Student focus sessions :: Reference guide

Overall goals

Student focus sessions are opportunities for teachers to have collaborative, structured conversations around student reasoning. These sessions have two goals.

Goal #1: Learn more about how students are reasoning about the task, and design instructional moves and classroom activities based on students' reasoning.

Goal #2: Improve assessment items:

- Improve the *validity* of the item by strengthening the connection between the task/rubric and the learning progression.
- Improve the *reliability* of the item by writing clear tasks and rubrics to reduce the variability that happens when different people score the same task.

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—— Outline —

Roles: There are three different roles in a student focus session

<u>Lead teacher</u>: Each student focus session is facilitated by a *lead teacher*. This teacher selects the student work, makes copies for each participant, and facilitates the meetings.

<u>Recorder:</u> The recorder takes notes during the sessions. They are specifically focused on notes that capture the group's discussions related to the task and rubric, and related to student reasoning. The recorder will need a computer. The recorder is also a <u>participant</u>.

<u>Participant:</u> Most of the participants are just that: participants. They score tasks and engage in discussion. They do not have any "extra" responsibilities. All participants will need a computer.

Phases: Student focus sessions have two phases.

In phase one, all participants score the same copy of student work. They then discuss any variation in their scores, and they come to a consensus score. They discuss ideas to modify the task and rubric to minimize score discrepancies in the future.

In phase two, participants examine the consensus scores and the student work to generate a deep understanding of the student's reasoning. They then discuss next steps for this student based on their analysis of the student's reasoning, and their goals for the student.



Phase one

In phase one, all participants score the same copy of student work. They then discuss any variation in their scores, and they come to a consensus score. They discuss ideas to modify the task and rubric to minimize score discrepancies in the future.

Preparation of phase 1: Do this before the first meeting

The lead teacher selects student work.

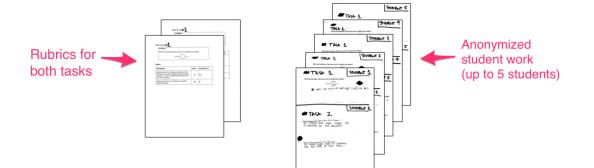
- Select two tasks, and up to five students
- Choose the tasks and students to capture variation in student scores and student reasoning (see Appendix for some ideas)

The <u>lead teacher</u> prepares participant packets. The packets should include:

- Copies of the student work. The students' names should be removed, as should any scoring marks. Label the students as "student 1", "student 2", etc. Label the tasks as "task 1" and "task 2."
- Copies of the rubric for each task.

Each participant should have their own packet. Here's what a "participant packet" might look like:







Implementation of phase 1: Do this during the first meeting

Phase 1 will take one hour to complete.

5 minutes: Introduction

- The <u>lead teacher</u> introduces the tasks. She explains how the tasks as related to the learning trajectory, and she explains why she chose these particular tasks.
- <u>Participants</u> solve each task

5 minutes: Independent scoring

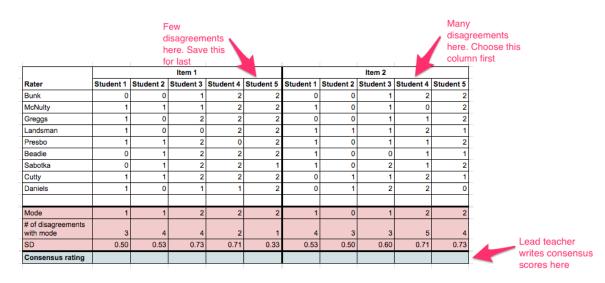
- The <u>lead teacher</u> distributes participant packets.
- <u>Participants</u> (including the recorder and the lead teacher) score the student work independently using the rubrics.
- The <u>Lead Teacher</u> can record and tally participants' scores in the scoring form for this session.
- If <u>participants</u> finish early, they should write down their thoughts on the task and rubric, including any modifications they think should be made.

40 minutes: Consensus discussion

- The <u>lead teacher</u> shows the summary of responses to the group.
- The <u>recorder</u> takes notes. Using a shared Google Doc makes it easier to share and take notes collaboratively.



