The Birmingham Education Foundation is a non-profit 501(c)3 dedicated to increasing the number of students in Birmingham City Schools that are on the path to college, career, and life readiness. We believe that this is only possible by creating a diverse network of people who demand excellence for students and encourage others to do the same.

Written by:
Corinn O’Brien
Birmingham Ed Foundation Strategy Manager

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For additional hard copies, contact:
Corinn O’Brien
Strategy Manager
cobrien@edbirmingham.org or 205.582.8740
EXECUTIVE SUMMARY

In April of 2018, Alabama’s results on the National Assessment of Education Progress (NAEP) were released and revealed few improvements in student performance since 2015. Over the past twenty years, Alabama’s NAEP scores have long been near the bottom of the pack - significantly below the national averages for public schools. While Alabama has made progress with NAEP results, this progress has not outpaced the rest of the country and long-term trends indicate that the state’s achievement gaps persist for students of color and students living in poverty. In order to create better schools, teachers, administrators, district leaders, and policymakers need to have access to timely and accessible data to determine what instructional methods, curriculum, and initiatives are effectively working and what’s not. Parents and families also deserve more information - understandable, accessible, transparent information - about the schools their children are attending.

Increased school data transparency and accessibility in Alabama would allow stakeholders at all levels -- families, teachers, school administrators, district leaders, and policymakers -- to make better-informed decisions in our public education system. There are several actions that Alabama should take to make this a reality:

1) fully implement the recommendations of the Data Quality Campaign,
2) create a data center website for the state that is easy-to-navigate and provides data reports in useable forms,
3) create a user-friendly website for parents and families, and
4) create a district-level office of data strategy and analytics.

There are several states and districts that Alabama can learn from, like Arkansas, Tulsa Public Schools, Colorado, and Chicago, that are leading the way in the development and implementation of exemplary data systems and practices that prioritize transparency & accessibility for all stakeholders.

SCOPE OF THE PROBLEM

OVERVIEW

When it comes to school data, there are many elements that come together to paint a comprehensive picture of student learning. School data include student demographics, academic information like course enrollment and grades, test performance including school-level and state assessments, teacher effectiveness and evaluation, culture and behavior metrics, per-pupil
expenditures, and many other indicators.² When all of these metrics converge, stakeholders can engage in a process called data-driven decision making. Such decisions include parents deciding where to send their children to school, teachers deciding what lessons to reteach after an assessment, principals deciding what type of teacher to hire in order to best support student needs, district leaders deciding the scope and sequence of professional development, or policy-makers deciding where to designate expenditures to best meet the needs of schools.²¹ Each of these stakeholders needs access to transparent and accessible school data in order to make these informed and timely decisions.²¹,²³ Without access to quality data, these individuals can only guess at what changes need to be implemented, which can result in wasted taxpayer dollars and, at worse, the expansion of the student achievement gap.²³

With a growing emphasis placed on evidence-based policy-making in education, the ultimate goals of data transparency and accessibility are threefold: to improve student learning, to increase equity by closing learning gaps, and to create stronger accountability measures among policymakers, teachers, parents, and students.³,¹⁶,²¹,²⁶ For example, information transparency can answer questions about per-student spending, school safety, disciplinary trends, graduation rates, attendance, and academic performance. Often times, parents and families with children in low-performing schools see their children’s academic struggles as an individual responsibility — their children’s fault, or their own — but access to and understanding school data can help identify broader, more systemic problems. With access to quality data, researchers are able to pinpoint specific issues affecting school districts, identify trends, and craft effective solutions for the problems they identify.²¹,²⁶ Without transparency or access to useable and easy-to-understand data, parents are left wondering how to best support their children and how to advocate for better schools. Teachers are left wondering how best to adjust classroom instruction to ensure that all students are learning. And policy-makers are left wondering how best to tighten the gears of education standards without having the full toolbox available to them.

