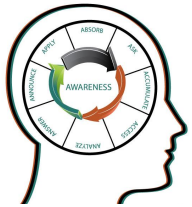

Develop Your Data Mindset

Module 4 - Balanced Assessment System and Assessment Calendar
Part 1 - Balanced Assessment System and Assessment Calendar

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Learning Goals

- Increase knowledge of considerations for narrowing the focus of a data use purpose
- Increase knowledge of data use contexts within a balanced assessment system

SLDS Data Use Standards

- K.1.A Question Formation: Knows which questions can be answered with data and how to identify the nature and extent of the data needed to answer questions
- K.1.D Types of Measures: Knows various types and purposes of ASSESSMENTS and other MEASURES
- K.1.E Data Metric: Knows that MEASURES can be broken down into data metrics, which are calculated for ANALYSIS and monitored for changes
- K.2.D Data Context: Knows the circumstances and purposes for which data are collected

Overview

At this point, you're aware of common data types, inquiry methods, the A+ Inquiry framework for putting data into action, and school initiatives that require data use.

In this module, we'll narrow our focus to student learning data by developing an assessment calendar that represents various uses of data for formative and summative purposes throughout a school year.

Teacher Thought

Now that I know how to ask clearer questions to get the data that I need, if I apply the A+ Inquiry as a framework for putting the data standards into action, then can I create an assessment calendar to make sure I’m balancing the types of data I’m analyzing. Would this help me make sure that I apply the right kinds of data at the right time periods during the year to personalize instruction for my students?

Overview

Ryan Kelly:

And I thought you'd be ready for a nap after your lunch, but it appears the sugar pick me up you had has really helped you to catch on. I guess we better get busy before the sugar high drops off! Pretty soon you will be heading back to your classrooms to do some planning for the year, but let's recap a bit before we roll up our sleeves to build your assessment calendar.

Yes! You heard me correctly. This is one of those PD sessions where you actually get to do something that will apply to your classroom! Cheers! Who is buying at happy hour?! Oh yes..Uhhmm…I'm getting ahead of myself.

Overview

Principal Mary Carter:

Up through this point, we've taken a broad look at data use in education. We discussed the role of data in assessment, evaluation, and research and addressed common data types in educational settings.

This led into our focus on data utilization standards and the application of A+ Inquiry as a framework for putting the standards into action. Then, we touched on the use of data for assessment and evaluation purposes relevant to K-12 initiatives, such as AdvancED, NDMTSS, and RTI. Now,our Data Coach, Ryan Kelly, is going to actually help us put what we've learned into practice for the school year.

Overview

Ryan Kelly:

Ms. Carter, that was definitely a mouthful, but now that you have some background knowledge we're going to narrow our focus on student learning data. This should really help as we focus efforts this school year on how you can improve student outcomes by examining and applying data.

We'll take a look at the elements of a balanced assessment system and an assessment calendar to identify when and how various types of assessment data can be utilized throughout a school year.

Overview

Ryan Kelly:

As we discussed earlier, there are several questions answerable with data that serve purposes aligned with AdvancED, RTI, and NDMTSS and are rooted in the fields of assessment and evaluation. Let's see if you remember what problems can be solved with data from each respective assessment or which type of question aligns with the correct assessment.

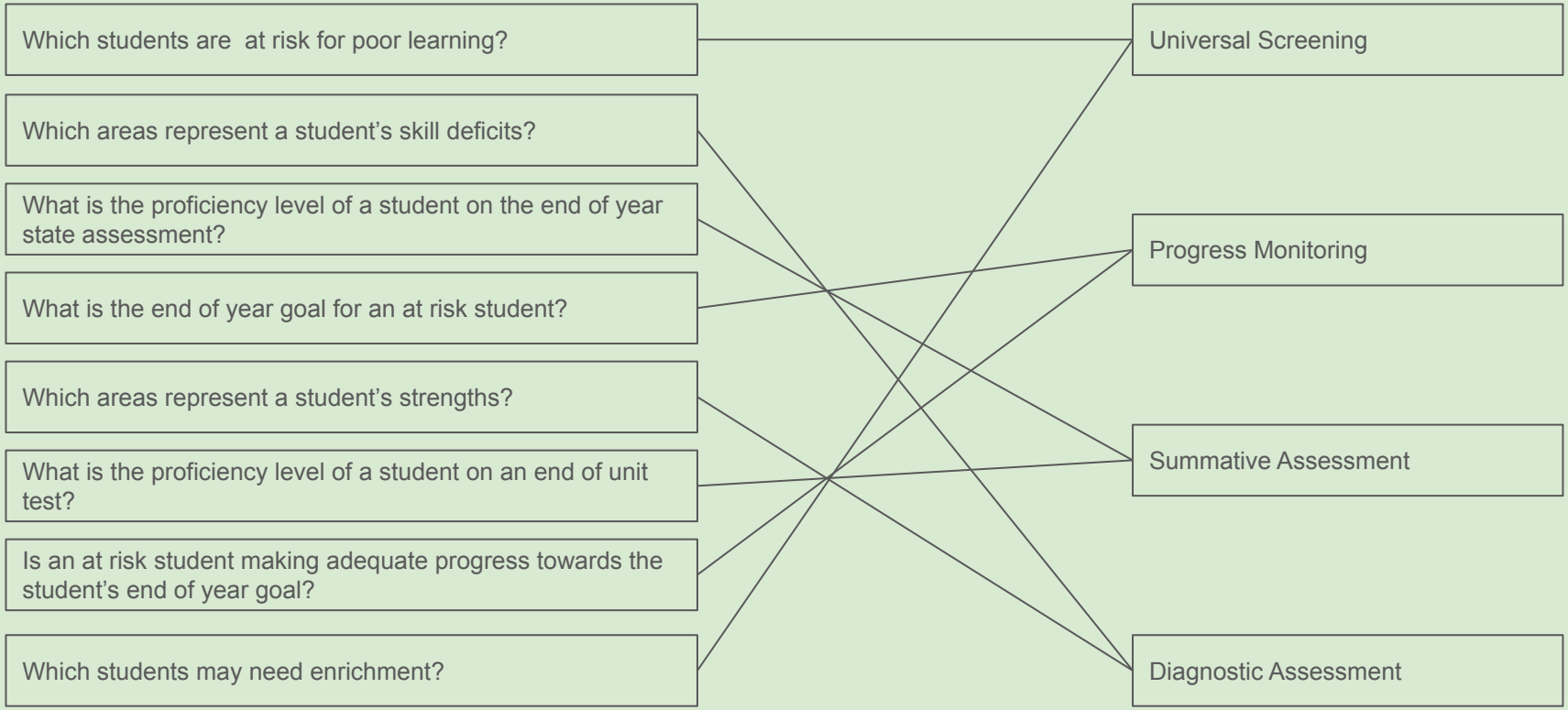
Activity

Match each question with the applicable purpose. Each purpose has two associated questions.