- <u>Participants</u> discuss their scores, facilitated by the <u>lead teacher</u>. The goal is to develop a consensus score for each column, and to modify the task and rubric to reduce the possibility of inter-rater variance in the future.
 - The <u>lead teacher</u> chooses a column that has a lot of disagreement in scores.
 - The <u>participants</u> discuss their scores, and make arguments for particular score levels. The <u>lead teacher</u> facilitates the discussion. The <u>recorder</u> makes a note of attributes that are causing disagreement. The <u>recorder</u> also records any discussion of student reasoning.
 - The <u>participants</u> come to a consensus on a score for that column, and the <u>lead</u> <u>teacher</u> records the consensus score in the table.
 - The <u>participants</u> discuss ways to modify the task and/or rubric so as to reduce the possibility of inter-rater disagreement in the future. The <u>recorder</u> notes these ideas.
 - The process repeats for the next column with high disagreement, until there are consensus scores for all students, or until the time is up.



10 minutes: Task discussion

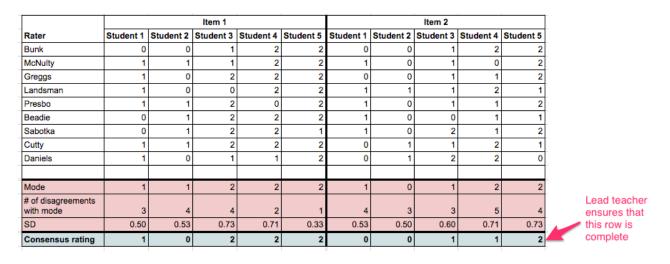


- The <u>participants</u> discuss any other modifications to tasks or rubrics that they think should be made, but which didn't come up in the previous discussion.
- The <u>recorder</u> takes note of all suggested changes.



Conclusion of phase 1: Do this at the end of the first meeting

The <u>lead teacher</u> makes sure that there is a consensus score recorded for each column. If there wasn't time to reach a consensus for each score, the <u>lead teacher</u> should use the modal score for that column.



Participants keep their "participant packets" for use in phase 2.

The recorder's notes should be made available to all teachers.



Phase two

In phase two, participants examine the consensus scores and the student work to generate a deep understanding of the student's reasoning. They then discuss next steps for this student based on their analysis of the student's reasoning, and their goals for the student.

Preparation of phase 2: Do this before the second meeting

The lead teacher prepares the response spreadsheet:

- 1. In the "response summary" tab (bottom left), ensure that consensus scores have been recorded for all columns.
- 2. In the "Consensus scores" tab (bottom left), fill-in the maximum score for each item.

	Student 1	Student 2	Student 3	Student 4	Student 5	Mean scores	
Item 1	1	0	2	2	2	70%	
Item 2	0	0	1	1	2	40%	
Total score	25%	0%	75%	75%	100%		The consensus
							scores are
			The lea	d teacher			automatically
Points p	ossible		enters t	he maximun	1		copied over
Item 1	2		points p	ossible			
Item 2	2		for each	n item			

Consensus scores:

The participants bring their packets from phase one.



Implementation of phase 2: Do this during the second meeting

Phase 2 will take one hour to complete. During this phase, student reasoning and the consensus scores are the objects of reflection. The <u>lead teacher</u> facilitates the discussions below.

10 minutes: Order students and tasks based on qualitative analysis of student reasoning:

- <u>Participants</u> examine the student work and decide which tasks is more difficult than the other based on the learning trajectory
- <u>Participants</u> examine the student work and put the students in ascending order on the learning progression, based on the reasoning apparent in the student work. Participants share their rationales for ordering students. These rationales will be based on "amount of correctness," but also should be based on varying levels of sophistication in student reasoning, including analyzing different representations and strategies that students use.
- If there is not an opportunity for students to use multiple representations or strategies in the task, <u>participants</u> discuss modifications to the task so that it is open to multiple representations and strategies.
- If there is an aspect of the task that is causing variance in student responses that is not aligned to the learning progressions (e.g., a vocabulary word), participants discuss ideas to modify the tasks to remove this "progression-irrelevant variance"
- The <u>recorder</u> takes detailed notes about what the participants notice in terms of student reasoning, including the representations and strategies that students use. The recorder also notes ides for changes to the task and rubric.

