Children's Educational Well-Being



Based on U.S. performance measures three out of four Tennessee students are scoring below proficient.

This domain examines educational well-being in Memphis and Shelby County from three perspectives.

- 1. Child development and pre-kindergarten education
- 2. Academic achievement and progress from kindergarten through high school
- 3. Educational attainment of the Memphis and Shelby County population ages 18-24

Availability, cost and quality of education for all children is assessed. Opportunities for children to arrive at school ready to learn are explored. Tennessee's *Universal Pre-Kindergarten* program is examined and compared with other *UPK* programs throughout the country.

In the second section TCAP and NAEP scores for Memphis City Schools (MCS) and Shelby County Schools (SCS) are reported for 2006. Confidence in public education in Memphis and Shelby County is examined in terms of per-pupil expenditures and enrollment in public and private schools.

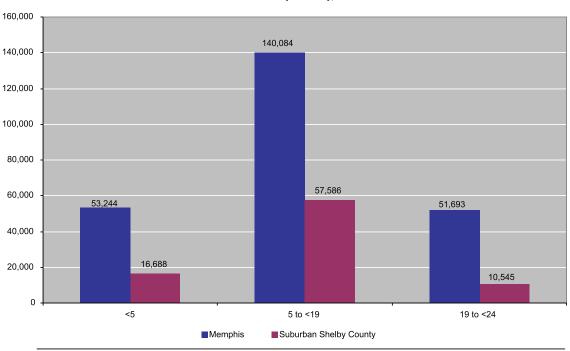
The third section is devoted to the "knowledge economy" in Memphis and the role that educational attainment plays in the lives of young adults to get and hold jobs that pay a living wage.

Overall, this chapter contains a comprehensive picture of educational opportunities for children and young adults in Memphis and Shelby County in the context of the State of Tennessee and the United States.

Who is attending public school in Memphis & Shelby County?

Before considering education in the City of Memphis and Shelby County it is important to review who is being educated. Memphis and Shelby County both have substantial populations under the age of 24. The percentage of young people in each age group in Memphis and Shelby County is nearly equal.

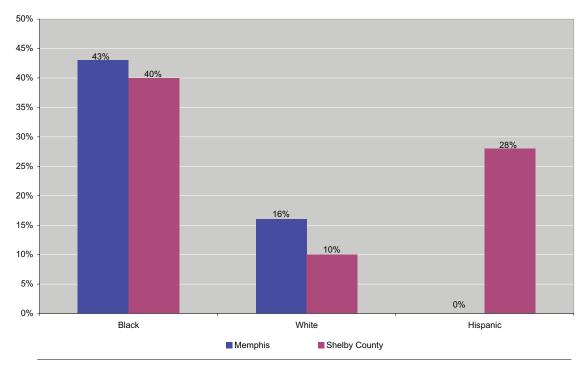
Distribution of Under-24 Poputulation in the City of Memphis and Shelby County, 2005



Source: American Community Survey, 2005

- One in 10 is pre-kindergarten, under age 5.
- Slightly less than one-third are age 6-19, the K-12 population.
- The "knowledge economy" group, ages 19 to 24, represents 10 percent of people in Memphis and Shelby County.
- More children under age 5 live in poverty in the City of Memphis than in suburban Shelby County.

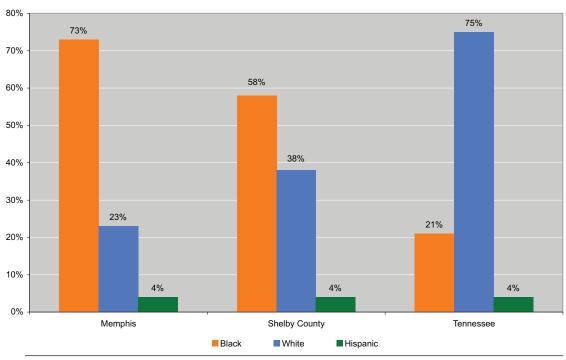
Distribution of Children Under-5 Living in Poverty by Race & Ethnicity in the City of Memphis and Shelby County, 2005



Source: American Community Survey, 2005

- Ten percent of white children under age 5 in Shelby County live in poverty, whereas 40 percent of black children under age 5 in Shelby County live in poverty.
- One in four Hispanic children in Shelby County lives in poverty. The American Community Survey does not register enough Hispanic children in the City of Memphis for a separate count.
- Seventy-five percent of children under age 5 in Memphis, and more than half of children under age 5 in Shelby County, are black.

Distribution of Children Under-5 by Race & Ethnicity in the City of Memphis, Shelby County and Tennessee, 2005



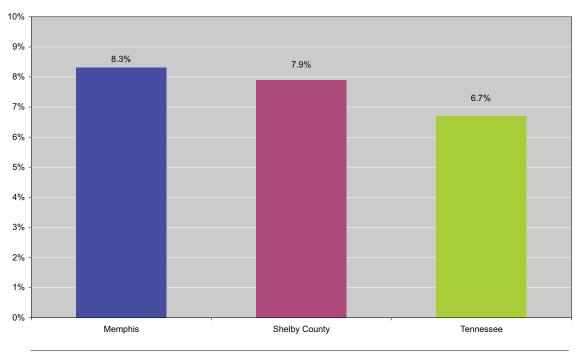
Source: American Community Survey, 2005

Child care and pre-kindergarten readiness are special challenges in Memphis & Shelby County.

- Both the City of Memphis and Shelby County have disproportionately large populations of children under age 5.
- Sixty-eight percent of births in Memphis and 52 percent in Shelby County are to unwed mothers, the majority of whom live in poverty.
- Welfare legislation enacted in 1996 requires these mothers to work, go to school or actively seek 40 hours of work per week.

Because the first years of life are so critically important, this creates a disproportionately great need for high-quality, accessible and affordable child care in both the city and county.

Children Under-5 as a Percent of Population in the City of Memphis, Shelby County and Tennessee, 2005



Source: American Community Survey, 2005

School readiness depends on a child's home life.

Children's experiences before they enter school make a great difference in their capacity to learn and thrive in an academic setting. If children are prepared unequally to attend school, they will perform unequally. The quantity and quality of words to which children are exposed have a great impact on their education.

- Children in professional families hear an average of 11 million words annually.
- Children in working class families hear an average of six million words.
- Children in welfare families hear only about three million words a year, and 80-90 percent of the words they hear are negative. (*Meaningful Differences*)

Before entering kindergarten the average cognitive score of children in the highest SES group is 60 percent higher than the average of the lowest SES group. Moreover, average math achievement is 21 percent lower for black students than for white students and 19 percent lower for Hispanics. (*Inequality at the Starting Gate*)

Governor Bredesen's plan commits Tennessee to pre-kindergarten education.

- Tennessee ranks 33rd out of 38 on the National Institute for Early Education Research's index of states that provide enough access to pre-school learning for children.
- Tennessee ranks ninth out of 10 on quality standards in place for pre-schools. This
 includes the requirements that pre-school teachers have bachelor's degrees and that
 class sizes and student-teacher ratios be small.
- The state ranks 19th out of 38 on pre-k funding, a ranking that is expected to improve as a result of the new budget. (CA Kumar 3.23.06)

The governor's universal pre-kindergarten initiative is part of a national movement toward providing quality preparatory education for 3-and-4-year-olds. This program targets primarily at-risk children and seeks to "provide (them) with the learning experiences they need in order to succeed in kindergarten."

The program is voluntary. Parents and communities can decide whether they need and want pre-kindergarten programs. The program will be available to all 4-year-olds with a priority given to at-risk children and high-priority communities. High standards that include small class size, quality curricula and teacher standards will be maintained.

An Office of Early Learning has been established to coordinate and administer the pre-k initiative, work closely with Head Start as well as local agencies and serve as the clearing house for information. The existing pilot pre-k programs will be "grandfathered" into the universal pre-k program.

