



SeeMeTeach[®] Teacher Challenge

Small Group Productivity: Teacher
Interactions and Facilitation

SMT Teacher Challenge

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The minimal required training to complete this challenge includes:

Training 1: SMT Observation Setup

Training 2: Qualitative Comments Mode

Training 3: Quantitative Data and Analysis Mode

Training 4: Student Misbehaviors and Teacher Reactions – (M Codes)

Training 5: Student Actions and Engagement – (S Codes 1-9)

Training 6: Teacher Questioning – (T3a, T3b, T4a, T4b)

Training 8: Teacher Action Codes – (T Codes 0, 1, 2, 5-12)

Training 9: Wait Time Regular

Training 10: Small Group Summary

Data collection should focus on wait-time, L, T, M, and S codes while utilizing the seating chart. Demographics could be designated for this *Teacher Challenge* as well.

Introduction

A common pedagogical strategy used in classrooms is to group students for labs, discussions, working problem sets, or various other reasons. Small group lessons can foster high student physical and mental engagement and be a great tool for learning and development.

When structuring lessons using small group work, educators hope that rich and equitable interactions occur between small group members and that all group members are involved in the work and conversation. Yet small groups can be notoriously inefficient and inequitable regarding who is engaged and doing the work versus who is along for the ride. One or two group members might dominate discussions while others remain silent, resulting in inequitable contributions within the group.

Since teacher-student interactions significantly impact student actions and activity, data on teacher actions will be collected and analyzed. Student performance and outcomes can vary greatly depending on the teacher's choices when interacting with and facilitating small group work. Data collection on the quantity and type of student-student interactions present can indicate whether the lesson fostered the type of equitable interactions and contributions desired within the small group.

The Challenge

This challenge is optimizing the impact on student learning in small groups by using powerful teacher-student interactions that optimize engagement and contributions from all students.

Challenge Steps

- 1) **Teach a Lesson:** First, capture the video and audio of the lesson. Make sure to teach the lesson as you normally would, as this lesson will be used for your baseline data.
 - a. **Note:** This challenge focuses on how the teacher interacts with each small group and the whole class. Therefore, the teacher wears a microphone, so the audio captures the teacher's voice and the voices of any group members the teacher is visiting at that time. The other small group discussions will not be on video until the teacher approaches and interact with the other small groups.

- 2) **Complete the Required SMT Training:** If not already done, complete the required training to learn how to collect the specific data required for this challenge. The minimal required training recommended includes:
 - Training 1: SMT Observation Setup
 - Training 2: Qualitative Comments Mode
 - Training 3: Quantitative Data and Analysis Mode
 - Training 4: Student Misbehaviors and Teacher Reactions – (M Codes)
 - Training 5: Student Actions and Engagement – (S Codes 1-9)
 - Training 6: Teacher Questioning – (T3a, T3b, T4a, T4b)
 - Training 8: Teacher Action Codes – (T Codes 0, 1, 2, 5-12)
 - Training 9: Wait Time Regular
 - Training 10: Small Group Summary

Note: The cheat sheets that accompany these trainings provide a comprehensive summary of the training and are excellent resources to keep on hand while you code your recorded lessons.

- 3) **Collect Data:** Use the SMT teacher observation app to collect baseline data specifically focusing on teacher actions/reactions and student engagement.
- 4) **Document and Analyze Data:** After you have collected your baseline data, plot the pertinent data on the *Data Summary and Change Chart* on the next page.

Note: See the Suggestions for Analyzing Data section in this teacher challenge for additional suggestions on how to analyze your specific data.

- 5) **Revamp Your Teaching:** Implement one change to the way you approach the facilitation of small groups in your classroom. It is recommended to:
 - a. Only implement one change or one strategy at a time to determine what is making the difference in student engagement.
 - b. Fill out the "[My Plan of Action](#)" google form to document your observations and progress through this teacher challenge. This can be used for your personal

development or as evidence for a yearly observation or pre-service teacher certification program.

Note: See the Implementing Growth and Change section in this teacher challenge for additional suggestions on how to implement specific changes to your teaching.

- 6) Repeat Challenge Steps 1, 3, 4, and perhaps 5:** One cycle through this process might achieve the desired results, but more than likely, it might take more than one cycle. Teaching is complex, with many variables in play, but know that sometimes a very small change can have a noticeable and sometimes very large effect on the learner or the learning environment.

