

# **TDOP Cover Sheet**

On this cover sheet please fill in information about the purpose of the observation, instructor characteristics, and course characteristics. Some of this information will require a meeting/interview with the observed instructor, which is optional but recommended.

I. O	Observer Information	
1	1) Observer name:	
2	2) Date and time of observation:	
	Instructor Characteristics	
1	1) Instructor name:	
2	2) Appointment type:	
3	3) Years teaching this course:	
IIb.	Instructor Characteristics – Goals and plans	
1	1) Goals for the observed class:	
2	2) Planned activities for the observed class:	_
3	B) How the class fits into the larger course (e.g., exams, special activities):	-
4)	4) How instructor uses data, if at all, to refine and/or inform teaching:	_
III. (	Course Characteristics	
1	1) Class name and level:	-
2	2) Department:	
3)	3) What is the total number of students in the class at the time of the observation?	
	O 25 or fewer O 200-300 O 26-50 O 300-400 O 51-100 O 400 -500 O 100-200 O 500 +	
	4) Please describe the physical layout of the room (e.g., type of student seating, technology directly accessible instructor on dias, number of projection screens and their positioning, etc.)	by students
5)	5) Please note if there is anything unusual about this particular class/lecture (e.g., quiz day, first day of semeste	er, etc.)



# **Code Definitions & Coding Rules**

## **Teaching Methods**

### **Teacher-focused instruction (teacher is the primary actor)**

- L Lecturing: The instructor is talking to the students and not using visuals, demonstration equipment, actively writing, or asking more than 2 questions in a row in a Socratic manner.
- LW Lecturing while writing: The instructor is talking to the students while actively writing on a chalkboard, transparencies, digital tablet, or other material. The instructor must either be writing or referring to what they are writing (or have already written). This code also captures real-time drawing of graphics (e.g., molecular structure, physiological processes), and if the use of visual representations is of interest, this should be included in the notes section. (Note that this code also captures writing/drawing in front of students without speaking, as a separate code for silent writing was deemed superfluous).
- LVIS Lecturing from pre-made visuals: The instructor is talking to the students while referencing visual aides, such as slides, transparencies, posters, or models (e.g., plastic model of molecular structure, examples of sedimentary rocks, multi-media). The instructor must be referring to the topic contained in the visual, but the visual serves only as a reference point for the material and not as a live demonstration of phenomenon.
- **LDEM** Lecturing with demonstration of phenomena: The instructor actively uses equipment (e.g., lab equipment, computer simulation) to convey course content. The objects must be in active use in relation to the topic and must be used for more than a simple reference point (e.g., "here is an example of a sedimentary rock") to demonstrate a process or phenomenon in class (e.g., "here is how sedimentary rock erodes over time" while physically demonstrating this process).
- **SOC-L** Socratic lecture: The instructor is talking to the students while asking multiple, successive questions to which the students are responding. Student responses are either guiding or being integrated within the discussion. A minimum of 2 relevant student responses is required to use this code. (Note that SOC-L can be co-coded with other types of lecturing, such as LW, if the instructor is doing both writing AND interspersing his/her talk with questions).
- WP Working out problems: This code refers to the instructor working out computations or problems. These can include balancing a chemical equation, working out a mathematical proof, or designing equations or Punnett squares, etc. The intent of the code is to capture the working through of some sort of problems in front of students. (If the computations/problems are on a slide and the instructor is actively working through problems, then this will be co-coded with LVIS. If this process is being written out, then this code will be co-coded with LW, and if students are being asked to participate in the problem-solving process via questions, code SOC-L).
- IND Individualized instruction: The instructor provides instruction to individuals or groups and not the entire class. This often occurs while the instructor is roaming the classroom, but students or small groups may also approach the instructor. This code is usually co-coded with SGW or DW (see below). It is important to recognize that this code should not be used to classify the types of student-teacher interactions that are occurring in a large class setting instead, use this code only when students are engaged in SGW or DW and the instructor is directly interacting with one or more students.
- **MM Multimedia**: The instructor plays a video or movie (e.g., Youtube or documentary) <u>without speaking</u> while the students watch. If the instructor is talking over a video, movie, or simulation, then co-code with LVIS.
- A Assessment: The instructor is explicitly gathering student learning data in class (e.g., tests, quizzes, or clickers).
- **AT** Administrative task: The instructor is discussing exams, homework, or other non-content related topics.

