



**state of  
black arizona**

Volume II







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[www.stateofblackaz.org](http://www.stateofblackaz.org)



Arizona State University is pleased to collaborate with the Arizona Community Foundation and the Tucson Urban League to present the second volume of the State of Black Arizona. The African-American community has played a key role in the development of Arizona and this volume continues an important collaborative effort undertaken to initiate and sustain dialogue between the university and the many diverse communities of our state on issues of importance not only to African Americans but all Arizonans. The report represents an important contribution to our effort to advance a broad understanding of the dynamics of the African-American experience in the American Southwest and underscores our explicit institutional commitment both to diversity and to teaching and research with societal impact.

In the rapidly changing and highly competitive global knowledge economy, the importance of a university education has never been greater, and the focus in this volume on the role of higher education in advancing society is timely. During this period of economic recovery and reassessment it is critical that Arizonans recognize that the three state universities represent the front line of engagement in shaping our response to such pressing issues as sustainable economic development, job creation, disparities in healthcare, the housing crisis, quality of life and quality of place, and opportunity for enterprise and social advancement.

The participation of President Barack Obama in our spring 2009 commencement exercises underscored his recognition of the critical importance of higher education. When the president addressed more than 70,000 members of the academic community, including our graduating class numbering more than 9,000, he was especially excited about our newly established program to ensure that resident undergraduates from families with annual incomes below \$60,000 admitted as incoming freshmen would be able to graduate with baccalaureate degrees debt free. We estimate that for fall semester 2009, the President Barack Obama Scholars program will allow approximately 1,600 freshmen an opportunity to attain their educational objectives.

The Obama Scholars program epitomizes our pledge to Arizona that no qualified student will face a financial barrier to attend ASU and underscores the success of the longstanding efforts that have led to record levels of diversity in our student body. While the freshman class has increased in size by 42 percent since 2002, for example, enrollment of students of color has increased by 100 percent, and the number of students enrolled from families below the poverty line has risen by roughly 500 percent. Our success in offering access regardless of financial need is easily one of the most significant achievements in the history of the institution.

Throughout its history ASU has championed diversity and we particularly value the perspective the report provides on Arizona students from historically underrepresented backgrounds. We reject the notion that academic excellence and inclusiveness to a broad demographic cannot be achieved in a single institution. With our egalitarian admissions standards, the university seeks to admit all qualified students who demonstrate the potential to succeed. Consistent with these objectives, discussions such as those presented in this report inspire the kind of teaching and research needed to improve the educational experiences and outcomes for all Arizona students.

Many individuals inspired and guided the creation of the report, and the input of community members and civic and business leaders has been especially invaluable. I would like to commend all those who contributed to this important document. The project is certain to inform decision-making on public issues and provide a valuable resource for policymakers throughout Arizona. I hope that you will find this volume to be both useful and thought provoking, and I would like to express my appreciation for your continued support of ASU.

A handwritten signature in black ink that reads "Michael Crow".

Michael M. Crow  
President  
Arizona State University



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# foreword.

by Kelly Langford and Kimberly A. Scott





Drawing on the superlative work from Volume I, this year's project focuses on education. Clearly, education relates to various topics and cannot be divorced from discussions of law, economics, sustainability, health, immigration, and housing. Therefore, in this report and the essays that appear on our website, [www.stateofblackaz.org](http://www.stateofblackaz.org), each author uses education as a lens to explore other issues relevant to our schools, youth, and society in general.

The authors represent various geographic and professional perspectives. Importantly, each writer took seriously community insight. We hosted a series of community forums during which authors shared earlier drafts of their work to gain feedback prior to submitting final versions. As a statewide initiative, we want these essays to be accessible; use current research to inform educational policy; and initiate long-term discussions that will encourage positive changes to all of our communities.

Although only four essays appear in this manuscript, the website hosts many other significant works. Set within each of these four are snippets of what appears on-line. We encourage you to peruse both the written and virtual publications. It is our hope that these essays will lead to collective action. As President Obama has said, "We have an obligation and a responsibility to be investing in our students and our schools."

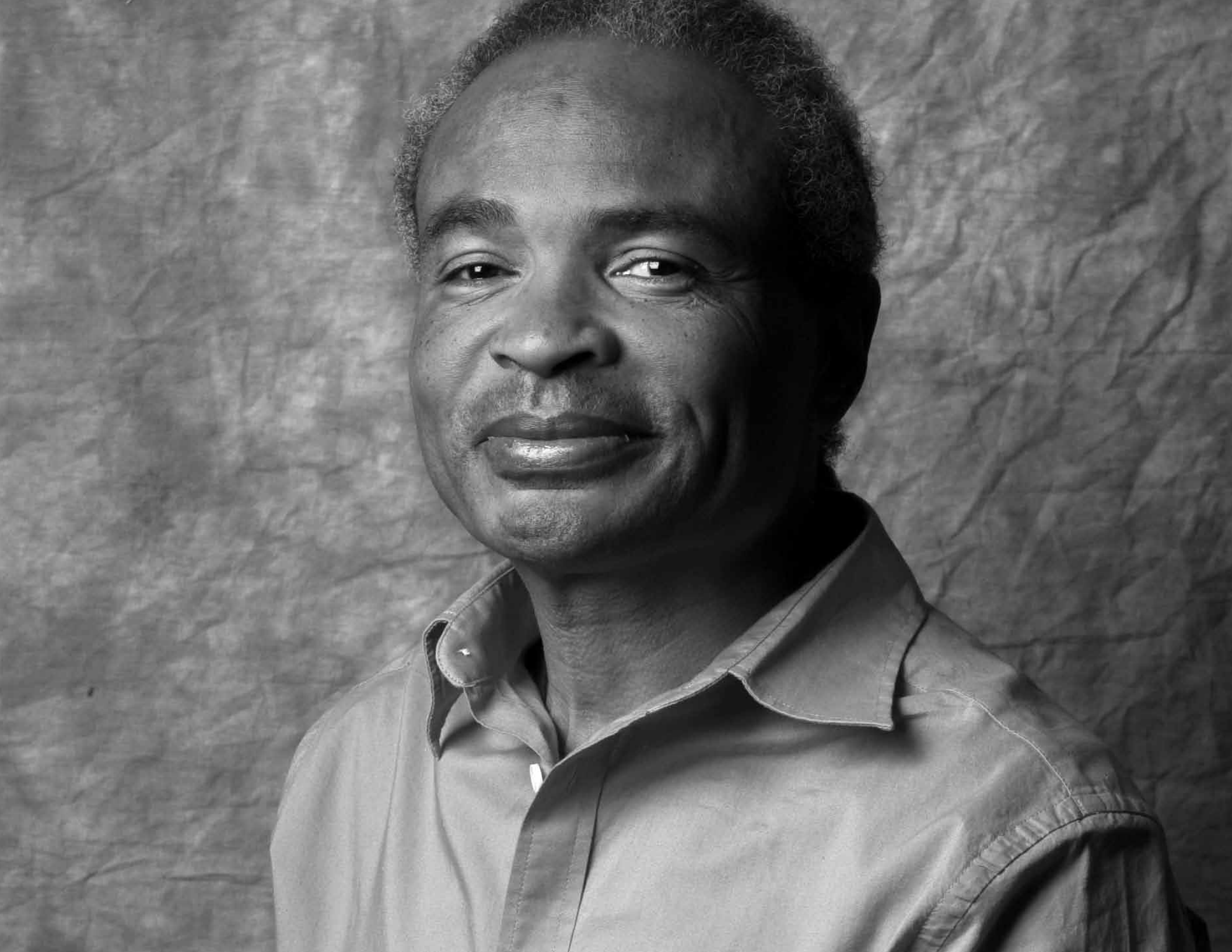
Sincerely,

Kelly Langford, President  
President, Tucson Urban League

Kimberly A. Scott, Ed.D.  
Executive Editor, State of Black Arizona, Volume II











# the state of black arizona:

education and the law

by Judge Penny L. Willrich, J.D. *(Retired)*

Ms. Willrich has practiced law in Arizona for 22 years and served as a Superior Court Commissioner and Judge. She is currently an Associate Professor at the Phoenix School of Law.





**Since the early days of African American<sup>[2]</sup> migration to Arizona, equal opportunity in education has been a primary goal for the Black citizens of Arizona. Almost 100 years of activism has been instrumental in lifting (but not eradicating) the stigma of slavery, Jim Crow laws, *de facto* and *de jure* segregation, racial discrimination, and Black citizens being treated as second class citizens. Some proponents of desegregation of public schools merely pushed for African American children to be educated in the same schools, with the same curriculum, and by the same teachers as White students.**

Proponents of social equality through desegregation were fighting *de facto* and *de jure* laws, customs, and practices that wanted education for African Americans to produce an “industrious but contented workforce” or “subordinated and controlled to perpetuate a separate and unequal social order grounded in White fear and greed.”<sup>[3]</sup>

As early as 1827, Black citizens across the United States pushed for educational equity. The philosophical underpinning for integration is the belief that if children

of African descent are exposed to the same educational opportunities as White children there would be recognition of Black children’s intellectual abilities and an expectation of success would follow. In reality, integration served as the Americanization process for African Americans because by sending Black children to school with White children, Black parents had to relinquish the idea that Black children would be educated by persons sensitive to the needs and values of Black people.

