

Mississippi's MANDATE

Why the Investment in Education Pays off in Mississippi

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Institute for Higher Education Policy

Funding for this project was made possible through the generous support of **USA Funds®**

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MAY 2006

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ACKNOWLEDGEMENTS

The authors are grateful to many individuals and organizations for their efforts in making this study a success. We especially thank officials of the Mississippi Institutions of Higher Learning Dr. Phil Pepper, Assistant Commissioner of Policy, Research, and Planning, and Pete Waley, Director of the Bureau of Planning, for their continuing guidance as this project evolved.

We also would like to thank the many persons at both the state and national levels who provided us with data and information that have been critical to the substantive analysis contained in this report.

We also heartily acknowledge our Institute for Higher Education Policy colleagues Lan Gao, Graduate Fellow, Alisa Cunningham, Managing Director of Research and Evaluation, and Loretta Hardge, Director of Communications, for their very careful editing, fact checking, and overall feedback at various stages of the study.

Finally, we would like to acknowledge the critical role of Henry Fernandez, Executive Director of Scholarships, Outreach and Philanthropy at USA Funds®, as well as the entire USA Funds communications team, in making this project possible. From conception to final design, USA Funds has been an outstanding partner and supporter of the project.

We acknowledge the assistance and support of USA Funds and other organizations that provided data and feedback and recognize that they are not responsible for any errors of omission or interpretation contained herein.

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Introduction

Education, ingenuity, and perseverance have always been important components of the American dream. Today, a college degree is an increasingly critical milestone on the road to personal independence and career success. The individual gains from education are more obvious, but society also benefits substantially from the skills and knowledge of college graduates. In short, individuals benefit both from attaining a college degree and from living in a well-educated community. Yet, in response to shifting attitudes about the relative importance of individual and societal benefits that result from increased education, the share of public resources going to higher education in the United States has decreased over time. The purpose of this report is to present information to help policymakers and the general public understand and appreciate the relative contribution of education to individuals and to society.

This report was inspired in part by a nationally acclaimed 2004 study by the Institute for Higher Education Policy and Scholarship America entitled *Investing in America's Future: Why Student Aid Pays Off For Individuals and Society*. That study documented widespread and dramatic benefits to the nation from investing in higher education and the critical role played by student financial aid.

Benefits of Education to Individuals and Society

Many attempts have been made to document and quantify the benefits of education for both the individual and society. The most commonly accepted public and private benefits are catalogued in Figure 1 and related to their economic or social value (Institute for Higher Education Policy 1998). According to U.S. Department of Labor data, by 2020 there will be 12 million more skilled jobs—those requiring a college education—than people qualified to fill them (Carnevale & Fry 2001). Seventy percent of the top 30 fastest-growing jobs nationally in the next decade require postsecondary education (ACRN 2005).

Private Economic Benefits

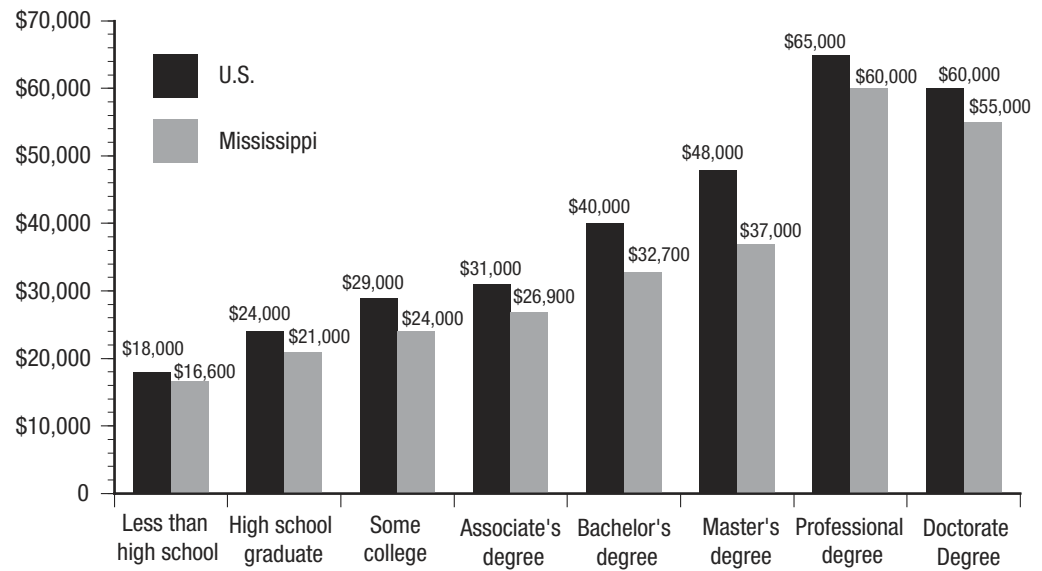
Most discussions about the value of education concentrate on private economic benefits. Individual gains from education are much more salient because of the clear correlation between income earning potential and the level of educational attainment. As shown in Figure 2, a high school graduate is likely to earn approximately 1.3 times as much annually as a high school dropout, both nationally and in Mississippi. The difference is even more striking for those who attain four-year degrees. A bachelor's degree recipient in Mississippi and the United States, respectively, can expect to earn 1.6 and 1.7 times more per year than a high school graduate.