Data Summary and Change Chart

Data (Numerical Data)	1 st Observation	2 nd Observation	3 rd Observation	4 th Observation
<u>Small Group Summary</u>				
Avg # of Interactions (S2+S4/# of groups)				
# of M10 + M12 events				
# of Interactions with the Teacher (S1 + S3 + S5)				
<u>Student Engagement Summary</u>				
Most Contributions by Student Number (Top 5 Students)				
Least Contributions by Student Number (Lowest 5 Students)				
<u>Interaction Patterns: Freq. Sequence 3</u>				
Most Frequent				
2 nd most Frequent				
3 rd most Frequent				
<u>Interaction Patterns: Freq. Sequence 4</u>				
Most Frequent				
2 nd most Frequent				
3 rd most Frequent				
<u>Code Summary: Teacher Actions</u>				
T0: Monitoring students				
T1: Lecturing or Presenting Info				
T2: Tchr gives directions				
T3a: Tchr asks yes/no question				
T3b: Tchr asks short answer question				
T4a: Tchr asks question – speculation				
T4b: Tchr asks question – justification				
T5: Rejects response				
T6: Acknowledges response				

T7: Confirms response				
T8: Repeats response				
T9: Clarifies for the student				
T10: Answers student's question				
T11: Asks student to clarify				
T12: Uses student response with class				

Equitable Contributions (General observations of trends and patterns) Data can be pulled from *Seating Chart Heat Map* and/or *Demographics*

Observation 1	
Observation 2	
Observation 3	
Observation 4	

Distribution of Teacher Actions (General observations of trends and patterns) Data can be pulled from *Teacher Actions Plus*

Observation 1	
Observation 2	
Observation 3	

Observation 4	
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Data as Indicators/Questions to Ponder:

- What was their intention when the teacher approached small groups and interacted with or observed them?
- In what ways are the teacher-student interactions student-centered, where students are asked to think, articulate their ideas, listen carefully and respectfully, consider, and react to each other's thinking?
- How did the teacher's interactions foster the goals for the small group and the lesson?
- In what ways did the teacher's interactions lessen the intention of the lesson or weaken the intended purpose of having students work in small groups?
- Small groups are a great place to ask good questions and to foster student-to-student interactions – what did the observer notice regarding such? Which type of questions predominate?
- How might the teacher improve?
- How was the teacher's ability to pace themselves and get around to all small groups without taking too much time with one small group?
- How student-centered was the lesson? (S Code Total Time/T Code Total Time)
- How are students generating questions and comments to the teacher? (Look at S1 and S3 counts).
- How are students generating questions and comments and responding to each other? (Look at S2, S4, and S5).

Suggestions for Analyzing Data

Teacher Actions Plus – The *Teacher Actions Plus* displays a visual flow of teacher actions throughout the lesson associated with student actions within the context of lesson type. The four types of questions are color-coded to make it easy to see if any question types dominate or are missing from the lesson. A glance shows the story of how the teacher interacted with the students and the flow of S codes.

Using Student Engagement Summary:

- a. Shows the S1-S5 (individual) events in black and the S6-S9 (whole class) events in red as distributed across the timeline of the lesson.
- b. Single students can be isolated on the timeline if coding by student or group number.
- c. Each data point links to a segment of the video.
- d. Provides a summary of time of S1-S5, S6-S9, Total Student Time, and Total Teacher Time.

Implementing Change and Growth

Factors that can be altered that might affect small group interactions and engagement in the lesson include:

- Teachers can foster more S-S interactions by using and increasing wait time to ~3.5 seconds. Generally speaking, wait time is the pause between anyone (a student or the teacher) speaking. Increasing wait time allows more time for students to think and formulate a response and also results in more students contributing. (*See SMT Teacher Challenge: Wait Time for more details*).
- Reflecting questions posed to the teacher back to the small group members, refraining from directive actions, and asking the small group to come up with options and sort out the best option for proceeding are all powerful options as they put the ball back in the small group's "court." Students are gently prompted to work through issues or find answers rather than relying on the teacher. Simple phrases such as:
 - "What do you think?"
 - "Have you asked your group members? What do they think?"
 - "What do you remember from class that could help you with this?"
 - "I'm not quite sure about that. Let's hear your ideas."

all put the emphasis back on student participation. The ultimate goal is to utilize teacher actions that convey a curious or wondering approach that keeps you informed of student intentions and progress while fostering more student-to-student interactions and more student thinking.

- Try to increase your monitoring time and decrease your interaction time. One of the major ways that teachers stifle student-to-student interaction is by inserting themselves into the conversation. This is oftentimes hard to do as we always want our students to come to the correct conclusion, but sometimes letting them get there themselves is the most powerful teaching we can do.
- Try to check on their status and progress without verbally interrupting their momentum. Some ways to do this could include:
 - Daily journal entries where students summarize what they did that day or answer certain prompts.
 - Exit slips.
 - A color code system where each group has a green cup, a yellow cup, and a red cup. If they put the green cup out, it means they are okay. Putting the yellow cup out means they are having a little difficulty and may need some help from the teacher soon. If the red cup is out, they are at a standstill and need the teacher's help immediately.
 - Having students grade or assess their group members and how well they participated or contributed to the group.