Desegregating schools in es-

sence was the laboratory for exploring whether African Americans had adopted the White language, customs, standards, and culture in order to realize the advantages of living in a homogenous community.<sup>[4]</sup> Segregation created a caste system “to preserve race identity, purity of blood, and prevent amalgamation.”<sup>[5]</sup> Despite the milestones reached through dismantling the doctrine of separate but equal, the institutional and psychological structures of forced desegregation have not created a more equitable educational community for many African Americans. Arizona’s schools “function as centers for education, sites of socialization, and as reflections of the city or town’s values.”<sup>[6]</sup> Immediate equalization of the socioeconomic playing field through an educational policy of assimilation was defeated by residential covenants that restricted where African Americans could live.<sup>[7]</sup> Proponents of integration recognized education as a requisite part of the for-

mula for social equality of African Americans. Yet, the concept of “social equality” presented a difficult dilemma for Blacks in Arizona. Many argued for social equality because they knew that “separate could never be equal.”<sup>[8]</sup> Others were quick to point out that social equality with Whites was a foreign concept to African Americans. The push for desegregation was based upon the financial consequences to Arizona taxpayers. Establishing separate school systems based on race was not justifiable based on Arizona’s population of African Americans.<sup>[9]</sup>

The central theme of this essay is that the very laws designed to end segregation and bring about equalization in education without regard to skin color have not closed the achievement gap between Black children and White children. Moreover, the achievement gap between children of color and White children is yet one more vestige of a system of education replete with a continued

**“ ...They shall segregate pupils of the African race from pupils of the White race, and to that end are empowered to provide accommodations made necessary by such segregation.”**

- 1913 Arizona Legislature<sup>[1]</sup>



legacy of racial discrimination and subtle, but modern, perverse practices that thwart real educational opportunity for Black students in Arizona.

Overt and subtle practices within Arizona's education system label Black children as under-achievers; purposely hamper their learning by labeling them behaviorally disordered; group them according to ability to maximize achievement on standardized testing; use exclusionary discipline consequences of suspension and expulsion; unwittingly contribute to high dropout rates, illiteracy, and the pipeline to prison; and pair the least trained teachers with the students who have the most significant educational needs. This is a call to raise the bar toward educational achievement through competence, quality teaching, a culturally relevant education curriculum and parental involvement.

### **Separate but Unequal**

*"Democracy rejects any theory of second-class citizenship. There are no second-class citizens in Arizona." (Judge Frederick Struckmeyer, 1953)<sup>[10]</sup>*

Many impediments have been thrown in the paths of African Americans seeking equal edu-

cation opportunity in Arizona. School segregation was not a new phenomenon to Arizona, particularly since the Arizona Territorial Legislature enacted the segregated school doctrine as part of the state law in 1909.<sup>[11]</sup> Professor Matthew Whittaker states that the atmosphere of "...White supremacy, racism and racial segregation was firmly established" in Arizona in that it was "the atmosphere one breathed from day to day, the pervasive irritant, the chronic allergy, which made one uncomfortable and jumpy."<sup>[12]</sup> African Americans who migrated to the southwest did not expect to find the extensive segregation and discrimination by law, custom and practice.<sup>[13]</sup> Some African Americans thought that the exodus to the southwest offered a haven as the "racial promise land," when in reality, the struggle for racial justice was even more imminent in a state where the total population of African Americans has not risen above five percent.<sup>[14]</sup>

When Black people were enslaved throughout the United States, there was very little effort made and in many cases it was illegal to educate Black children.<sup>[15]</sup> Though 1865 brought freedom from involuntary servitude, this newfound freedom provided little if any impetus toward adequate



educational facilities for Blacks even if it were legal to do so. Even though most southern Whites did not want Blacks to be educated at all, there were Blacks and Whites willing to risk the sanctions of law to educate Blacks in clandestine schools.<sup>[16]</sup> The objection by Whites to Blacks being educated is that southern Whites did not want to pay taxes for Black children's education.<sup>[17]</sup>

The 1896 decision in *Plessy v. Ferguson* reinforced the barriers to educating Black children under the separate but equal doctrine. Mary Melcher writes that "In Arizona, racist attitudes perpetuated by southerners, including many former Texans, led to a harsher form of segregation for Blacks."<sup>[18]</sup> Melcher characterizes mandated segregation in Arizona as "unusual" for a Rocky Mountain and Pacific West state, attributing its existence to southerners from states that mandated segregation serving in the Arizona legislature and the increased migration of African Americans to Arizona. Some Whites in Arizona were accustomed to having Blacks as servants, not as equals. The customary position of a servant was to be invisible and the general belief regarding Black children was an assumption that they were illiterate.<sup>[19]</sup>

As African Americans migrated

to Arizona, they walked into a combustible discourse. Integration of the public schools was an issue that was disruptive to the White social order. Yet, for many school districts in Arizona, especially in the rural counties, the enrollment numbers were insufficient to warrant separate schools. In Phoenix and Tucson, the separation of African American students from White students was wholeheartedly adopted, particularly in elementary and middle schools. Public schools in Arizona were organized and maintained by a plan of segregation promulgated by a White Legislature for White school districts.

The adoption of "Jim Crow" laws in Arizona officially separated the races in health care facilities, public transportation, hotels, marriage, voting, restaurants, theaters, and any other establishment that served Whites.<sup>[20]</sup> Arizona's Jim Crow statutes and the *de facto* practices that followed "constituted a complete system of segregation designed to isolate and degrade Blacks; and the segregated education for African Americans that was grudgingly accepted was a means to obtain a trained yet subservient, industrious but content, work force,"<sup>[21]</sup> regardless of the cost.

Unlike other people of color



**“ In the most populous counties of Arizona, (Maricopa, Pima and Pinal) a diverse and multi-cultural group of citizens who recognized the inherent inequality and unfairness of segregation took it upon themselves to challenge the educational mandate of segregation.”**

who were subjected to “Americanization”<sup>[22]</sup> programs, African Americans’ involuntary arrival in the United States as chattel introduced them to subservience throughout domestication programs. Americanization programs were designed to “instill (White) American values in the new immigrant such as: love for family, the right work ethic, patriotism, citizenship, allegiance to country, moral qualities to include duty, obedience, proper dress, service, honor, truth, and uprightness;”<sup>[23]</sup> African Americans must have been deemed exempt from the Americanization process based upon their experiences during a 400 year history of serving as subservient plantation workers or indentured servants and the domestication process in place when they disembarked from the slave ships.<sup>[24]</sup>

School districts and state legislators in Arizona ignored the financial impact of establishing “separate but equal schools” even though the cost rose to more than three times that of educating

other students.<sup>[25]</sup> Arizona Governor John Kibbey vetoed the 1909 school segregation law but the Legislature overrode the veto and school segregation became a fixture in the enacted law of Arizona.<sup>[26]</sup> A challenge to Arizona’s racial segregation of African American children came as early as 1912, when Samuel Bayless sought injunctive relief against the Phoenix Elementary School District Board of Trustees because his children had to travel a greater distance to attend an all Black school. Superior Court Judge Edward Kent issued an injunction finding that “...the educational facilities for African American children and White children were not substantially equal.”<sup>[27]</sup> The victory for Mr. Bayless and his children was short-lived because the Arizona Supreme Court sent the case back to the Superior Court with specific orders to vacate the injunction and dismiss the case. The Arizona Supreme Court upheld the constitutionality of Arizona’s segregation laws based on the United State’s Supreme Court’s

decision of *Plessy v. Ferguson*.<sup>[28]</sup> The Arizona Supreme Court did not consider it a danger that Mr. Bayless’ children had to cross a railroad track to get to school nor did the Court conclude that separate but equal included substantially the same traveling distance for Black children to go to school as compared to White children.