Figure 1: Benefits Resulting from Higher Education

	Public	Private
Economic	<ul style="list-style-type: none"> ○ Increased Tax Revenues ○ Greater Productivity ○ Increased Consumption ○ Increased Workforce Flexibility ○ Decreased Reliance on Government Financial Support 	<ul style="list-style-type: none"> ○ Higher Salaries and Benefits ○ Employment ○ Higher Savings Levels ○ Improved Working Conditions ○ Personal/Professional Mobility
Social	<ul style="list-style-type: none"> ○ Reduced Crime Rates ○ Increased Charitable Giving/Community Service ○ Increased Quality of Civic Life ○ Social Cohesion/Appreciation of Diversity ○ Improved Ability to Adapt and Use Technology 	<ul style="list-style-type: none"> ○ Improved Health/Life Expectancy ○ Improved Quality of Life for Offspring ○ Better Consumer Decision Making ○ Increased Personal Status ○ More Hobbies, Leisure Activities

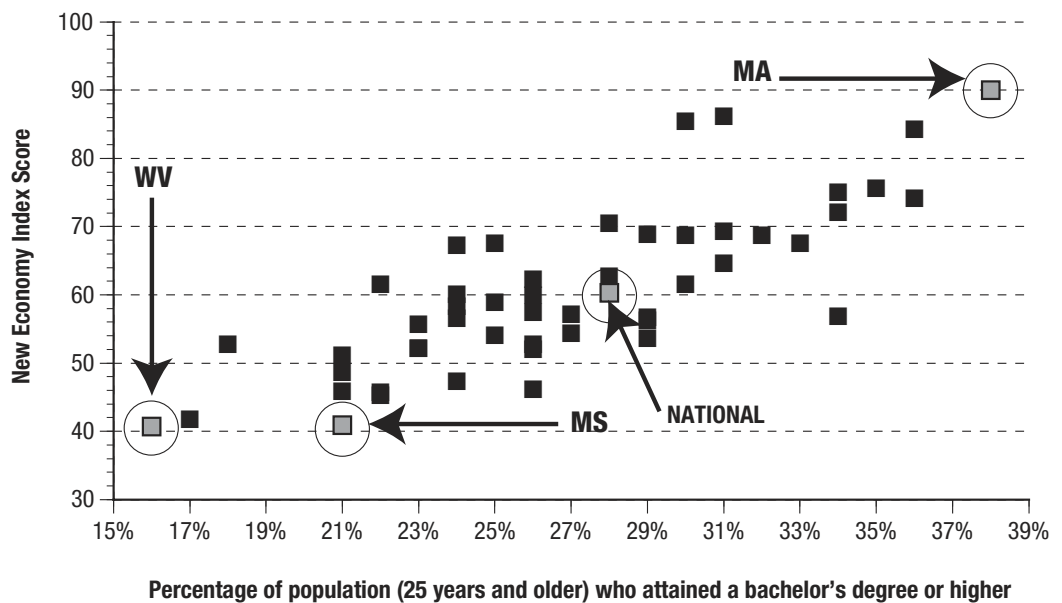
SOURCE: Institute for Higher Education Policy 1998.

Figure 2: Median Earnings of Year-Round, Full-Time Workers in Mississippi, Age 30 and Older, by Educational Attainment (1999)



SOURCE: U.S. Census Bureau 2000a.

Figure 3: New Economy Index by Educational Attainment and State



SOURCES: U.S. Census Bureau 2004; New Economy Index 2002.

Educational attainment not only provides higher earning potential, but also an improved ability to find employment in general. High school dropouts are the least likely of all groups to find employment and the most likely to become recipients of public assistance. In 2003, almost 65 percent of all public assistance recipients in the state of Mississippi were individuals who did not complete high school (U.S. Census Bureau 2004).

Public Economic Benefits

Education not only creates individual economic gains but also serves as a catalyst for the greater well-being of the whole society. Increasing income of individual citizens is often associated with greater spending, greater tax revenues, and eventual economic growth. Thus, public policy aimed at increasing the level of general educational attainment can potentially bring substantial benefits to the economy.

In the 2002 New Economy Index,¹ Mississippi languished near the bottom among the 50 states. The index, developed by the Progressive Policy Institute, measures the extent to which states participate in knowledge-based industries. Figure 3 shows the relationship between each state's level of educational attainment and the New Economy Index—Mississippi had one of the lowest educational attainment levels in the country and was the second worst-performing state, besting only West Virginia. As of March 2004, only 20 percent of Mississippi's population age 25 and older held a bachelor's degree. On the other hand, Massachusetts was the best-performing state and scored 90 on the New Economy Index. Not surprisingly, the level of educational attainment was almost twice as high in Massachusetts as in Mississippi. In Massachusetts, 38 percent of the population attained a bachelor's degree and higher.

Private Social Benefits

Private social benefits accrue to individuals or groups and are not directly related to economic, fiscal, or labor market effects. These private benefits can range from personal and professional fulfillment to the ability to engage in hobbies and leisure activities. One quantifiable indicator in this category is personal health.

The general level of health is dependent on both an individual's ability to finance resources for remedial health care and his or her "behavioral attitude" toward health. The ability to obtain financial resources for remedial health care (or health care insurance coverage) is partly based on an individual's ability to obtain higher paying and more fulfilling employment, which, in turn, may be dependent on an individual's level of educational attainment. Also, wealthier and more educated people will spend money on "fruits and vegetables in the grocery store, instead of cigarettes and beer. They will purchase a safer car and always fasten their seat-belt" (Logue 2000a, p. 5). In addition, education is related to improved health beyond the

¹ The New Economy Index is an index of 21 indicators designed to measure the degree to which state economies were structured and operated according to the tenets of the New Economy. According to the Progressive Policy Institute, the term New Economy refers to a set of qualitative and quantitative changes that, in the last 15 years, have transformed the structure, functioning, and rules of the economy. The New Economy is a knowledge and idea-based economy where the keys to job creation and higher standards of living are innovative ideas and technology embedded in services and manufactured products.

Table 1: Percentage of Population Age 25 and Older Who Described Their Health as Good, Very Good, or Excellent in March 2004, by Educational Attainment

	United States	Mississippi
All education levels	84.1%	77.5%
Less than 9th grade	64.4%	36.0%
Less than high school	69.4%	57.1%
High school graduate-high school diploma	82.0%	79.7%
Some college but no degree	86.5%	80.6%
Associate's degree	88.7%	82.9%
Bachelor's degree and higher	92.6%	92.7%

SOURCE: U.S. Census Bureau 2004.

