State Action 5: Role-Based, Timely Access to Information for Authorized Stakeholders *

Implement systems to provide all stakeholders timely access to the information they need while protecting student privacy

With the development of statewide longitudinal data systems, states now have the capacity to provide rich, meaningful longitudinal data. However, many key stakeholders such as parents, students, teachers, and educational practitioners still do not have ready access to this information. Typically, the only information offered from state data systems is compliance-based state, district and school NCLB report cards that merely provide a snapshot of success. According to districts, this information provides limited functionality to inform instruction due to the types of data and often untimely nature in which the data are provided. Without timely and ready access to academic and performance information, stakeholders are forced to make decisions based on anecdote, experience or instinct.

To ensure data are accessible, understandable and used through **role-based, timely** access the Data Quality Campaign (DQC) has included this as one of the DQC's 10 State Actions to Ensure Effective Data Use: Action 5 – *Implement systems to provide all stakeholders timely access to the information they need while protecting student privacy.*

Examples of Access

- Students have access to their own academic and performance history;
- Parents have access to their own children's data;
- Teachers have access to individual student data;
- Principals and district administrators have access to student-level data for the students in their schools;
- Researchers with research contracts with the SEA have access to the individual student data specified in the contract; and
- Everyone, including students, teachers, administrators, parents, state board of education members, legislators, governors, researchers and members of the general public, may view aggregate data for schools, programs, districts and the state.

For states to truly fulfill the intentions of Action 5 they must launch role-based, interactive web-based tools based on stakeholder needs and incorporating actionable data. This means putting data in context—presenting information so that users have clean, understandable data that allows for easy interpretation. Many technology experts use the term 'portal' to describe this web interface. A web portal is a page that presents information from diverse data sources in a unified way. It's a single web page tailored to the user protected by a username and password allowing the portal to provide data based on the user's role because everyone does not need access to all data, nor does everyone involved in education need to suddenly become a statistician. Rather, teachers need to teach, principals to lead, parents to ask questions and make decisions in the best interest of their children, and policymakers to allocate resources.

At the same time, states must ensure that confidential student and teacher information remains private. Creating systems that provide access based on the role of the data user enables the state to share appropriate data with each group of stakeholders while protecting individual privacy. In general, the key distinction between roles is based on whether or not an individual has a reason to be allowed access to confidential student and teacher information.

Districts Leading the Way

While states play a major role in providing access to information, many districts are leading the way. The Michael & Susan Dell Foundation's *Performance Management Report* provides examples of promising practices in data presentation throughout districts around the country.

- A principal in the *Dallas Independent School District* can see school-level budget line items, teacher and student attendance rates, and student achievement trends.
- A teacher using the ARIS system in *New York City Public Schools* can access his/her current classroom's student-level program participation (IEP, ELL, and more), attendance rates, and state assessment scores.

For more information, visit www.msdf.org/Programs/Urban_Education/Performance_Management.aspx .

PROMISING STATE PRACTICES

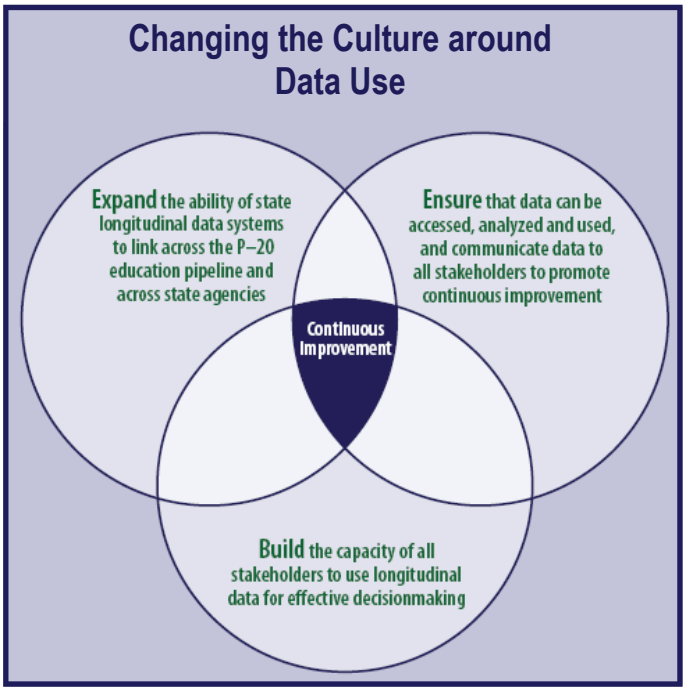
Every state data portal, which provides stakeholders with a secure environment, is at various stages of development, and these portals' functionality varies based on the purpose for which they were built. Some state systems are able to break down assessments scores at the item level, do district-by-district comparisons of cohorts of students, and allow educators to review achievement trends of their students over time to estimate student projections based on historical performance. Portals can also provide an avenue for policymakers to have access to aggregate-level program data to ensure funding decisions are based on evidence of success. Below are examples of two states, Arkansas and Colorado, with specific role-based access to information.

Arkansas is one of few states to develop multiple portals designed with specific users in mind. The state is developing portals for the public, researchers and journalists, district and school leaders, and teachers, parents and students. Each stakeholder is awarded a different level of access depending on his/her role.

- Legislators can view and manipulate aggregate level data regarding districts and schools through the HIVE portal;
- Researchers can view and export Excel spreadsheets with de-identified data relating to district and school performance through the ADE Data Center;
- The public has access to the NORMES School Performance Reports detailing school-by-school academic performance;
- Teachers can improve instruction through identifiable information received through the TRIAND portal; and
- Students can access their information through Kudor and the Arkansas Scholarship Application web site.

The user interfaces with identifiable information are protected through password accessible access and are only available to those stakeholders with an inherent need to connect data with individual (such as teachers and parents).

The ***Colorado*** Department of Education has developed a data visualization tool that enables users to explore the complete set of the state's academic performance data. Called the Colorado Growth Model, this interactive web application allows users with varying roles to navigate through the state's academic growth and achievement data using an intuitive and user-friendly visual interface. Based on delegated roles and password-protected credentials, district and school users can compare the performance of groups of students both in the public domain as well as those they have drill-down rights to see.



