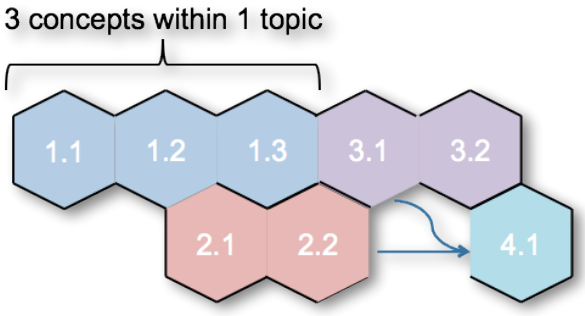
MSTAR

Using the Diagnostic Assessment

What is a Learning Progression?

According to the National Research Council, learning progressions describe ways of thinking about a topic. Learning progressions become more sophisticated as children deepen their understanding of a particular topic.

As you look at this graphic, what do you notice?

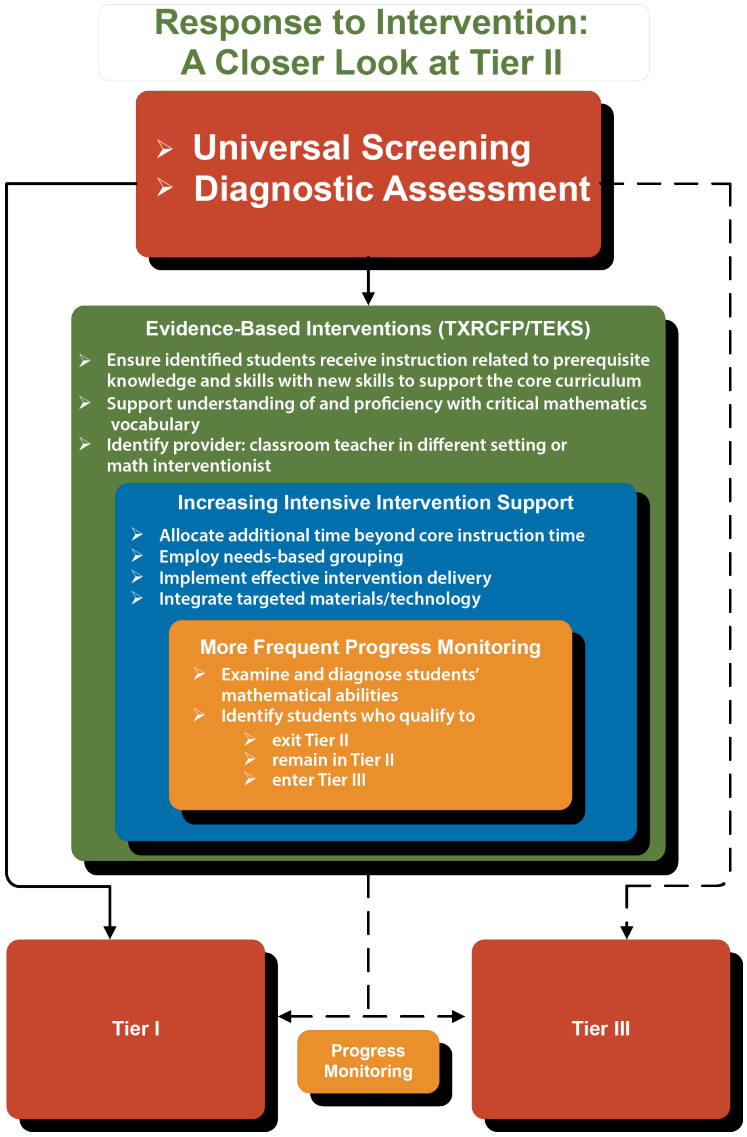


A learning progression is not unerringly accurate but represents best instructional thinking.

A learning progression is not the one and only way, but it represents a general projected path.