All programs will be funded fully and incorporated into the Basic Education Program. (http://www.tennessee.gov/governor/prek/activities/index.htm)

In the City of Memphis there are 67 state-subsidized pre-k classes and seven in suburban Shelby County. Ninety-one percent (124 of 136) of school districts in Tennessee are participating in the state-funded pre-k program. (10.23.06ChattanoogaTimes Free Press) This demonstrates the need for child care throughout the state.

Pre-kindergarten is a measurable predictor of success.

Pre-kindergarten classes offer opportunities that involve socio-emotions, language, physical development, literacy preparation and engagement in math, science, social studies and creative arts. The development and encouragement of these skills is particularly important for at-risk children. Research, such as that by Hart and Risley (*Meaningful Differences*), shows that children from different socio-economic classes enter kindergarten with very different skills and levels of preparation. At-risk children also begin school 18-24 months behind their more advantaged peers. (*Hart&Risley*)

Data collected from four segments of children show the difference that pre-kindergarten makes in the lives of less-advantaged children. The study follows three groups of children per segment:

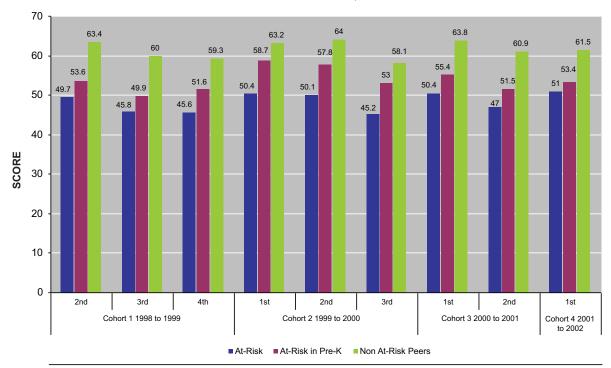
- At-risk with no pre-kindergarten
- At-risk in pre-kindergarten
- Not-at-risk peers

For each segment in every grade, the at-risk group without pre-kindergarten preparation scored the lowest. The at-risk group with pre-kindergarten scored higher, and the not-at-risk children scored the highest. (*Tennessee pre-kindergarten longitudinal data*, 1998-2002)

While all students' scores taper off each year that they are tested, it is clear that the at-risk group that receives pre-kindergarten instruction makes and maintains progress above the at-risk group without pre-k.

According to a report released by the Center for Economic Development in June 2006 (The Economic Promise of Investing in High-Quality Preschool: Using Early Education to Improve Economic Growth and the Fiscal Sustainability of States and the Nation), investing in "high-quality pre-kindergarten programs (and) implementing pre-school programs for all students whose par-

Achievement by Risk Category of Pre-Kindergarten Children in Tennessee, 1998-2002



Source: Tennessee Department of Education

ents want them to participate (will generate) significant public and private benefits, producing \$2 to \$4 in net present-value benefits for every dollar invested, having a positive impact on state budgets and boosting long-term economic growth."

Long-term evaluations of early education programs such as *High/Scope Perry Preschool Program*, *Abecedarian* program and *Chicago Child-Parent Centers* have shown tremendous and far-reaching societal benefits that extend far beyond individual gains. These include:

- Overall higher academic achievement
- Fewer grade repetitions
- The necessity for fewer special education classes
- Increased likelihood of high school graduation and college enrollment
- Decreased juvenile crime
- Decreased likelihood of child-neglect and abuse
- Increased participation in the workforce and higher overall wages
- Decreased likelihood of being dependent on public assistance or becoming teenage parents

The implications for children in Memphis are profound. One in four (26%) children under age 5 lives in a low-income family. Another 19 percent live in poverty. An additional 17 percent live in dire poverty. The opportunity for advancing Memphians' educational potential from a young age is tremendous.

Children in Memphis have the most to gain from universal pre-kindergarten education because at-risk children are overwhelmingly the target audience for this program.

Tennessee pre-kindergarten budget increased 80 percent to \$55 million.

In 2005, the Tennessee pre-k budget was \$25 million, which covered 300 new pre-k classrooms serving approximately 6,000 students.

This year an additional \$20 million was authorized, reaching a total of 673 classes statewide that serve 13,500 students. The total amount allocated for Tennessee's Universal Pre-Kindergarten program in 2006-2007 is \$45 million, or \$3,333 per child.

Nationwide enrollment in pre-school programs has increased by 16 percent since 2002.

Child care is big business in Memphis & Shelby County.

According to the 2004 report, *The Economic Impact of the Child Care Industry in Shelby County*, TN, "Child care services are a significant segment of the overall Shelby County economy. When child care expenditures are calculated to include related indirect and induced expenditures, they account for one-and-one-half percent of the Shelby County gross product." The con-

Funding for Universal Pre-Kindergarten, 1998—2007

SCHOOL YEAR	FUNDING	NUMBER OF CLASSES	NUMBER OF CHILDREN
1998-1989	\$3 million (state)	30	600
2000-2001	\$6 million (state) \$9 million (TANF) added in January	60 90 added mid-year	1,200 1,800 added mid-year
2003-2004	\$10 million (state) TANF funding ended	147	2,500
2005-2006	\$10 million (state) \$25 million (lottery)	146 pilot classes 300 pre-K for all classes	8,900
2006-2007	\$55 million (state added additional \$20 million)	673	13,500

Source: Tennessee Department of Education, March 2006 Presentation to Senate Education Committee; Commercial Appeal, July 14, 2006

tribution of child care services is about equal to the Hotels and Lodging (1.32%) and Amusement sectors (1.85%).

Moreover, the report states that, "The child care sector will continue to grow in Shelby County as the percentage of the population under 17 years of age is expected to grow." The population growth is due, in large part, to high birth rates among the black and Hispanic populations.

The increased state funding for pre-kindergarten classes also will increase employment in this sector of the economy. The aforementioned 1996 welfare reforms, the need for child care spaces in classrooms, as well as for staff, and Federal and state subsidies to fund the programs have resulted in an explosion of the child care business locally.

Quoting a 1999 article from the Memphis Flyer, Who's Watching the Kids?, "A series of controversies -including two deaths - has shattered confidence in Memphis day care centers," included the following: "Day care is a booming, lucrative industry in Memphis. In the past 20 years, the number has increased from about 40 to over 800. Most of that growth occurred in the past six years, thanks in part to Governor Don Sundquist's initiative, Families First, a program that provides day-care assistance for welfare recipients as they enter the workforce."

Tennessee rates child-care centers on three different levels.

Tennessee has implemented a rating system to measure the levels of care given to children in centers across the state and is in the process of creating more rigorous standards.

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One-Star Center

- Director has a high school diploma and minimum of five years relevant experience.
- All staff members have high school diplomas and at least 10 percent have 30 hours of training.
- Staff members have had no probation within the last year and no more than five minor civil penalties.
- A bulletin board for parent communication and one annual parent group meeting are required.
- Small classroom sizes and low teacher-to-student ratios
- Minimum pay scale for teachers plus two benefits from a list of 11 items
- Assessment by observation

* *

Two-Star Center

- Director has a high school diploma and minimum eight years experience.
- All staff members have high school diplomas and 25 percent have three years experience and 30 hours training or are enrolled in associates program.
- No probation within previous year and no more than four minor civil penalties
- A bulletin board for parent communication, one annual parent group meeting, one quarterly newsletter and one parent/teacher/child conference per year are required.
- Smaller class sizes and lower teacher-to-student ratios
- Minimum pay scale for teachers plus three of 11 benefits

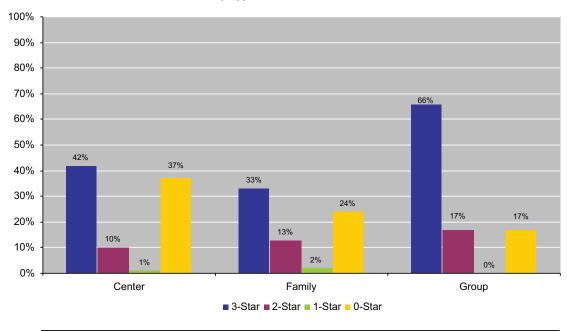
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Three-Star Center

- Director has a high school diploma, 20 hours of training annually, seven years experience in child development, associate's degree in child development or a relevant area or a bachelor's degree or above in child development or relevant area.
- All staff members must have high school or GED diploma and six hours of training annually.
- Half of staff members must have four years experience or three years experience and two years of documented enrollment in child care development training or one year of experience and an associate degree or above in a related area.
- Written plan for staff turnover and absences
- No probation for one year and no suspensions
- Bulletin board for parent communication, one parent group meeting per year and one parent/teacher/child conference per year
- Monthly newsletter to parents
- One family workshop annually
- Establish and maintain parent advisory council.