In the 1912-1913 Arizona state legislative session the Arizona Code was revised to allow school districts to segregate those groups of students that the school district “deemed necessary.”<sup>[29]</sup> This enactment changed segregation from a mandatory legislative principle to a permissive school district determination. In 1921, the Arizona legislature amended the statutes to allow school districts to segregate high school students under the Rule of 25 (if 25 or more African American pupils were enrolled). Phoenix, Tucson, Casa Grande and Douglass segregated Black and White high school students; Gila Bend did not allow Black high school students to attend their schools at all; some

communities erected a “tent house” for Black school children and provided a half day of schooling; and, other communities built a one-room “colored” school – often placed on the grounds of a White school, but with barriers to prevent the Black and White children from associating with one another (even during recess).<sup>[30]</sup>

Though the origin of educational segregation laws were to prohibit African American children from attending school with White children, often times, other children of color, particularly Hispanic students or students of Mexican or Spanish descent, were victims of discrimination based on race and language. For Hispanics and children of Mexican or Spanish descent, the decision to segregate them from White students often rested on whether or not the children were monolingual in Spanish.<sup>[31]</sup> Until 1951, Hispanics and students of Mexican or Spanish descent in Arizona were required to attend separate schools or were denied admittance into White schools within the school districts.<sup>[32]</sup> Following the lead of litigants in California, Arizona litigants of Mexican descent took their challenge opposing segregation to the United States District Court and secured an injunction against the school districts to prohibit them from seg-





regating students based upon their Spanish last name, or because of the perception that students who spoke Spanish lacked the requisite English-language skills.<sup>[33]</sup>

Throughout the country a legal strategy was developing to challenge the constitutionality of the separate but equal doctrine. In Arizona, though that legal victory would come before the United States Supreme Court pronouncement, little attention had been given to the underground movement of desegregation occurring in counties throughout Arizona prior to the court challenges. In the most populous counties of Arizona, (Maricopa, Pima and Pinal) a diverse and multi-cultural group of citizens who recognized the inherent inequality and unfairness of segregation took it upon themselves to challenge the educational mandate of segregation. Eulalia Bourne, a teacher in Pima County, frequently disobeyed the educational policy of English only by allowing the students to speak in their language of birth and by facilitating teaching in their language.<sup>[34]</sup> Merrill C. Windsor, principal of the Casa Grande Central Grade School, enrolled an African American student in 1923 despite his conflicted emotions and extreme opposition from the local community.<sup>[34]</sup> Louise

Hennes, a Casa Grande High School District Board member, was determined to integrate the high school in Casa Grande. She diligently pushed this agenda from 1946 to 1949 and was ultimately successful.<sup>[35]</sup> Addie Hankins worked diligently and successfully to garner transportation for her children to the one-room school in Casa Grande and she met with county and state officials urging that schools be desegregated.<sup>[36]</sup> In Maricopa County, Herb Finn, Hayzel B. Daniels, Lincoln and Eleanor Ragsdale, Ralph Estrada, Greg Garcia, Ruth Finn, William P. Mahoney, Herb Ely, Stuart Udall, William Crump, and many others pursued equality in education.<sup>[37]</sup> Ironically, even after segregation was declared unconstitutional in 1953 and 1954 by Arizona courts and the United States Supreme Court, Casa Grande maintained de facto segregated grade schools until 1962.<sup>[38]</sup>

In Arizona, as in many other states in the United States, the law was the systemic nucleus for denying protection and opportunities to Black people. Segregation laws coupled with miscegenation laws and literacy tests for voting were enacted with callous disregard for the mandate of equality through the Constitution of the United States. Equality for Afri-

can Americans in Arizona was a mere fiction. Lawyers Hayzel B. Daniels, Herb Finn, and Stuart Udall challenged Arizona's public school segregation laws based on the precedent established in the federal cases of *Mendez v. Westminster*, a 1947 California case and *Minerva Delgado v. Bastrop Independent School District*, a 1947 Texas case, both of which declared segregation of Mexican Americans in public schools as violations of state law and unconstitutional under the Fourteenth Amendment as a denial of due process and equal protection.<sup>[39]</sup>

On November 10, 1953, Arizona Superior Court Judge Fred Struckmeyer ruled on the African American parents' challenge to separate but equal public schools, presented in the case of *Phillips v. The Phoenix Union High School District*. Judge Struckmeyer issued a judgment in which he said, "[T]here are no second class citizens in Arizona." He ruled that the portion of the Arizona law that delegated the power to the board of trustees of school districts to determine whether to segregate or desegregate public schools as inherently unconstitutional. In a second Arizona Superior Court case, *Heard v. Davis*, decided on May 13, 1954 (days before the infamous *Brown* decision) and in-

volving the Wilson School District, trial court Judge Charles Bernstein said that "...segregating members of the African and Caucasian races is unlawful and a violation of the Constitutions of the United States and the State of Arizona."<sup>[40]</sup> In his memorandum decision, Judge Bernstein wrote:

The school is society's chief agency for conserving and transmitting its culture; educational segregation has extra significance. A segregated educative system is likely to transmit to each succeeding generation the superiority-inferiority value attitudes of a racially conscious society. Furthermore, it has become the primary symbol of the Negro's inferiority. ... There are intangible inequalities in segregation. These are more difficult to demonstrate. However, we know the impact on the child of the Negro Race. These children would seem either to be in conflict about their status or to have resigned themselves to inferior self-images. Our general experience as we observe human status each day, tells us that segregation intensifies rather than eases racial tension. Instead of encouraging racial cooperation, it fosters mutual fear and suspicion which is

## **Excerpts from State of Black Arizona – Housing and Education**

By Dee Wheeler-Cronin

Income inequality between the poorest families, the largest percentage being African American, and the wealthiest families, typically White, is a commonly referenced statistic, but does not tell the complete story. When the national net wealth of Whites is compared with that of African Americans, the net increase is significantly greater for African Americans, but there is still a huge disparity of net wealth overall. Wealth, or net worth, is a better indicator of a family's ability to achieve economic security and upward mobility. When the statistics are viewed in this light, the gap is even wider....the median income for African Americans in 2004 was \$28,000 versus \$48,000 for Whites. The net worth held by African Americans, including home equity, was \$11,800 or about 10% of the \$118,300 net worth held by Whites. But when you subtract home equity, African Americans held only \$300 in net financial assets, or less than 1% of the \$36,100 in net financial assets held by whites (Dorsey & Lin, 2008). As summarized in more simple terms by Thomas Wilson, the vast majority of African American's net wealth is equal to the value of their property less the current market value, which means that such value is either an addition to or subtraction from net wealth. The impact of the current housing crisis on local and national economies has been nothing short of devastating for individuals and families across the country....Based on figures released by the Federal Housing Finance Agency, the Phoenix Metropolitan Area posted a three month drop in values of over 7.5 percent and current values are down by more than 16.6 percent from a year ago. The bottom has dropped out of the housing market, and more and more Americans, particularly African Americans and other minorities, are upside down on their mortgages. African American homeowners who do not have funds in reserve to weather periods of unemployment or undertake necessary home repairs or equipment replacements are exposing themselves to even greater economic instability.

...What, then, are the implications of the housing crisis on wealth building through homeownership? While some researchers claim to be unsure about how this crisis will affect the wealth gap, the available data is sufficient enough to draw a logical conclusion. Since most of Black wealth is concentrated in home equity, it is logical to suggest that the wealth divide between Whites and Blacks in Arizona and across the nation will continue to widen.

A full version of this essay is available to download at [www.stateofblackaz.org](http://www.stateofblackaz.org).





the basis of racial violence.”<sup>[42]</sup>

On the heels of the Arizona trial court decisions, on May 17, 1954 the United States Supreme Court decided *Brown v. Board of Education*, which ended the Plessy “separate but equal” doctrine in public schools.<sup>[43]</sup> The Supreme Court wrote:

...education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. ... It is the very foundation of good citizenship. Today it is the principal instrument in awakening the child to cultural values, in preparing him for later professional training and helping him adjust normally to his environment. In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity for an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms.<sup>[44]</sup>

The Supreme Court recognized that discriminatory educational

policies could affect the hearts and minds of Black children in a way that could not be undone.<sup>[45]</sup> The Court failed to discuss how the hearts and minds of White children would be affected.

The law that had played such a central role in the denial of educational equity and equality was deconstructed with the stroke of a pen in a unanimous decision of the Court. While *Brown* represents a major shift in the Supreme Court’s opinion on human rights and a fundamental change for Arizona’s educational system, the Arizona courts after *Brown* took a more modest role in educational reform. Arizona’s legislative scheme of segregation by choice, the ultimate pre-*Brown* dismantlement of the option for segregated schools, and the low number of African Americans residing in Arizona caused the educational policies and programs in Arizona since *Brown* to receive only marginal scrutiny.