Notes:

Using the MSTAR Learning Progressions for Assessment

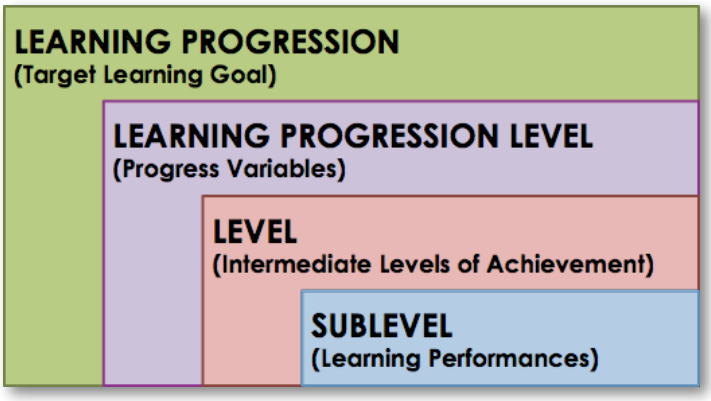


Notes:

Students are given the diagnostic assessment along with progress monitoring tools. Those students who are in Tier II are given regular core instruction in addition to strategic intervention support and more frequent progress monitoring. Teachers can decide when students are able to move back into Tier I or if they need to move into Tier III for more intensive support.

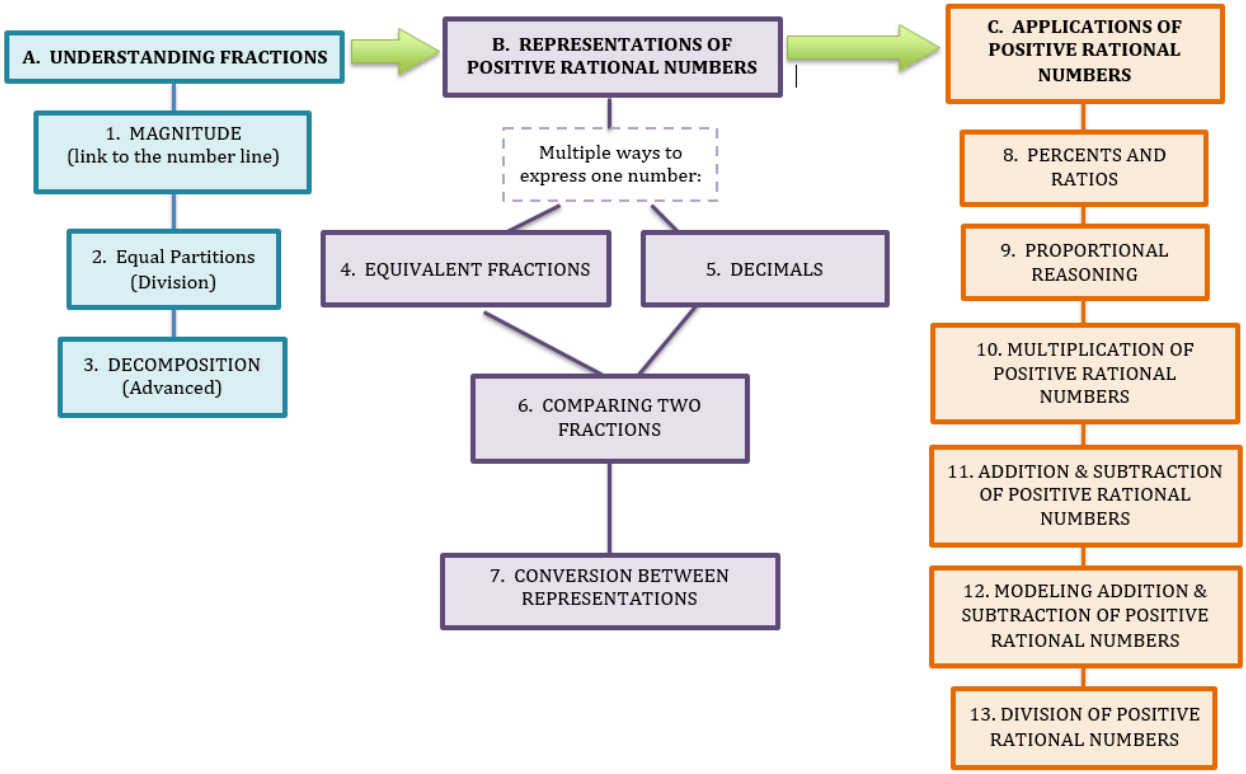
What is a Learning Progression?

