

T-TESS Observation Evidence Sheet
8th Grade Math (Pre-Algebra) Scatter Plots

Domain 2: Instruction		
Dimension	Evidence	Rating
2.1 Achieving Expectations	<p>The agenda for the day was established but the learning objectives weren't clearly communicated. It was unclear whether Ss were developing mastery of the concepts, as there was no individual check for understanding. When Ss worked in groups on the questions at the end, the questions were not strongly aligned with the objective.</p> <ul style="list-style-type: none"> ● 0:10- Review the agenda for the day: Warm Up, Scatter Plot, Study Island ● LO- Plot data on a scatter plot graph and line of best fit (written on the board)- Not clearly stated by T to Ss what they were focusing on. ● The questions answered by students during small group work were not aligned to the LO on the board of "line of best fit" or plotting data on a scatter plot. They aligned more to analyze data and infer information from the scatter plot. <p>Group work questions about the scatter plot: Determine if correct or incorrect. If incorrect, explain why.</p> <ol style="list-style-type: none"> 1. The scatter diagram shows a positive correlation between scores on test A and scores on test B. 2. The lowest score on test A is lower than the lowest score on test B. 3. The range of scores on test b is 25. 	Developing

Domain 2: Instruction

Dimension	Evidence	Rating
	<p>4. The student with the highest score on test a. also has the highest score on test b.</p> <p>5. The biggest difference between the student’s scores on a test is 5.</p> <ul style="list-style-type: none"> ● During the warm-up, Ss take the initiative of their learning and volunteer to come to the board to share during the warm-up. ● 6:47 After reviewing the agenda and having students do the warm-up for the lesson. T. stated that they would be doing a plotting activity to review what they have returned. ● Asked students for the definition of angle. One student described mean instead and the teacher asked another student who gave the correct definition. The teacher got ahead of herself. ● Later she pointed out that the student had provided this definition. She prompted students to remember that mean and average are the same. and reviewed the definition. She was writing on the doc camera and students were making notes at their desks. ● 25:15 “The next part is where you work together I want you to talk about those. Read it and raise your hand if you need help. You have 5 statements. You need to determine if it’s correct or not, and if it’s not, you need to fix it.” ● 26:35 2 of 4 groups begin discussing (back right and center table don’t appear to be discussing). 26:50 Coach goes to the back right group and supports. When he approaches, they turn to the page with the questions. ● 39:50 Explains why they use the line of best fit (to find ranges and the mean of things). The 	

Domain 2: Instruction		
Dimension	Evidence	Rating
	<p>word “things” is vague and misses an opportunity for students to understand the real-world application of this concept. Ask students if anything that was difficult about this activity. S responded that the wording on question 5 was challenging. T. provided a short debrief and acknowledged that she could see confusion.</p>	
2.2 Content Knowledge and Expertise	<p>Teacher conveys accurate content knowledge about scatter plots but doesn’t clearly structure the lesson to ensure Ss understand the learning goal. Ss aren’t given the steps or strategies to understand the content until after they work on the items (8:31), so the sequencing doesn’t support student mastery and successful practice. There is no evidence of the integration of scatter plots in real-world applications or other disciplines. The questions Ss answered about the scatterplot are dichotomous (correct or incorrect), though it did ask them to explain why or why not. The level of S thinking required by this lesson was generally remember and apply level with a few opportunities for higher level thinking requiring analyzation or justification, but students didn’t actively engage in the higher-level thinking.</p> <ul style="list-style-type: none"> ● 1:30 Warm Up- Number Lines (plotting points on a number line). Asks S to come to plot it (square root, absolute value, integers, ● 5:12- S makes an error plotting -3.5 (plots between -2 and -3) We’re going this way. It goes -1, -2, -3, -4... That always happens with neg because we’re used to going this way but we need to remember how it’s going. ● 7:00 T. provided an explanation for range and mean. 	Developing

