Develop Your Data Mindset

Module 8 - Progress Monitoring
Part 11 - Absorb, Ask, Accumulate & Access
(Cycle 5 - Evaluate Impact of Intervention)

By Nathan Anderson, Amy Ova, Wendy Oliver, and Derrick Greer

Learning Goals

- Implement A+ Inquiry to evaluate -- and take action based on -- the impact of an intervention on a student

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.C Types of Data: Knows that data come in two main forms—quantitative and qualitative—and that, within these forms, there are other categories

- K.1.F Data Sources: Knows different types of data sources and the benefits and limitations of using each

- K.2.D Data Context: Knows the circumstances and purposes for which data are collected

- K.3.B Data Limitations: Knows that data have limitations and that these limitations affect the interpretation and usefulness of data

- S.3.B Technology: Uses appropriate technologies to collect, access, and store data
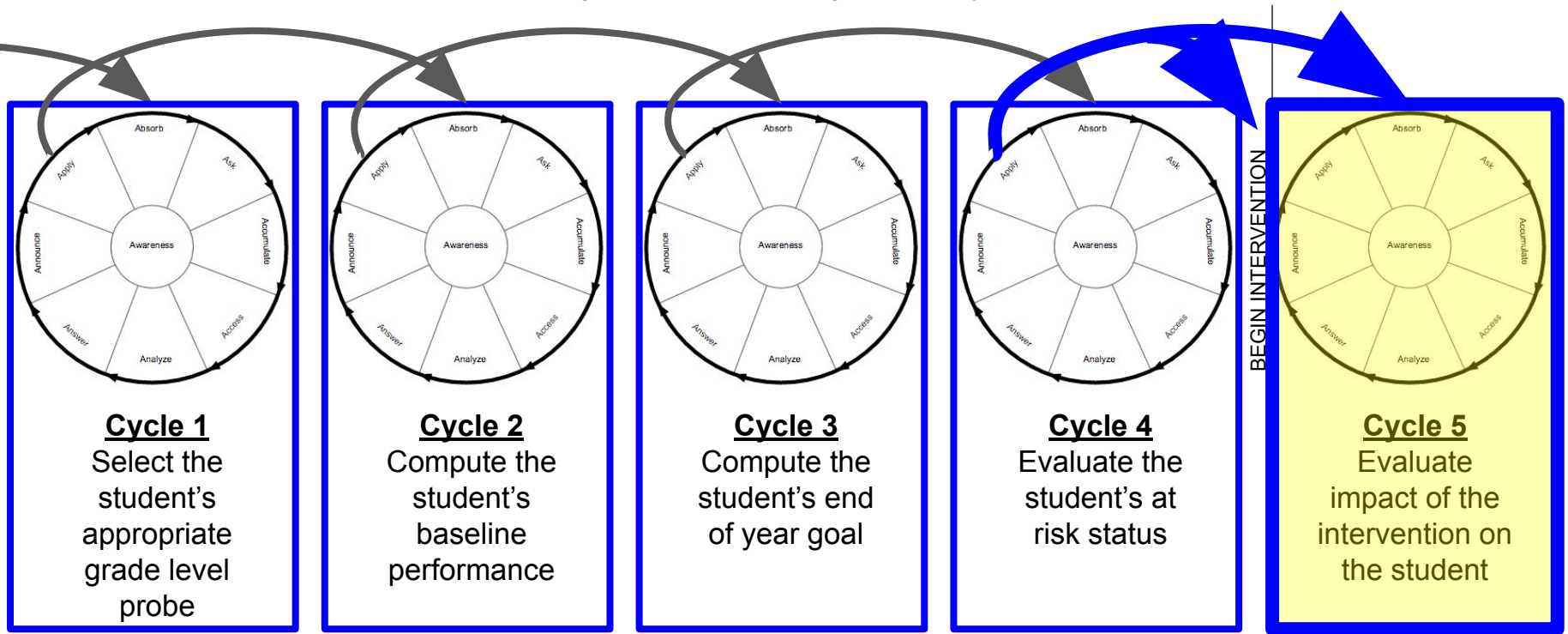
SLDS Data Use Standards (continued)

- S.4.C Aligned Analysis: Using appropriate technologies, conducts ANALYSIS suitable for the type of data collected, the VARIABLES identified, and the questions or hypotheses posed

- S.5.C Patterns: Identifies patterns, TRENDS, and gaps in data and suggests reasons for their occurrence

- S.6.C. Multiple Audiences: Communicates effectively about data, interprets FINDINGS, and explains progress toward goals to a variety of constituent groups (e.g., students, families, and colleagues)

- S.7.A Strategies: Identifies appropriate strategies grounded in evidence to address the needs and goals identified during data ANALYSIS

Introduction

Ryan:

Now that you have confirmed the student's at-risk status and assigned an intervention in Cycle 4, you may proceed to the next cycle of evaluating the intervention's impact on the student.

Progress Monitoring Data Cycles

Cycle 1
Select the student's appropriate grade level probe

Cycle 2
Compute the student's baseline performance

Cycle 3
Compute the student's end of year goal

Cycle 4
Evaluate the student's at risk status

BEGIN INTERVENTION

Cycle 5
Evaluate impact of the intervention on the student

Determining the appropriate grade level probe for a student needs to occur before establishing a student's baseline performance. Establishing a student's baseline needs to occur before determining the student's end of year goal. Determining the student's end of year goal needs to occur before confirming or disconfirming the student's at risk status. Confirming or disconfirming a student's at risk status needs to occur before monitoring a student's progress toward the goal.
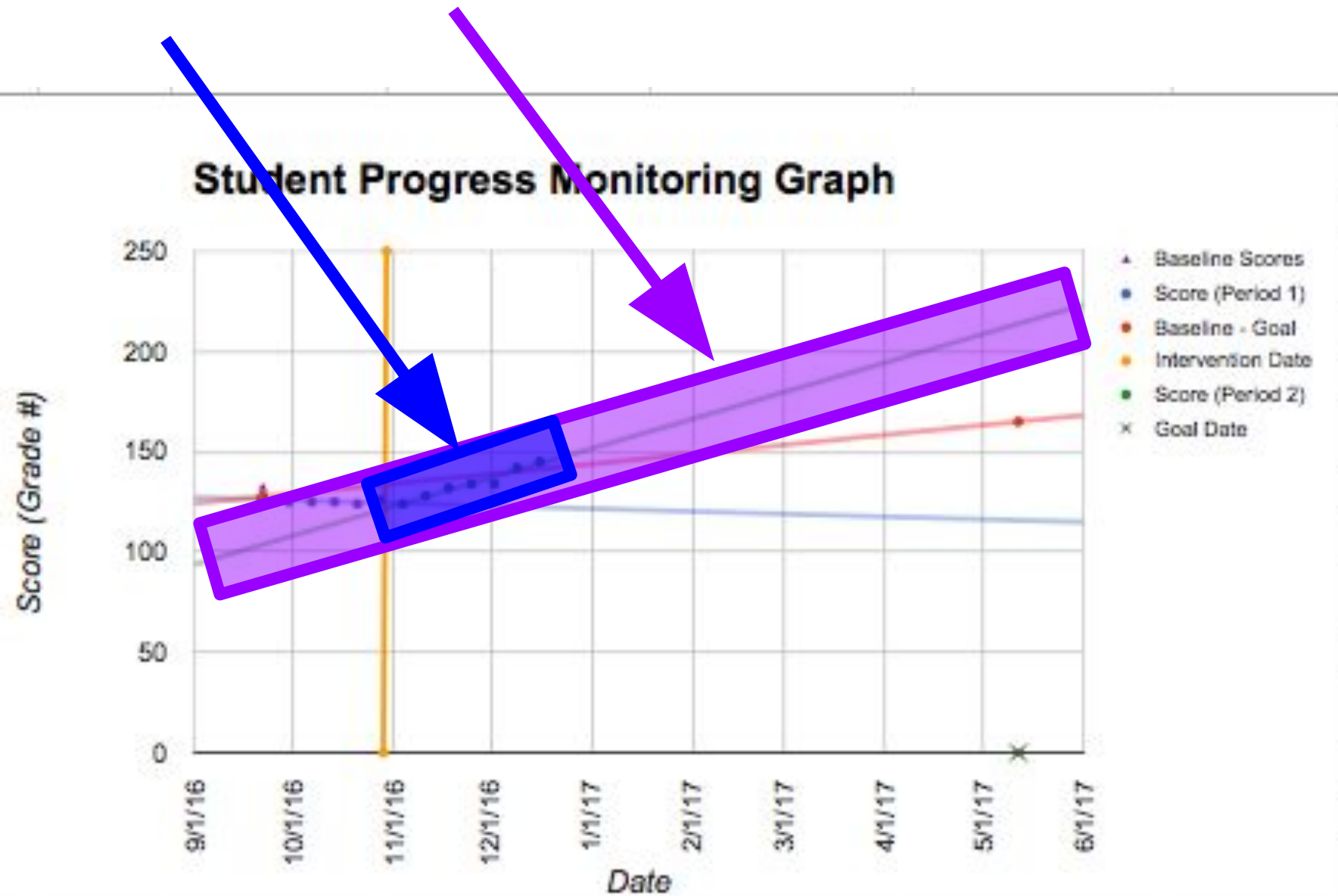

