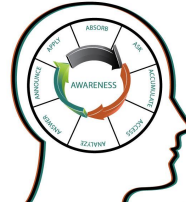




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Develop Your Data Mindset

Module 8 - Progress Monitoring Part 12 - Answer, Announce & Apply (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

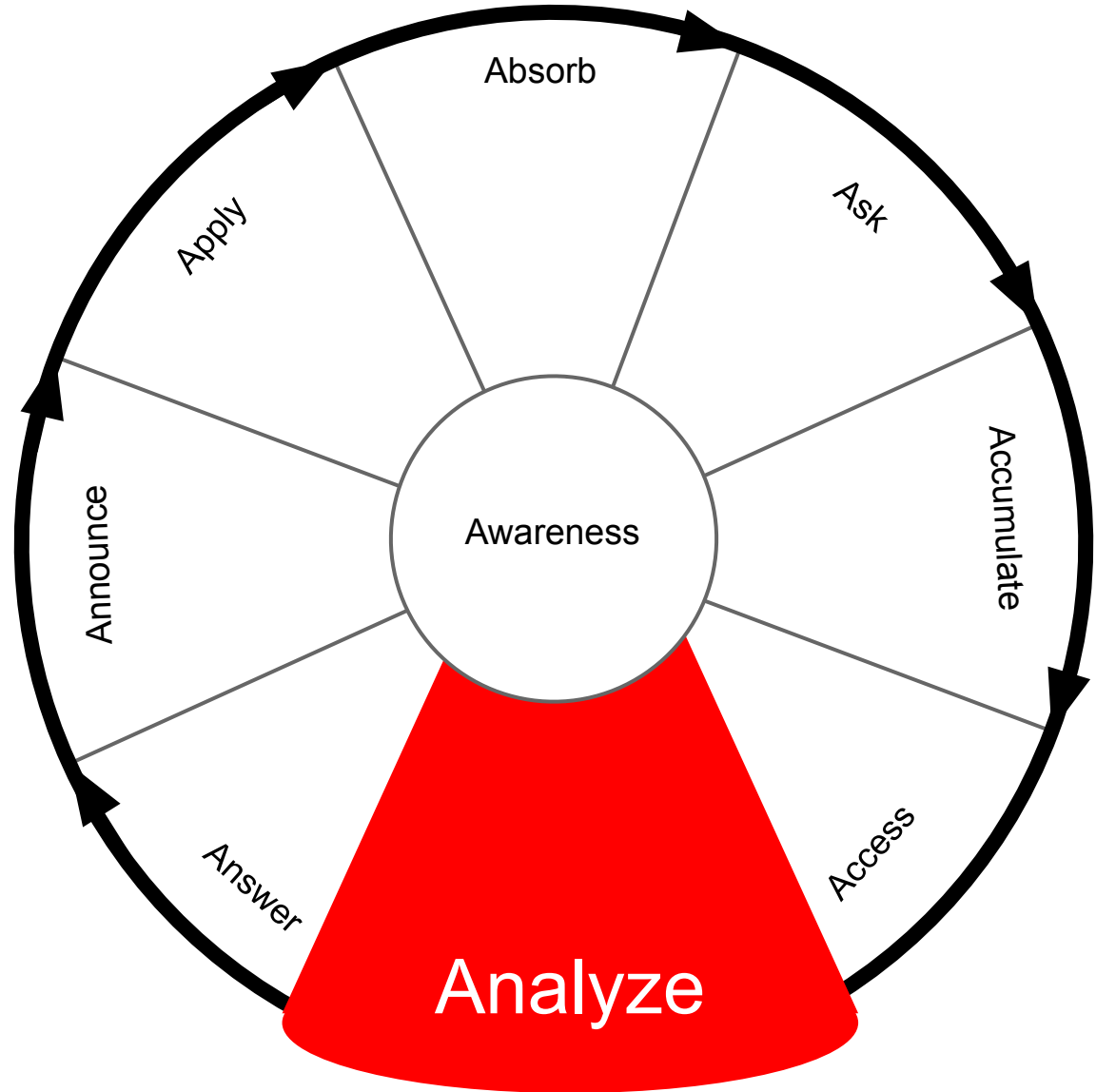
SLDS Data Use Standards (continued)

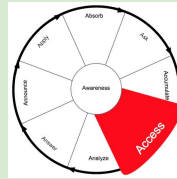
- S.4.C Aligned Analysis: Using appropriate technologies, conducts ANALYSIS suitable for the type of data collected, the VARIABLES identified, and the questions or hypotheses posed
- S.5.C Patterns: Identifies patterns, TRENDS, and gaps in data and suggests reasons for their occurrence
- S.6.C. Multiple 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

Analyze Stage

Ryan:

Now that you have retrieved the data you need, it's time to enter the Analyze stage where you will conduct analysis of the data you accessed.



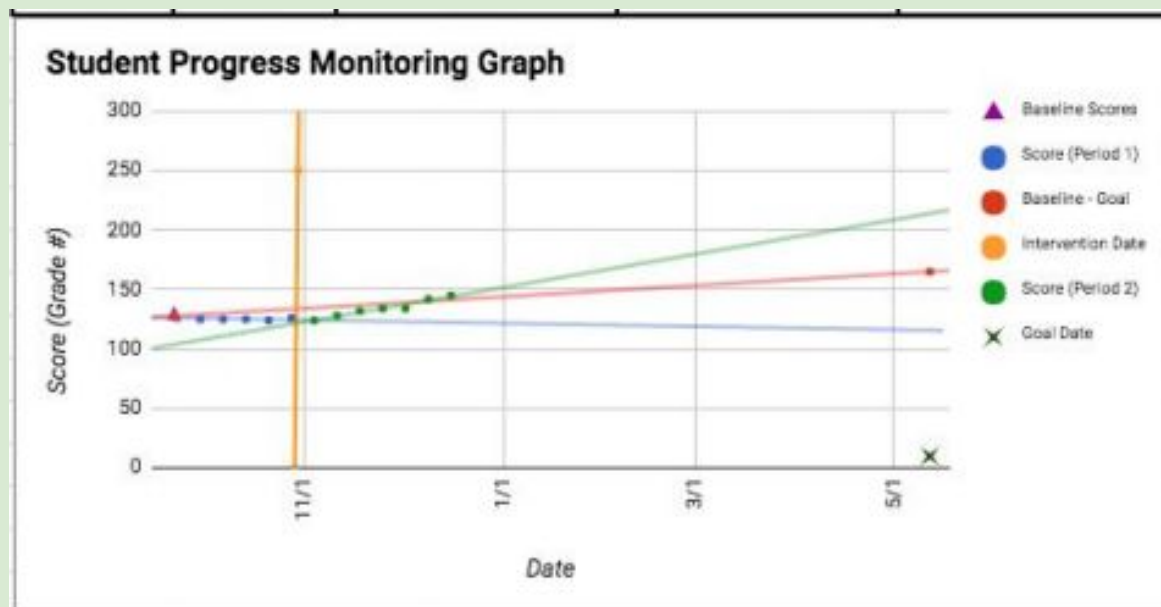


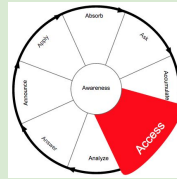
Activity - 08.12.01

Go to the graph in Lisa Lund's progress monitoring spreadsheet. _____ data points have been plotted on the graph since her intervention began.

- 1
- 3
- 6
- 7

Standard: S.4.C Aligned Analysis



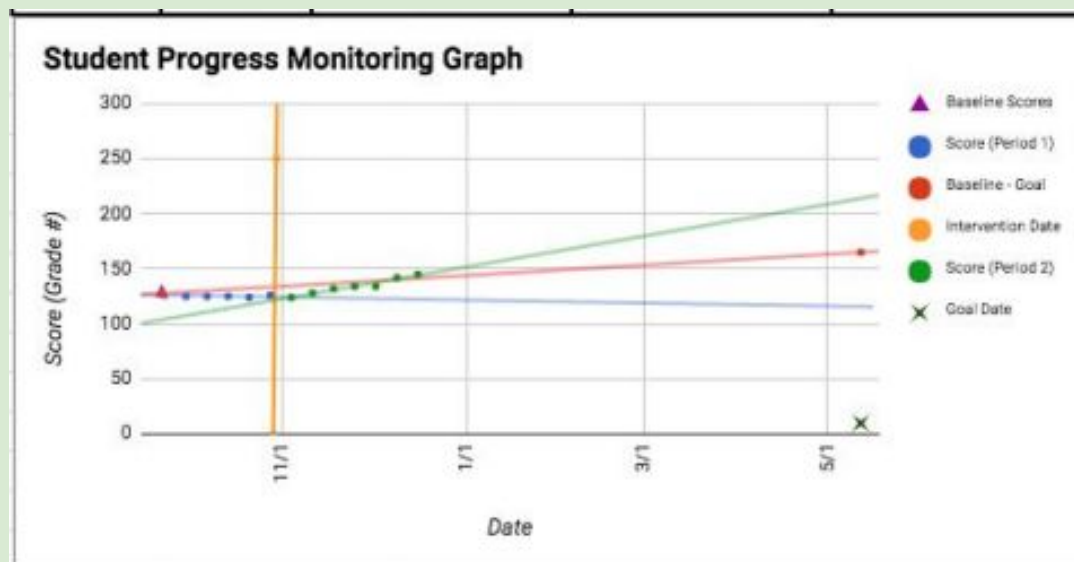


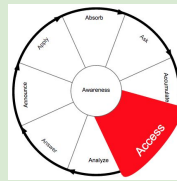
Activity - 08.12.02

Go to the graph in Lisa Lund's progress monitoring spreadsheet. The _____ line represents Lisa's trend line based on the 7 data points that have been established during her intervention period?

- blue
- red
- green
- yellow

Standard: S.4.C Aligned Analysis



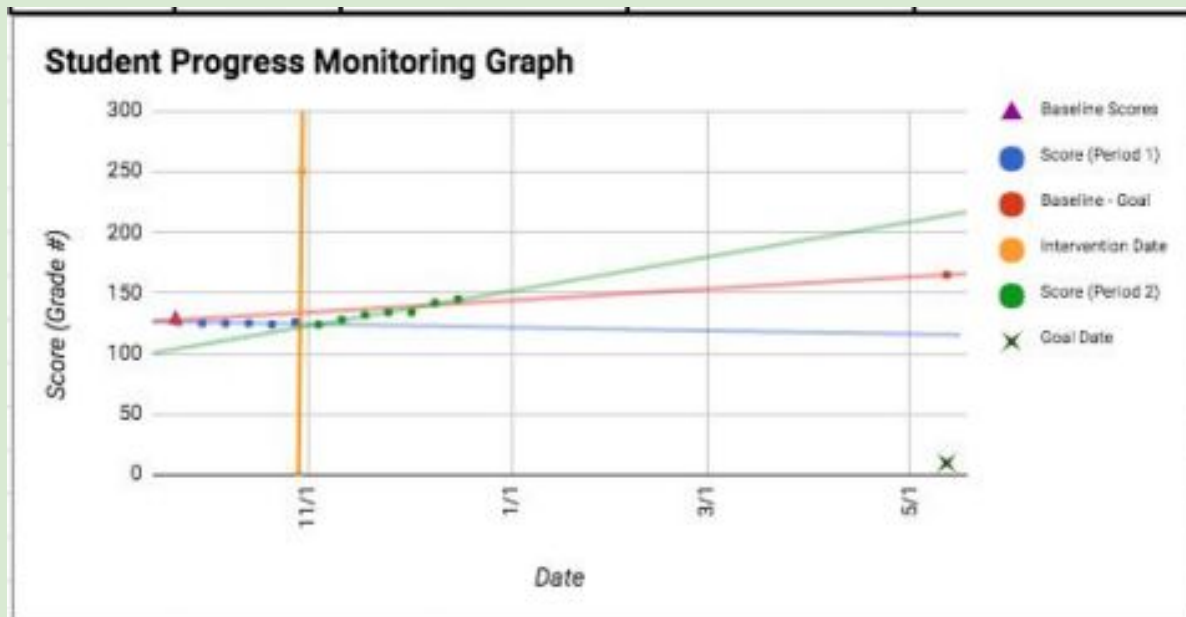


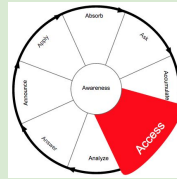
Activity - 08.12.03

The _____ line on Lisa's progress monitoring graph represents her goal line.

- blue
- red
- green
- yellow

Standard: S.4.C Aligned Analysis



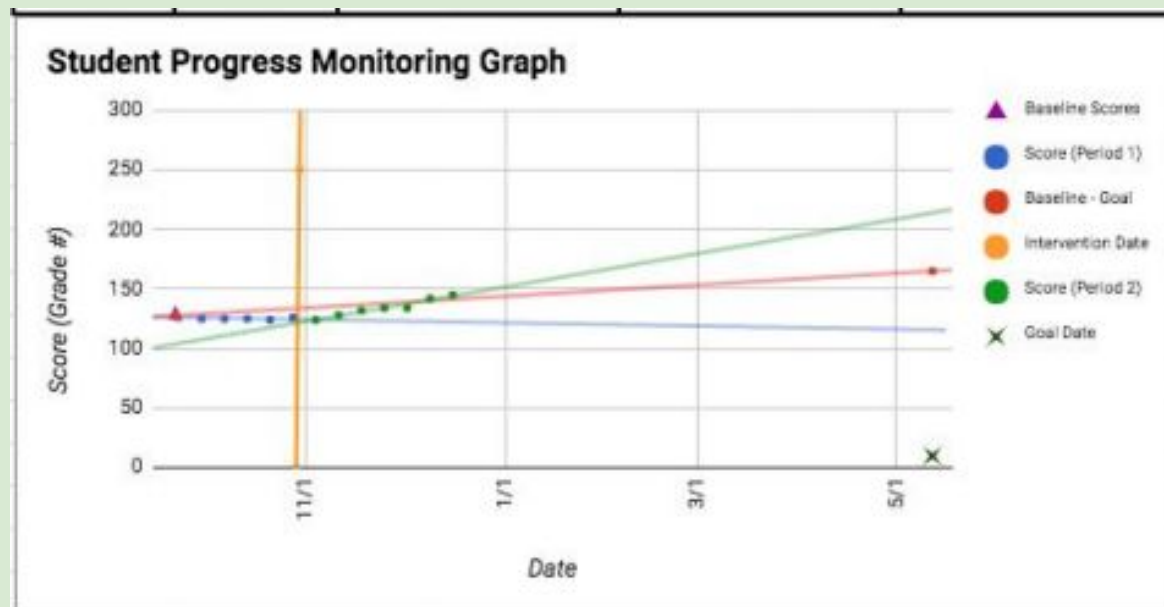


Activity - 08.12.04

The trend line based on the 7 data points that have been established during Lisa's intervention period is _____ her goal line.

