http://bit.ly/WISEdata2021

Welcome to the WISExplore session of Data Validation for Snapshot Readiness.

We encourage you to open WISEdash for Districts and follow along during the session if you wish.

I am Mary Ann Hudziak and with me today is Lisa Arneson. We are both on the WISExplore team, myself with CESA 6 and Lisa is with CESA 3. We will be presenting this information together today.

We also want to thank the DPI staff who will be recording the session, the questions and the answers throughout the afternoon.
Please post any questions you have in the chat throughout this session so they can be captured. We have some time set aside for addressing your questions toward the end of the session.

Again, this session is being recorded.

WISExplore Team

Lisa Arneson (CESA 3)

Mary Ann Hudziak (CESA 6)

Wendy Savaske (DPI)

Judy Sargent (CESA 7)

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For more information contact your local CESA Data Specialist.

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As mentioned the two of us are part of team of five--the WISExplore Team (pictured here)--who develop training and resources for statewide use and are your go-to for anything WISE!

WISExplore is a CESA (Cooperative Educational Service Agency) Statewide Network (CSN) and DPI collaboration that began in 2012.
The purpose and vision for WISExplore includes
- **Training Data Specialists in all 12 CESAs**
- **Building Statewide Capacity with Data Use**
- **Supporting Data Navigation and Inquiry Processes** as well as
- **Facilitating Data Use to Inform Continuous Improvement**

Know that if you want more information and support on the topics we present today, you may contact your local CESA.
Each CESA has at least one Data Specialist who works with us directly and is well positioned to assist you.

Session Focus

- The Need for Data Quality

- Snapshot Dashboard Navigation

- Snapshot Dashboard for Data Validation

- Strategies to Improve Data Quality

Today will focus on how to use WISEdash for Districts to validate data accuracy used in accountability and other reporting.
This session elevates the need for effective data stewards and is designed to show the need for district data leadership teams.
Particular focus will include examples and guidance in navigating select Snapshot dashboards and functionality to review and prevent future data errors.
During this session, you will receive strategies to develop systems for improved data quality.

The Need for Data Quality

Data quality impacts:

- State and federal funding
- Accountability
- Public reporting
- Stakeholder perception
- Planning

There are several reasons why we must be vigilant about data quality--several are listed here.

Accountability usually warrants the most attention, but the others are just as important.

Data Quality & Accuracy

Data accuracy is key to meaningful data use.

Inaccuracies and low data quality lead to ...
- **data invalidation.**
- **misleading analysis.**
- **faulty conclusions.**
- **loss of confidence.**
- **abandoning its use.**
- **return on investment is destroyed.**

A word of caution to promote the value of data accuracy.

Data is valuable for all the reasons mentioned on the previous slide.

Because data is used for a variety of purposes, if the data is not accurate or not of high quality, the usefulness and value unravels quickly.

Elements of Data Quality

- **Duplication** (no duplicate records)
- **Conformity** (to standard data definitions)
- **Consistency** (data across the system are in sync)
- **Accuracy** (true representation)
- **Integrity** (valid & logical)
- **Timeliness** (availability)
- **Definition** (business rules)

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Several data quality elements are important to review.

We want to specifically look for:

Quality data that has *no duplications.*

Data that Conforms to a set of standard data definitions.

Data that is *Consistent, so* that data across the system reflects the same information and are in sync.

When data is *Accurate-- it* truly represents the "element" being described.

Quality data has *Integrity* -- meaning that data across all relationships are valid and the connections are logical.

Timeliness -- ensures that the data is timely, available when it is expected and needed.

Finally, Quality data meets the *Definition* and business rules around each component.

It Takes Teamwork

To best ensure data quality, collaborative team practices should be in place at both district and school levels.

Team Members may include:

- **administrators**
- **data entry staff**
- **program leaders**
- **technology staff**

What roles do teachers play with data quality?

Teams …

★ meet at regular and critical times

★ collaborate to establish data protocols

★ work together to continually improve the system that supports data quality

Do we have data quality teams? 7

Throughout our session -- you will hear about the importance of every educator taking on responsibility for data quality -- and about the importance of a data quality team.