Whose progress should be monitored? An individual "at risk" student

When should the first progress monitoring data cycle begin? After a student has been identified as potentially "at risk" through a universal screening process

When should an intervention be assigned? After confirming a student's "at risk" status (i.e. after Cycle 4)

What are some tools available for progress monitoring? Aimsweb, Edcheckup, DIBELS, easyCBM, FAST, istation, STAR (see more details at http://www.intensiveintervention.org/chart/progress-monitoring)
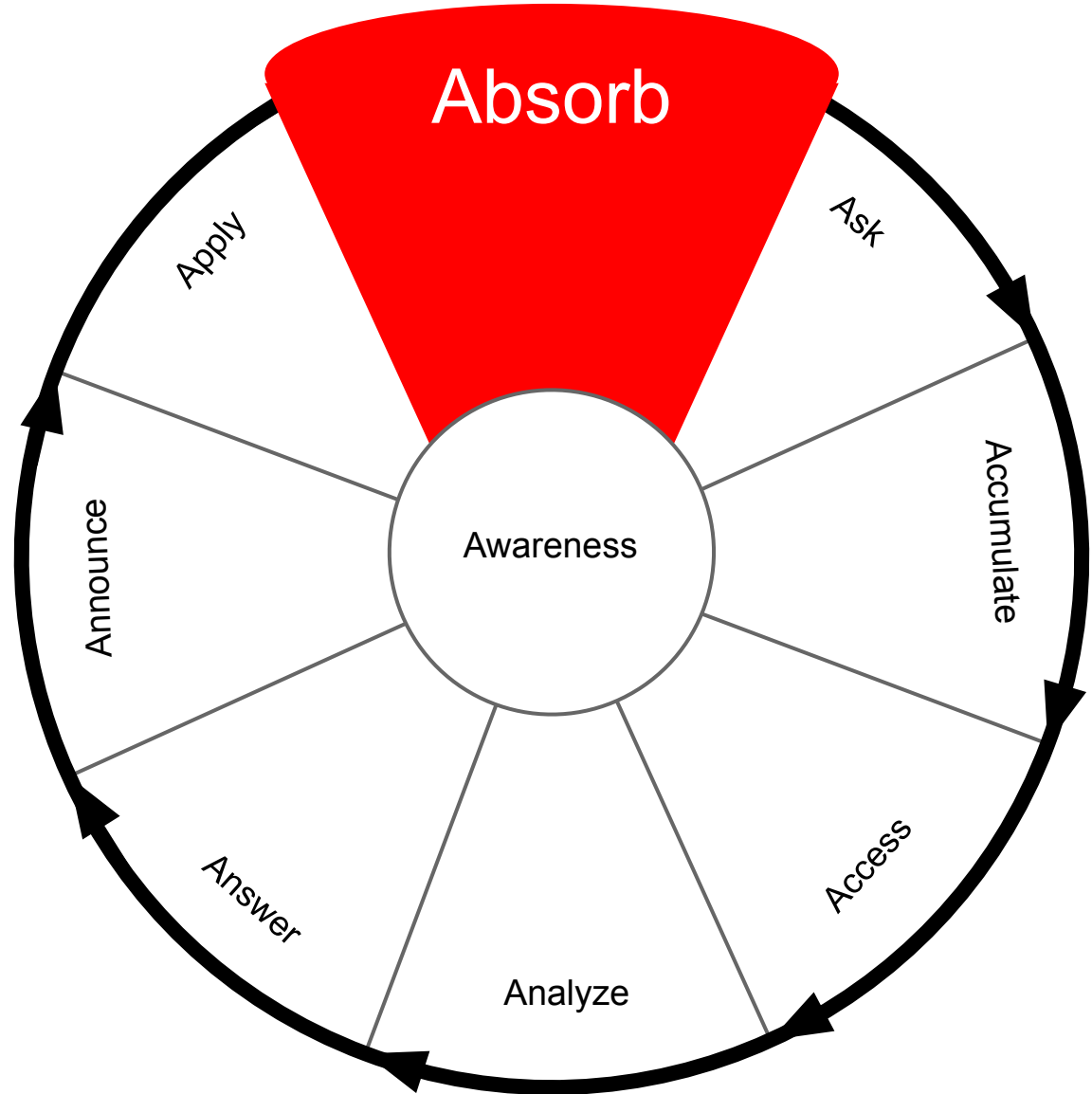
Cycle 5 is required to plot the data points and draw the trend line during the intervention

Student Progress Monitoring Graph

- ▲ Baseline Scores
- ● Score (Period 1)
- ● Baseline - Goal
- ● Intervention Date
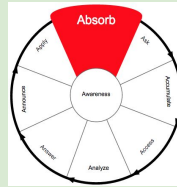- ● Score (Period 2)
- ✕ Goal Date

Absorb Stage

Ryan:

Let's begin in the Absorb stage where you identify information that is known about a context and reveal a need for more knowledge.
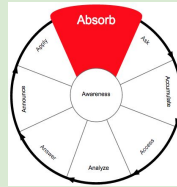
Activity - 08.11.01

In the Absorb stage, it's important to _____.
- identify details that are known about the context
- formulate operationalized questions
- collect data
- retrieve data that have been collected

Standard: K.2.D Data Context

Activity - 08.11.02

In the Absorb stage, it's also important to _____.
- reveal a need for more knowledge relevant to the context
- begin identifying limitations of data analysis findings
- communicate results to applicable stakeholders
- administer a data collection instrument to participants in the study

Standard: K.2.D Data Context
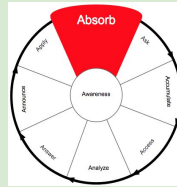
Activity - 08.11.03

You know Lisa Lund was identified as potentially at-risk through the universal screening process. As a result she was targeted for an additional stage of screening through Oral Reading Fluency (ORF) progress monitoring. You know she's capable of being assessed with an ORF probe at her current grade level. Her ORF baseline and goal levels are known. Her risk status was confirmed, and she was assigned a "listening passage preview" intervention. Next, you need to know _____.

- whether Lisa is making adequate progress toward her goal during the intervention period
- how well Lisa's classmates are performing
- whether the percentage of proficient students in Lisa's class is changing
- the average scale score of students at the next grade level on the district's interim reading assessment
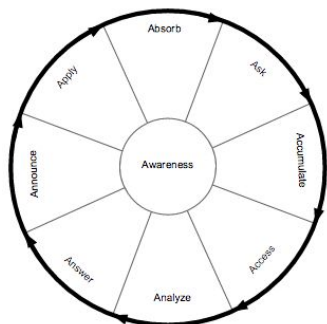
Standard: K.2.D Data Context

Tutorial

In the Absorb stage, you identify details that are known about the context and reveal a need for more knowledge.

You know Lisa Lund was identified as potentially at-risk through the universal screening process. Consequently, she was targeted for an additional stage of screening through Oral Reading Fluency (ORF) progress monitoring. You know she's capable of being assessed with ORF probes at her current grade level, and you know her ORF baseline and goal values. Lisa's at-risk status was confirmed through progress monitoring and she was assigned a "listening passage preview" intervention.

Tutorial

Cycle 1
Select the student's appropriate grade level probe

Cycle 2
Compute the student's baseline performance

Cycle 3
Compute the student's end of year goal

Cycle 4
Evaluate the student's at risk status

BEGIN INTERVENTION

Cycle 5
Evaluate impact of the intervention on the student

You know Lisa is capable of being assessed with ORF probes at current grade level
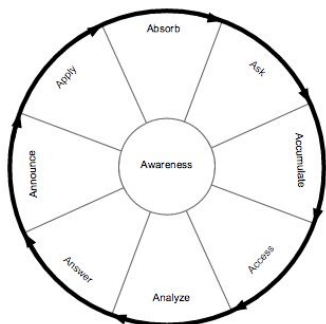
You know Lisa's ORF baseline
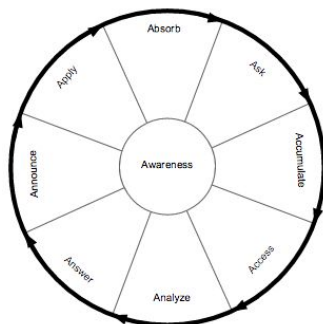
You know Lisa's ORF end-of-year goal
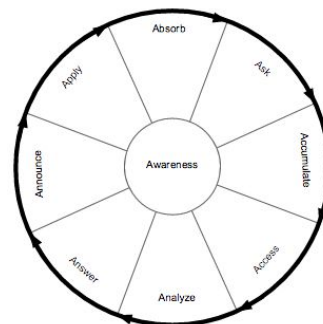
You know Lisa's risk status was confirmed and an intervention was assigned
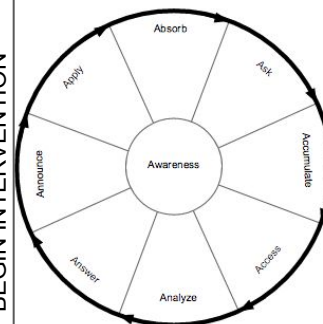
You NEED to know if Lisa is making adequate progress during the intervention

Tutorial

Given this context, it's important for you to know whether Lisa is making adequate progress toward her goal during the intervention period.