- not as positively steeped as
- more positively steeped than
- equal to
- greater than

Standard: S.4.C Aligned Analysis



Tutorial

To analyze the data you retrieved, go to the graph in Lisa's progress monitoring 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 | | | | | |

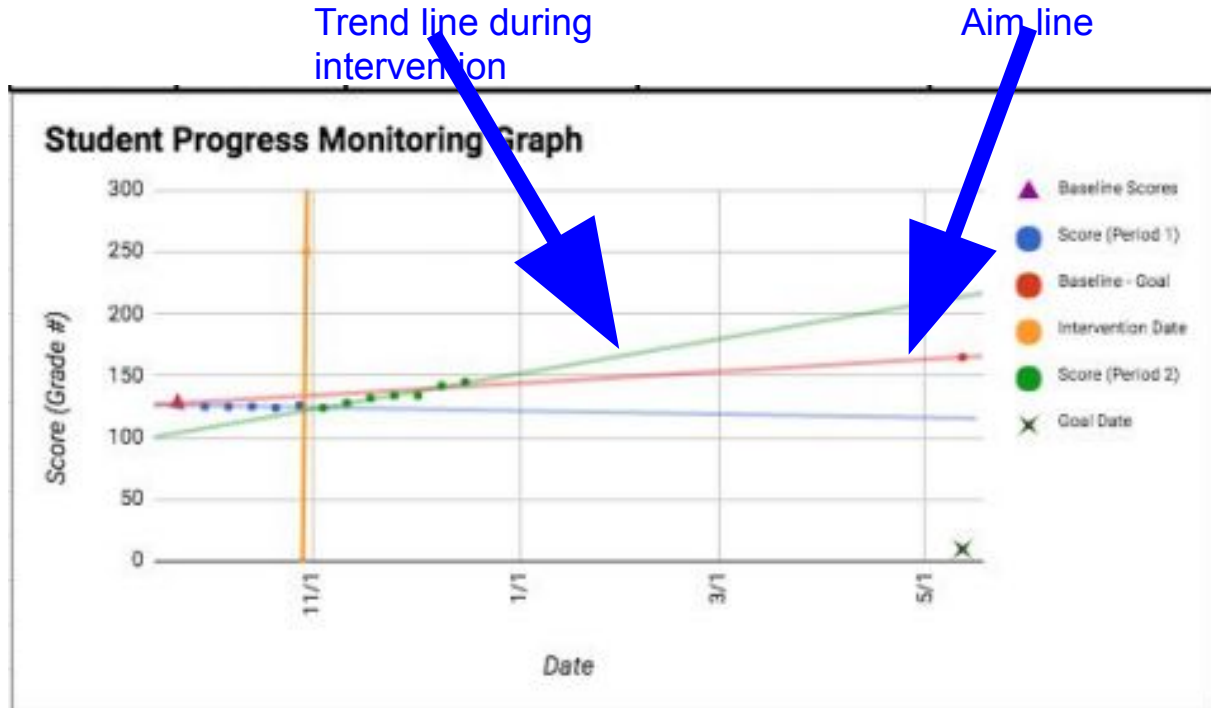
Student Progress Monitoring Graph

The graph displays the student's progress over time. The y-axis represents the score in grade numbers, ranging from 0 to 300. The x-axis represents the date, from 9/23 to 12/16. The data points show a consistent upward trend, with a significant increase in scores after the intervention date (11/1). The goal score is set at 165, which is reached by the student around 12/16.

Tutorial

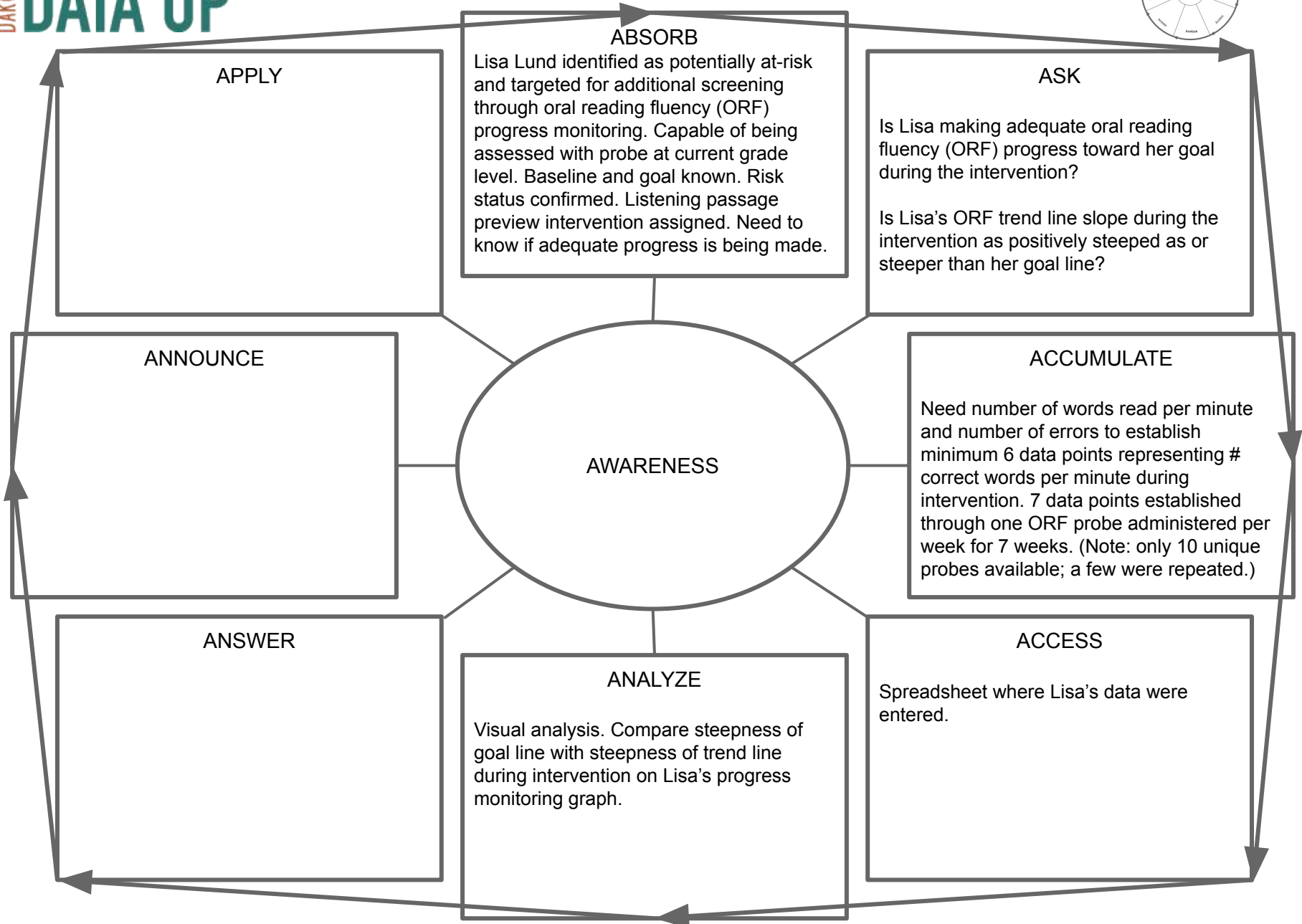
Conduct a visual analysis of the graph by comparing the slope of Lisa's aim line (i.e., goal line) with the slope of her trend line representing data points during the intervention period. As a reminder, the aim line is drawn between Lisa's baseline and goal values; this is the red line on the graph. The trend line during the intervention is based on the 7 data points plotted to the right of the vertical intervention line; this is the green line on the graph.

As you can see in the graph, Lisa's trend line during the intervention period is more positively steeped than her aim line.



A+ Inquiry Framework

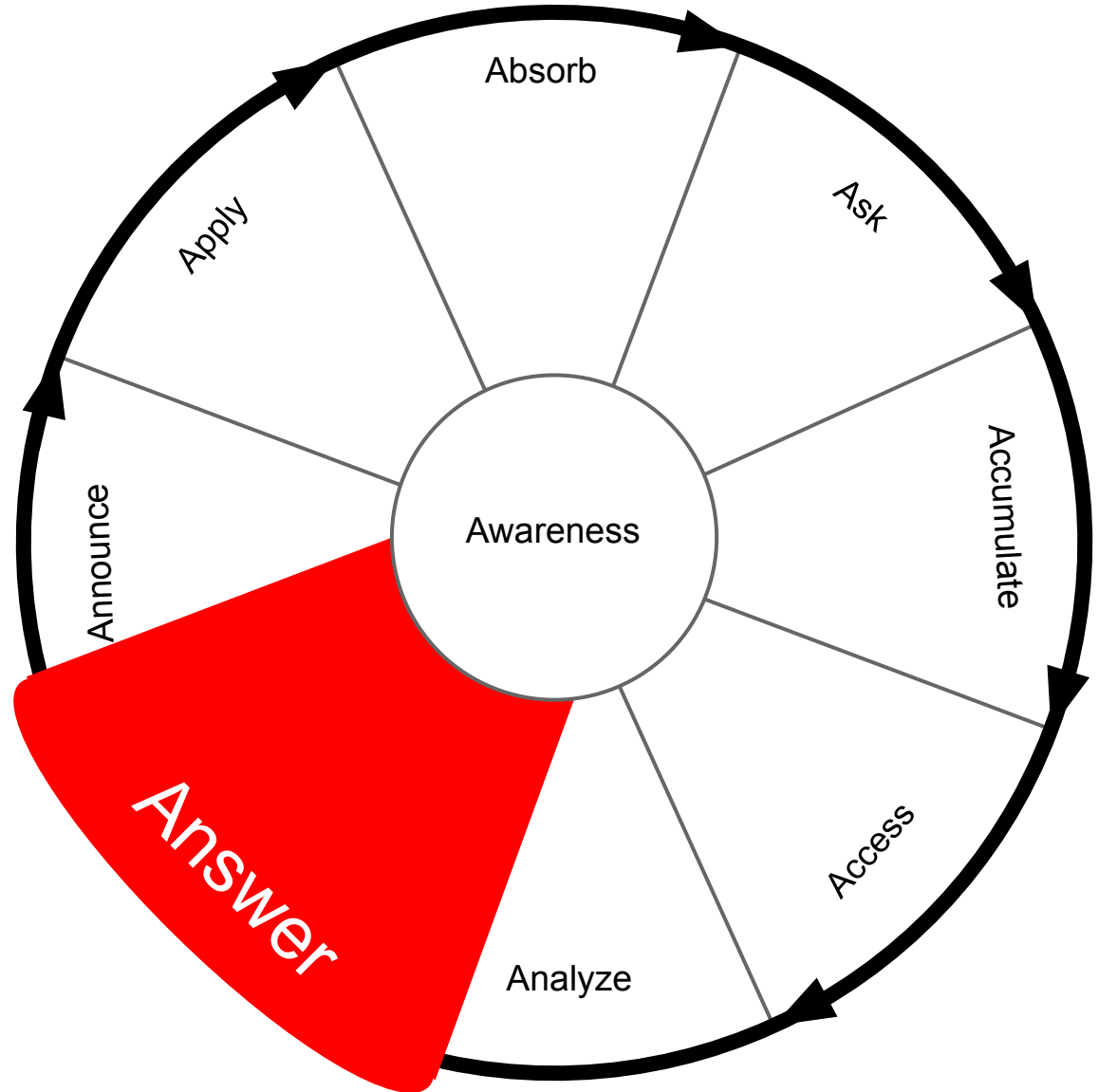
The Analyze stage has been completed.

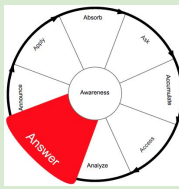


Answer Stage

Ryan:

Now it's time to enter the Answer stage where you confirm that data analysis revealed answers to your questions.



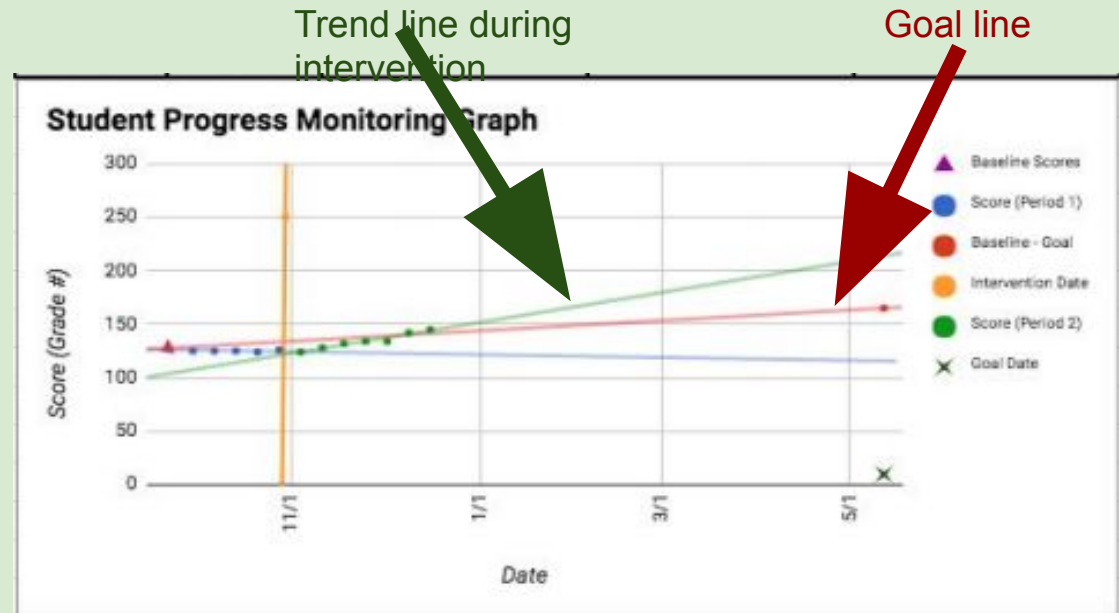


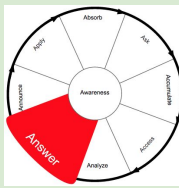
Activity - 08.12.05

Based on your visual analysis revealing that Lisa's trend line during the intervention period is more positively steeped than her goal line, select the answer to the general question you posed in the Ask stage, "Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?"