Which students are at risk for poor learning?	Universal Screening
Which areas represent a student's skill deficits?	
What is the proficiency level of a student on the end of year state assessment?	Progress Monitoring
What is the end of year goal for an at risk student?	
Which areas represent a student's strengths?	Summative Assessment
What is the proficiency level of a student on an end of unit test?	
Is an at risk student making adequate progress towards the student's end of year goal?	
Which students may need enrichment?	Diagnostic Assessment

Activity Answer

Match each question with the applicable purpose. Each purpose has two associated questions.



Balanced Assessment System

Ryan Kelly:

There are certain times during the school year that data should be collected and analyzed in order to personalize learning. In this module or PD session, we're going to create an assessment calendar to help ensure the necessary data are collected and analyzed at the appropriate times throughout the year. We'll be building the calendar around student learning data and different data use contexts you encounter as a teacher throughout the school year.

Coach Smith:

Ryan Kelly, you picked on me during the last session, so I have earned the right to share my opinion on this topic, right?

Balanced Assessment System

Ryan Kelly:

Sure, Coach Smith. This doesn't sound like it is going to be good, but I always like learning from others and you're right, you earned your right to share.

Coach Smith:

All we hear is data, data, data, but there's so much more for students to gain from school than just academic knowledge and skills. As a teacher, I teach the whole student. Students don't just increase their academic knowledge when they're in my class. I give them opportunities -- and in fact encourage them -- to fail in my classroom so we can focus on important lessons they can learn from their failures; this, no doubt, increases their creative capacities and their emotional strength to navigate adversities encountered within and outside the school setting. I have them work in groups so they learn social skills. Trust me. That is really important, even with 9th graders! There's so much more to learning than math and reading; I just don't get why all the focus on using data has to be on measuring only these things when we have an impact on students' lives that span far beyond these and other subject areas.

Activity

Indicate the order you would collect the following data points throughout a school year by numbering the items sequentially (1 = the first data point you would collect; 12 = the last data point you would collect)

- Total number of discipline incidents for the year -
- Exit slip form the end of a lesson from Math Unit 1 -
- Percentile on a winter interim assessment -
- Proficiency level on the spring annual state assessment -
- Grade on end of Math Unit 1 quiz -
- Fist of five check for understanding during a reading lesson for Unit 6 -
- Scale score on a winter interim assessment -
- Grade on end of Unit 6 reading test -
- Students' perceptions of the learning environment on a survey in May -
- Staff perceptions of the school climate on a survey in April -
- Attendance at the end of the first quarter -
- Demographic data at fall student enrollment (gender, birthday, race, ethnicity, etc.) -

Activity Answer

Indicate the order you would collect the following data points throughout a school year by numbering the items sequentially (1 = the first data point you would collect; 12 = the last data point you would collect)

- Total number of discipline incidents for the year - 12
- Exit slip form the end of a lesson from Math Unit 1 - 2
- Percentile on a winter interim assessment - 6
- Proficiency level on the spring annual state assessment - 9
- Grade on end of Math Unit 1 quiz - 3
- Fist of five check for understanding during a reading lesson for Unit 6 - 7
- Scale score on a winter interim assessment - 5
- Grade on end of Unit 6 reading test - 8
- Students' perceptions of the learning environment on a survey in May - 11
- Staff perceptions of the school climate on a survey in April - 10
- Attendance at the end of the first quarter - 4
- Demographic data at fall student enrollment (gender, birthday, race, ethnicity, etc.) - 1

Balanced Assessment System

Ryan Kelly:

You are spot on! Academic areas are the easiest to measure with accuracy, though, which is why we are focusing on them right now. That being said, there's plenty of data that are being collected and not being used – that is, we have plenty of data hoarding these days. Consider the exercise you just did with the clock. As a teacher, you couldn't fit all the data on the clock, just like you cannot use ALL the data being collected out there.

Our job as educators are far greater than standardized testing that measure academic growth. It's important for us to know how to use the data we already collect -- or know why it shouldn't be used -- before we start collecting more or different data.

Balanced Assessment System

Ryan Kelly:

As efforts continue to advance the research, assessment, and evaluation capacities -- that is, the data utilization capacities -- within our education systems, our schools will be better positioned to measure and support not only conventional academic proficiencies, such as math and reading skills, but also unconventional yet imperative proficiencies, such as abilities to remain present or mindful, resonate with sense of purpose, and operationalize inherent passions. Schools that measure and nourish both conventional and unconventional proficiencies will better prepare our youth as optimal contributors to their respective communities and beyond.

For now, we're keeping our focus on academic, partially because learning academic skills is a core purpose of education and also because extensive amounts of knowledge, effort, and money have been invested into the the development of valid and reliable academic measurement instruments so we have readily available tools, such as **standardized interim and summative assessments**, for measuring math and reading and other subjects. A test is **valid** if it measures what it is intended to measure. A test is **reliable** if it consistently yields the same results.

Balanced Assessment System

Coach Smith:

Hold on a sec...did you say standardized assessments? I'm not so sure what to think about those. We've been collecting standardized assessment data for years and, to be honest, it's really not helping us in any way. I don't think anyone even really looks at it.

So, I'm going to keep causing trouble, and I will let you have one for explaining why we are focused on core subject areas, but we've been collecting standardized assessment data for years and, to be honest, it's really not helping us in any way. I don't think anyone even really looks at it.

Ryan Kelly:

Is that supposed to be a change up, Coach? Or a curve ball? Again, you make a good point. Let's see if I can give you one back. We haven't been using standardized assessments to their full potential; however, they do serve a purpose. In some cases, we're just not sure why they're even supposed to be used.