- Grade-level curriculum leaders in a school can access longitudinal growth and achievement reports for all students from a particular grade in the school, print out these graphical reports or even upload them as PDFs into another online tool for teachers to gain authenticated access to; and
- Groups of teachers can meet and discuss the particulars of each student's academic progress over the past four years in the three content areas tested. These reports can be shared with students and parents at parent-teacher conferences.

Colorado has placed student academic growth at the center of its state system of accountability and support, and creating various ways for growth data to be reported to the public and made accessible to educators with need for access has driven much of the work. Colorado feels that this direct engagement with data by its stakeholders will help to drive its public education system to achieve its long-term goals.

PROVIDING AUTHORIZED ACCESS

By granting access to different types of users based on the kinds of information to which they are entitled, state data systems can provide access to information while fully protecting student privacy. The state should work to ensure that all stakeholders have appropriate access to longitudinal data; promote the effective use and timely presentation of this information; and protect statewide longitudinal data for research and improvement purposes.

* This is one in a series of briefs on the DQC Ten State Actions to Ensure Effective Data Use. For more information go to www.DataQualityCampaign.org/files/NextStep.pdf.

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APPENDIX A: EXAMPLES FROM ARKANSAS

The public reports available through the **NORMES portal** provide information on an aggregate school-level basis, including information about academic performance and teacher quality. The images below are specific to Forrest Park Elementary.

School Summary for FOREST PARK ELEMENTARY SCHOOL (6001024)

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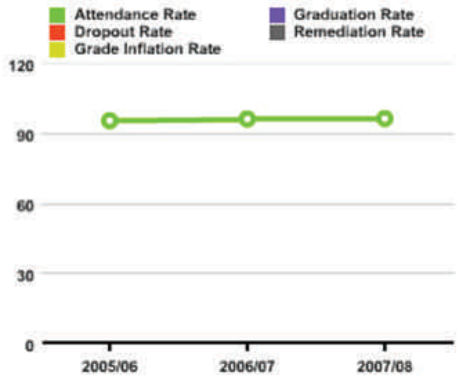
School Summary | Related Links

Superintendent	DR. LINDA WATSON		
Principal	MS. THERESA J. COURTNEY-KETCHER	Phone	(501)447-4500
School address	1600 N. TYLER ST. LITTLE ROCK, AR 72207	Fax	(501)447-4501

Grade Range	P - 5	Accredited	YES
Total Enrollment	381	Accredited-cited	No
School Percent of Students Eligible for Free/ Reduced Meals	13	Accredited-probation	No
State Percent of Students Eligible for Free/ Reduced Meals	54.2	AYP Status	Meets Standards

	2005/2006	2006/2007	2007/2008
Attendance Rate	95.2	95.8	96.1
Graduation Rate	NA	NA	NA
Dropout Rate	NA	NA	NA
Remediation Rate	NA	NA	NA
Grade Inflation Rate (Number of Students Taking ACT)	NA	NA	NA



	2005/2006	2006/2007	2007/2008
Percent Teachers Completely Certified	100	96	100
Percent Teachers with Bachelors	60	63	58.6
Percent Teachers with Masters	40	38	34.4
Percent Teachers with Advanced Degree	0	0	0
Percent of Teachers Not Highly Qualified Teaching in High Poverty Schools	NA	0	NA
Percent of Teachers Not Highly Qualified Teaching in Low Poverty Schools	NA	0	0
Percent of Teachers Not Highly Qualified at all School Economic Levels	NA	0	0

Literacy Performance Classes by Demographics for AR Benchmark EOC Exams

Font Size : ++ / -- Text Only / Default Print Download to PDF

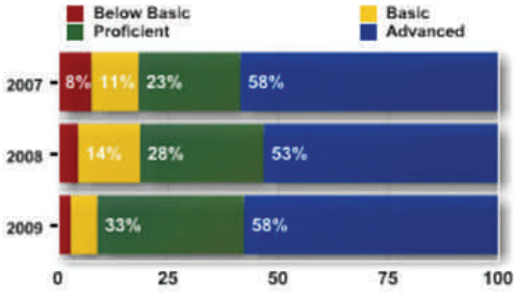
Literacy | Mathematics | Science

School: FOREST PARK ELEMENTARY SCHOOL (6001024) | **Grade:** 3rd

Select a grade:- 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11-Literacy

Combined Population

Year	Below Basic	Basic	Proficient	Advanced	Students Tested
2007	7.675%	10.775%	23.075%	58.475%	65
2008	4.7%	14.1%	28.1%	53.1%	64
2009	3%	6.1%	33.3%	57.6%	66

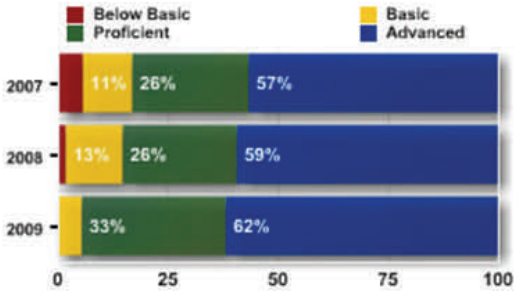


African-American: < 10 Students Tested

Hispanic: < 10 Students Tested

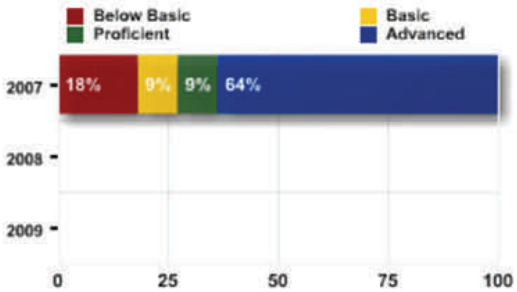
Caucasian

Year	Below Basic	Basic	Proficient	Advanced	Students Tested
2007	5.7%	11.3%	26.4%	56.6%	53
2008	1.875%	12.975%	25.875%	59.275%	54
2009	0%	5.5%	32.7%	61.8%	55



Economic Disadvantaged

Year	Below Basic	Basic	Proficient	Advanced	Students Tested
2007	18.2%	9.1%	9.1%	63.6%	11
2008	< 10 Students Tested				
2009	< 10 Students Tested				



SCHOOL IMPROVEMENT REPORT 2009

2007 | 2008 | 2009

FOREST PARK ELEMENTARY SCHOOL (6001024)

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Overall School AYP Information