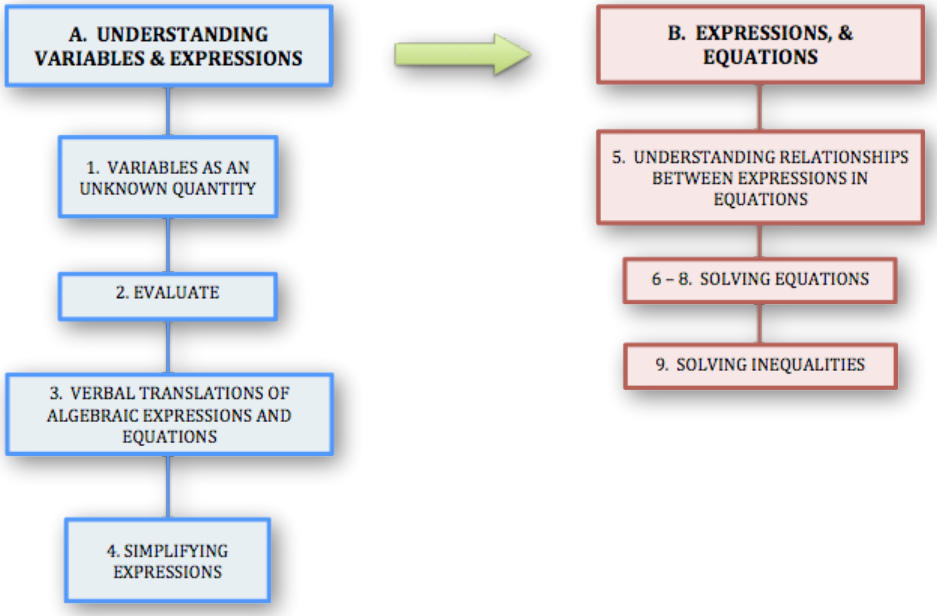
Notes:



Overview of MSTAR Learning Progressions

Take a moment to reflect on concepts, skills, misconceptions, and errors that you believe may be associated with each of these levels.





Learning Progressions

What is the place value of the digit that is underlined?

2.1<u>5</u>

A) The ones place	Student always believes the last digit is the ones place.
B) The tenths place	Student knows that the tens place is 2 digits to the left of the decimal, so the tenths place would be 2 digits to the right of the decimal.
C) The hundredths place	Correct
D) The hundreds place	Student confuses hundreds and hundredths.

Can you see some of your struggling students making these errors?

How would this information be valuable to you?

Which Assessment Should My Student Take?

If it's **appropriately** assigned, it will

-
-
-
-

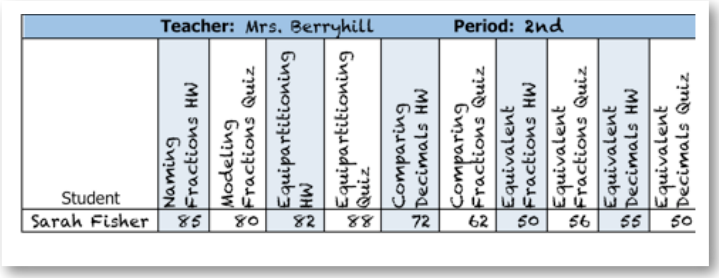
If it's **inappropriately** assigned, it will

-
-
-
-

Which Assessment Should My Student Take?

Sarah – 6th grade – Which assessment would you assign?

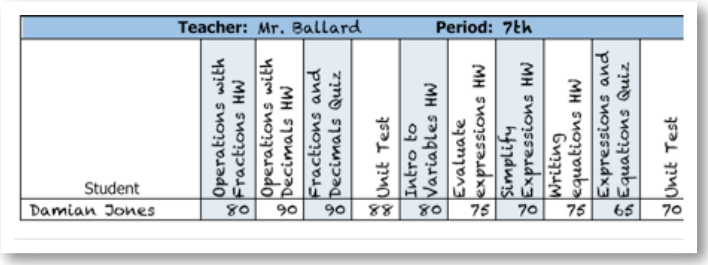
- She participated in the MSTAR Universal Screener.
  - Spring classification: Tier 3A
- She understands basic fraction concepts but has difficulty generating different forms of rational numbers and applying rational numbers.



