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The Center on Standards and Assessment Implementation
Getting Started

Step 1: Collect your assessment data

The Assessment System Visualizer works on your data! So first, collect the information about each assessment in your state, district, school, or classroom assessment system. See the Assessment Inventory Resource for guidance collecting and organizing assessment information. This inventory document corresponds to the Visualizer.

Step 2: Create an account

Using the Visualizer requires creating an account.

1) Go to https://csai-visualizer.wested.org.
2) Under Create Account, enter your name, email, and a password.
3) Click Create Account.

4) You will land on the My Assessments page.

Notes:

- Next time you come back, Sign in with your email and password.
- Click Forgot Password as needed, and enter the email address you signed up with, to get help resetting your password.
Step 3: Enter your assessments

1. Select My Assessments.

2. Name your Assessment System. All the assessments you enter will be saved as part of a single assessment system. Select the pencil icon next to Assessment System to edit the default name to one that makes sense for your use.

3. Click Save.

4. To add each assessment within your assessment system, select + Create New.

5. Complete the form with all the data that you have, or want to graph, and click Create.
Notes:

- Only the Name of Assessment is required to save the record. Fill in as many of the fields as you want, or have data for, keeping in mind that a graph cannot be created for fields that have no data points.
- Hover over the “?” icon for clarification on each field.
- Most of the fields are either single select or multi-select from an existing list of choices. Click or type in the field to view those choices.
- See Table of all assessment fields and options on page 8 for details on each field and how to interpret the available choices.
- This assessment will now be available for visualization options. To continue adding new assessments, select + Create New, complete the form and click Create, until you have entered all your assessments.
- To modify or delete an assessment at any time, select the pencil or X icon, respectively.
Step 4: Visualize your data

1) Select Visualizer.
2) Select variables from the pull-down menus to create graphs of 1, 2, 3, or 4 variables at a time.
3) Apply filters to graph specific subsets of the assessments in your whole assessment system.
4) Optional: review the Sample Questions provided to help you analyze and discover strengths, weaknesses, or patterns in your assessment system.

For more detailed instructions on using the visualizer features, see Selecting variables and applying filters in the visualizer on page 11.

Step 5: Download, print, save, or share

- **Download** all charts on a page together or individually, in PNG image or PDF formats.
- **Print** the whole page or an individual chart.
- **Save** a specific configuration of charts on the Visualizer, bookmarked to access again in your Saved Visualizations.
- **Share** the URL of a specific visualization page of your data with others so that you can collaborate, without requiring everyone to create an account.

See Download, print, save, or share on page 17 for detailed instructions on how to use each of these options.

Help

If you have any questions about the Assessment System Visualizer, please contact the Center on Standards and Assessment Implementation at csai@wested.org.
The following chart displays all the fields and the options in each field for entering an assessment.

### Table 1: Assessment data fields

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Select</th>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Assessment</td>
<td>Free text</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Type of Assessment</td>
<td>Multi</td>
<td>Curriculum Embedded Diagnostics, Diagnostic, End-of-Course Summative, End-of-Grade Summative, End-of-Unit, Formative, Interim or Benchmark Placement</td>
<td>Portfolio, Project, Screener, Summative – Annually Summative – Biannually Summative – Other Other</td>
</tr>
<tr>
<td>Content Area(s) or Subject(s) Tested</td>
<td>Multi</td>
<td>Algebra, Biology, Civics, Economics, English Language Arts, English Language Proficiency, Fluency, Foreign Language, Geography, Health, Integrated Math, Listening, Mathematics</td>
<td>Performance Arts, Physical Education, Reading, School Readiness, Science, Social Studies, Speaking, Technology, U.S. History, Visual Arts, World History, Writing, Other</td>
</tr>
<tr>
<td>Grade(s) Tested</td>
<td>Multi</td>
<td>Pre-kindergarten, Kindergarten, Grade 1, Grade 2, Grade 3, Grade 4, Grade 5</td>
<td>Grade 6, Grade 7, Grade 8, Grade 9, Grade 10, Grade 11, Grade 12</td>
</tr>
<tr>
<td>Purpose</td>
<td>Multi</td>
<td>Course Placement, Determine Eligibility for Services, Determine English Proficiency Level, Determine Student Needs, Graduation Requirement, Inform Instructional Decision-Making, Measure Student Achievement, National Benchmarking Program Admissions</td>
<td>Program Evaluation, Program Improvement Student-Level Accountability, Teacher-Level Accountability, School-Level Accountability, District-Level Accountability, State-Level Accountability, College Entrance Other</td>
</tr>
</tbody>
</table>

What type of assessment is being administered?