Activity

Please mark whether the statement is true or false.

Standardized assessments can include the same questions, or a sample of questions, from the same test bank.

- True
- False

Activity Answer

Please mark whether the statement is true or false.

Standardized assessments can include the same questions, or a sample of questions, from the same test bank.

- True
  - The reason for this is because the bank of questions has already been tested
- False

Activity

Please mark whether the statement is true or false.

Standardized assessments are administered in a consistent way to all students.

- True
- False

Activity Answer

Please mark whether the statement is true or false.

Standardized assessments are administered in a consistent way to all students.

- True
  - The consistent offerings of the test allow us to know what normal expectations are and to establish patterns in the questions
- False

Activity

Please mark whether the statement is true or false.

New test items are always given on a separate standardized assessment and not on one being used to establish data.

- True
- False

Activity Answer

Please mark whether the statement is true or false.

New test items are always given on a separate standardized assessment and not on one being used to establish data.

- True
- False
  - New items that are being evaluated for use on future tests are typically folded into an established test. It is then tested for validity and reliability. Once it passes the test, it may be added to the test bank to be used for data on a later assessment.

Activity

Please mark whether the statement is true or false.

Standardized assessments are scored in a similar way.

- True
- False

Activity Answer

Please mark whether the statement is true or false.

Standardized assessments are scored in a similar way.

- True
  - This makes it possible to compare the relative performance of students.
- False

Activity

Please mark whether the statement is true or false.

A valid standardized assessment shows consistent scoring patterns.

- True
- False

Activity Answer

Please mark whether the statement is true or false.

A valid standardized assessment shows consistent scoring patterns.

- True
- False
  - A valid test measures what it is intended to measure

Activity

Please mark whether the statement is true or false.

The consistencies with which these types of standardized assessments are administered and scored allow student achievement to be compared across populations and across time.

- True
- False

Activity Answer

Please mark whether the statement is true or false.

The consistencies with which these types of standardized assessments are administered and scored allow student achievement to be compared across populations and across time.

- True
  - This is also how we establish that the standardized assessments are valid and reliable.
- False

Balanced Assessment System

Coach Smith:

So, I hate to keep pushing, but you haven't answered my question. If the standardized assessments are so great, why aren't we using them more?

Ryan Kelly:

Frustrations with standardized assessments may result from not knowing how to use them for their intended purposes. It's sort of like wearing shin guards for a basketball game. They serve their purpose in a soccer game much better. Using them incorrectly doesn't mean shin guards are not important in soccer as a tool; in fact, they are critical to any soccer player, but only when applied to the correct sport. Imagine how a toddler plays with a tape measure, but for a carpenter, the tape measure is a valuable tool. Without it, many errors could be made, no matter how good he is at his trade.

Balanced Assessment System

Coach Smith:
You had me at shin guard. Actually, that is a good point, but aren't we already measuring academic skills in our classrooms. I create assignments, quizzes, and tests that I use to measure academic skills, and other teachers do the same. Should we give this up for the latest standardized test initiative? Or maybe I just need to know when to put on shin guards and when to wear hightops.

Ryan Kelly:
Actually, you need to do all of the above. Assignments, quizzes, and tests in the classroom are important means of measuring academic achievement that should never be abandoned; but, don't be so quick to rule out the importance of standardized assessments. Do your assignments, quizzes, and tests measure academic achievement in the same way as other teachers? For example, a coach is judged based on a metric of wins. Every coach in the region faces the same opponents twice, usually, so the team's record is based on comparison with other teams. How can we apply that to the classroom for teaching? Would a student's achievement level on an assessment you created be the same as the student's achievement level on an assessment another teacher created?

Balanced Assessment System

Carolyn Ross:

Well, you don't get Coach of the Year by just practicing. You have to see how you stack up to others!

Ryan Kelly:

Exactly. You probably coach differently than other coaches, but how do you know what drills are the most effective? Performance. The comparison standardized testing allows for helps us improve as educators because we cannot really compare success based on regular classroom activities. They likely don't measure achievement in the same exact way and produce the exact same results, even if they're close.

Balanced Assessment System

Ryan Kelly:

Think of it this way. Imagine you're a personal trainer. There's an overweight man who walks into your health club and informs you that his doctor told him he needs to lose weight. Before you begin helping him, you need to know his current weight, but imagine that scales measuring weight in standardized units, such as in pounds or kilograms, haven't been invented yet. Eeek! Your job just became a bit difficult. You and all the other fitness instructors measure weight in units, but the units aren't the same.

Balanced Assessment System

Ryan Kelly:
Look at these two ways to measure weight. Which is more accurate?

Although the methods of using a scale to measure weight at each health club were similar, metrics, that is, the units of measurement were not standardized on the "Too Much" scale. If he had been measured in pounds with a modern scale, his weight would have been consistent. Just as it's important to measure weight with a valid and reliable scale, it's also important to measure academic achievement with valid and reliable scales.

Balanced Assessment System

Coach Smith:

Okay, I like the sports comparison a lot better than the overweight man! Are you trying to tell me something? Okay, seriously I'm getting close to joining your team. Although, my wife will not know what to say when I tell her I "enjoyed" a training on data! But, what about the students who have disabilities or are simply not good test takers? Are standardized assessments valid and reliable measures of their knowledge and skills? In my classroom I can make modifications for students who need them. How does one giant test personalize to meet their specific needs?

Balanced Assessment System

Ryan Kelly:

Coach Smith, for a middle-aged man, you still have a pretty good arm. You just keep throwing them at me, but again, you make a good point. This is where accommodations come into play. Just like in your classroom, you described making accommodations for students.

In some cases, students might perform below their actual level of competency due to a variety of reasons, such as a disability, illness, or test anxiety. Some students qualify for **test accommodations** to help ensure their assessment results accurately represent their knowledge and skills; accommodations may include the use of headphones, speech to text dictation, or closed captioning. Accommodations for qualifying students help ensure the assessment is an accurate measure. Think about it this way; let's say you are measuring the height of a student who slouches all the time, never standing up straight. If you measure a student when he is slouching his measured height will be less than his actual height; therefore, you provide extra support -- that is, accommodations -- to help him stand up straight so the measurement of his height is an accurate measure.