A data quality team includes a variety of staff roles.
This team meets regularly and at critical times throughout the year.
The team adheres to collaboratively established data protocols and work together to continually improve the system that supports data quality.

Use the emotions feature of Teams to share if your district has data quality teams.
(pause)

Summary of How WISEdata & WISEdash Can Help You Prepare for a Snapshot		
Action	**WISEdata**	**WISEdash**
Frequent process that requires regular attention to maintain accurate and current data.	✔	X
Used for reviewing data that will be used for reporting and for improvement planning	X	✔
Review and Address L1 and L2 Errors	✔	X
Review data submitted	✔	X
Compare current data to prior snapshot data	X	✔
Review trend data	X	✔
Identify individual students from Summary	✔	✔

Our Focus for today is how to use WISEdash effectively to prepare for a snapshot. You may be familiar with this chart, as it compares WISEdash and WISEdata. Notice which actions can be accomplished in each of these two different WISE portals.

WISEdata is where the data entry staff check to be sure the data is flowing and where general comparisons can be made between the Student Information System and the flowing data.
Some error flags are communicated here as well as a search and find feature for individual student data summary analysis.

WISEdash is where those that are poised to validate the data can go to review and compare this current data to previous snapshot data, trend data, and summary data. Data entry staff should have access to both portals, however they cannot be the only one(s) verifying the flowing data.

This chart illustrates the need for BOTH tools to be used to monitor data quality and accuracy. We will continue to emphasize that due to the amount and variety of data flowing into these tools, it takes more than one set of eyes to evaluate the accuracy and completeness of the data.

WISEdash Snapshot Dashboards

Using data snapshot tools within WISEdash for Districts to help study data for accuracy.

Now we're going to look further into WISEdash for Districts and how to use the Snapshot Dashboards.

Snapshots are data collections that are taken at specific points of time, becoming permanent for use in accountability and reporting.

The following demographics are captured for **all** students (public and non-public school students): Race/Ethnicity, Gender, Grade Level, Disability Status, Economically Disadvantaged Status, and to the extent applicable - Food Services Eligibility.

In addition, Migrant Status, English Learner status, Homelessness, and Parent in Military are required for public schools only.

The Snapshot Dashboards:

- Provide a static data set to examine
- They offer users tools to query data captured in a snapshot and compare that data to their district's current data, and they
- Assist districts to identify and correct data reporting deficiencies in preparation for a future snapshot event.

To locate the Snapshot dashboards, login into WISEdash for Districts.

Use the 9 dots icon in the upper left hand corner of the WISEdash Home page to open the main menu and reveal a list of (click) dashboards. Select snapshots from the dropdown.

(click) From the Snapshot menu, shown here in black, select the snapshot topic you are interested in exploring.

(click) For example, Third Friday in September or TFS Count Date. When the TFS dashboard opens you will notice that there is a green current view and a purple snapshot view.
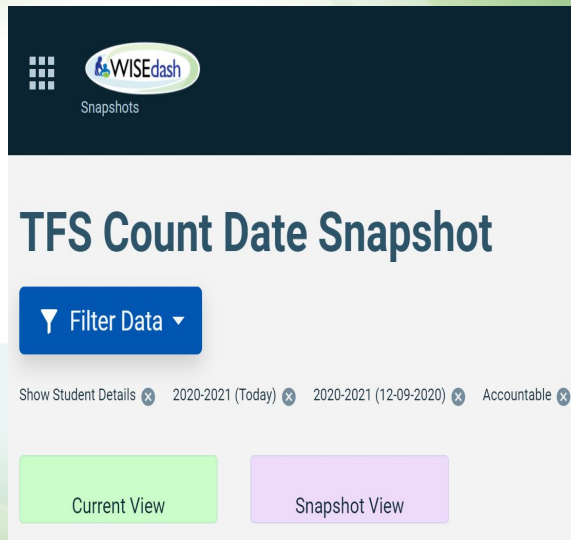
As of today there are eight different snapshot menu options. Each menu option displays different data elements collected through the snapshots taken throughout the year. These data elements are the ones that are currently being collected; however, more are added as reporting requirements change.