**CURRENT LOCAL & STATE POLICY**

In 2015, the Every Student Succeeds Act (ESSA) replaced previous federal legislation guiding K-12 public education in the US.³¹ Under ESSA, the Alabama State Department of Education is required to submit its accountability plan, release a state report card, and share new data points with the federal government and the general public, including annual per-pupil expenditures at the school level on their state & school report cards.³¹,³⁴,³⁸ In addition, ESSA mandates that state and local school report cards are presented in an understandable and uniform format, that report cards are developed in consultation with parents, and that these report cards are made accessible, which includes making them available online.³¹,³⁴,³⁸

Following the passage of ESSA, Alabama State Senator Del Marsh (R-Anniston) proposed the Alabama Rewarding Advancement in Instruction and Student Excellence (RAISE) bill, renamed as the Preparing and Rewarding Educational Professionals (PREP) bill in 2016.²⁸ The PREP bill sought to establish a teacher evaluation model tied to student achievement data
and an increase in the number of years required for tenure, performance-based pay schedules, and the Alabama Longitudinal Data System Center.\(^{13,27,28}\) In short, teacher performance, and consequently teacher bonuses, would be tied directly to student test score data made available through the state longitudinal data system (SLDS).\(^{13,27,28}\) Parents and community members came out in strong opposition to the bill, in large part because they believed student data collection on such a scale would be a significant invasion of privacy.\(^{32,33}\) Eventually, Sen. Marsh pulled the bill from the legislative session, likely in response to the growing opposition.\(^{29}\) Equal resistance has been voiced against newer legislation pushing for a state longitudinal data system. The Alabama State Senate bill, SB153 of 2017 and its partner in the House, HB97 of 2017, both sought to solve issues surrounding limited data availability by creating an SLDS.\(^{7}\) Neither bill made it out of committee. One criticism of these legislative attempts for an SLDS - PREP bill, SB153, and HB97 of 2017 - is that the Alabama State Department of Education already has an existing assessment reporting system.\(^{6}\) Alabamians are concerned that creating a state longitudinal data system is just another unnecessary and extraneous expense.\(^{6}\) ALSDE’s existing data collection system does not have all of the foundational elements of a high-quality longitudinal data system. Alabama needs a better system for organizing and providing access to critical school and student data so that stakeholders at all levels can analyze and propose solutions to the difficult challenges facing our state’s public education system.

In December of 2016, the Alabama State Department of Education (ALSDE) quietly released school report cards on its website.\(^{50}\) Nationally, states have begun to include school report cards as a part of their accountability systems in order for schools and districts to use data to evaluate and improve their own effectiveness, and to improve transparency in communications about school quality and performance with families and stakeholders.\(^{55,56,57}\) Sponsored by Rep. Terri Collins (R-Decatur) and passed in 2012, the original Alabama legislation created an A-F grading system that would assign each school a letter grade based on a number of indicators, including academic achievement and learning gains on the state assessment, attendance metrics, and graduation rates.\(^{49,50}\) Missing from the AL school report cards released in 2016 were the A-F scores, a critical component that proponents argue would communicate school quality to parents and families, but which were removed by a vote of the AL State Board of Education.\(^{50,51}\) Previously, Alabama has issued school report cards but they did not report metrics that measured student performance on state assessments.\(^{49}\) The production of these report cards ended in 2008-2009.\(^{49}\)

In February 2018, ALSDE released school report cards with A-F grades for the 2016-2017 school year. For schools without a 12th grade, grades were determined using student achievement and student growth on ACT Aspire and chronic absenteeism.\(^{52}\) For schools with a 12th grade, graduation rate and College and Career Readiness indicators were also incorporated.\(^{52}\) In the 2016-2017 school year, the Alabama school system received a score of a ‘C’, while Birmingham City Schools received an overall score of a ‘D’, with 22 schools earning an ‘F’.\(^{52}\) Recently, ALSDE released school report cards for the 2017-2018 school year in
December 2018, with slight changes to the grading formula including more opportunities to earn points for student growth. The AL state system received a ‘B’ score, while Birmingham City Schools received an overall score of ‘D’, with only 5 schools earning an ‘F’. While opponents of the A-F grading system continue to say that a single score cannot capture everything that happens at a school, proponents argue that Alabamians are now able to have conversations about school quality and performance that they were not able to a few years ago. These conversations are a direct result of data transparency.