After the Phillips and Heard cases, Arizona school districts simply closed the Black schools and Black students began to attend neighborhood schools or the closest school to their home.<sup>[46]</sup> Thus, racial integration with White students in Phoenix was not immediately achieved because relatively few Blacks lived in tradi-

tionally White residential areas and few if any Whites lived south of Van Buren Street in Phoenix.<sup>[47]</sup> As more African Americans moved to Phoenix and settled in the southern section of the city, “in almost every instance in education, employment, and housing, [African Americans] suffered some degree of deprivation.”<sup>[48]</sup>

Subsequent legal decisions on busing, school finance, and court monitored desegregation plans were not significant to Arizona’s progress of voluntary desegregation. In Arizona, school desegregation gave the illusion of opening new doors to African American students in the 1960s and 1970s. “Optimistic integrationists believed that ending legally mandated segregation and exclusion would produce equality of opportunity.”<sup>[49]</sup> African Americans soon learned that active participation in the political, economic, and cultural life of Arizona was necessary to fight the humiliation of exclusion at all levels.<sup>[50]</sup>

Title IV of the Civil Rights Act of 1964 authorized the United States Office of Education to provide all necessary guidance to school boards constructing desegregation plans; empowered the United States Attorney General to initiate legal action against school districts to enforce desegregation;

and allowed withholding of federal funding from school districts that were found to be racially discriminatory.<sup>[51]</sup> Arizona as a whole was not the subject of a desegregation plan as a result of segregating African American children; no law suits were filed by the United States Attorney to enforce desegregation on behalf of African American children in Arizona. Federal funding for Arizona school districts was never withheld as a result of the treatment of African American children. However, Mexican American parents in Pima County, with the help of California activists, challenged the segregation continuing to occur in Tucson.

In 1969, citizens of Tucson, in a formal public protest, claimed that Superintendent Thomas L. Lee and the Tucson School Board were “ignoring the needs of students of color and perpetuating a paternalistic system that discriminated against them.”<sup>[52]</sup> Their claims against the school district and its board included: “conditions of isolation and subordination;” “use of denigrating language toward students of color by teachers, coaches and other school personnel;” “denigration of student’s culture and language;” “exclusion from school activities such as student government;” “failure to meet with students to discuss and







“ In Arizona, school desegregation gave the illusion of opening new doors to African American students in the 1960s and 1970s. “Optimistic integrationists believed that ending legally mandated segregation and exclusion would produce equality of opportunity.”<sup>[49]</sup> African Americans soon learned that active participation in the political, economic, and cultural life of Arizona was necessary to fight the humiliation of exclusion at all levels.”<sup>[50]</sup>

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acknowledge their complaints of alleged racism;” “a need for Spanish-speaking personnel;” “children attending school with little or no reading ability;” “students being tracked into low-ability and vocational education courses rather than college preparatory courses;” “failure to inform parents that their children were classified as in need of special education;” “children using outdated books and materials, poor facilities, poor curricula, and unqualified culturally insensitive teachers;” “state-adopted textbooks and social studies curriculum that presented the European-American experience rather than the experiences of children of color;” and a paucity of Mexican-American and Black teachers and counselors.”<sup>[53]</sup>

The Tucson Superintendent publicly denied that the conditions outlined by the parents existed, which resulted in an

investigation by the United States Department of Health Education and Welfare (HEW) Office of Civil Right (OCR) as part of the United States Commission on Civil Rights investigation of education in the Southwest to ensure compliance with Title VI of the Civil Rights Act of 1964.<sup>[54]</sup>

Despite the key state and national court decisions of Phillips, Heard and *Brown’s* failure to bring immediate relief to the problem of segregation, the United States Congress continued to enact laws and the United States Supreme Court continued to issue decisions that affected educational equity. In 1965, Congress passed the Elementary And Secondary Education Act as a means to fund remedial education programs for disadvantaged children. Through this Act, Head Start programs were created throughout the country, including Arizona, primar-

ily to provide poor children and children of color with opportunities for socialization and first-grade readiness. For African American children, Head Start meant race socialization. “Race socialization is the racialized experiences in the home and out-of-home context that children encounter, which help shape children’s views about themselves and their views concerning themselves in relation to others.”<sup>[55]</sup>

The Health Education and Welfare Office of Civil Rights found that the Tucson School District indeed discriminated against students of color on the basis of race and national origin by its “failure to have programs and services for Spanish speaking students;” “questionable recruitment and hiring practices;” “unequal educational programs;” “racially imbalanced schools;” “over-representation of children of color in emotional or

mental retardation and special education classes;” and found that the “pattern of discrimination traced back to the 1870s.”<sup>[56]</sup>

The result of the HEW investigation led to a threat to withhold \$5.5 million in federal funds from the school district. HEW required the Tucson School District to implement a “desegregation plan that ensured all students’ access to high quality academic programs, reduced educational disparities, reduced academic segregation, and reduced the drop-out rate.”<sup>[57]</sup> When the threat of withholding federal funds failed to cause the school district to take action, a group of Mexican and African American parents sued the Tucson School District and Board in class action suits, *Mendoza, et al. vs. Tucson School District No. 1* and *Fisher, et al. v. Lohr, et al.* The 1978 consolidated decisions reflect a finding by the court that

many of the Tucson schools were racially imbalanced.<sup>[58]</sup> The federal court found that the school district had failed to a limited extent to dismantle the dual system but had converted Black schools to minority schools.<sup>[59]</sup> The judge found that the school district was in compliance with Title VI and there was no indication of intentional discrimination despite the school district's *de facto* segregation.

<sup>[60]</sup> Finally, the Court found that a school district can not pair minority students from different races to demonstrate desegregation. This was a mixed victory, a finding that *de facto* segregation existed in Tucson; however a finding of no intent to discriminate did not really reflect the reality of the condition for the Tucson school children.

### **The Illusion of Educational Equality**

*"A strong and effective system of education is one of the fundamental ways to strengthen our economy and raise living standards."<sup>[61]</sup>*

Overt, inherent institutional racism did not subside with the Court decisions calling for the dismantlement of segregated schools. Integration became much more palatable to its foes who agreed with the philosophy of Booker T. Wash-

ington, the founder of Tuskegee Institute, and an African American leader to Whites and some Blacks. Washington's philosophy, although ideologically different from many African Americans, called for a "special kind of education for African Americans designed to allay White fears and to adjust Blacks to a subordinate caste."

<sup>[62]</sup> This philosophy supported the notion that "Black education was meant to train African Americans to perform manual labor, to serve the needs of Whites." <sup>[63]</sup> Perhaps, Senator John McCain's recent reference to Booker T. Washington's meeting with President Theodore Roosevelt, during his November 4, 2008 concession speech, <sup>[64]</sup> is symbolic of White Arizona's philosophical adoption of the Booker T. Washington philosophy that "Black education was neither to upset White supremacy nor challenge the racial order, and all involved knew it." <sup>[65]</sup>

If indeed Washington's philosophy has been in operation in Arizona as more and more African Americans entered the educational system, the traditional barriers to educational equity continue to exist and the expectations for African American children's progress has been marginalized by the very system altered by law to ensure that they were equally educated.

Educational equality depends not on Black children merely passing through the school house doors to sit next to little White boys and White girls, but must be a philosophical value ascribed to by those operating the school and teaching in the classroom. In many cases in Arizona, exclusion by segregation has been replaced with exclusion by discipline, special education, tracking, standardized testing, teacher beliefs and the No Child Left Behind Act. In the interest of space, I focus on the first two substitutes below. For the complete discussion of these points, please read the entire essay on the website, [www.stateofblackaz.org](http://www.stateofblackaz.org).

### **Discipline**

African American students are five percent of the 1.1 million students in Arizona's schools, yet for every 100 Black students enrolled in school, there are nine suspensions.<sup>[66]</sup> School districts with the highest rates of suspension for Black children are located in Maricopa County Arizona.<sup>[67]</sup> The overall state rankings and the comparative national educational achievement of Arizona's Black students serves as a magnifying glass that brings into focus all types of disparities, both institutional and contextual. The state and national rankings depict the

reality of being Black in an institution controlled by institutional racism.<sup>[68]</sup> Institutional racism is defined as laws, policies, procedures and practices that appear neutral on their face but have a disproportionately negative affect on Black students.<sup>[69]</sup>

Where in the past the primary justification for discriminating against Blacks in education was perceived inferiority, today it is perceived criminality. Thirty years of research has shown that African American students are over-represented in suspension and expulsion as education-related discipline.<sup>[70]</sup> Research further shows that there is a direct link between exclusionary discipline and the pipeline to prison. And the rate of expulsion has increased as the pressure for academic achievement through standardized testing has increased. In the last 15 years, even though crime rates have decreased, incarceration rates of African American youth have increased substantially. Research shows a direct correlation between school suspension and poor academic preparedness.<sup>[71]</sup>

### **Special Education**

Research through the Goldwater Institute in 2003 found that the criteria outlined in the Individuals with Disabilities Education Act





of 1975 have been subjectively used to segregate and neglect the education of African American and Hispanic students in Arizona.<sup>[72]</sup> Matthew Ladner states that race is the primary factor in assigning a disability label to children of color who attend school in predominantly White school districts.<sup>[73]</sup> “Black (student) underachievement reinforces stereotypes that Black students cannot compete in intellectual pursuits.”<sup>[74]</sup>

## Conclusion and Summary

*“We are our histories. What we think, what we believe in and the choices that we make are products of our histories.”<sup>[75]</sup>*

From the State of Black Arizona 2009 Community Forums, citizens’ words of wisdom and reactions to the presentation of this historical backdrop on education and the law in Arizona provided the following five recommendations:

1. African American students in Arizona must be treated fairly, with appreciation of their culture, in a learning environment that nurtures their abilities to succeed, and through a curriculum that values diversity;
2. African American children

should not be placed in “tracked-based” educational settings because it lessens their entire school experience and reinforces negative learning stereotypes;

3. Teacher bias toward students of color must be eliminated in order to have a school environment conducive to learning for all, regardless of race or ethnicity;
4. Overrepresentation of Arizona’s African American students subjected to disciplinary expulsion and suspensions must be eliminated in order to eliminate the cradle-to-prison pipeline; and
5. For Arizona’s educational system to ensure that no child is left behind, parents must be involved in critical decision making regarding their child’s achievement.

