#### **Teaching Observation Form**

Please record your observations on this form (or use a different method if you prefer). The feedback you provide will be helpful for lesson revisions and improving teaching.

This form asks you to observe not only the teaching, but the students as well. When you document what the teacher is doing, please also comment on what the students are doing. Specific comments may be most helpful.

of Instru	tructor: Date:						
Time	What is the instructor doing?	What are the students doing?					

Please see back page for additional questions. Provide as much feedback as you desire.

1.	How appropriate was the lesson (subject, level, organization) for the class?
2.	How engaged were the students in the lesson content?
3.	Did the instructor assess student understanding at least one time during class (ask a clicker question, collect written answers, lead a discussion where students explain a concept)?
4.	List one or more aspects of the lesson that were effective.
5.	Give one or more suggestions for improvement of the lesson.

#### CFP OBSERVATIONS WORKSHOP - SAMPLE #2

Instructor:	Department:	Date:	Time:
Course #:	Course Title:		
Observed by:			

Category	Exceeds Expectations (4)	Meets Expectations (3)	Approaching Expectations (2)	Does Not Meet Expectations (1)	Comments
Instructor Preparation and Organization	Instructor demonstrates exceptional preparation and organization of the course material, content, and class session.	Instructor demonstrates appropriate preparation and organization of the course material, content, and class session.	Instructor demonstrates some preparation and organization of the course material, content, and class session.	Instructor lacks preparation and organization of the course material, content, and class session.	
Instructional Strategies: Variety and Pacing of Instruction	Instructor employs a great variety of instructional strategies and expertly paces the class for interest and accomplishments of class goals.	Instructor employs appropriate variety of instructional strategies and paces the class for interest and accomplishments of class goals.	Instructor employs some variety of instructional strategies with limited pacing of the class for interest and accomplishments of class goals.	Instructor does not employ a variety of instructional strategies or inappropriately uses strategies and demonstrates poor pacing of the class.	
Content Knowledge	Instructor demonstrates extremely relevant content knowledge, using the most important and current information.	Instructor demonstrates relevant content knowledge, using important and current information.	Instructor employs mostly relevant content knowledge. The importance and currency of the information is unclear.	Instructor does not employ relevant, important, or current content knowledge.	

Presentation Skills	Instructor uses extremely appropriate voice, tone, fluency, eye contact, rate of speech, gestures, and use of space.	Instructor uses appropriate voice, tone, fluency, eye contact, rate of speech, gestures, and use of space.	Instructor does not consistently use appropriate voice, tone, fluency, eye contact, rate of speech, gestures, and use of space.	Instructor does not effectively or appropriately use voice, tone, fluency, eye contact, rate of speech, gestures, and use of space.	
Teacher-student Rapport					

Category	Exceeds Expectations (4)	Meets Expectations (3)	Approaching Expectations (2)	Does Not Meet Expectations (1)	Comments
	Instructor enthusiastically welcomes and appreciates student discussion, exhibits an appreciation for diversity, and demonstrates strong interpersonal skills.	Instructor welcomes student discussion, exhibits an appreciation for diversity, and demonstrates interpersonal skills.	Instructor welcomes some student discussion, exhibits some appreciation for diversity, and demonstrates some interpersonal skills.	Instructor is unwelcoming of student discussion, does not exhibit an appreciation for diversity, lacks interpersonal skills.	
Classroom Management	Instructor has established an extremely effective classroom routine which students clearly understand and maintains an environment that is conducive to learning for the widest variety of students.	Instructor has established a classroom routine which students understand and maintains a classroom environment that is conducive to learning for most students.	Instructor does not provide a consistent classroom routine and the environment is conducive to learning for some students.	Instructor does not provide a classroom routine and the environment is not conducive to learning.	
Clarity	The instructor expertly uses examples, makes clear explanations and answers to student questions, defines and elaborates on terms.	The instructor uses examples, makes explanations and answers to student questions, defines terms and concepts.	The instructor uses some examples, makes explanations and answers to student questions, defines some terms and concepts.	The instructor does not use examples or the examples are unclear, does not explain or answer student questions.	

Other observational comments:

#### **COPUS Overview**

CBE—Life Sciences Education Vol. 12, 618–627, Winter 2013

# The Classroom Observation Protocol for Undergraduate STEM (COPUS): A New Instrument to Characterize University STEM Classroom Practices

Michelle K. Smith,\* Francis H. M. Jones,† Sarah L. Gilbert,‡ and Carl E. Wieman‡

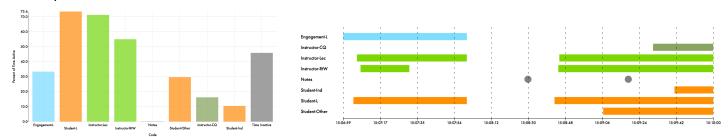
Instructors and the teaching practices they employ play a critical role in improving student learning in college science, technology, engineering, and mathematics (STEM) courses. Consequently, there is increasing interest in collecting information on the range and frequency of teaching practices at department-wide and institution-wide scales. To help facilitate this process, we present a new classroom observation protocol known as the Classroom Observation Protocol for Undergraduate STEM or COPUS. This protocol allows STEM faculty, after a short 1.5-hour training period, to reliably characterize how faculty and students are spending their time in the classroom. We present the protocol, discuss how it differs from existing classroom observation protocols, and describe the process by which it was developed and validated. We also discuss how the observation data can be used to guide individual and institutional change.