10 minutes: Compare qualitative and quantitative ordering

• The <u>lead teacher</u> displays the "consensus scores" tab on the response spreadsheet. This shows the consensus scores, and summaries of each student and item:

Student 1	Student 2	Student 3	Student 4	Student 5	Mean scores
1	0	2	2	2	70%
0	0	1	1	2	40%
25%	0%	75%	75%	100%	
	1	1 0 0 0	1 0 2 0 0 1	1 0 2 2 2 0 0 1 1 1	1 0 2 2 2 2 2 2 2 2 1 1 2

- <u>Participants</u> compare their qualitative ordering from above with the quantitative order given by the consensus scores. In the example above, the tasks would be ordered: item 1 (easier), item 2(harder). Students would be ordered quantitatively in ascending order as follows: 2, 1, 3/4, 5.
 - If the qualitative and quantitative orderings don't match, participants discuss why not. For example, maybe there is important variation in student reasoning that is not captured by the rubric. In that case, participants discuss ideas to modify the rubric so as to capture this variation.
 - If there are two students with the same score (like 3 & 4 in the example above), participants examine the student work to determine if the students are qualitatively similar. If there are important qualitative differences in student reasoning, participants discuss ideas to modify the rubric so as to capture this variation.
 - The <u>recorder</u> notes all ideas related to the task, rubric, and student reasoning.

30 minutes: Student summaries and instructional strategies

- <u>Participants</u> write a 2-3 sentence narrative description of each student, based on the student's reasoning. The narrative description will include "what the student can do" in terms of skill, but should also include ways of reasoning and conjectures about what the student understands.
 - <u>Participants</u> should use the notes that the recorder has taken thus far as a resource.
 - The <u>recorder</u> types the 2-3 sentence description for each student.
- Participants discuss instructional strategies for each student, based on the descriptions of the students and the teachers' goals for the students. Participants might draw on their

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iceberg models during this process. For example, if a student appears to be struggling with a formal skill, participants should consider what informal experiences and what models, representations, and strategies underlie that formal skill. This can help inform instructional decisions.

• The <u>recorder</u> types the instructional strategies for each student.



Conclusion of phase 2: Do this at the end of the second meeting

By the end of the second meeting, the recorder's notes include:

- Detailed ideas for how to improve the task and rubric
- Detailed notes about the various forms of student reasoning that have been revealed, including different representations and strategies, and the participants' thoughts about the sophistication of these various forms of reasoning.
- Narrative summaries of each student and ideas for instructional strategies to use with each student.

The <u>lead teacher</u> agrees to try some of the instructional strategies with her students. Other <u>participants</u> agree to as well, if appropriate (for example, if other participants teach the same course, or have similar students).

The lead teacher modifies the tasks and rubrics based on the recorder's notes



Appendix

Choosing student work: Ideas for choosing students and tasks for student focus sessions

Student focus sessions give you an opportunity to discuss student reasoning with your colleagues. Here are some guidelines that can help you decide which tasks and students to discuss.

Guideline #1: Choose tasks and students that you think will be interesting to discuss.

This is the most important guideline. You're going to spend two hours discussing the reasoning students demonstrate on these tasks, so choose examples that you think will be interesting.

Guideline #2: Choose tasks that allow students to demonstrate a variety of strategies, representations, or other varied forms of reasoning.

If the task can only be solved one way, then there probably isn't going to very much to discuss during a student focus session. You don't just want to discuss whether a student got the task right or wrong, you want to consider the range of reasoning that students demonstrate.

Guideline #3: Choose students that are representative of the most popular solutions and strategies.

If half of the class solved a problem in a particular way, you should choose one student from this set to discuss during the student focus session. This student will be the



"representative" for the group of students with similar reasoning. When you discuss this student, you're really discussing the set of students with similar reasoning.

Guideline #4: Choose student such that there is variance in scores.

You want to make sure that there are students from multiple levels in the learning progression represented. One way to do this is to choose students with different scores on the tasks. For example, if there are three levels in the rubric, make sure you choose students with scores at all three levels. Another way would be to choose students from different locations in the distribution of final scores. For example, choose one student who had a very low final score, another with a very high final score, and another with a middle final score.