Desegregation of public schools in Arizona has not brought the gains for African American achievement or closed the achievement gap that was envisioned by parents and activists. Perhaps it was naïve for so many to believe that integrated schools would offer wholesale improvement to the plight

of African Americans. As so aptly stated by Lasana Hotep in *State of Black Arizona, Volume I*, “African Americans have a long journey ahead ... in raising the education proficiency of our students.”<sup>[76]</sup> While we celebrate Arizona’s educational achievements since 1909, our celebration must not be a void, and we must recognize the pressing issues that are still thwarting Black children’s achievement at the same level as White children. In Arizona, race relations will not improve as long as the education of any disadvantaged group of people are frustrated by law, policies, and programs; or when the institution serves as a vehicle for oppression that shatters the aspirations of achievement for any child. ■

## Endnotes

- [1] Statutes of Arizona, 1913. Subdivision 2 of Paragraph 2733, proscribing the powers and duties of the Board of Trustees of School Districts.
- [2] The terms “African American” and “Black” will be used interchangeably throughout this article, with both having the same meaning of referring to children or people of African descent.
- [3] United States Department of the Interior, *Racial Desegregation in Public Education in the U.S.* (National Park Service, 2000), p. 27.
- [4] J.E. Carlson, Jr. *The Assimilation of Aliens a Civic Duty.* *Arizona Teacher and Home Journal*, 18(3) (1929), pp. 75-80.
- [5] *Berea College v. Kentucky*, 211 U.S. 45, 51 (1908).
- [6] Mary Melcher, “This is Not Right”: Rural Arizona Women Challenge Segregation and Ethnic Division, 1925-1950. *Frontiers*, 1999.
- [7] Bradford Luckingham writes: “Segregated schooling persisted ... largely because of cultural and residential factors.” *Phoenix: The History of a Southwestern Metropolis*, 49 (1989).
- [8] *Id.* at 134.
- [9] *Id.* at 134.
- [10] *Phillips v. The Phoenix Union School District*, No. 72909, Opinion and Order p. 2. (Maricopa County Superior Court, 1953).
- [11] Luckingham at p. 62.
- [12] Matthew C. Whitaker, *Race Work: The Rise of Civil Rights in the Urban West*, p. 11 (University of Nebraska Press, 2005).
- [13] Quintard Taylor. *Seeking Sunbelt Freedom: African Americans in the urban southwest, 1865-1970.* *Magazine of History*, 18(1), pp.17-20 (October 003). *ProQuest Education Journals*.
- [14] *Id.* at 17.
- [15] John Hope Franklin and Alfred A. Moss, Jr., *From Slavery to Freedom, A History of African Americans*, 7th ed. (New York: McGraw-Hill, 1994), 99-100, 188.
- [16] Janet Duitsman Cornelius, *When I Can Read My Title Clear: Literacy Slavery, and Religion in the Antebellum South* (Columbia University of South Carolina Press, 1991).
- [17] United States Department of Interior, at p. 27.
- [18] Melcher, at p. 5.







- [19] United States Department of Interior, at p. 27.
- [20] *Id.*
- [21] *Id.*
- [22] Americanization is defined as the process of unifying native and foreign born in perfect support of the principles for which America stands, namely liberty, union, democracy, and brotherhood. In Alfred E. White, *Americanization, the Mexican Group*. San Francisco, Ca: R & E Research Associates, (1971, p. 3).
- [23] Herman R. Lucero, *Plessy to Brown: Education of Mexican Americans in Arizona Public Schools During the Era of Segregation*. (Unpublished Dissertation, 2004, p. 35).
- [24] The Underground Museum in Cincinnati, Ohio aptly has on display a “slave pen,” a 10 by 10 room in which newly purchased slaves were chained together, beaten, denied the use of their own language, taught a cryptic form of English, and assigned to either being a field-hand or house servant.
- [25] Melcher, at p. 5.
- [26] Mary E. Gill and John Goff, Joseph H. Kibbey and School Segregation in Arizona, *The Journal of Arizona History*, 21(3), 411. (Winter, 1980).
- [27] *Dameron v. Bayless*, 126 P.273, 274(1912).
- [28] *Id.*, citing to *Plessy v. Ferguson*, 163 U.S. 537 (1896).
- [29] Arizona Code of 1913, section 2750.
- [30] *Id.* Melcher, pp. 6-7.
- [31] *Collective Outrage: Mexican American Activism and the Quest for Educational Equality and Reform, 1950-1990*. Maritza De La Trinidad (unpublished dissertation – Department of History, the University of Arizona, 2008), pp. 84-102.
- [32] Luckingham, pp. 133-143.
- [33] Terry Goddard, *The Promise of Brown v. Board of Education: A Monograph* (March 2005).
- [34] Melcher at p. 1.
- [35] Merrill C. Windsor File at the Casa Grande Historical Society. Cited in Melcher at p. 6.
- [36] Melcher, p. 8
- [37] *Id.* at 7-8.
- [38] Luckingham, pp. 133-143.
- [39] Melcher, p.10
- [40] United States Department of Interior at p. 67.
- [41] *Heard v. Davis*, No. 77497. Judgment and Order, p.1. May 13, 1954.
- [42] *Heard v. Davis*, No. 77497. Memorandum Opinion, pp. 2-3 and 5. May 13, 1954.
- [43] Brown, p. 494.
- [44] Brown, p. 493.
- [45] Brown, p. 494.
- [46] Luckingham, at p. 162
- [47] *Id.* at p. 163.
- [48] *Id.* at p. 164.
- [49] Jay P. Heubert (Editor), *Law and School Reform: Six Strategies for Promoting Educational Equity*. (Yale University Press (2000), p. vii.
- [50] Luckingham at pp. 145-146.
- [51] United States Department of Interior, at p. 80.
- [52] Maritza De La Trinidad, *Collective Outrage: Mexican American Activism and the Quest for Educational Equality and Reform 1950-1990*, (unpublished Dissertation, 2008, p. 210).
- [53] *Id.* at pp. 210-219.
- [54] *Id.* at p. 220.
- [55] Melissa Landa, *Crossing the Divide the Divide: A Phenomenological Study of Childhood Literacy and Teachers who choose to Work with Children in High Poverty Schools*. (Unpublished Dissertation, 2007, p. 7).
- [56] United States Commission on Civil Rights, *Ethnic Isolation of Mexican Americans in Public Schools of the Southwest, Report I: Mexican Education Study*, (Washington, D.C.: U.S. Commission on Civil Rights, 1971). In *De La Trinidad*, supra at p. 220.
- [57] Trinidad, at p. 228.
- [58] *Id.*
- [59] *Id.*
- [60] *Id.*
- [61] Alan Greenspan, September, 2003 testimony to the United States Congress, 33rd Annual Legislative Conference of the Congressional Black Caucus, Washington, D.C. (September 26, 2003).
- [62] United States Department of Interior, p. 30.
- [63] *Id.* at 31.
- [64] Senator John McCain in acknowledging his defeat and conceding that Senator Obama had won the bid to be the 44th President of the United States said, “This is a historic election, and I recognize the special significance it has for African-Americans and for the special pride that must be theirs tonight. I’ve always believed that America offers opportunities for all who have the industry and will seize it. ... A century ago, President Theodore Roosevelt’s invitation of Booker T. Washington to dine at the White House was taken as an outrage in many quarters. America today is a world away from the cruel and frightful bigotry of that time.” Retrieved from [www.forbes.com/2008/11/05/mccain-concession-phoenix-biz-beltway-cx](http://www.forbes.com/2008/11/05/mccain-concession-phoenix-biz-beltway-cx).
- [65] United States Department of Interior, p. 31.
- [66] Children’s Defense Fund, 2007 Cradle to Prison Pipeline Report – Arizona.
- [67] *Id.* Alhambra Elementary School District is shown to have 17 suspensions of Black students for every 100 enrolled; Cartwright Elementary District has 12 suspensions of Black Students for every 100 enrolled, and Mesa Unified School District has 9 suspensions of Black students for every 100 enrolled.
- [68] J.R. Feagan. *Systemic Racism: A Theory of Oppression*. (Rutledge, 2006).
- [69] Randall. *America’s Whitest Law Schools*. <http://www.academic.udayton.edu/TheWhitestLawSchools/2005>
- [70] Pamela Fenning and Jennifer Rose, *Overrepresentation of African American Students in Exclusionary Discipline: The Role of School Policy*, *Urban Education*, 42(5), p. 536 (November 2007).
- [71] Linda M. Rafaele Mendez. *Predictors of Suspension and Negative School Outcomes: A Longitudinal Investigation in Johanna Wald and Daniel J. Losen (eds.), New Directions for Youth Development: Deconstructing the School to Prison Pipeline*, No. 99, (Fall 2003.).
- [72] *Race and Disability: Racial Bias in Arizona Special Education*.
- [73] Matthew Ladner. *Center for Educational Opportunity: Mislabeled Harms Arizona’s Minority Students*. Tucson Citizen (April 11, 2003).
- [74] Winkfield F. Twyman, Jr., *The Biggest Mistake of Her Life* (July 21, 2006). [www.intellectualconservative.com](http://www.intellectualconservative.com)
- [75] Joel Spring, a Native American scholar and author.
- [76] Lasana Hotep, *An Analysis of Arizona’s Education System and its impact on African Americans*. In *The State of Black Arizona*, (February, 2008), p. 42.