Balanced Assessment System

Coach Smith:

Okay, I can see the importance of using standardized assessment data. I really just want to make sure I'm using it in the right way and not trying to use it for reasons it's not intended to be used. With that in mind, can we get back to the calendar we were talking about earlier so I can have a better idea of when we're supposed to be collecting and analyzing standardized assessment data, as well as the other types of data that are required to answer the questions we need to answer.

Ryan Kelly:

Woot! One for me. Let's get back to that calendar and filling it in; it will be a great plan to make sure we are using data the way it is intended. This calendar will actually be part of your annual planning. It is getting close to time to go back to your rooms, so I'm excited to get you started before then. Remember when you are planning that you want a balanced assessment approach. This means you balance formative and summative data in student learning.

Balanced Assessment System

Coach Smith:

Hold on…there you go with that assessment terminology. Tell us what you mean by "balanced assessment."

Ryan Kelly:
A **balanced assessment system** includes the use of various student learning data elements for formative purposes before and during an instructional period. If assessment is balanced, then various student learning at elements are collected for summative purposes at the end of an instructional period.

An instructional period could represent a single instructional unit spanning a few weeks, a single semester, or an entire year. For example, think of an instructional unit.

You might conduct a pre-assessment before the unit to identify what students know relevant to the unit you will be teaching; you could use the assessment results formatively to guide instructional planning and delivery.

Balanced Assessment System

Ryan Kelly:

Think of an instructional period as being an instructional unit in a teacher's classroom that includes daily assignments, periodic quizzes, and a final test.

- **Daily assignments**: Daily assignments are given on an ongoing basis to measure whether students demonstrate knowledge relevant to current learning targets. The results are used formatively to guide instruction, which may include reteaching, grouping, or other differentiation strategies.
- **Quizzes**: Quizzes are administered periodically throughout the instructional unit to measure the extent to which students demonstrate knowledge relevant to a broader set of learning targets within the instructional unit. As with assignments, the results of quizzes are used formatively to guide instruction, which may include reteaching, grouping, or other differentiation strategies.
- **Test**: A test is administered one time at the end of the instructional unit to measure the extent to which students demonstrate knowledge relevant to all learning targets in the instructional unit. The results are used summatively to assign a grade.

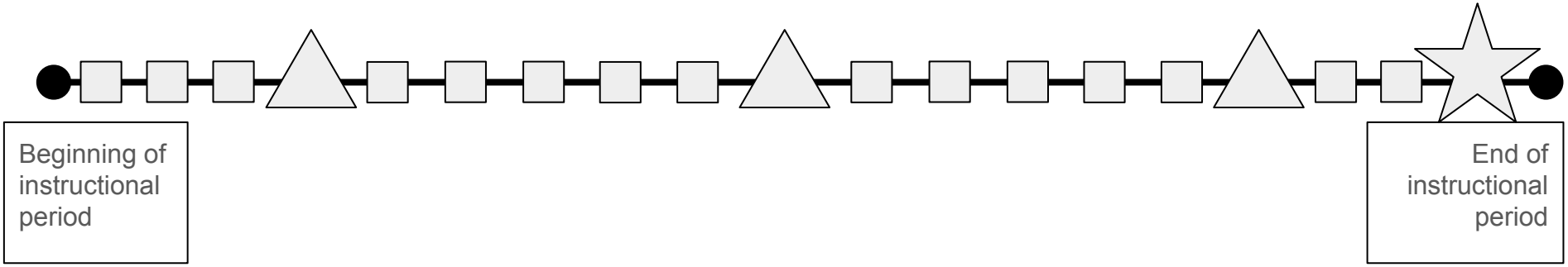
Balanced Assessment System

Ryan Kelly:

Tip: Keep in mind, if the results of the daily assignments and quizzes are used in the calculation of the final grade -- which is often the case -- they also serve a summative purpose, for they are summarizing learning. They serve a formative purpose or are “for” learning when they guide instruction during the instructional unit.

Balanced Assessment System

Example:
Instructional period = *Instructional unit in a teacher's classroom comprised of daily assignments, quizzes, and an end of unit test*



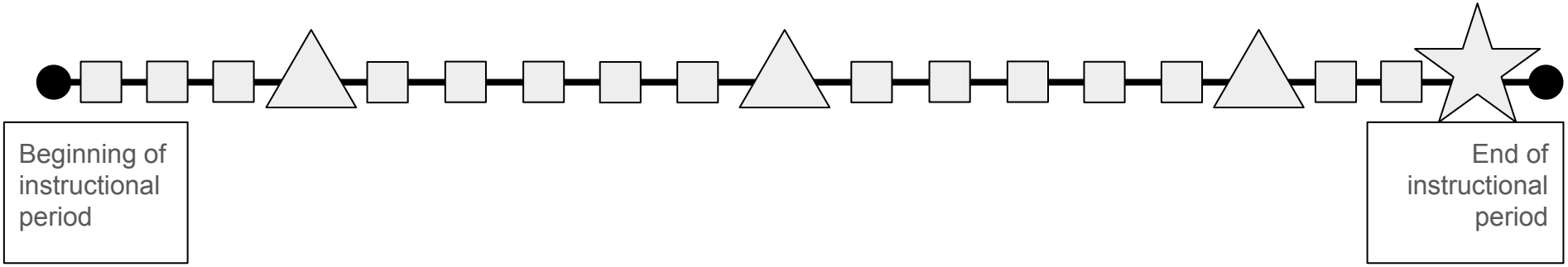
Ongoing: Daily assignments are given on an ongoing basis to measure whether students demonstrate knowledge relevant to current learning targets. The results are used formatively to guide instruction which may include reteaching, grouping, or other differentiation strategies.

Periodic: Quizzes are administered periodically throughout the instructional unit to measure the extent to which students demonstrate knowledge relevant to a broader set of learning targets within the instructional unit. As with assignments, the results of quizzes are used formatively to guide instruction, which may include reteaching, grouping, or other differentiation strategies.

One time: An end-of-unit test is administered one time at the end of the instructional unit to measure the extent to which students demonstrate knowledge relevant to all learning targets in the instructional unit. The results are used summatively to assign a grade.