Only about one-third of child-care centers in Shelby County have earned a three-star rating.

Tennessee Rating of Child Care in Shelby County by Type of Care Provider, 2006



Source: Tennessee Department of Human Service Child Care Licensing

Due to the higher cost of three-star centers most children cannot afford to attend, even with subsidies. While most Shelby County children in local day-care centers would benefit from the higher quality care in three-star centers, they are the least likely to be enrolled therein.

Center-Based Care: Twenty percent of *center-based* child-care centers in Shelby County have a three-star rating. Another 10 percent have a two-star rating, slightly more than one-third are below a one-star rating and 10 percent of centers are not yet rated.

Family-Based Care: One in three *family-based* child-care centers in Shelby County has a three-star rating. One in four is below a one-star rating.

Group-Based Care: Two in three *group-based* child-care centers in Shelby County have three-star ratings. Seventeen percent have two-star rating, and another 17 percent are below a one-star rating.

The status of children in child care in Shelby County.

- Statewide there is enough capacity for 80 percent of pre-k-age children to participate in center-based, family-based or group-based care.
- In Shelby County there are nearly 70,000 children under age 5, and there are 1,066 location-based child-care centers.

- Of the 12,000 4-year-olds in Shelby County, only seven percent have been enrolled in pre-k classrooms. Another 86 percent are enrolled in licensed child care. The remaining are in the care of relatives or unregulated care.
- Of 7,400 3-year-old "certificate-children" in Shelby County, 11 percent are enrolled in *Head Start*, and 84 percent are enrolled in child-care centers.
- There is a total capacity of 114,000 child-care-licensed spaces in Shelby County. More than half (58%) of the spaces are dedicated to children in the *Families First* certificate program.
- Twenty-two-thousand children of Families First, Transitional Families First and/or atrisk families are eligible for child care subsidies.
- Forty-seven percent of all 3-and-4-year-olds in Shelby County are enrolled in preschool. About half (47.7%) are enrolled in public facilities and half (52.4%) in private (AECF 2000).

National accreditation exists also for child-care centers.

Another measure of quality in child care centers is **NAEYC** accreditation. *The National Association for the Education of Young Children* gives accreditation to centers that meet the following 10 standards. Key subjects are in bold.

- 1. Provide positive **relationships** among all children and adults to encourage each child's sense of individual worth and belonging as a part of a community.
- 2. Implement a **curriculum** consistent with its goals for children, and promote social, emotional, physical, language and cognitive learning and development.
- 3. Use developmentally, culturally and linguistically appropriate and effective **teaching** approaches.
- 4. **Assess children's learning and development** by ongoing, systematic, formal and informal approaches.
- 5. Promote the nutrition and **health** of children, and protect children and staff from illness and injury.
- 6. Employ and support a **teaching staff** with the educational qualifications, knowledge and professional commitment necessary to promote learning and development across the diverse needs of children.
- 7. Establish and maintain collaborative relationships with each **child's family** to foster children's development in all settings.
- 8. Establish relationships with, and use the **resources** of, the children's **communities**.
- 9. Maintain a safe and healthful environment that provides appropriate and properly maintained indoor and outdoor physical environments.
- 10. Implement policies, procedures and systems that support stable staff and strong personnel, fiscal and program management. (Source: http://www.naeyc.org/academy/standards/)
 - Forty-one centers (4%) in Shelby County are NAEYC-accredited.
 - The demand for quality child care in Shelby County exceeds the availability of open spaces for children in pre-k classrooms.

Financial options for child care in Shelby County.

Families needing assistance with the cost of child care have several options in Tennessee:

- Families First (FF) requires no payment by families. Eligibility is based on the program's guidelines.
- Working families on FF are eligible for Transitional Child Care Assistance and meet a co-pay requirement based on a sliding income scale.
- At-Risk Child Care is available for families leaving the Transitional Child Care Assistance program. A fee is based on a sliding income scale.
- At-Risk Child Only assistance is available for children living with a care-giver, other than the child's parents, who is eligible for assistance.
- Teen Child Care Assistance is available for mothers who are enrolled in high school or middle school and who must stay in school in order to receive child-care assistance. Parents or grandparents must co-pay an amount based on a sliding income scale.

Extreme Shelby County poverty increases the need for child care.

- According to the Federal government, the poverty level for a family of three in 2006 was \$16,600 per year.
- Twenty-eight percent of children under age 5 in Shelby County live in poverty, and in the City of Memphis 36 percent of children under age 5 live in poverty.
- A significantly greater percentage of black children (43%) than white children (16%) in Memphis live in poverty.
- According to the National Center for Children in Poverty, "Research consistently shows that, on average, families need an income of about twice the Federal poverty level to make ends meet," or roughly \$33,200 per year.
- In 2005 51 percent of Memphians earned less than \$35,000 a year, and more than one in four families (29%) lived below the poverty line of \$16,000 per year.

Established in 1964, Federal poverty guidelines state that the average family should spend roughly one-third of household income on housing, one-third on food and one-third on everything else. According to the National Association of Child Care Resource and Referral Agencies, low-income Tennesseans spend about \$200 more toward average child-care payments than their monthly rent.

"In Tennessee a family of three with one infant and one pre-school child pays a median monthly rent of \$564, while their average monthly child-care costs at a licensed child-care center are \$761." (Nashville City Paper, February 6, 2006)

Federal poverty guidelines and child care costs are unrealistic.

- **Scenario 1:** Mary and Joe are married with one child, Billy (age 2). Their combined annual income is \$59,000, the median family income of a married parent family with children for Memphians. Mary's and Joe's combined annual income makes them ineligible for child care subsidies.
 - The average, unsubsidized yearly cost for Billy's child care is \$103 per week, \$5,355 a year. This is 16 percent of Mary and Joe's gross income.
 - The average weekly cost of a three-Star-or-NAEYC-accredited child care center for Billy is \$191 per week, \$9,932 a year. This is nearly one-sixth (17%) of Mary and Joe's gross income.
 - Based on the Federal poverty guidelines, if Mary and Joe enroll Billy in the
 highest quality of child care, they would spend one-sixth of their annual
 income on child care, half the amount that the guidelines state should be
 allocated for *all other* family expenses except food and housing.
- **Scenario 2:** Megan is a single mother of two, Michelle, age 5, and Michael, age 3. Megan has an annual income of \$18,000, the average annual income for single mothers in Memphis.
 - The average, unsubsidized yearly cost of child care is \$103 per week per child, or \$10,710 per year for two children. Unsubsidized child care is the equivalent of nearly two-thirds (60%) of Megan's income.
 - The average weekly cost of a three-star-or-NAEYC-accredited child care center for both children is \$285 per week, or \$14,768 annually. The highest quality of child care for two children would cost Megan 82 percent of her annual salary.
 - The weekly cost of *subsidized* child care for two children is \$33 per week, or \$1,716 annually, only nine percent of Megan's salary.
 - The only way that Megan falls within the Federal poverty level guidelines for budgeting (one-third on housing, one-third on food, one-third on everything else) is if her children are in subsidized child care.

