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Communicating Performance: A Best Practices Resource for Developing State Report Cards

THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS

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Communicating Performance: A Best Practices Resource for Developing State Report Cards

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EXECUTIVE SUMMARY

State report cards should help families, educators, policymakers, and other critical stakeholders in your state understand and act on education information for schools, school districts, and your state as a whole. While each state finds itself in a different place regarding its own progress in building state report cards with such an impact, emerging research and best practices can inform all states as they engage in continuous improvement for state report cards.

This resource proposes considerations to state education leaders – key questions to ask along with emerging research and best practices that can inform the answers. The considerations encompass the following areas:

- Feedback and engagement strategies,
- Data and content,
- Development and sustainability.

Communicating Performance: A Best Practices Resource for Developing State Report Cards is intended to inform your next steps regardless of where your state is in the journey to build state report cards that deepen understanding and inform action among key stakeholder groups. It is also intended to help states build on progress made through implementation of the Every Student Succeeds Act (ESSA) to engage diverse stakeholders.

This resource should help your state meet the following the goals:

- Tie the state report card to your state's **theory of action** to improve education outcomes by identifying priority users of the report card and the actions the report card should inform.
- Evolve the way the state report card displays data by moving beyond data tables to visualizations that help tell **stories** that users will remember.
- Build buy-in and use among users by deploying multiple **engagement** mechanisms such as advisory groups, town hall meetings, presentations, and communicating updates through the state's website.
- Improve users' experience with and understanding of the data by gleaning specific **feedback** on current state report cards; draft "wireframes" that show how new report card pages could be structured; draft visualizations including text, colors, and pictograms; and potential elements of functionality.
- Assure users that data included in the state report card are technically defensible and meet the highest standards of **quality,** and that **privacy** is safeguarded.
- **Sustain** momentum to keep improving the state report card – to answer more and better questions, to build in functionality that users need, and to ensure the state has the resources and support to do so.

INTRODUCTION

State leaders invest considerable time and resources in building and enhancing state report cards designed to help parents, educators, policymakers, and other critical stakeholders understand education information for schools, school districts, and for the state as a whole.[1] They do so in the context of their broader strategies for public reporting, communication, and engagement, which include numerous avenues for communicating with parents, educators, policymakers, and other critical stakeholders. Report cards should be one of the most accessible ways for such stakeholders to glean information to make good decisions. Providing information to the public on how all groups of students are performing academically and ensuring all groups of students have access to essential resources for learning are key tools for parents and community groups in making important decisions for their children.

At a minimum, state report cards are meant to ensure basic transparency, providing high-quality education data and information to the public in an accessible format. Report cards inform families, educators, and policymakers of the progress a state, and schools within a state, has made toward the state's goals. They reflect a state's openness to communicate with credible data and information. Report cards should also go beyond this minimum aim of transparency, deepening understanding about the state's public education system and informing actions that serve to improve the education of all students in the state. Report cards can help all stakeholders, especially families, understand what the data mean and why these data are valuable.

In recent years, several states and partner organizations have been taking more intentional steps to find what it takes to build and enhance report cards that meet the dual purposes of transparency and informing actions. With their leadership, they have contributed to a growing research base, lessons learned, and exemplars to inform their own next steps as well as those of states just starting out.

The purpose of this resource is to share emerging research and best practices with state education agency leaders, helping you think through key decisions in all phases of state report card development and continuous improvement. The considerations encompass feedback and engagement strategies, data and content, design and structure, and development and sustainability. They are intended to inform your next steps regardless of where your state is in the journey to build state report cards that deepen understanding and inform action among key stakeholder groups. This resource is intended to complement the State Guide to Building Online School Report Cards, along with other guidance documents for states. Please see the appendix for a full list of resources.

1 This resource is focused on the public, online dynamic, or static "report cards" that state education agencies (SEAs) produce to communicate data and information to the public at the school, school district, and state levels. The best practices it contains may be applicable to other forms of public reporting. They may also be applicable to reporting that is not provided to the public, such as student-level report cards or assessment reports that are accessible by families and educators.

ESSA AND BEYOND: USING REPORT CARDS TO MEET STATE GOALS

State leaders can harness opportunities to make dramatic progress in the effectiveness of state report cards as they implement the Every Student Succeeds Act (ESSA). Implementation can provide an opportunity for you to gain momentum or learn from and continue to act on the specific insights gleaned about effective stakeholder engagement and feedback through recent efforts to engage a wide variety of stakeholders through your state's ESSA development processes. ESSA is a starting point – it should not restrict your commitment to improving your statewide systems of public reporting.

You can learn from ways the public reporting field has evolved to make data indicators actionable, to design for understanding and use, and to optimize the functionality of report cards to help users access the information they need in the way that is most useful for them. As a result, state leaders will not only enhance transparency of information, but will better position state report cards as key levers in each state's theory of action to meet ambitious education goals for all students.

To do so, each state will need to identify within its theory of action, who uses the report cards, what actions they take as a result of the information they find, and how they need to see the information to maximize their understanding and use. Your state may tether the state report card to the overall theory of action driving the state's accountability system, prioritizing a report card that simply communicates accountability indicators and results. You may prefer, however, to devise a theory of action for the state report card that goes well beyond this scope. For example, your state may prioritize building a report card designed to illuminate data and information about key transition points for students across their educational journeys, spurring school and community action to focus on strengthening these critical points to help more students succeed. It is essential to ensure that state leaders have a shared understanding of the theory of action before work to build the report card begins.

Figure 1 provides an example of how a state may specify the primary users for the report card and the priority actions they hope will be taken by each user as a result of the information. In this example, the state has chosen to differentiate each aggregation level of the report card (state, school district [or LEA], and school) by the *primary* users for the information at each level. Following ongoing feedback and engagement with the identified groups, the state will be able to customize the data elements and display to meet the needs of each audience.

This exercise is intended to make sure each level of the state report card has its "best fit" with the primary audience, but doing so should not lead to "information silos." In education, audiences are not easily segmented. Individuals fit within multiple stakeholder groups. For example, the chair of a state legislature's education committee may also be an educator and a parent. As well, we want to make sure different user groups can use the state report card to communicate with one another – teachers need access to the same information that families have, for instance, to facilitate strong communication.

Figure 1: How state report cards can support a state's theory of action

Level of Aggregation	Primary Users	Priority Actions
State	State policy leaders (e.g., state board members, legislators, governor, SEA leaders)	1. Communicate and rally support for state goals for student performance and equity 2. Evaluate progress to meet these state goals and celebrate progress that is made 3. Identify bright spots, emerging trends, and patterns such as gaps among student groups 4. Highlight areas needing improvement or targeted resources 5. Build public capacity to use education data
School district (or LEA)	1. Local policy leaders (e.g., school board, mayor, superintendent) 2. Business, community, faith leaders	1. Evaluate progress to meet state and local goals 2. Identify bright spots and emerging trends, and develop the means to learn and share from districts experiencing success with student groups of concern 3. Prioritize local resources 4. Inform community supports and partnerships 5. Illuminate and address equity issues 6. Mobilize communities to improve education 7. Understand how a district is performing within the state and among districts with similar demographics and establish connections
School	1. Families 2. Educators 3. Community partners	1. Answer priority questions from families about their child's education 2. Benchmark similar or nearby schools 3. Monitor progress to meet goals for overall improvement and equity aims 4. Plan school improvement efforts 5. Help families contact and engage with the school

Given advances in technology and heightened understanding about how to optimize user experience, states also have an opportunity to transform how information is communicated in the report cards. In recent years, the field has made great advancements in evolving beyond tables of data to charts that illuminate patterns and trends, and then to visualizations and infographics that present data in ways that are user-friendly and easy for stakeholders to understand. Ultimately, your state has an opportunity to drive understanding and use of information by using data, words, and pictures to tell stories (Figure 2). Stories have a structure – a beginning, middle, and end – that *people are more likely to learn, remember, and share with others.* Stories have the power to shift perceptions and prompt actions.

Figure 2: Evolution of data presentation

Tables → Charts → Visualizations → Infographics → Telling stories through data

Figure 3: Colorado fiscal reporting infographic

Amended in 2014, the Colorado Public School Financial Transparency Act requires the Colorado Department of Education to publish a financial transparency website that makes user-friendly information about school and district expenditures available to the general public. The public website became available on June 30, 2017. In addition to providing visually-appealing expenditure ("spending") information for schools, and revenue ("funding") and expenditure information for districts, the site includes narratives from district leaders to give context for the school and district. The state also tells its own story through the fiscal reporting infographic in Figure 3 below.

ESSA acknowledges this evolution, encouraging states to raise the bar in how they leverage report cards for educational improvement. The statute sets detailed requirements for state report cards (see appendix). [Non-regulatory guidance issued by the U.S. Department of Education (USED) in January 2017] provides suggestions for both content and the way states engage with their residents.[2] It directs states to engage a broad set of stakeholders in the report card development process, including those who may not traditionally have a seat at the table. It instructs states in ways to ensure accessibility of the information, from use of color to translations. The statute requires states to give users the ability to dive deeper into assessment data through cross-tabulations. Finally, it specifies not only a set of required data elements,[3] but descriptions to help users make sense of the policy context behind the information.

2 The non-regulatory guidance that pertains to ESSA statutory language remains applicable, but portions that pertain to the accountability and State Plan final regulations affected by the resolution of disapproval from Congress are not applicable.

3 ESSA-required data elements include 1) ESSA accountability indicators; 2) state and LEA data collected through the Civil Rights Data Collection (CRDC); 3) educator qualifications; 4) state performance on NAEP; 5) per-pupil expenditures; and 6) postsecondary enrollment rates by high school.

CONSIDERATIONS FOR STATES BUILDING AND ENHANCING REPORT CARDS

FEEDBACK AND ENGAGEMENT

When developing their state report card, states should first consider how they will lead with feedback and engagement as an initial and *ongoing* component of their report card development and continuous improvement cycle. Doing so will ensure that the report card is grounded in its purposes to ensure transparency as well as support strategic actions that lead to educational improvements. As states have learned through stakeholder engagement and feedback strategies in developing their ESSA plans, starting engagement early with specific opportunities for feedback builds buy-in and ownership by allowing stakeholders to be part of the process. Too often, feedback and engagement are sought only after there is a solid draft or prototype for potential users to review. While the instinct to wait until there is something to respond to is well-intentioned, it increases the likelihood that the feedback will be too narrow, missing "big picture" insights that should have been surfaced earlier in the process. Engaging users early in the process also creates opportunities for stakeholder ownership and buy-in. They will likely feel more compelled to use and spread the word about the tool if they felt involved in its creation.

Ongoing feedback ensures that the report card focuses on its purpose and the needs of users, encouraging the full range of primary users to take informed action. Feedback from stakeholders[4] and users *at all phases* of development is critical to make sure the report card provides clear and accurate data, effective design and content, and the functionality users need. Clearly, feedback will illuminate how user needs for data, design, and functionality vary, and states will need to consider how to differentiate user experiences to meet those needs. In some cases, technology may make it possible to embed feedback tools into the report card, through back-end analytic reporting on user behavior, but also by encouraging users to comment on what they see.

Engagement ensures that the report card will reach its intended audiences – and, in turn, helps deepen understanding of how to read and use the report card data. By building buy-in among key constituencies, it lays the foundation for sustainability of the state's public reporting strategies. As such, states should engage early and often with state leadership (e.g. governor, legislature, state board of education), local district and school leaders, business and community leaders, and teacher, family, and student groups.