Balanced Assessment System

Example:
Instructional period = *Entire year comprised of teacher classroom assessments, district interim assessments, and a state annual assessment*



Ongoing: Teacher classroom assessments (e.g., quizzes, tests, exit slips, observations, portfolios, journals, thumbs up / thumbs down)

Periodic: District interim assessments (e.g., NWEA MAP, Renaissance Star, aimsweb)

One time: State annual assessment (e.g., North Dakota State Assessment)

Activity

If an instructional period is an entire year, it would include teacher classroom assessments, district interim assessments, and a state annual assessment. Match each example with the correct category for a balanced approach to assessment.

- Daily assignments
- NWEA MAP
- aimsweb
- Quizzes
- Administered one time at the end of the year
- Tests
- Exit slips
- Observations
- Portfolios
- Administered 3 times per year (fall, winter, spring)
- Measure the extent to which students met standards relevant to the annual curriculum
- Journals
- Electronic surveys
- Thumbs up / thumbs down
- Formative data to guide instruction over the year
- Renaissance Star

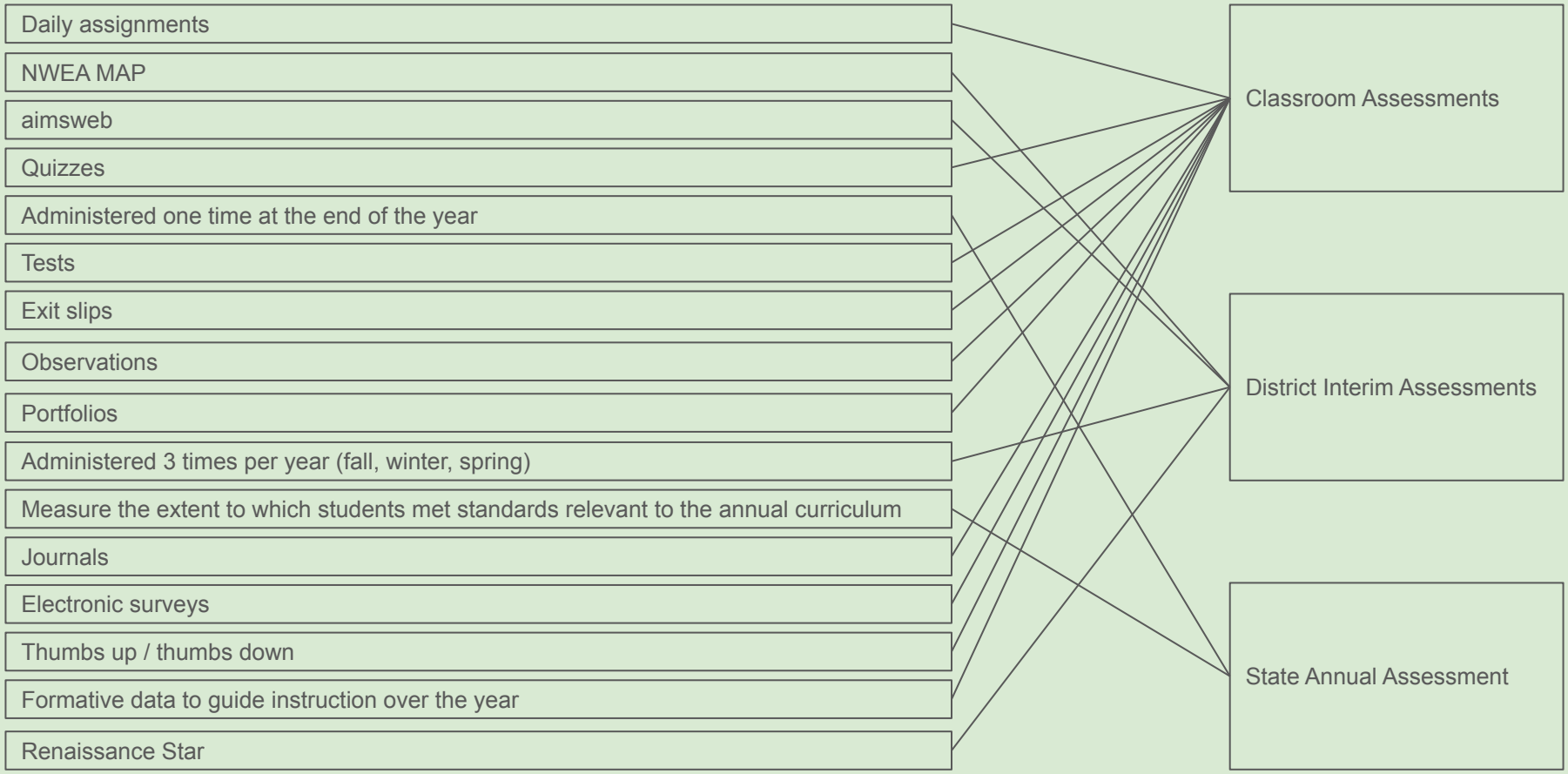
Classroom Assessments

District Interim Assessments

State Annual Assessment

Activity Answer

If an instructional period is an entire year, it would include teacher classroom assessments, district interim assessments, and a state annual assessment. Match each example with the correct category for a balanced approach to assessment.



Activity

Now that you know how to categorize each assessment strategy in a school year, let's determine what type of data they produce. Match each example with the correct category for a balanced approach to formative and summative strategies.