- Yes
- No
- Not sure
- There's not enough information to answer the question

Standard: S.5.C
Patterns



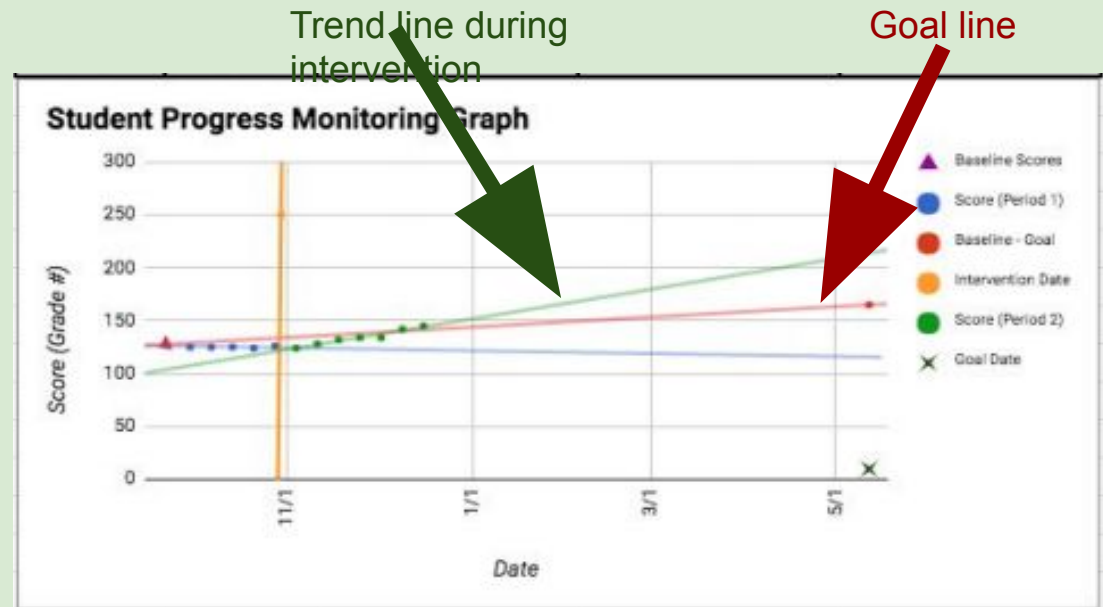


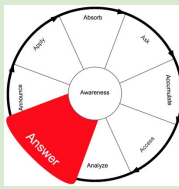
Activity - 08.12.06

As indicated in the Accumulate stage, there are only 10 unique oral reading fluency (ORF) probes available for you to use. Consequently, a(n) _____ could be a potential limitation of the results. This would suggest Lisa's performance may have improved on a repeated probe, not necessarily because of the intervention, but because she learned something during the first time she was assessed with the probe.

- learning effect or practice effect
- open source impact
- single probe effect
- intentional impact

Standard: K.3.B
Data Limitations



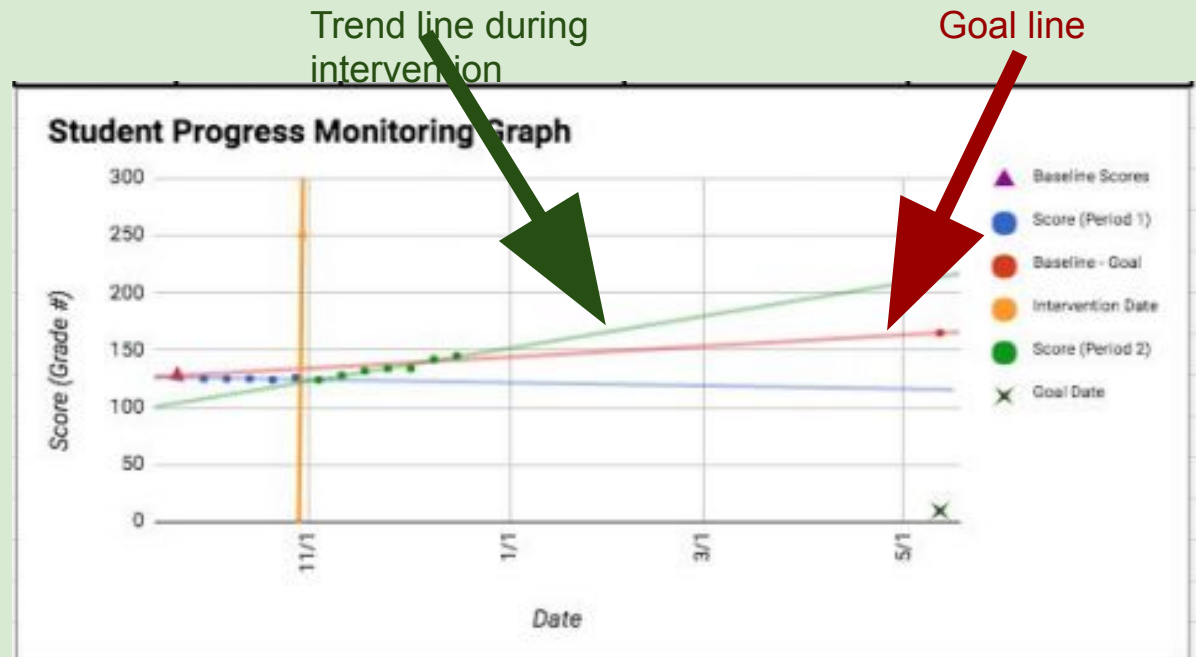


Activity - 08.12.07

If Lisa is making adequate ORF progress during the intervention period, an implication would be to _____.

- intensify the intervention with Lisa because it is not working
- assign the same intervention to all students in Lisa's class whether or not they are at risk
- continue implementing the intervention and monitoring Lisa's progress
- start assessing Lisa with probes that represent a lower grade level

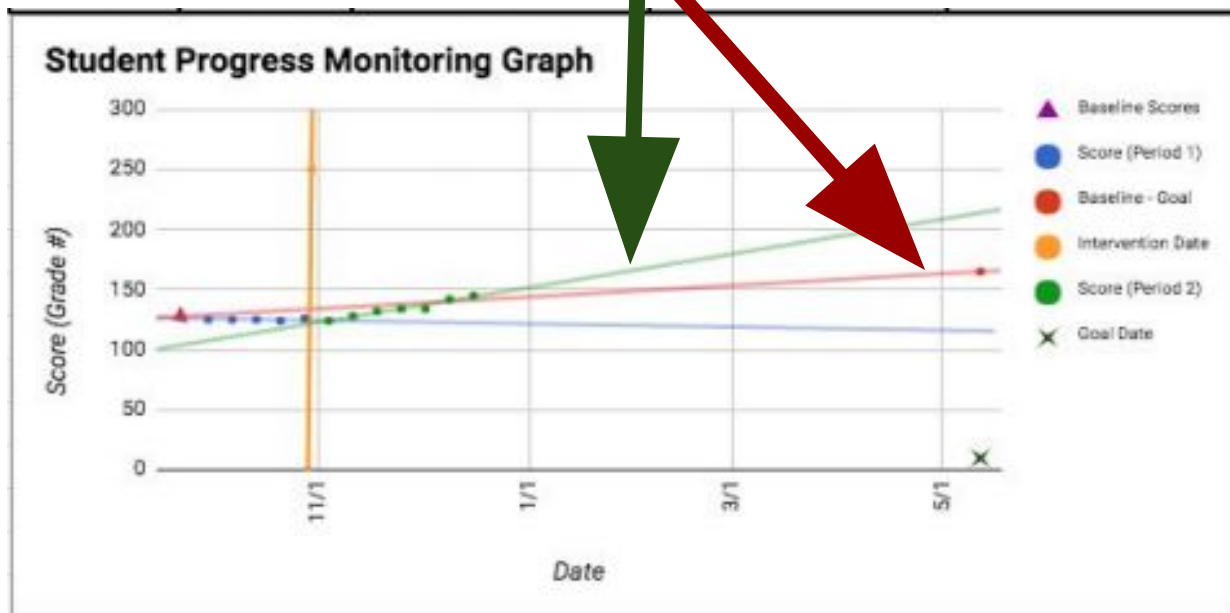
Standard: S.7.A
Strategies



Tutorial

You revisit the initial questions to verify your analyses revealed answers to the questions. The operational question posed in the Ask stage states, “Is Lisa’s ORF trend line slope during the intervention as positively steeped as or steeper than her goal line?” This is a proxy for the general question, “Is Lisa making adequate oral reading fluency (ORF) progress toward her goal during the intervention?” Your visual analysis revealed the answer to both questions is “yes,” which is evidence that the intervention appears to be having a positive effect on Lisa’s learning.

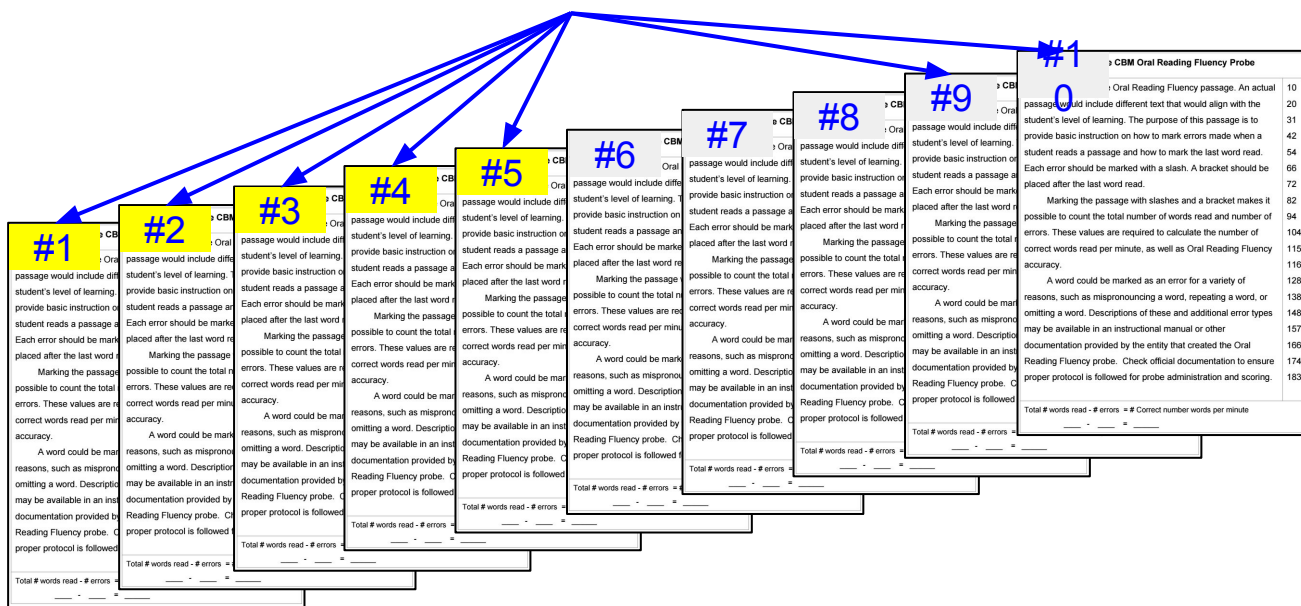
Trend line (green)
is more positively
steeped than goal
line (red)



Tutorial

As indicated in the Accumulate stage, there are only 10 unique oral reading fluency (ORF) probes available for you to use. Consequently, during the intervention period, probes 1-5 were administered to Lisa a second time; the same probes had already been administered to Lisa prior to the intervention. Administering probes 1-5 to Lisa a second time could have inhibited the internal validity of the repeated probes due to a practice effect, which may also be referred to as a learning effect. A practice effect would suggest Lisa's performance improved on a repeated probe, not necessarily because of the intervention, but because she learned something during the first time she was assessed with the probe. Therefore, the possibility that a practice effect occurred is a potential limitation of the results.

Probes 9-10 and 1-5 administered during intervention

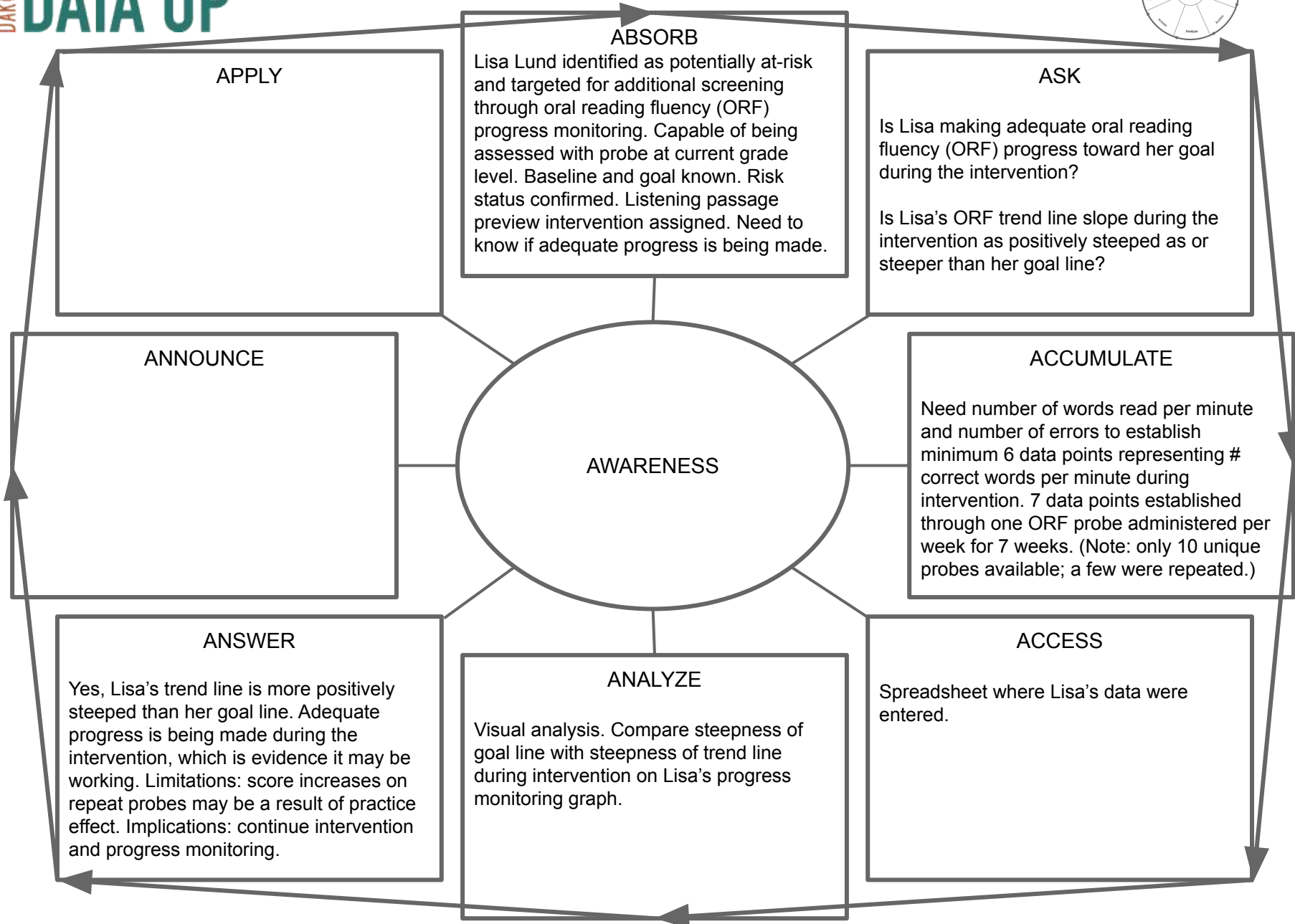


Tutorial

Although there is a potential limitation, an implication of this result is that it would be appropriate to continue implementing the intervention and monitoring Lisa's progress to ensure she continues learning at a rate that will help her achieve her goal.