As states craft feedback and engagement plans, they should consider the following questions:

1. ***Who should be involved?*** The plan identifies all those who need to be involved in the process.

Primary users: As outlined on page 3, the priority for states is to identify the primary users of the report cards for initial and ongoing feedback, such as families (who represent a broad range of perspectives), educators, administrators, and state and local policy leaders. In many cases, you will

4 Please see appendix for a list of potential stakeholders within and external to the SEA.

need to build or strengthen new relationships to effectively engage individuals, especially those who have traditionally been disadvantaged or marginalized. It is critical that the engagement plan include outreach to existing partners and champions, like the PTA, but that it also extends beyond that to solicit feedback from those whose voices are not often heard or who don't regularly engage in dialogue with the SEA. In its guidance, USED highlights the need for states to be intentional about engaging those who "traditionally may be left out." As such, you may consider building partnerships with agencies or organizations in your state with reach and credibility with traditionally under-engaged groups. For example, in **Louisiana**, EdNavigators, a non-profit founded by a group of educators and families, is partnering with employers to reach and engage directly with families in New Orleans. It is also providing guidance so that they can make informed decisions about their children's school experiences, including providing assistance in using data included from student and school-level report cards. It has also led family meetings on behalf of the Louisiana Department of Education to vet improvements in the state report card.

- **Champions:** The second priority is to identify those whose ongoing guidance and support are critical for buy-in. In some cases, these will also be primary users. It is likely, however, that some groups that may not rise to the top as primary users could be a high priority to engage to ensure buy-in and sustainability. For example, **Delaware** has benefited from high-level leadership from the governor's office on the redesign of its report card. In other states, district leaders have stepped into the role as champions for the state report card. Finally, some states have cultivated champions from across the SEA, as well as other state agencies (e.g., P-20 longitudinal data system staff, higher education coordinating body, workforce development, health and human services).
- **Technical advisors:** Your state's technical advisory group for assessment and accountability, and other advisors with expertise in educational measurement, will also play a role in evaluating reports to ensure they are technically defensible.

The **District of Columbia** found success in creating a formal reporting partnership across agencies (District of Columbia Public Schools, the Office of the State Superintendent of Education, and the District of Columbia Public Charter School Board) to develop and deploy its Equity Reports.

2. ***At what points should they be involved?*** State should create a transparent process and timeline for development, clearly highlighting opportunities for stakeholders to engage in the process. It is helpful for states to be explicit about windows of opportunity for feedback during the process. States should involve users and champions **early** and at **multiple points** in the development and continuous improvement cycle of the state report card.

   - **Gathering requirements:** There are many ways to start getting feedback early in the process to develop requirements. The team driving the project should be able to gather feedback through a series of facilitated sessions, and synthesize it into both technical and user requirements. Those can then be tested again, but the work of creating the requirements documentation does not happen with stakeholder groups.

States have an opportunity to begin user research as requirements are being gathered – for instance, they can work to get feedback on the current state report card site or other similar sites. As requirements can be about design, structure, data, content, and functionality, it will be important to differentiate which groups might be best suited to develop which type of requirement. **North Carolina** gathered requirements from state board of education members, legislators, and representatives from stakeholder groups including business, community, families, and educators. They worked with them in small groups with facilitators to get feedback to develop requirements for reporting measures.

- **Design and content development:** States are engaging families, educators, and other users in the process of designing and developing content for state report cards. **New Mexico**, to honor the state's "fundamental belief that our families and taxpayers have a right to know how their children and their schools are doing," led community meetings during the 2015-16 school year to learn about families' understanding of report cards. As a result, the state simplified and clarified language in the report card and has begun a process to update the report cards to enhance understanding and usability. **Michigan** is in the process of developing a transparency dashboard, designed with families as the primary audience. The intent is to use both traditional and non-traditional indicators to provide a more comprehensive picture of schools. The development process has included parent focus groups and surveys to make sure that the data reported are meaningful and understandable to parents.

- **Building, testing, and launch:** Early and frequent engagement and feedback lay the groundwork for launch and outreach. An emerging best practice across states is to keep stakeholders informed throughout the development process. **Delaware** has a webpage with updates about its report card launch. States are also advancing ways to more deeply engage users and champions in the testing process prior to launch. In **Georgia**, state leaders select school districts to test new features of its report card. This strategy not only improves the functionality of the system, it broadens ownership. **Delaware** also engages primary users in testing prior to launch through an actual working website behind a firewall.

The Council of Chief State School Officers, in partnership with national civil rights, advocacy groups and organizations that represent historically underserved communities, developed "Let's Get this Conversation Started," a comprehensive guide to stakeholder engagement in June 2016. The guide detailed 10 key steps to authentic, meaningful stakeholder engagement:

Getting Started

1. Clarify your goals
2. Work with partner organizations to identify and engage with your stakeholders

Engaging Stakeholders

3. Speak to your audience
4. Use multiple vehicles
5. Identify your best ambassadors
6. Ask for input before decisions are made, and use it
7. Keep your materials simple and brief
8. Communicate early and often
9. Keep your team informed

Sustaining Engagement

10. Turn these new connections into long-term relationships

A report card prototype that Tembo developed with Learning Heroes includes functionality that allows users to submit comments directly into the prototype. In both examples, the building and testing processes are iterative.

- **Sustainability and enhancement:** Feedback and engagement must continue far after launch. States can use a variety of mechanisms to create feedback loops with stakeholders to help continue improving the site to help it meet its goals (see below). It is also an important opportunity to build capacity among primary users at the state and local level.

3. ***How should they be involved?*** The plan should identify a variety of mechanisms for feedback and engagement with careful attention to timing and location to maximize access and convenience for participants.

    - **Selecting mechanisms**: States have a number of options for mechanisms to use for feedback and engagement, and these mechanisms *differ in their potential to heighten engagement and provide precise feedback*. Figure 4 suggests how several common mechanisms vary according to their potential for feedback and engagement. These mechanisms also come with specific benefits and challenges. Some mechanisms will be great opportunities for feedback (1:1 interviews), but would not engage many people, while others (town halls) would engage many people, but would not be great for feedback. States may want to determine the most appropriate balance of these types of engagement mechanisms. Figure 5 addresses several of these, along with considerations for states that choose specific mechanisms.

    - **Planning for access:** For in-person mechanisms such as town halls and focus groups, states should take care to ensure that the time and location lend themselves to wide participation. For example, states should consider offering various times (day, evening, weekend) for family sessions, and offering child care, meals, and translation services. The sessions should also be held at a variety of geographic locations around the state and within large cities. As part of the development process that led to **Ohio's** new report card in 2015, state officials made 23 trips across the state to seek feedback on the Ohio School Report Card, bringing materials tailored to each site. Where possible, neutral, community-based locations should be selected to ensure all participants feel welcome. CCSSO's Let's Keep This Conversation Going Guide offers an array of engagement strategies and successful state examples. All of the strategies represent ways that SEAs can transform their current approach to engagement into a series of impactful efforts to reach, engage and build lasting relationships with all stakeholders.

    - **Preparing for success:** To maximize their impact for the report card process, and ensure participants have positive experiences, state leaders should plan time to prepare fully for feedback and engagement sessions. For sessions seeking feedback, a clear protocol should be developed – and reviewed – in advance.[5] For sessions emphasizing engagement, it is essential to agree on the key messages and the most effective messengers to deliver them. Regardless of the primary purpose of the session, state leaders need to have a solid grounding in the context in which the opportunity will take place. What experiences have participants had to date with report cards? What differences can you anticipate will emerge across participants (e.g., families and educators often have different views on A-F grading

5 See appendix for a sample focus group protocol.

for schools) and how can the feedback process show that all views are valued? What education issues or concerns[6] such as data privacy[7] can you predict will arise – and how can the session be structured to acknowledge them at the outset? State leaders will also need to set expectations about why feedback is being solicited and how it will be used.

Figure 4: Finding a good mix of mechanisms to maximize feedback and engagement

ENGAGEMENT

FEEDBACK	Low	High
High	*Focus groups* *1:1 interviews* *User testing* *Online surveys*	*Formal advisory group*
Low	*Embedded questions*	*Presentations at existing meetings* *Town halls*

Figure 5: Selecting mechanisms for state report card feedback and engagement[8]

Mechanism	Benefits	Challenges	Considerations
Formal advisory group	1. Members can be selected to represent the range of priority users 2. Advisory group members can serve as ambassadors, champions for the work 3. Flexibility to design working meetings to maximize feedback	1. Anticipating need to make decisions at a point of authority, even if the advisory group has not weighed in 2. Ensuring that members adequately represent the range of users 3. Making sure all participants understand their role and responsibilities and the ultimate goal of the work	1. What norms/protocol will be used to make decisions when there are conflicts in feedback, priorities? 2. How can the advisory group be clear about the *primary* users and their *priority* actions in order to focus discussion and inform decisions and priorities? 3. How will the role of the advisory group shift through phases of the development and continuous improvement process? 4. What is the responsibility of participants to communicate directly with their constituencies?

6 Focus group research from Learning Heroes suggests that parents put the highest priority on information about school safety and educator credentials and often see differences in performance across schools as a result of funding inequity.

7 See Data Quality Campaign for resources on state policy to safeguard data privacy: https://dataqualitycampaign.org/resource/key-elements-strengthening-state-laws-policies-pertaining-student-data-use-privacy-security-guidance-state-policymakers/.

8 For more information about leveraging feedback and engagement strategies, see CCSSO's *Let's Keep This Conversation Going* guide: http://www.ccsso.org/Documents/2016/ESSA/LetsKeeptheConversationGoingGuide11022016.pdf.

Mechanism	Benefits	Challenges	Considerations
Town halls (including online town halls)	1. Likelihood of communicating priority messages 2. Potential to engage a broad set of stakeholders in one setting	1. Ensuring diverse participation 2. Difficult to collect detailed feedback 3. Making sure all interested participants are aware of these meetings 4. Making sure these meetings are accessible to all who want to participate	1. How can partnerships and other efforts to build relationships help you get the word out to participate? 2. Who are the right messengers? 3. How can the state record and share the town hall? Can the state host a "virtual" town hall for those who cannot travel? 4. How can the state partner with an organization to host the meeting and encourage more individuals to attend? 5. How can the state collect contact information of participants at these meetings and use that to inform them on how their feedback was used?
Presentations at existing meetings, including those hosted by community organizations	1. Built-in audiences, often those needed to be champions 2. Ability to segment messages and ask for feedback by audience	1. Time limitations 2. Gaining focus and attention of participants if multiple topics are being discussed in addition to the report card	1. How can states leverage existing meetings beyond the "usual suspects" to meetings where families and others from under-engaged groups will be?
Focus groups	1. Feedback can be tailored and precise with open-ended questions, follow-ups to press for understanding 2. Small groups of participants can surface areas of agreement and disagreement	1. Getting the timing right – pulling together a focus group to answer near-term needs for the development process 2. Recruiting participants who reflect the priority users 3. Using a third-party facilitator so participants can feel open in sharing feedback	1. How can focus groups be utilized prior to the data and design/content phases (e.g., sharing existing reports)? 2. What partnerships are needed to recruit a strong set of participants? 3. How can you make sure focus groups include individuals representative of your state's population?