2009 AYP Status:	Meets Standards	2009 AYP Status:	Meets Standards
Met Standards for Mathematics	YES	Overall Math Status	MS
Met Standards for Literacy	YES	Overall Lit. Status	MS
Met Standards for Attendance	YES	Overall Attend Status	MS
AYP Group	K - 5	Attendance Goal	91.13 %
Grade Range	P - 5	Met Attendance Goal	YES

Percent Proficient for Status and Growth by Subgroup (AMO =Annual Measurable Objective)

Subgroup	Mathematics				Literacy			
	Percent Proficient Status	Percent Proficient Growth	Met AMO by Status?	Met AMO by Growth?	Percent Proficient Status	Percent Proficient Growth	Met AMO by Status?	Met AMO by Growth?
Combined	87.6	89.1	Yes	Yes	87	88.6	Yes	Yes
African American	64.7	70.6	NA	NA	67.6	73.5	NA	NA
Hispanic	NA	NA	NA	NA	NA	NA	NA	NA
Caucasian	91.9	92.6	Yes	Yes	91.3	91.9	Yes	Yes
Economically Disadvantaged	56.5	60.9	NA	NA	65.2	73.9	NA	NA
LEP	100	100	NA	NA	75	75	NA	NA
Students with/ Disabilities	66.7	83.3	NA	NA	50	50	NA	NA

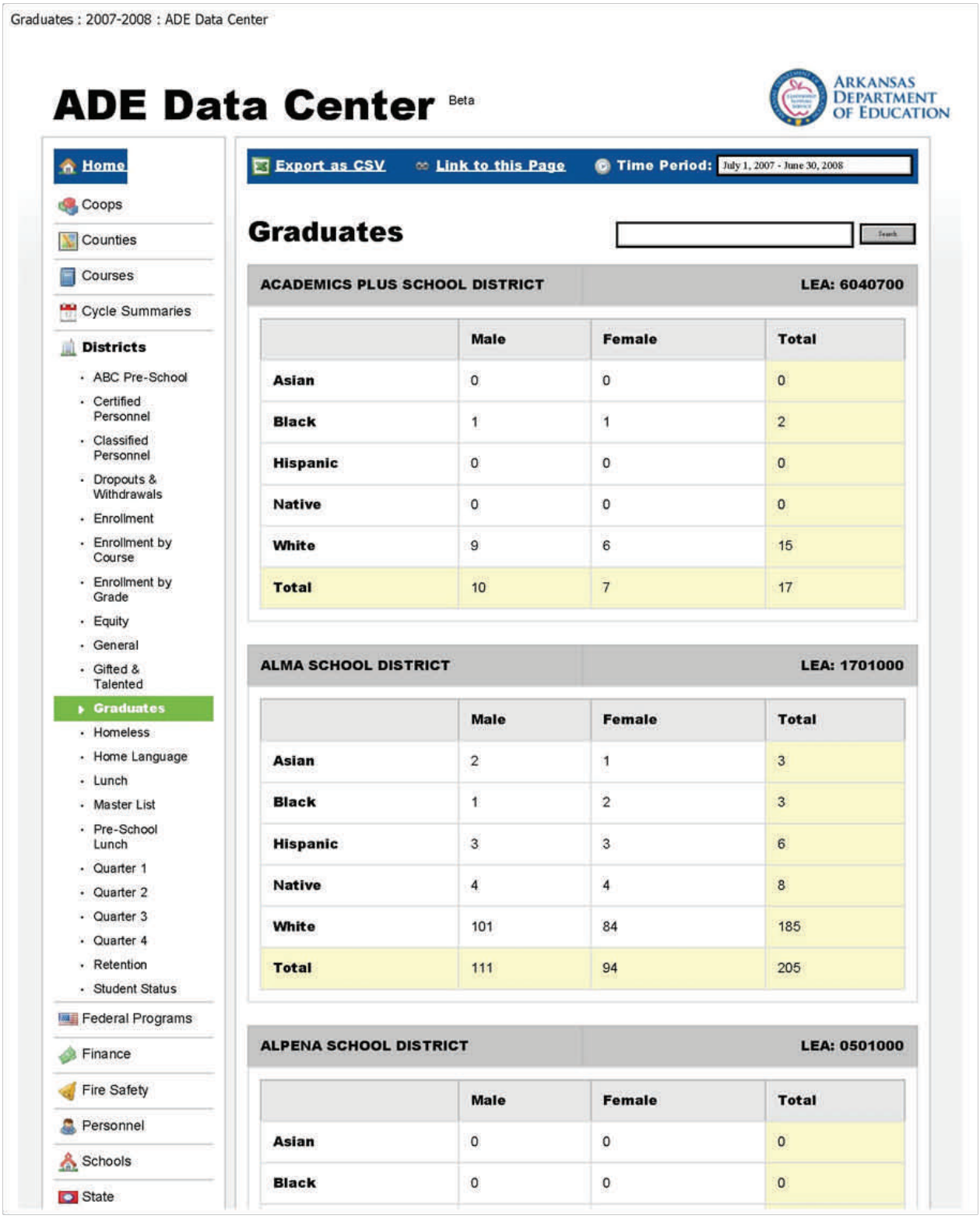
Percent Tested Results for Overall and Subgroups (95% or greater)

Type	Combined	Economically Disadvantaged	Limited English Proficient	Students with/ Disabilities	African American	Caucasian	Hispanic
LIT	YES	YES	YES	NO(86%)	YES	YES	NA
MATH	YES	YES	YES	NO(86%)	YES	YES	NA

