining Rural Teachers*, ERIC Clearinghouse, Dec. 1999).

Although few universities in the United States have pre-service programs for rural teachers, successful programs in Australia and Canada offer a rural focus in course work and provide ample opportunity for rural experiences (Stone, 1990; Boylan & Bandy, 1994). (Note: there is some research that suggests preservice programs do not advance teacher retention. This makes some sense considering the research that the main issues for retention are income, environment and decision-making participation).

Mississippi's Critical Teacher Shortage Act has begun to address some of teaching needs in hard-to-staff districts which are predominantly poor, rural, and African American. The Act is comprised of six program components. These programs target, but are not limited to, Critical Shortage Areas (CSA) – districts designated each year by the Mississippi Department of Education as areas “with 60 or more teaching positions having 10% or more of their teaching staff not appropriately licensed.” For districts with less than 60 positions, the CSA criterion is that 15% or more of the teaching staff is not appropriately licensed. The six state programs created by the Critical Teacher Shortage Act are:

- **Critical Needs Scholarship Program** – This program provides scholarships for undergraduates for up to four years of financial aid (tuition, fees, book, room and board) and requires a three year commitment of teaching in a CSA upon graduation. Thus far, 173 teachers from this program have been placed in CSAs.
- **William F. Winter Scholarship** – This program provides financial aid in the form of scholarship loans (\$1,000 – \$3,000). Scholarship recipients are given one year in loan forgiveness for each year of teaching in any Mississippi school district. Recipients are given four years of loan forgiveness for teaching three years in a CSA.
- **Mississippi Teacher Fellowship Program** – This program provides fellowships (tuition, books, materials, fees) for teachers in CSA districts to obtain their Master's degree in education. Thus far, 176 individuals have participated in this program.
- **Mississippi School Administrative Sabbatical Program** – This program is available to teachers and administrators with three or more years of experience and a recommendation from any Mississippi school district. Individuals participating in this program must commit to five years administration in the sponsoring district.
- **Moving Expenses** – Mississippi will provide up to \$1,000 for moving expenses for teachers relocating to teach in a CSA. This is a one-time grant.
- **Housing Assistance for Teachers (HAT)** – HAT will provide a loan (up to \$6,000) to pay for closing costs for teachers in CSA district to buy a house in that county. The program requires one year's service in a CSA for each third of the loan.

These programs are relatively small given the significant need in CSAs. In addition, only one of the programs addresses the need for teachers with advanced training. Still, more than two-thirds of the participants have been placed or are located in CSAs. Again, these programs serve as only a beginning strategy to tackle the multifaceted issue of improving teacher quality in Mississippi.

IV. FINANCING

Historically, Mississippi public schools have been funded at significantly lower levels than other states. In 1996 Mississippi spent an average of \$3,948 per pupil. Not only was this number significantly lower than other regions of the country, it was lower than almost every other state in the region.

STATE	1996 PER PUPIL SPENDING	DIFFERENCE AS COMPARED TO MS
ALABAMA	\$4,302	+\$354
ARKANSAS	\$3,303	-\$645
FLORIDA	\$5,270	+\$1322
GEORGIA	\$5,935	+\$1987
KENTUCKY	\$5,245	+\$1297
LOUISIANA	\$4,342	+\$394
MISSISSIPPI	\$3,948	----
NORTH CAROLINA	\$4,941	+\$993
SOUTH CAROLINA	\$4,581	+\$633
TENNESSEE	\$4,832	+\$884
VIRGINIA	\$5,614	+\$1666
US AVERAGE	\$5,787	+\$1839

In the current study, the major factors considered for the examination of school district funding allocations were:

- Per pupil spending at the federal, state, and local levels;
- Percentage of budget spent on district administrative expenses; and
- Salaries of instructional personnel.

These variables allow only a broad observation of district expenditures. This study lacked data on specific funding allocations to a school within the district, which might provide a better picture of the nature and impact of per pupil spending. The following sections will explore the relationships between finance and other district level variables.