Mechanism	Benefits	Challenges	Considerations
Websites and online surveys	1. Ability to reach stakeholders in a uniform, transparent way 2. Additional information can be shared through the website and email correspondence with survey link	1. Ensuring target audiences view website, respond to survey 2. Inability to press for understanding 3. Survey respondents are sometimes limited to certain demographics	1. What existing websites, surveys, or email lists could be harnessed to glean feedback and reinforce messages? 2. How will results from surveys be shared and to whom? 3. How can you partner with groups, especially community-based organizations, to ensure good participation among diverse populations? 4. How can you make the survey available in multiple languages? 5. Can you ask for demographic information to track who is responding to the survey, and which audiences you may need to target further?
1:1 interviews	1. Depth of discussion can uncover important insights 2. Talking to one individual may illuminate information that would not be shared in a group – such as disconnects between what is on a report card and the message a family member receives from a teacher	1. Insights may not be generalizable 2. Resource, time-intensive	1. Are there particular questions that require deeper conversations? 2. How can you identify individuals who will give you deeper insights necessary to move the work forward?
User testing	1. Observing how users actually interact with the data, design and content, and functionality 2. Ability to target users with precision through services that specialize in user testing	1. Resource, time-intensive	1. What high-priority questions should be asked to test site usability, or particular reporting concepts? 2. How can you make sure you are testing among users with different needs, such as limited English proficiency, literacy skills, or disabilities?
Embedding questions in a live report card	1. Open-ended questions, such as a "Notice anything confusing?" comment box, can pick up important issues that may not otherwise get raised.		1. How will ongoing advisory or governance groups for the report card address information coming through this mechanism?

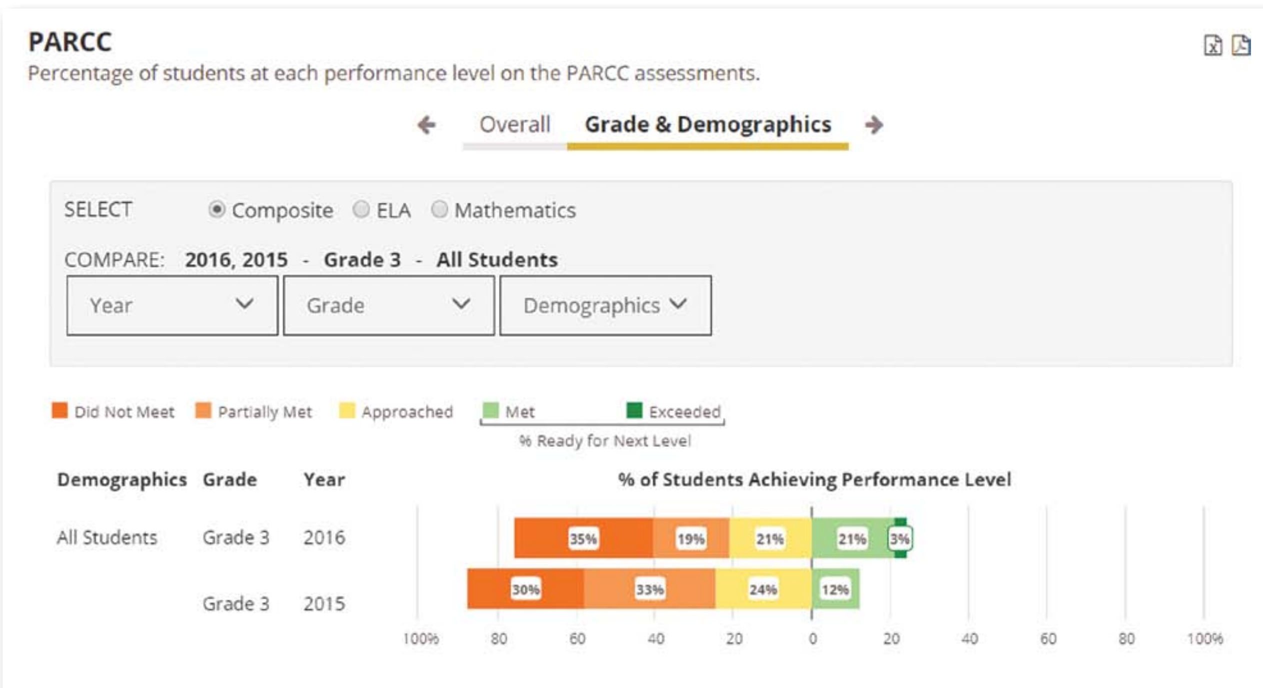
DATA AND CONTENT

Families and other users must have **trust** and **confidence** in the information in state, local, and school report cards. States must ensure that data in state report cards are of the highest quality, that privacy is protected, and that measures are timely, clearly defined, and consistent across different levels (e.g., student-level to school-level) and different reports.

States should consider these questions in all phases of report card development and continuous improvement:

1. ***What data and performance metrics will be reported?***

    - **Meeting minimum requirements:** ESSA and other federal education laws prescribe a set of data and information that states must include on state report cards for schools, districts, and/or the state as a whole. In addition, many states have policies in statute or regulation that require additional data elements to be included in state report cards. Taken together, these requirements set a "floor" – the minimum set of data that a state must include.



2. ***How do we ensure data used in the report card are of the highest quality?*** What is data quality? According to NCES, data quality entails accuracy, completeness, timeliness, validity, and consistency.[9]

    - **Building capacity at the local level**: Given that most data are collected at the local level, it requires coordination and capacity-building from the school building to local education agency to state levels. Kansas has developed a Data Quality Certification program with specialized tracks for LEA data entry personnel, data coordinators, program staff and administrators. The purpose of the program is to build a culture of

9 Institute for Education Sciences, May 2014, Data Quality: Striking a Balance. SLDS Issue Brief.

quality data in the State of Kansas to improve data quality and reduce the negative effects of inaccurate/missing data. Last year KSDE provided both in-person and webinar trainings to individuals in 284 out of 286 public school districts.

- **Involving the right people at the right time in decisions:** Collaboration is essential to developing high-quality data for public reporting. State leaders with responsibility for report cards must involve CIOs, data managers, policy staff, and other experts in decisions about data for report cards.

- **Driving data use at all phases of development and continuous improvement:** Data use and quality are a virtuous cycle – as more reports are developed and used to support and inform work to improve student performance, more people ask more questions of the data, leading to improvements in data quality. States can take steps to encourage use of data beginning in the gathering requirements phase, engaging primary users with real data on proposed measures. They can continue to use feedback and engagement opportunities throughout design and content development, and testing and launch. Questions that primary users pose in these phases can alert states to potential issues with data quality.

- **Deploy quality assurance routines on data after each phase of development:** Similarly, states would benefit from establishing formal quality assurance routines on data elements not just prior to launch, but throughout the process of development and continuous improvement. Given that data quality and use are mutually reinforcing, doing so across the cycle provides more opportunities to catch errors or misunderstandings. Routines must be based on data quality rules and data governance that support the rules, and should leverage a clear, easy to read data dictionary that includes information about how data are used, the frequency of data collections, and what data source is considered the truth if more than one collection is used for the report card. States may consider establishing an agency-wide Quality Assurance and Standards group with broad representation of data analysts and producers.

3. How do we provide assurance that data on the report card protect privacy?

- **Establishing and enforcing clear reporting rules to protect privacy:** As states have transitioned to reporting aggregate data to the public based on databases of student-level data, the importance of ensuring data privacy has risen. Privacy is also a primary concern of families and policymakers. State data management leaders should determine policies that ensure consistent use of minimum n sizes, data suppression routines, and other strategies.[10] Each policy decision will involve significant trade-offs. For example, higher n-sizes will improve privacy protections, but will decrease access to data. All decisions should be made with ongoing stakeholder engagement and communicated broadly. Quality assurance routines should check to make sure these policies are followed for all reported data. The District of Columbia Office of the State Superintendent of Education (OSSE) details its procedures for ensuring the privacy of data in accountability and public reporting in its ESSA plan (pages 10-11), including a minimum n-size of 10, suppressing individual outcome categories, secondary data suppression, and using top and bottom coding for extreme percentages.

10 See Data Quality Campaign resources for state education agencies – Roadmap to Safeguarding Student Data

4. ***What steps can we take to increase the timeliness of data?***

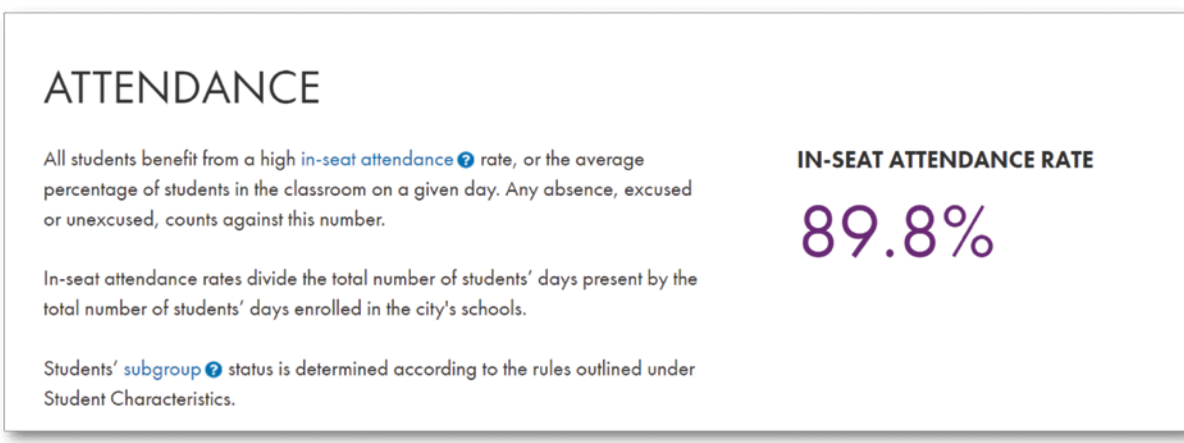
   - **Updating report cards throughout the year:** Report cards should be updated at least once a year – at a minimum, along with the release of accountability results. Every update becomes a built-in opportunity for proactive communications. Meanwhile, a range of data that answers important user questions is finalized throughout the year. States should consider opportunities to keep report cards fresh with updated data throughout the year.

5. ***Are the measures defined clearly and consistently?***

   - **Simplifying measures:** To support their theory of action for reporting, states should consider how to leverage their report cards to build users' capacity to understand and use the data. Where possible, states should consider ways to simplify data definitions to encourage understanding and use.