# human capital and the state of blacks in arizona:

how about those METS!

by William F. Tate IV, Ph.D

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**In the early part of the 21st Century, the impact of the extension of product and labor markets, expanded global competition, and infusion of technology in the latter part of the past century have significantly changed all sectors of the economy. Moreover, technological advances across science and engineering have radically altered the nature and quality of information available to citizens.**

Many state and local governments have acted in response with bold campaigns to further develop the skills and understanding of citizens in their regions. States across the country have commenced endeavors to stress the significance of fostering capacity in science (Building Engineer and Science Talent, 2006; Battelle Technology Partnership Practice & SSTI, 2006). The motivation for capacity building in science is buttressed by two long standing national goals (Kamen & Benovot, 1992). First, states are seeking an economic benefit by amassing highly competent intellectual human capital. Second, a science education of superior quality is seen as foundational for building a literate citizenry who must be able

to make political and personal choices on the basis of contemporary bioscience, burgeoning technology, environmental science, and other areas of science and engineering influencing the human condition. Science education in the United States and Arizona, the focus of this paper, must attend to two interconnected challenges—the inadequate quantity of science literate citizens and the quality of school science learning experiences. These two challenges are captured in the outcomes of international comparisons of science achievement (Gonzales et al., 2004). According to the report, *Rising Above the Gathering Storm: Energizing America for a Brighter Future*, students in the United States fail to achieve at levels that

generate the desired competitive advantage relative to other countries (Committee on Prospering in the Global Society of the 21st Century, 2007). While the desired degree of competitive advantage is infrequently described in commentaries of this type, it is apparent that in national assessments of science proficiency, performance grows worse in later grades (Berliner & Biddle, 1997; Grigg, Lauko, & Brockway, 2006). The international and national science attainment developments are also a concern with respect to the aim of building a scientifically literate citizenry (Center for Science, Mathematics, and Engineering Education, 1998).

The state of Arizona has embarked on a set of human capital strategies that are directly and indirectly linked to the advancement of mathematics, science, engineering, and technology (METS). Discussions of education and economics include a renewed emphasis on METS education. Researchers, policymakers, and community leaders have argued that the opportunity to learn in METS disciplines is foundational to the attainment of economic access and full citizenship in the information technology era. In her 2008 State of the State Address, Governor Janet Napolitano out-

lined specific education priorities linked to METS. The priorities described include new expectations and standards mandating more mathematics and science in high school. In addition, the governor discussed the need to build an assessment system aligned with new and more rigorous graduation requirements. A renewed focus on early childhood education and kindergarten was highlighted in the address as well. Governor Napolitano stated:

“It’s also time to end the fiction that a high school diploma is the final goal of education or that a student should be allowed to drop out at the age of 16. An Arizona diploma should demonstrate that a student is fully prepared for higher education, whether in a technical or vocational setting, a community college, or a university. Yes, we should make reasonable alternatives available for students who can’t succeed in a regular classroom. And the dropout age should be raised to 18 years old...Our education system is linked to the needs of Arizona’s economic future. There is no separation. We need more teachers. We need more engineers, scientists, urban planners, water specialists and entrepreneurs. We have worked





ardently, from preschool to community college and university, to increase the quality of an Arizona education, and then to align education as a whole to the needs of Arizona's economy." (Napolitano, 2008)

The governor has argued that Arizona's economic future is linked to state-level advances in human capital development. While empirical evidence does not always support this logic, the argument is nevertheless important and worthy of additional commentary. The purpose of this essay is to describe relevant METS indicators with a specific focus on the status of Blacks in Arizona. The essay is organized into four sections. The first section is a brief and somewhat narrow review of the value of education. A full discussion of the value of education is beyond the scope of this essay. However, in light of Governor Napolitano's address and related vision, a short technical commentary is warranted. The second and third sections are an examination of indicators related to Black Arizonans and METS competencies. The essay will conclude with a set of recommendations to inform future research, policy, programming, and practices.

### **Value of Education**

The purpose of this section is to describe the value of education in terms of individual economic benefit and broader benefits to a state. Day and Newburger (2002) developed a useful model to determine synthetic work-life estimates for full-time workers by educational attainment. Their model provides a framework to conceptualize the relationship between Black educational attainment in Arizona and work-life estimates. They created synthetic estimates of work-life earnings by using the working population's one-year annual earnings and summing their age-specific average earnings for people ages 25 to 64. The sum totals estimated what individuals with comparable educational levels could expect to earn, on average, in today's dollars, during a hypothetical 40-year work-life. According to Day and Newburger (2002), a typical work-life is defined as the period from age 25 through age 64. While the beginning and ending ages of a work-life vary, this range of 40 years provides a practical benchmark for many individuals. The resulting sums represent what individuals with the same educational level would expect to earn on average in 1999 dollars, in a hypothetical 40-year work-life.



**Figure 1. Synthetic Work-life Estimates for Full-Time, Year-Round Workers by Educational Attainment (Numbers in 1999 dollars)**

(Source: Derived from Jennifer Cheeseman Day and Eric Newberger, 2002)

|                            | Work-life Earning Estimate <sup>[2]</sup> | Annual Average Earnings | Work-life Impact | Annual Impact |
|----------------------------|---|-------------------------|------------------|---------------|
| Not a high school graduate | \$950,100.00<br>(25,797)                  | \$23,752.50             |                  |               |
| High school graduate       | \$1,226,570.00<br>(14,583)                | \$30,664.25             | \$276,470.00     | \$6,911.75    |
| Some college               | \$1,494,990.00<br>(29,240)                | \$37,374.75             | \$544,890.00     | \$13,622.25   |
| Associate degree           | \$1,563,705.00<br>(46,903)                | \$39,039.63             | \$613,605.00     | \$15,340.13   |
| Bachelor degree            | \$2,140,860.00<br>(35,559)                | \$53,521.50             | \$1,190,760.00   | \$29,279.00   |

<sup>[2]</sup> The numbers in parentheses when added to or subtracted from the estimate provide the 90 percent confidence interval.

The Current Population Survey (CPS) was used to generate the work-life estimates. The following equation describes the estimates, where work-life earnings equal the sum of all the average earnings of workers of each age from 25 to 64 years old. <sup>[1]</sup>

$$\text{work-life earnings} = \sum_{x=25}^{x=64} \text{average (earnings)}_{\text{age}(x)}$$

The work-life estimates of this model depend upon several assumptions. First, the estimates assume current cross-sectional earnings reasonably capture patterns in future earnings. Second,

the estimates do not take into consideration work history, past performance, or other factors that may influence pay. Third, the estimates do not take into consideration future productivity gains in the economy, and, therefore, the estimates may be low.

Figure 1 provides synthetic estimates of work-life earnings, average annual earnings, work-life impact, and annual impact. Using the category, 'Not a high school graduate' as the base, each level of educational attainment is compared with the base to provide a work-life impact estimate. On average, work-life earnings for a non-high school graduate are about 77 percent of the work-life

earnings of a high school graduate. The estimated difference in work-life earnings between a high school graduate and non-graduate is \$276,470. This difference is the work-life impact estimate. The estimated annual difference is \$6,911.

Figure 1 illustrates the positive relationship between educational attainment and work-life impact estimates. Although the estimates do not reflect a causal relationship, this synthetic model is a useful tool to think about the im-

portant role that education plays in work-life estimates for Blacks in Arizona. Other benefits associated with improving our education attainment may include: more state, local, and federal tax revenues; public services decreases; and greater social gains (see Belfield & Levin, 2007 for details on these advantages in the California context). Going forward, an assumption of this essay is that there is a relationship between Black Arizonans' educational attainment and work-life estimates.