For example, most recently, course data and Perkins (or Career and Technical Education) data was included in the latest snapshot.

Current View vs Snapshot View

To examine data choose
- Current View (green) or
- Snapshot View (purple)

WISEdash
Snapshots

TFS Count Date Snapshot

Filter Data ▼

Show Student Details ⊗   2020-2021 (Today) ⊗   2020-2021 (12-09-2020) ⊗   Accountable ⊗

Current View   Snapshot View

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Current view (green background charts) means that the data shown is what WISEdash currently has on record from your district. In other words what does the data look like today for the data element and year selected?
If you are in the current year, this will be the data most recently pushed from your district into WISEdata.
If you have selected a different year of data, the current view displays the latest data for that year shared through the WISEdata portal. This is one reason it is so important to always look at the year indicated on the chart of data you are seeing.

Snapshot view (purple background charts) shows what the data looked like when the snapshot was taken and certified for the required data reporting element. The snapshot view (purple chart) will only display after the snapshot has been taken **and certified**. For example, if a snapshot is taken on December 8, the data will not be available in this snapshot view until it has been certified. There are quality checks that the data team at DPI conducts before activating this snapshot view.

Prior to a snapshot, use the current view to verify how data from your Student information system or SIS is flowing through WISEdata into WISEdash for Districts.
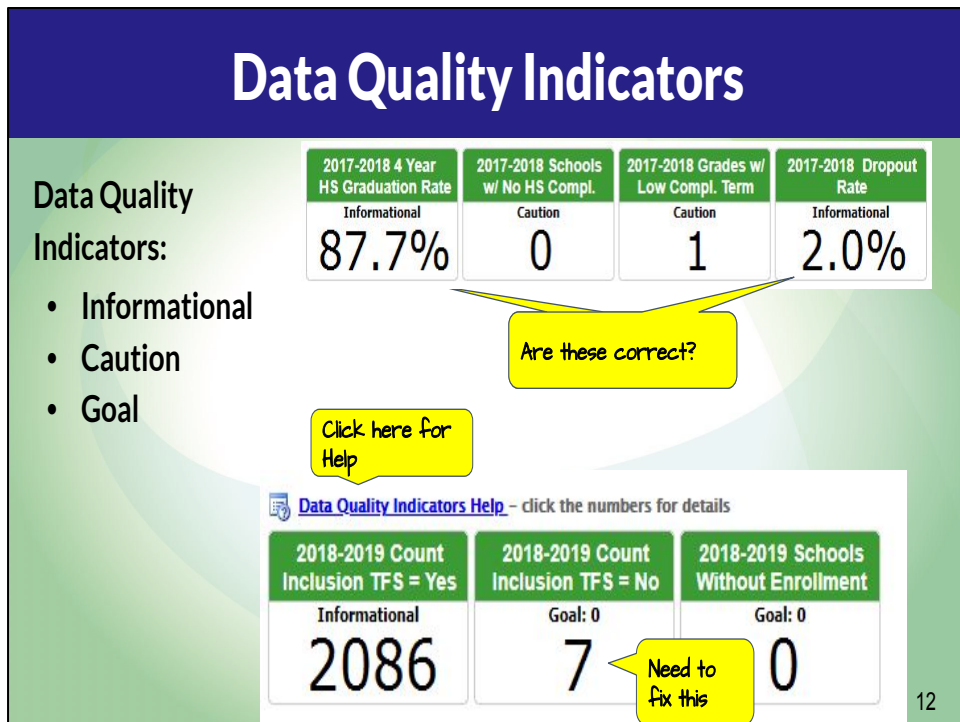
Data Quality Indicators provide information and flags for potential data errors.

There are three types of Data Quality Indicators.

- **Informational** indicators give you an easy way to see important counts or percentages for the topic at hand.
- **Caution** indicators show you data that may be in error or may be questionable but may also be valid. Review the data more closely to see if it is correct.
- **For the Goal indicator: The goal is to have a 0 displayed.** When a number other than 0 is displayed in the "Goal" box, it is likely that there is an error. You should review the data more closely to see if it is correct.