Families First is a good but limited program.

As of June, 2006 more than 20,000 children in Shelby County were enrolled in subsidized child care. Seventy percent of these children were enrolled in child care subsidized through Families First, and an additional 22 percent were funded by Transitional Families First benefits.

Families receiving benefits through Families First are eligible for an uninterrupted 18 months plus an additional 18 months of Transitional Families First child care coverage when summary benefits for the family end. Most families, however, do not receive benefits for a continuous 18

months, and there is a mandatory three-month interim period between sequences of coverage. There is a lifetime limit of 60 months total for receiving *Families First* benefits.

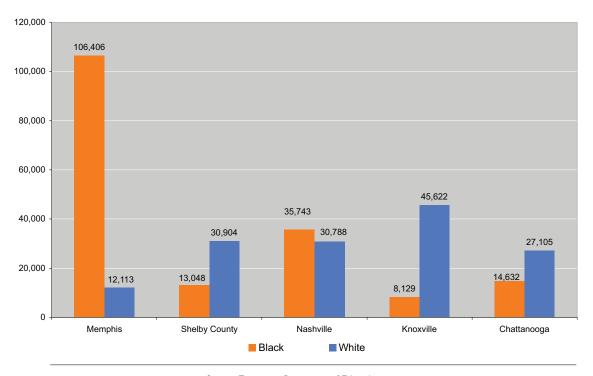
Additionally, low-income, working families may be able to receive assistance by placing their names on a waiting list. However, due to budget shortfalls, growing numbers of families on Families First and an increasing number of names on the waiting list, it is closed indefinitely to additions.

Memphis City Schools is the 21st largest school district in America.

Children enter the educational system from a variety of backgrounds. Social, economic and cultural influences have an impact on the educational success of children. Furthermore, educational success has a major impact on children's development and life chances. Cumulatively, these variables have a major impact on the economic and social progress of the community.

- One in five of Tennessee's children lives in Shelby County.
- Memphis City Schools (MCS) district is the largest in Tennessee and the 21st largest in the nation.

Distribution of Public School Enrollment by Race, 2006



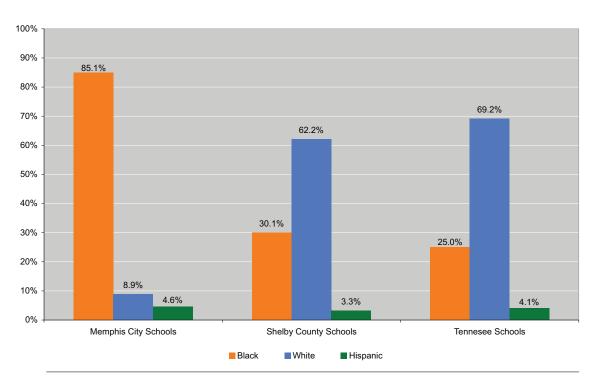
Source: Tennessee Department of Education

- Memphis serves more minority students than any other district in Tennessee.
- Nearly 20 percent of the population in Shelby County is aged 5-17, the school-age population.
- MCS serves 116,000 students in 112 elementary, 25 middle and 31 high schools.
- By comparison, Shelby County Schools (SCS) serves about 45,000 students in 28 elementary, 13 middle and seven high schools.

MCS has the greatest number of at-risk students.

 Eighty percent of MCS students are black, 10 percent are white, and less than 10 percent are Hispanic.

Percent of Student Population by Race & Ethnicity. 2006

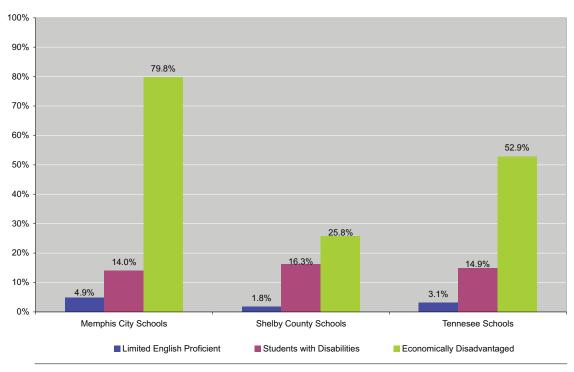


Source: Tennessee Department of Education

- One-third of SCS students are black, about two-thirds are white, and a small percentage is Hispanic.
- Across Tennessee, one-fourth of students are black, two-thirds of students are white and a small percentage is Hispanic.
- Low socio-economic status has more impact on knowledge than factors such as race, ethnicity, home reading and family educational expectations. (*Economic Policy Institute* 2002)

• Eighty percent of students in MCS come from economically disadvantaged families.

Percent of Student Population by Risk Category, 2006

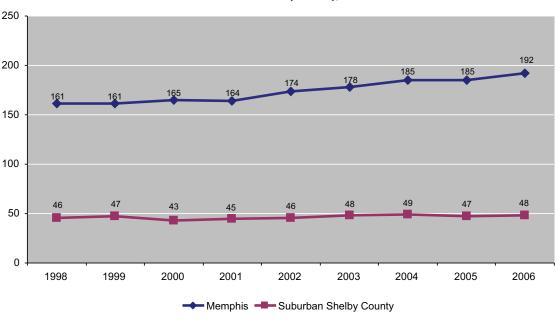


- In 94 percent of MCS schools the majority of students are from low-income families. In 75 percent of the schools at least 75 percent of students come from low-income families.
- Only about 25 percent of students in suburban Shelby County come from economically disadvantaged families.
- Half of all students (52.9%) in Tennessee come from economically disadvantaged families.
- In 2000 nearly 60 percent of white children in the City of Memphis and 95 percent of black children attended MCS. Six years later, the number of white students has changed significantly. By 2006 97 percent of black children aged 5-17 still attended public schools, but less than half (49%) of white children aged 5-17were enrolled in MCS. (2006 MCS, 2005 ACS)
- Nationwide 85 percent of 5-17-year-olds attend public schools.

The SCS trend of white student flight is repeating the MCS pattern of the '60s.

• In the 10 years from 1996 to 2006 student enrollment has increased seven percent in SCS and 17 percent in MCS.

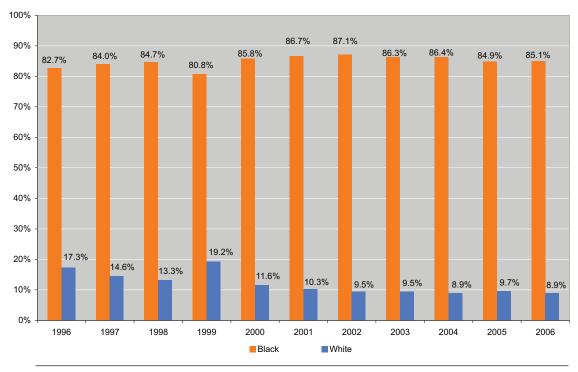
Number of Schools in the City of Memphis and Suburban Shelby County, 1998—2006



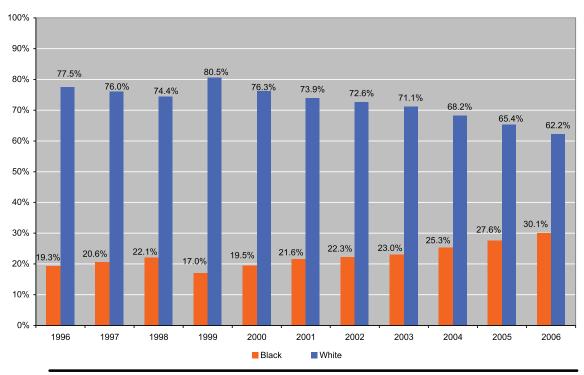
Source: Tennessee Report Card 1998 - 2006

- The percentage of white students in MCS decreased by 49 percent and in SCS by 40 percent. The black student number in MCS increased by three percent and by 36 percent in SCS.
- Thus, the substantial gap between the overwhelming number of black students and small number of white students in MCS continues and is widening. The overwhelming majority of white students that existed in SCS for decades no longer exists, and if the current county trend continues, the racial mix in SCS will approximate that in MCS.
- School districts with a substantial percentage of low-income students spend, on average, 40 percent more per-student than other districts.
- MCS spends approximately \$3,500 more per student than the national average.