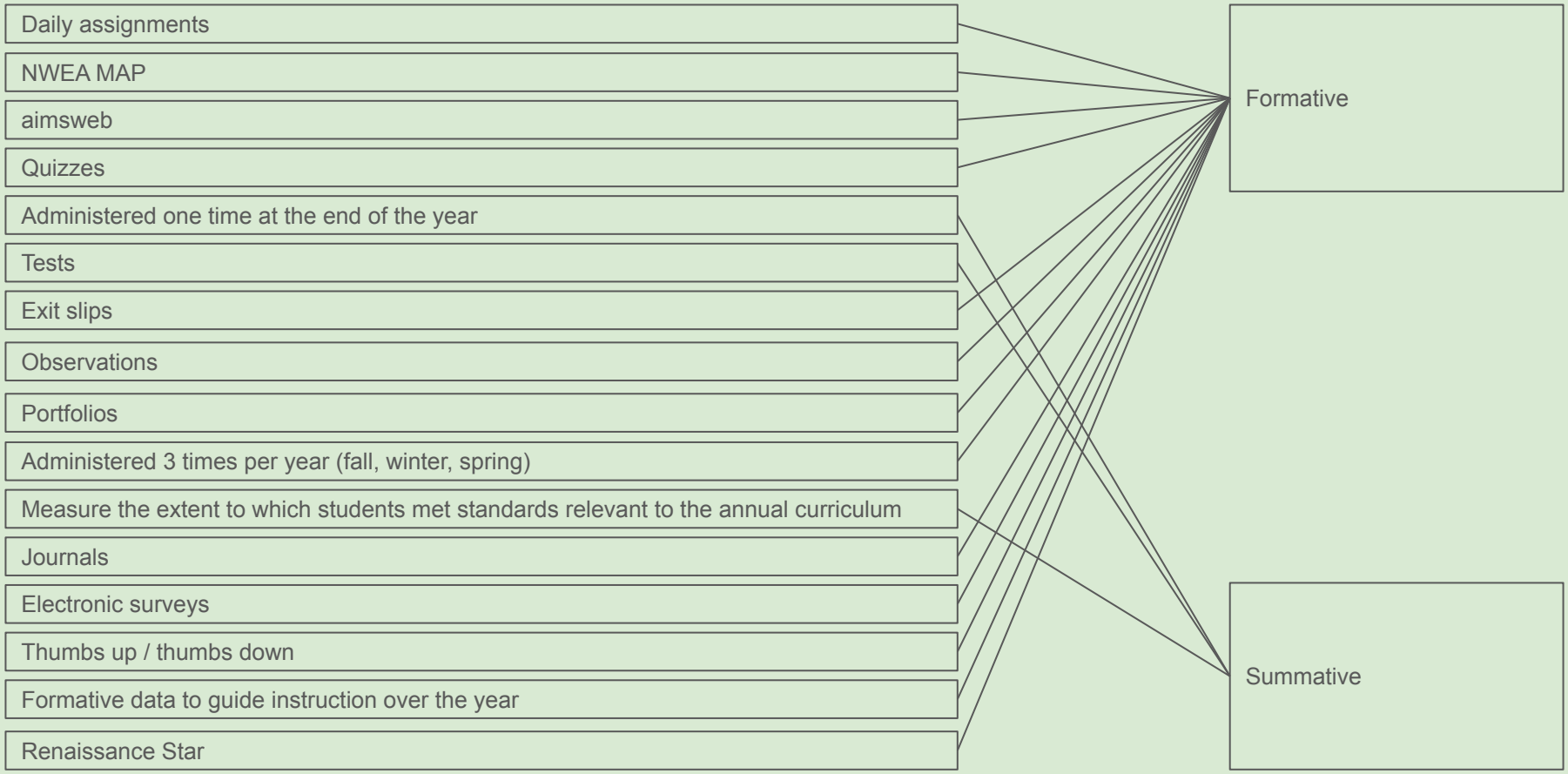
- Daily assignments
- NWEA MAP
- aimsweb
- Quizzes
- Administered one time at the end of the year
- Tests
- Exit slips
- Observations
- Portfolios
- Administered 3 times per year (fall, winter, spring)
- Measure the extent to which students met standards relevant to the annual curriculum
- Journals
- Electronic surveys
- Thumbs up / thumbs down
- Formative data to guide instruction over the year
- Renaissance Star

Formative

Summative

Activity Answer

Now that you know how to categorize each assessment strategy in a school year, let's determine what type of data they produce. Match each example with the correct category for a balanced approach to formative and summative strategies.



Balanced Assessment System

Ryan Kelly:

I see you looking at your watches! Ms. Carter wants me to make sure you have some time to work in your rooms this afternoon to build your assessment calendars, so I won't take up much more of your time. Don't shoot the messenger, but Ms. Carter asked that you submit your Assessment Calendars to her Friday. Remember, the calendar will specify:

1. Assessments that will be administered throughout the year.
2. Which students will be assessed, when the students will be assessed.
3. How the assessment results will be used.

Balanced Assessment System

Ryan Kelly:

As we work on personalizing learning through data this year, keep in mind that a balanced assessment system does not represent a complete picture of educational data use. A balanced assessment system, which focuses on student learning data and is a critical component of effective data use in education, only partially represents the overall scope of data use in educational settings. The overall scope, which synthesizes your learning thus far, can be illustrated by addressing 8 considerations of data use. Using the Scope of Educational Data Use lens, you will be able to walk through everything we have worked on today in order to personalize learning.