Here are two examples to illustrate what the user will see when examining data quality indicators. (click)

In the first example, the user will want to look at what is shown and verify for accuracy. (click)

Similarly, the second example identifies seven potential errors under Goal. Further investigation is warranted.

See the **Data Quality Indicators Help** document linked at the top of the chart for details.

Comparing Data in Snapshot Dashboards

Use the Snapshot dashboards is to compare current data to prior snapshot data.
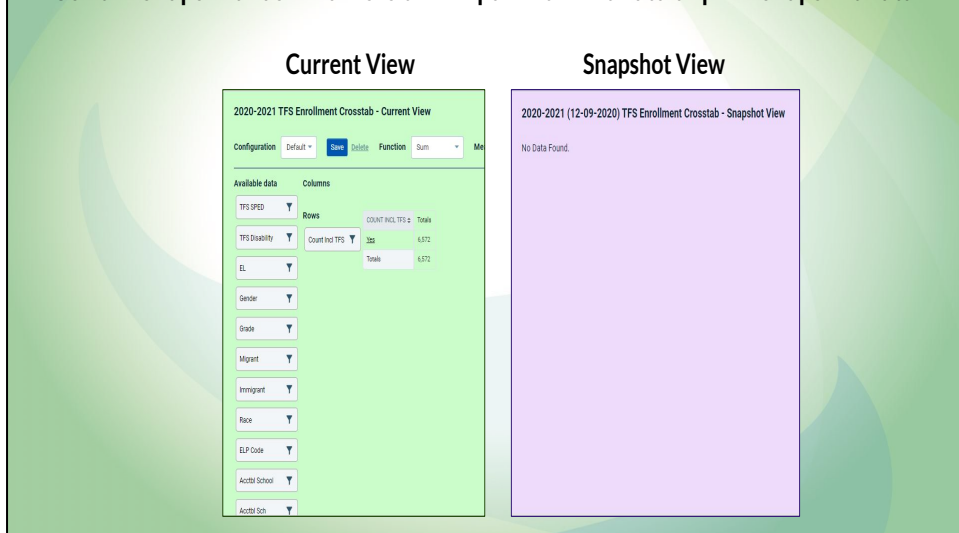
As you explore Snapshots, you'll encounter a tool called Dynamic Crosstabs. It allows you to drag and drop the different data points you wish to examine, thus building your own data table.
When working in a Snapshot dashboard, users must remember to scroll down. Charts appear vertically, beginning with current view. They are shown side-by-side here for our discussion only.

Once again, we want to emphasize the difference between the green and purple charts. The green is the most current view--it might be data as of today if no year filters are applied.
Remember that school information systems from districts push data to WISEdata at least once per week, and this is what is reflected in the green table. For this reason, it may change often as data is entered into the SIS in your district.

The purple view displays the data that was part of the snapshot for the year indicated on the table. This example indicates that no data is found, which means it **has not** been certified and posted yet. There is a time lag for the DPI to verify the snapshots, so you may find no data on one day, such as this example, and it may suddenly appear the next. Data

appears only when it is certified.

Remember to check the Welcome Screen for WISEdash announcements on new data postings.

Comparing Data in Snapshot Dashboards

Use filters to change the year displayed in each of the tables.

Filters allow users to determine specific data points, including year, as shown here. Sometimes, when comparing current views and snapshot views of the same year, differences in the data appear. The numbers don't add up. This happens frequently and is a common question.

Remember, that a snapshot is just that--a point in time where the data is captured. Any changes that may have occurred after that capture will still be reflected in that year's Current View. Note that the year at the top of the chart describes the data year being shown. On the purple chart there is also the date the snapshot was taken in parentheses.

If you know how to drag and drop with your mouse, you can master Dynamic Crosstabs!

Essentially, users choose the data fields for the rows and columns of their own data table and drag them into place.

Crosstabs are very forgiving because you can simply move the tab back if you want to change it.

In the example shown here, we examine the current view for a district's Third Friday Count. Grade is in the column and

Race and **third Friday in September special education status** are both in Rows. Our table, then, shows the number of students by race at each grade level for students with disabilities and without.