#### Student-focused instruction (students are the primary actor)

- **SGW** Small group work/discussion: Students form into groups of 2+ for the purposes of discussion and/or to complete a task.
- **DW Deskwork:** Students complete work alone at their desk/chair.
- **SP Student presentation**: Groups or individual students are giving to the class or are otherwise acting as the primary speaker or instructor in the classroom. In this instance, only select this code and none others as long as the primary instructor is not actively taking the lead in teaching the class.

#### **Student-Teacher Dialogue**

#### Teacher-led dialogue

- **IRQ Instructor rhetorical question**: The instructor asks a question without seeking an answer and without giving students an opportunity to answer the question.
- **IDQ Instructor display question:** The instructor poses a question seeking information. These questions can: seek a specific fact, a solution to a closed-ended problem, or involve students generating their own ideas rather than finding a specific solution.
- **ICQ Instructor comprehension question**: The instructor checks for understanding (e.g., "Does that make sense?") and pauses for at least five seconds, thereby indicating an opportunity for students to respond.



#### Student-led dialogue

- **SQ Student question**: A student poses a question to the instructor that seeks new information (i.e. not asking to clarify a concept that was previously being discussed) **and/or** clarification of a concept that is part of the current or past class period.
- **SR Student response to teacher question**: A student responds to a question posed by the instructor, whether posed verbally by the instructor or through digital means (e.g., clicker, website).
- PI Peer interactions: Students speaking to one another (often during SGW, WCD, or SP).

## **Instructional Technology**

- CB Chalkboard/whiteboard/Smart Board
- OP Overhead projector/transparencies
- PP PowerPoint or other digital slides
- CL Clicker response systems
- **Demonstration equipment**: These could include chemistry demonstrations of reactions, physics demonstrations of motion, or any other material being used for the demonstration of a process or phenomenon. The objects must be in active use in relation to the topic. This can also include objects such as rocks being passed around a classroom.
- **DT Digital tablet:** This refers to any technology where the instructor can actively write on a document or graphic that is being projected onto a screen. This includes document cameras as well as software on a laptop that allows for writing on PDF files.
- M Movie, documentary, video clips, or Youtube video
- **Simulation:** Simulations can be digital applets or web-based applications.
- **WEB** Website: Includes instructor interaction with course website or other online resource (besides Youtube videos). This can include using a website for student responses to questions (in lieu of clickers).

### **Pedagogical Strategies**

- **HUM** Humor: The instructor tells jokes or humorous anecdotes; this code requires laughter from at least a couple of students.
- ANEX Anecdote/example: The instructor gives examples (either verbally through illustrative stories or graphically through movies or pictures) that clearly and explicitly link course material to (a) popular culture, the news, and other common student experiences, or (b) widely recognized cases or incidents that illustrate the abstract (both types are co-coded with CNL).
- ORG Organization: The instructor writes or posts an outline of class (i.e., advance organizer) or clearly indicates a transition from one topic to the next verbally or through transitional slides. This transition from one topic to another can indicate a change in topics within a single class or from a previous class to the present class. These transitions must be verbally explicit statements to the class (e.g., "Now we're moving from meiosis to mitosis") as opposed to ambiguous statements such as "Now we'll pick up where we left off on Monday." This may also include statements concerning how concepts covered in different portions of the class (e.g., lecture, homework and lab) may overlap.
- **EMP** Emphasis: The instructor clearly states that something is important for students to learn or remember either for a test, for their future careers, or to just learn the material well