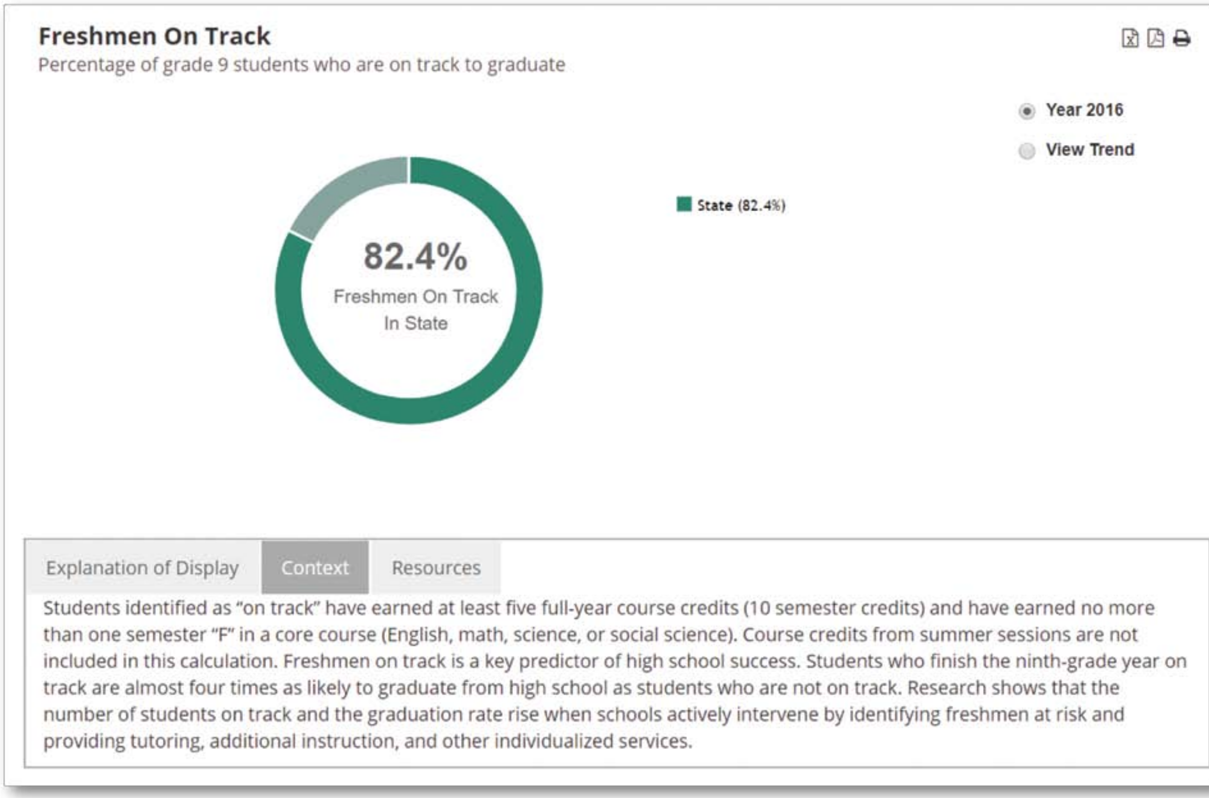
   - **Providing definitions near data**: Where possible, states should consider how to report data using familiar terms and avoiding jargon (particularly for family-focused report cards). Learning Heroes has found a number of common words and phrases that have different meanings to families outside of the school or district than they do in the school context. For example, families often take school "climate" to pertain to temperature or weather, and "culture" to pertain to ethnicity or race. Learning Heroes has found that a phrase such as "learning environment" better communicates the intent. In some cases, clarity will require using technical terminology. States should find ways to provide data definitions in an accessible manner, through hover-over features or otherwise nearby the data that are reported. For complex data definitions, states should take opportunities to explain the data in engaging ways. For example, **Georgia** posts a video on its website to explain its growth model in easier to understand language. Virginia has an FAQ and Glossary of terms for their School Quality Profiles.

Exemplar | District of Columbia Equity Reports (defining specialized education words "jargon")



   - **Providing narrative context near data:** In some cases, feedback may point out areas where data elements promote misunderstanding or confusion rather than clarity. According to research from Learning Heroes, in these cases, providing narrative information that reinforces the context underlying the data can be helpful.

Exemplar: Illinois (providing context to data)



- **Ensuring consistency across student-level and aggregate reports:** Given questions from users, Delaware has identified a significant need to ensure consistency of data from the student level to aggregate, public reporting. State leaders emphasize the need to be "100% in sync" across the two levels through effective data governance. In addition, states should be aware of where data elements are reported across different aggregate report cards – and ensure data consistency in these cases as well.

6. ***Are there opportunities to streamline reporting?***

- **Taking stock:** States, along with standing advisory groups, should regularly take stock of reports that display similar data, even across agencies, to check for consistency of definitions and business rules. As it does so, **Delaware** asks whether similar reports are still needed, and identifies opportunities to streamline reporting.

- **Serving data where it is used the most:** Some states report a wealth of data (e.g., reporting postsecondary enrollment information on higher education agency websites), but not in the school-level report cards where families and other users are accessing data most often.[11] States may consider reporting some of these data on the state report card, and including a link so users who want additional detail can find the more comprehensive data set.

11 See Data Quality Campaign, A Time to Act 2017.

DESIGN AND STRUCTURE

States that position report cards as a part of their overall strategy to improve education for all students will pay considerable attention to design and structure throughout all phases of the development process. Simply, families, teachers, policymakers will not take action based on information in report cards if they see information that is overwhelming, confusing, or unreadable. While states with sufficient capacity can evolve online state report cards to take advantage of new technology and user experience principles, even those with more limited resources can develop static report cards with far greater impact by taking time to engage with users to advance design and content. Effective design requires states to wrestle with a variety of trade-offs – for example, prioritizing among different user needs, balancing simplicity of both design and content with needs to provide opportunities to engage with data in more complex ways, and the like. It also requires a mindset open to learning and adapting based on new knowledge and understanding from users.

States should consider the following questions throughout the report card development and continuous improvement process:

1. ***Who uses the report card? Why and how are they using it?*** The most important aspect of good design is to understand who your users are, why they are there, and the best way to serve the content to them at the right level of granularity.

    - **Identifying priority users:** Very early in the process, states should clearly identify the priority users of the report card, and all decisions about design and functionality should ripple out from this one. Families will be a critical audience for all states. They may be the priority audience for report cards, particularly at the school level.[12] Educators – teachers and administrators – are also critical users of aggregate information at the school and district levels. It is essential for states to ensure that educators have access to and capacity to interpret state report cards to help answer families' questions and proactively frame report cards (such as through a cover letter) in the context of the school's goals and strategies. Educators are also an important audience for aggregate report card information that provides opportunities to "drill down" to more complex or student-level information. As an example of a way a state uses multiple tools for reporting, **Massachusetts** provides extensive data for district and school leaders through its Excel-based District Analysis Review Tools (DART)[13]. Policymakers, business, and community leaders are also important users of aggregate information at the school, district, and state level. Finally, researchers are frequent users of report card information, so providing entry points for them to access files to download should be a consideration for all states. See Figure 1 for an example for how a state may articulate its priority users.

12 Research from Learning Heroes indicates that parents are most interested in questions that concern their own child's schools.

13 Please note that DART is a reporting tool used in Massachusetts but is not used as a report card. Additionally, please not that users can access online DART tools in School and District Profiles. An example is available here.

- **Finding out *why* they use the report card:** You can use feedback and engagement mechanisms to find out more about why families and other stakeholders use report cards. They will likely hear a variety of answers within any particular group, and can use this information to inform design, structure, and functionality. States can also use this insight to design online report cards that adapt based on answers to questions such as, *"Why are you here today – to find a school in your community? Compare schools? Learn more about my child's school?"* States can also plan their report card continuous improvement processes to inform ongoing understanding of the reasons users access report cards, including embedding analytics in online report cards to show the types of information users are accessing most frequently.

- **Designing for *how* they access the report card:** Given that more parents and educators are accessing online report cards through their phones, tablets, and other mobile devices, incorporating responsive design is becoming a far higher priority. States should also consider ways optimize load time, and avoid putting information behind tabs or requiring drop-down menus in the design process. States should leverage feedback and engagement mechanisms to test how parents and other users navigate through online report cards. Many users, meanwhile, want – or need – to access and print a static report such as downloading a .pdf file from a website or receiving a hard copy of a static report from a school or community organization. **New Mexico** has focused efforts on developing informative and engaging static reports at the school level tailored to parents.

- **Giving context:** Without context, data are just numbers without any meaning. States should consider how to design report cards in such a way as to provide the context that users need to understand and act on the information. Showing how the data relate to benchmarks helps build context. In addition, providing the most recent assessment information for a school is important, but families also want to see the most recent data in context of trends or historical information to answer questions such as, "Is the school improving over time and by how much?"[14]

- **Helping families use the report card in conversations with educators:** State report cards could also provide families with suggested questions to ask when meeting with a teacher or administrator or information about who to contact with questions about the information in the report card.

- **Understanding what tools are already available:** To avoid redundant reporting or reinventing the wheel, understand what local systems are reporting and determine how the state report card can add value.

2. ***How should information be prioritized?*** As the active design work progresses, states should begin to make the tough decisions about how content will be structured to drive understanding and use. States and data designers can work together and engage with users through wireframes that show the structure for how information could be prioritized and organized on a specific page.

14 For trend data in which calculation methods change over time, states should normalize the data to ensure the trend shows meaningful information.

- **Letting the story lead:** As discussed earlier with the example from Colorado's financial transparency website, states are learning that people *learn* through stories, *remember* stories, and *take action* based on stories. When someone engages with a state report card, they should be able to weave a story from the data – a story with a beginning, such a compelling question, then data and context through brief narrative, and then a conclusion – a clear answer, a suggestion for action, or a direction to go for other questions or more detailed information. In some cases, however, gaps in data, changes in baselines, or other factors may present significant challenges.

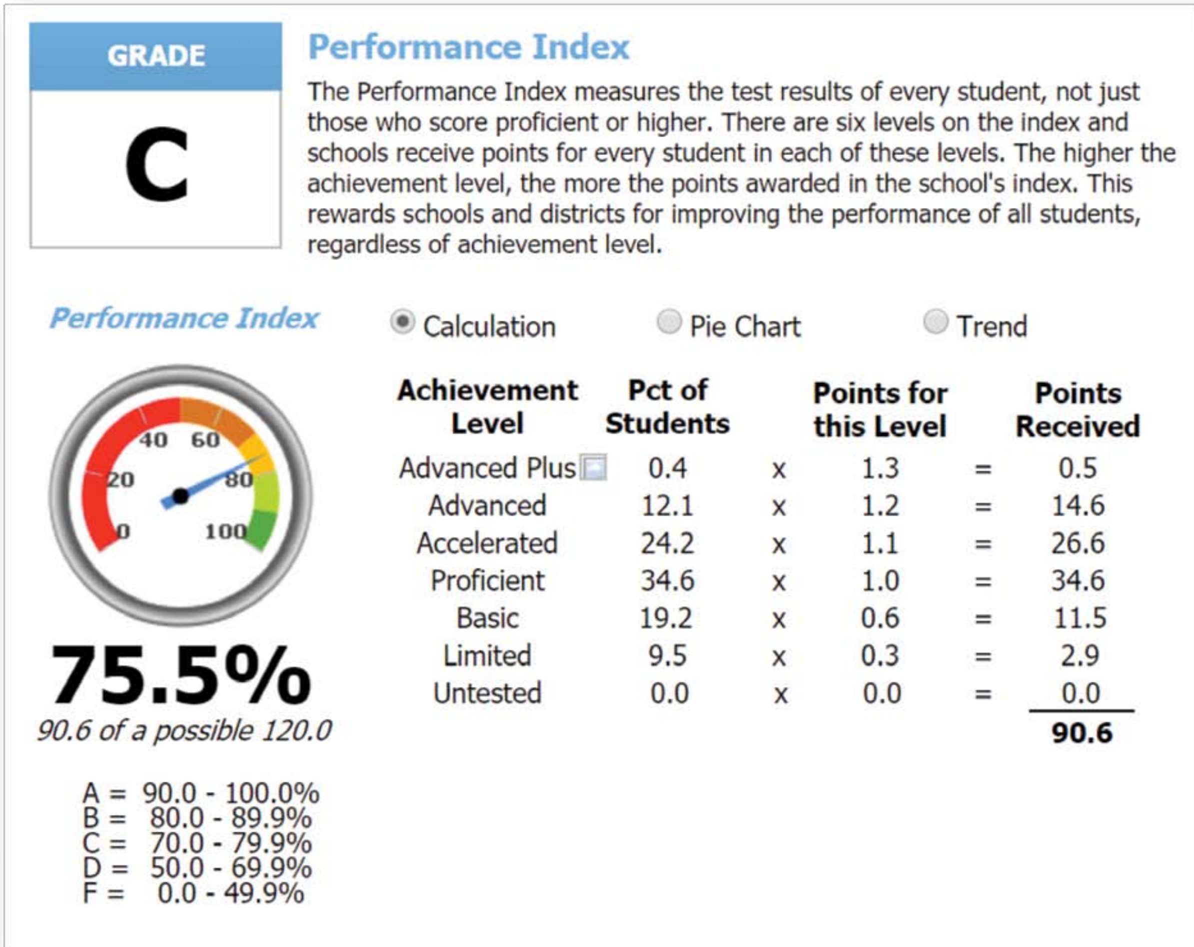
- **Preventing information overload – for users and staff:** Many families and other users get overwhelmed when they see traditional state report cards that provide numerous data points in table format. They often won't find information they need, or worse – will leave frustrated or misinterpret what they see. States are learning how critical it is to give users the information they need the most to prevent information overload. States can start by stating the questions the data are meant to answer, what the data mean, and any benchmarks that help the user interpret the data. User research has shown the benefits of designing with the highest level, most important information at the top, then cascading information down with further details. It also shows the benefits of letting users "opt-in" to details – clicking on a link, scrolling down, or turning a page. Information overload is a risk not just for users, but for staff and others designing state report cards. Today, state agencies collect a great deal of data, not all of which needs to be included on report cards. Staff should be careful not to get lost in the data as they are designing, just as they do not want to let users get lost.

