

Data Analysis Model and Process: Guiding Questions

Frame the Question	Organize for Dialogue	Collect the Data	Analyze the Data	Interpret the Data	Select Actions	Monitor Results
<ul style="list-style-type: none"> •What do we want to know? •What are we attempting to measure, monitor? •What questions are we asking of the data? •What are we hoping to learn about our own practices as a result of this data analysis? •Why is this important? •What are the primary concerns about my current instructional program? •How will information obtained from this data analysis study help to improve my overall instructional program? •What areas (instructional, curricular) need improvement? 	<ul style="list-style-type: none"> •Who should be involved to answer the questions? •Does everyone know what the strategies look like in action? •How do I create a culture for data conversations that are focused on inquiry? •What is the process for building learning teams that use data to make decisions? •What are the different types of data conversations? •What are the steps of the data analysis process? •What are tools I can use with teachers as they engage in data conversations? •How do I facilitate data conversations? •How do I provide structures for teachers to use data to make instructional decisions? 	<ul style="list-style-type: none"> •What data sources will be needed? •Do we need any resources to learn more about the data analysis strategies? •What data measure the skills or concepts that we need to monitor? •Is the source reliable? •Where can I get more information? 	<ul style="list-style-type: none"> •How will data need to be aggregated and disaggregated? •How will I analyze strengths and obstacles? •How will I prioritize? •Do any responses stand out? •Which questions had a high number of correct responses? •What are some things we have not explored? •What questions about student thinking and understanding will we address by examining our student data? •What skills, knowledge, and concepts do students have mastery of as evidenced by the data? Which have they not mastered? •Are the observations and inferences that surfaced during the analysis of the student data validated by multiple data points and sources? •What additional insights can we gain about student thinking and understanding from the data? 	<ul style="list-style-type: none"> •What do the data tell you? •What learning needs are evident? •What question(s) seem most difficult for students? •Which concepts require focused and direct instruction? •What is a sample of an ideal/proficient response? •Do we know what we consider proficient? •Do we agree on what proficiency looks like? •What exactly will tell us if proficiency has been achieved? •Have we defined proficiency for a given skill/concept process? •What inferences and explanations can we draw from these data sets? •What tentative conclusions might we draw? •What important points seem to stand out? •What are some patterns or trends that are emerging? •What do you notice about subgroup performance? •What hunches do you have to explain the performance? •How strong is the evidence overall? •What do the numbers mean? •What are some contributing factors to the lack of student understanding? 	<ul style="list-style-type: none"> •What actions will need to be taken to address the identified learning needs? •Establish goals: set, review, and revise •Is our goal a SMART (Specific, Measurable, Achievable, Relevant, and Timely) goal? •Specific: students, group, content area, objectives and student expectations •Measurable: Can it be measured with an assessment? •Achievable: Is our goal within our reach? •Relevant: Are these concepts and skills aligned with the TEKS? •Timely: Can the progress be measured frequently and teachers see results immediately? •What additional data might we explore to verify our explanations? •What will each of us do to increase the level of student proficiency? •What else do I need to know? 	<ul style="list-style-type: none"> •How will you monitor the effectiveness of your action? •Are we all committed to helping students meet their learning goal? •What obstacles stand in the way of reaching our student learning goals? •What does the research say about the effectiveness of the strategies we have chosen? •How will we know students are learning as a result of our actions? •What should we see students applying after 5 days of instruction, 10, and 20? •How will we monitor progress and rigor? •What will directly link learning with specific strategies? •How will we confirm that the entire team has implemented the strategies that were collaboratively and collectively agreed upon? •What overall application behaviors will we be able to see/note if the desired learning is occurring as a result of our focused actions? •When will we assess student learning? •What needs for school improvement might arise from these data? •What new insights do you have about the student learning problem? •How will I know if the instructional program is working at top efficiency and effectiveness?