# **Optional Dimensions**

#### **Potential Student Cognitive Engagement**

- CNL Making connections to own lives/specific cases: Students are given examples (either verbally through illustrative stories or graphically through movies or pictures) that clearly and explicitly link course material to popular culture, the news, and other common student experiences. Students may also be given specific cases or incidents in order to link an abstract principle or topic (e.g., flooding) with a more readily identifiable instance (e.g., 2013 floods in Boulder, Colorado). For this code to be used, the observer will need to make a judgment that the specific case is something meaningful to students, such as a local historic item or location, or a widely recognized incident. In general, a high bar is required here that is based on specificity and salience to students, such that showing a picture of a sedimentary rock will not be sufficient for this code, but if the picture was of the Grant Canyon and named as such, it would be coded as CNL. This code will be particularly important in biology (e.g., Dolly the sheep) and geoscience courses.
- Problem solving: Students are asked to actively solve a problem (e.g., balance a chemical equation, work out a mathematical equation/algorithm). This is evident through explicit verbal (e.g., "Please solve for X") or written requests (e.g., worksheets) to solve a problem. This is coded in relation to closed-ended exercises or problems where the instructor has a specific solution or end-point clearly in mind.
- CR Creating: Students are provided with tasks or dilemmas where the outcome is open-ended rather than fixed (e.g., students are asked to generate their own ideas and/or products rather than finding a specific solution). The task can be delivered verbally or in written form. This is coded in relation to open-ended exercises or problems where the instructor does not have a specific solution or end-point clearly in mind.



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## **Student Engagement**

- **VHI Very High:** More than 75% of the students in the immediate area of the observer are either (a) actively taking notes, or (b) looking at the instructor/course materials
- **HI High:** Between 50% and 75% of the students in the immediate area of the observer are either (a) actively taking notes, or (b) looking at the instructor
- **MED** Medium: Between 25% and 50% of the students in the immediate area of the observer are either (a) actively taking notes, or (b) looking at the instructor
- **Low:** Less than 25% of the students in the immediate area of the observer are either (a) actively taking notes, or (b) looking at the instructor



**Directions:** Circle codes for each behavior observed during every two-minute interval. Take detailed notes about aspects of the class that is of particular interest for your application (e.g., content discussed, nature of student dialogue). Note: this template is for illustrative purposes only and includes the 3 Basic Dimensions and 2 Optional Dimensions (i.e. student engagement is not shown).

Interval #	1	2	3	4	5
Min	0-1:59	2:00-3:59	4:00-5:59	6:00-7:59	8:00-9:59
Instruct. Practices – Teacher- focused	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT
Instruct. Practices – Student- focused	SGW DW SP				
Notes:					
Student- Teacher Interactions Teacher-led	IDQ ICQ IRQ				
Student- Teacher Interactions Student-led	SQ SR PI				
Notes:					
Instructional Technology	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB
Notes:					
Potential Cognitive Demand	CNL PS CR				
Notes:					



Interval #	6	7	8	9	10
Min	10:00-11:59	12:00-13:59	14:00-15:59	16:00-17:59	18:00-19:59
	L LW LVIS				
Instruct.	LDEM SOC-L WP				
<b>Practices</b> – Teacher-	IND MM				
focused	A AT				
Instruct. Practices – Student- focused	SGW DW				
Notes					
Student- Teacher Interactions Teacher-led	IDQ ICQ IRQ				
Student- Teacher Interactions Student-led	SQ SR PI				
Notes:					
	CB OP PP	CB OP PP	CB OP PP	CB OP PP	
Instructional			CL D DT		CB OP PP
Technology	CL D DT	CL D DT		CL D DT	CL D DT
	M SI WEB				
Notes:					
	CNII PC	CNL PS	CNL PS	CNL PS	CNL PS
Potential	CNL PS				
Potential Cognitive Demand	CRL PS	CR	CR	CR	CR



			TDOP Teaching Dimensions Observation Protocol		
Interval #	11	12	13	14	15
Min	20:00-21:59	22:00-23:59	24:00-25:59	26:00-27:59	28:00-29:59
	L LW LVIS	L LW LVIS	L LW LVIS	L LW LVIS	L LW LVIS
Instruct.	LDEM SOC-L WP	LDEM SOC-L WP	LDEM SOC-L WP	LDEM SOC-L WP	LDEM SOC-L WP
Practices – Teacher-	IND MM	IND MM	IND MM	IND MM	IND MM
focused	A AT	A AT	A AT	A AT	A AT
Instruct. Practices – Student-	SGW DW	SGW DW	SGW DW	SGW DW	SGW DW
focused	51	51	51	51	51
Notes	Γ				
Student-	IDQ	IDQ	IDQ		IDQ
Teacher Interactions	ICQ IRQ	ICQ IRQ	ICQ IRQ	IDQ	ICQ IRQ
Teacher-led	neg mg	ney my	neg mg	ICQ IRQ	neg mg
Student- Teacher	SQ	SQ	SQ	SQ	SQ
Interactions	SR PI	SR PI	SR PI	SR PI	SR PI
Student-led					
Notes:					
	CB OP PP	CB OP PP	CB OP PP	CB OP PP	CB OP PP
Instructional Technology	CL D DT	CL D DT	CL D DT	CL D DT	CL D DT
1 cennology	M SI WEB	M SI WEB	M SI WEB	M SI WEB	
		51 ,,,,,,			M SI WEB
Notes:					
Potential	CNL PS	CNL PS	CNL PS	CNL PS	CNL PS
Cognitive	CR		CR	CR	
Demand	CK	CR		CK	CR