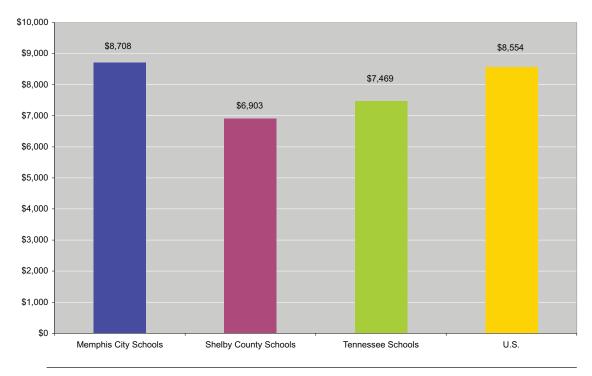
Distribution of Students by Race in Memphis City Schools, 1996-2006



Distribution of Students by Race in Shelby County Schools, 1996-2006



Per-Pupil Expenditures, 2006



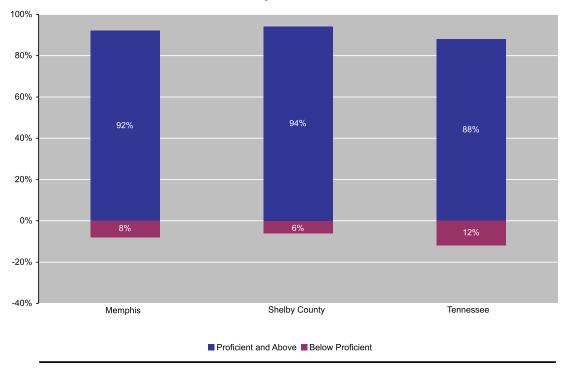
SCS and schools throughout Tennessee spend less than the national average per-student. Although per-pupil spending varies widely in the U.S. local school funding is determined, in large part, by property taxes. Districts with higher property taxes spend more per student, so there is a socio-economic bias embedded in school spending.

- The number of MCS schools in good standing with the State of Tennessee increased by 10 percent (103 to 114) from 2005 to 2007. The number on the "high priority" list decreased by one-third (57 to 36). To be removed from the "high priority" list schools must make what is defined as, "Adequate Yearly Progress" for two consecutive years.
- From 2005 to 2007 the number of so-called "target schools" increased by 46 percent (24 to 35).

Reading is a good measure of educational achievement.

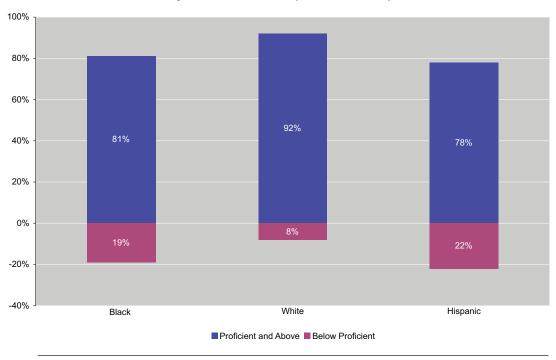
MCS students perform at about the same TCAP reading level as the average of students statewide, and in the other three metropolitan areas of Tennessee, Nashville (Davidson County), Knoxville (Knox County) and Chattanooga (Hamilton County). SCS students perform slightly above the state average.

Reading TCAP Performance, 2006



Average TCAP Reading scores for black students fall below those of white students in MCS, and scores for Hispanic students are lower than both.

Reading TCAP Performance by Race & Ethnicity in MCS, 2006



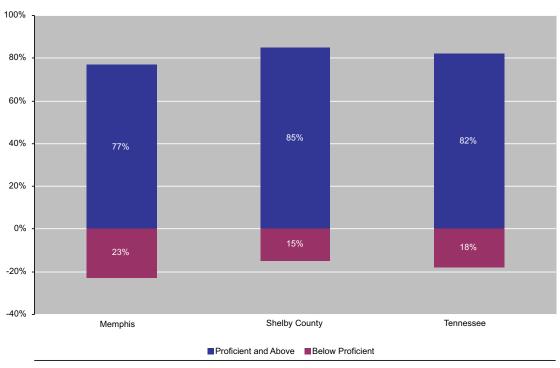
High-risk students are a challenge.

Reading scores are reported for three student risk-groups, students that are economically disadvantaged, have disabilities and/or limited English proficiency.

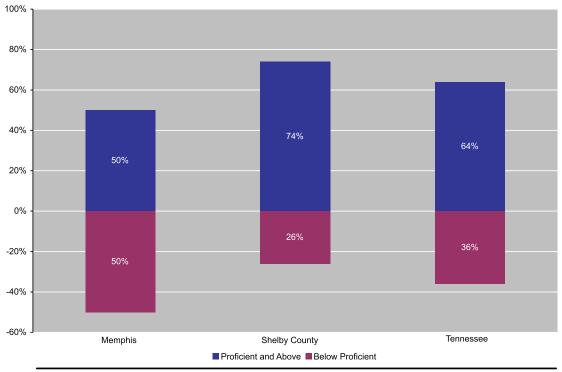
All three risk-groups score below the reading average of other students. Family income and economic well-being is the strongest predictor of student achievement, and the majority of MCS students are economically disadvantaged.

Economic circumstances and the growing number of Hispanic students in both MCS and SCS are major challenges.

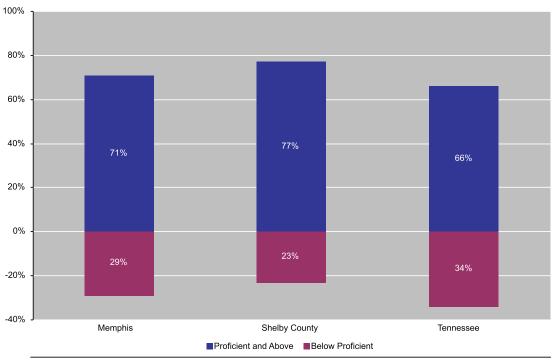
TCAP Reading Proficiency by Economically Disadvantaged Students, 2006



Reading TCAP Performance by Students with Disabilities, 2006



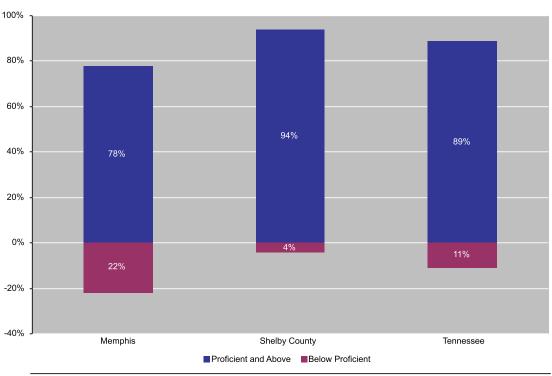
Reading TCAP Performance by Students with Limited English Proficiency, 2006



MCS math scores remain below, SCS scores well above, state average.

- The gap between average MCS scores and average statewide scores is larger in math
 than in reading. While MCS students read on a par with students across the state, they
 score significantly below the state average in Math.
- SCS students, on the other hand, score measurably better than the state average.