What subject(s) or content area(s) are assessed?

What grade(s) are assessed?

How will assessment results be used?
<table>
<thead>
<tr>
<th>Field Name</th>
<th>Select</th>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Population(s)</td>
<td>Multi</td>
<td>All Students English Learners, Students with Disabilities Other</td>
<td>Which group(s) of students will be assessed?</td>
</tr>
<tr>
<td>Delivery Mode(s)</td>
<td>Multi</td>
<td>Computer-Adaptive, Computer-Supported, Observation</td>
<td>In which format(s) is the assessment administered?</td>
</tr>
<tr>
<td>Required By</td>
<td>Single</td>
<td>Teacher, District, School</td>
<td>Who is requiring the administration of the assessment?</td>
</tr>
<tr>
<td>Item Type(s)</td>
<td>Multi</td>
<td>Constructed Response, Culminating Activity, Evidence Based Selected,</td>
<td>What type(s) of items are included on the assessment?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extended Response, Performance Tasks, Portfolio, Selected Response,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technology Enhanced Other</td>
<td></td>
</tr>
<tr>
<td>Standards Assessment is Aligned to</td>
<td>Free</td>
<td>N/A</td>
<td>Which set(s) of standards are being assessed?</td>
</tr>
<tr>
<td>Alignment to State/Local Initiatives</td>
<td>Single</td>
<td>Full Alignment to State/Local Initiatives, Partial Alignment to State/Local Initiatives</td>
<td>How well aligned is the assessment to current state and local initiatives?</td>
</tr>
<tr>
<td>Test Frequency</td>
<td>Single</td>
<td>Daily, Weekly, Bi-Weekly, Monthly, Bi-Monthly, Quarterly, Biannually</td>
<td>How often is the assessment administered?</td>
</tr>
<tr>
<td>Instructional Time</td>
<td>Single</td>
<td>Less than 1 day, 1 day, 2-3 days, 4-5 days</td>
<td>How much instructional time (in days) does the preparation, administration, and scoring of this assessment utilize?</td>
</tr>
<tr>
<td>Testing Window</td>
<td>Single</td>
<td>Less than 1 day, 1 day, 2-3 days, 4-5 days, 6-10 days, 11-15 days</td>
<td>How many days does the testing window span?</td>
</tr>
<tr>
<td>Number of Students Testing</td>
<td>Single</td>
<td>0-5, 6-10, 11-25, 26-50, 51-100, 101-250</td>
<td>How many students will be assessed?</td>
</tr>
<tr>
<td>Primary Audience for Results</td>
<td>Multi</td>
<td>District Administrators, Parents, Policymakers/ Deciders/ Elected</td>
<td>Which audience(s) are most concerned with the results of the assessment?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Officials, School Administrators</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>State-Level Administrators, Students, Teachers, Other</td>
<td></td>
</tr>
<tr>
<td>Fiscal Agent</td>
<td>Multi</td>
<td>Local, National, State</td>
<td>What is the source of funding for the assessment?</td>
</tr>
<tr>
<td>Field Name</td>
<td>Select</td>
<td>Options</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------</td>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Total Assessment Cost</td>
<td>Single</td>
<td>$0, $1-$100, $101-$250, $251-$500, $501-$1,000,$1,001-$5,000, $5,001-$10,000, $10,001-$25,000, $25,001-$50,000, $50,001-$100,000, $100,001-$250,000, $250,001-$500,000, &gt;$500,000</td>
<td>What was/is paid to the assessment vendor (if applicable) to utilize this assessment for this administration? If cost is unknown, leave blank.</td>
</tr>
<tr>
<td>Per Student Assessment Cost</td>
<td>Single</td>
<td>Select an individual dollar amount from $0 to &gt;$50</td>
<td>What is the total assessment cost per student (total cost of assessment divided by number of students testing)? If cost is unknown, leave blank.</td>
</tr>
</tbody>
</table>
Selecting variables and applying filters in the visualizer

After assessment data have been entered, you can use the visualizer to graph data and look for commonalities and differences across assessments.

