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.

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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.

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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).

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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.

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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.

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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.

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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.

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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.