A+ Inquiry Framework

The Answer stage has been completed. You answered the questions and began to identify limitations and implications of the answers.



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?

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.)

ACCESS

Spreadsheet where Lisa's data were entered.

ANALYZE

Visual analysis. Compare steepness of goal line with steepness of trend line during intervention on Lisa's progress monitoring graph.

ANSWER

Yes, Lisa's trend line is more positively steeped than her goal line. Adequate progress is being made during the intervention, which is evidence it may be working. Limitations: score increases on repeat probes may be a result of practice effect. Implications: continue intervention and progress monitoring.

ANNOUNCE

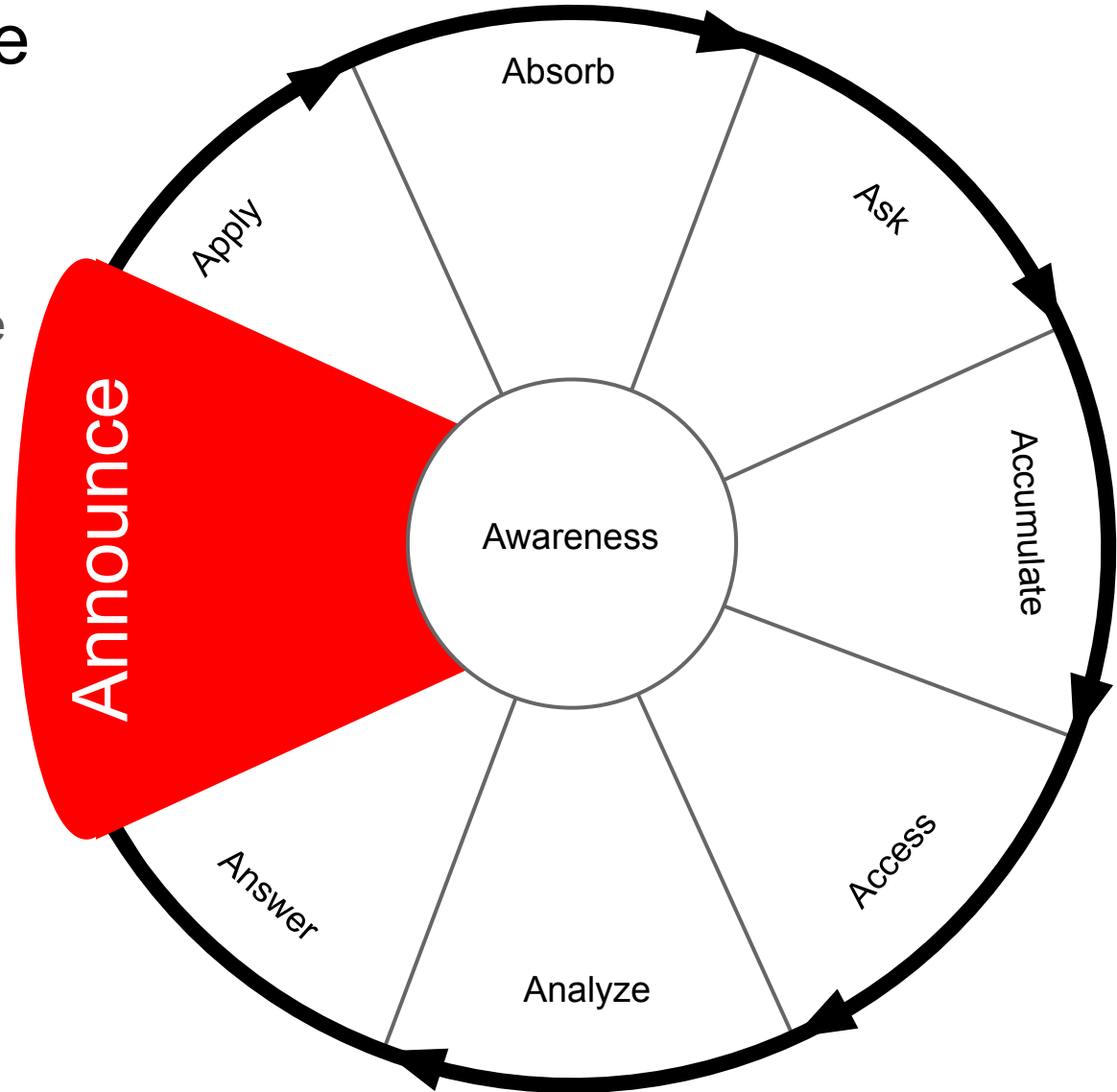
APPLY

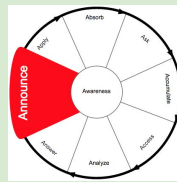
AWARENESS

Announce Stage

Ryan:

Now it's time to enter the Announce stage where you communicate the answers to applicable stakeholders.



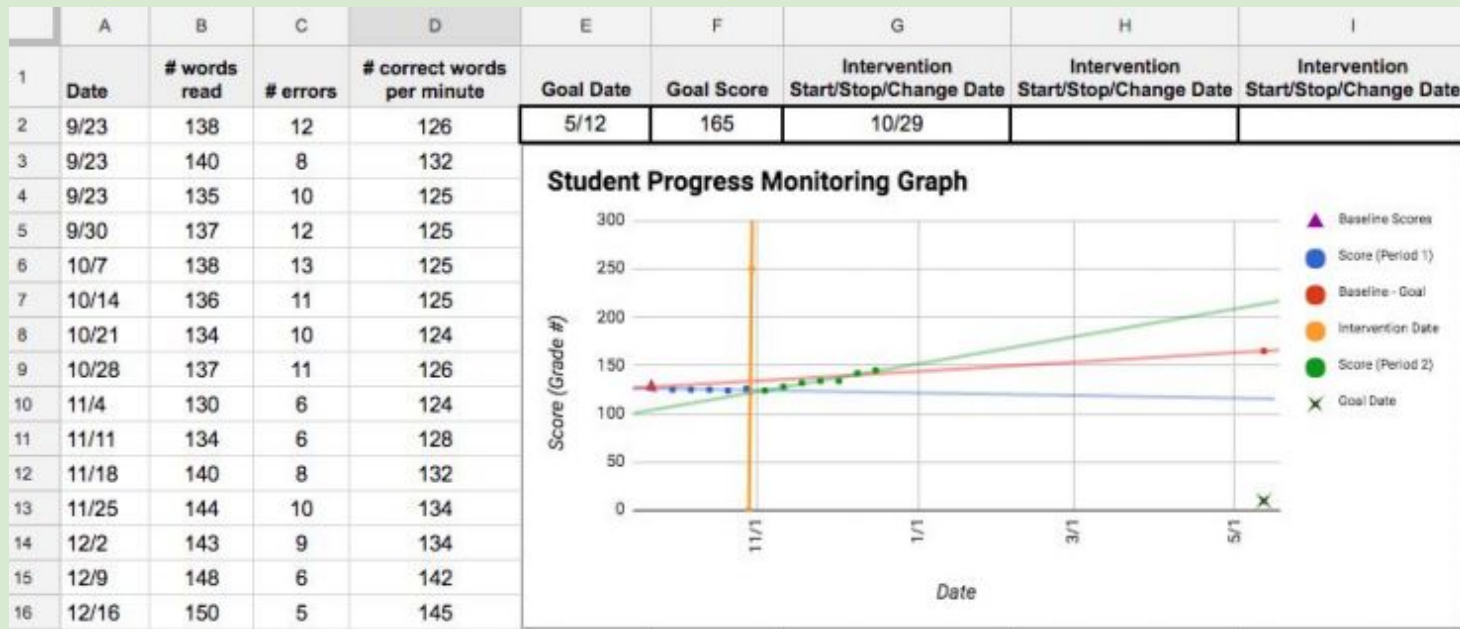


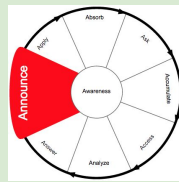
Activity - 08.12.08

It would be appropriate for you to discuss the findings of your analysis with _____.

- parents of other students in Lisa's class
- the RTI team
- students in Lisa's class
- Lisa's best friends

Standard: S.6.C
Multiple
Audiences



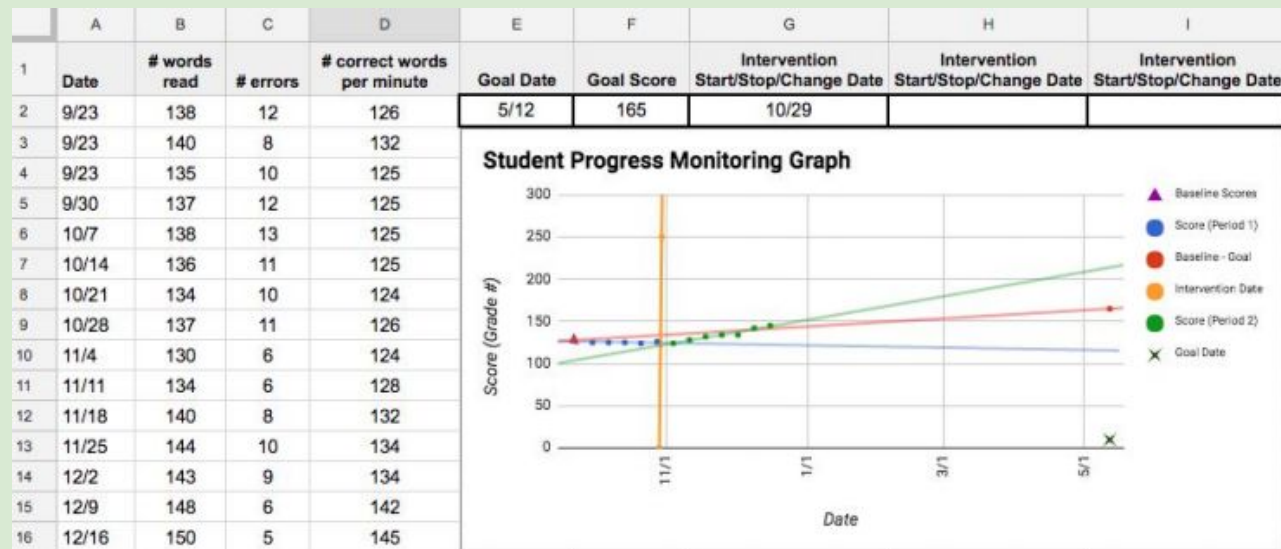


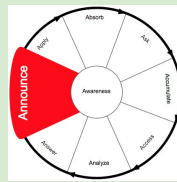
Activity - 08.12.09

Which items relevant to your data analysis findings regarding Lisa's progress during the intervention period would be appropriate to discuss with the RTI team?

- How many miles Lisa walks and the number of minutes she spends on other exercise each day
- Desired vacation destinations
- The number of hours Lisa spent in extracurricular activities with her friends during the summer
- Potential limitation of a practice effect and the implications of continuing the intervention and progress monitoring

Standard: S.6.C
Multiple Audiences



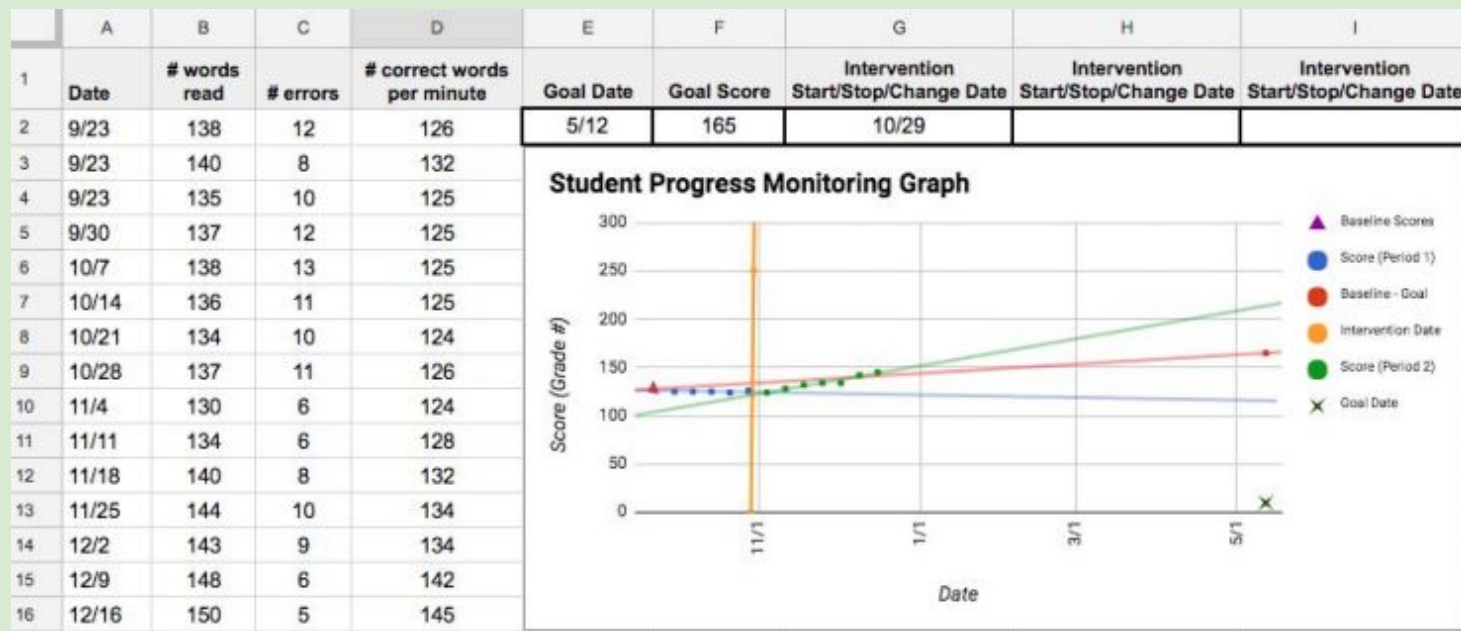


Activity - 08.12.10

It would also be appropriate to share the results about Lisa's progress during the intervention period with _____ during a one-on-one meeting.