Select **Visualizer** to access the graph variable options, with up to four selections possible. Depending on the type of question or analysis you are interested in, you can select either a single variable or a mix of variables.

To create graphs from entered assessment data, follow these steps:

1) Choose what variable to **see your assessments by**. This creates a bar graph for that variable based on your data.

2) If you would like to look at more data points, select a variable to **group by**. The page will update with additional data bars on your existing graph.

3) If you would like to look at other data points alongside your bar chart, select the option(s) for **added information**. This will add corresponding pie charts to your screen.
For example, if you are interested in displaying the number of assessments administered by content area and grade, the accompanying graphs will appear after selecting those variables.

Up to four variables can be selected at the same time. To remove a variable, click on the x next the variable name.
If you are interested in further understanding how your assessments are delineated by assessment type, you can enter an additional variable to create a pie chart.

The pie chart will display the total number of assessments that each variable applies to, but not the names of included assessments. Details on each assessment included in the visualization can be found in View the Data, located at the bottom of the page. The information presented in View the Data adjusts based on the variables selected.

<table>
<thead>
<tr>
<th>NAME</th>
<th>CONTENT AREA OR SUBJECT TESTED</th>
<th>GRADE TESTED</th>
<th>TYPE OF ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Assessments</td>
<td>English Language Arts</td>
<td>Grade 3</td>
<td>Diagnostic, Formative</td>
</tr>
<tr>
<td>NGSS</td>
<td>Mathematics, Science</td>
<td>Grade 1, Grade 2, Grade 3, Grade 4, Grade 5, Grade 6, Grade 7, Grade 8, Grade 9, Grade 10, Grade 11, Grade 12</td>
<td>Diagnostic, Formative, Screener</td>
</tr>
<tr>
<td>Texas EIA and ELP</td>
<td>English Language Arts, English Language Proficiency, Fluency, Listening, Reading, Speaking, Writing</td>
<td>Grade 2, Grade 3, Grade 4, Grade 5, Grade 11, Grade 12</td>
<td>Diagnostic, Formative, Interim or Benchmark, Placement, Screener</td>
</tr>
<tr>
<td>Texas MATH</td>
<td>Algebra, Integrated Math, Mathematics, Reading, Writing</td>
<td>Grade 3, Grade 4, Grade 5, Grade 6, Grade 7, Grade 8, Grade 9, Grade 10</td>
<td>Curriculum Embedded, Diagnostic, Formative, Interim or Benchmark, Placement, Screener</td>
</tr>
<tr>
<td>Texas for Science</td>
<td>Mathematics, Reading, School Readiness, Science, Writing</td>
<td>Grade 3, Grade 4, Grade 8</td>
<td></td>
</tr>
</tbody>
</table>
Filters

Filters can be used to narrow down the data being displayed. When you select and add a filter to your graph, your graph will only display the filtered data. Filter categories are located beneath the variable selection options.

I want to see my assessments by [Type of Assessment] grouped by [Select an Option].
With added information about [Select an Option] and [Select an Option].

<table>
<thead>
<tr>
<th>Filtered by</th>
<th>Content Area</th>
<th>Grade</th>
<th>Purpose</th>
<th>Required by</th>
<th>Type of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Algebra (0)</td>
<td>[ ] Foreign Language (0)</td>
<td>[ ] Physical Education (0)</td>
<td>[ ] Technology (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Biology (0)</td>
<td>[ ] Geography (0)</td>
<td>[ ] Reading (5)</td>
<td>[ ] U.S. History (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Civics (0)</td>
<td>[ ] Health (0)</td>
<td>[ ] School Readiness (0)</td>
<td>[ ] Visual Arts (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Economics (0)</td>
<td>[ ] Integrated Math (0)</td>
<td>[ ] Science (5)</td>
<td>[ ] World History (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] English Language Arts (6)</td>
<td>[ ] Listening (1)</td>
<td>[ ] Social Studies (2)</td>
<td>[ ] Writing (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] English Language Proficiency (0)</td>
<td>[ ] Mathematics (8)</td>
<td>[ ] Speaking (1)</td>
<td>[ ] Other (0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Fluency (0)</td>
<td>[ ] Performance Arts (0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Filters are different from the variable selection drop-downs. The drop-downs represent categories of variables (such as Content Area), while the filters contain individual items within those categories (such as Reading, Math, or Science).