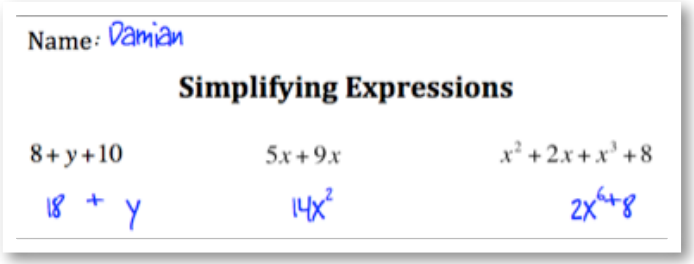
Teacher: Mrs. Berryhill					Period: 2nd					
Student	Naming Fractions HW	Modeling Fractions Quiz	Equipartitioning HW	Equipartitioning Quiz	Comparing Decimals HW	Comparing Fractions Quiz	Equivalent Fractions HW	Equivalent Fractions Quiz	Equivalent Decimals HW	Equivalent Decimals Quiz
Sarah Fisher	85	80	82	88	72	62	50	56	55	50

Damian – 8th grade – Which assessment would you assign?

- He participated in the MSTAR Universal Screener.
  - Fall classification: Tier 2A
- He works well with positive rational numbers, but is currently struggling with equations and expressions in the classroom.



Teacher: Mr. Ballard					Period: 7th					
Student	Operations with Fractions HW	Operations with Decimals HW	Fractions and Decimals Quiz	Unit Test	Intro to Variables HW	Evaluate Expressions HW	Simplify Expressions HW	Writing Equations HW	Expressions and Equations Quiz	Unit Test
Damian Jones	80	90	90	88	80	75	70	75	65	70



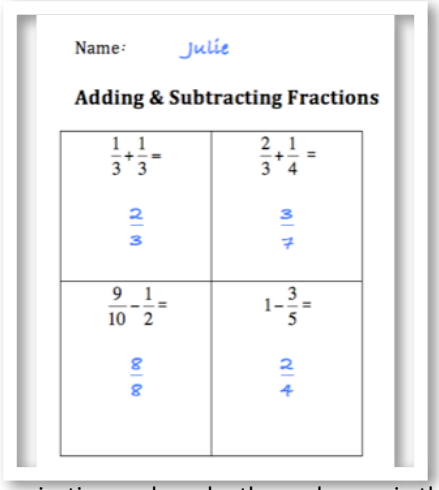
Name: Damian

Simplifying Expressions

$8+y+10$	$5x+9x$	x^2+2x+x^3+8
$18+y$	$14x^2$	$2x^{4+8}$

Julie – 5th grade – Which assessment would you assign?

- She participated in the MSTAR Universal Screener.
  - Fall classification: Tier 1A
  - Winter classification: Tier 1B
- Her mathematics classroom averages are
  - 1st 6 weeks: 90,
  - 2nd 6 weeks: 86, and
  - 3rd 6 weeks: 78.