- Lisa's best friend
- Lisa
- Lisa's sibling
- Lisa's cousin

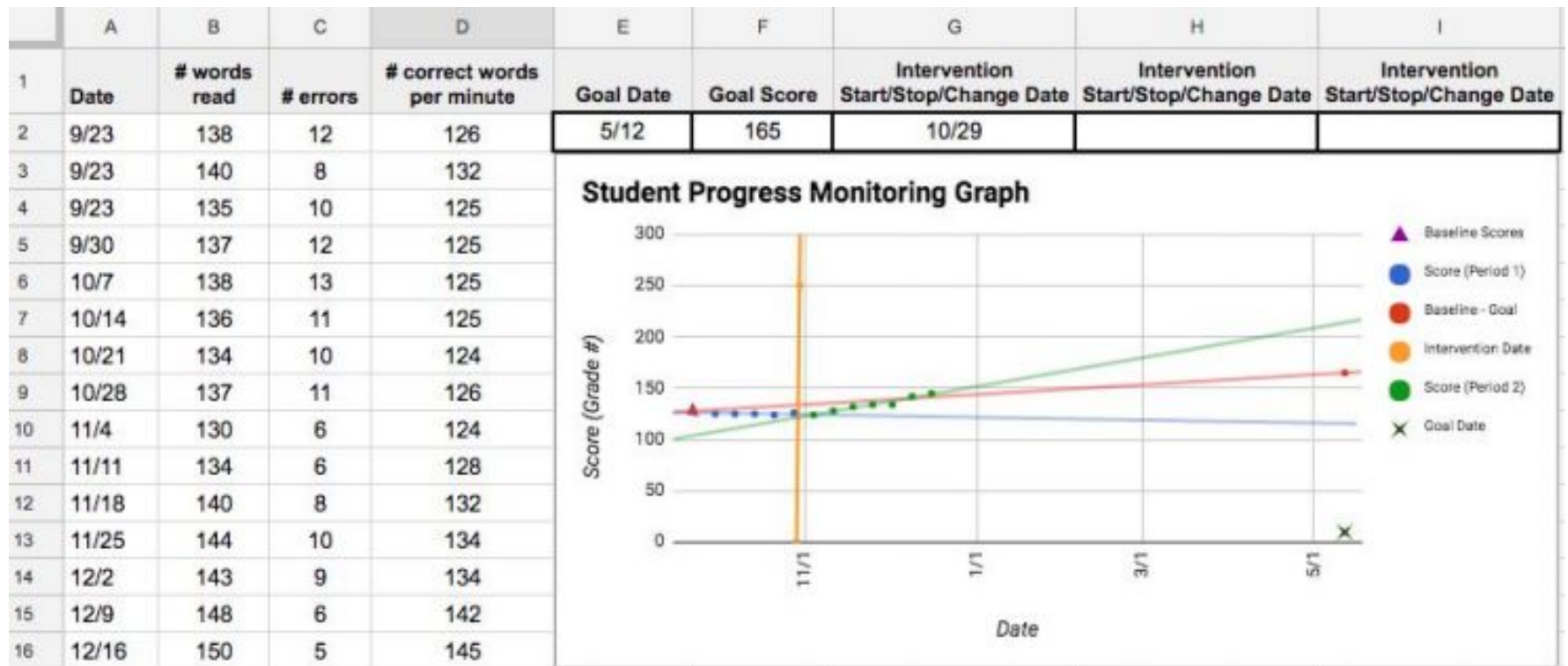
Standard: S.6.C
Multiple
Audiences



Tutorial

You discuss the following items relevant to your analysis with the RTI team:

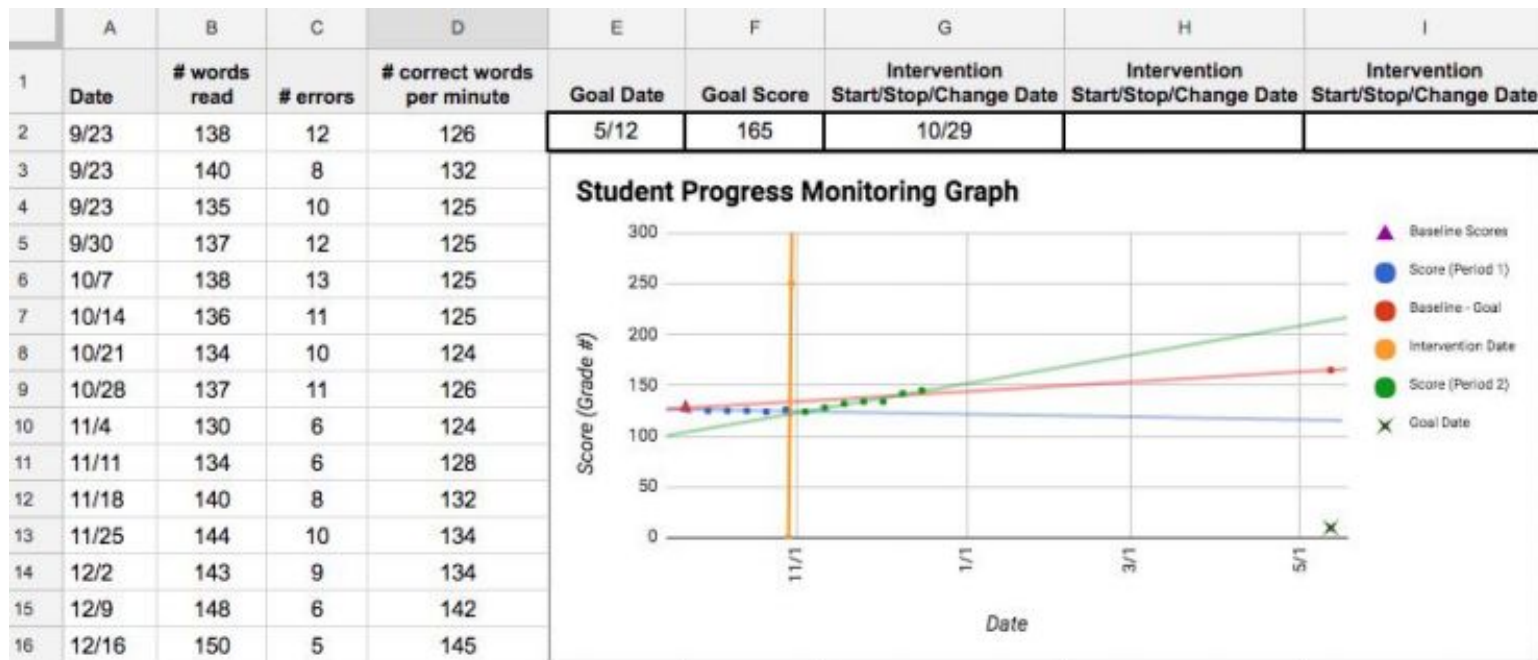
- Lisa's performance during the intervention compared to her goal and her performance prior to the intervention
- the potential limitation of a practice effect
- the implication of continuing the intervention
- the implication of continuing progress monitoring



Tutorial

It would also be appropriate to share the results with Lisa during a one-on-one meeting and with Lisa's parents during a parent/teacher conference or meeting. The items you would discuss with Lisa and her parents are similar to the items discussed with the RTI team:

- Lisa's performance during the intervention compared to her goal and her performance prior to the intervention
- the potential limitation of a practice effect
- the implication of continuing the intervention
- the implication of continuing progress monitoring



A+ Inquiry Framework

The Announce stage has been completed. You communicated the data analysis findings.



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?

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.)

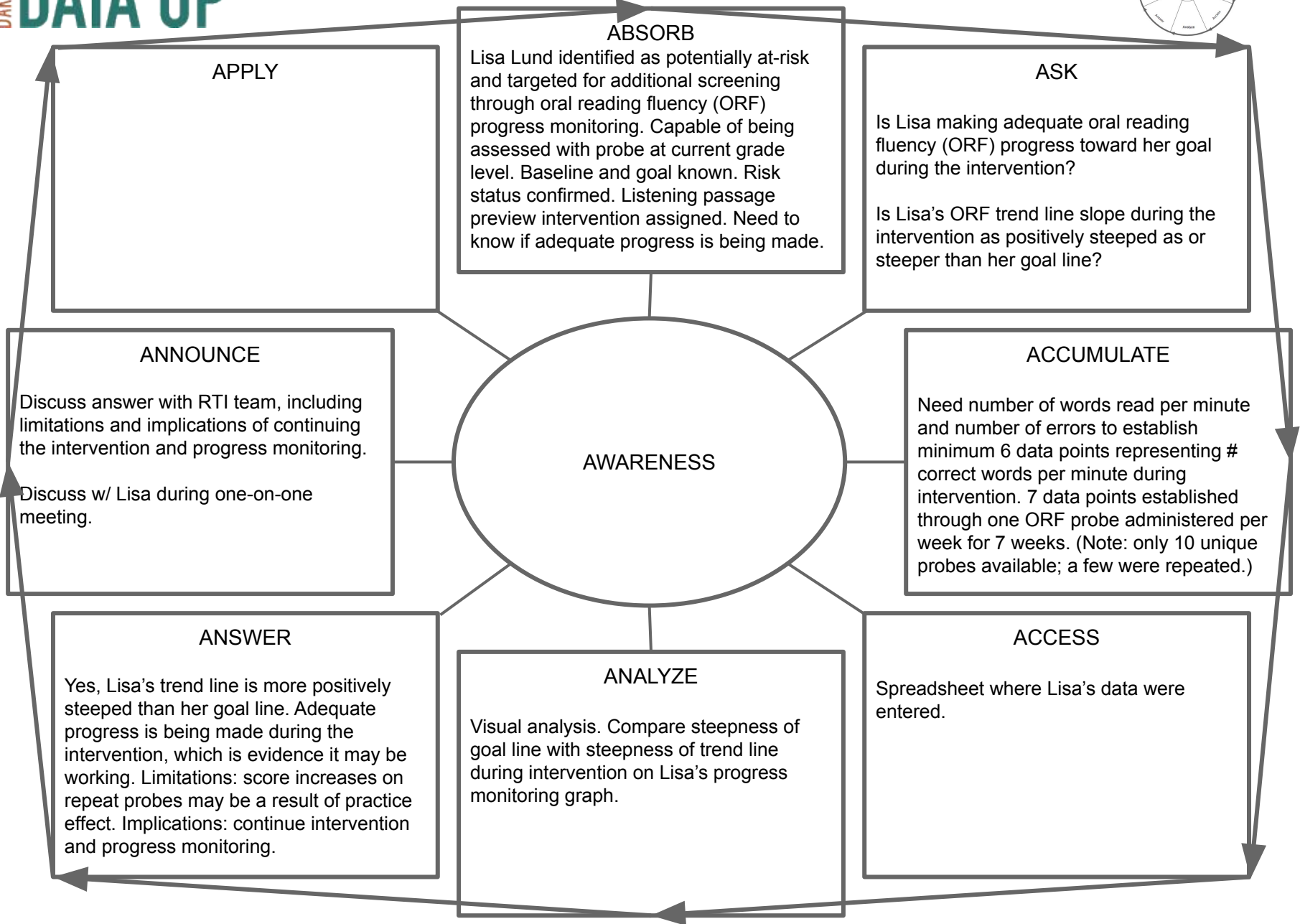
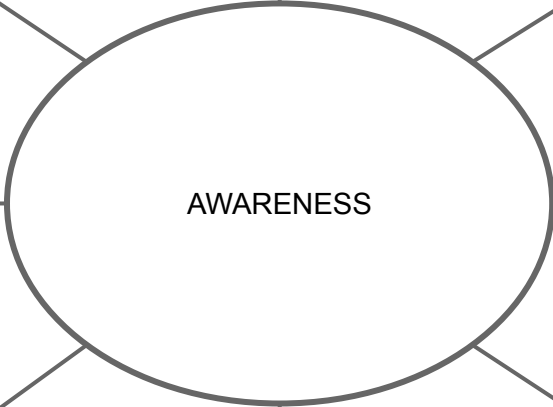
ACCESS
 Spreadsheet where Lisa's data were entered.

ANALYZE
 Visual analysis. Compare steepness of goal line with steepness of trend line during intervention on Lisa's progress monitoring graph.

ANSWER
 Yes, Lisa's trend line is more positively steeped than her goal line. Adequate progress is being made during the intervention, which is evidence it may be working. Limitations: score increases on repeat probes may be a result of practice effect. Implications: continue intervention and progress monitoring.

ANNOUNCE
 Discuss answer with RTI team, including limitations and implications of continuing the intervention and progress monitoring.
 Discuss w/ Lisa during one-on-one meeting.