Table 2: Percentage of Population Age 25 and Older Who Voted in the November 2000 Election, by Educational Attainment

	United States	Mississippi
All education levels	62.9%	63.6%
Less than 9th grade	40.5%	48.8%
Less than high school	43.1%	53.0%
High school graduate-high school diploma	56.0%	62.8%
Some college but no degree	66.6%	64.4%
Associate's degree	68.8%	77.2%
Bachelor's degree and higher	78.2%	72.1%

SOURCE: U.S. Census Bureau 2000b.

Table 3: Percentage of Population Age 25 and Older Who Indicated Ever Volunteering by September 2004, by Educational Attainment

	United States	Mississippi
All education levels	24.6%	12.5%
Less than 9th grade	8.9%	7.4%
Less than high school	13.7%	8.6%
High school graduate-high school diploma	20.6%	8.0%
Some college but no degree	30.7%	13.7%
Associate's degree	31.0%	21.2%
Bachelor's degree and higher	35.8%	24.5%

SOURCE: U.S. Census Bureau 2000b.

effects of income. Better health contributes to better education (healthier children have more energy for study and are less likely to skip school), and more education helps to contribute to better health (knowledge about proper diets leads to better medicinal choices).

Table 1 shows that more than 93 percent of people in Mississippi with a bachelor's degree indicated that they were in "excellent, very good, or good health" compared with less than 80 percent of those with less than a high school diploma.²

Public Social Benefits

Public discussion about the benefits of education often overlooks one of the major goals of education, apart from being the mechanism for knowledge and skills transfer. Education is instrumental in instilling civic values and acceptable behavioral norms. More educated people have a tendency to be active members of their society and have greater trust in its institutions. Education can also work as a unifying force in societies divided along ethnic and religious lines, allowing cross-cultural interaction and better understanding between different ethnic groups (Gradstein and Justman 2002). In short, education promotes the existence of social cohesion.³

The level of civic engagement and volunteerism are two quantifiable aspects of social cohesion. Table 2 points out the contrast in voting rates by level of educational attainment. Only about 50 percent of Mississippians with less than a high school diploma voted in the November 2000 election, compared with almost three-fourths of those with a bachelor's degree and higher.

Table 3 shows a similar pattern in volunteering engagement in Mississippi and nationally. Less than 10 percent of persons in Mississippi age 25 and older with less than a high school diploma reported volunteering for or through an organization in September 2004; almost 30 percent of those with a bachelor's degree did so.

These data show that education, especially at the level of at least a bachelor's degree, provides important and tangible benefits to society and individuals. There is a significant return to both the state of Mississippi and its residents from public investment in education at all levels.

² Please note that values should be considered only as approximations because of the small size of samples.

³ There is no clear cut definition of social cohesion. Political scientists view social cohesion in a number of ways, from the presence of common norms and values or having a sense of shared identity and belonging to a community, to the presence of institutions responsible for providing collective welfare and income distribution in a society (Green, Preston, Sabates 2003).

The High School Dropout Dilemma:

The Opportunity Costs of Opting out of Education in Mississippi

Study after study has shown that the higher the level of educational attainment, the greater the benefits to both individuals and society. In contrast, lack of education can thwart an individual in developing both personally and professionally and impose serious costs upon society. Mississippi has one of the lowest levels of educational attainment in the country and suffers from an array of social and economic problems associated with low educational attainment.

To provide the public and policymakers with information to assess and improve postsecondary education, the National Center for Public Policy and Higher Education (NCPPE) has published three national report cards for higher education. According to the Center, about 20 percent of adults in Mississippi do not have a high school diploma or its equivalent compared with a national average of 14 percent (NCPPE 2004). Of course, low high school graduation rates adversely affect college graduation and college-going rates in the state. Only 20 percent of all adults age 25 to 65 in Mississippi had a bachelor's degree or higher in 2004 (NCPPE 2004). Furthermore, the 2002 high school graduation rate in Mississippi was less than 60 percent, based on a study conducted by the Manhattan Institute (Winters and Green 2005). In 2004, a Mississippian had only a 34 percent chance of going to college by age 19.

The situation is further exacerbated by the lack of quality education for underprivileged students. Researchers at Johns Hopkins University identified schools with underprivileged populations that have a good graduation track record. They search for schools where at least 40 percent of students qualify for free lunch, where 25 percent or more of students are black or Latino, and where the average promoting power over three years (defined as the ratio of students who move from one grade to another in a given year) is at least 80 percent. In Mississippi, only 15 schools met these criteria (The Civil Rights Project 2005).

Social and economic problems experienced by Mississippi range from low economic performance to a high teenage pregnancy rate, issues that are not unrelated phenomena. These issues are often linked by a complex web of economic limitations and social stigmas extending over multiple generations. The next section will outline private and public costs associated with undereducated Mississippians.

Private Economic Costs

As previously discussed, education is key to obtaining employment in the modern-day, knowledge-based economy. Research conducted by Barbara Logue suggests that in 2000 more than one-third of non-working Mississippians suffered from educational

deficiencies such as lack of high school diploma (Logue 2000c). Employment projections indicate that the possibility of finding employment will become even slimmer both for high school dropouts and for those who do not have a post-secondary degree. For instance, by 2008 jobs requiring only a high school education will grow by just 9 percent. On the other hand, employment for those holding a bachelor's degree will grow by 25 percent, and for those holding an associate's degree, employment will grow by 31 percent (Alliance for Excellent Education 2003).