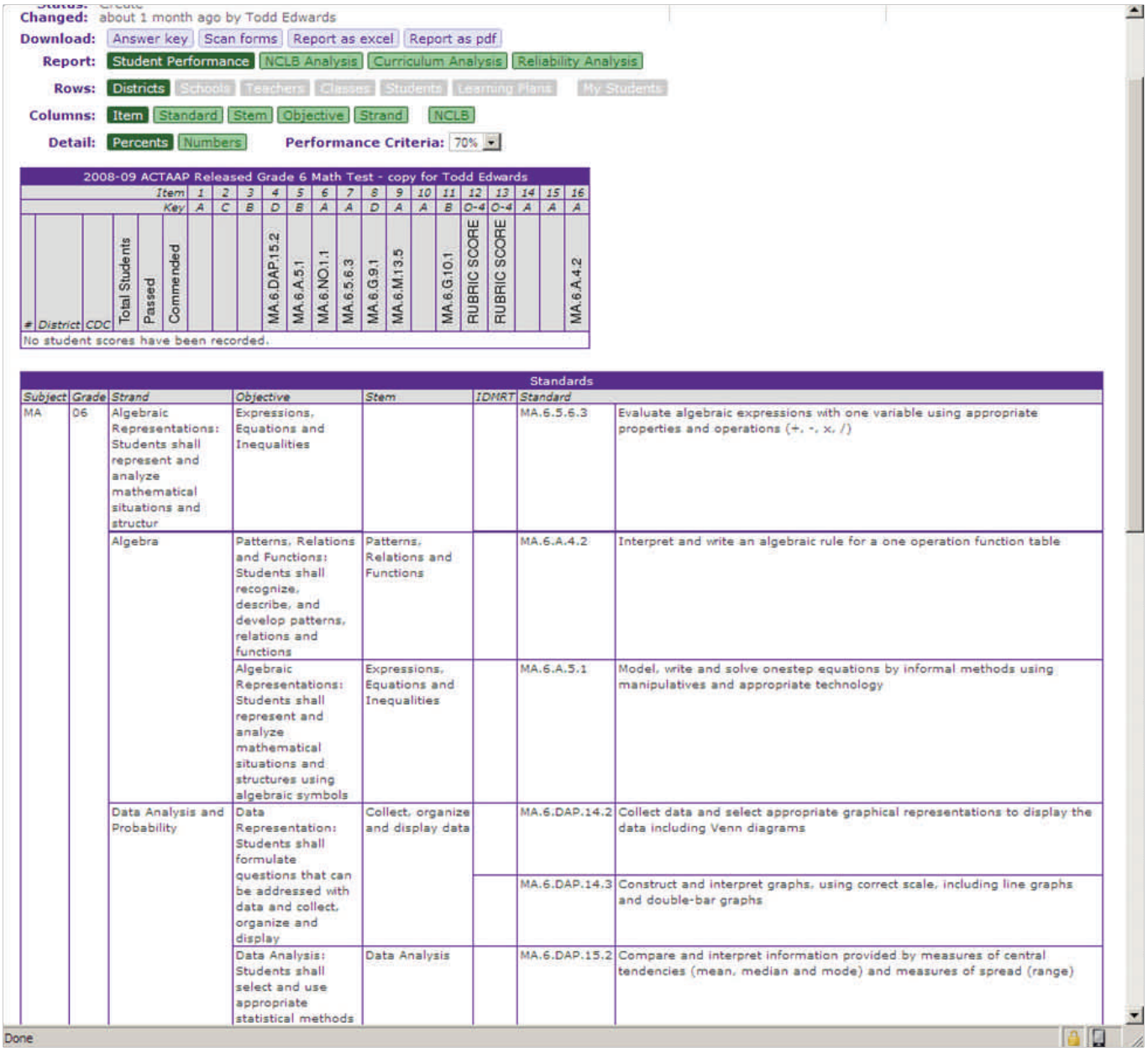
Attendance Data

	Qtr1	Qtr2	Qtr3	Average
Average Daily Attendance	385.6	386.6	389.58	387.26
Average Daily Membership	392.07	392.11	398.38	394.19

The **ADE Data Center** is designed for researchers and provides a variety of information. For each district users can view a myriad of information categories by district and/or school. The screen shot below shows the number of graduates by racial/ethnic sub-group for each district in the state.



The **TRIAND portal** is restricted to educators and includes all K-12 student and teacher data in the state data warehouse. The image below depicts an interim test. This particular test was not taken when the screenshot was created, so the image only shows where the scores would be reported.



Changed: about 1 month ago by Todd Edwards

Download: Answer key | Scan forms | Report as excel | Report as pdf

Report: Student Performance | NCLB Analysis | Curriculum Analysis | Reliability Analysis

Rows: Districts | Schools | Teachers | Classes | Students | Learning Plans | My Students

Columns: Item | Standard | Stem | Objective | Strand | NCLB

Detail: Percents | Numbers Performance Criteria: 70%

2008-09 ACTAAP Released Grade 6 Math Test - copy for Todd Edwards

	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Key	A	C	B	D	B	A	A	D	A	A	B	O-4	O-4	A	A	A
#	District	CDC	Total Students	Passed	Commended				MA.6.DAP.15.2	MA.6.A.5.1	MA.6.NO.1.1	MA.6.5.6.3	MA.6.G.9.1	MA.6.M.13.5		MA.6.G.10.1	RUBRIC SCORE	RUBRIC SCORE			MA.6.A.4.2