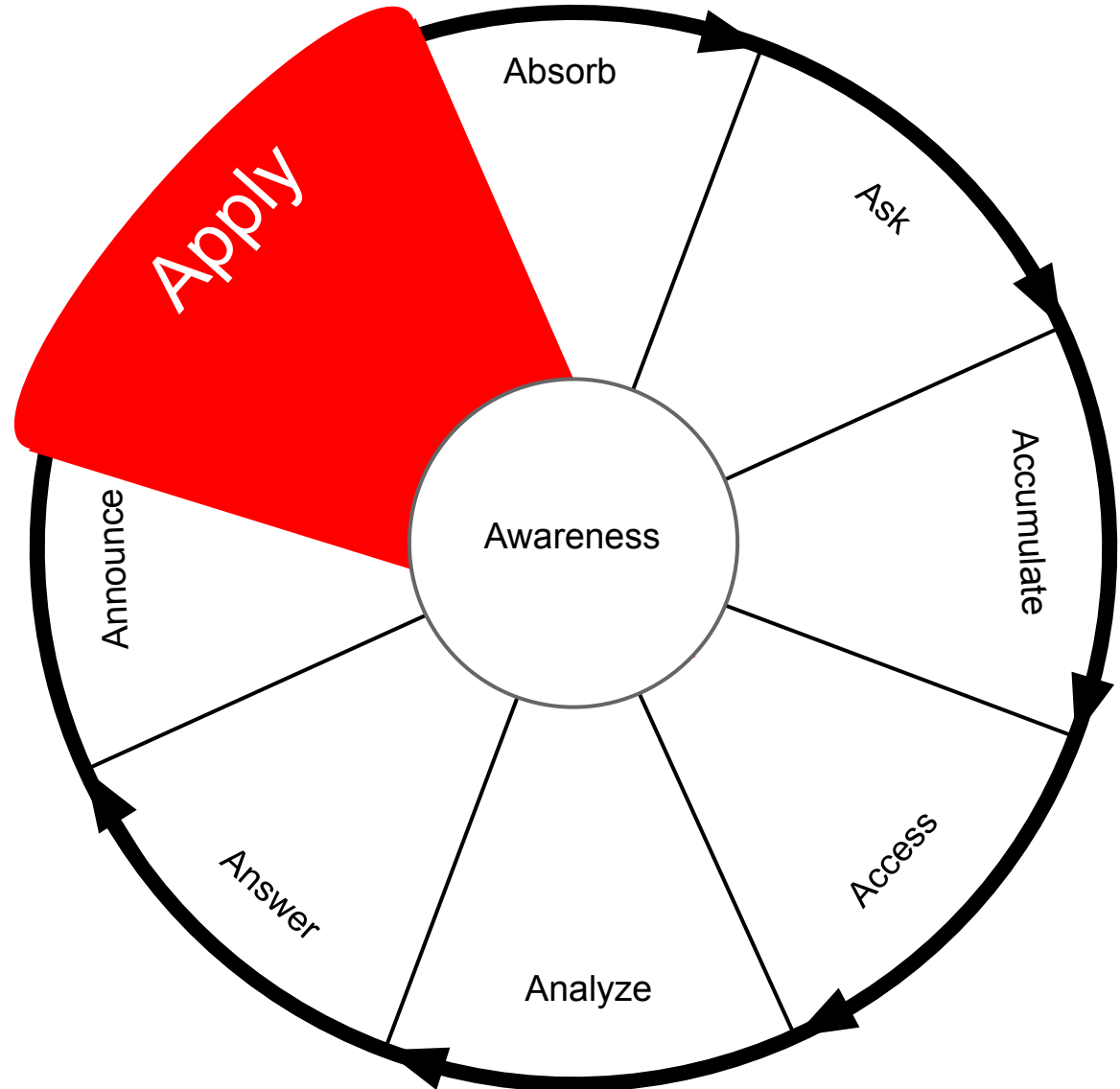
APPLY

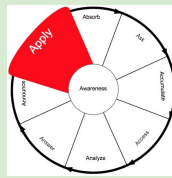


Apply Stage

Ryan:

Now it's time to enter the Apply stage where you make decisions and take action based on answers to the questions you posed in the Ask stage.



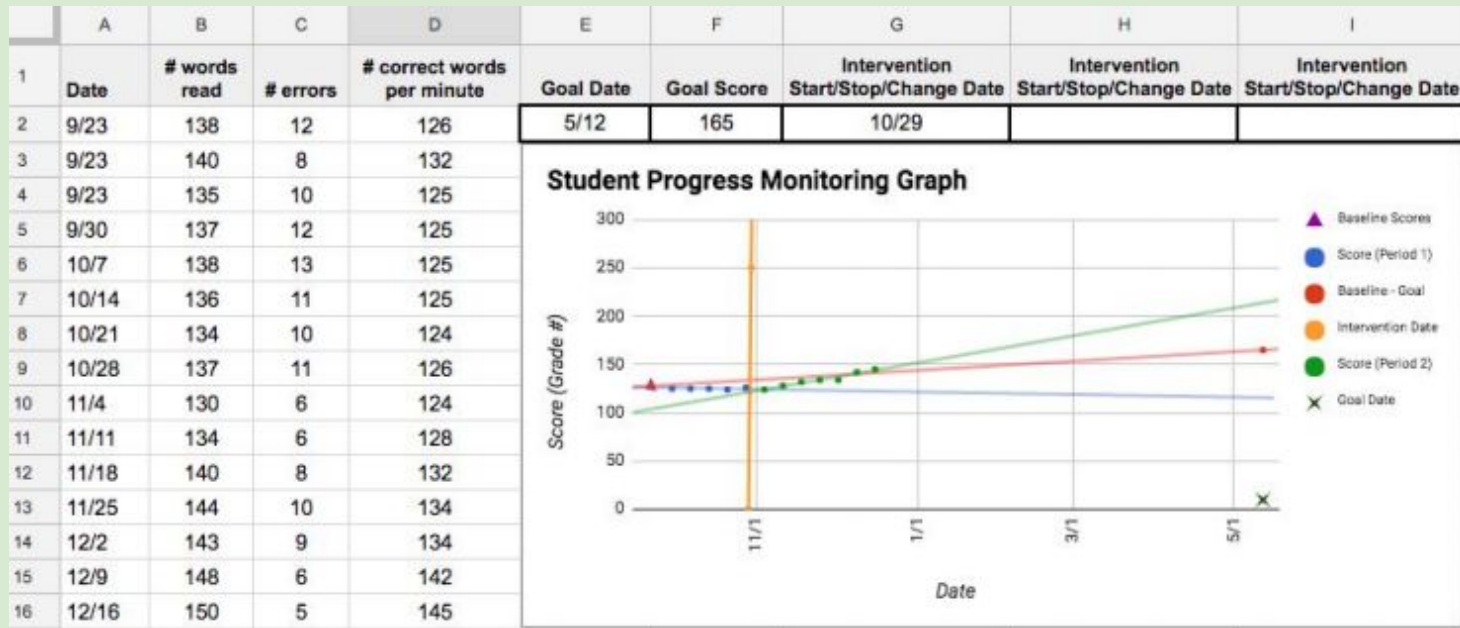


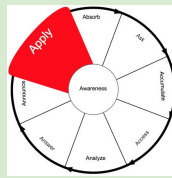
Activity - 08.12.11

Based on your evidence indicating that the “learning passage preview” intervention may be having a positive effect on Lisa’s learning, you _____.

- continue implementing the intervention and monitoring Lisa’s progress
- remove Lisa’s end-of-year goal
- stop the intervention because it is not working
- begin the same intervention with all students in your class whether or not they are at-risk.

Standard: S.7.A
Strategies



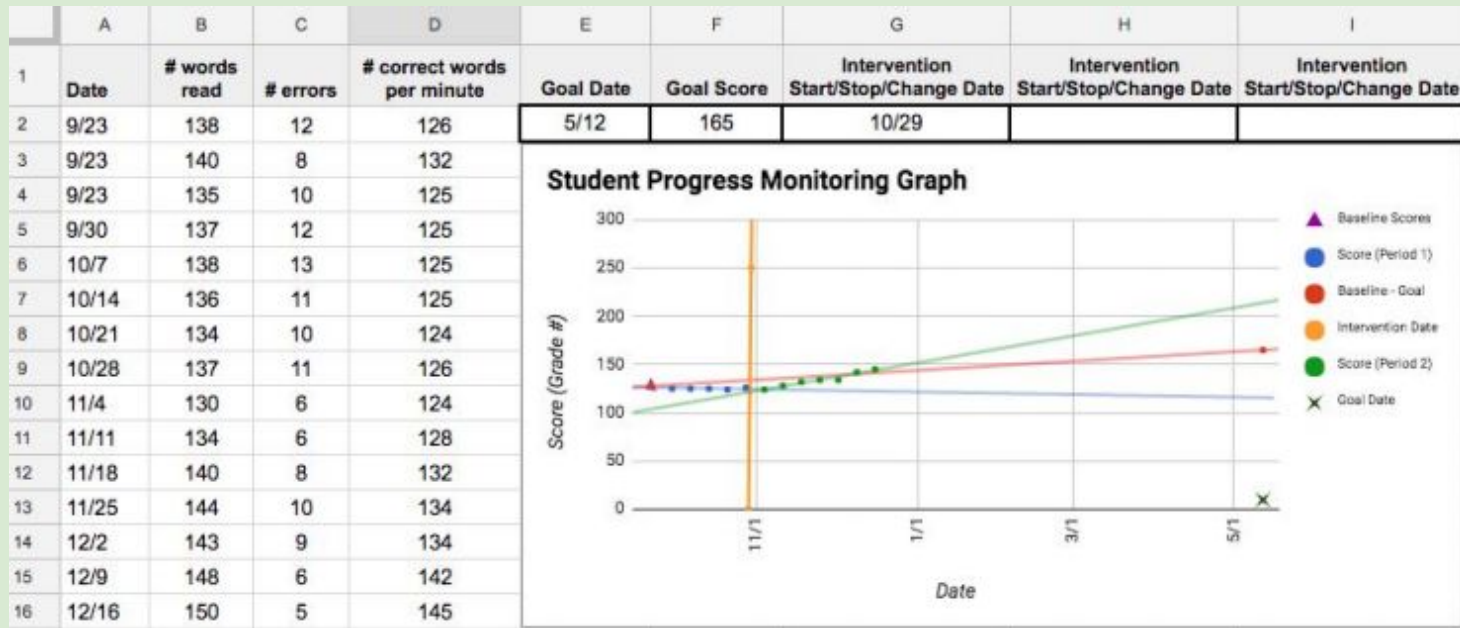


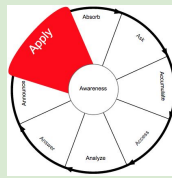
Activity - 08.12.12

If she continues to make substantial progress, especially if there are a few consecutive data points plotted above her goal line, it may make sense to _____.

- increase the intensity of the intervention
- decrease the intensity of the intervention or stop it altogether
- add an intervention so she could participate in two simultaneous interventions
- decrease the intensity of interventions for all students in your class

Standard: S.7.A
Strategies



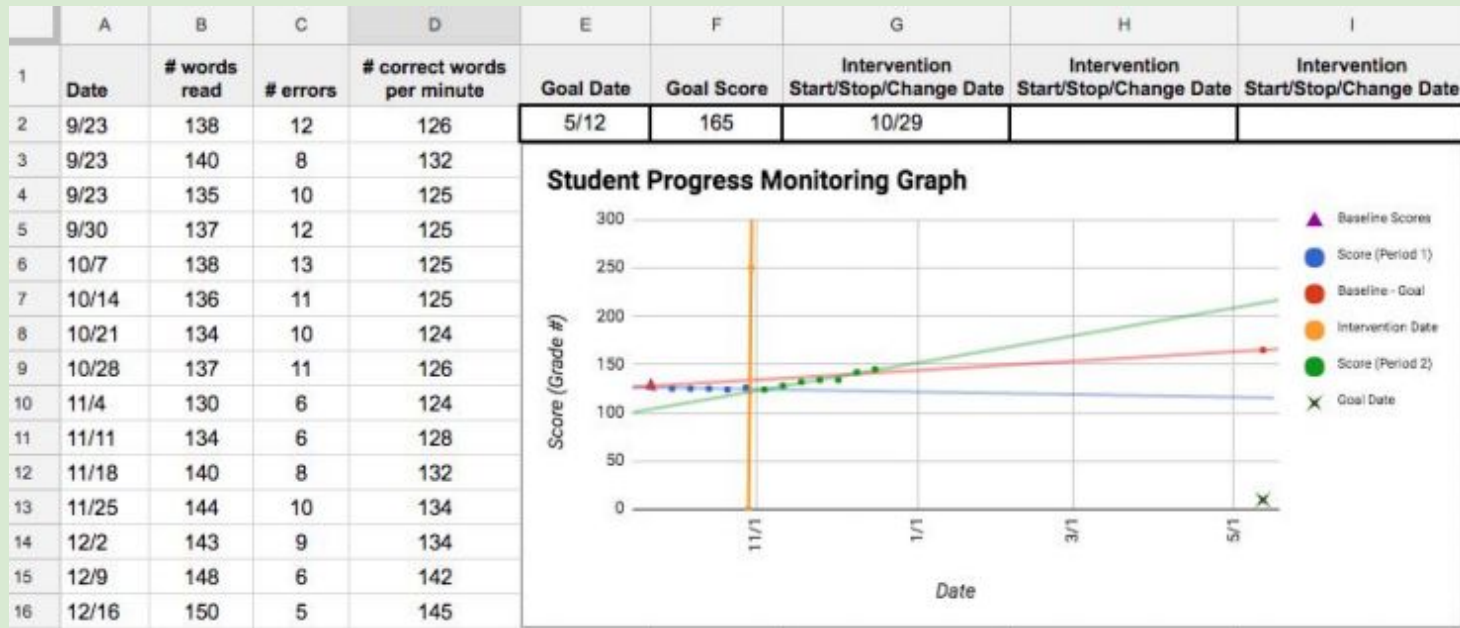


Activity - 08.12.13

If additional progress monitoring reveals that Lisa no longer needs a supplemental intervention, she would return to the general education setting, which is otherwise known as _____.