An ability and willingness to obtain employment are the most powerful weapons against the vicious cycle of poverty. According to the Kids Count Data Book (2004), among the 50 states, Mississippi had the second highest number of children living in poverty in 2004, and 13 percent of Mississippi's children lived in extreme poverty⁴ compared with 8 percent nationally. Even those families above the poverty level in Mississippi had incomes much lower than the national average. In 2004, the median income for Mississippi families with children was \$34,360, compared with the national median income of \$50,050 (Kids Count Data Book 2004).

Private Social Costs

Private social costs of opting out of education are numerous and affect all aspects of an individual's life, from personal fulfillment to the ability to make better consumer decisions. One social problem often associated with low levels of educational attainment and deeply entrenched in Mississippi, is the high level of teenage pregnancies. Demographers explain the relationship between education and fertility levels in a number of ways. First, more educated couples are more aware of costs and challenges related to child rearing. Secondly, education also allows upward mobility for women and enhances their likelihood of finding employment. Education facilitates the acquisition of information about family planning, increases communication between partners, encourages belief in control of one's future and thus control over childbearing, and increases couples' income potential, making a wider variety of contraception methods available (Weinberger 1987).

According to the rankings of the *Kids Count 2001 Data Book*, Mississippi had the highest rate of teen births in the country—39 births per 1,000 females between the ages of 15 to 17. Sixteen percent of all babies born in 2004 in Mississippi were born to teenage mothers (Mississippi Department of Health 2004). The effects of teenage pregnancies on mothers and children extend far beyond the early years of child rearing. Teen mothers often have to drop out of school or stop working to take care of their children. Once these mothers are ready to reenter the workforce, they often face difficulties finding employment, as employers understandably prefer employees with recent work experience and up-to-date skills. Thus, teen parents are at high risk of falling or remaining below the poverty line.

Apart from economic problems related to teenage pregnancy, there are also psychological aspects of child rearing by teenage mothers. Teen mothers are not

⁴ Extreme poverty is defined as income below 50 percent of the poverty line.

mature enough to care for a child and are less likely to stimulate the child's cognitive development, which can potentially cause long-lasting negative effects on the child's self-esteem and academic and social aspirations (Young et al. 2004).

Public Economic Costs

The public economic costs of an insufficient level of educational attainment have at least two components. The first component is the decreased tax revenue due to stunted economic growth, and the second component is the increased public expenditure due to increased reliance on public social programs.

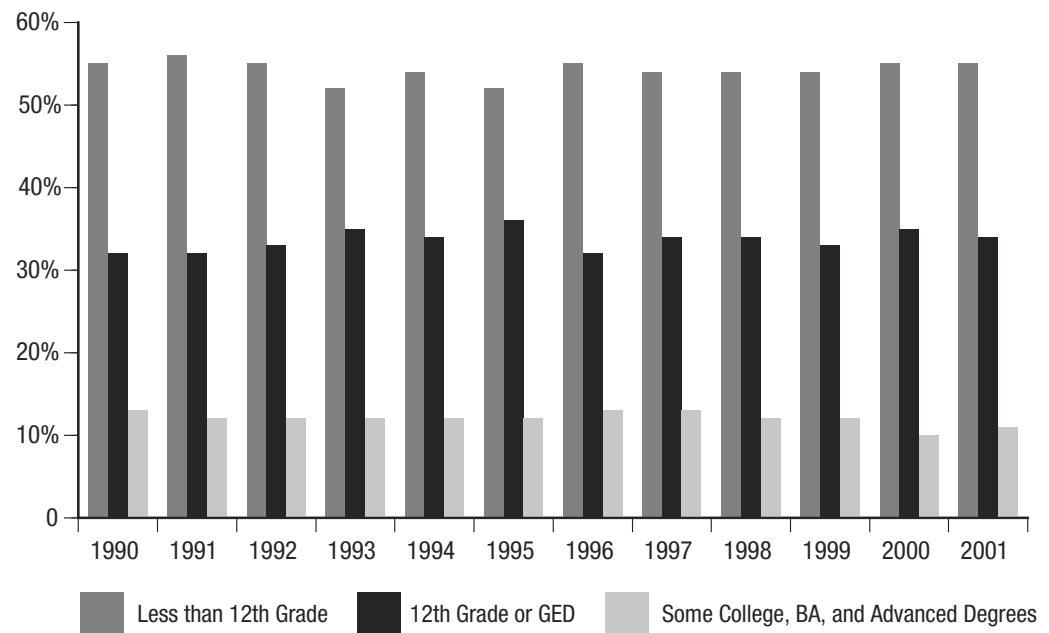
According to the National Center for Public Policy and Higher Education (2004), Mississippi could gain enormous fiscal benefits from closing the educational achievement gap between its ethnic groups. Currently, 24 percent of white Mississippians hold a bachelor's degree or higher, and only 11 percent of Mississippians of color hold the same credentials (U.S. Census Bureau 2004). If all ethnic groups in Mississippi had the same educational attainment and earnings as whites, total personal income in the state would be about \$3.2 billion higher, and the state would collect almost \$1.1 billion in additional tax revenues (NCPPE 2004).

Higher levels of educational attainment would also allow Mississippi to save money on increasingly costly social programs. For instance, curbing the rate of teenage pregnancies, could potentially help diminish spending on both health care and social assistance by more than \$125 million per year (Mississippi Department of Health 2004). Based on the estimate suggested by Health Searchlight (2001), the total potential yearly cost to Mississippi taxpayers for newborn babies lacking prenatal care and born to teenage mothers is more than half a million dollars. Medicaid expenditures for pregnant teenage women and children less than one are about \$45 million per year, and the AFDC/TANF social assistance program costs for teenage mothers add up to almost \$85 million per year. Using methodology from a California study of the costs of teen pregnancy (Constantine and Nevarez 2003), Mississippi's direct cost for all services for teen births in 2004 was \$230 million. Total social costs in Mississippi were estimated to be \$540 million annually.