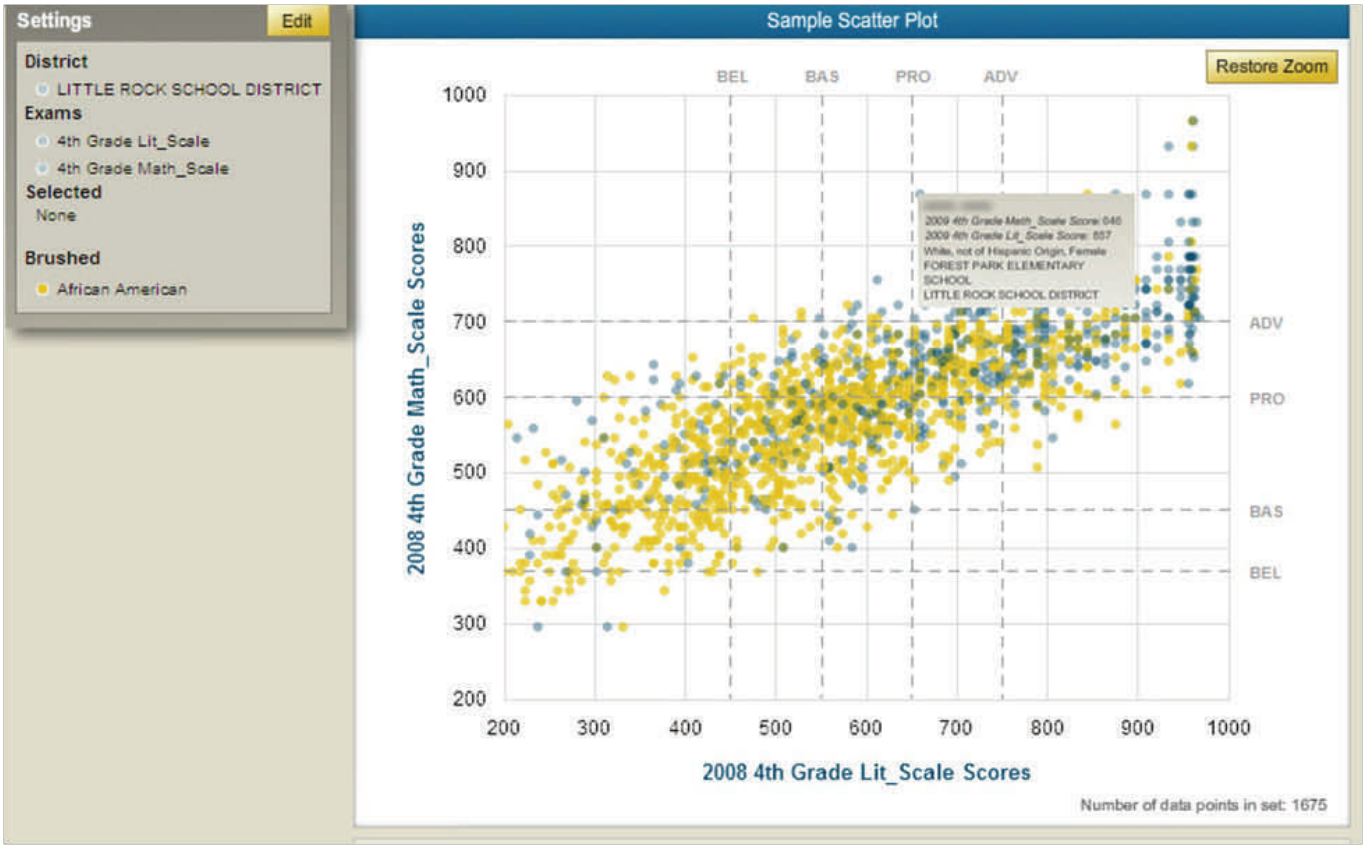
No student scores have been recorded.

Standards

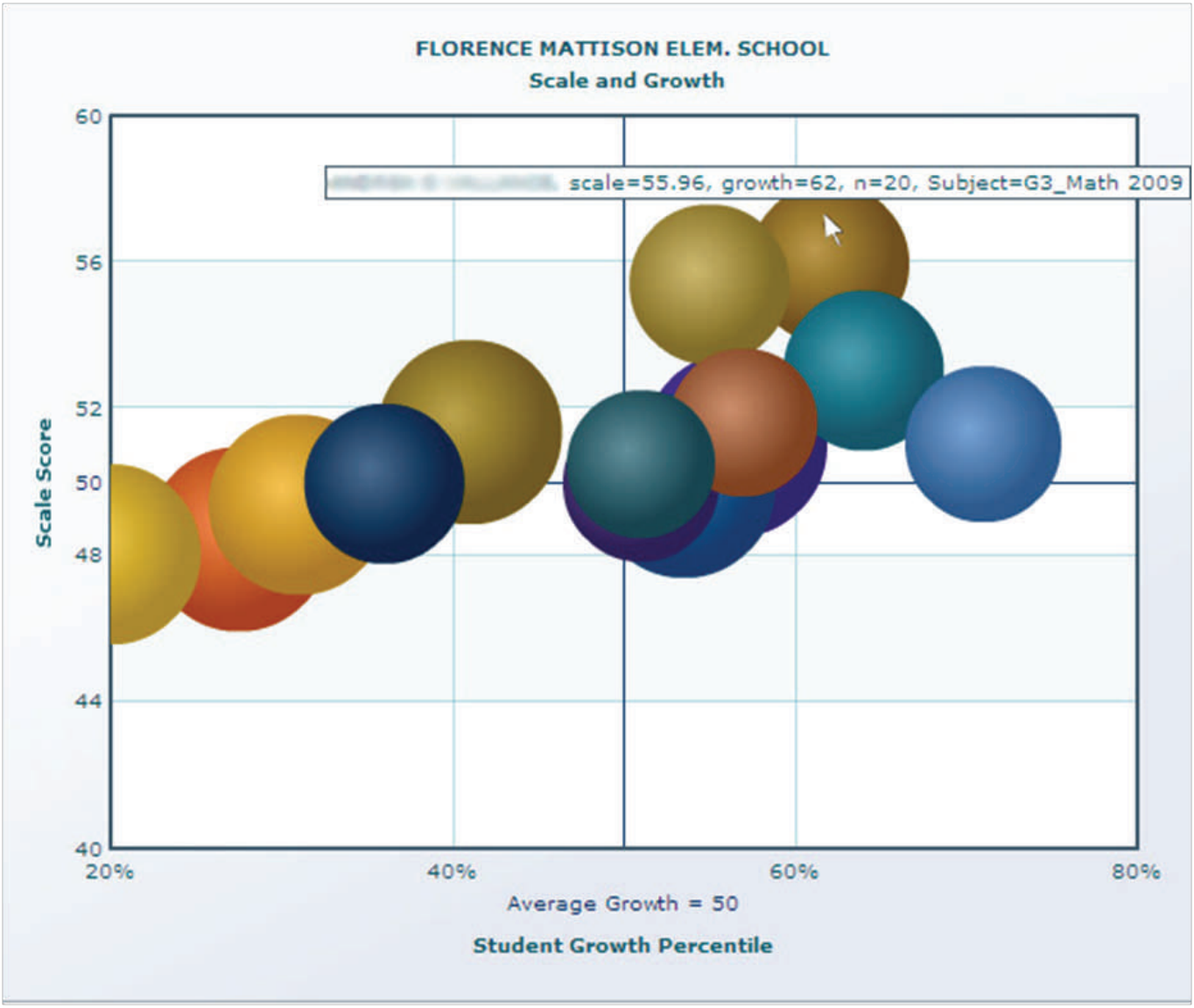
Subject	Grade	Strand	Objective	Stem	IDNRT	Standard	
MA	06	Algebraic Representations: Students shall represent and analyze mathematical situations and structur	Expressions, Equations and Inequalities			MA.6.5.6.3	Evaluate algebraic expressions with one variable using appropriate properties and operations (+, -, x, /)
		Algebra	Patterns, Relations and Functions: Students shall recognize, describe, and develop patterns, relations and functions	Patterns, Relations and Functions		MA.6.A.4.2	Interpret and write an algebraic rule for a one operation function table
			Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols	Expressions, Equations and Inequalities		MA.6.A.5.1	Model, write and solve onestep equations by informal methods using manipulatives and appropriate technology
		Data Analysis and Probability	Data Representation: Students shall formulate questions that can be addressed with data and collect, organize and display	Collect, organize and display data		MA.6.DAP.14.2	Collect data and select appropriate graphical representations to display the data including Venn diagrams
						MA.6.DAP.14.3	Construct and interpret graphs, using correct scale, including line graphs and double-bar graphs
			Data Analysis: Students shall select and use appropriate statistical methods	Data Analysis		MA.6.DAP.15.2	Compare and interpret information provided by measures of central tendencies (mean, median and mode) and measures of spread (range)

