

## Transcript – Making Instructional Decisions

This diagram is an adaptation of the Data Cycle presented in the IES Practice Guide on Using Student Achievement Data to Support Instructional Decision Making. We often begin this cycle at “Identify.” The Universal Screener can help us identify those students who are not on track for algebra-readiness. Then, we will “Gather” additional data to help us better understand students’ proficiency. We want to make an informed decision, realizing that a test score is only one piece of data. The ESTAR and MSTAR Diagnostic Assessments will also help provide additional information. Then we will “Analyze” the Diagnostic assessment results, as well as other classroom data, and see what misconceptions and errors students may have that are interfering with their correct understanding of the content. Next, we will “Implement” a plan using the data gathered to help these students be successful. The next three slides will discuss strategies to use at this point in the cycle. You can also refer to the Implementation Tools course in Project Share for more ideas and other strategies. Last, we will “Evaluate” whether the plan is working by examining student performance in the classroom and the Universal Screener.

Take a moment to reflect on (a) what additional supports we can provide teachers to help them interpret the Diagnostic Assessment data and (b) what additional supports we can provide teachers to help them *learn from* the data to revise their instruction as needed.

## Transcript – What do I do with my data?

At this point you have carefully examined all of the ESTAR or MSTAR Diagnostic Reports and know which students are struggling and why, but you may be thinking, “What do I do with my data?” Just collecting data on your students and knowing where they are does not automatically improve student achievement. We must use the data from the assessments to drive instructional decisions.

Using data to guide instructional decisions is critical in the Response to Intervention, or RtI, approach. By now, you know that the RTI approach begins with screening and diagnosing students. After you give the ESTAR or MSTAR Universal Screener and an ESTAR or MSTAR Diagnostic Assessment, you are given a report full of data, but where do you go from there?

These assessments are tools that provide you with data to help inform your instruction and to help students to become proficient in the curriculum. You can use this data to make changes to your instruction.

For those students who have been identified as Tier 1A or Tier 1B on the ESTAR or MSTAR Universal Screener, you may not need to adjust your instruction at all. Students who have been identified as Tier 2 or Tier 3, or at-risk for meeting grade-level algebra-readiness expectations, need to receive evidence-based interventions, increased intensive intervention support, and frequent progress monitoring. There

are many resources available to you that you can use to develop a plan for students, whether it involves small group or individualized instruction.

Each student's plan may be different and can include, but is not limited to, allocating additional time, grouping students based on need, intervention delivery, and targeted materials and/or technology. You can use the data from the ESTAR or MSTAR Diagnostic Assessment reports to help identify what content may need to be focused on during intervention activities.

If you are planning to group students by ability, the "Student and Group Misconception Report" from the Diagnostic Assessment can be helpful in making grouping determinations. In this example, these students could be grouped together, while these students could be placed in another group.

The Institute of Education Sciences has many practice guides for mathematics instruction that can be resources when designing interventions for students.

One practice guide that may be useful to you is *Assisting Students Struggling with Mathematics*. This practice guide summarizes recent research on mathematics instruction and intervention for students in grades kindergarten through eight.

The authors of this guide found evidence suggesting that a few instructional strategies may promote positive achievement gains for elementary and middle school students who are struggling with mathematics.

Additionally, IES also published a practice guide called *Developing Effective Fractions Instruction for Kindergarten Through 8<sup>th</sup> Grade*. The authors developed five recommendations to use in the classroom to improve students' understanding of fraction concepts.

The newest practice guide is called *Improving Mathematical Problem Solving in Grades 4 through 8*. The recommendations provide strategies to use with students to strengthen their problem-solving skills.

For more information on these practice guides, please visit the IES website.

In addition to the IES practice guides, the state of Texas has also developed numerous resources to help you learn how to tailor instruction to students' needs. Some of these resources are part of the Texas Algebra Ready initiative. Online courses are available on Project Share at <http://www.projectsharetexas.org>. A few of the courses specifically focus on the RtI approach and the recommendations from the IES practice guides. Two courses that will be especially relevant to you are the *Overview of the Universal Screener* and the *Overview of the Diagnostic Assessment*. These courses help you interpret and make instructional decisions based on your data from the ESTAR and MSTAR Universal Screeners and Diagnostic Assessments.

TEA has also created the Texas SUCCESS Initiative (Students Using Curriculum Content to Ensure Sustained Success). The initiative involves online programs that support students at all skill levels and, more importantly, encourage and enable progress and achievement as students move through the activities and curriculum. Each program assesses an individual student according to his or her skill level

and then automatically assigns and delivers appropriate curriculum tailored to that student's abilities. Meaningful reporting tools available through both programs inform teachers and parents when an intervention is needed or confirm that the student is on the right path. With free, round-the-clock access to these online adaptive programs at school and at home, teachers, students, and parents are equipped with the necessary tools to build confidence and promote academic success.

For more information about both of these resources, contact your local education service center.

Every student has different instructional needs, but by learning more about effective instructional strategies, taking courses on Project Share, and reading the IES Practice Guides, teachers can develop plans to help every student become equipped with the skills necessary to be ready for success in algebra.