COPUS is an observation protocol developed by Michelle Smith and colleagues for observations in college-level STEM classrooms. COPUS uses different activity codes that match to different things that might be going on in the classroom. In order to use COPUS, the observer selects all appropriate codes at a regular interval (usually 2 minutes). Codes are separated for the Instructor and the Students. The earliest versions of COPUS relied on pen and paper to select codes and type notes. An app-based coding tool (GORP) now allows observers to click appropriate codes on a computer or tablet.

The app is laid out as follows:



and will provide data on codes used over time like these:



#### **COPUS STUDENT CODES**



Listening to instructor/taking notes, etc.



**Individual thinking/problem solving.** Only mark when an instructor explicitly asks students to think about a clicker question or another question/problem on their own.



Student answering a question posed by the instructor with rest of class listening



Student asks question



Making a prediction about the outcome of demo or experiment



Discuss clicker question in groups of 2 or more students



Working in groups on worksheet activity



Other assigned group activity, such as responding to instructor question



Engaged in whole class discussion by offering explanations, opinion, judgment, etc. to whole class, often facilitated by instructor



Presentation by student(s)



Test or quiz



Waiting (instructor late, working on fixing AV problems, instructor otherwise occupied, etc.)

## **COPUS INSTRUCTOR CODES**



**Lecturing** (presenting content, deriving mathematical results, presenting a problem solution, etc.)



Real time writing on board, doc. projector, etc. (often checked off along with Lec)



Showing or conducting a demo, experiment, simulation, video, or animation



Posing non clicker question to students (non rhetorical)



**Asking a clicker question** (mark the entire time the instructor is using a clicker question, not just when first asked)



Listening to and answering student questions with entire class listening



Follow up/feedback on clicker question or activity to entire class



Stretch-it - Student follow up - a series of questions targeted to an individual student to really flush out their thinking on an idea or topic.



Moving through class guiding ongoing student work during active learning task



One on one extended discussion with one or a few individuals, not paying attention to the rest of the class (can be along with MG or AnQ)



**Administration** (assign homework, return tests, etc.)



Waiting when there is an opportunity for an instructor to be interacting with or observing/listening to student or group activities and the instructor is not doing so

COPUS	For ea	2. Lec-	1. L-Lig	Classro	Date:_	Smith
•	For each 2 minute interval, check columns to show what's happening in each category (or draw vertical line to indicate continuation of activity). Check multiple columns where appropriate	2. Lec-Lecturing; RtW-Writing; FUp-Follow-up; PQ-Pose Q; CQ-Clicker Q; AnQ-Answer Q; MG-Moving/Guiding; 101-One-on-one; D/V-Demo+; Adm-Admin; W-Waiting; O-Other	1. L-Listening; Ind-Individual work; CG-Clicker Q discussn; WG-Worksheet group work; OG-Other group work; AnQ-Answer Q; SQ-Student Q; WC-Whole class discuss; Prd-Predicting; SP-Student Q: WC-Whole class discussion discus	Classroom arranged how?	Class:	MK, Jones FHM, Gilt
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# **Part I. Instructor and Course Information**

Observer Name Obs. email
Diserver Name Obs. email
Course Name
nstitution
Reason for Observation
Part II. Observation Rubric
A. Classroom Environment
The instructor's expectations for the students are clear.
Instructor presents and discusses Learning Objectives that are appropriate for the course and describe ways students can demonstrate expected levels of achievement. Expectations for student engagement and contribution are clear and consistent.
Notes/Evidence:

Instructor Name \_\_\_\_\_ Date of Observation \_\_\_\_\_

Instructor responses to student questions/comments support student achievement.
Student questions are encouraged, questions are routinely used as opportunities for clarifying instruction and student comments are integrated into instruction/discussion.
Notes/Evidence:
Instructor effectively manages the class period.
Class time is prioritized for instruction and not used excessively for administrative tasks or instructor organization. Time is appropriately allotted to both instruction and activities. When necessary, instructor efficiently re-directs the class back to aligned content. Class ends on time and at an appropriate stopping point.
Notes/Evidence:

### CFP OBSERVATION WORKSHOP - SAMPLE #4

#### **B.** Instruction

In-class instructional content is aligned to the learning objectives.
Lectures, discussions and activities teach content required for students to achieve a stated learning objective.
Notes/Evidence:
Instruction is rigorous and clear.
Where applicable, instructional materials are thoughtfully created and explanations are clear, appropriately paced and rigorously accurate.
Notes/Evidence:

### CFP OBSERVATION WORKSHOP - SAMPLE #4

## C. Student Engagement

#### CFP OBSERVATION WORKSHOP - SAMPLE #4

### Part IV. Additional Comments

Do you believe this lesson achieved its objectives? What evidence do you have?
Based on things you observed in this lesson, describe at least 1, but not more than 3, specific changes the instructor can make to improve their teaching.
Please use this space to comment on aspects of the lesson not addressed elsewhere in this rubric.

#### CFP OBSERVATIONS WORKSHOP - SAMPLE #2

Instructor:	Department:	Date:	Time:
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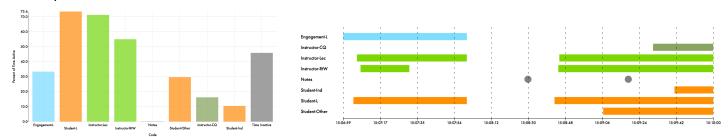
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