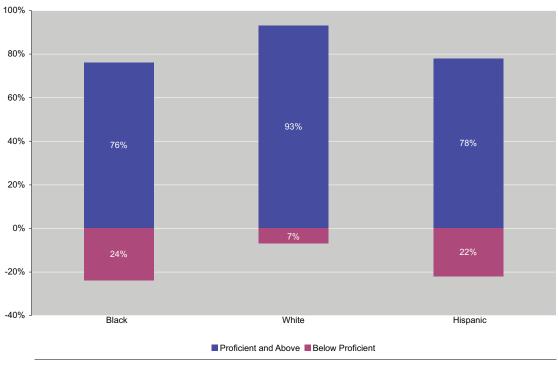
Math TCAP Performance, 2006



Source: Tennessee Report Card

• White students in MCS score higher than both black and Hispanic students locally and the all-student state average (Figure 23).

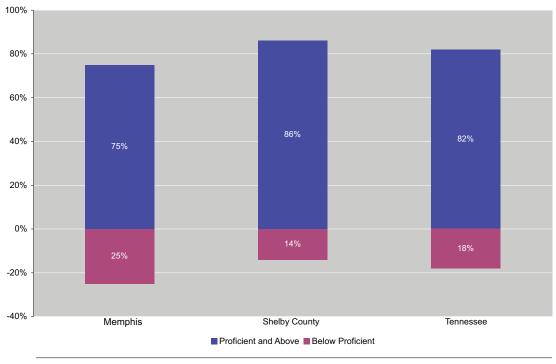
 $\label{eq:math_continuous_math_continuous_math_continuous_math} \begin{subarray}{c} Math\ TCAP\ Performance\ in\ MCS\ by\ Race\ \&\ Ethnicity,\ 2006 \end{subarray}$



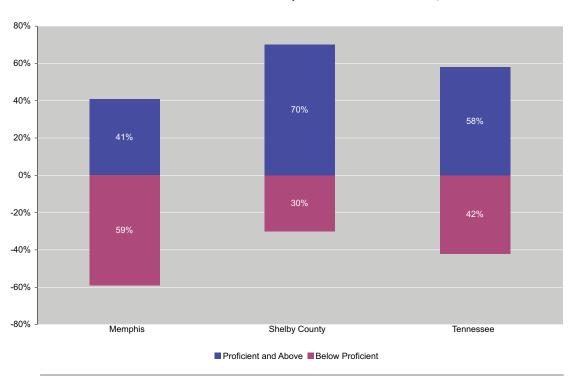
MCS at-risk category math scores vary by risk while all SCS categories beat state.

MCS students score below the Tennessee math averages in both the economically disadvantaged and disabilities risk-groups. Conversely, MCS students with limited English proficiency score above the state average. SCS students in all three risk categories out-perform the state averages.

Math TCAP Performance by Economically Disadvantaged Students, 2006



Math TCAP Performance by Students with Disabilities, 2006



100% 80% 60% 89% 40% 77% 75% 20% 0% 25% -20% -40% Memphis Shelby County Tennessee ■ Proficient and Above ■ Below Proficient

Math TCAP Performance by Students with Limited English Proficiency, 2006

State and national testing are 'apples and oranges.'

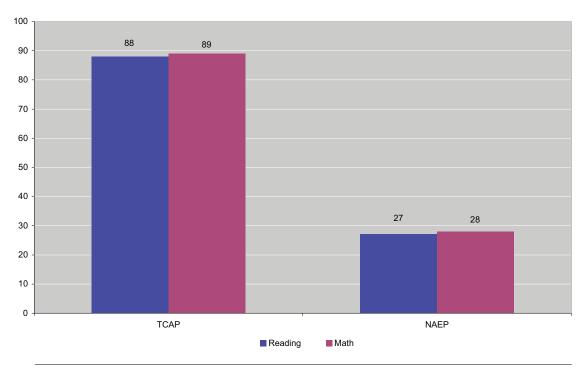
It is difficult to compare MCS and SCS students with students nationwide because they are tested differently. MCS and SCS students are tested on the Tennessee TCAP test. Nationally students are measured on the NAEP (National Assessment of Educational Progress) test. Because a sampling of students in Tennessee *is tested* on the NAEP we can draw some comparison of student performance.

Differences between TCAP and NAEP present an uncomfortable probability.

- TCAP has three rankings: Advanced, Proficient and Below Proficient.
- NAEP has four rankings: Advanced, Proficient, Basic and Below Basic.
- NAEP *Basic* level denotes "partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade assessed."
- Tennessee Department of Education reports the TCAP *Proficient* level to be comparable to the NAEP Basic level.
- This suggests that Tennessee assigns grades of *Proficient* to some students with "partial mastery" of fundamental skills.

• Results of TCAP and NAEP paint two very different pictures of educational achievement in Tennessee. The NAEP is administered every two years. TCAP is given annually.

Comparison of TCAP & NAEP Scores in Reading and Math in Tennessee



Source: Tennessee Report Card, 2006 & NAEP, 2005

By national standards only one in four Tennessee students is at grade level.

NAEP is the, "gold standard of large-scale assessments because of its high technical quality and because it represents the best thinking of educational specialists...and content specialists...from around the nation," according to the U.S. Department of Education.

While TCAP scores indicate that most students in Tennessee are proficient in reading and math, NAEP results suggest that Tennessee student performance is much lower, with a little more than one-fourth of all Tennessee students at grade level in reading and math.

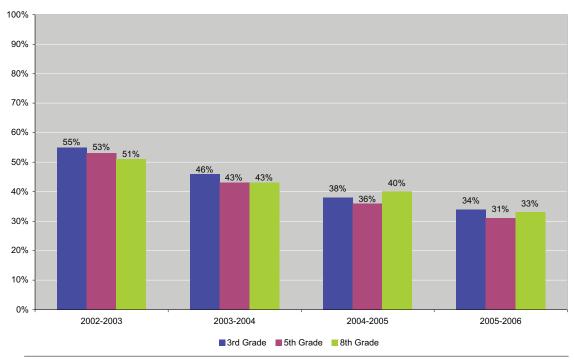
The U.S. Department of Education asserts that NAEP data "will highlight the rigor of standards and tests for individual states: If there is a large discrepancy between children's proficiency on a state's test and on their performance on the NAEP, that would suggest that the state needs to take a closer look at its standards and assessments and consider making improvements."

The gaps in average scores between ethnic and socio-economic groups on the TCAP are striking. The gaps on NAEP paint an even bleaker picture.

Academic progress in Tennessee is hard to measure because the yardstick keeps shrinking.

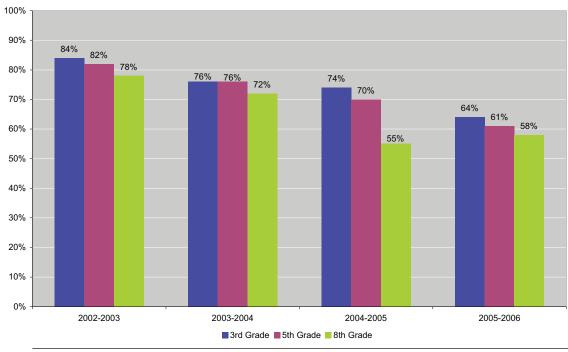
• The percentage of questions students must answer correctly on TCAP to be considered proficient has declined steadily in the past four years in Grades 3, 5 and 8.