The MAEP funding formula has standardized much of the variance in the total expenditures across districts. MAEP considers federal funding available for a district, and then sets state and local contributions to meet an expenditure figure based on the average cost of operating a level III school. In the 2000-2001 school year, on average districts spent about \$5,900 per enrolled students. Federal funds, on average, account for about 16% of the per pupil district spending. There are, however, extreme differences in funding sources across districts. This is evident when comparing two Delta districts, DeSoto and Hollandale, where federal contributions comprise approximately 6% versus 31%, respectively, of the district's budget. Federal spending tends to play a greater role in poor and African American districts. In affluent, majority White school districts, like DeSoto and Rankin, state and local funding are more than 93% of

the total expenditure and strongly shape school activities. The degree to which funding sources differ across districts appears to be important in influencing administration and instructional spending. More research is needed to understand these differences and their impact on student achievement.

Administration expenditures are about 4%, and range from 1.2% to 11.4% of the total education spending in districts. Increases in total per pupil expenditures, as well as increases in federal or local spending are positively correlated with administration expenditures. In other words, the more that funding is available in a district, regardless of the source (but especially increases in federal monies), the more schools are able to spend on administrative costs. Districts with high concentrations of African American and poor students tend to spend a larger percent of their budget on administrative costs ($p = .000$ for both variable relationships). Not surprising, a disadvantage to spending more on administration tends to be that less monies are allocated for instructional costs. Administration costs are negatively related to average instructional costs ($p = .001$).

Standardization of teachers' salaries in the mid 1980's has reduced extreme disparities across districts. As previously noted, instructional personnel's average salary is about \$32,700 and ranges from roughly \$28,200 (in Lumberton) to \$38,700 (in Biloxi). Average teachers' salaries are associated with higher total expenditures per pupil in districts. However, the amount of teachers' salaries tends to be highly influenced by the source of school funding. Instructional salaries are positively correlated with state and local contributions ($p = .000$), and not statistically related to federal expenditures. Additionally, districts with higher percentages of teachers with advanced degrees spend more on instructional staff salaries. Similarly, districts with larger percentages of less qualified teachers (those holding emergency certification licenses) spend less on instructional costs.

Although disparities in school financing across districts have been significantly reduced in the past decade, important differences remain. Poor and largely African American districts remain more reliant on federal funding than their counterparts. This lack of local revenue appears to affect the ability of these districts to pay more for highly skilled teachers. As noted in previous sections, higher teacher quality is associated with better curriculum and better student performance. Thus, school funding and resource allocation, especially in poor and African American districts, is a significant factor in education success and must be explored more fully.

V. CURRICULUM AND STUDENT ACHIEVEMENT

A. Graduation Rates, The American College Test and Advanced Placement Courses

Mississippi offers very few Advanced Placement courses to its students. According to a 1997 Education Week report (based on unpublished Education Testing Service data), only 38% of high schools in Mississippi offered advanced placement courses, compared to a national average of 58%. Regionally, only two states had a lower percentage of high schools offering AP courses: Louisiana (20%) and Arkansas (31%). Most southern states have a significantly higher percentage of high schools offering AP courses.

This study used the following variables to measure curriculum: the rate of graduation; percent of college-prepared students; and number of advance placement (AP) courses offered. The study used these measures to reflect the degree to which districts provide appropriate coursework for student's educational success. The study lacked data reflecting curriculum content.

The average graduation rate in Mississippi school districts was 77.2%. The graduation rate ranges across school districts from a low of 47.5% in Okolona to a high of 100% in Pontotoc City. As previously mentioned, graduation rates are correlated with teacher quality indicators. The percentage of graduating seniors is positively associated with the percentage of teachers with advance degrees and negatively correlated with the percentage of instructors with emergency certifications.

Graduation rates are significantly lower (nearly ten percentage points) in districts with high proportions of African American and poor students.

<u>Race Quartiles</u>	<u>Average Graduation Rate</u>
1 st	80.0%
2 nd	80.3%
3 rd	76.0%
4 th	71.5%

<u>Class Quartiles</u>	<u>Average Graduation Rate</u>
1 st	82.8%
2 nd	76.8%
3 rd	75.5%
4 th	73.6%

In all but two of the districts with lowest graduation rates (lowest 5% of all ranked districts), concentrations of African American and poor students are above average. Additionally, most of these districts are located in the Delta.

