Science Discourse Practices Observation Template

Teacher Discursive Forms

Rubric 1: ASK - *Does the teacher ask open-ended questions intended to elicit diverse student responses?*

	Description	**Examples from the video**
Emerging practice	The teacher asks open-ended questions that do one but not both of the following: 1. Generate diverse responses 2. Support use of evidence and reasoning	
Proficient practice	The teacher consistently asks **open-ended questions** that can sustain **prolonged**, **relevant** discussion; can generate **multiple responses**; and allow students to use **evidence/reasoning**. Alternatively, the teacher asks a **single** such question (guiding or focal question).	

Rubric 2: PRESS - *Does the teacher press students to support their contributions with evidence and/or reasoning?*

	Description	**Examples from the video**
Emerging practice	Asking for clarification or elaboration (e.g. Can you say more? Is there another word for that?) Asking for additional information in the form of short phrase-like observations or memorized knowledge. Revoicing with an opportunity to clarify or elaborate (e.g. "Is that what you mean?")	

Improving Practice Together

Proficient practice	The teacher consistently presses students in the class to **provide evidence/reasoning** for their own comments or the comments of another student.	

Rubric 3: LINK - *Does the teacher connect students' ideas and positions in a way that helps build and develop the discussion?*

	Description	**Examples from the video**
Emerging practice	Juxtaposing ideas, without consolidating them. Asking students to build on each other's ideas (e.g. Can anyone build on what John just said?) Asking students if they agree or disagree with a contribution (e.g. John, do you agree with that?) Publicly documenting (or inviting students to publicly document) ideas but in a way that does not consolidate them (list of ideas, written share out.)	
Proficient practice	The teacher consistently shows (or provides opportunities for students to show) how two or more contributions relate to each other in a way that moves the discussion forward. • Summarizing of ideas that consolidate (e.g. It seems like we have two major camps in this discussion.) • Demonstrating how two ideas are similar or different (e.g. It sounds like Johnny and Mikaela are both saying that density is what makes the water sink.) • Highlighting a particular student contribution for others to comment on. (e.g. I want to go back to what Mikaela said earlier about the land heating up faster than the water.) • Documenting students' ideas but in a way that consolidates them (clusters of ideas)	

Student Discursive Forms

Rubric 4: EXPLAIN/CLAIM (Nature of Students' Responses)
Do students offer explanations or claims/conjectures supported by evidence?

	Description	**Examples from the video**
Emerging practice	Observations without explanation (e.g. I think that the hot water is rising to the top of the beaker.) Claims without evidence or reasoning (e.g. I don't think that would happen during the day, only at night.) Incomplete or irrelevant explanations.	
Proficient practice	Students consistently offer extended explanations using science ideas and **reasoning appropriate to the discipline** OR consistently make **claims that are supported with evidence/reasoning**. ● Observations with explanation (e.g. I think that the hot water is rising to the top of the beaker. The cold water is sinking to the bottom of the beaker because it is more dense.) ● Claims with appropriate evidence/reasoning (e.g. I think that seeds are alive because they turn into something living. ● Extended explanations with reasoning (e.g. Since the land heats up faster than the ocean, the air above the land will heat up and rise.)	

Rubric 5: CO-CONSTRUCT (Student Co-Construct)
Do student's contributions link to and build on each other to co-construct understanding?

	Description	**Examples from the video**
Emerging practice	Students state that they agree with someone but are not clear about why. (e.g. I agree with Anna.) Students state that they agree with someone and repeat their idea without adding anything new. (e.g. I agree with Ana that seeds are alive).	
Proficient practice	The students **consistently** make contributions that **build on** other students' comments AND explicitly show **how the ideas/positions shared during the discussion relate to each other.** • Students add to someone's idea (e.g. I agree with Ana and I want to add that seeds need water too.) • Students ask clarifying questions to a peer (e.g. Why did you draw the arrow over the ocean?) • Students explicitly revise ideas based on what they heard (e.g. I changed my mind because now I think that seeds are alive since they turn into something living with the right ingredients).	

Rubric 6: CRITIQUE (Student Critique)
Are students offering critiques of the contributions of other students or the teacher?

	Description	**Examples from the video**
Emerging practice	Students express disagreement with a prior idea but do not make the connection explicit. Example 1: S1: I think that a seed is alive because it turns into something living. S2: But it can't be alive because it doesn't move. Example 2: I disagree with Ana. I think that… (student goes on to make an argument for what they think, not what's wrong with Ana's argument.)	
Proficient practice	There is **more than one instance** in which a student challenges, critiques or questions presented ideas; includes evidence/reasoning that supports their contribution; **AND** explicitly **links their contribution** to the ideas being discussed. Example: I don't agree with the idea that a seed isn't alive, because it needs things to make it grow; we would also stop growing if we didn't have food. If something can grow and use food or water it must be alive.	