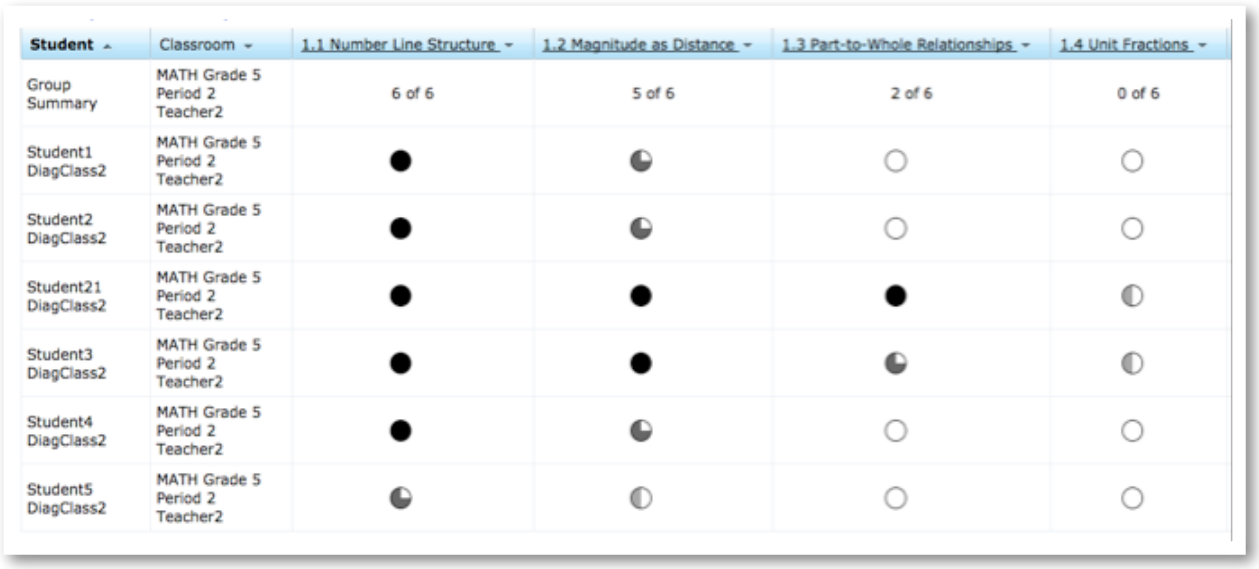
Name: Julie

Adding & Subtracting Fractions

$\frac{1}{3}+\frac{1}{3}=$ $\frac{2}{3}$	$\frac{2}{3}+\frac{1}{4}=$ $\frac{3}{7}$
$\frac{9}{10}-\frac{1}{2}=$ $\frac{8}{8}$	$1-\frac{3}{5}=$ $\frac{2}{4}$

Interpreting the Student and Group Misconception Report

The Student and Group Misconception Report is intended to provide teachers and administrators with detailed information on individual student diagnostic results and misconceptions and errors. This report allows teachers to determine if students can be grouped for efficient instructional delivery.

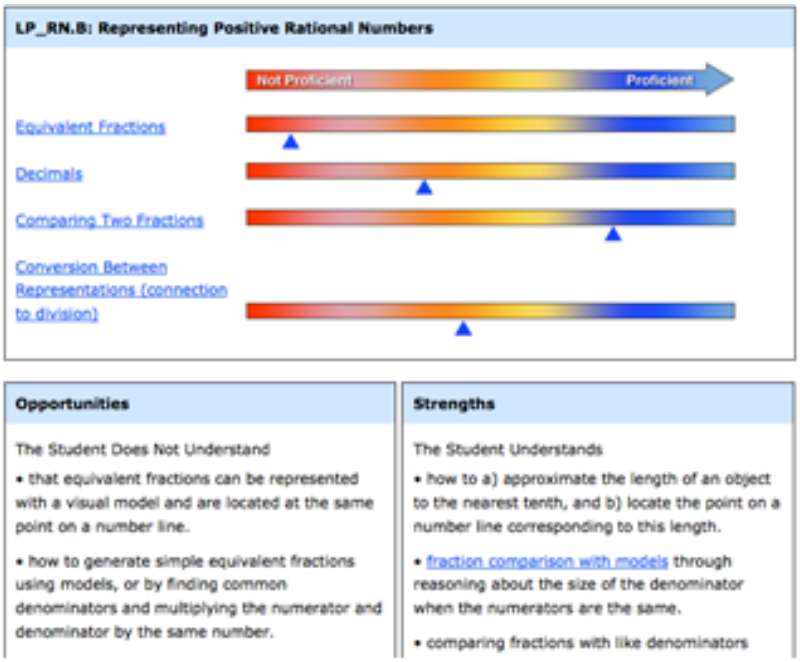


Student	Classroom	1.1 Number Line Structure	1.2 Magnitude as Distance	1.3 Part-to-Whole Relationships	1.4 Unit Fractions
Group Summary	MATH Grade 5 Period 2 Teacher2	6 of 6	5 of 6	2 of 6	0 of 6
Student1 DiagClass2	MATH Grade 5 Period 2 Teacher2	●	◔	○	○
Student2 DiagClass2	MATH Grade 5 Period 2 Teacher2	●	◔	○	○
Student21 DiagClass2	MATH Grade 5 Period 2 Teacher2	●	●	●	◐
Student3 DiagClass2	MATH Grade 5 Period 2 Teacher2	●	●	◔	◐
Student4 DiagClass2	MATH Grade 5 Period 2 Teacher2	●	◔	○	○
Student5 DiagClass2	MATH Grade 5 Period 2 Teacher2	◔	◐	○	○