Done

The **HIVE interface** is a visualization tool open to various levels of access. The public view is similar to the Colorado Growth Model described below. This scatter plot shows fourth grade math and literacy for the Little Rock School District in 2008. The scatter plot is brushed so that African American students are yellow and all other ethnicities are blue. For authorized users, a mouse-over a particular dot reveals the student's name, demographics, and score details.

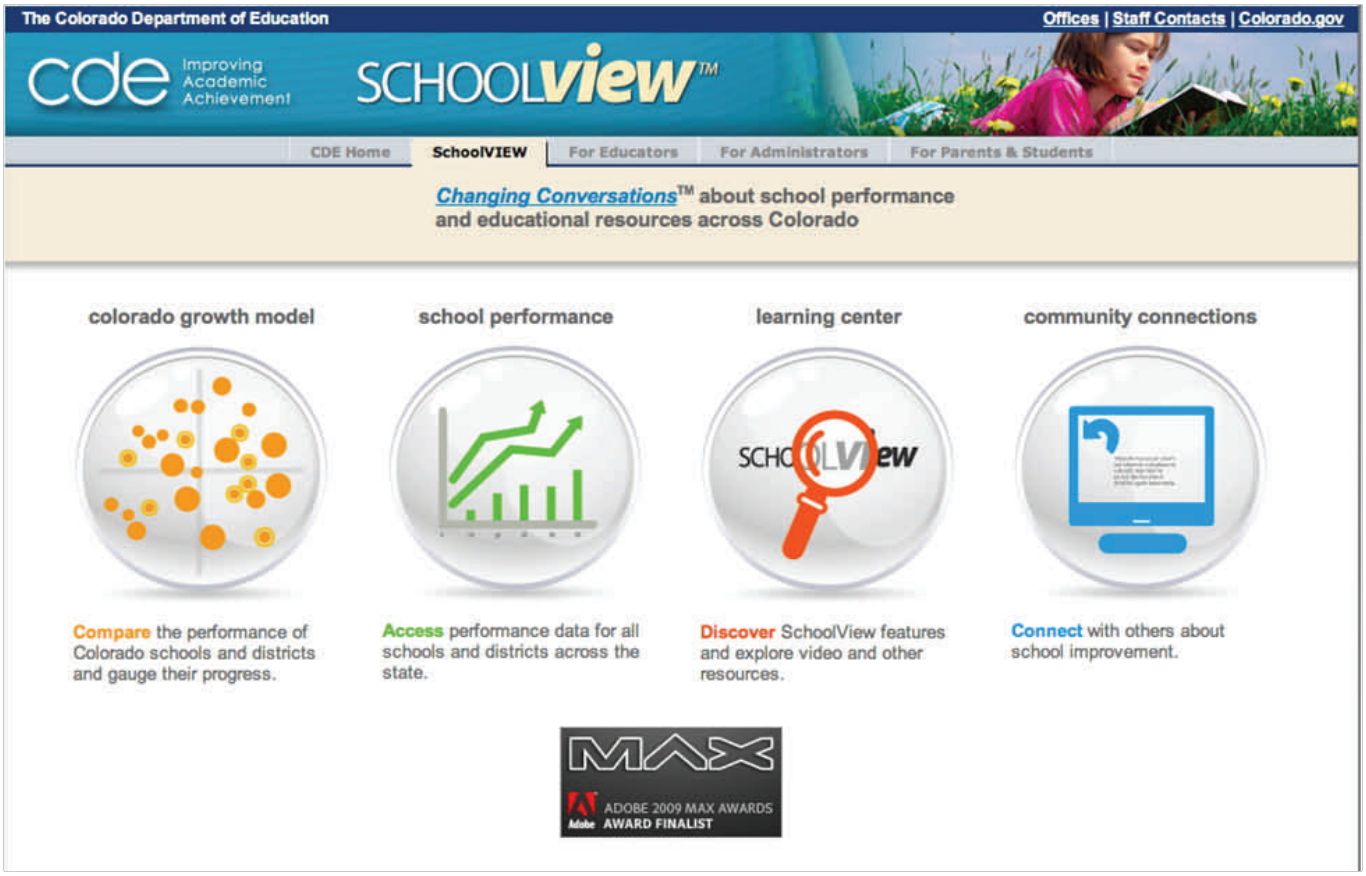


This visualization shows the variety of uses of the **HIVE portal**. The below screenshot shows aggregate student scale scores and growth percentiles by teacher. For authorized users, a mouse-over reveals the teacher's name and score details. Only district administrators have access to this level of data, and they must first attend an Arkansas Department of Education training before being provided a username and password.