- **Organizing information:** Information presented in state report cards should be organized in a way that reinforces the decisions made for prioritization and story-telling. States are learning that they can organize report cards by compelling questions, or by domains of information, through a site map. Many states are exploring "dashboard" approaches that show a limited set of high-priority data indicators through simple visualizations, with opportunities to then drill-down to more details.

- **Balancing a variety of needs:** State agency leaders and users do not always have the same priorities for information, again reinforcing the need for early and frequent stakeholder engagement. State leaders often prioritize information that reinforces state goals and initiatives, while families tend to be most interested in information about school safety and educator credentials.[15] With this understanding in mind, states should prioritize data that are important to reinforce state goals along with clear explanations for why the data are important. Where appropriate, it's also important to clearly articulate how the information comes together to provide a summative score or rating.

15 For more information please see [Overview of Research on Effectively Engaging Parents]

Exemplar | Ohio (dashboard organization)


GRADE

C

Performance Index

The Performance Index measures the test results of every student, not just those who score proficient or higher. There are six levels on the index and schools receive points for every student in each of these levels. The higher the achievement level, the more the points awarded in the school's index. This rewards schools and districts for improving the performance of all students, regardless of achievement level.

Performance Index

75.5%

90.6 of a possible 120.0

A = 90.0 - 100.0%
B = 80.0 - 89.9%
C = 70.0 - 79.9%
D = 50.0 - 69.9%
F = 0.0 - 49.9%

◉ Calculation ○ Pie Chart ○ Trend

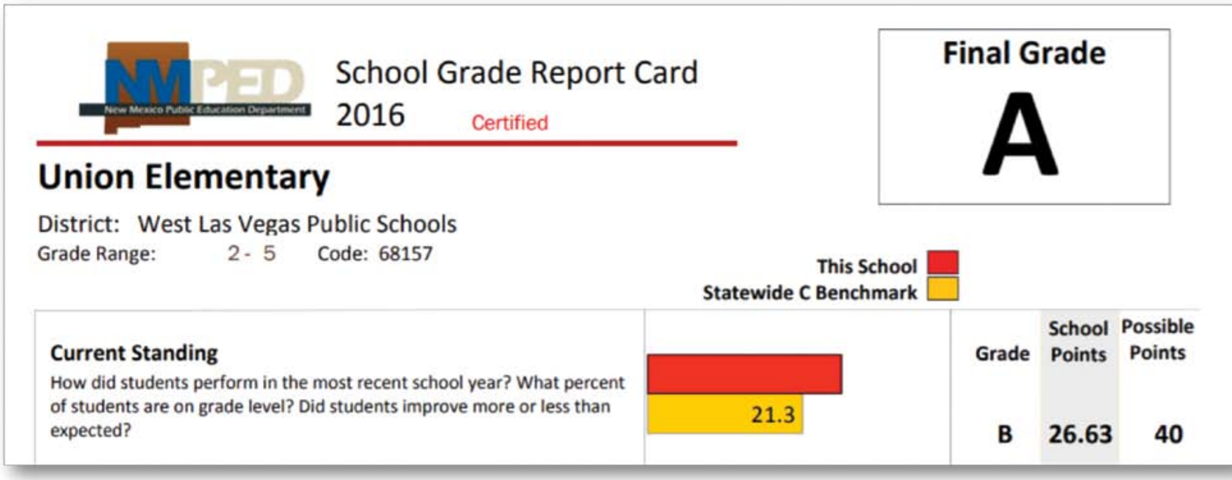
Achievement Level	Pct of Students		Points for this Level		Points Received
Advanced Plus	0.4	x	1.3	=	0.5
Advanced	12.1	x	1.2	=	14.6
Accelerated	24.2	x	1.1	=	26.6
Proficient	34.6	x	1.0	=	34.6
Basic	19.2	x	0.6	=	11.5
Limited	9.5	x	0.3	=	2.9
Untested	0.0	x	0.0	=	0.0
					90.6

3. ***How can information be communicated through text?***

- **Refining language:** Families, business and community leaders, and other users prefer simple, familiar words to give context to the data in report cards. Test language through focus groups and other engagement activities with families, educators, legislators, and others – do not assume that words and phrases have consistent meanings across stakeholder groups. Aim to keep the language clear and straightforward (e.g., avoid compound or complex sentences). If states must use specialized words, provide explanations within the narrative. Run report card language through text complexity tools[16] and refine language until it reflects an 8th grade reading level (e.g., use an automatic readability checker and/or check the Lexile level).

16 CCSSO has a Short Guide to quantitative text complexity tools here: http://www.ccsso.org/Navigating_Text_Complexity/Learn_the_Ropes.html.

Exemplar | New Mexico (using narrative to explain meaning of indicators)



4. ***How can information be communicated through visualizations?*** Data visualizations transform data into information that drives understanding and use. *Similar to strong writing, strong visualizations depend on numerous rounds of editing to include only those elements that best convey a story.* Although the data visualization field is always pushing the envelope with innovative techniques, many of the most effective techniques are simply highly-refined versions of traditional tables or graphs.

    - **Keeping visualizations consistent:** Focus on the story with consistent visualizations – keeping visualization techniques, colors, language, directionality, and comparisons among school, district, and state level data consistent allows users to orient themselves and then focus on the story, rather than on understanding a variety of visualization types. When color is used to convey meaning, such as levels of performance where red means low and green means high, make sure the meaning will be helpful to what you are trying to convey, and keep those meanings consistent across visualizations.

    - **Learning best practices in data visualizations and continuing to learn:** The field of data visualization is continuously innovating and learning about the techniques that drive understanding, and it pays off to dive into current best practices and stay up-to-date on new developments. Websites such as flowingdata.com and data visualization pioneer Edward Tufte's edwardtufte.com contain numerous examples and resources. Digital journalists have been leading many of the innovations in the field of data visualization. Research on data visualization from the Northeastern University School of Journalism suggests that text is highly important

Data Visualization Sites to Follow (recommended by Jonathan Schwabish):

* **flowingdata.com**

* **policyviz.com/blog**

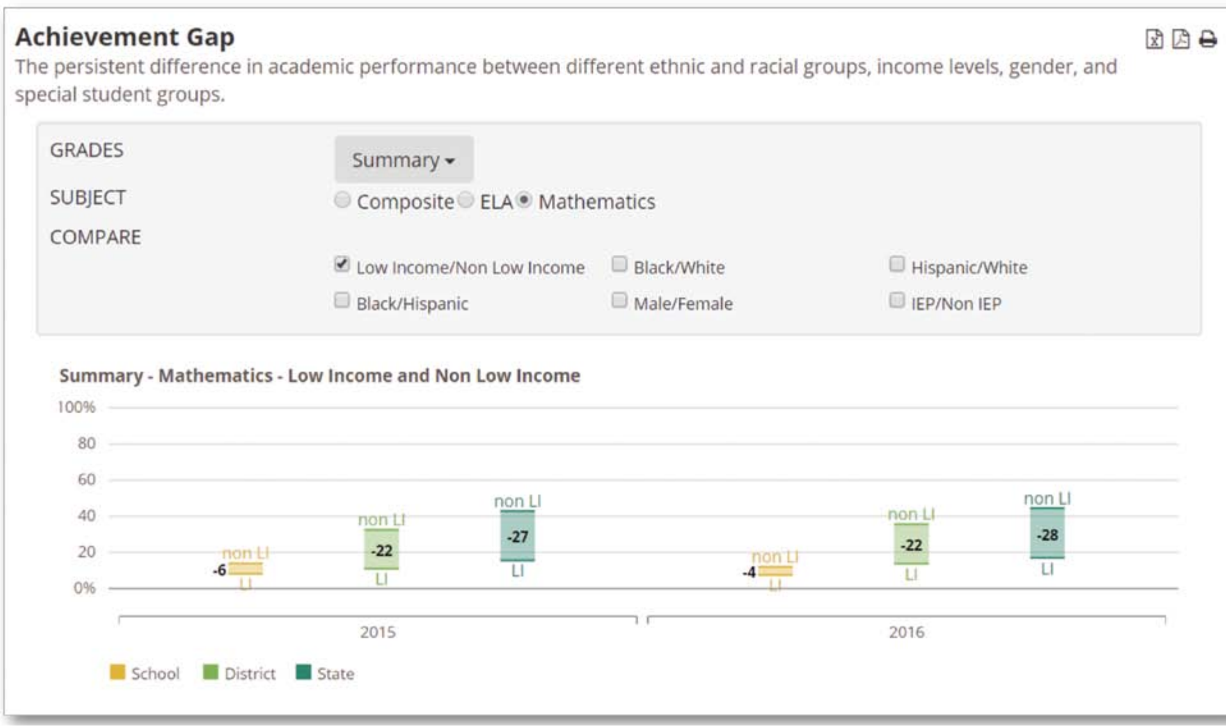
* **visualizingdata.com**

* **storytellingwithdata.com**

* **helpmeviz.com → you can submit visualizations in progress to get feedback**

in data visualization, that users remember data presented as pictograms (e.g., icons or logos incorporated into visualizations), and that some redundancy of data helps users remember information. The USED's report card guidance cites Jonathan A. Schwabish's article from 2014, An Economist's Guide to Visualizing Data, as a strong resource on current data visualization techniques. The 2016 NCES Forum Guide to Data Visualization is directed at SEAs and includes detailed guidance on displaying data in ways to support analysis of information and support communication, along with guidance on processes to use to develop visualizations that convey meaning to users.

Exemplar | Illinois (data visualization)



5. ***How can the state report card promote broad accessibility?***

- **Complying with accessibility standards:** For nearly 20 years, SEAs and other public agencies have been required to comply with technical standards to ensure online accessibility for users with physical or cognitive considerations. NCES has published a best practice resource for education data content providers that outlines techniques for addressing the standards. It also addresses standards from the Web Content Accessibility Guidelines (WCAG) initiative.