In the example chart displayed on this page, adequate progress is being made because the student's trend line (blue line) is more positively steeped than the goal line (i.e., green line).
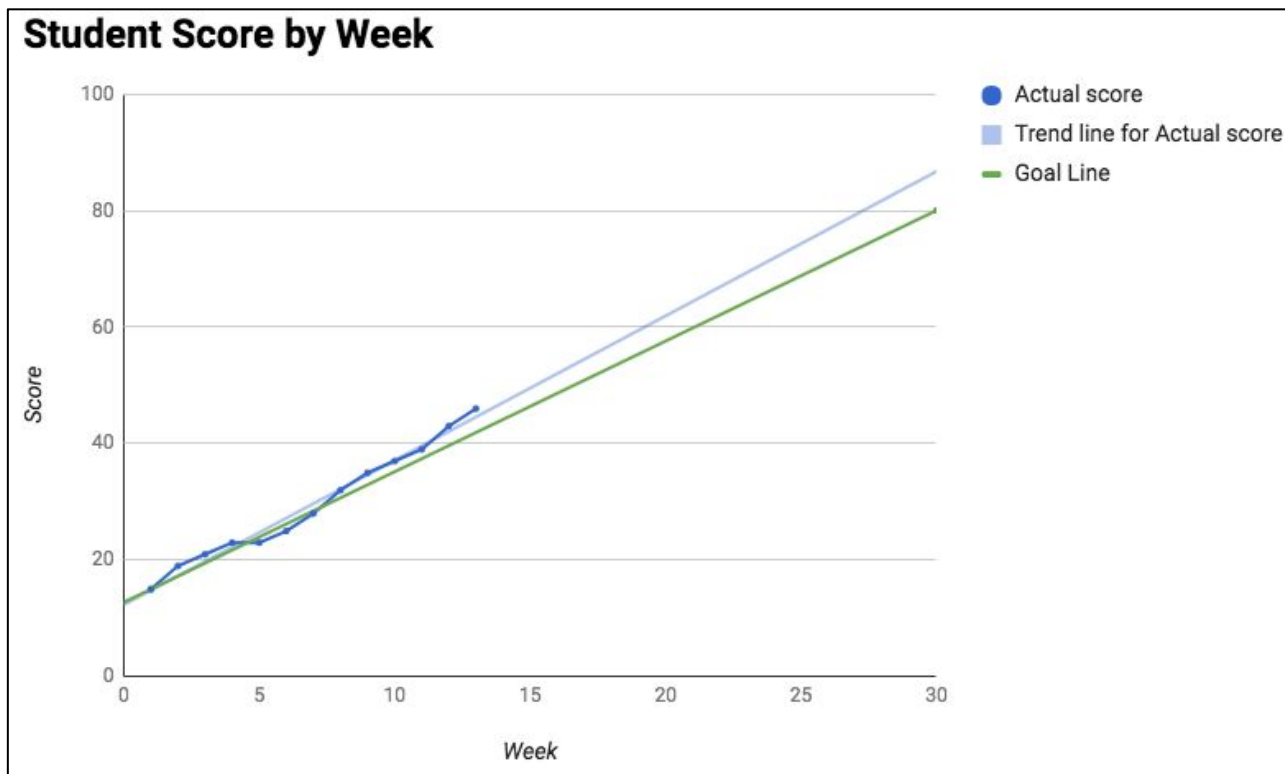
A+ Inquiry Framework

The Absorb stage has been completed. You understand the context and identified general details of missing information that could be revealed by data.

NORTH DAKOTA DATA UP

APPLY

ABSORB
Lisa Lund identified as potentially at-risk and targeted for additional screening through oral reading fluency (ORF) progress monitoring. Capable of being assessed with probe at current grade level. Baseline and goal known. Risk status confirmed. Listening passage preview intervention assigned. Need to know if adequate progress is being made.

ASK

ANNOUNCE

AWARENESS

ACCUMULATE

ANSWER

ANALYZE

ACCESS

Ask Stage

Ryan:

Now that you are past the Absorb stage, let's see if you can ask operationalized or answerable questions, which will lead you to the information you need to know.
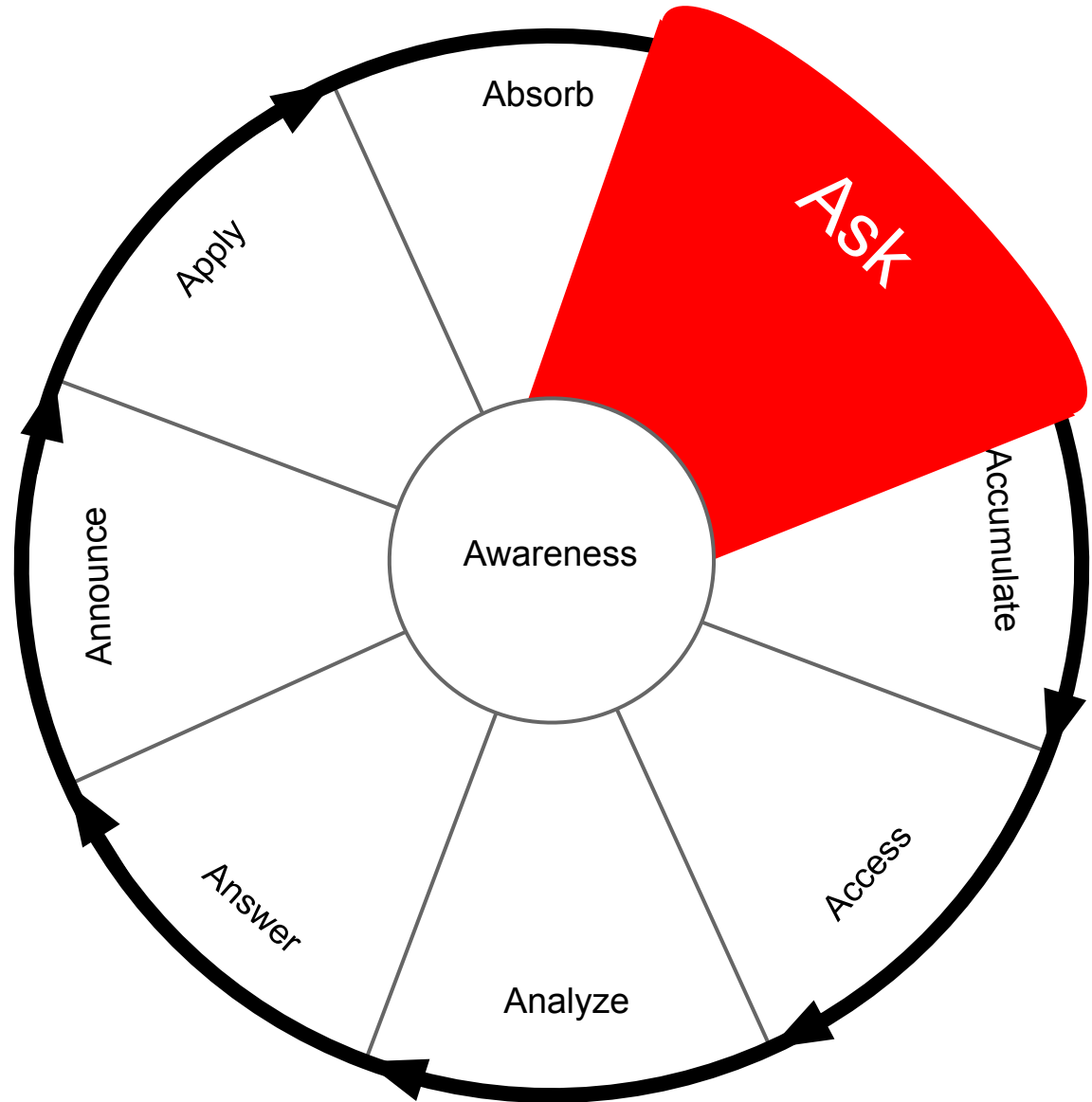
Activity - 08.11.04

The Absorb stage revealed a need for you to know whether Lisa is making adequate progress toward her end-of-year goal during the intervention period. You pose the following general question, "Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?" The general question needs to be operationalized further because it is currently too _____ to be answerable with data.