Domain 2: Instruction		
Dimension	Evidence	Rating
	<ul style="list-style-type: none"> ● “Coach” went through a sample from student work on the board and asked a student to come to graph the mean, ● The teacher realized the lack of label on the graph ● T: What is X representing? Scores in test A. Y is test B. ● T: To a student. Did you plot your point? Use the rule. ● 8:31 When we start with this scatter plot, first, we need to identify the range of the number. How do we find the range? S misconception- explains mean. Restates what was defined by S- that’s not range, what was that? Another S corrects- mean. Original S correctly explains how to find the range. T explains why they need to know the range ● 12:18- S justifies answer- What will I divide that by? Why 2? ● 15:20- We’re used to the graphs that are already labeled for us. In this case, they didn’t do that. But you can do that. ● 15:35. T explains items Ss should be doing and understanding by looking at the scatter plot. Label X and Y axis. What does it represent? T explains how to find the range of test B. ● T explains that the mean is the middle- Inaccurate wording- Would that be the median? ● 17:40 Why is this point important? St: You can use it to find the line of best fit. T: Always think of the association ● Asked a pair of students to come to draw the line of best fit on the board. 	

Domain 2: Instruction		
Dimension	Evidence	Rating
	<ul style="list-style-type: none"> 18:07 Coach- Also look at the type of slope. What kind of slope is this? T- positive. “You can prove that it’s not 5.” T doesn’t explain how to disprove the question correctly. 	
2.3 Communication	<p>Most of the communication was one way from the teacher or the coach to the students. Questions were at the apply and understand level for the most part and students didn’t engage in meaningful discussion, but some volunteers generally tried to answer questions. Ss volunteers to participate during the warm-up but do not participate in class discussions or have as many opportunities to volunteer during the lesson. Some groups struggled during the group work and might have benefited from more structured expectations around how to conduct the partner work. Explanations are generally clear but don’t amplify discussion and the teacher doesn’t fully check for understanding, often asking- “Does that make sense?” Students did not respond well to this type of questioning</p> <ul style="list-style-type: none"> Jesse answered 6+ times during the lesson. Warm-up: How do we say this number? What does this number mean? Where do we plot this? 11:00 T writes notes for the process and Ss copy the process off the board. S reads the question. Coach explains that we just need to plot- OK so what do we plot here? Coach repeats the question. We’re looking for 19 for test A and 16 for test B 17:40 Now we know this is the middle. Why is that point important? Jacob - Use it to find the line of best fit? Teacher - do y’all agree? Coach - 	Developing

Domain 2: Instruction

Dimension	Evidence	Rating
	<p>what else can we predict? Positive slope going up. T. reinforces</p> <ul style="list-style-type: none"> ● 20:10 When we do our line of best fit, what did we say about above and below the line? What did we say about the dots or data points. T uses this strategy to check the line of best fit that Juan and David made on the board. ● Review answers- this group what did you say? Why? ● Question 2 says (T reads question). This group, what did you come up with? Did we get that? Jesse- repeat what he said. ● 23:00 T: what did we say about the dots? T: Coach said it earlier. How do we use scatter plots I don't know if y'all were paying attention. The teacher kept repeating - "Remember the activity from yesterday? remember? Don't you remember?" ● Shared example of going to a football game. It's kind of comparing like you said, but it's predicting. ● Shared example of a test score. They're kind of the same. ● We use scatter plots/lines of best fit to predict. ● Shen students began working in their small groups: T: Go back and look at the graph; What happened on that one? T: Share ideas - talk about it 	
2.4 Differentiation	<p>During the warm-up, Ss were given some element of choice as they were able to choose which question they wanted to share on the board. During independent work time, the teacher & coach circulated the room and provided additional support to groups that needed help but there was no evidence that the adults were documenting any notes regarding student performance. When Ss struggled, the teacher provided</p>	Developing