<u>District</u>	<u>% African American</u>	<u>% Free Lunch Eligible</u>	<u>Graduation Rate</u>
Okolona	93.47	87.9	47.5
<i>Greenville Public</i>	95.54	82.6	50.9
Houston	46.34	53.7	56.3
<i>Sunflower</i>	96.80	87.3	58.9
<i>South Delta</i>	96.67	94.0	60.5
<i>Quitman</i>	97.10	90.0	60.9
<i>Yazoo City</i>	97.17	90.6	61.1
Forrest Municipal	64.53	65.5	61.1

Italics indicates district located in a Delta county

Pontotoc county school districts boast the highest graduation rates in the state, at 100% in the city and 98.1% in the rest of the county. In this study, Pontotoc county school districts are in the first quartile race and class divisions. This means that these districts have low concentrations of African American and poor students.

The variable representing college preparedness is the percentage of seniors who have taken the ACT (American College Test). The variable indicates the degree to which students consider higher education attainment. The rate of students taking the ACT averages at 37.4% and ranges between 15.2% in Greenville (a Delta community) and 59.7% in Ocean Springs (7.4% African American and 16.4% free lunch eligible students). The percentage of seniors taking the ACT is strongly and positively related to the number of AP courses ($p = .000$) and percentage of teachers with advance degrees in a district ($p = .002$). The percentage of seniors taking the ACT is also correlated with higher graduation rates. Districts with large concentrations of poverty tend to be associated with low ACT rates.

Advance placement courses are classes that can be taken in high school for college credit. These courses allow entering college freshman to bypass large, introductory “weed-out” classes and begin their studies at higher levels than their peers. As noted above, the number of advanced placement courses in a district tends to increase in relationship to the percentage of teachers with advance degrees and the percentage of students who have taken the ACT. In more than one-quarter of the school districts (27.3%), AP courses are not offered. These districts tend to be majority African American (70.9% on average) and/or majority poor (73.7%), and many are located in the Delta.

The data suggest that districts that have the ability to provide qualified teachers and advance placement courses are more likely to have students who will graduate and pursue a college education. The data also reveal a disturbing trend that poor and African American students are more likely to be in districts that are unable to provide them with the tools for educational success.

The study's findings are supported by other reports of low student achievement in Mississippi. Only 18% of fourth graders tested "proficient" on the National Assessment of Educational Progress (NAEP) for reading (1994 data). The national average was 28%. Again, Mississippi ranks at the bottom for the region, trailed only by Louisiana. Nine states in the South have at least a 5% higher proficiency rate than Mississippi.

Surprisingly, in 1996 Mississippi had the highest percentage in the region of students taking upper level science courses (40%) and significantly higher percentages than the national average (27%). It also had the highest number of high school graduates in the region enrolling in two to four year colleges in 1994 (69%). The national average was 62%.

STATE	4 th graders proficient in reading	HS offer- ing AP course	8 th graders taking algebra	Students taking upper level math	Students taking upper level science	16-19 yr olds not in school who had not graduated	9 th -12 th graders who dropped out of school in '94-'95	HS grads enroll- ing in 2 or 4 year college ('94)
AL	23%	50%	21%	32%	22%	11%	6.2%	64%
AR	24%	31%	18%	43%	28%	8%	4.9%	48%
FL	23%	81%	27%	?	?	13%	?	49%
GA	26%	79%	30%	?	?	12%	9%	59%
KY	26%	67%	22%	47%	32%	12%	?	49%
LA	15%	20%	14%	44%	21%	13%	3.5%	53%
MS	18%	38%	18%	46%	40%	10%	6.4%	69%
NC	30%	88%	30%	59%	30%	11%	?	51%
SC	20%	93%	28%	?	?	11%	?	58%
TN	27%	53%	18%	39%	19%	10%	?	54%
VA	26%	86%	29%	?	?	9%	?	53%
US AVG	28%	58%	25%	43%	27%	9%	n/a	62%

Table taken from Education Week's Quality Counts '98: Student Achievement Data Table 4.