Having the flexibility to combine data elements helps to examine the data more carefully to identify potential errors or validate its accuracy.

Using Filters

Filtering can be done using the blue filter button on top or within the available data in the crosstab metric.

Using filters is another way to create tables. For example, users could use the blue "Filter Data" button at the top of the page to choose grade, or even choose specific grades, as shown here. The result would be the same--an individualized data table. Filters do allow users to narrow down their criteria (ie. choose specific grades to view) more than the drag and drop. There are some additional data options listed with the blue filter button at the top of the page that are not shown as draggable tabs. When using the blue Filter Data option at the top of the page, you are deciding the parameters for the data that will be available in the crosstab tables.

When applying filters in the available data options of the crosstab table, you will see an * to indicate the filter has been applied.

It is important to note that when you apply one or more filters at the top, you will need to scroll back to the top of the page to review the filters that have been applied.

Also be aware that the data fields available for each Snapshot dashboard are unique for that topic (For example: Perkins, Attendance and Oct. 1 Child Count will have different data fields)

Notice the three dots--also called vertical ellipsis--in the upper right corner of the crosstab table. This will open a pop-up window that provides three options for further details
- the chart tab displays the table you created,
- the data tab shows the data included in the chart, and
- the definitions tab explains each of the data fields available within that snapshot.

This is a very helpful reference to learn more about the data available.

Snapshot Dashboards - Crosstabs

The dynamic crosstab also allows you to review all of the students displayed in one list. Simply click on a link (an underlined number or word) and a new window will open with the student list. This can be very helpful when examining accuracy of student demographics and aligning the total numbers of your population with, say, an accountability report.

The list of demographics shown on the slide, are linked to more information about that data element.

You will notice under Econ Code a note about only if you have this access role. Economic data is highly sensitive. There should be limited people with access to the Economic Indicator Analyst role in WISEdash for Districts. Only those with that role can see data on students' socioeconomic status.

There are a number of reasons why users could/should use the Snapshot Dashboard to ensure data quality.
You can

- Compare prior year with current year data in preparation for a snapshot.

- Examine **all** data points that will be captured and review them all (that's why a team is helpful!)

- Periodically, examine the current view to determine if those numbers look accurate.

- Examine the data behind accountability reports to better understand a score or identification

Doing these things regularly will help eliminate data errors and calls to the help desk.

Self-Assessment of
Data Quality & Accuracy

Use this Self-Assessment tool to identify effective practices. The tool will help you assess your:

- District-wide Data Systems

- Data Entry & Validation

- Data Error Analysis

Self-Assessing Data Quality & Accuracy

DISTRICT-WIDE DATA SYSTEMS

Indicators of Effective District-Wide Data Systems *Rate each indicator on a scale of 1 to 5 based on current practices. (1 = minimal and 5 = exceptional)*		Rating
POLICIES	Policies and standards describe staff expectations with data; appropriate uses of technology and data; and define roles of staff in assuring data accuracy, confidentiality and use.	
TRAINING	Technology hardware and software, data access, and security requirements are in place and reinforced to protect PII; staff are trained to understand definitions of data fields, data collection timelines and how data will be used and ramifications of inaccurate data	
STAFF ROLES	User assigned access is differentiated based on the type of role (i.e. Administrator, Entry, Viewer, etc.). Users have logins and passwords. User roles are updated annually and a back up staff person is assigned for data entry. Data teams are assigned to monitor accuracy of data (such as administrators, program staff, persons in the know, tech support and entry clerks).	
PROCEDURES	Data coding and entry procedures are documented and all staff follow procedures. Data transfer is conducted in a secure environment where staff follow protocols to guard student data privacy.	
TECHNOLOGY & SECURITY	Leaders ensure that there are no shared logins and passwords and that passwords meet secure specifications. Data downloads are stored in secured folders. Screensavers are set to sleep or hibernate when the computer operator leaves, and access requires secure login. Data entry is conducted in a secure location/setting.	