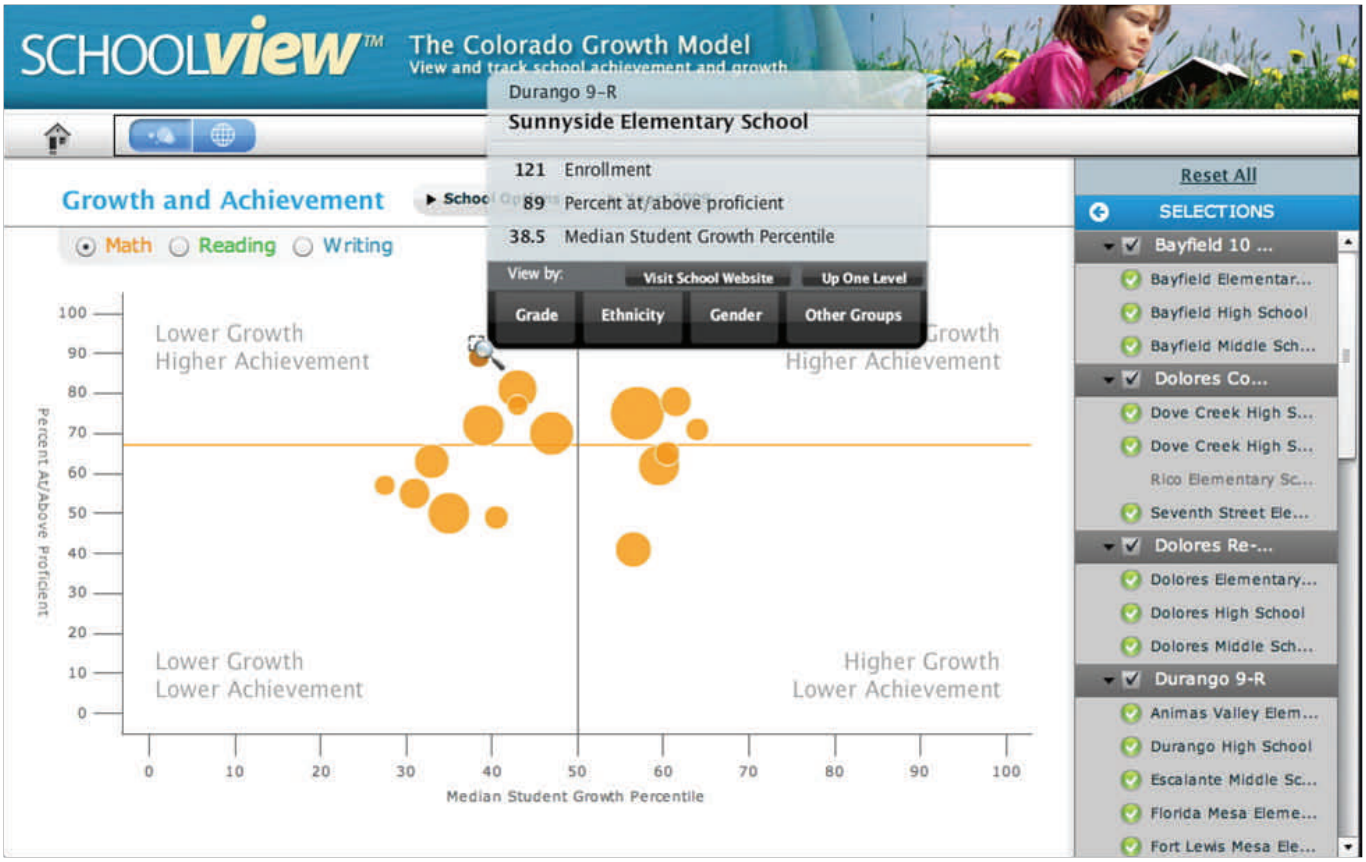


APPENDIX A: EXAMPLES FROM COLORADO

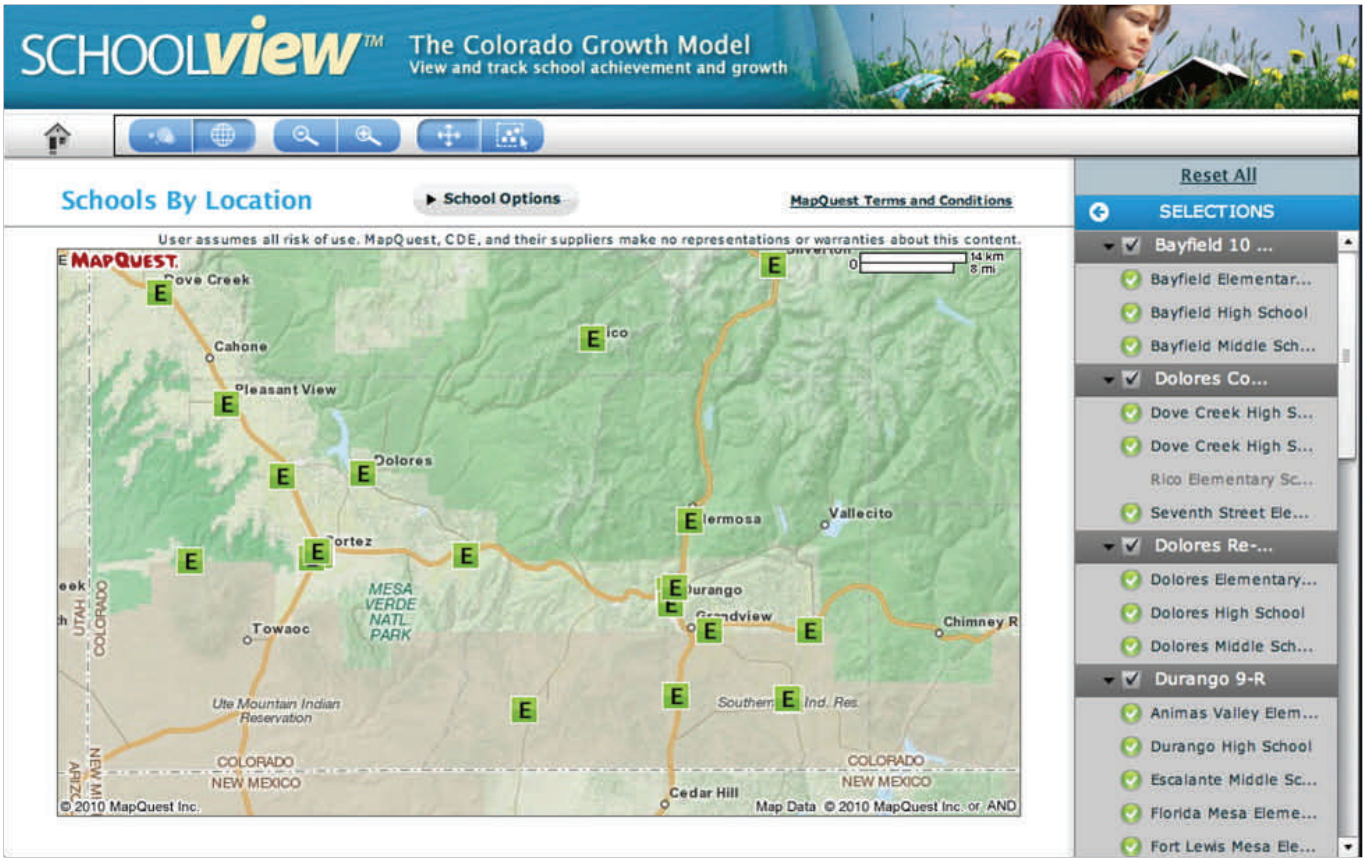
The Colorado Department of Education's data visualization tool, the Colorado Growth Model, is accessible from Colorado's new one-stop educational information portal at SchoolView.org.