Notes:

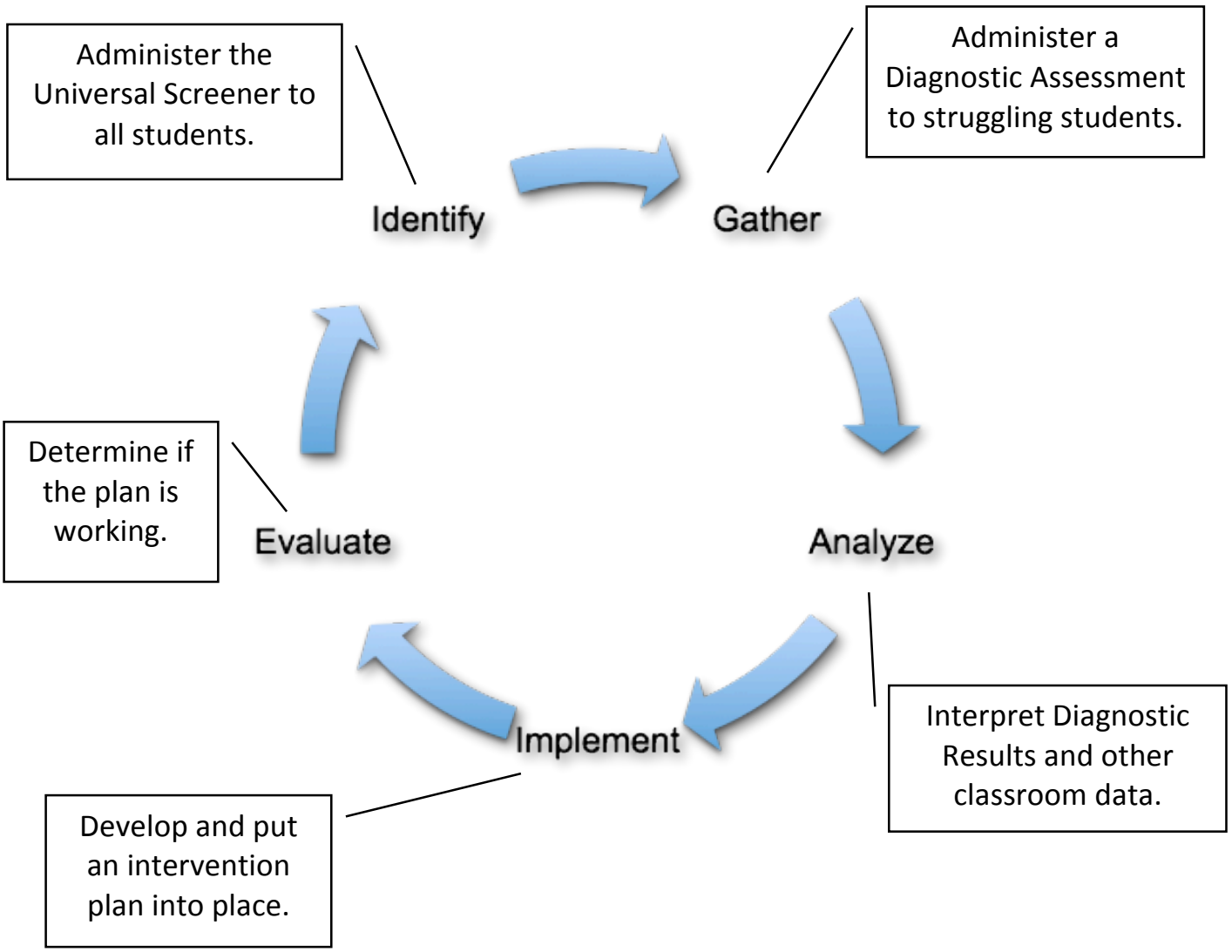
Interpreting the Student Summary Report

The Student Summary Report provides teachers with a summary of the student's performance in an easy to understand format.



Notes:

Making Instructional Decisions



What new ideas do you have to implement?

Write down ideas in the learning portfolio about how you

- already support learning from data, and
- could support learning from the diagnostic results.