- vague
- precise
- accurate
- clear

Standard: K.1.A Question Formation

Activity - 08.11.05

The general question states, "Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?" You operationalize this question further by stating _____.
- Is Lisa's ORF trend line slope during the intervention as positively steeped as or steeper than her goal line?
- How much has the slope of Lisa's line changed since she started an intervention?
- What is the change in Lisa's ORF performance since an intervention began?
- Is Lisa enjoying the intervention intended to improve her ORF performance?

Standard: K.1.A Question Formation

Activity - 08.11.06

The operational question you formulate serves as a(n) _____ the general question.
- proxy for
- ambiguous version of
- unanswerable version of
- vague replacement for

Standard: K.1.A Question Formation

Activity - 08.11.07

A potential answer to the general question, "Is Lisa making adequate oral reading fluency (ORF) progress in the general education setting?" and operational question, "Is the slope of Lisa's ORF trend line as positively steeped or steeper than her goal line?" would be _____.

- "yes", "no", or "not sure"
- "green", "red", or "yellow"
- "-10%", "0%", or "10%"
- "positive", "negative", or "neutral"

Standard: K.1.A Question Formation

Tutorial

The Absorb stage revealed a need for you to know whether Lisa is making adequate progress toward her end-of-year goal during the intervention period. You pose the following general question, "Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?" As it is written, this question is too vague to be answered with data. Therefore, you operationalize the question further by stating "Is Lisa's ORF trend line slope during the intervention as positively steeped as or steeper than her goal line?"

The operational question serves as a proxy for the general question. In other words, the operational question is written as a substitute for the general question to ensure the general question may be answered. Therefore, an answer of "yes", "no", or "not sure" will be the same for both the operational and general questions. For example, if the answer to the operational question is yes, the answer to the general question will also be yes.

Tutorial

In this example, the student's trend line (light blue line) is MORE positively steeped than the student's goal line (green line). Therefore, the answer to the operational question, "Is the slope of Lisa's ORF trend line as positively steeped as or steeper than her goal line?" is YES. Because the operational question is an answerable substitute for the general question "Is Lisa making adequate oral reading fluency (ORF) progress in the general education setting?" the answer to the general question is also YES.
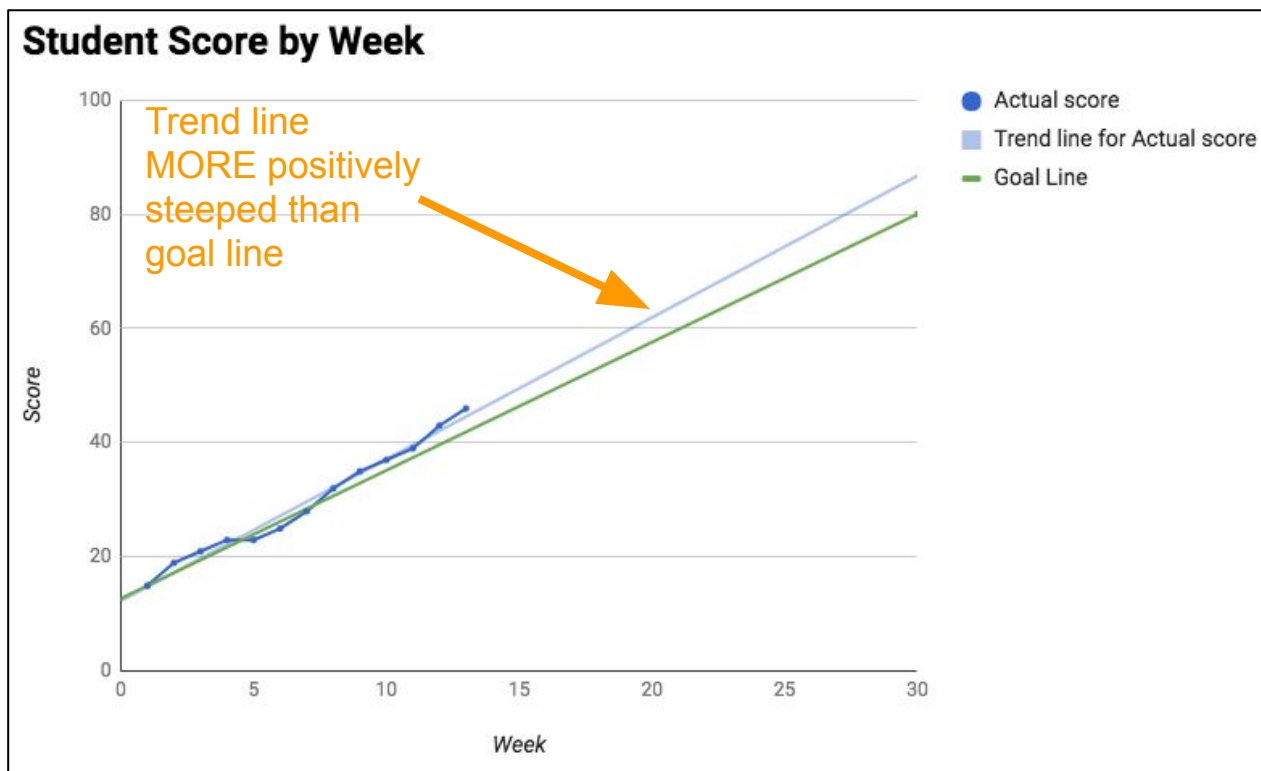
Tutorial

In this example, the student's trend line (light blue line) is LESS positively steeped than the student's goal line (green line). Therefore, the answer to the operational question, "Is the slope of Lisa's ORF trend line as positively steeped as or steeper than her goal line?" is NO. Because the operational question is an answerable substitute for the general question "Is Lisa making adequate oral reading fluency (ORF) progress in the general education setting?" the answer to the general question is also NO.

Trend line less positively steeped than goal line
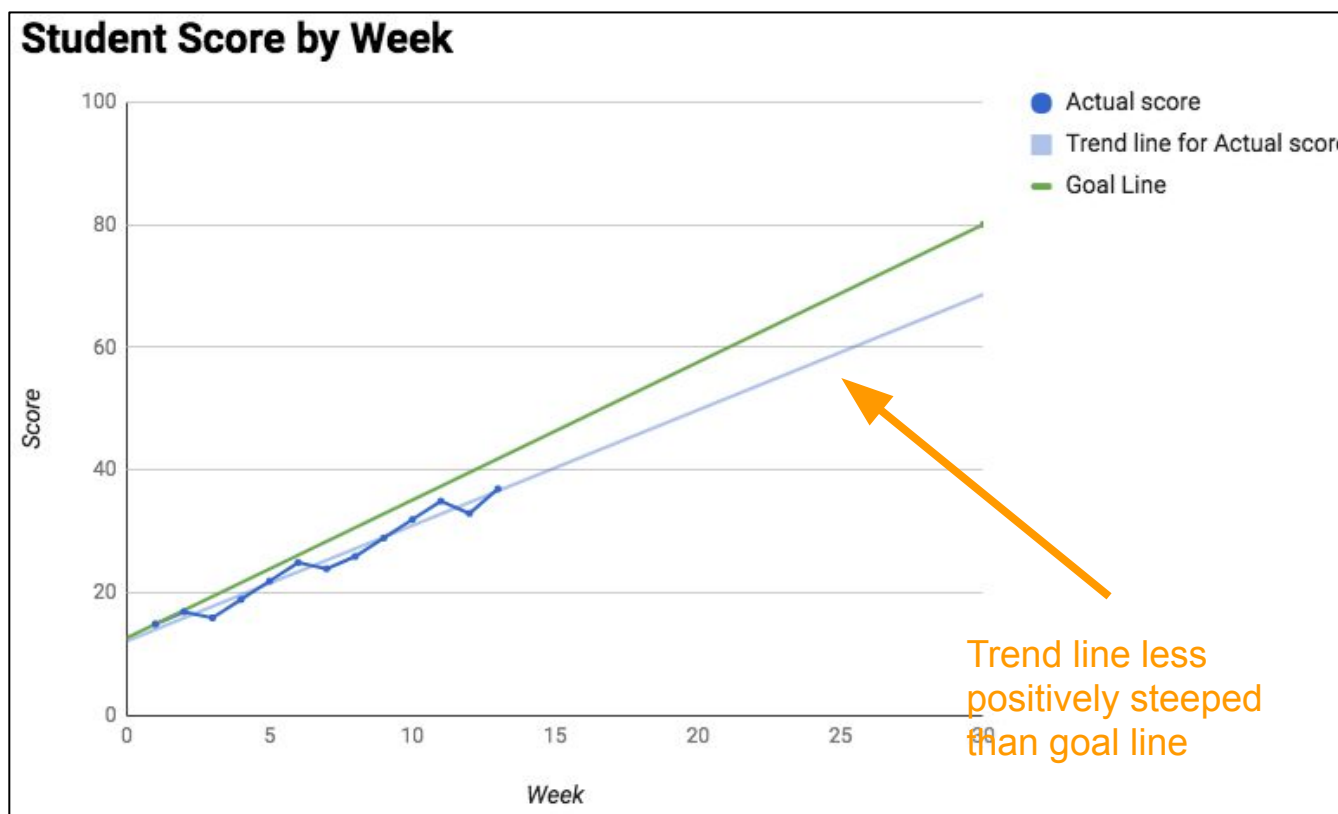
A+ Inquiry Framework

The Ask stage has been completed. You posed questions that will lead you to the information identified as missing in the Absorb stage.