Balanced Assessment System

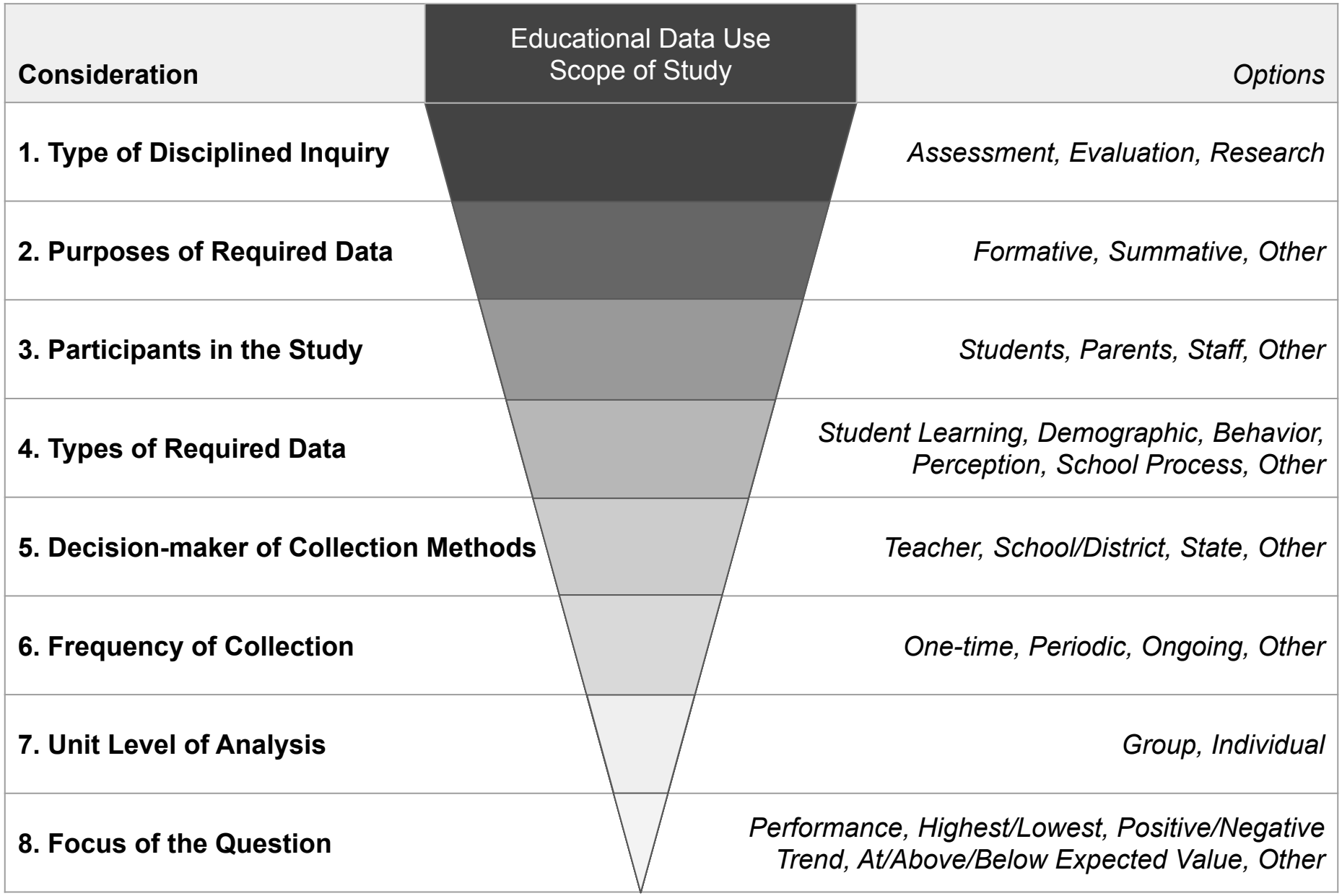
Scope of Educational Data Use

- Type(s) of disciplined inquiry
- Purpose(s) of required data
- Participants in the study
- Type(s) of required data
- Decision-maker of collection methods
- Frequency of collection
- Unit level of analysis
- Focus of the question(s)

Educational Data Use Scope of Study

This is the "**Educational Data Use Scope of Study**" framework. It includes 8 considerations. Focusing on these considerations will illuminate important details in various stages of the A+ Inquiry data utilization framework, such as which question(s) will be answered with data, how frequently and from whom certain types of data will be accumulated, the unit level at which data will be analyzed, and whether decisions or actions will be applied based on formative or summative findings. All of this information is necessary to populate a balanced assessment calendar.

Educational Data Use Scope of Study


Educational Data Use
Scope of Study
Consideration
Options
1. Type of Disciplined Inquiry
Assessment, Evaluation, Research
2. Purposes of Required Data
Formative, Summative, Other
3. Participants in the Study
Students, Parents, Staff, Other
4. Types of Required Data
Student Learning, Demographic, Behavior, Perception, School Process, Other
5. Decision-maker of Collection Methods
Teacher, School/District, State, Other
6. Frequency of Collection
One-time, Periodic, Ongoing, Other
7. Unit Level of Analysis
Group, Individual
8. Focus of the Question
Performance, Highest/Lowest, Positive/Negative Trend, At/Above/Below Expected Value, Other

Educational Data Use Scope of Study

Types of Disciplined Inquiry - 1 of 2

- The considerations do not necessarily need to be addressed in any specific order; however, to get things started, take a look at the first consideration: type(s) of disciplined inquiry. This consideration highlights three main types of data utilization processes: assessment, evaluation, and research. Most processes requiring data use in education will fit into one of these types of disciplined inquiry. For example, if you want to measure a student's level of learning against a defined set of standards or learning targets, you would go through an assessment process. If you want to determine whether the implementation of a new communication plan had a positive impact on staff culture, you would go through an evaluation process. If you want to figure out whether there is a relationship between behavior incidents and student perceptions of the school, you would conduct a research study.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Types of Disciplined Inquiry - 2 of 2

- Some purposes might address all three types. Take, for example, a district with 4 elementary schools performing below expected levels in the area of reading. Before purchasing a reading program for all elementary schools in the district, a district might want to determine whether a specific reading program has a positive impact on reading achievement. District administrators decide to pilot the program in two schools before making a long-term districtwide commitment to the program. The district's data coordinator and school leadership teams conduct a research study by assessing students to evaluate whether the reading growth of students in the two schools implementing the program is significantly greater than the reading growth of students in the two schools not implementing the program.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Purposes of Required data - 1 of 2

- The next consideration addresses the purposes of required data: formative, summative, and other. In most cases, educational data are used in assessment or evaluation processes for formative or summative purposes. In other words, data are often used by educators to guide formative or summative decisions and actions. Formative data are collected before and/or during a process. Data are used formatively when they inform the development of something. For example, a teacher might conduct a diagnostic assessment to illuminate student strengths and skill deficits. The teacher would use the results formatively to inform the development of instruction that would improve skill deficit areas and build upon strengths. Summative data are collected at the end of a process. For example, data are used summatively when they are collected at the end of a unit or a program to identify the extent to which learning targets or program objectives were met. A teacher could conduct a summative assessment at the end of a unit to measure whether students learned what they were supposed to learn.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Purposes of Required data - 2 of 2

- The results could be used to assign a grade and/or make a decision about continuing or modifying the methods of teaching the same unit to future students. An administrator could conduct a summative evaluation at the end of a school year to measure the extent to which a newly implemented program met its intended objectives and make a decision about continuing the program. Another way to think of formative and summative assessments is that formative assessments are assessments “for learning” and summative assessments are assessments “of learning.” To give this some context, think about a particular segment of learning; the segment could span a chapter, unit, or entire year. Assessments “for learning” measure student performance before or during a learning segment for the purpose of making instructional decisions based on performance. Assessments “of learning” measure student performance at the end of a learning segment for the purpose of making a judgment regarding the extent to which content was mastered.