It is important to note that Alabama has recently come under scrutiny around accuracy of school data, specifically graduation rates. In 2017, the Office of Inspector General of the U.S. Department of Education found that Alabama had artificially inflated graduation rates for several years, during which the state graduation rate improved from 72% in 2010 to 89% in 2015 and earned Alabama a ranking of 3rd in the nation, an unprecedented year-over-year improvement. Federal investigators discovered that graduation credit and diplomas were issued to students whose coursework was not tied to Alabama state standards and the graduation rates increased as a result. This year, Alabama is again under scrutiny by federal agents after posting a 40 percent increase in graduation rates for students with disabilities, from 54% in 2016 to 74% in 2017.

**Challenge #1: School data is complicated and nuanced.** Most educators, students, and families would agree: there is more to measuring student success than just one indicator and it is extremely difficult - if also incomplete - to assess student success without considering a variety of factors in relationship to each other. For example, graduation rate is often considered the most significant data point by which to measure the quality of education delivered by schools, but even Alabama State Superintendent Dr. Eric Mackey has commented that there is a gap between our graduation rate and the College and Career Readiness rates that ideally should not exist.

**Challenge #2: The way school data is presented affects stakeholders’ ability to access it.** In the age of ESSA, school data is plentiful and states dutifully publish required measures to the federal government and general public on their websites. The challenge is that most of this data is difficult to find or in formats that are difficult to use. It is no longer enough to simply share the data. States must ensure that 1) data is easy to find and 2) there are a variety of ways that stakeholders can access, understand, and use school data, through easy-to-navigate dashboards and thoughtfully designed school report cards. Additionally, stakeholders come to the table with varying levels of experience and expertise in data analysis and may need additional support in developing their data literacy. Parents and families need workshops to learn how to best utilize these data tools and teachers and school leaders need professional development to increase their data analysis skills.
Challenge #3: Decision makers need additional capacity to move beyond using ‘data for compliance’ to making data-driven decisions. Across the country, policymakers are in need of additional capacity and partnerships between state-level education departments and non-profit research organizations that conduct analysis on school data to identify exemplary practices to share and emulate, to pinpoint challenges and to develop effective next steps for policy.

POLICY ALTERNATIVES

LONGITUDINAL DATA SYSTEMS

According to the National Forum of Education Statistics, a high-quality longitudinal data system is, “a data system that collects and maintains detailed, high quality, student- and staff-level data that are linked across entities and over time, providing a complete academic and performance history for each student; and makes these data accessible through reporting and analysis tools.” The critical piece -- collecting and linking information about how individual students are performing over time -- aids teachers, administrators, and policymakers to understand how to better support the academic achievement and growth of both individuals and cohorts of students throughout their P-20 experience. These systems can be built at the district level, but are usually found at the state level due to local budgetary restrictions. Ideally, an SDLS should measure a multitude of student-level indicators (i.e. enrollment, attendance, state assessment scores, college-readiness scores, post-secondary enrollment) for well-rounded data analysis.