<sup>[1]</sup> To account for the limited sample size of the Current Population Survey, three years of sample data from the March 1998, 1999, and 2000 CPS were consolidated into a single data set for analysis. The earnings data were adjusted to reflect 1999 dollars using the Consumer Price Index. Additionally, average earnings were generated on consolidated age groups rather than on single years of age.

## **Excerpts from Economic Challenges and Opportunities: New paradigms for developing the 21st century workforce**

By Rodrick Miller and Brett Hudson

...[A]s the American economy continues to struggle, African Americans and other minorities will suffer the worst part of this ugly economic decline if no definitive actions are taken. That said, opportunities abound from the policy, entrepreneurial, and community perspectives that aim to reverse the current trajectory and better the African American condition. Education, in the broadest sense of the word, is the single most important factor in determining how the African American community adapts and fares in the changing global state.

- Education is critical to long-term economic success, and education must be more global, interdisciplinary, and keenly focused on reasoning ability;
- Science, math, and technology are the cornerstone of innovation, and there is a direct correlation between innovation and economic opportunity;
- The African American community must take responsibility for the education of its population and seek a comprehensive array of public, private, and community options, as there is no singular solution to the complex challenges facing the African American community;...

The current economic trajectory for the African American community is not positive, and the consequences of non-action are dire.

....[T]he traditional models of education are inadequate for the demands of a 21st Century workforce in which the skills required to perform optimally change constantly. This new workforce must be able to learn continuously, analyze quickly, and solve problems in an interdisciplinary fashion. The current trajectory of the U.S. economy....should be viewed as a distinct opportunity to redefine what it means to be an American and, particularly, a Black American. Economic integration, technological disruption and convergence, and the fear of the decline of the American superpower provide a unique space in which to craft policy, engage the private sector, and build community.

### **Community Recommendations**

- ..... years of integration and policy discussions have failed to produce commensurate educational opportunities and equitable performance between Blacks and Whites. These traditional measures remain worthwhile points to continue to pursue; however, a model that recognizes the failures of the system and places the onus on community, parents, and community groups to bridge this gap is the most viable option for success in the near term.
- ....models must be developed around innovating in the way materials are taught in a culturally conscious and relevant way. These models must also force students to take a more active role, become engaged in, and find relevancy in their studies.
- The African American community must augment the traditional education model with extracurricular education that is culturally sensitive, affordable, and practical. It is especially important to focus on science and technology.
- African American students must be trained in foreign languages and cultures to take advantage of the opportunities provided by foreign investment in the U.S. and globalization.
- African Americans must partake in private-sector involvement in education to increase sectoral employment. "...We also need immediate and targeted investments in basic education for lower-skilled working adults" (Maguire, S. (2008, December 3). Jobs Going Begging in Some Fields. Retrieved 30 2009, 2009, from CNN: [www.cnn.com/2008/POLITICS/12/02/maguire.job.training/index.html?iref=mpstoryview](http://www.cnn.com/2008/POLITICS/12/02/maguire.job.training/index.html?iref=mpstoryview)).

A full version of this essay is available to download at [www.stateofblackaz.org](http://www.stateofblackaz.org).





**Snapshot of Arizona Job Market**

One focus of the discussion is on the educational background required to participate in the recent job market of the state. On the basis of the 2005 American Community Survey, EPE Research Center (2007) reported each state’s distribution of workers across the five job zones defined by the United States Bureau of Labor Statistics. The categories are outlined in Figure 2.

According to the EPE Research Center (2007), there is a positive relationship between job zone and salary. Typically, jobs in Zone 3 or higher require a high school diploma plus substantial post-secondary education or training as a minimum qualification. Figure 3 illustrates that nearly 53 percent of Arizona jobs are classified in Zones 3 and higher. This percentage is calculated by taking the sum of Zone 3, Zone 4 and Zone 5. This pattern is very consistent with the percentage of jobs in the United States classified in Zones 3, 4, and 5. Nearly 1.5 million jobs in Arizona were classified in Zones 3 and higher. The Arizona median annual income and median years of education required for jobs in Zone 3 and higher is \$40,666 and 13.5 respectively (EPE Research Center, 2007).

How does the Arizona job zone

pattern align with Black Arizonans educational attainment in the 2000 Census? In this report, the Glasper and Ramakrishna essay provides statistics necessary to consider this question. Their analyses of the 2000 U.S. Census came to similar conclusions—the majority of Black Arizonans are not attaining education beyond the high school diploma. What interventions and incentives might result in reversing this trend? The work-life estimates of jobs associated with Zones 3 and higher represent one incentive structure. The major intervention offered by any state in this country is its system of public education.

**Threat to METS: Empty-Seat Problem**

Arizona state standards in METS education may clearly spell out learning goals for all students that reflect a greater level of cognitive demand than once was deemed attainable. However, there are numerous challenges to achieving the METS goals spelled out in Arizona’s state standards. One challenge is what might best be described as the empty-seat problem. If students are not in school, they cannot learn METS subject matter as articulated in state standards. School dropout is a direct threat to the advancement

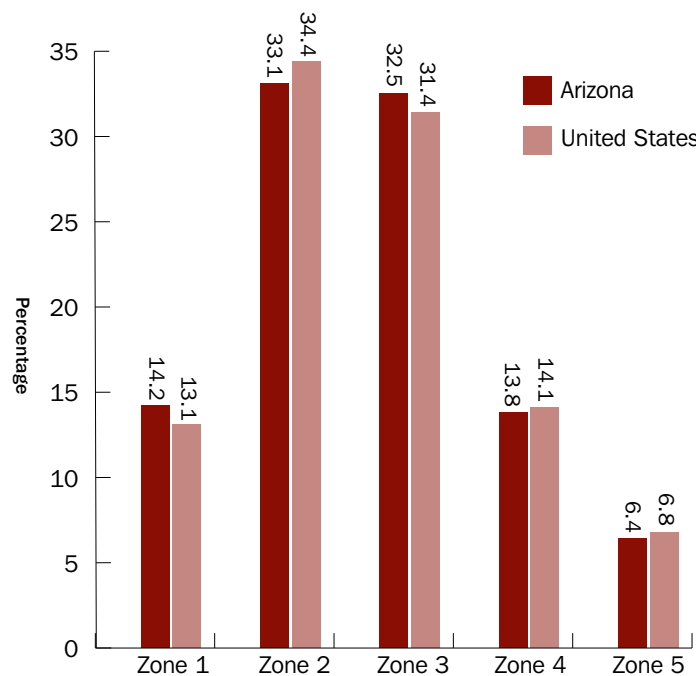
**Figure 2. Job Zones, Categories linking Educational Attainment and Jobs**

(Source: EPE Research Center, 2007)

|        |   |
|--------|---|
| Zone 1 | Requires high school diploma or GED, formal training sometimes required to obtain a license   |
| Zone 2 | Requires high school, perhaps some vocational training or job-related experience; associate’s degree or bachelor’s degree could be needed |
| Zone 3 | Vocational school, on-the-job experience, or an associate’s degree, bachelor’s degree sometimes required                                  |
| Zone 4 | Bachelor’s degree, but some do not  |
| Zone 5 | Bachelor’s degree is the minimum requirement; some require graduate education   |

**Figure 3. Percentage Distribution of Workers by Job Zones, Arizona and United States**

(Source: EPE Research Center, 2007)







of the METS workforce and related literacy in Arizona's Black community. Failure to complete high school is also financially devastating if work-life income estimates are accurate. According to the Arizona Department of Education (2008), nearly 3,800 Black Arizonans were classified as school dropouts in the three academic years beginning in 2005.<sup>[3]</sup>

What are some of the predictors and moderating influences on dropping out of school? It might be surprising to learn that some METS indicators are related to dropout patterns. Neild and Balfaz (2006) examined 8th grade data for the entire first-time freshman cohort in the Philadelphia school district. This cohort of students constituted the projected high school graduation class of 2000. The cohort study identified two factors from 8th grade that gave students at least a 75 percent probability of dropping out of school: 1) having an 80 percent or lower attendance rate in 8th grade (that is, missing at least five weeks of school), and 2) earning a failing final grade in mathematics and/or English during 8th grade. More specifically, of the

8th-graders who attended school less than 80 percent of the time, 78 percent became high school dropouts. In addition, of those 8th-graders who failed mathematics, 77 percent dropped out of high school.

In their review of the dropout prevention research literature, Kennelly and Monrad (2007) discovered that mathematics performance in 6th grade was related to on-time graduation from high school. In addition, their report recommended implementing a system of catch-up courses, benchmarking, progress monitoring, and specialized high school-preparatory classes to improve the transition to high school. The report also suggested that educators monitor first-quarter and first-semester freshman grades and offer academic supports immediately to those who are failing or on track for failing.