Public Social Costs

Education is instrumental in instilling societal values and behavioral norms. Lack of education, and consequently lack of these values and norms, produces enormous costs for the society. Figure 4 shows that approximately 75 percent of all persons who were sentenced to a prison term for the first time in Mississippi had never had any college education. Moreover, almost half did not graduate from high school. According to the Alliance for Excellent Education (2003b), high school dropouts and students with low levels of academic achievement are more likely to participate in criminal activity than high school graduates and students with high levels of academic achievement. Thus investing in education and diminishing the number of dropouts could potentially represent significant savings in crime-related expenditures to the state and federal budgets.

Figure 4: New Incarcerations, Self-Reported Education Levels, and Percentage of New Commitments with High School and Less in Mississippi (1990–2001)



SOURCE: Mississippi Department of Corrections 2001.

In 2001, there were 14,652 delinquents who had not reached the age of 18 and were under arrest in Mississippi. Among the total of 5,629 new offenders in 2001, over 50 percent had not graduated from high school (See Figure 4). According to the Mississippi Department of Corrections, in 2001 it cost \$14,105 per year to incarcerate an inmate. In contrast it costs only \$4,565 per year to educate a pupil in Mississippi's public schools (Children's Defense Fund 2003). Thus, Mississippi currently spends 2.5 times as much per year to incarcerate an individual as it does to educate one.

Expanding the matrix in Figure 1, Figure 5 illuminates the devastating effect of lack of education in the populace by summarizing selected quantifiable and unquantifiable costs of opting out of education in the state of Mississippi.

Cultural Barriers to Education

If education is so beneficial and the lack thereof is so costly, why does not everyone pursue it? The level of educational attainment and academic aspirations are often dependent on income, health, socioeconomic status, parental educational history, and social environment. A combination of all these factors influences an individual's perception of the value of education and can become an additional barrier to education, the so-called "cultural barrier."

Cultural barriers reflect the family history, attitudes, and values of an individual's social environment. Cultural barriers exist because of the lack of role models, absence

Figure 5: Matrix of Selected Yearly Costs of Opting Out of Education in Mississippi

	Public	Private
Economic	<ul style="list-style-type: none"> ○ Lower consumption and savings (\$3.2 billion)¹ ○ Lower tax revenue (\$1.1 billion)¹ ○ Lower economic growth ○ Greater public assistance payments 	<ul style="list-style-type: none"> ○ Greater poverty incidence ○ Lower personal earnings ○ Lower levels of employment ○ Lower professional development
Social	<ul style="list-style-type: none"> ○ Teenage pregnancies (\$540 million)² ○ AFDC/TANF and food stamps (\$9.4 million)³ ○ Teenage criminal offenders (\$16.5 million)⁴ ○ Youth confinement in training schools (\$20.6 million)⁵ 	<ul style="list-style-type: none"> ○ Lower life expectancy ○ Lower quality of life ○ Lower level of personal development and satisfaction

1. According to NCPPHE (2004), if all ethnic groups in Mississippi had the same educational attainment and earnings as whites, total personal income in the state would be about \$3.2 billion higher, and the state would collect an estimated \$1.1 billion in additional tax revenues.

2. SOURCE: Walley 2004.

3. SOURCE: The estimate is based on the Mississippi Department of Health (2004) statistics and Annie B. Casey Foundation *When Teens Have Sex: Issues and Trends, Special Report* estimate of yearly costs. Refers only to pregnant women and children less than one.

4. SOURCE: Mississippi Department of Corrections 2001.

5. SOURCE: Mississippi Coalition for the Prevention of Schoolhouse to Jailhouse 2004; Ohanian 2003.

of values and attitudes that demonstrate the importance of attending college, or a perceived lack of the social knowledge and skills required for continuing education by the student. Research suggests that students from low socioeconomic status (SES) backgrounds have lower educational aspirations, persistence in college, and educational attainment than their peers from high SES backgrounds prior to and during college (Walpole 2003). The differences begin at a young age, are cumulative, result from many forces, and are shaped by SES differences such as parental interaction styles and expectations, school structure, school experiences and expectations, college costs, and financial aid availability. Parental expectations and definitions of success are particularly important for pursuing or continuing education. These expectations vary with SES. Low SES parents are more likely to view a high school diploma as the norm for their children than high SES parents, to whom a bachelor's or advanced degree is considered the norm (Walpole 2003).

In states such as Mississippi, where the level of educational attainment is relatively low, academic aspirations and the value ascribed to education will also be relatively low. Part of the challenge facing legislators and policymakers in Mississippi is to break down the cultural barriers to education by changing deeply entrenched beliefs and perceptions.

In economic terms, these beliefs and perceptions are information driven. Information problems from a consumer's perspective (or a student's perspective) are persistent throughout the realm of education. In order to make a competent decision about the future—including a decision to enter higher education and to assess available options

of financing—students need accurate information about their choices. In general, information is more accessible to the wealthier and more privileged social strata. Wealthier and more educated parents demand better schools for their children. Better schools have better technology, better college guidance resources, better and more competent teachers, and consequently produce better-performing students. Those students coming from low SES or minority backgrounds are disadvantaged in their ability to obtain information on quality education. Low SES parents frequently lack understanding of the importance of education, skills attainment, and life-long learning. Thus they demand less from their children (Walpole 2003). The pattern is passed on from generation to generation.

Because more privileged students have more knowledge about education, they are more likely to obtain additional education. Due to the nature of the application process, educators as well are limited in their choices to those students in the applicant pool. It is impossible to be accepted into a university without applying. This failure in the education markets could be corrected through an aggressive “education marketing” intervention by policymakers. It is necessary for the state and federal government to provide disadvantaged students with reliable and persistent information about the value of and routes to higher education in order to equalize the disparities in SES status.