NORTH DAKOTA DATA UP

ABSORB
Lisa Lund identified as potentially at-risk and targeted for additional screening through oral reading fluency (ORF) progress monitoring. Capable of being assessed with probe at current grade level. Baseline and goal known. Risk status confirmed. Listening passage preview intervention assigned. Need to know if adequate progress is being made.

APPLY

ASK

Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?

Is Lisa's ORF trend line slope during the intervention as positively steeped as or steeper than her goal line?

ANNOUNCE

AWARENESS

ACCUMULATE

ANSWER

ANALYZE

ACCESS

Accumulate Stage

Ryan:

Now it's time to enter the Accumulate stage where you will identify details of data required to answer the questions you posed in the Ask stage. When formulating the operationalized questions, you demonstrated an awareness of the data you need. Here, you'll specify a few more details of the data, which will help ensure you retrieve the appropriate data in the Access stage.
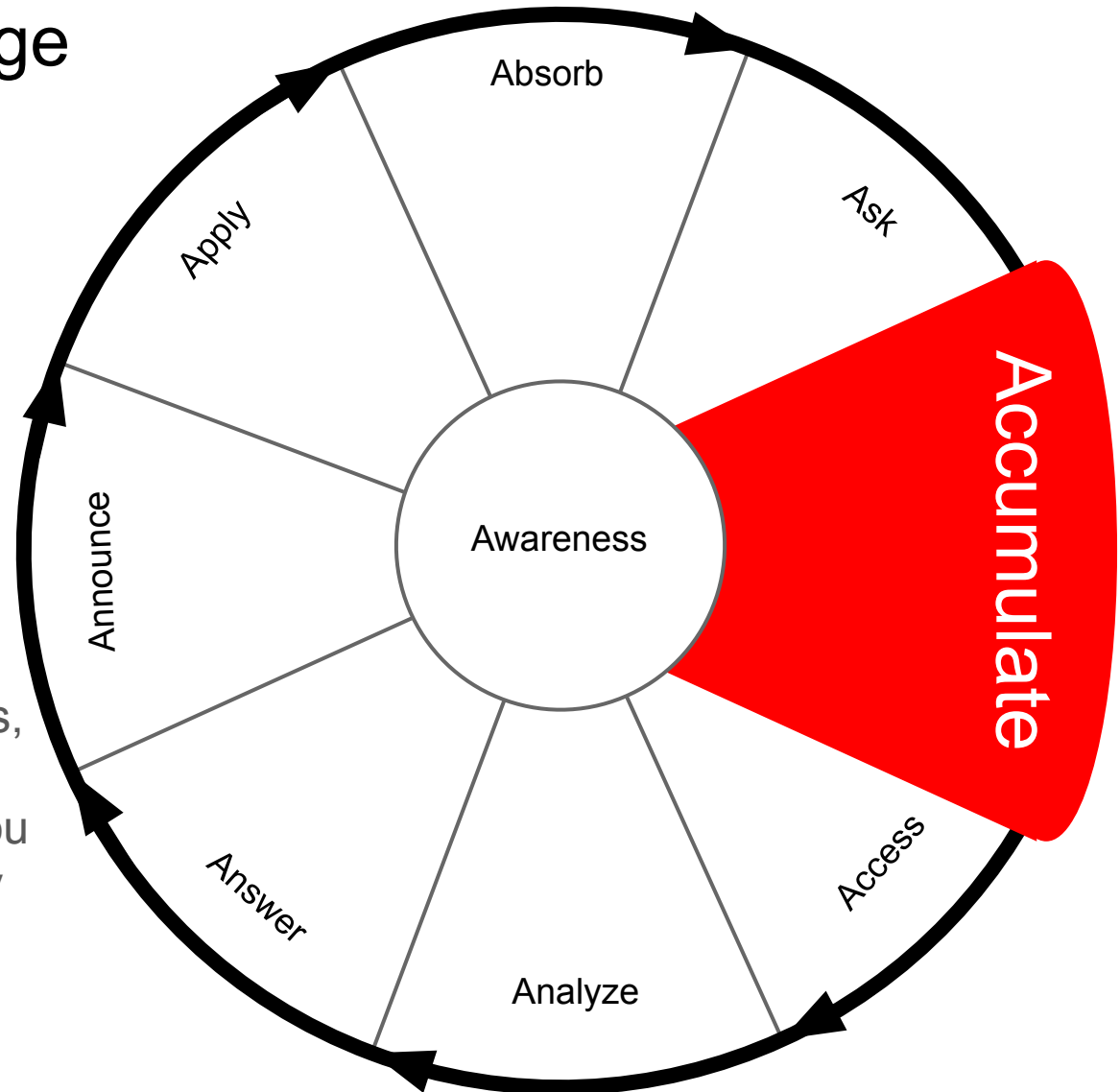
Absorb

Ask

Apply

Announce

Awareness

Accumulate

Answer

Analyze

Access

During the Ask stage, you demonstrated an awareness of the required data when you formulated the operational question. According to standard protocol at Great Plains school district, you need _____ data point(s).

- 0
- 1
- 2
- 6

Standard: K.1.C Types of Data

Activity - 08.11.09

The data points you need represent Lisa's _____ on an oral reading fluency (ORF) probe.
- number of correct words per minute
- number of minutes spent reading
- number of sentences read per minute
- percent of correct words per minute

Standard: K.1.C Types of Data

Activity - 08.11.10

The data you accumulate when administering probes includes the number of total words read per minute and number of errors. These values are required to calculate the _____ on each probe.
- number of correct words per minute
- number of correct sentences per minute
- number of syllables read per minute
- number of complete paragraphs read per minute

Standard: K.1.C Types of Data

Activity - 08.11.11

You enter required data, along with the date the data were collected, into _____
after administering each probe.

- Lisa's progress monitoring spreadsheet
- Lisa's daily planner
- Lisa's demographic record in the district's student information system
- the district's monthly newsletter

Standard: S.3.B Technology

Tutorial

During the Ask stage, you demonstrated an awareness of the required data when you formulated the operational question. According to standard protocol at Great Plains school district, you need at least 6 data points during the intervention period representing Lisa's number of correct words per minute on an oral reading fluency (ORF) probe.
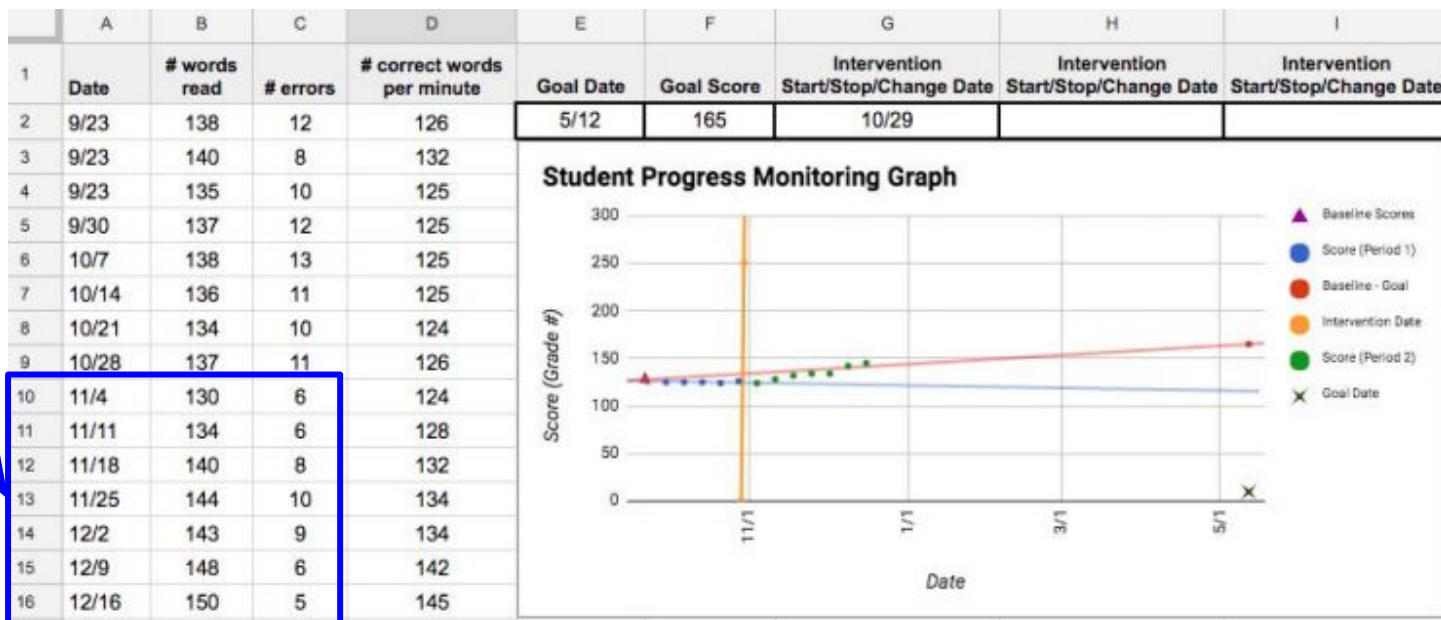
Tutorial