Other factors are also related to school dropout. According to South, Haynie, & Bose (2007), adolescent residential and school mobility is linked to an increased risk of dropping out. Their study found an increased risk of dropping out among mobile and non-

mobile students attending schools with high rates of mobility. This finding was partially attributable to lower levels of school attachment and weaker academic achievement in high-mobility schools.

Other important predictors related to school dropout are family characteristics including: socioeconomic status, family structure, family stress (e.g., death, divorce, family mobility), and mother's age. Alexander, Entwistle, and Kabbani (2001) reported that students classified as low-socioeconomic status (SES) had a dropout rate four times higher than students of higher SES. According to a United States Department of Education report (1999) and Bridgeland, Dilulio and Morison (2006), students drop out of school because of social and academic reasons including:

- Don't like school
- Perception that adults in school do not care about students
- Failure to develop sufficient comfort in school setting
- Poor academic achievement
- Retention at a grade level

Dropping out of school is often based on the cumulative effect of many factors over time. If METS advancement is the goal for

Arizona, and with Black Arizonans in particular, then the drop out phenomenon must be addressed. This problem is directly related to the challenge of generating greater work-life income, employment opportunities, and overall value-added to the return on Arizona's investment in human capital.

### **METS Attainment: College Readiness**

The ACT examination is a curriculum-based measure of college readiness. ACT components include measures of academic achievement in mathematics, science, English, and reading. The ACT test is not a mandatory college entrance examination. Many post-secondary institutions require the SAT. Some institutions of higher education do not have testing requirements as part of their admission process. Moreover, some high school students are not pursuing college study. Thus, these students may choose not to take the ACT. As a result of these factors, the ACT is limited for purposes of system-wide evaluation. However, nationally the number of Black students taking the ACT is on the rise. In 1998, 100,647 Black students took the ACT ("The Widening Racial Gap in ACT College Admission Test Scores," 2008). A decade later in

<sup>[3]</sup> The dropout figure was calculated based on the Arizona Department of Education annual dropout rate studies conducted on the 2005-2006, 2006-2007, 2007-2008 academic years. The reports can be found at the website listed in the reference.



**Figure 4. ACT College Readiness Benchmark Scores**

(Source: ACT, 2008)

| ACT Subject Test | Benchmark Score | Corresponding College Coursework |
|------------------|-----------------|----------------------------------|
| Reading          | 21              | Social Sciences                  |
| Mathematics      | 22              | Algebra                          |
| Science          | 24              | Biology                          |
| English          | 18              | English Composition              |

**Figure 5. Percentage of Black Arizona in 2008 High School Graduating Class attaining ACT College Readiness Benchmark Scores (N=444)**

(Source: ACT, 2008)

| ACT Test    | Percentage Attaining Ready Score | Percentage Not Ready |
|-------------|----------------------------------|----------------------|
| Reading     | 35                               | 65                   |
| Mathematics | 23                               | 77                   |
| Science     | 9                                | 91                   |
| English     | 48                               | 52                   |
| All Four    | 6                                | 94                   |

2008, more than 178,000 Black high school seniors took the ACT, an increase of 77 percent. The ACT scale scores range from 1 to 36. For Blacks, the 2008 median composite ACT score (average of the reading, mathematics, science, English scores) was 16.9. The average composite ACT score for Black Arizonans in the five-year period between 2004 and 2008 has ranged between 18.4 and 18.8 (N = 1944) (ACT, 2008). The composite score is a useful measure to compare performance across demographic groups, however, a close examination of Black Arizonans' specific discipline-based college readiness is possible.

The ACT reports college readiness benchmark scores. A benchmark score is the minimum score linked to a 50% chance of attaining a B or higher or about a 75% chance of earning a C or higher in the corresponding credit-bearing college course. The benchmark scores are calculated based on empirical studies of actual performance by college students. Figure 4 provides the ACT college readiness benchmark scores.

Figure 5 reports the percentage of Black Arizonans in the 2008 high school graduating class attaining ACT college readiness benchmark scores who took the

examination. The data provide insight into the college readiness of this self-selected group of 444 Black Arizonans.

The ACT college readiness benchmark scores in content areas directly related to METS preparation, mathematics and science, indicate a large majority of the examinees were unprepared for college level study in these areas. A majority of the 2008 examinees also were not prepared for college level study in English or the social sciences. Historically, an important school factor related to ACT test performance is an opportunity to study in a cognitively demanding college preparatory curriculum. Many states including Arizona have recognized the need to provide all students with a more demanding high school program of study. There are two related policies that are not generally mentioned when new, more rigorous high school standards are implemented. The first is that new, more demanding standards in grades 9-12 require a highly competent secondary teaching workforce. This is especially true in METS education. Hoglebeand and Tate (in press) found that schools with more concentrated percentages low-SES and minority students achieved higher science proficiency scores when they had



a greater percentage of courses taught by highly qualified teachers and more of their teachers were regularly certified. A second related policy that is often not mentioned is that new, more demanding secondary standards require a system-wide effort to prepare students in elementary and middle schools.

### Final Remarks

The call for greater METS understanding and skills in Arizona secondary schools is an important signal and opportunity. However, achieving desired outcomes will require a system-wide effort. Attaining the METS competencies associated with college readiness is strongly linked to cognitive-based employment skills, work-life income, and a broader set of societal benefits. An ACT study (2006) demonstrated that college readiness skills as measured by the ACT examination are the same mathematics and reading proficiencies required for specialized vocational employment. Many vocational jobs require a high school diploma and some additional training. These opportunities would be classified in Zones 3 and higher in the EPE assessment. In sum, whether pursuing college at-

tainment or specialized workforce skills, Black Arizonans require a high quality METS education. To achieve this reality will necessitate sustained public-private partnerships and extraordinary civic capacity. The recommendations that follow are offered to support the advancement of not only Black Arizonans, but all citizens of the state.

- Collective cognition matters when the goal is sustained reform of METS education. To that end, the state of Arizona in partnership with universities, civic organizations, and corporations should invest additional funds into the advancement of the Arizona Initiative for Mathematics and Science or a complementary effort.<sup>[4]</sup> Distinguishing features of this initiative should include a comprehensive METS-related data archive, geographic focus on science attainment and industrial development, engagement with a range of stakeholders, and clear commitment to communicating research findings to many publics (see Tate, 2008). A particular focus of the

**“ Dropping out of school is often based on the cumulative effect of many factors over time. If METS advancement is the goal for Arizona, and with Black Arizonans in particular, then the drop out phenomenon must be addressed.”**

research function should be on the state of affairs associated with racial/ethnic groups in METS education.

- Engineering change requires sound indicators that describe the nature and extent of system-wide progress. The state of Arizona should conduct predictive validity studies of current METS related indicators. It is not clear how useful current measures are for supporting the advancement of school improvement in underserved communities. It is very important for educators, parents, and the community to understand the utility of a measure. It appears that like the state of Michigan, the Arizona State Department of Education should investigate the potential value-added of using the ACT (or a similar indicator system) as a key measure for secondary

schools (see JBHE, 2008). As outlined in this essay, the ACT has conducted predictive validity studies relating its scoring system to college and workplace readiness. This type of information is vital to public understanding of METS education.

- Differences in academic achievement and attainment among racial/ethnic groups reflect the fact that the variation in family resources is greater than school resources (Miller, 1995). This family resource gap can be addressed by developing funding and infrastructure to support pre-teen and teen programs (before and after school) that focus on both academic and non-cognitive skills and understandings. This effort should be supported by state and foundation funding. Local civic and social organizations are often

<sup>[4]</sup> See <http://educationpartnerships.asu.edu/content/arizona-initiative-math-science-education>

the appropriate implementers of teen programming.

- Investigate the potential of making engineering a core high school experience. Traditionally, engineering programs have been part of desegregation magnet programs designed to court middle-class families. Arizona state standards in mathematics and science provide the foundation to expand into comprehensive engineering education in secondary schools. The state of Arizona should establish engineering education standards and a teacher certification program in the area of engineering. Arizona universities and colleges would need to comply and develop engineering certification programs.
- More rigorous METS standards and ambitious graduation targets call for high quality teachers. The state of Arizona and school districts must ensure that low-SES/high minority schools have a full complement of METS certified teachers (and in other school subjects and elementary school as well). This is generally a school district function. However, it is vitally important that

the State of Arizona and the corporate community create economic incentives to support the recruitment and retention of a high quality METS education workforce in both elementary and secondary schools.

- Adults have transitioned out of the Arizona K-12 education system. Unfortunately, many will not have the skills to compete in a technology-based economy. The State of Arizona, local school districts, civil rights organizations, and other civic actors have the potential to assist young adults. The revenue and organizational structure to create and promote METS education opportunities and other developmentally appropriate programming (academic and social skills development) for young adult learners presents an opportunity for a joint civic capacity building effort. ■

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