- Tier 1 or universal intervention
- Tier 2 or strategic intervention
- Tier 3 or tertiary intervention
- Tier 4 or enrichment intervention

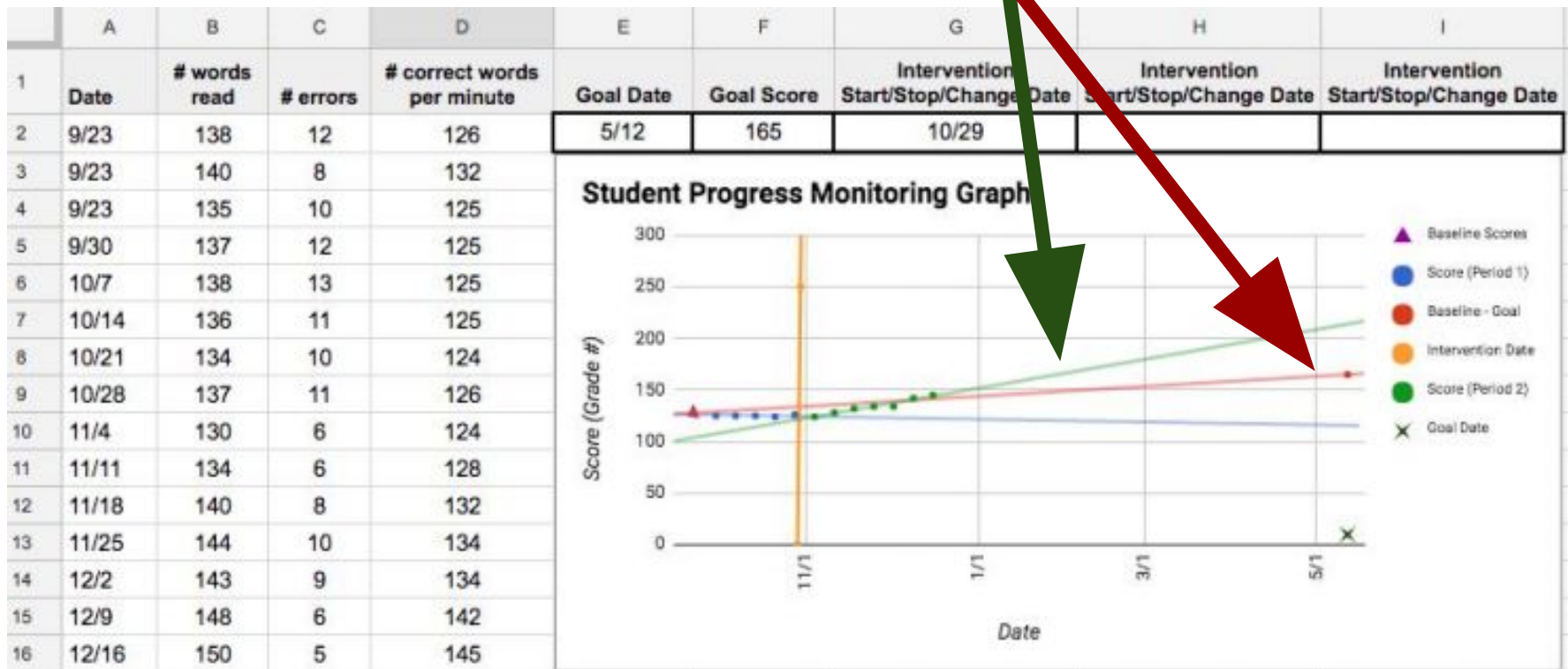
Standard: S.7.A
Strategies



Tutorial

In the Apply stage, based on your evidence indicating that the “learning passage preview” intervention may be having a positive effect on Lisa’s learning, you continue implementing the passage learning intervention and navigating a similar data use cycle to continue monitoring her progress.

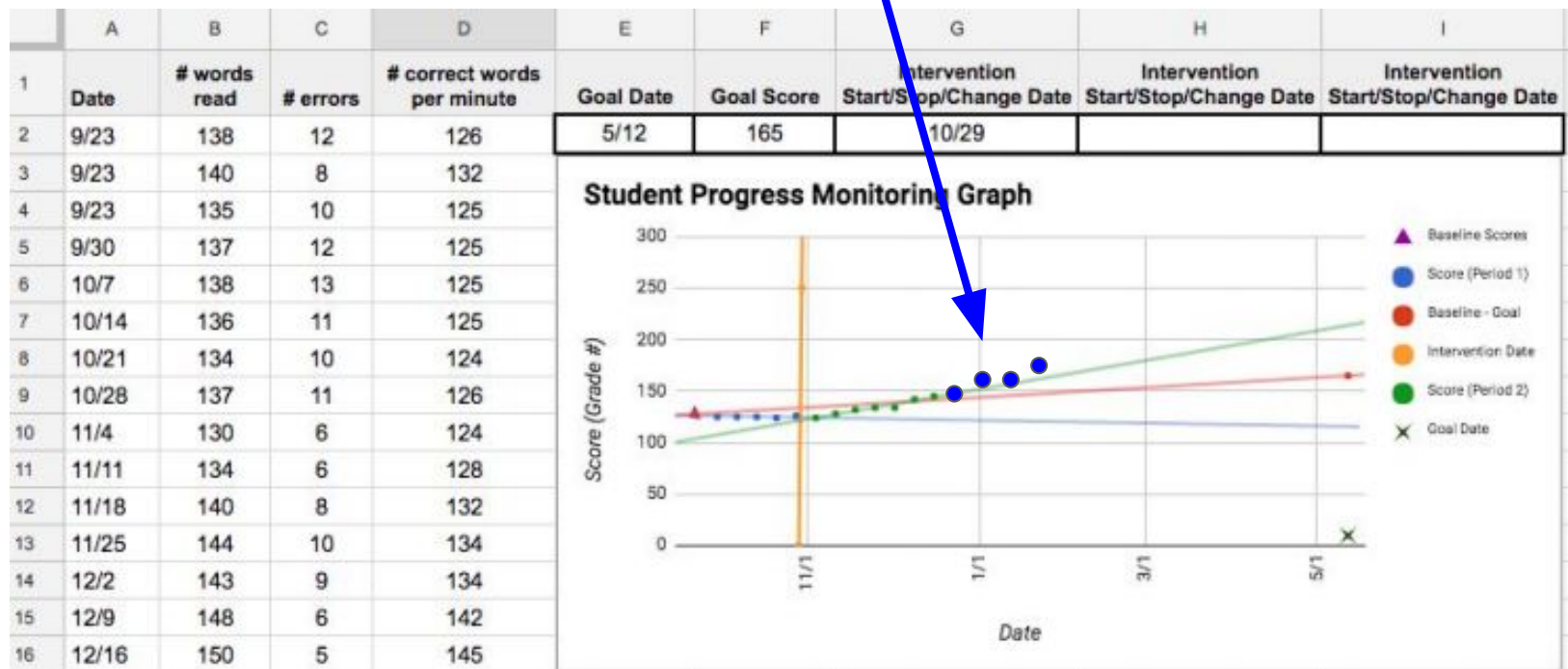
Trend line (green) is more positively steeped than goal line (red)



Tutorial

If Lisa continues to make substantial progress, especially if she has a few consecutive data points plotted above her goal line, you may consider decreasing the intensity of the intervention or stopping it altogether and returning her to the general education setting only.

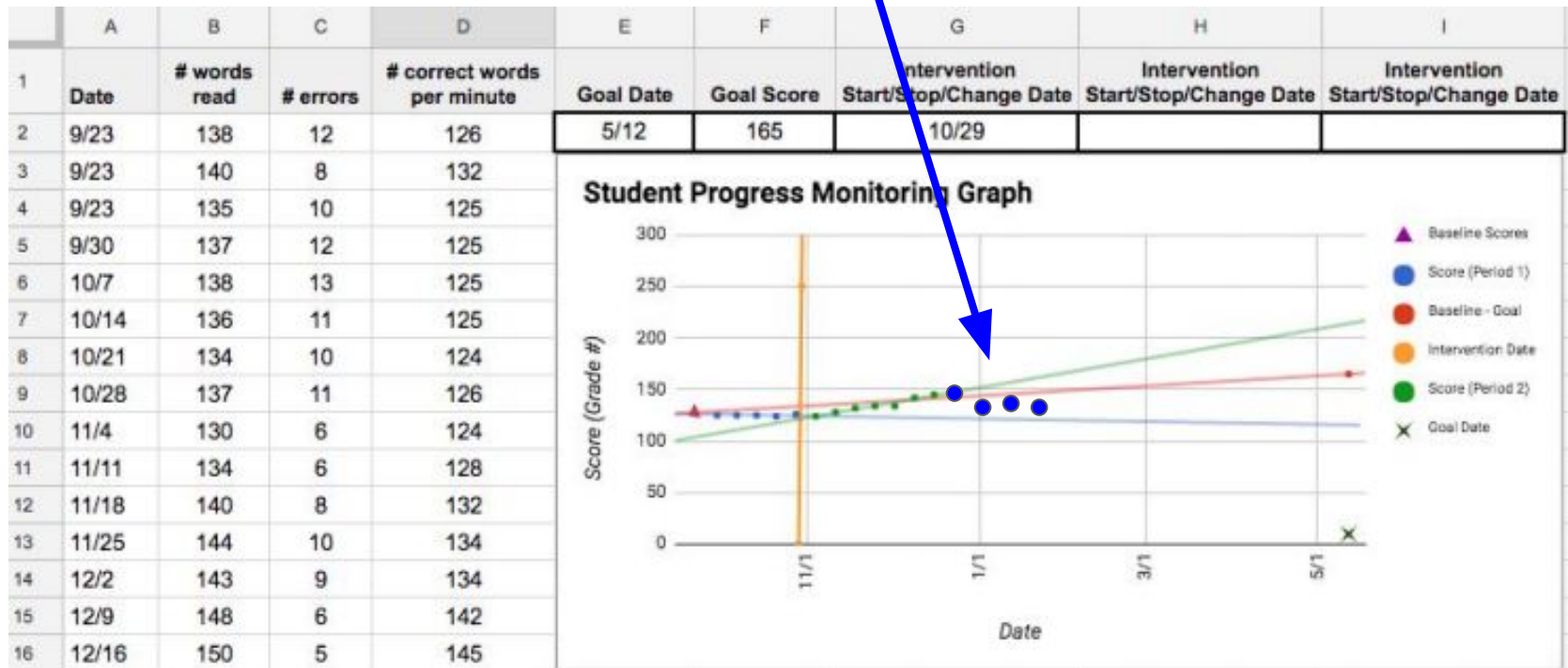
Example of subsequent data points plotted above goal line



Tutorial

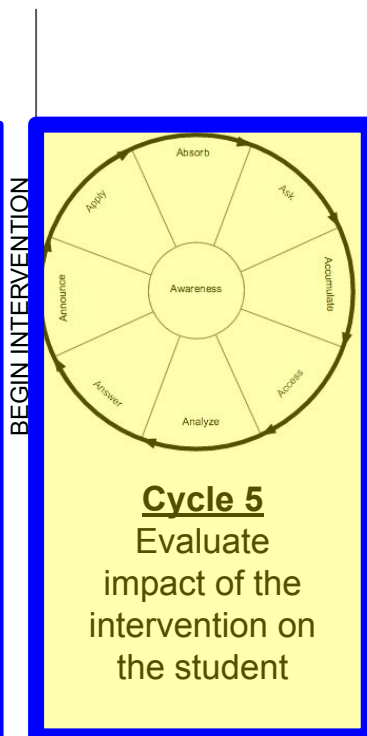
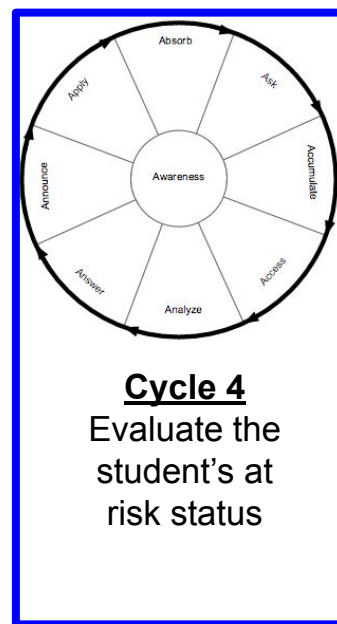
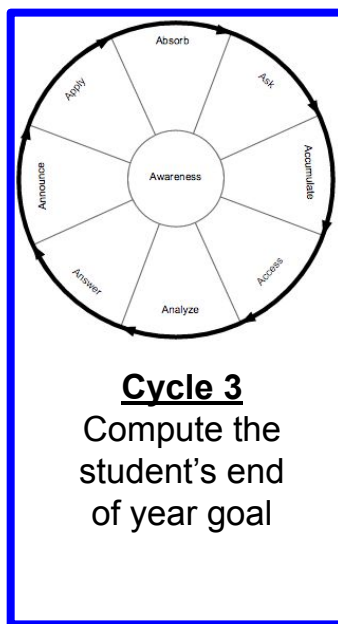
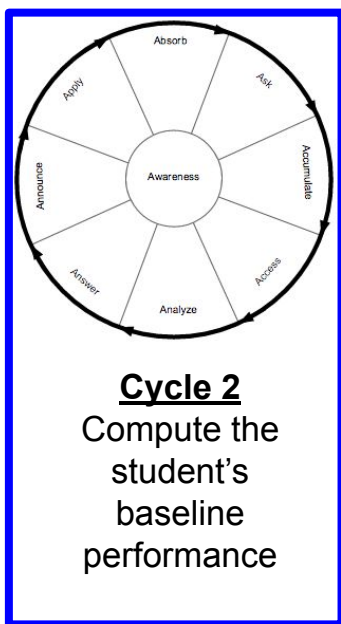
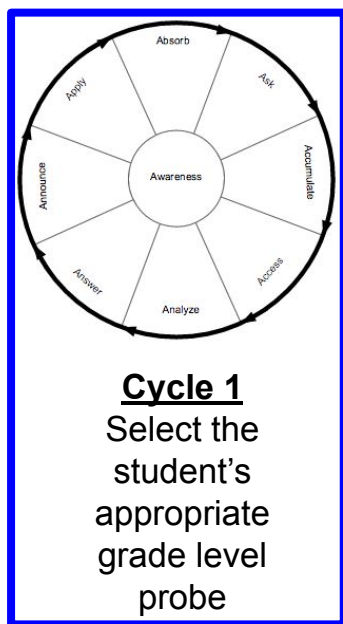
If her performance declines, you may consider intensifying or modifying the intervention.