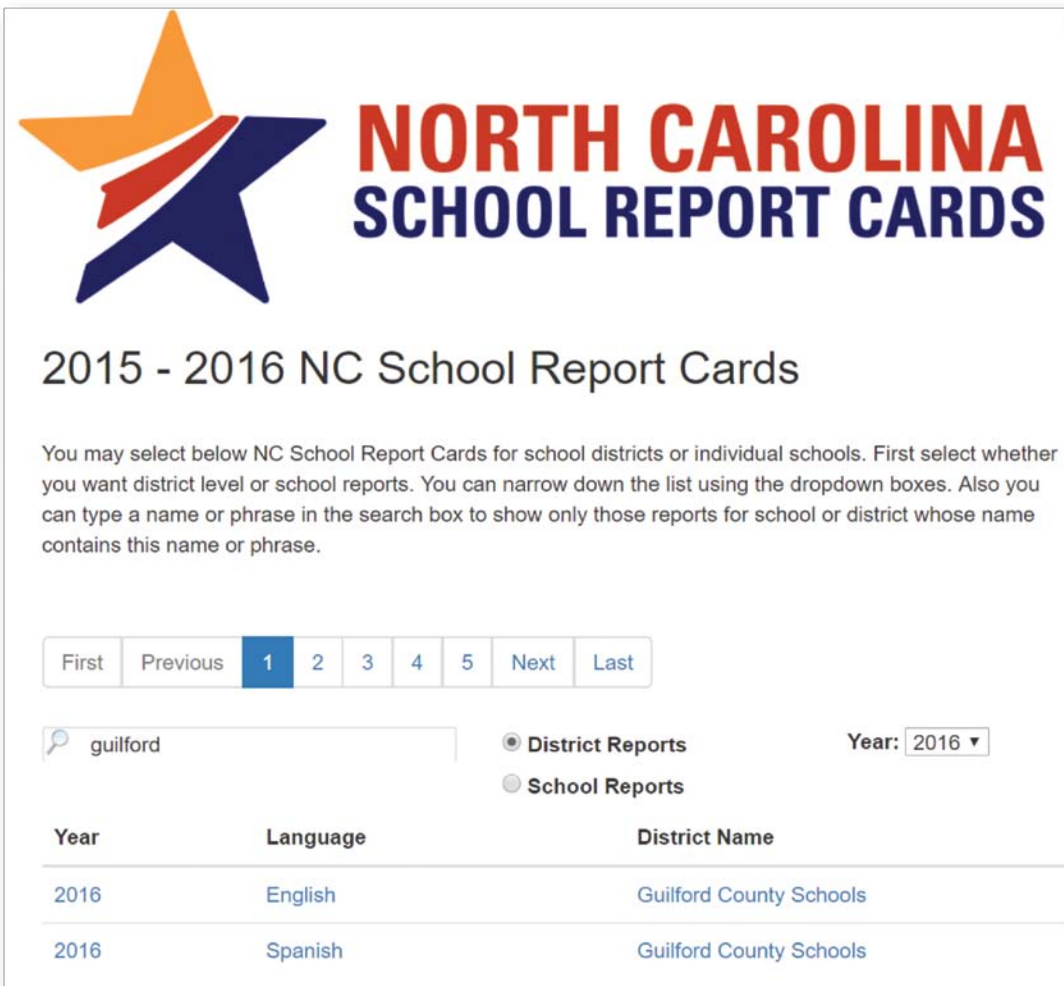
- **Testing color schemes:** Estimates suggest that up to 7 percent of the male population in the United States cannot distinguish between red and green. States can use guides, such as that developed by the Foundation for Excellence in Education, to select colors that are easily distinguishable.

- **Sizing up text:** Text needs to be at a size that it is easily readable – both in narrative or explanatory blocks and within visualizations. User testing has clearly shown that families and other users often struggle with the small text sizes in traditional state report cards.

- **Providing multiple languages:** Today, few states provide report cards and wrap-around materials such as cover letters in languages other than English. As states continue to prioritize equity, consider opportunities to provide families and community leaders information in a variety of languages. See Figure 6 for an example from North Carolina.

- **Putting the report card out front:** Many state report cards are difficult for users to find. They should be easy to find on the state's website, through searches, and on other sites where families or other stakeholders will be (and with the fewest required clicks as possible). **Illinois** (www.illinoisreportcard.com) has gone an extra step by using an easy-to-find URL.

Figure 6: North Carolina (providing multiple languages)



6. ***What functionality does the report card need to support its primary users?***

- **Learning from users:** States will begin mapping their functionality requirements early in the stakeholder feedback process. Do families prefer to search for their child's school by typing in the name of the school, selecting the district and then the school from lists, entering their address, selecting from a map, or other method? Do families want to see a static .pdf report or engage with interactive features? How might families prefer to "drill down" from higher level to more detailed data? Do educators want to be able to compare performance information for their school with that of schools with similar demographics for benchmarking purposes? State leaders should begin mapping out these questions – and engaging users to answer them through focus groups, 1:1 interviews, and other mechanisms – early in the development process.

DEVELOPMENT AND SUSTAINABILITY

States will need to carefully design their report card development and continuous improvement processes to ensure the system supports decisions made about data and content, as well as design and structure. The *State Guide to Building Online School Report Cards* (see appendix) includes key steps and timelines for report card development:

1. ***How will the state manage the development process?***

    - **Outlining decision-making protocols:** Although states will engage and solicit feedback from a wide variety of stakeholders, a sound development process – one with a high likelihood of producing report cards on time and within budget – will identify a project team with an individual leader responsible for final approval of decisions. The project team itself may be comprised of different groups – for instance, a policy group, a technical (e.g., data and accountability) group, and a communications group. A sound process will also include formal change and release management protocols.

    - **Documenting requirements:** It is essential that states formalize a set of data and content, design, and functionality requirements prior to the active design work. Not doing so risks significant production delays due to change orders – along with commensurate cost implications.

    - **Clarifying roles and responsibilities:** States may work with a vendor or multiple vendors throughout the development process. Establishing clear roles and responsibilities, timelines, and review procedures with vendors will be critical for success of the project.

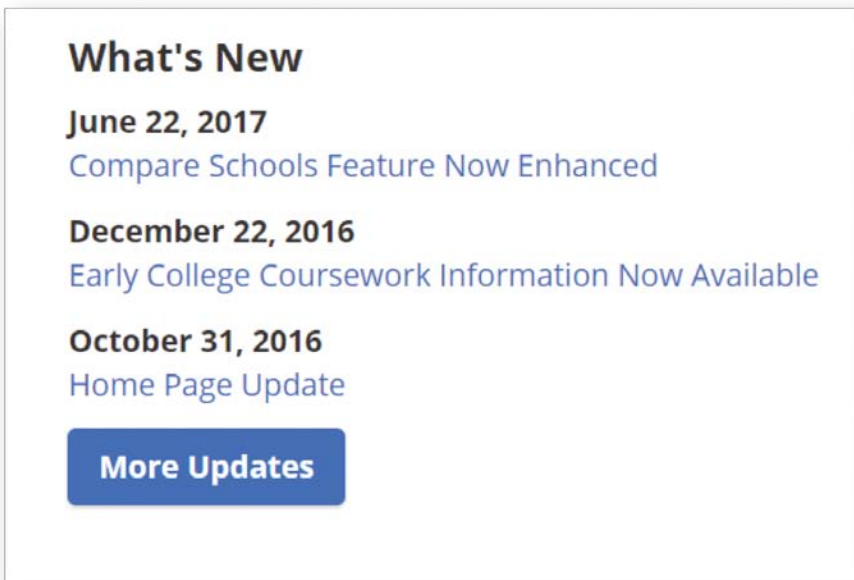
2. ***How will the state plan for continuous improvement of the report card?***

    - **Learning what works – and what doesn't:** In the building and testing phase, states can build an alpha site with limited functionality (even if the data and design are not quite right) to begin testing, followed by a beta version with complete functionality, and then quality assurance testing. After the launch, states can use analytics to find out how users are interacting with the report cards and identify needs to adapt functionality based on the metrics — both traditional metrics, such as the number of unique visitors to the site, repeat visitors, unique downloads, social sharing, mobile vs. desktop device usage, as well as metrics specific to state report cards, such as the popularity of particular school and district report cards and geographic areas requested in search and interaction with specific data exhibits.

    - **Planning for continuous improvement:** Your state may consider planning to release a version 1.0 of the report card, with expectations to answer new questions over time and enhance functionality in later releases. See below for an example from Illinois on sharing new functionality to compare schools and answering new questions about college-level coursework in high school. You may also consider adding wrap-around materials such as explanatory videos and cover letters to families and other stakeholder groups.

- **Keeping track of requests: Georgia** maintains a running list of enhancement requests that are regularly reviewed and prioritized by the report card governance group.

Illinois: Communicating Updates on Front Page of Report Card Site



CONCLUSION

Today, your state can take the next steps to weave data stories for families, educators, policymakers, and others that go well beyond basic public reporting transparency aims to support actions that improve education for all students. States can signal their commitment to continuous improvement by leveraging meaningful feedback loops and harnessing improvements in technology and design. They can do so with these users as partners in the process, inviting early guidance and building ownership along the way. Ultimately, states can see their state, local, and school report cards as an avenue for ongoing communication with those whose work directly affects students. They can use this feedback loop not only to enhance the report cards over time, but to support overall strategies to build capacity among families, educators, and policymakers to use education data to make informed decisions. States have much to learn from each other as they travel their own journeys to make report cards an integral part of their state's theory of action to improve student achievement, and will benefit from learning communities to share effective practices – and lessons learned.

APPENDIX

[State Guide to Building Online School Report Cards]

A State Guide to Building Online School Report Cards

A 12-month, development to launch guide to creating a next-generation school accountability reporting tool under ESSA

The Every Student Succeeds Act (ESSA) directs states to create report cards that are easy for parents and the public to access and understand. Additionally, states are required to provide more school-level data than ever before by highlighting multiple indicators of student performance, funding, teacher quality, post-secondary success, and more all in a parent-friendly format.

The timeline below outlines the necessary steps toward creating an ESSA-compliant report card (a full list of ESSA reporting requirements can be found here) that is accessible and quality within a 12-month period. This timeline integrates four streams of interconnected work: feedback and engagement; design and content; data; and functionality and development. Resources are provided below on each stream to look to for advice and information during the development process.

The streams of work are presented in four phases: gathering of requirements; design and content development; building, testing and launch; and sustainability and enhancement. Effective project management is critical for the development of a high-quality report card, and no one team within a state agency can do the work alone. These interconnected streams of work require close coordination of a robust project team of data experts, designers, developers, policy and communications experts, parents and community stakeholders.

What You'll Find in This Tool:

- Step-by-step process for designing a high quality report card.
- Process organized by four streams of interconnected work: Feedback and Engagement; Data; Design and Content; Functionality and Development
- Resources to guide your work.
- Glossary to define and clarify technical terminology.

CCSSO Council of Chief State School Officers · COLLABORATIVE · DQC Data Quality Campaign · ExcelinEd · Learning Heroes · National PTA everychild.onevoice.