DATA ENTRY & VALIDATION

Indicators of Effective Data Entry & Validation Practices	Rating

We have created a tool that might be helpful for improving the data quality and accuracy in your district.

This is a self-assessment tool designed to be used collaboratively as a district-wide data team.

Click the "Self-Assessment" link on this slide and make a copy to get started. We encourage you to open this tool and explore as we walk you through its contents.

Part 1: District-wide Data Systems

Considerations include:

- POLICIES
- TRAINING
- STAFF ROLES
- PROCEDURES
- TECHNOLOGY & SECURITY

DISTRICT-WIDE DATA SYSTEMS	
Indicators of Effective District-Wide Data Systems *Rate each indicator on a scale of 1 to 5 based on current practices. (1 = minimal and 5 = exceptional)*	Rating
POLICIES — Policies and standards describe staff expectations with data; appropriate uses of technology and data; and define roles of staff in assuring data accuracy, confidentiality and use.	
TRAINING — Technology hardware and software, data access, and security requirements are in place and reinforced to protect PII; staff are trained to understand definitions of data fields, data collection timelines and how data will be used and ramifications of inaccurate data.	
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When digging into the first part of the self-assessment, the focus is district-wide data systems.
This first section asks you to look at the policies and practices established at the district level to ensure data quality in a broad sense.

Things like policies, training, staff roles, procedures, and technology & security.
As you read each item, highlight parts of the item you may want to explore more. The tool encourages you to provide a rating for each item ranging from 1 to 5. *(1 = minimal and 5 = exceptional)*

Use the self-assessment to initiate discussion about current state and desired state for each item.
You will find an Action Plan section at the end of the self-assessment to record action steps for moving toward desired state.

Part 2: Data Entry & Validation

Considerations include:

- **RESPONSIBILITY & OVERSIGHT**
- **DATA ERROR PROTOCOLS**
- **TIME ALLOCATION**
- **TRAINING & ASSISTANCE**
- **DATA VALIDATION**

DATA ENTRY & VALIDATION		Rating
Indicators of Effective Data Entry & Validation Practices *Rate each indicator on a scale of 1 to 5 based on current practices. (1 = minimal and 5 = exceptional)*		
RESPONSIBILITY & OVERSIGHT	Staff understand data entry fields, definitions and requirements for their area of reporting. The principal bears responsibility for accurate data for their building. A data team is established and actively leads data accuracy processes. The administrator assigns, supervises and monitors staff assigned for data entry. The administrator demonstrates the importance of data accuracy and quality to all staff.	
DATA ENTRY PROTOCOLS	Data field definitions in the school information system (SIS) are clearly understood by data entry staff. Protocols and procedures are documented for all data entry staff to follow. There is consistency in data entry within a school and across the district.	
TIME ALLOCATION	The DPI calendar for data requirements is understood by staff conducting data entry. Data staff have scheduled time to enter data accurately in a timely manner. Time is calendared to conduct data checks prior to DPI-scheduled Snapshots.	
TRAINING & ASSISTANCE	Staff are provided access to vendor help desks and support to understand the connection between the SIS and WISEdata Portal. Staff refer to DPI knowledge base articles and websites to learn entry requirements and solutions to error messages. Staff participate in webinars with DPI for updates and Q & A. Staff utilize the DPI Google Communities message board for questions and networking. Staff access the CESA Help Desk in their region to find answers to WISEdata use questions. Non-data entry staff attend WISEdash for Districts training with a CESA Data Specialist to build their capacity in navigating and validating a variety of data elements. Internal technical support is assigned and utilized to ensure that all necessary staff have access to and training in the data sources they need.	
DATA VALIDATION	Staff understand the importance and processes for data validations. The connection between data entry and accountability reporting is clearly understood by data entry staff and those administrators responsible for accountability reporting. Clear lines of communication are established to find answers to questions about the status of students or responses to data questions. Those in charge of different data points collaboratively review the data prior to DPI Snapshots, to determine its correctness and spot any errors. Routine data team collaboration is scheduled to review current data elements.	

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The second part of the self-assessment helps you examine specific practices around data entry and validation.
What systems are in place to make this routine?
You'll consider things like roles and responsibilities, time allocations, training, and actual validation processes.