This study lacked the data to measure other important curricular variables, including class size and conduct in the classroom. It is, however, relevant to note what other studies found.

B. School Climate

1. Class size

Class room overcrowding is a national problem. Therefore, Mississippi classroom sizes do not compare badly with the national average. It appears that Mississippi has approximately one third of its student population in fairly large classrooms, according to a 1998 Education Week study. Only 71% of fourth

graders and eighth graders were in classrooms of no more than 25 students. This earned Mississippi the low grade of D on classroom climate. Notably, few states do well on this measure and Mississippi is performing substantially better than the national averages (60% of 4th graders and 50% of 8th graders in classrooms with 25 students or less. It would, however, be important to identify where overcrowding occurs. It would be consistent with other state and local experiences if overcrowding occurred disproportionately in poor African American schools. More information is necessary to make this assessment.

2. Classroom behavior

The US Department of Education surveys students to determine classroom behavior. The survey does not take into account teacher failures in maintaining order in the classroom or in motivating students. It is, however, useful data for identification of problems in the classroom. According to the 1998 Education Week study, based on 1996 data, Mississippi's eighth graders reported significant problems with absenteeism, tardiness and misbehavior. Only 60% report that absenteeism is not a problem, 69% report that tardiness is not a problem and 54% report that misbehavior is not a problem. The national averages are 75%, 80% and 67%, respectively.

3. Corporal punishment

A US Department of Education study suggests that more students experience corporal punishment in Mississippi than anywhere else in the nation. The study shows 12.4 percent of Mississippi's public school children were paddled during the 1997 school year. That places the state at the top of a national ranking for use of corporal punishment. Arkansas was ranked second for paddling an estimated 10.8 percent of students followed by Alabama with 6.3 percent. Estimates show that nationally, 2,500 students receive corporal punishment a day and that African American children, who make up 17 percent of the U.S. student population, received 39 percent of them. It should be noted that African American in Mississippi parents have reported incidents of beatings, with paddles in which their children have sustained bruises and other injuries. The Department of Education study did not examine severity of corporal punishment, only occurrence.

In Mississippi state law allows corporal punishment in public schools. The state Department of Education has no guidelines on paddling and leaves the decision up to the districts.

VII. CONCLUSION AND RECOMMENDATIONS

Public education in Mississippi continues to be racially identifiable, inequitable and inadequate. Education policy in Mississippi, as elsewhere, is a reflection of the state's social, economic and political ideology – racial segregation and subordination of African Americans, a low wage labor base for the economy and the ideology of individual self-help. As a result, earnest education reforms began only in the past decade and, with the possible exception of the recent attempt to equalize funding, has not adequately addressed the structure of the educational system. Not surprisingly, student achievement across the state is low, but it is particularly low for poor African American students.

This study's findings can be summarized as follows:

- The MAEP formula improves equity in financing of public education across wealthy and poor school districts, but does not adequately take into account either the cost of actually improving school performance to adequate levels or the cost of providing an excellent education.
- Rural, poor, and African American students, generally, have more poorly prepared teachers (% of emergency certification licensees) and fewer teachers with advanced degrees.
- The data suggest that districts that have the ability to provide qualified teachers and advance placement courses are more likely to have students who will graduate and pursue a college education. African American majority schools are less likely to offer advanced placement courses. Graduation rates are significantly lower (nearly ten percentage points) in districts with high proportions of African American and poor students.
- Money matters. Although disparities in school financing across districts have been significantly reduced in the past decade, important differences remain. Poor and largely African American districts remain more reliant on federal funding than their counterparts. This lack of local revenue appears to affect the ability of these districts to pay more for highly skilled teachers

Because Mississippi's educational system also serves an economy that relies on low wage, technologically unprepared labor that reinforces the historic subordination of African Americans, it may be necessary to develop a long-term reform strategy that takes these structural realities into account. A reform strategy may need to be couched in terms of economic reform and additional structural reforms related to institutionalized racism.

It is clear from the research that teacher quality and curriculum are interrelated and must be addressed. Developing some shorter-term strategies to identify reforms and focus resources on these problems would be useful.