Beyond High School: Access and Affordability in Mississippi

Another aspect to increasing the level of educational attainment in Mississippi concerns affordability. Those students who possess the skills and desire to go to college should be able to afford to do so. Affordability and access to higher education were the weakest areas on the *Measuring Up 2004* Mississippi state report card. Mississippi received a failing grade in its ability to provide access to higher education for deserving students. As shown in Table 4, Mississippi had one of the highest ratios of college prices to family income in the country. In addition, the state has also failed to provide inexpensively priced alternatives. Indeed, even at the state’s community colleges, families with the lowest income would spend half of their annual income to meet net college prices.

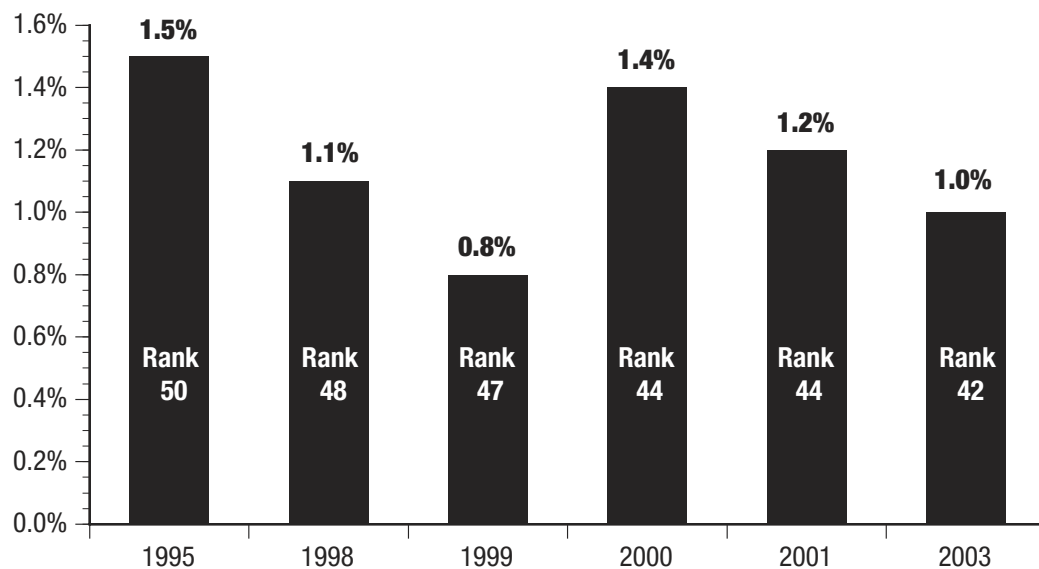
The state is ranked among the lowest in the country in providing financial aid to its students. Figure 6 shows the percentage of Mississippi state grant aid targeted to low-income students as a percentage of federal Pell Grant aid. Compared with the number of Pell Grants provided by the federal government primarily to low-income students, the state has committed little grant assistance for students coming from families with lower earnings. Throughout the decade, the ratio of state grants to Pell Grant awards lingered at around 1 percent, compared with the national median of 22 percent in 2003 (NCPHE 2004).

Table 4: Family Ability to Pay for Postsecondary Education in Mississippi (2004)

Income level (20% increments)	Average Family Income	Community Colleges		Public 4-year Colleges/Universities		Private 4-year Colleges/Universities	
		Net college price (\$)*	% of income needed to pay net college price	Net college price (\$)*	% of income needed to pay net college price	Net college price (\$)*	% of income needed to pay net college price
Lowest income	9,048	12.5%	50%	5,513	61%	11,398	126%
Lower-middle income	21,408	7.4%	25%	6,462	30%	12,156	57%
Middle income	37,200	8.6%	16%	7,361	20%	12,797	34%
Upper-middle income	57,700	8.0%	10%	7,769	13%	13,012	23%
Highest income	96,509	6,023	6%	7,825	8%	13,770	14%
40% of the population with the lowest income	15,228	4,958	33%	5,987	39%	11,777	77%

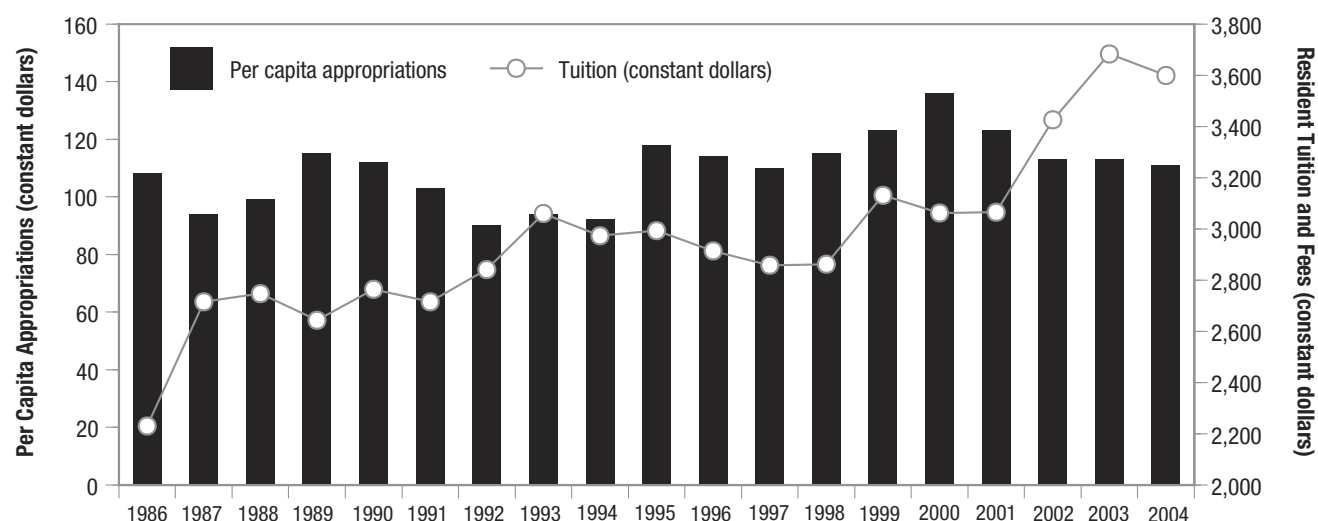
*Net college costs equals tuition, room, and board, minus financial aid.
SOURCE: Adapted from NCPPE 2004.