In light of the new focus on data transparency and data-driven decision making, organizations like the Data Quality Campaign have emerged “to encourage and support state policymakers to improve the availability and use of high-quality education data to improve student achievement.” The Data Quality Campaign (DQC) identifies 10 essential elements of a robust longitudinal data system:

1. A unique student identifier that remains with the student throughout their P-20 career and allows the system to protect student privacy;
2. Student-level enrollment, demographic, and program participation data;
3. The ability to match individual students’ test records from year to year to measure academic growth;
4. Information on untested students;
5. A unique teacher identifier that allows the system to link teachers to student data;
6. Student-level transcripts, including information on courses completed and grades earned;
7. Student-level college readiness test scores;
8. Student-level graduation and dropout rates;
9. The ability to match student records between the PK-12 and the postsecondary systems; and
10. A state data audit system assessing data quality, validity, and reliability. The DQC’s indicators represent the ‘gold standard’ for state systems. In 2005, when the DCQ first began, no states had a data system that incorporated all ten of these elements. By 2008, four states - Arkansas, Delaware, Florida, and Utah - made the necessary changes to their data systems and incorporated all 10 of the aforementioned elements. As of 2014, Alabama had instituted five of the ten essential elements in its data systems: #2, #3, #7, #8, and #10.

OVERVIEW OF ALTERNATIVE POLICY

A number of states and school districts across the country have developed and implemented exemplary data practices that are promoted by the Data Quality Campaign and that prioritize transparency & accessibility, a handful of which are described below.

**Exemplar #1: Arkansas**

Arkansas has been nationally recognized for its innovative data practices for over a decade after creating a state education data center with several portals for use by different stakeholder groups.

- **Arkansas Department of Education Data Center**: As the primary entry point, the ADE Data Center is the intersection of several data systems that provide access to information about academics, human capital and licensure, student supports, district operations and fiscal governance, facilities and transportation, accountability, and the ADE directory. This one-stop shop provides a search bar for overwhelmed guests to find exactly what they need.

- **Arkansas studentGPS Dashboards**: Through these dashboards, educators have password protected access to historical student data, including attendance, state assessment data, previous academic course grades, school assessment grades, and discipline. With access to this level of data, teachers are able to make data-driven decisions for their students in a timely and informed manner.

- **My School Info through ADE Data Center**: For parents and families seeking to understand the quality of their child’s school, ADE created My School Info. This easy-to-navigate website allows any stakeholder to analyze and compare schools using a report that presents basic school information, program availability, per-pupil expenditure, years of teaching experience of school staff, and school ratings; with access to pertinent school documents like the ESSA report card and aggregate disciplinary reports.

Arkansas Department of Education has gone beyond collecting school data for accountability and compliance purposes and is striving to ensure that all stakeholders have the data necessary to continuously improve performance and outcomes for the students.

**Benefits**
The following are the benefits of Arkansas’ data practices:

- The ADE Data Center provides easy access to information about Arkansas’s public education system.⁵
- Educators have password protected access to historical student data.³
- ADE has prioritized data accessibility for students and families by creating My School Info.

**Exemplar #2: Tulsa Public Schools Office of Data Strategy and Analytics**

Under the direction of Tulsa Superintendent Dr. Deborah Gist, the Tulsa Public School District has prioritized data-driven decision making through the creation of the Tulsa Office of Data Strategy and Analytics, which uses student data as the driving force to continuously improve student learning.⁴⁸ The office created a high functioning real-time data strategy to better help teachers, school leaders, and support staff serve students and their families by providing analytic reports, data tools, and dashboards; fulfilling data requests; and conducting in-house research and evaluation. The central element of the office’s work is creating dashboards that bring together data points stored in multiple places, such as attendance, state and MAP assessment scores, grades, and transcripts.⁴⁸ In addition to the data dashboards, the office has created a tool that allows teachers to prepare a report for a parent-teacher conference in a few clicks.⁴⁸ Having all of the data accessible through one main portal helps teachers and principals save time and streamlines the data collection and analysis process.⁴⁸ The Office of Data Strategy and Analytics is also using its local, longitudinal data set to generate research used to create targeted, individualized solutions for the Tulsa Public Schools system.²

**Benefits**

The following are the benefits of Tulsa Public Schools Office of Data Strategy & Analytics:

- Teachers have access to timely and actionable data through dashboards, which allows them to adjust curriculum, instruction, and intervention in order to close learning gaps quickly for their students.⁴⁸
- Ability to generate research that is driving strategy and improvement efforts for the district.⁴⁸

**Exemplar #3: Colorado**

In 2009, Colorado’s General Assembly passed The Education Accountability Act (EAA) of 2009, which established SchoolView, the state’s education accountability system and online data portal that allows families, teachers, school leaders, and community members to explore a comprehensive view of the state’s current and historical education data in one location.²²,⁴² Through the SchoolView website, stakeholders have access to several data sources:

- **District and School Dashboards**: These tools display historical and disaggregated data on demographics, achievement, and growth on Colorado’s state assessment; postsecondary attainment; and accountability scores for both school and district levels.⁴³ Each
dashboard is easily adjustable by the user, runs comparisons across districts and state levels, and surfaces school-, district-, and state-level trends.\textsuperscript{22, 43}

- **School and District Performance Framework Reports**: These PDF reports present academic achievement, academic growth, and postsecondary and workforce readiness metrics, disaggregated by priority groups.\textsuperscript{22, 44}

- **Colorado Growth Model**: Under The Education Accountability Act, the Colorado Department of Education also established the Colorado Growth Model (CGM), a statistical model that determines a student’s academic progress compared to that of other students with historically similar scores throughout the state.\textsuperscript{20, 22, 42} A student growth percentile is then calculated based on the percentage of those academic peers who experienced more growth than this student.\textsuperscript{22, 42} Parents and stakeholders have access to review Colorado Growth Model data through the SchoolView portal.\textsuperscript{18, 22}

- **Colorado Education Statistics**: This is a one-stop shop for Colorado’s educational statistics, including school and district staff information, pupil membership, graduation rates, dropout rates, and attendance information.\textsuperscript{45}

- **Financial Transparency**: Colorado’s Department of Education committed to true financial transparency as a result of the passage of House Bill 14-1292.\textsuperscript{42} This website allows all stakeholders access to easy-to-read reports on school, district, and state level per-pupil expenditures.\textsuperscript{46}

Additionally, the SchoolView web portal guides users through the data, explaining the various data sets and allowing users to create their own custom charts.\textsuperscript{22}

**Benefits**

The following are the benefits of Colorado’s SchoolView System:

- Lower-capacity districts are able to use SchoolView as their own data system in place of establishing their own district-level data office.\textsuperscript{22}

- Reports & dashboards provide longitudinal data on almost all metrics, including demographics, achievement, and growth on Colorado’s state assessment; postsecondary attainment; and accountability scores.\textsuperscript{42, 43, 44}

- Reports & dashboards provide easy-to-read disaggregated data so that any stakeholder is able to identify and analyze trends across racial and priority students groups, such as English, Language Learners, students with Learning Disabilities, or students from low-income families.\textsuperscript{43}

**Exemplar #4: Consortium on Chicago School Research**

In 1990, the Chicago School Reform Act decentralized the governance of the city’s schools. In response to this shift and a growing need for accurate, accessible, and timely data, the Consortium on Chicago School Research (CCSR) was founded as a research and data-sharing partnership between the University of Chicago and Chicago Public Schools.\textsuperscript{3, 14} CCSR is unique in that it is one of the most comprehensive longitudinal data archives utilized by
a city’s public school system in the county. CCSR conducts reliable, highly technical research that is accessible to practitioners, journalists, and policymakers; and used by the school reform community in Chicago and nationwide. In the search for solutions to school reform challenges, CCSR builds capacity for the school district by identifying what matters for student success and school improvement. In order to build this capacity, CCSR tracks critical indicators to chart the progress of schools, programs, and policy initiatives and conducts a theory-driven evaluation to identify how those programs and policies are working. Below is a brief overview of some of the research tools that CCSR has contributed:

- **5Essentials School Report**: Over fifteen years of CCSR’s research and data analysis of Chicago Public Schools, researchers identified five essential elements that schools need in order to quickly improve their effectiveness: effective leaders, collaborative teachers, involved families, supportive environments, and ambitious instruction. Each year, CCSR evaluates each CPS school to identify which of these essential elements are in place and which elements are missing. These reports assist school leaders to drive improvement on their own campuses and are also available to the general public.