Decreasing Percentage of Questions Students Must Answer Correctly for TCAP Reading Proficiency



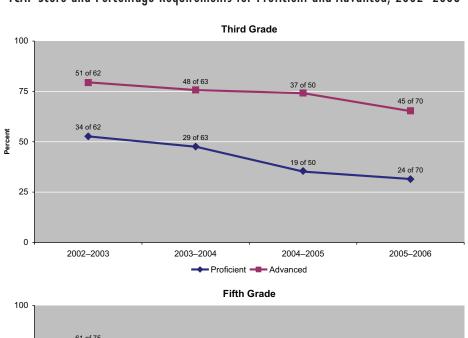
- In 2002 third-graders needed to answer 55 percent of questions correctly to be considered *Proficient*. By 2006 they needed to answer only 34 percent correctly.
- Eighth-graders in 2002 needed to answer 51 percent of questions correctly to be considered proficient. By 2006 33 percent correct answers was considered *Proficient*.

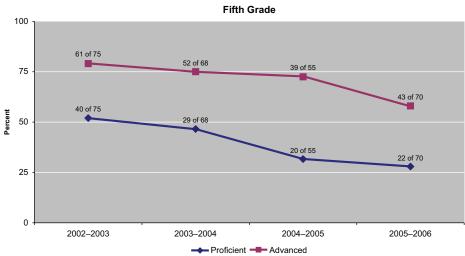
Decreasing Percent of Questions Students Must Answer Correctly for TCAP Reading Advanced, 2002—2006

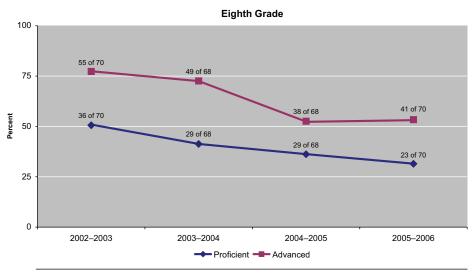


- Standards for *Advanced* measurement of subject matter also have decreased over the past four years.
- To be considered Advanced in 2002 students were required to answer roughly four out of five questions (80%) correctly.
- In 2006 students only needed to answer two out of three questions (67%) correctly.
- By 2006 fifth-and-eighth-graders needed to answer 25 percent fewer questions correctly than they were in 2002.

TCAP Score and Percentage Requirements for Proficient and Advanced, 2002—2006





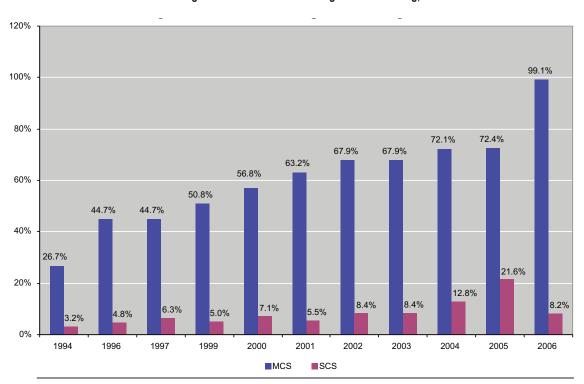


MCS depends on the Federal dole.

The number of public schools in the MCS receiving Title I funding, which is extra money from the Federal government to educate children in low-income families, has increased dramatically over the past decade.

In 1994 one in four schools in MCS received Title I funding. By 2006 nearly every public school in Memphis received Title I funding. This means that there has been a dramatic increase in the number of low-income students in the City of Memphis.

Percentage of MCS & SCS Receiving Title I Funding, 1994-2006



Source: Tennessee Report Card

MCS teachers work in a revolving door.

The number of "stable" students, those who do not change schools during the school-year, steadily decreased between 1999 and 2006.

In half of all MCS schools at least two out of five students change schools during the school year for reasons other than grade promotion. The average classroom has 25 students. So during the school-year half of all teachers have a turnover of 40 percent (10 students). In 85 percent of all MCS schools at least one out of three students changes schools during the school year.

Only two percent of MCS schools can be considered to have relatively stable student populations or a maximum of 10 percent student turnover in a school-year.

What next for the Class of '07?

- Two-thirds (67%) of MCS students graduate on time from high school. Tennessee-wide 80 percent of students graduate on time.
- Two out of three (67%) MCS students now take the ACT exam, a 27 percent increase.
- The average ACT score in MCS is 17.9, more than three points below the Tennessee average (20.7). The U.S. average is 21.1. Only two MCS schools have ACT averages equal to, or above, the U.S. average.
- It's expected that students with ACT scores of 18 and up on English will succeed in college composition, and those who score 22 and up on Math likely will earn B or C grades in college algebra.
- Students entering an in-state, two-year, higher education program can expect to pay approximately \$5,000 tuition over two years for an associate degree. Students can expect to pay approximately \$21,000 tuition in-state over four years for a bachelor degree.
- Of the 1,193 students entering Southwest Tennessee Community College as freshmen in 1999 only 4.4 percent had graduated within three years, and 10 percent had matriculated to other higher education.
- Youngsters entering the workforce in a minimum-wage job directly after high school can expect to earn \$10,712 a year (2007 Federal minimum wage), according to the Memphis Living Wage Coalition. MLWC defines a living-wage as \$20,000 a year plus benefits.

To say it bluntly, 75 percent of Tennessee students are below proficient.

In 2006 Tennessee and North Carolina were selected to participate in a "Growth Model" pilot project as a part of No-Child-Left-Behind's mandate that students show academic progress year to year. In this program students who scored below *Proficient* were allowed to be counted as *Proficient* if their schools expected them to become *Proficient* within a three-year period.

Counting students *Proficient* in years when they are not helps schools to make *Adequate Yearly Progress* (AYP), a key provision under NCLB that keeps schools off the High Priority lists, one of the penalties for low achievement. This is part of the "safe harbor" provision that allows schools to make AYP and that makes failure less likely for a school system.

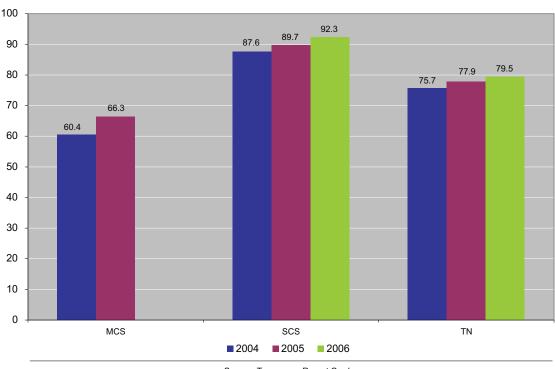
TCAP results indicate that most students in the City of Memphis are performing close to their peers across the state in reading and math. This picture is encouraging given that MCS educates a disproportionate share of low income and minority students. Confidence in the high marks awarded by TCAP, however, is undermined by the less encouraging results of all Tennessee students on the NAEP exam, which suggests that only 27 percent of Tennessee students are at grade-level and *Proficient*.

In less polite terms, this means that almost three out of four Tennessee students are below proficient, and the public seems to know it.

Moreover, a high school graduation rate of only two out of three students graduating on time in MCS portends a bleak future. *The Organization for Economic Cooperation and Development* (OECD) released a report entitled Education at a Glance in 2006 that outlines the economic implications for not having a high school diploma. Among the key findings were:

- The United States is losing ground as other nations make faster and bigger gains.
- Adults who don't finish high school in the U.S. earn only 65 percent of those with a high school diploma. No other country has such a severe income gap.
- The U.S. ranks 11th in the percentage of 25-to-34-year-olds with high school diplomas.
- "The lack of candor about the rate at which public school students are graduating from high school is a fundamental problem in education." (HS Grad Rates in the US)
- The target graduation rate for the State of Tennessee is 90 percent. Only 67 percent of MCS students graduate on time, 75 percent of students statewide graduate on time and 80 percent of SCS students graduate on time.