Example of subsequent data points plotted below goal line



Tutorial

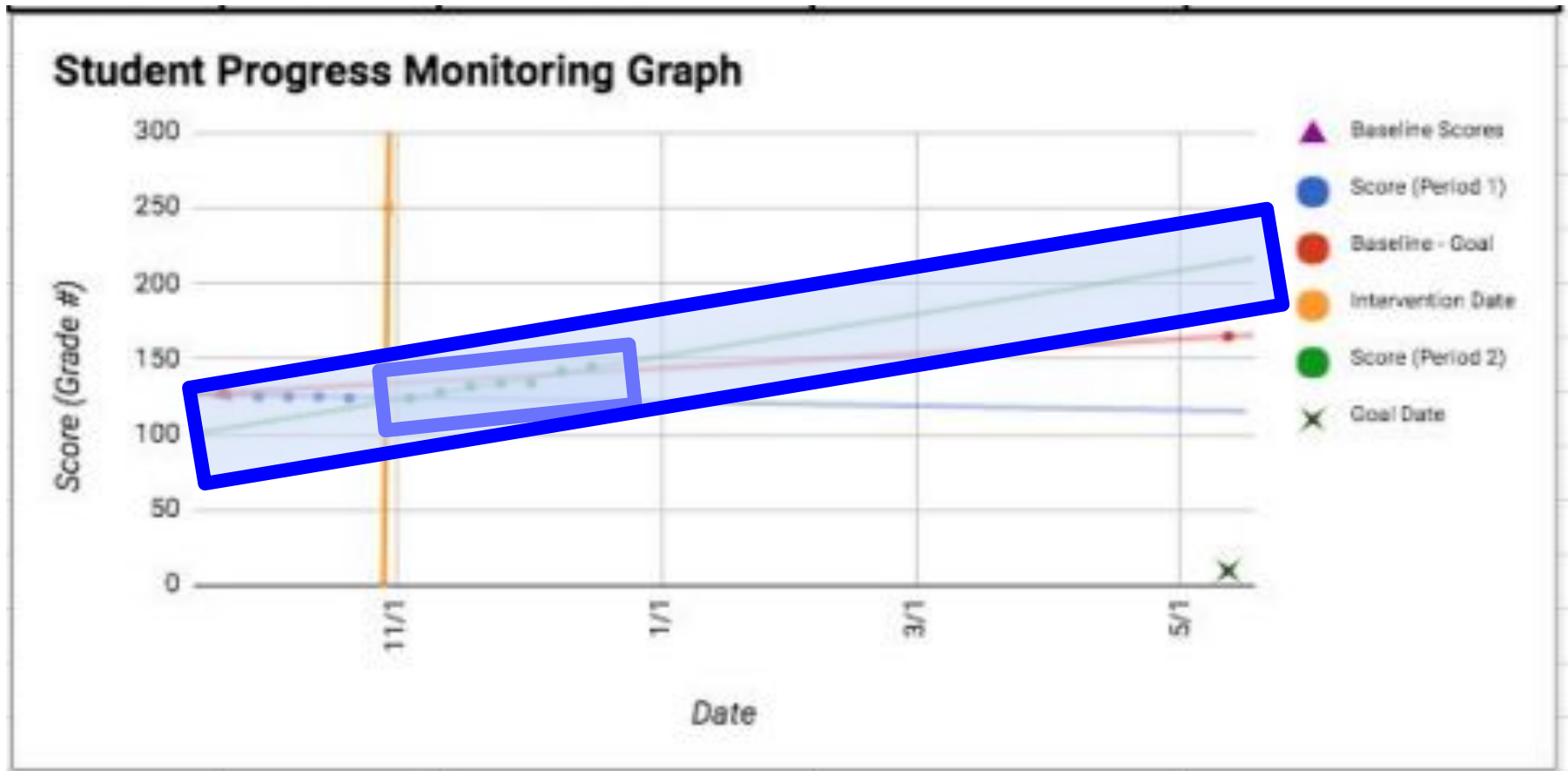
As you continue monitoring Lisa's progress, you will implement data use cycles similar to cycle 5 to ensure she is on track to achieve her end-of-year goal and inform decisions about modifying or stopping interventions and/or adjusting her goal.



A+ Inquiry Framework

The Apply stage has been completed. All stages have been completed for Cycle 5 of progress monitoring. Excellent work! You are applying decisions and actions based on data analysis findings. You addressed each stage of the A+ Inquiry framework, demonstrating awareness throughout the entire inquiry cycle to ensure the right context was absorbed, the right questions were asked, the right data were accumulated, accessed, and analyzed, the right answers were derived, the right announcements were communicated, and the right applications were made.

You've completed the fifth data cycle. As a result, Lisa's data points and trend line during the intervention period have been added to her progress monitoring graph.





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?

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.)

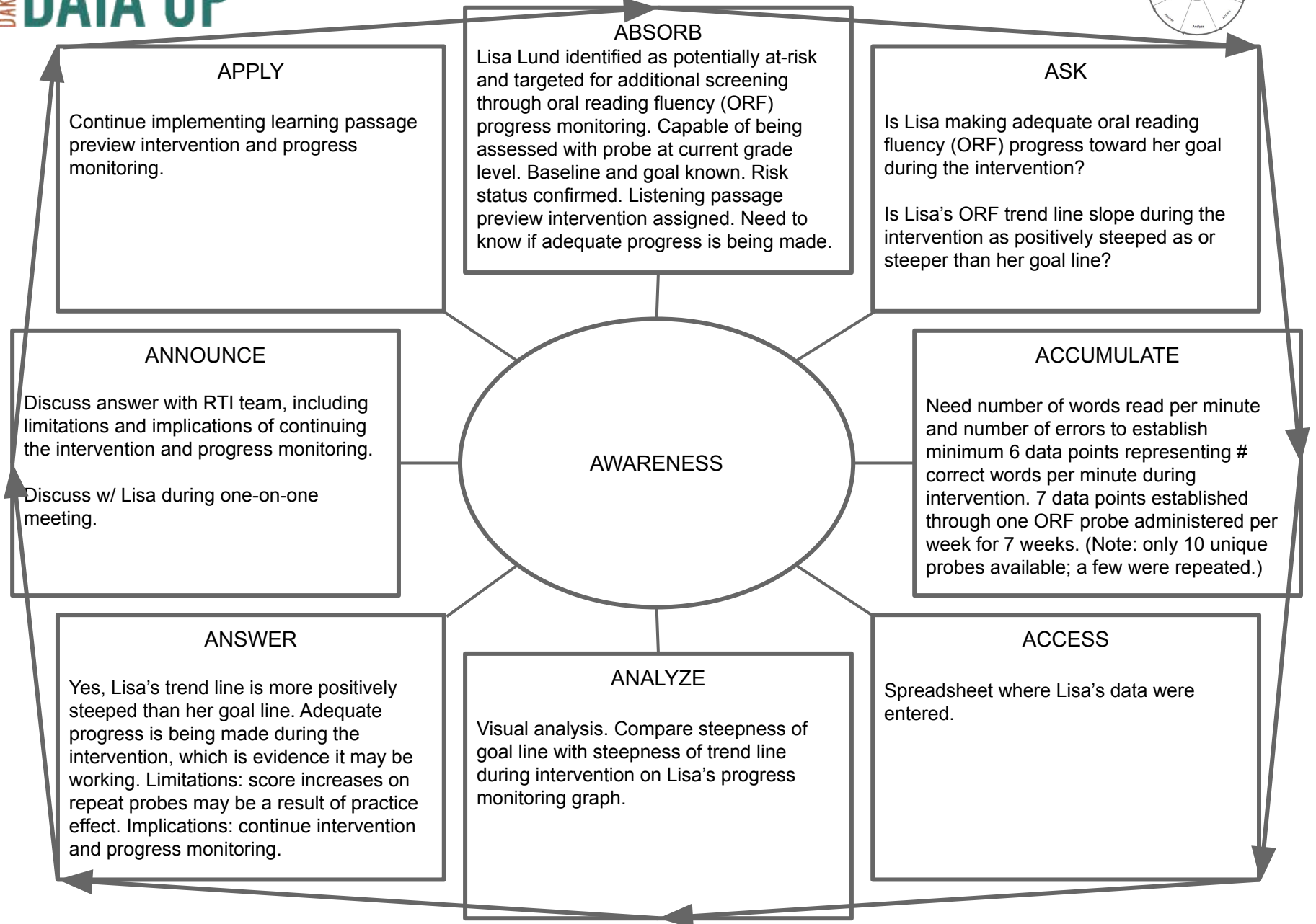
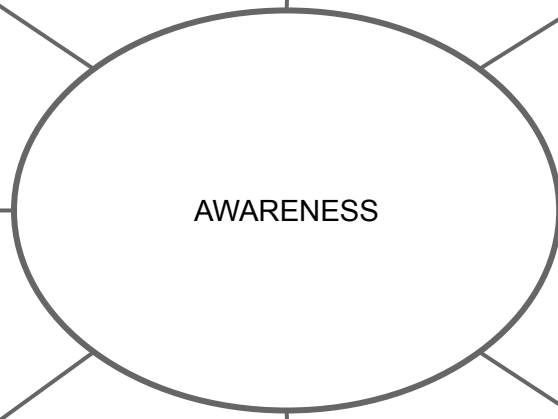
ACCESS
 Spreadsheet where Lisa's data were entered.

ANALYZE
 Visual analysis. Compare steepness of goal line with steepness of trend line during intervention on Lisa's progress monitoring graph.

ANSWER
 Yes, Lisa's trend line is more positively steeped than her goal line. Adequate progress is being made during the intervention, which is evidence it may be working. Limitations: score increases on repeat probes may be a result of practice effect. Implications: continue intervention and progress monitoring.

ANNOUNCE
 Discuss answer with RTI team, including limitations and implications of continuing the intervention and progress monitoring.
 Discuss w/ Lisa during one-on-one meeting.

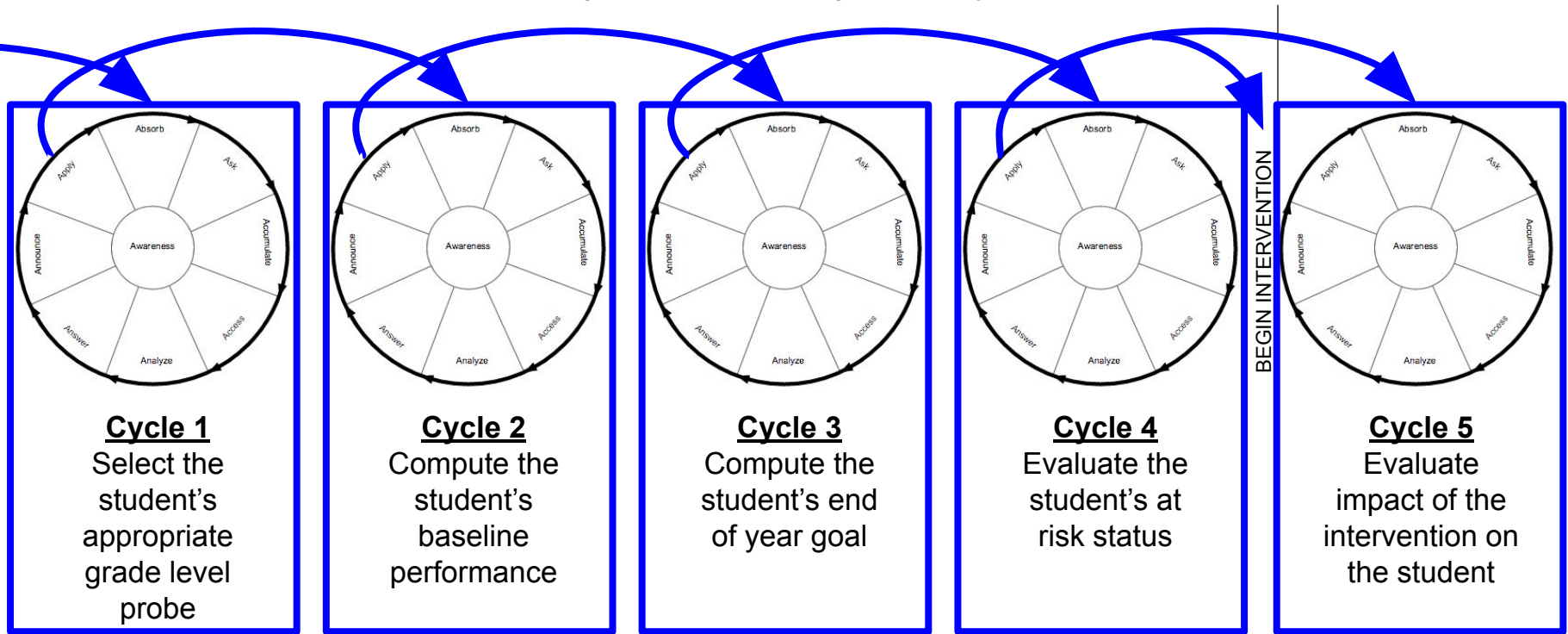
APPLY
 Continue implementing learning passage preview intervention and progress monitoring.



Conclusion

You have successfully completed 5 unique data cycles relevant to progress monitoring. You will navigate similar data cycles as needed to continue monitoring the progress of Lisa and other students throughout the remainder of the year.

Progress Monitoring Data Cycles



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>)

Activity Answers

| | |
|----------|---|
| 08.12.01 | 7 |
| 08.12.02 | green |
| 08.12.03 | red |
| 08.12.04 | more positively steeped than |
| 08.12.05 | Yes |
| 08.12.06 | learning effect or practice effect |
| 08.12.07 | continue implementing the intervention and monitoring Lisa's progress |
| 08.12.08 | the RTI team |
| 08.12.09 | Potential limitation of a practice effect and the implications of continuing the intervention and progress monitoring |
| 08.12.10 | Lisa |
| 08.12.11 | continue implementing the intervention and monitoring Lisa's progress |
| 08.12.12 | decrease the intensity of the intervention or stop it altogether |
| 08.12.13 | Tier 1 or universal intervention |

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 Access, Analyze, Answer, Announce, and Apply stages of A+ Inquiry to evaluate -- and take action based on -- the impact of an intervention of a student | | | | |

Well Done

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