Phase I: Gathering of Requirements

Months 1–3

Feedback and Engagement

- ☐ Identify your user audiences.
- ☐ Look to local pilots that can serve as frameworks for a state platform.
- ☐ Conduct focus groups, deliver surveys, and convene your user audiences to understand what audiences expect, gain credibility with local constituencies, and build institutional knowledge.
- ☐ Announce your intention and goals for the development of new online school report cards; plan and share opportunities for engagement.

Coordinating Project Partners
Communications Staff

Resources
Learning Heroes evidence-based parent tools and language.

Learning Heroes, CCSSO, and PTA's Guidelines for SEAs Engaging Parents

Data

- ☐ Determine the scope of the tool (local or statewide).
- ☐ Assess and document the quality and availability of your accountability and other data.
- ☐ Review the SEA's accountability plan and other data that is required or desired on new report cards, data collection methodology, and anticipated data release schedule.
- ☐ Decide the high level categories and specific data indicators to be included and create a data catalog.
- ☐ Format the data and document the business rules for all data indicators that will be included in the tool.

Coordinating Project Partners
Policy Team
Data and Accountability Team
Communications Staff

Resources
DQC's Opportunity to Make Data Work for Students in the Every Student Succeeds Act.

ECS's State Information Request: ESSA Accountability System Requirements

Design and Content

- ☐ Apply knowledge about user audiences to establish criteria for the look and feel of parent-friendly report cards.
- ☐ Use insights from focus groups and interviews to determine the tone and level of content that aligns with user expectations.
- ☐ Begin to prioritize information and develop user journeys through the data and content that will be offered in the tool.

Coordinating Project Partners
Communications Team

Resources
ExcelinEd's My School Information Design Challenge findings

DQC's Opportunity to Make Data Work for Students in the Every Student Succeeds Act.

Functionality and Development

- ☐ Determine website hosting parameters and select an open source content management system (CMS) such as Drupal or WordPress.
- ☐ Determine and document the structure and workflow for the Application Program Interface (API) and how it integrates with the curation, cleaning, verification and uploading of data into the tool.
- ☐ Create detailed technical requirements documenting the scope and functionality of the tool, such as sort, search, comparison and customization features, and presentation in multiple languages.

Coordinating Project Partners
Data and Accountability Team

Phase II: Design & Content Development

Months 4–6

Feedback and Engagement

- ☐ Develop a strategy for engaging local parents, educators, and community members through the design, development, and launch of the tool.
- ☐ Identify national, state, and local stakeholders to support the use of the tool and determine how to partner with them.
- ☐ Test sample content and design concepts with user audiences and refine them based on feedback.

Coordinating Project Partners
Communications Staff

Resources
CCSSO's Let's Get This Conversation Started: A Guide on Stakeholder Engagement and Outreach

CCSSO's Let's Keep This Conversation Going

Data

- ☐ Confirm different cuts at the data across years (over time) or subgroups.
- ☐ Verify that all original data is "clean" and reconcile any irregularities or incomplete entries.

Coordinating Project Partners
Policy Team
Data and Accountability Team

Design and Content

- ☐ Map data catalog to specific visualizations and content needs within the tool.
- ☐ Develop full color design mock ups showing the look of the tool on desktop and mobile.
- ☐ Determine data visualizations (charts, graphs) and content needed to support each data indicator in the tool.
- ☐ Create parent-friendly content explaining and supporting data displays.
- ☐ Build messages that contextualize the data and empower parents to engage with their school.
- ☐ Identify partners, like district, school, and community members who can amplify the messages and promote the report card launch.

Coordinating Project Partners
Policy Team
Communications Staff
Data and Accountability Team

Resources
ExcelinEd's My School Information Design Challenge findings

DQC's Opportunity to Make Data Work for Students in the Every Student Succeeds Act.

Functionality and Development

- ☐ Finalize user experience journeys and create a wireframe and sitemap showing overall tool structure.
- ☐ Set up data repository and establish the Application Program Interface (API).
- ☐ Begin development of the tool, including analytics tracking.

Phase III: Building, Testing & Launch

Months 7–9

Feedback and Engagement

- ☐ Invite users to engage with beta tool prior to public launch.
- ☐ Launch and promote use of the live tool.
- ☐ Engage stakeholders around the live tool to get feedback on design and content ideas.

Coordinating Project Partners
Communications Staff
Policy Team

Resources

CCSSO's Let's Get This Conversation Started: A Guide on Stakeholder Engagement and Outreach

CCSSO's Let's Keep This Conversation Going

ECS's Collaborative Stakeholder Engagement

Data

- ☐ Load or migrate data into the Application Program Interface (API).
- ☐ Create a plan to accommodate newly released data during development.

Coordinating Project Partners
Data and Accountability Team

Design and Content

- ☐ Finalize all aspects of the design of the tool.
- ☐ Create launch messaging.
- ☐ Design and produce promotional collateral (one-pager, video tutorial, announcement, etc).

Coordinating Project Partners
Communications Staff
Policy Team

Functionality and Development

- ☐ Develop the front end design and underlying back end code needed to connect the data in the Application Program Interface (API) to what users see in the tool.
- ☐ Engage in rigorous quality assurance testing to ensure all data and functionality are working correctly in the tool across environments and website browsers.

Phase IV: Sustainability & Enhancement

Month 10 and Beyond

Feedback and Engagement

- ☐ Continuously promote the report card and use it as a tool to reinforce state priorities; use new data releases as an opportunity to drive users to the site.
- ☐ Thoughtfully review analytics to understand how the tool is being used; apply learning to enhancement of the tool.
- ☐ Continue to engage with stakeholders upon new releases to test enhancements.

Coordinating Project Partners
Communications Staff
Policy Team

Data

- ☐ Create a calendar of projected future data for implementation in the tool.
- ☐ Enhance the Application Program Interface (API) to accommodate new data indicators.
- ☐ Update existing data.

Coordinating Project Partners
Data and Accountability Team

Design and Content

- ☐ Enhance how data is prioritized, displayed, and explained based upon user feedback.
- ☐ Create mock ups for new data indicators and changes to data visualizations required to accommodate additional years of data.

Coordinating Project Partners
Communications Staff
Policy Team
Data and Accountability Team

Resources
ExcelinEd's My School Information Design Challenge findings

DQC's Opportunity to Make Data Work for Students in the Every Student Succeeds Act.

Functionality and Development

- ☐ Develop new data displays and add or update supporting content.
- ☐ Execute ongoing hosting and maintenance of the tool, such as updating the Content Management System (CMS).
- ☐ Train staff on use of the Content Management System (CMS) and data workflow.
- ☐ Create an annual sustainability plan for future costs to keep the tool live and up to date.

Coordinating Project Partners
Policy Team

Resources
CCSSO's Memo on State Report Card Requirements

ExcelinEd's Know Your School Project

Glossary

Data, design and development terms commonly used in online report card projects.

Application Program Interface (API): An API is a set of instructions for accessing data in a database. APIs provide standardized "building blocks" of data that can be used to build many different types of websites. The use of APIs also makes combining multiple data points easier, exponentially increasing the value of those data sets. For example, Google Maps data is connected to numerous apps and websites via APIs that allow those apps and websites to combine their data with the Google Maps data.

Front End Design: Think of a website or web tool as having two sides. The front end design is what a user or visitor sees. A front end designer makes deliberate decisions, informed by user experience (UX) best practices. These best practices inform where on the page information is displayed, how users navigate from one part of the web page or tool to another, and how information is prioritized.

Back End Code: Think of a website or web tool as having two sides. The back end code is the engine of an online tool or website. This code does all the unseen work of accessing the API, inserting the data into a page and showing that page to the user on the front end.

Beta Tool: A beta tool is like a first draft. Once front end design and back end code are complete, developers test a beta version of a website or tool. The website is not complete, and bugs are to be expected, but the point of a beta is to ensure that the user experience aligns to user expectations. Developing and testing a beta tool is a development best practice.

Content Management System (CMS): A CMS provides a human-friendly way to manage the content that goes into a website, such as text, photos, video, etc. By creating a system that can manage this content, a CMS enables non-developers to update, delete and create new website pages and easily add content throughout the site.

Data Catalog: The written documentation and inventory of the actual data points available to power an API, and how developers can access them, is called a data catalog. A quality data catalog includes business rules that define where data comes from, parameters regarding its content, and how it is computed.

Business Rules: The business rules are the guidelines that describe proper use of data, including when certain data should and shouldn't be used, how data points interact and when data is considered out of date.

Data Repository: A data repository is a collection of multiple, but related databases accessed by an API used to power a website.

Sitemap: A sitemap is a visual flow chart showing the structure of how information will be organized on a website. A sitemap allows developers and designers to work from a common understanding of which pages link from a main page, which pages link from a subpage, and so on.

Wireframe: A wireframe is a visual representation of how a single web page type will be organized. For most websites, three to five wireframes are developed for various page types, such as the homepage, a news page or other interior page. Wireframes are turned into templates by the front end designers, and used repeatedly throughout the site.

ESSA PUBLIC REPORTING REQUIREMENTS

Section 111(h)(1)(C) of the Every Student Succeeds Act (ESSA) requires that every state "prepare and disseminate widely to the public" an annual report card. It directs states to ensure the report card is concise, presented in an understandable and user-friendly format, developed along with parents and presented "to the extent practicable" in a language parents understand. The law prescribes a number of "minimum" requirements for data and descriptions that should be included in the state report card. Note: data elements that include the parentheses (cross-tabulation) must be provided in such a way as to allow cross-tabulation at the state level by race/ethnicity, gender, English learner and not English learner, and students with and without disabilities.

Descriptions

- The state's accountability system, including
    - Minimum "n size" for student subgroups
    - Long-term goals and interim measures of progress for all students and each student group
    - Annual indicators
    - System for differentiating school performance, including the weights assigned to each indicator, the methodology for identifying a school as consistently underperforming for any group of students, and the methodology for identifying a school for comprehensive support and improvement
- Names and number of schools identified for comprehensive support and improvement and names and number of schools identified for targeted support and improvement
- Exit criteria for schools identified for comprehensive support and improvement, and for targeted support and improvement

Data Requirements

- Academic achievement of all students and each student group – including homeless, military dependent, and foster-care students – for each assessment and at each level of achievement (cross-tabulation)
- Performance on the "other academic indicator" for elementary and middle schools, and the four-year adjusted cohort high school graduation rate for all students, all student subgroups, and homeless and foster care students (cross-tabulation)
- Number and percentage of English learners attaining English language proficiency
- Performance on the "other indicator or indicators of school quality and student success" for all students and each student subgroup
- Progress toward meeting the state's long-term goals and interim measures of progress for all students and each student group

- Percentage of students assessed and not assessed, for all students and each student group (including racial and ethnic group, economically disadvantaged and not economically disadvantaged, students with and without disabilities, English learners, male and female, migrant students) (cross-tabulation)

- For the state and each LEA, the measures of school quality, climate, and safety required by the Office of Civil Rights Data Collection, number and percentage of students enrolled in preschool programs, the number and percentage of students enrolled in accelerated coursework to earn postsecondary credit and in dual- or concurrent enrollment programs

- Teacher qualifications, disaggregated by high-poverty and low-poverty schools, including the number and percentage of inexperienced teachers, principals, and other school leaders; teachers teaching with emergency or provisional credentials; and teachers teaching outside of the subject or field of certification

- Per-pupil expenditures of federal, state, and local funds for each LEA and school, including personnel and non-personnel expenditures

- Number and percentage of students with severe cognitive disabilities who take the alternate assessment, by grade and subject

- NAEP results for mathematics and reading for 4th and 8th for the state and as compared to the national averages

- Postsecondary enrollment cohort rate for each high school, where available, for enrollment in public postsecondary institutions in the state, private postsecondary institutions inside the state, or postsecondary institutions outside the state

QUESTIONS TO CONSIDER

Feedback and Engagement

1. Who should be involved?
2. At what points should they be involved?
3. How should they be involved?

Data and Content

1. What data and performance metrics will be reported?
2. How do we ensure data used in the report card are of the highest quality?
3. How do we provide assurance that data on the report card protect privacy?
4. What steps can we take to increase timeliness of data?
5. Are the measures defined clearly and consistently?
6. Are there opportunities to streamline reporting?