Although you only need 6 data points before you analyze the data, you end up establishing 7 data points by administering 1 ORF probe to Lisa each week for the next 7 weeks by the time you are ready to analyze the data. The data you accumulate when administering probes includes the number of total words read per minute and number of errors. These values, which you enter into Lisa's progress monitoring spreadsheet are required to calculate the number of correct words per minute on each probe.

Link to example of unmarked ORF probe PDF: https://goo.gl/kSHa3f

Link to spreadsheet PDF (DataCycle5NoTrend): https://goo.gl/XyZFY3

7 sets of weekly ORF data entered in spreadsheet

	A	B	C	D	E	F	G	H	I
1	Date	# words read	# errors	# correct words per minute	Goal Date	Goal Score	Intervention Start/Stop/Change Date	Intervention Start/Stop/Change Date	Intervention Start/Stop/Change Date
2	9/23	138	12	126	5/12	165	10/29		
3	9/23	140	8	132					
4	9/23	135	10	125					
5	9/30	137	12	125					
6	10/7	138	13	125					
7	10/14	136	11	125					
8	10/21	134	10	124					
9	10/28	137	11	126					
10	11/4	130	6	124					
11	11/11	134	6	128					
12	11/18	140	8	132					
13	11/25	144	10	134					
14	12/2	143	9	134					
15	12/9	148	6	142					
16	12/16	150	5	145					

**Student Progress Monitoring Graph**

Tutorial

On a side note, there are only 10 unique ORF probes available for you to use; however, by this time, you will have administered 15 total probes
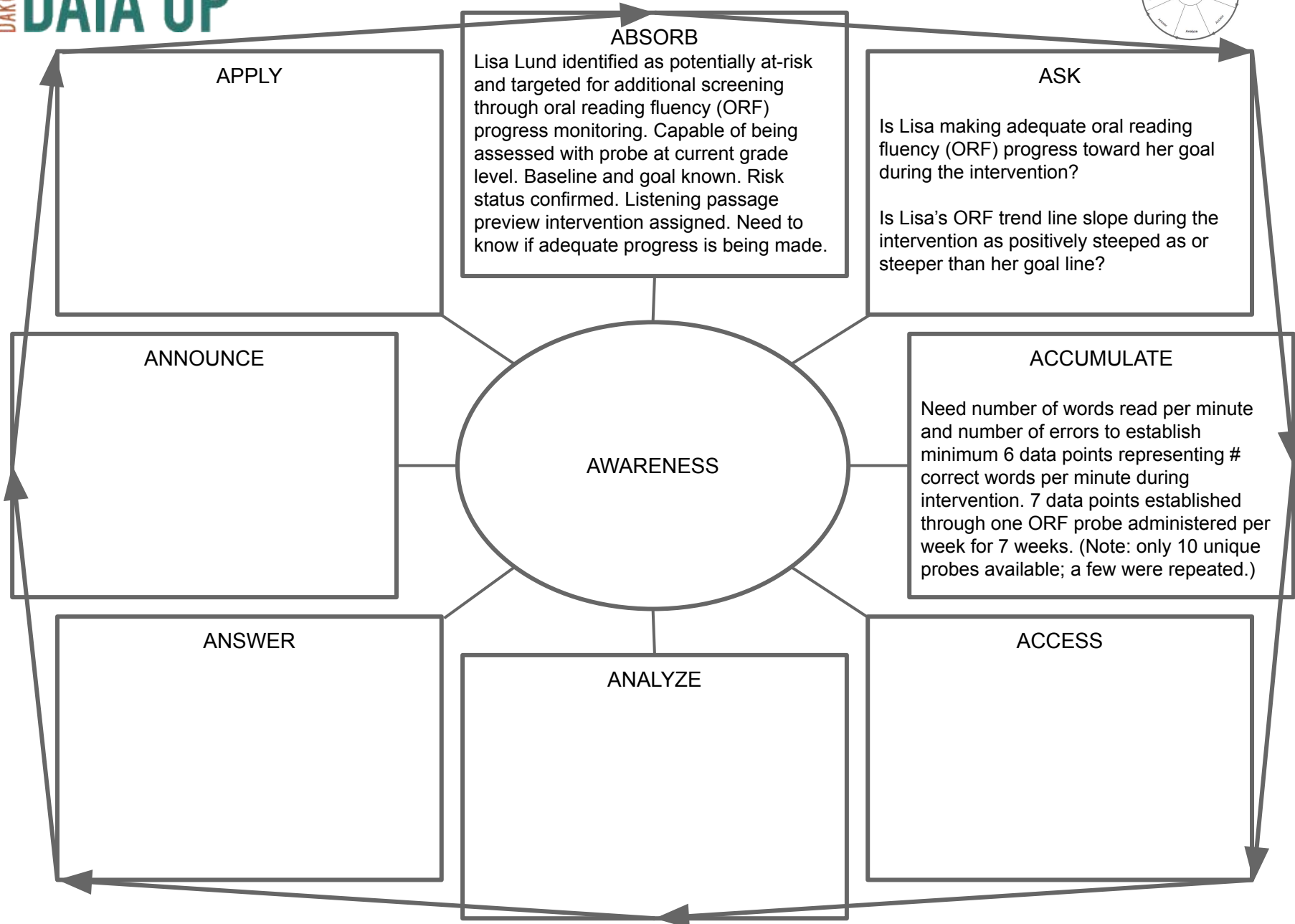- 3 to establish the baseline (probes 1-3)
- 5 to complete progress monitoring prior to the intervention (probes 4-8)
- 7 to monitor progress during the intervention (probes 9-10, 1-5)

As a result, when administering probes during the intervention, you administer probes 1-5 a second time.

Probes 9-10 and 1-5 administered during intervention
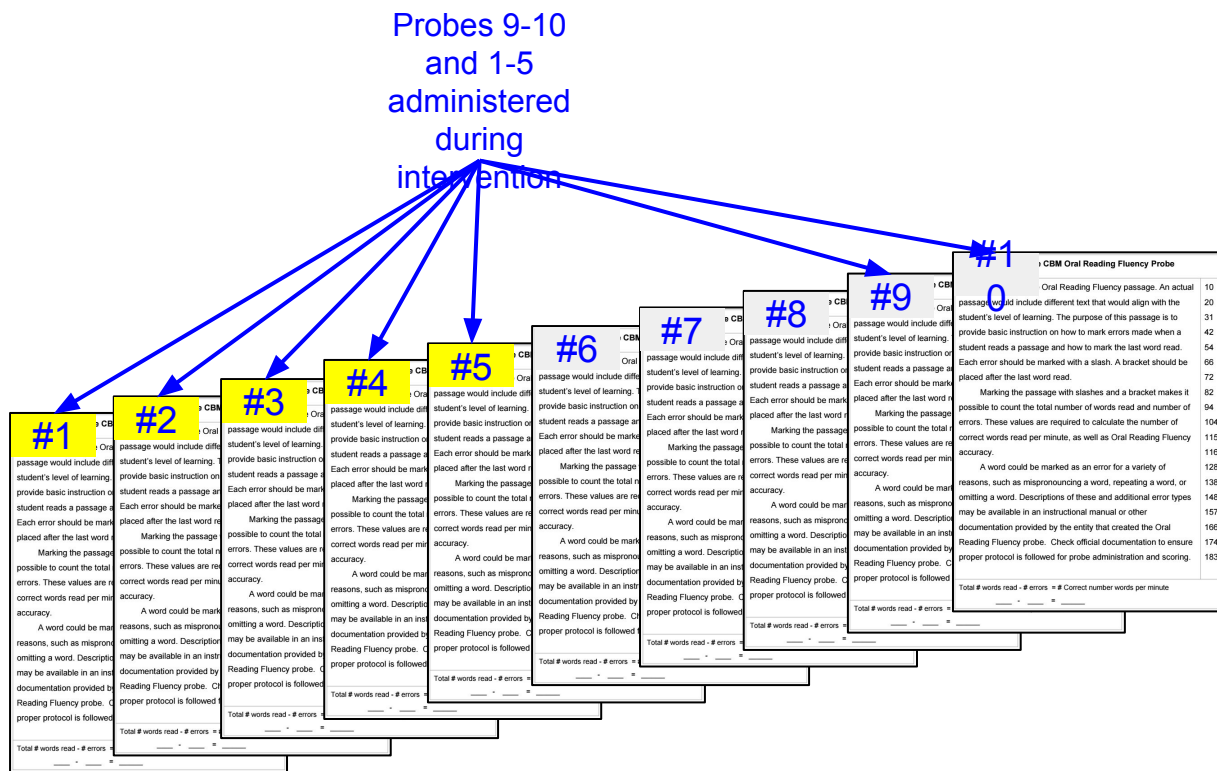
A+ Inquiry Framework

The Accumulate stage has been completed. You specified details of the data you need and collected the data.