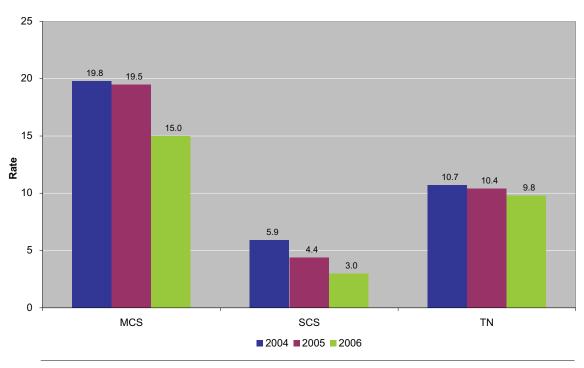


Source: Tennessee Report Card

Graduation rates in conjunction with test scores provide a more complete picture of school performance than test scores alone because a school's test proficiency rate is higher if low-performing students drop out, and their scores are not included. (GAO Report, September 2005, "Education Could Do More") The dropout rate in Tennessee has remained fairly constant since 2004, while MCS dropout rate (highest in the state) has declined about 25 percent and SCS has been cut in half.

A Cumulative Promotion Index (CPI) can determine the probability of a student's graduation. In 2002 MCS had a CPI of 45.3 percent. In 2003, the index had risen to 48.5 percent, but in 2005 the CPI had dropped to 45 percent. (PIPE Memphis 2007, Understanding Graduation and Dropout Rates in Memphis City Schools: An Issue Brief)

Cohort Dropout Rate, 2004-2006

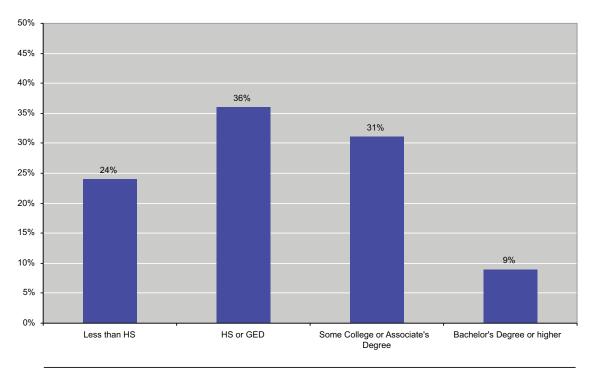


Source: Tennessee Report Card

Memphis is one of the least-educated cities in America.

- In Memphis almost one in four adults (24.3%) has less than a high school education.
- A little over one-third (36.7%) have high school diplomas or equivalent only. Less than one out of three (30.5%) has completed some college or has an associate degree. Fewer than one out of 10 (8.5%) has a bachelor degree or higher.

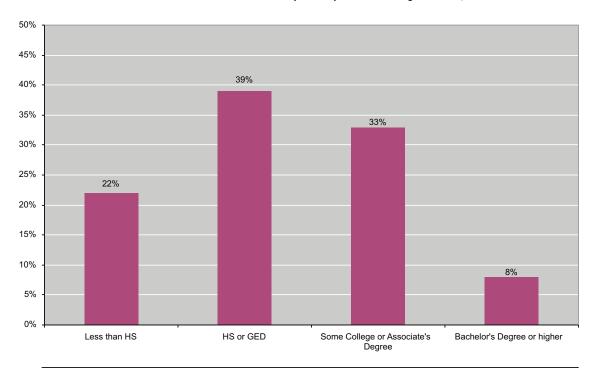
Educational Attainment by Memphians Age 18-24, 2005



Source: American Community Survey, 2005

In Shelby County 22.1 percent have less than a high school diploma, 36 percent have a high school diploma or equivalent only, 31.3 percent have completed some college or have an associate degree and 10.8 percent have bachelor degrees or higher.

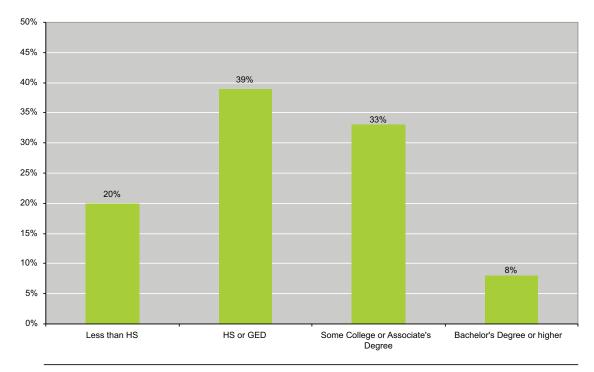
Educational Attainment by Shelby Countians Age 18-24, 2005



Source: American Community Survey, 2005

- In Tennessee about one in five (19.5%) persons has less than a high school diploma.
- Two out of five have high school diplomas or equivalent only.
- One out of three (32.5%) has completed some college or has an associate degree.
- Fewer than one in 10 (8%) has a bachelor degree or higher.

Educational Attainment by Tennesseeans Age 18-24, 2005

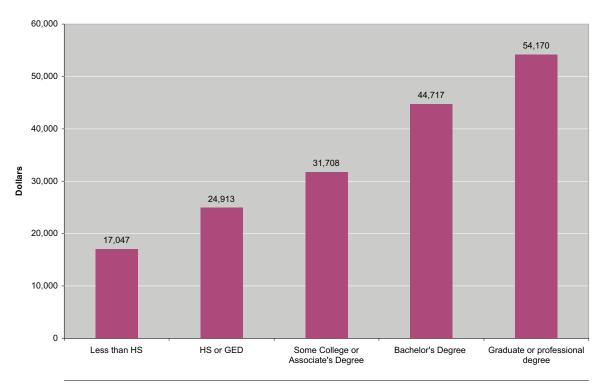


Source: American Community Survey, 2005

Average Shelby County income is only \$1,804 above the label, 'low-income.'

- Income correlates closely to educational attainment. In Shelby County median annual income is \$31,804, and \$30,000 is considered low-income.
- Workers with less than a high school diploma can expect to make half as much as the median income, which puts the worker at the poverty level.

Income by Educational Attainment in Shelby County, 2005



Source: American Community Survey, 2005

- A high school diploma increases the average salary, but keeps the worker in the lowincome category.
- Some college or an associate degree places the wage-earner on par with the average income in Shelby County, or slightly above low-income.
- A person with a bachelor degree earns one-third more than the average, and an individual with a graduate or professional degree can expect to earn about twice the average in Shelby County.

Memphis is unprepared to participate in the 'Knowledge Economy.'

According to former U.S. Treasury Secretary, Lawrence Summers, the *Knowledge Economy* is the transitioning of our national economy from one based on the production of physical goods to one based on the production and application of knowledge. (*Tennessee and the Knowledge Economy*)

As centers of production move from the global north to the global south through trade agreements such as NAFTA, from countries like the United States to countries in Latin America and Southeast Asia, the accumulation, dissemination and synthesis of information have supplanted industrial infrastructure in developed countries. Production of goods has shifted south, while production and control of information has developed in the north.

This means that increasingly in developed countries the pursuit of higher education is mandatory. While a high school diploma was once a valid form of currency in obtaining gainful employment, the need for a college education or higher degree has become a requirement rather than a luxury.

Proficiency in manipulating information, rather than proficiency in product manufacturing, is a key component of the knowledge economy.

Competing in the knowledge economy requires investing in human capital rather than physical capital.

In 2001, the Tennessee Advisory Commission on Intergovernmental Relations released a report entitled "Tennessee and the Knowledge Economy." Among its key findings are:

- One in five jobs today requires a college degree.
- Another one in four jobs requires training beyond college.
- Remaining jobs will require limited on-the-job training of less than 12 months.

Among some of the policy implications in this report are:

- A need for continued investment in the quality of education in Tennessee
- Improving worker training
- Supporting research and development
- Attracting (and retaining) workers from knowledge economy sectors to live and work in Tennessee

These findings have profound implications for Memphis and Shelby County. While some employers in the knowledge economy are located in Shelby County, such as International Paper and FedEx, others such as Dell, chose to locate in Nashville because Davidson County has more desirable conditions to foster recruitment and retention of workers who can compete in the knowledge economy.