Part 3: Data Error Analysis

Considerations include:

- ERRORS
- WISEDASH
- CORRECTIONS
- IMPROVEMENT

DATA ERROR ANALYSIS

Indicators of Effective Data Error Analysis Practices *Rate each indicator on a scale of 1 to 5 based on current practices. (1 = minimal and 5 = exceptional)*		Rating
ERRORS	Staff know how to identify and correct data errors as they arise. Time is preserved for data analysis and error correction. All staff are familiar with those who hold key data roles: data entry know key educators knowledgeable in specific data elements, and educators know who is responsible for data entry.	
WISEDASH	Staff have access to the WISEdash for Districts secure site. Staff know how to navigate and search data in WISEdash. Staff know how to access and use the WISEdash Snapshot tools to verify data accuracy.	
CORRECTIONS	Staff correct data errors and enter any missing data in the SIS as a result of WISEdata reporting. WISEdash for Districts Snapshot Dashboard--Current Year is used to verify data errors have been corrected prior to a DPI Snapshot. Data errors identified after a DPI Snapshot may require a data inquiry/errata, which must be filed with the DPI through the WISEdash District Administrator Portal. Preliminary accountability reports are examined in a timely manner to utilize the inquiry window for data questions/corrections.	
IMPROVEMENT	Schedule time for staff to study patterns of data errors. Data errors are reviewed to determine patterns and problems with data entry. Protocols are revised to aid in prevention of data errors. Training is designed and provided for data error prevention and improvement.	

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Finally, part 3 emphasizes data error analysis.
What systems are in place in anticipation of finding and correcting data errors?
In this section, you'll consider how you identify errors, using WISEdash, making corrections, and improvement.

Again, this self-assessment is designed to bring teams together to think about data quality and accuracy practices that may or may not be in place. It provides enough description in the items for teams to be able to develop any missing practices. Use the action plan at the end to help you do this important work.

(Snapshot Calendar)

Snapshots occur twice a year, and here we can see what data is collected for each one. As of the development of this presentation, the snapshots dates for the current year are yet to be announced.

We've mentioned several times the importance of teamwork in the data validation process. The data elements listed here should certainly reinforce that! We cannot stress enough how having the right people at the table who can help validate the data they're familiar with is essential! For example, I wouldn't consider sending my Career Education data without having my CTE teachers review it first.

Now, we invite you to network with your colleagues by sharing the strategies used in your district to empower teams to validate data for snapshots.

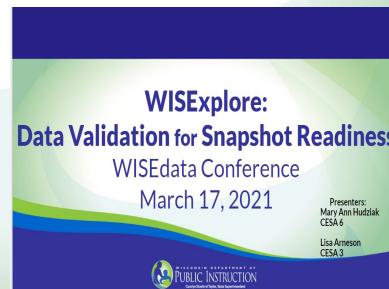Share your ideas in the chat--let's take just a minute to post and

review all the ideas shared. (pause, we may even want to pause or stop the recording at this point)

(We could also remind participants to post their questions in the chat as well as we will be moving to Q/A shortly.)

Wow! We've shared a lot of information with you today, and we encourage you to think about ways to use what you've learned back in your district.
We invite you to use the slides and self-assessment as communication tools with your leadership teams.

We have included a resources slide with some key documents and webpages at the end of this slide deck.

(stop the recording if it has not been stopped already)
We would like to provide a few minutes for your questions.
Please post your questions in the chat. I would ask our DPI friends to please share any questions that have been posed in the chat that we have not already answered.

(Q/A)

Thank you for participating with us today. Don't forget to reach out if you have any questions for the WISExplore team.
Our email is posted on this slide wisexplore@cesa7.org.

Resources

- DPI Resource: [Collaborate with School and Data Experts for High Quality Data Reporting](#)

- DPI Resource: [WISEdata and WISEdash Snapshot Reference Guide for WISEdata Contacts](#)

- **[Snapshot Preparation Guide](#)**

- [WISEdash 101 Webinars](#)

- WISExplore Resource: [Self-Assessing Data Quality](#)

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