NORTH DAKOTA DATA UP

ABSORB
Lisa Lund identified as potentially at-risk and targeted for additional screening through oral reading fluency (ORF) progress monitoring. Capable of being assessed with probe at current grade level. Baseline and goal known. Risk status confirmed. Listening passage preview intervention assigned. Need to know if adequate progress is being made.

ASK

Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?

Is Lisa's ORF trend line slope during the intervention as positively steeped as or steeper than her goal line?

APPLY

ANNOUNCE

AWARENESS

ACCUMULATE

Need number of words read per minute and number of errors to establish minimum 6 data points representing # correct words per minute during intervention. 7 data points established through one ORF probe administered per week for 7 weeks. (Note: only 10 unique probes available; a few were repeated.)

ANSWER

ANALYZE

ACCESS

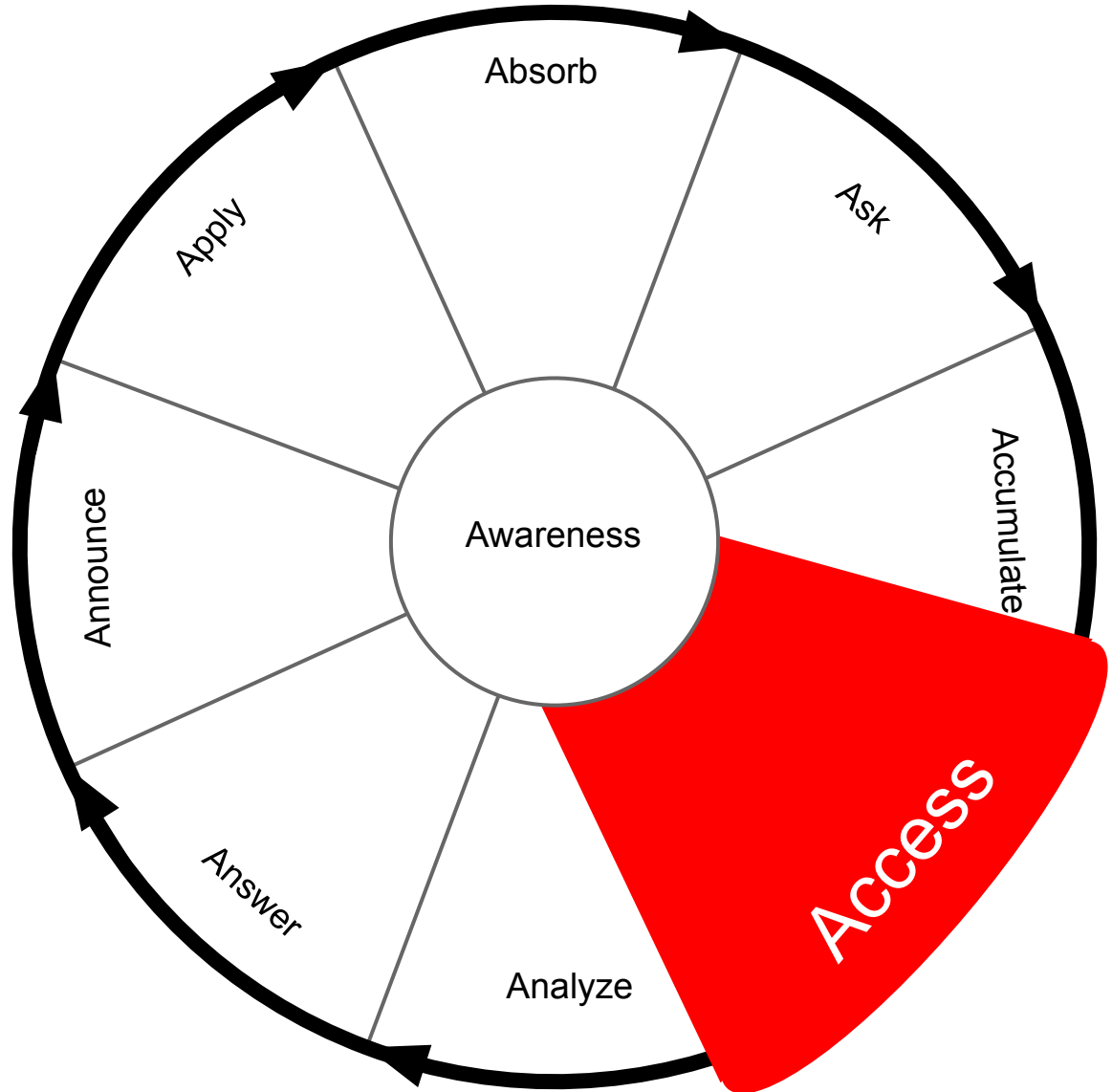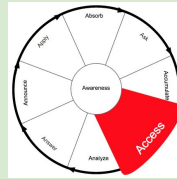# Access Stage

Ryan:

Now it's time to enter the access stage where you will retrieve the specific data you identified in the accumulate stage.

Activity - 08.11.12

Now that 7 data points have been accumulated during the intervention period, which meets the minimum requirement of ____ data points, you may proceed to access the data you need.

- 2
- 4
- 6
- 8

Standard: K.1.F Data Sources
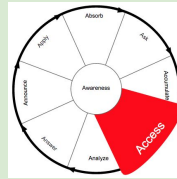
Activity - 08.11.13

You may access the data you need _____.
- on the homepage of the district's website
- in a state assessment report within the Statewide Longitudinal Data System
- in the spreadsheet where you entered Lisa's data
- on the school's monthly calendar

Standard: K.1.F Data Sources
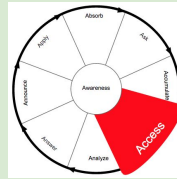
Activity - 08.11.14

Lisa's Progress Monitoring spreadsheet is stored _____.
- on my computer's hard drive
- on the school district's public website
- in a file cabinet in the secretary's office
- on a shelf in my classroom

Standard: K.1.F Data Sources

Tutorial

The data collection methods you implemented to accumulate 7 data points, which meets the minimum requirement of 6 data points, allow you to immediately access required data in Lisa's progress monitoring spreadsheet. Her progress monitoring spreadsheet is available on the hard drive of your computer.

