OPTIC (Observation Protocol for Teaching in Interactive Classrooms) Codes	
Codes (KEY below)	Shorthand meaning
Interactions in the classroom	
I→WC	Instructor verbally communicating to the whole classroom of students. The students are not verbally responding back to the instructor.
l↔WC	Instructor interacting with the whole classroom of students including learning team call outs. The student(s) <i>are</i> verbally responding. Non-verbal responses are not coded.
IxWC	Instructor is not observing or not monitoring any portion of the whole class.
l→LT	Instructor is communicating to learning team, but the learning team <i>does not</i> communicate back to the instructor.
loLT	The instructor is observing/monitoring learning team work without interacting with learning team
I↔LT	Instructor is interacting with a learning team, the learning team <i>does</i> communicate back to the instructor. (Note: not coded during whole class discussion)
LT↔LT	Learning teams or learning team representatives interacting or communicating information (written, oral or digital) to other learning team or teams.
S↔S (within LT)	Students interacting with each other within the same learning team during collaborative activity.
%S	An estimated percent of students participating or paying attention.  Code with 0 (0%),1 (less than 20%), 2 (20-80%), 3 (greater than 80%)
Facilitator Actions	Note: It is possible for no facilitator actions (e.g., instructor reading notes)
PLA	Content or methodology in preparation for a learning-activity component, including verbal instructions for learning teams and writing content on the board for the whole class.
MWC	Instructor moving about the whole classroom actively observing, monitoring or coaching the learning teams.
swc	Instructor actively observing or monitoring the whole classroom while remaining in one place. Instructor is static, not moving while observing. Observe at least 30 s.
INTV	Instructor intervenes and addresses the whole class to respond to student needs such as a misconception or confusing concept during an activity.
RO	Within the learning activity the code begins when the information is being shared by all students or learning teams demonstrating their constructed knowledge (e.g., clickers, whiteboards, verbal), not when the instructor or activity says the RO will occur.
LEC/DISC	The instructor is lecturing to the whole class, including follow up discussion
СМ	Instructor is involved in classroom management/administration tasks, such as erasing the board and setting up the AV. Not related to the content or methodology of the learning activity. Includes instructor's management of time or pacing.
Activity Type	Note: If instructors are giving mini- or full- lectures, no activity type will be coded.
POGIL	Instructor using Process Oriented Guided Inquiry Learning.
CLA	Instructor is using student-to-student collaborative learning approach other than POGIL.
IND	Instructor presents a task for students to work on individually.

Interactions
→, communicating to
←, interacting with
I, Instructor
<b>S</b> , Student
LT, Learning Team
WC, Whole Class
<b>x</b> , no interaction