- **CCSR Publications**: In addition, CCSR has contributed many research papers and findings through their publications, which have been referenced and utilized in other urban school districts nationwide. Impressively, CCSR has made important contributions to school reform in Chicago and around the country, both through the findings and implications of specific research studies and more broadly by improving the capacity of the district to use data, build effective strategies, and evaluate progress.

**Benefits**

The following are the benefits of the Consortium on Chicago School Research:

- Proximate to the community it serves, CCSR has been able to generate research that directly impacts and informs data-driven decision making at the local school system level, while making findings broadly accessible to other urban districts across the country.

**Considerations**

The following considerations apply for all of the exemplars mentioned above:

- **Ensuring student and teacher privacy is critical.** Due to privacy concerns, Alabamians have long been skeptical of longitudinal data systems. All data systems need to ensure student privacy and security - striking a balance between data transparency and student confidentiality and keeping within the boundaries set by the federal Family and Educational Rights and Privacy Act of 1974 (FERPA). Best practices for the safeguarding of student data are outlined in the [Student Data Principles].

- **Data systems can be seen as a “punitive” and “tools to monitor and punish staff members,” therefore, building educator investment is crucial.** These concerns have
also been a reason for pushback in Alabama, but an effective data system is critical to empowering educators and administrators to make decisions that are best for students and to identify the curriculums, programs, and initiatives that are working. Leaders at all levels must establish trust and communicate clearly about how data will be used in order to build and cultivate a data-driven culture.24

- **Data systems must provide actionable, timely, and user-friendly data.** Some educators “harbor negative perceptions of data” because of previous experiences of overwhelming or obtrusive data collection that did not feel useful or applicable to their daily experiences.23 In order to build educator investment in data systems, state and local systems must ensure that these systems provide actionable, timely, user-friendly data to teachers and school leaders to ease the burden of data-analysis.26,48

### POLICY RECOMMENDATIONS

The following are recommendations to improve school data transparency and accessibility in Alabama:

- **Implement the remaining essential elements recommended by the Data Quality Campaign.** Alabama’s data systems should move to including unique student and teacher identifiers, information on untested students, student-level transcript information, and the ability to match student records between the PK-12 and the postsecondary systems.10,24,26

- **Create an easy-to-navigate, more widely accessible website for ALSDE’s data center.** Specific improvements include streamlining and organizing publically available school data in categories on a single data center directory page to reduce data center website navigation time, ensuring that all data documents are released to the general public in useable formats, like Microsoft Excel, and creating easy-to-understand district and school dashboards that provide a quick glance at school performance for all stakeholders. It is worth noting that Alabama recently made a significant investment for a similar initiative for workforce development, called [*AlabamaWorks!*](https://www.alea.state.al.us/AlabamaWorks/)19

- **Create a user-friendly website for parents and families to access school data, like the state report card and state assessment scores, in one place.** There are two critical pieces here: 1) ensure that the website is easy to navigate and 2) ensure that the data and language are accessible to the general public while maintaining technical accuracy so that all stakeholders are able to read and interpret school data.
• **Create an Office of Data Strategy and Analytics at the district level.** Staffed with data analysts and programmers, the office should create interactive data dashboards to manage local data and equip teachers, administrators, and district leaders with timely information that enables them to make quick decisions about instruction, curriculum, and interventions. This office should also provide ongoing professional development on data literacy for teachers, administrators, and district leaders to ensure that dashboard tools make the data analysis process more efficient and effective.

**Resources**

56. Data Quality Campaign, “Show Me the Data,” December 2016,