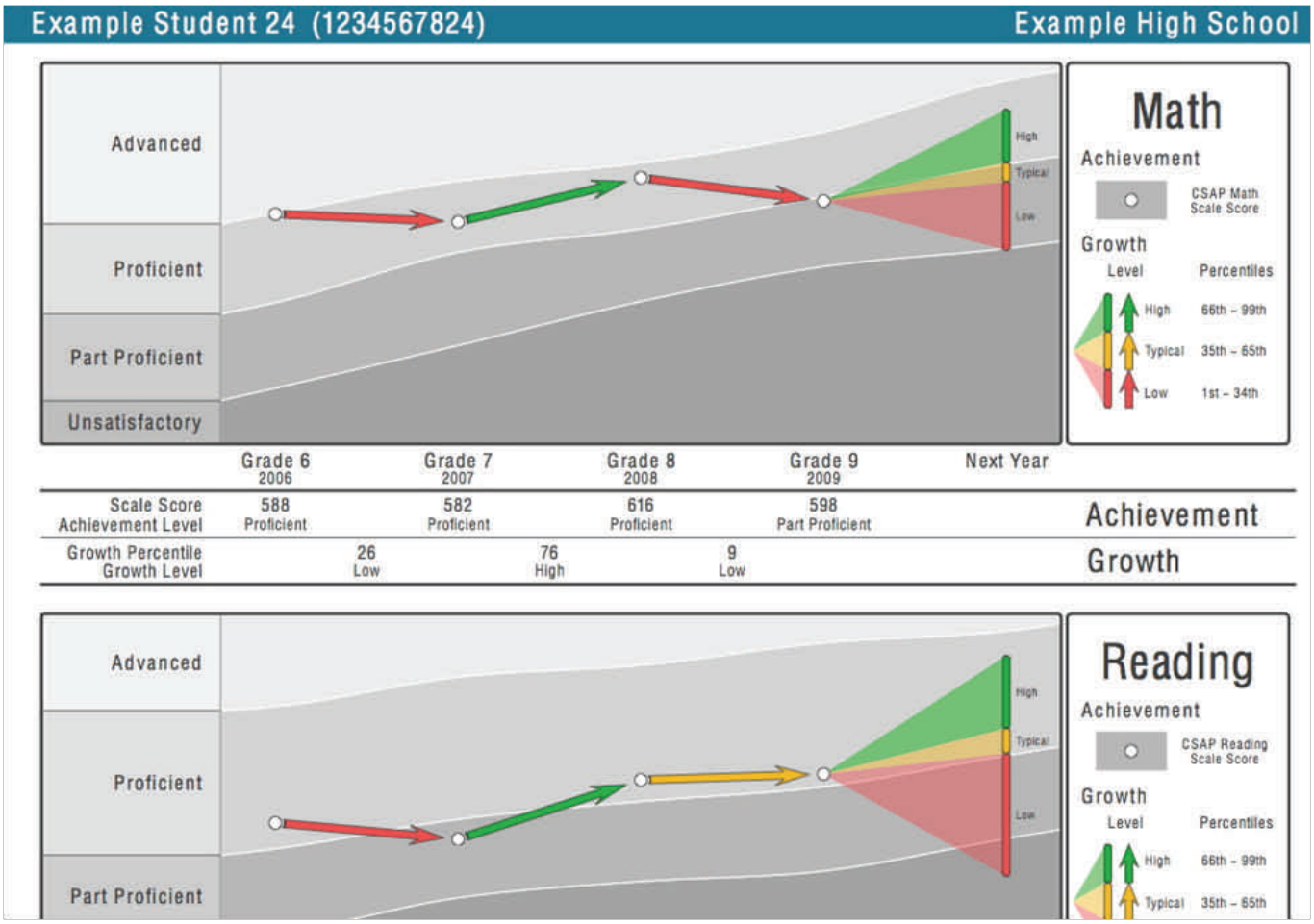
Because one of the primary goals of the CDE was to not just get data to educators, but rather to engage *all* interested parties in conversations about the school, district, and subgroup performance evidence that the data reveal, it was important that the interface be based on a common "language" for all the roles stakeholders might play. The resulting common visual language posits growth and achievement as separate but related dimensions, and places data points representing individual students, demographic groups, schools and districts as bubbles in this two-dimensional space.



The application therefore allows on-the-fly exploration of all the state's data from multiple years within a single, easy to interpret chart structure on a web page. Map-based views and selection mechanisms make it easy for those outside of the education profession to understand more about and easily compare schools, districts, and their academic performance over time.



Based on delegated roles and password-protected credentials, district or school users can compare the performance of groups of students both in the public domain as well as look at that of individual students that they have drill-down rights to see.



Another online tool to be released in 2010 will give the public full access to all years of the state's growth and achievement data, cut and sliced by district, school, grade, and demographic groups. Users such as researchers will be able to generate unique on-demand tabular reports based on the query they set up, giving them just the aggregations and filters they need to produce a particular set of analyses (such as for state charter schools only). These reports search the student-level database and report results that are fully compliant with stringent privacy requirements, while creating an unprecedented level of access and transparency around the public state assessment data.

The same IBM Cognos engine driving the public data tools also works quietly in the background giving credentialed Colorado educators access to test scores, item responses, demographic information, and both pre-prepared and on-demand reports down to the individual student level. Educators with access to these data can create powerful reports specifically targeting the academic standards or performance levels they would like to analyze, share the reports with other users, and update them in myriad ways.