Domain 2: Instruction		
Dimension	Evidence	Rating
	<p>limited help—often by repeating the directions or by asking if they remember the lesson from the day before without actual scaffolding to help Ss access the learning. “You need to find the range.”</p> <ul style="list-style-type: none"> • No evidence of meaningful differentiation in the product, process, or content • During the time when the adults circulated they did engage with students but didn’t seem to have a “toolbox” of strategies to support students who were disengaged or were uncertain or misunderstanding concepts. 	
2.5 Monitor and Adjust	<p>T circulates the room and checks in with some groups more frequently than others. There was no clear evidence that the teacher adjusted the instruction and activities based on what she could observe or hear from students. At times (27:00) she answered her own question, missing the opportunity to informally assess student understanding. She seems unaware of the low level of engagement with most Ss.</p> <ul style="list-style-type: none"> • 4:19 S makes an error on plotting -0.75. T points out where -0.5 is and -1. Would it be closer to -1 or in the middle? S responds in the middle. T corrects the plot. • 19:17- T circulates the room to check on groups as they draw the line of best fit (back right corner table). You’re going to guide yourself with the point (19,16). Use this to guide yourself to draw the line of best fit. • 27:00 T solves the question for the group. So it says there’s a positive correlation between tests A and B. So flip it over. This one and this one show a positive correlation. So what do you do? • 27:52 So what happened here? Group explained it was incorrect. T- very good! 	Developing

Domain 2: Instruction		
Dimension	Evidence	Rating
	<ul style="list-style-type: none"> ● 29:15- Helps answer Faith’s question. So ● 29:55 How do you find the range? This is the highest and this is the lowest. So what do you have to do? <p>33:14 Groups have been working on questions for 7-8 min- You should almost be done. The first time T goes to the back right group which hasn’t been working together on the questions. Why aren’t you on the same one? T tells the answer to the group. Very good! See now look at this next one- it says the difference between tests is 5. T tells S how to do it. Pick anyone (t picks and interprets the info from the graph). So what’s 19-11? S struggles to subtract. What’s 9-1? S answers 8.</p> <ul style="list-style-type: none"> ● T asks: Did everybody get that? multiple times in the lesson. At times she asks an individual student to repeat what another student said. It was not clear that all students DID get it but there was no adjustment. ● The teacher said, “Good! Good, good!” to some students but did not provide specific feedback. ● She monitored students to see if they were working and would ask, “Why are you not working together? They are working together. You need to be working together. 	

Domain 3: Learning Environment		
Dimension	Evidence	Rating
3.1 Classroom Environment, Routines, and Procedures	<p>The classroom is calm and without disruption with smooth transitions. Guidance is generally clear, but the teacher doesn't always sequence directions well, resulting in over-talking by adults and less S autonomy for groups. There is not a reference point to guide student group interactions. The classroom is generally safe and organized to support general learning. The high-leverage descriptor here is the students' participation in groups is too dependent on teacher guidance to rate as Proficient. This results in this dimension being scored as Developing.</p> <ul style="list-style-type: none"> ● 6:45 Transition between the warm-up to the scatter plot. Coach helps pass out papers. Materials are readily available at desks- paper, pencils, calculator, etc. ● T transitions smoothly between screens (agenda, warm up, and scatter plot boards). ● Later the transition to group work is generally smooth without disruption, but the groups are highly dependent on teacher direction to manage the work they do in their student groups. ● A few students participate actively but there does not appear to be a strong culture of student participation in discussion. ● 26:20, Ss unclear about instructions on when they need to justify; 30:32 What about you two, why aren't you working together?- Unclear expectations for completing the group work 	Developing
3.2 Managing Student Behavior	<p>From the observation, it appears that the teacher is implementing behavior expectations. It is not totally clear about how systematic it is, though there is a reward system for the warm-up. Students are well-behaved and meet the standards as we can see them.</p>	Proficient

	<p>2:36 S get a treat for plotting on the # line during warm-up</p> <p>10:11 Most Ss track teacher and look at board when discussing the importance of the range.</p> <p>16:24-Most Ss are copying the annotations for the range on their paper.</p>	
<p>3.3 Classroom Culture</p>	<p>The first descriptor under Developing may be the better description of the learning environment. The relevance of the learning to the students' progress through math instruction is discussed but not the real-world relevance. Students do work respectfully as observed.</p> <ul style="list-style-type: none"> ● 1:33 Ss volunteer to plot the points on the number line for the warm-up ● 19:11- David and Juan plot the line of best fit on the board. Ss write on their boards. ● 25:30 Make sure everyone is recording in the group and then one person will share out. 1 group follows this expectation. 3 groups needed redirection from the teachers to ensure they were working together ● 26:20, Ss unclear about instructions on when they need to justify; 30:32 What about you two, why aren't you working together?- Unclear expectations for completing the group work 	<p>Proficient</p>