Figure 6: Mississippi State Grant Aid Targeted to Low-income Students as a Percentage of Federal Pell Grant Aid



NOTE: Data not available for all years.
SOURCE: NCPPE 2004.

Figure 7: Education and General Appropriations in Mississippi (1986–2004) Per Capita



SOURCE: Mississippi Institutions of Higher Learning System Administration, U.S. Census & BLS.

Rising tuition rates also hamper students' ability to pay for education. Similar to other areas in the country, tuition prices for public institutions in Mississippi have been rising consistently over the past 20 years. Resident tuition and fees have increased by 60 percent in constant 2004 dollars, from \$2,230 in 1986 to \$3,599.

Meanwhile, per capita educational appropriations in the state of Mississippi grew by only 2 percent, from \$108 in 1986 to \$111 in 2004 in constant dollars (See Figure 7).

The State's Commitment to Education

The low level of educational attainment in Mississippi is only a partial depiction of educational landscape in the state. Under the direction of Governor Haley Barbour, the state is concentrating on improving its educational system and increasing academic achievement by making education its top priority. The effects of educational reform will only become noticeable with time; however, the state is showing a high level of commitment to educational improvement.

Gov. Barbour has promoted several initiatives to improve education in Mississippi (Alliance for Excellent Education 2005). They include:

- Increasing education budget spending to \$2.1 billion, almost a three percent increase from last year.
- Endorsement of the Education Reform Act, which will allow credits to count towards both a high school diploma and the postsecondary degree while the student is still enrolled in high school, which would “save Mississippi's parents thousands of dollars in tuition, and [increase] the academic rigor of the senior year for Mississippi's students” (Alliance for Excellent Education 2005).
- Providing free Pre-Scholastic Aptitude Tests (PSATs) for all high school sophomores by the year 2007–08 and increasing the capacity of all school districts to administer advanced placement (AP) tests in core subject areas.

Yet another effort currently undertaken in Mississippi is the America's Choice/Mississippi's Choice School Design. This program is aimed at closing the achievement gap between ethnic groups and improving the quality of the Mississippi public schools system overall. The measures introduced by the Mississippi Department of Education contain the following five points, as summarized by the Mississippi Department of Education (2004) School Improvement and Closing the Achievement Gap Report (2003-2004, p. 31):

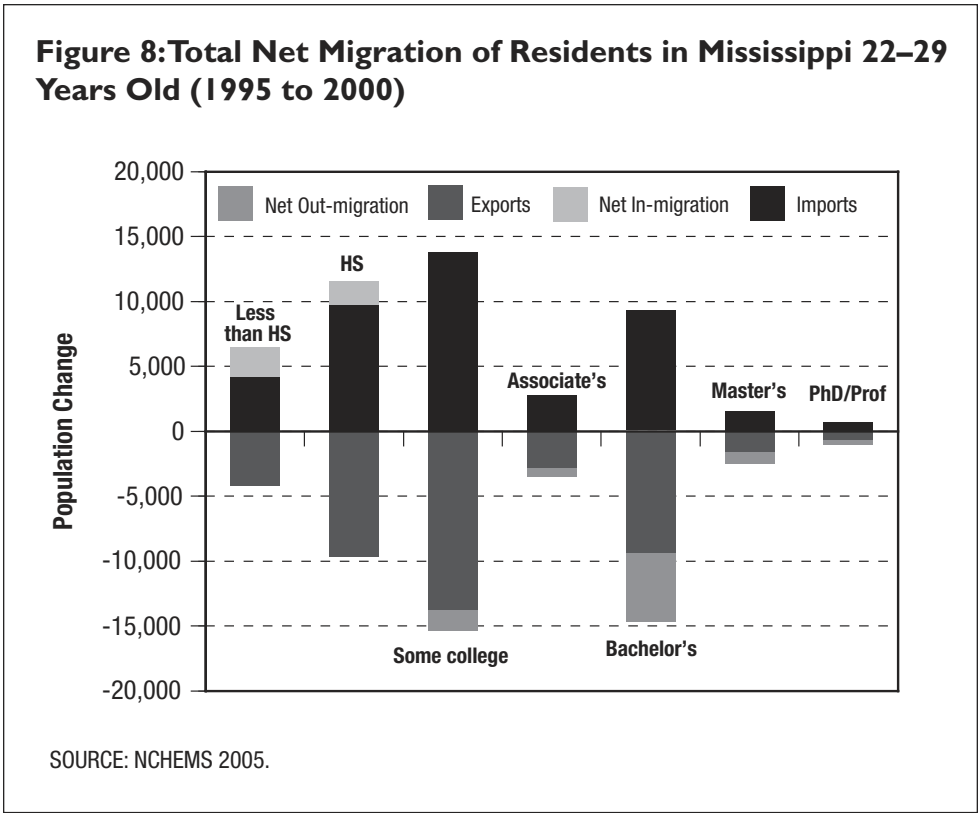
- “Introduction of aligned instruction;
- Enforcement of rigorous standards;
- Effective leadership and management;
- Intensive professional development for teachers; and
- Parent and community involvement.”