Educational Data Use Scope of Study

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Participants in the Study - 1 of 1

- The next consideration focuses on the people represented by the data that will be analyzed. We refer to these people as the participants in the study: students, parents, staff, and other potential participants. Students represent students enrolled in the district at the time the data were collected. Parents represent parents of students who were enrolled in the district at the time the data were collected. Staff represent employees of the district during the time the data were collected. Employees may represent a variety of positions, including teachers, administrators, secretaries, counselors, instructional coaches, librarians, or custodians. Other participants might include school board members, community members, or alumni, among others.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Types of Required Data - 1 of 1

- The next consideration focuses on the types of data required for the study. Required data may include demographic, behavior, school process, perception, and/or student learning data. These are all common types of data collected in educational settings, which we addressed more thoroughly in earlier modules. There is an “other” data type in this ring because there may be a data type required that is not quite as common for use in studies requiring educational data. For example, let’s say you want to conduct a research study to identify whether a relationship exists between student access to technology at home and the frequency at which students use an online resource purchased by the school. It would be challenging to designate a data point representing access to technology at home or a data point representing the frequency at which an online resource is used as one of the five common data types. Addressing this ring gives you some common data types to consider, yet you are certainly free to use other data types if they are required for your study.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Decision-maker of Collection Methods - 1 of 2

- The next consideration focuses on the decision-maker of the data collection methods. Decisions about data collection methods could occur at the teacher level, school or district level, or state level. A teacher would make decisions about how classroom formative assessment data would be collected before, during, or at the end of a daily lesson. For example, a teacher might develop an exit slip that students must complete and submit prior to leaving class for the day. A school or district would make decisions about collection methods that should be implemented for common benchmark assessments administered to students throughout the school system during the fall, winter, and spring. For example, if a district is using a vendor-based benchmark assessment, such as NWEA's Measures of Academic Progress (MAP) or Renaissance STAR, the district would make a decision to implement data collection methods according to the vendor's assessment administration protocol.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Decision-maker of Collection Methods - 2 of 2

- A state education department would make a decision about collection methods regarding an annual assessment for all students in the state. If the state assessment is provided by a vendor, the state would make a decision for the assessment to be administered to all students according to vendor protocol.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Frequency of Data Collection - 1 of 2

- The next ring focuses on the frequency of data collection: one time, periodic, ongoing, or other. One-time data are collected once to measure whether something occurs at a single point in time, usually at the end of a process. Periodic data are collected more than once to measure the status or progress of something at specific stages during a process. Ongoing data are collected frequently to measure whether specific things occur at several points in time, usually daily throughout a process. For example, think of the scope of study as representing a process of teaching a single unit to students. A one-time test could occur at the end of the unit to measure whether students know what they are supposed to know at the end of the unit. Periodic quizzes could occur at specific stages of the unit to measure student learning at specific points in time throughout the unit. Ongoing classroom assessments could be conducted daily to measure whether students achieve each learning target between the quizzes and before the end of unit test.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Frequency of Data Collection - 2 of 2

- Note that the frequency designation depends on the the contextual timeframe of the study. In another example, think of the scope of study as representing a process of delivering the district's curriculum to students throughout a single year. A one-time test could occur as the annual state assessment at the end of the year. Periodic district wide interim assessments, such as NWEA MAP or Renaissance Star benchmark assessments, could be administered to measure student achievement status or progress in the fall, winter, and spring. You could also think of weekly progress monitoring as periodic assessments administered to students identified as being at risk or potentially at risk.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Unit Level of Analysis - 1 of 1

- The next consideration focuses on the unit level of analysis: group or individual. The unit level of analysis represents the level of the data that will be analyzed. For example, for some data use purposes, you need an individual student data values, such as the proficiency level of a single student on the state assessment. For other purposes, you need a value representing a group of students, such as the percentage of students within a classroom, school, or district achieving proficiency or above on the state assessment.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Focus of the Question - 1 of 2

- The next consideration addresses the focus of the question to be answered: performance level, highest / lowest levels of performance, positive / negative / neutral trends in performance, at / above / below expected level of performance, and other. The term, performance, can be operationalized in a multitude of ways, such as the proficiency level of an individual student, percentage of students achieving proficiency for a group of students, percentage of parents indicating favorable perceptions about school effectiveness, total number of problem behavior incidents representing all students, or number of professional development hours completed by teachers. In each case, you would first operationalize the performance level and then conduct an inquiry -- that is, a data use process -- to answer a question relevant to one of the focus areas in the center circle. For example, a teacher would want to answer a question relevant to the performance level of each student in the class so students could be appropriately grouped for differentiated instruction.

Educational Data Use Scope of Study

Educational Data Use Scope of Study

Focus of the Question - 1 of 2

- A data team would want to know if a student's percentile is above or below the the tier 1 cut score on a universal screening assessment so appropriate students could be targeted for progress monitoring and/or tier 2 or tier 3 interventions. A teacher would want to know if a student in an intervention is showing a positive, negative, or neutral trend in performance to determine whether the intervention is working for the student. A teacher would want to know which areas represent a student's highest and lowest levels of performance so the teacher could plan and deliver instruction that both improves the student's skill deficits and builds upon the student's strengths. The focus areas of these questions could be applied to many evaluation and assessment inquiries in educational settings. There is an "other" item in the "focus of the question(s)" circle because there may be data use processes that answer questions representing different focus areas, such as a research question guiding an inquiry to determine whether a relationship exists between two variables.

Educational Data Use Scope of Study

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Ryan Kelly:

Now you have your cheat sheet that allows you to see the considerations for data use by each lens or purpose. Use this guide to help you develop your assessment calendar, and don't forget they are due Friday. Have a great year! I am looking forward to working with each of you individually.

Educational Data Use Scope of Study

Teacher Thought

I can use the Educational Data Use Scope Framework to guide me, depending on my purpose, on what data to collect. Thank goodness I know how to ask a great question already! Each lens can help me focus on what to consider as I identify data. Combine this with my new knowledge of how to create a balanced assessment, and I will be able to finish my assessment calendar by Friday for sure! I'm really looking forward to using these skills to save time as I meet the needs of my diverse learners this year.

Indicate the extent to which you agree or disagree

	Strongly disagree	Disagree	Agree	Strongly Agree
This module part increased my knowledge of considerations for narrowing the focus of a data use purpose				
This module part increased my knowledge of data use contexts within a balanced assessment system				

Well Done

You have completed this module part. You can begin the next lesson when you are ready.