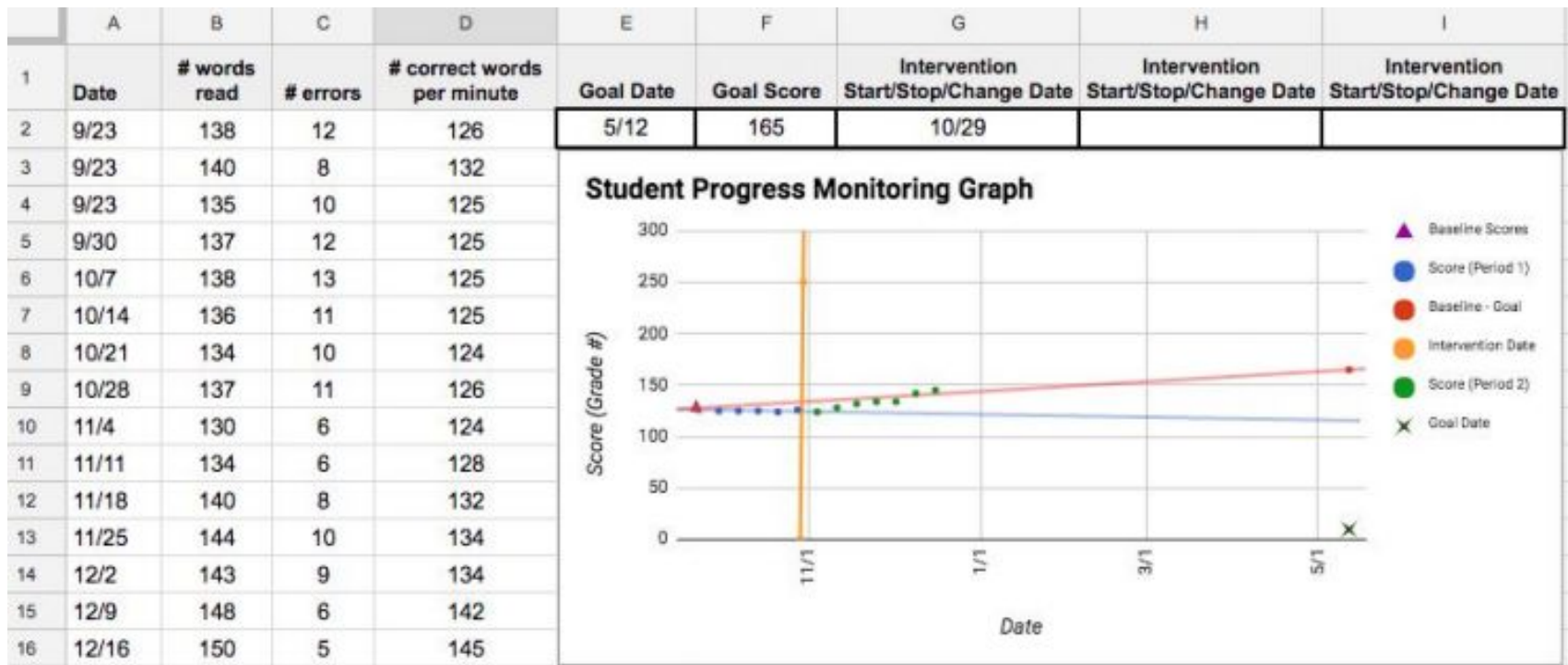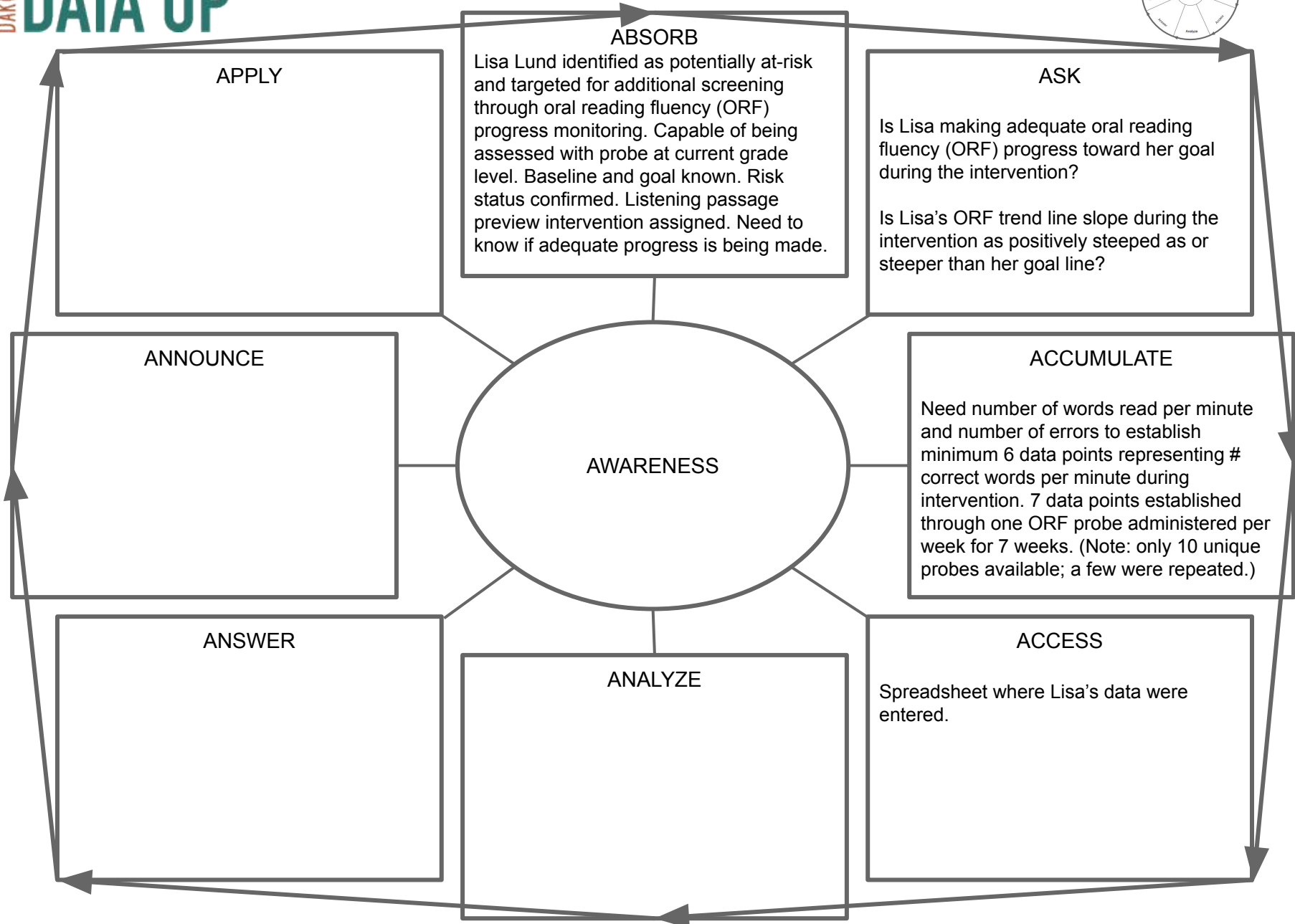|	A	B	C	D	E	F	G	H	I
1	Date	# words read	# errors	# correct words per minute	Goal Date	Goal Score	Intervention Start/Stop/Change Date	Intervention Start/Stop/Change Date	Intervention Start/Stop/Change Date
2	9/23	138	12	126	5/12	165	10/29		
3	9/23	140	8	132					
4	9/23	135	10	125					
5	9/30	137	12	125					
6	10/7	138	13	125					
7	10/14	136	11	125					
8	10/21	134	10	124					
9	10/28	137	11	126					
10	11/4	130	6	124					
11	11/11	134	6	128					
12	11/18	140	8	132					
13	11/25	144	10	134					
14	12/2	143	9	134					
15	12/9	148	6	142					
16	12/16	150	5	145					

Student Progress Monitoring Graph

Legend:
- ▲ Baseline Scores
- ● Score (Period 1)
- ● Baseline - Goal
- ● Intervention Date
- ● Score (Period 2)
- ✕ Goal Date

Y-axis: Score (Grade #) — 0, 50, 100, 150, 200, 250, 300
X-axis: Date — 11/1, 1/1, 3/1, 5/1

A+ Inquiry Framework

The Access stage has been completed.

NORTH DAKOTA **DATA UP**

APPLY

ABSORB
Lisa Lund identified as potentially at-risk and targeted for additional screening through oral reading fluency (ORF) progress monitoring. Capable of being assessed with probe at current grade level. Baseline and goal known. Risk status confirmed. Listening passage preview intervention assigned. Need to know if adequate progress is being made.

ASK
Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?

Is Lisa's ORF trend line slope during the intervention as positively steeped as or steeper than her goal line?

ANNOUNCE

AWARENESS

ACCUMULATE
Need number of words read per minute and number of errors to establish minimum 6 data points representing # correct words per minute during intervention. 7 data points established through one ORF probe administered per week for 7 weeks. (Note: only 10 unique probes available; a few were repeated.)

ANSWER

ANALYZE

ACCESS
Spreadsheet where Lisa's data were entered.

Conclusion

You have now finished the Absorb, Ask, Accumulate, and Access stages for Cycle 5 of progress monitoring: evaluate impact of intervention.

Activity Answers

08.11.01	identify details that are known about the context
08.11.02	reveal a need for more knowledge relevant to the context
08.11.03	whether Lisa is making adequate progress toward her goal during the intervention period
08.11.04	vague
08.11.05	Is Lisa's ORF trend line slope during the intervention as positively steeped as or steeper than her goal line?
08.11.06	proxy for
08.11.07	"yes", "no", or "not sure"
08.11.08	6
08.11.09	number of correct words per minute
08.11.10	number of correct words per minute
08.11.11	Lisa's progress monitoring spreadsheet
08.11.12	6
08.11.13	in the spreadsheet where you entered Lisa's data
08.11.14	on my computer's hard drive

Indicate the extent to which you agree or disagree

	Strongly disagree	Disagree	Agree	Strongly Agree
This module part increased my knowledge of how to implement the Absorb, Ask, Accumulate, and Access stages of A+ Inquiry to identify and retrieve data required for evaluating the impact of an intervention on a student				

Well Done

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