The main emphases of these strategies are early intervention and involvement of parents and community. The program actively seeks to change the cultural barriers to education by attempting to influence the pupil's environment.

In the 2003–2004 school year, there were 40 schools out of 1,055 in the state that adopted the America’s Choice/Mississippi’s Choice School Design, and the program is already showing encouraging results.

Issues Regarding Retention of Human Capital

Part of the challenge that Mississippi faces is its inability to retain human capital. Currently Mississippi is experiencing loss of human capital among 22- to 29-year-olds due to migration. As evident from the graph below, workers with an education level equivalent to some college and higher prefer to seek employment elsewhere. In contrast, Mississippi is experiencing a net in-migration of younger people with a high school diploma or less (See Figure 8).



Conclusions and Recommendations

This report has catalogued several public and private benefits, both social and economic, derived from educational attainment of the citizens of Mississippi. These benefits accrue to both the individual and society. In general, as one's education increases, the individual realizes a higher salary, higher savings, improved working conditions, professional mobility, better health, and increased life expectancy—among other benefits. Benefits to the overall society of a highly educated populous include increased tax revenues, greater productivity, decreased reliance on government support, decreased crime rate, and increased quality of civic life. Accumulated over several years, the evidence of benefits related to higher education is overwhelming. The striking and obvious conclusion from these data is that it is in the state's interest to support and encourage all of its citizens to increase their educational level.

A major barrier to raising the level of education of the citizens of the state is cultural. Cultural barriers exist because of the lack of role models, absence of values and attitudes that promote the importance of completing high school and attending college, or a perceived lack of social knowledge and skills required for continuing one's education. This report has pointed out that students from low socioeconomic status backgrounds have low educational aspirations, high school and college attendance rates, and educational attainment. Moreover, parental expectations and definitions of success are particularly important for pursuing or continuing education. Parents in lower socioeconomic strata are more likely to view a high school diploma as the norm for their children than parents from higher socioeconomic strata, to whom a bachelor's or advanced degree is often considered the norm.

The level of state support is assessed by evaluating public policies governing financial aid and support for the operating expenses of public institutions, both of which directly affect access. This report has shown that Mississippi's commitment to financial aid ranked among the lowest in the country, and the state has one of the highest ratios of college cost to family income in the nation. Tuition prices for public institutions rose by 60 percent during the past 20 years, while per capita educational appropriations increased just 2 percent.

These factors—(1) investment in education is beneficial to the state, (2) the state suffers to some degree from a cultural aversion to the pursuit of education, and (3) Mississippi's financial commitment to education, particularly higher education, is low compared to other states—prompt the following recommendations.

- **Request that the state legislature create and fund an entity to market the value of education, skills attainment, and life-long learning that provides all students, their parents, and educators with accurate, high quality information about, and access**

to courses that will help prepare students for college level standards. A necessary starting point in increasing the education of the state's citizenry is information, and the more the better. This recommendation is particularly targeted to parents and students who traditionally have not considered education a high priority.

- **Request that the state legislature fund the establishment of ninth grade “learning academies” styled after the successful efforts in North Carolina and other states.** This recommendation targets potential high school dropouts. A great deal of research indicates that the passage of students from the middle grades to high school is the most difficult transition point in education. The failure rate in grade nine is three to five times higher than that of any other grade. The ninth grade has been called a minefield for the most vulnerable students, especially those who become disengaged and discouraged and who fail to develop strong bonds with teachers and their school. Learning academies employ a variety of strategies to help these vulnerable students, which include finding solutions to individual student attendance, discipline, and learning problems.
- **More schools should be added to the state's America's Choice program along with continued support for Gear-Up Mississippi.** The America's Choice program has shown impressive results. Test scores for students in the program improved at a significantly higher rate for the last school year than did scores for students in all of the state's schools, although the results show that America's Choice students have far to go. The gains were especially significant because 90 percent of the students in the program come from low-income minority families (Richard 2004). Gear-Up Mississippi is a partnership of state education agencies and local school districts whose goal is to increase the preparedness of K–12 graduates for college and to provide additional resources and funds for students from economically limited communities. The total budget is \$25 million at \$5 million per year for five years (GEAR UP Mississippi 2005).
- **The state legislature should increase investment in financial aid, particularly need-based aid.** Investment in financial aid, particularly need-based aid, should be a priority for the state, given the limited support that characterizes the current system. Mississippi should make a clear commitment that those with academic capabilities but with limited financial means will not be denied the opportunity to attend a postsecondary institution. Need-based financial assistance should be an important new policy anchor in the state's overall higher education funding strategy.
- **Mississippi's Institutions of Higher Learning and the Mississippi Department of Education should work together to ensure that colleges and universities state and publicize their academic standards so that students, their parents, and educators have accurate college preparation information.** Often, the course work between high school and college is not connected; students graduate from high school under one set of standards and, three months later, are required to meet a whole new set of standards in college. Mississippi is one of 22 states participating in the State K-16 Network, which is an organization promoted by the National Association of System Heads (NASH) and the Education Trust. The Network is dedicated to develop coordinated education improvement efforts, kindergarten through college. A major focus is aligning high school graduation and college admissions and placement criteria. This recommendation applauds the state's commitment

to enhancing communication between high schools and colleges and urges a continued effort.

- **Mississippi's Institutions of Higher Learning should develop a statewide clearinghouse of information on all forms of financial assistance. The organization/agency also should create a financial literacy program to assist families with higher education expenses and reinforce the concept of investment and return on postsecondary education.** The statewide clearinghouse should provide information on all forms of financial assistance, including federal, state, institutional, and private scholarship resources. The clearinghouse should be accessible in a form that provides the public with clear and timely information regarding each and every dollar available to pay for postsecondary education. The financial literacy program should include information on education costs, savings plan options, tax credit programs, student loans, and the expectations of financial assistance programs.

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