



Eco-STEM Peer Observation Tool

Summary of Principles and Observed Behaviors

For more information visit: https://ecostem.calstatela.edu/wiki/index.php/Peer_Observation

Principles	Observable Behaviors
Climate: supportive, inclusive and recognizing cultural assets	
C1: Knows students as individuals	C1.1: Used students' names
	C1.2: Talked with students informally before or after class
	C1.3: Showed knowledge of students' interests beyond the class
C2: Encourages questions	C2.1: Promoted a classroom environment where questions are valued
	C2.2: Expressed curiosity about student thought process
	C2.3: Emphasized to students that making mistakes is a normal and healthy part of the learning process
C3: Expresses belief in students' capacity and potential	C3.1: Encouraged students to continue to try when stuck
	C3.2: Affirmed to students that they are capable to do the work
	C3.3: Projected a successful future for students (career, graduation)
	C3.4: Promoted a growth mindset in students
C4: Creates an inclusive environment	C4.1: Presented divergent viewpoints where appropriate
	C4.2: Did not embarrass or belittle students
	C4.3: Showed respect and sensitivity to diverse learners, including different ways of knowing
	C4.4: Adequately addressed student concerns
C5: Recognizes Cultural Assets	C5.1: Acknowledged students' past experiences
	C5.2: Valued and celebrated different ways of problem solving
	C5.3: Acknowledged and supported student resilience in the face of difficulties
Structure: facilitate the learning process	
S1: Provides clear goals/outcomes	S1.1: Provided purpose and learning outcomes of the lesson
	S1.2: Placed the lesson into the overall arc of the course
	S1.3: Gave clear instructions on activities and assignments and tied them to student learning outcomes
S2: Organizes class effectively	S2.1: Defined relationship of this lesson to previous/future lesson(s)
	S2.2: Presented an overview of the lesson
	S2.3: Presented topics in a logical sequence
	S2.4: Defined unfamiliar terms, concepts, and principles
	S2.5: Summarized what was covered and the next steps at the end of the class
S3: Employs instructional design based on knowledge of how people learn	S3.1: Included material appropriate to student prerequisite knowledge
	S3.2: Actively related the lesson topics to the students' lived experiences
	S3.3: Related new ideas to familiar concepts through examples that are meaningful to the student
	S3.4: Varied explanations or demonstrations for complex and difficult material

	S3.5: Paced lessons appropriately to allow diverse learners to grapple with ideas or apply concepts
S4: Structures activities to develop effective learners	S4.1: Used a variety of instructional activities
	S4.2: Used scaffolded activities
	S4.3: Used activities that requires students to explain their approach to the solutions, recognize structure, etc. (metacognitive components)
	S4.4: Asked students to generate their own explanations and justify their thinking
	S4.5: Included reflection activities (e.g., muddiest point, one-minute paper, exam corrections)
Vibrancy: activity and level of engagement	
V1: Communicates passion for the discipline	V1.1: Shared current developments in the discipline
	V1.2: Projected genuine enthusiasm about the discipline
	V1.3: Provided opportunities for students to share new developments in the field
V2: Uses active learning properly	V2.1: Addressed student questions and comments
	V2.2: Provided group tasks that promoted knowledge construction in community and higher-level thinking
	V2.3: Synthesized group work at conclusion of collaborative activity
	V2.4: Developed student learning through active participation in lesson activities
V3: Promotes healthy and productive dynamics between students	V3.1: Encouraged students to answer each other's questions
	V3.2: Encouraged groups to ensure that all students have an opportunity to speak and are listened to
	V3.3: Enforced respectful behavior and kindness between students
	V3.4 Facilitated effective group work through assignment of roles and group selection
	V3.5: Intervened as necessary to hold class to pre-agreed-upon community norms
V4: Stimulates a high level of student engagement	V4.1: Provided varied opportunities for students to apply newly learned content
	V4.2: Adopted strategies and activities that captivate disengaged students
	V4.3: Students readily participated in in-class activities
	V4.4: Gave students recurring opportunities to engage with other students in small groups or as a whole class
V5: Promotes the growth of motivated and deep learners	V5.1: Used class activities and assignments that held relevance to students' lived experiences and their communities
	V5.2: Promoted critical thinking through comprehensive exploration of assumptions and socio-cultural context in models and paradigms before accepting or formulating an opinion or conclusion
	V5.3: Asked students to generate their own explanations and justify their thinking
	V5.4: Promoted students' reflection on their own learning or performance



This material is based upon work supported by the National Science Foundation under Grant [IUSE#2013630](#).