Design and Structure

1. Who uses the report card? Why and how are they using it?
2. How should information be prioritized?
3. How can information be communicated through text?
4. How can information be communicated through visualizations?
5. How can the design and content promote accessibility?
6. What functionality does the report card need to support its primary users?

Development and Sustainability

1. How will the state manage the development process?
2. How will the state plan for continuous improvement of the report card?

INTERNAL SEA COLLABORATION

Internal SEA

Executive office: As with any SEA initiative, the vision of the executive office or team should be reflected in the purpose of the state report card. Key considerations: Why is the report card important? What value does it bring to improvement efforts? How does it align with the overall vision of successful schools? By clearly articulating the answers to other teams within and outside the SEA, the communications team can help maintain alignment to the executive office's vision.

Data information office: The information office will be central to the report card effort. They will need to be consulted to ensure the business rules are complete, data flow is clear, sources of relevant data are identified, and the appropriate representatives are included in data transfer and reporting efforts.

Assessment: The assessment office is responsible for statewide summative assessment data that serve as the foundation for much of the state report card. This team will likely own the process for selecting, calculating, and communicating the assessment results. The assessment team will work closely with others in the SEA to ensure internal and external stakeholders understand the data, how it's applied to other initiatives, and how to best use assessment data.

Accountability: For those SEAs that have accountability and assessment teams in the same office, there should be a natural partnership between team members. In places where the offices are distinct, SEAs should foster a close interaction to promote policies and business rules that account for the nuances of the assessment.

Standards/instruction/curriculum: The standards/instruction/curriculum teams understand the techniques that are effective in instructional efforts when using assessment and accountability information. It is important to involve these teams early and often so they can help reflect the perspective of local agencies and schools and serve as an ally for the SEA when contacted by districts and schools. Furthermore, they can help develop resources to facilitate the use of report card data for selecting instructional improvement strategies at the school and district levels.

School improvement/federal programs: These teams will serve a vital role in the ESSA accountability system. Because they help clarify the system of supports and interventions for local agencies and schools, they will need to have a thorough understanding of the data used for accountability determinations and how parents and other vital stakeholders can use the data.

SAMPLE PARENT FOCUS GROUP PROTOCOL

This is a sample. If it is helpful, we encourage you to adapt it to reflect your state's context and needs.

Context for Parents: *Before you begin to engage parents in a conversation, be sure to set the context for why you are asking questions and how you plan to use their feedback.*

Introduction: Every year, our state generates school-level report cards to illustrate performance. Our state is committed to sharing information with parents in a timely and easy to use manner. We are interested in your feedback on how to improve our state's report card.

In addition to our state's commitment, in late 2015, a new education law was passed by Congress known as the Every Student Succeeds Act or ESSA. This law replaces No Child Left Behind and gives states more control and power over their school systems. The goal of ESSA is to make sure that every student in the state has the opportunity to receive a high-quality education. It calls for much of the same work that schools are already doing, such as holding all students to high standards and using quality tests to better understand where students need to improve. ESSA also requires that states publicly share how every school and district in the state performs on an annual report card.

Opening question: In the month of X, our state releases these report cards. Do you remember receiving this report card or information about it?

IF NO:

- Do you remember ever receiving information about the report card?
- What do you know – or have you heard – about the report card?

IF YES:

- How did you receive the reports? When did you receive them?
- Were you given any information about how to read or use the report cards? If so, was this information useful?
- What was the first thing you did once you read the report card?
- What did you look for? Were you able to find it?
- Did reading the report card prompt you to think of additional questions? Did you know who to speak with to get those questions answered? If yes, did you reach out to anyone with those questions?
- Was there any information not included in the report card that you wish had been included?
- After you first read the report card, did you find yourself coming back to it at a later time? If so, for what purpose?

Distribute a copy of the report card to each parent.

Framing: Please spend the next 7 minutes reviewing the report card individually. We will then have a group discussion.

- What are three things that stood out to you?
- What about the report card did you find most appealing? Why?
- What about the report card did you find the most confusing? Why?
- Is the report card missing any information?
- Is there any irrelevant information displayed?
- Does the order of the information help or does it make it more challenging to read the report card?
- Do the charts/graphics help you understand the data or do they make it more challenging to read the report card?

Closing Discussion:

- Is there any other kind of information that you would want to see on the report card that we have not yet discussed?
- How would you like to receive the report card? (i.e., direct mail, e-mail, the backpack channel, in-person during parent/teacher conference)
- Would you rather see a collection of different kinds of data on your child's school? Or an overall rating, like a number or letter grade, so that you could easily rank schools across the state? Or a combination of the two?
- How might our state better use our report card to call attention to places that are making tremendous improvement and/or excelling? How might our state use the report card to call attention to critical equity gaps?

Closing Reminder: Before you adjourn, be sure to thank participants and remind them how you plan to use their feedback.

GUIDELINES FOR EFFECTIVELY ENGAGING PARENTS IN FEEDBACK SESSIONS

The Every Student Succeeds Act (ESSA) presents a unique opportunity for state education agencies (SEAs) to meaningfully engage a variety of stakeholders in the development of their state and school-based report cards. Parents are one stakeholder group in particular that SEAs have traditionally faced a challenged in reaching and connecting with in effective and meaningful ways. One of the most common and effective ways of obtaining parent input is through informal feedback sessions. In doing so, there are important guidelines to remember to make the most of parent feedback and to foster sustained, trusting relationships.

The following recommendations build on the Parent Engagement Guidelines for SEAs and Discussion Framework that CCSSO developed with the National PTA and Learning Heroes in November 2016 to support SEAs in better engaging parents as stakeholders in the development of state ESSA plans. These recommendations are based on qualitative research conducted across twenty states and multiple national surveys. It identifies effective strategies for in-person feedback sessions and is designed to help states make the most of these efforts. For additional parent-friendly resources, including FAQs, webinars, and supplemental materials, visit http://www.bealearninghero.org or https://www.pta.org/essastate.

✓ **Include a diverse group of parents.**

- You should ensure you have a diverse set of parents in your feedback session, as there are often different priorities, concerns and opinions among them. It's unrealistic to expect that you will reach a scientifically representative group of parents, but you should try your best to reach as many demographics as possible. You should consider the following characteristics:
    - Race and ethnicity
    - Education levels
    - Income levels
    - Language (you should hold sessions for Spanish speaking parents)
- Hold sessions in various areas of the state so you can reach urban, suburban and rural parents. Depending on the size and population of your state, you should try to have a minimum of three focus groups that cover different geographies.
- To have a meaningful, manageable discussion, try to keep your session between ten and thirty parents. As groups get larger, it's more difficult to get input from everyone present.

- For historically hard to reach populations (including Spanish speaking, low-income, etc.), consider partnering with community or religious organizations, or parent organizations such as the PTA, that have trusted and established relationships with these parents. They can be integral messengers to share information, encourage participation and co-lead sessions.

✓ **Make it convenient.**

- In the literal sense—meet parents where they are! Consider parents in various communities across the state and which locations would be the most convenient for feedback sessions. If a school is not centrally located, consider a location that is, and is also easily accessible via public transportation.

- Hold sessions at different times of day for parents who work different shifts or hold multiple jobs. In addition to the traditional evening meetings, offer a morning or early afternoon session. You may even want to ask parents first what time works best for them.

- Record or livestream in-person meetings and share the link via text and email for parents who are unable to attend.

- Think about amenities parents may need during sessions. Will they need childcare? If it is being held during a meal time, can you serve refreshments? Offering both of these tend to increase parent participation.

✓ **Meet parents where they are.**

- Gauge parents' understanding and perceptions of report cards in order to clarify any disparities or address knowledge gaps in language they understand. Information should be shared in a basic and factual manner. If it is not, it may be perceived as propaganda and therefore not trustworthy. Make every effort to be as specific as possible.

✓ **Leverage effective communication channels.**

- Parents' preferred communications channels are email and text. If districts, schools, or other community organizations have existing list serves, leverage them to share information about the opportunity to attend a feedback session.

- Text messaging can be a useful method in confirming, reminding, and follow up with participants.

- In addition to email and text, you may also consider posting information on a school/district or PTA website, using social media, and sending hard copies home through the mail and/or the backpack channel.

- Consider partnering with community-based organizations that would be willing to lead feedback sessions. In many states, these organizations have more established relationships with parents and may be viewed more positively than the state education agency.

✓ **Make the content relevant.**

- In an effort to create demand for the school level report cards, provide context and explain why they are important for parents—to give them information about how their child's school is performing and where improvement is needed.
- Talk about the report cards as a tool they can use to make more informed decisions and advocate for their child. Parents can use school level report cards much in the same manner they use student report cards: to measure progress and course-correct when necessary.
- Parents do not prioritize the same data policymakers and leaders do.
- They are more interested in information that directly impacts their child and they want multiple measures. To some level, they find every type of information useful. Ask questions to understand how parents prioritize measures, and you may want to consider providing a bank of measures for them to choose from.
- Ask questions designed to provide you with an evidence-base of the following:
    - Information parents want included on a school report card;
    - How they want to access the information;
    - How they will use the school report card; and
    - What language they do and do not understand.

✓ **Use evidence-based parent-friendly language.**

- Internal taxonomy should not be external messaging. Not only does policy language not resonate with parents, it is often misinterpreted, which can perpetuate misinformation.
- Be cautious in assuming parents have a common understanding of 'standard' policy language. Common terms such as growth, proficiency, achievement gap and culture and climate are interpreted differently by parents.
- Only use policy language and technical terms when absolutely necessary, and provide clear definitions to avoid misinterpretation.

✓ **Be transparent about the findings and thoughtful in how they are used.**

- Upon the conclusion of all stakeholder engagement efforts, analyze the feedback to uncover the overwhelming and consistent themes. Determine how it impacts the development and language of your report card. Ask the following questions:
    - What specific information do parents want to see on the report card? What is possible and realistic for us to include?
    - Were there clear recommendations on how parents want to access the report card?
    - What feedback did we receive that we cannot realistically implement?

- What language resonates with parents?
- What is parents' current level of knowledge about report cards and accountability? What supplemental information will we need to provide?

- Summarize and publicly share what you've learned and what decisions were made as a result of the learnings. Participants will need to see how their feedback was used in order to feel valued. If there was no clear agreement on a topic or question during discussion, be honest and discuss how a final decision was reached. Be explicit that the work is collaborative and not consensus-based, and therefore not *all* feedback could be implemented, but also be sure to share rationale for why feedback may not have been used.

✓ **View stakeholders as consumers and partners.**

- Do not think of this engagement as an isolated event, but as an opportunity to build sustainable relationships with parents, which can create more positive perceptions about the state's education agency and a more vested interest in the changes taking place.
- Continue to listen to parents. Identify additional opportunities for parent and family engagement to demonstrate that you value their input.

RESOURCES

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