Selecting a filter category will present options that can be applied to graphs. For example, selecting Content Area presents you with the different content areas that assessment data graph can be further filtered by. Applying filters to the visualization can be helpful for creating graphs that are more specific to your particular question.
For example, if you are interested in looking only at the reading assessments administered across different grades, select the Reading filter to show only data related to reading assessments.
What to do if you get a blank chart

A blank chart will appear if you select a variable that does not have any corresponding data. For example, if data for Per Student Assessment Cost has not been entered, when Per Student Assessment Cost is selected as a variable, there is no corresponding data to visualize. This results in a blank chart being displayed. For more information on why a blank chart has appeared, hover over the question mark next to Have a blank chart, located on the upper left side of the screen. This will present a dialog box with explanation for why the blank chart has appeared, and how you can prevent a blank chart from appearing again.
Download, print, save, or share visualizations

Download

All charts
1. While viewing charts on the visualizer page that you want to keep, select Download.
2. Choose PNG (image file, useful to put into a presentation) or PDF format.

A single chart
1. Select the “hamburger icon” next to an individual chart.
2. Choose whether to print the chart or download the chart in PNG or PDF format.

Note: Information contained in the hover box displayed when the user mouses over a section of the chart is not exported when printing or downloading. To export this information, display the hover box and take a screenshot.
Print

You can also use the Print button to print the full visualization or the hamburger icon to print the charts. A printing dialog box will pop up when the Print button is selected.

Save

Clicking on the Save button saves the generated chart(s) to the Assessment System Visualizer under the “Saved Visualization” page. Before the generated charts are correctly saved, you must assign a name for the saved charts. Adding notes to the saved charts is optional, but will be helpful at a glance when navigating through the list on the “Saved Visualizations” page if there are multiple charts saved.

A message in a green box will appear at the top of the page once the chart has been successfully saved.

Successfully saved your “Assessments by Grade(s) Tested” visualization
To refer to the list of saved visualizations, you can navigate to the “Saved Visualizations” tab and sort the list in ascending or descending order by date, clicking on the white arrow beside “UPDATED AT”. The default view is sorted by alphabetical order.

Notes entered for each saved visualization are displayed, allowing you to quickly glance through the list to find your desired chart. Clicking on the bar graph icon brings you back to the Visualizer page showing the chart that was saved, and clicking on the pencil icon allows you to edit the name and notes of the saved visualization.
Share

Clicking on the Share button generates an external link to the chart.

You can email or share the link with others who may be interested in looking at the chart(s). An account is not required to view, download, print, or share the chart. Below is an example of how the shared chart will look to a user without an account.
If a non-account holder is interested in saving the visualization online in the Assessment System Visualizer, he or she will be required to create an account, then return to the chart page and click Save.
Creating meaningful visualizations

Meaningful visualizations tell the story of what patterns, trends, or relationships exist within your data. They can help you identify areas that need attention or improvement, such as imbalances in the system, or grapple with the complexity of an entire assessment system as a whole.

Gather and enter as much information as possible about your assessment system, so you have the most data to explore. Adding more assessments and more details about them increases the number of questions you can answer about your assessment system.

Use the Sample Questions below to identify and understand what kinds of questions the Assessment System Visualizer can help you answer, and adapt those questions to your own situation.

Sample Questions

To support use of the Assessment System Visualizer, there are sample questions available to demonstrate how variables can be selected. Sample Questions can be selected from the toolbar. Assessment data must be entered before using the Sample Questions.

Sample Questions are arranged by topic, such as: time to administer, content area, type of assessment, delivery mode, purpose of assessment, and grade(s). They are provided to give ideas for how the tool can be used and to show what kind of graphs can be created.

A selected sample question presents charts based on the indicators included in the sample question. These charts will include uploaded assessment data in your assessment system.
Sample questions can also be accessed by clicking on the **Sample Questions** button in green next to **Not sure what to ask?** on the Visualizer page.
Changing your email or password

To change information associated with your account, you can edit your profile. To do so, navigate to the menu located in the tool’s upper right-hand corner, marked by Welcome (name). Upon clicking the triangle, a drop-down menu will appear with two options: Edit Profile and Sign out.

To change account information, select Edit Profile. This will allow you to change your first name, last name, email, or password. Once you make your changes, click Update to save. If you would like to cancel your user account, you can also find this option located at the bottom of the Edit Profile page.