Notes:



Interval #	16	17	18	19	20
Min	30:00-31:59	32:00-33:59	34:00-35:59	36:00-37:59	38:00-39:59
	L LW LVIS				
Instruct.	LDEM SOC-L WP				
Practices – Teacher-	IND MM				
focused	A AT				
	A AI				
Instruct.	SGW DW				
Practices – Student-	SP	SP	SP	SP	SP
focused					
Notes					
Student-					
Teacher	IDQ	IDQ	IDQ	IDQ	IDQ
Interactions Teacher-led	ICQ IRQ	ICQ IRQ	ICQ IRQ		ICQ IRQ
reacher-led				ICQ IRQ	
Student-	SQ	SQ	SQ	SQ	SQ
Teacher Interactions	SR PI				
Student-led					
Notes:					
	CB OP PP				
Instructional	CL D DT		CL D DT	CL D DT	
Technology		CL D DT	M CI WED		CL D DT
	M SI WEB				
Notes:					
Potential	CNL PS	CNL PS	CNL PS	CNL PS	
Cognitive			CR		CNL PS
Demand	CR	CR	Cit	CR	CR
Notes:					



	21	22	23	24	25
Min	40:00-41:59	42:00-43:59	44:00-45:59	46:00-47:59	48:00-49:59
	L LW LVIS				
Instruct.	LDEM SOC-L WP				
Practices – Feacher-	IND MM				
ocused	A AT				
Instruct. Practices –	SGW DW				
Student-	SP	SP	SP	SP	SP
focused					
Notes					
Student-	IDO	IDO	IDO		IDO
Teacher	IDQ	IDQ	IDQ	IDQ	IDQ
I <b>nteractions</b> Feacher-led	ICQ IRQ				
Student- Feacher	SQ	SQ	SQ	SQ	SQ
Interactions	SR PI				
Student-led					
Notes:					
	CB OP PP	CB OP PP	CB OP PP	CB OP PP	CD OD DD
Instructional	CL D DT		CL D DT	CL D DT	CB OP PP
Гесhnology		CL D DT			CL D DT
	M SI WEB				
	M SI WEB	M SI WEB	WI SI WED	M SI WEB	M SI WE
Notes:			CNI DC		
Notes: Potential Cognitive	CNL PS	CNL PS	CNL PS CR	CNL PS	CNL PS



Interval #	26	27	28	29	30
Min	50:00-51:59	52:00-53:59	54:00-55:59	56:00-57:59	58:00-59:59
Instruct. Practices – Teacher- focused	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT	L LW LVIS LDEM SOC-L WP IND MM A AT
Instruct. Practices – Student- focused	SGW DW SP				
Notes Student-	IDO	IDO	IDO		IDO
Teacher Interactions Teacher-led	IDQ ICQ IRQ				
Student- Teacher Interactions Student-led	SQ SR PI				
Notes:					
Instructional Technology	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB	CB OP PP CL D DT M SI WEB
Notes:					
	CNL PS				

Notes:



# **Post-Observation Field Notes**

Note any over-arching observations about the class just observed or any specific incidents or activities that are worth elaborating upon. Also keeping in mind the purpose of the evaluation, make summative observations about the class. Finally, if a post-class survey such as the RTOP or Teaching Behaviors Inventory (TBI) is of interest in order to assess the efficacy of the class, administer the survey at this point.



### **Teaching Dimensions Observation Protocol (TDOP)**

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Citation for the instrument: Hora, M., & Ferrare, J.. (2014). The Teaching Dimensions Observation Protocol (TDOP) 2.0. Madison, WI: University of Wisconsin-Madison, Wisconsin Center for Education Research.

TDOP was largely adapted from Osthoff, E., Clune, W., Ferrare, J., Kretchmar, K., & White, P. (2009). Implementing immersion: Design, professional development, classroom enactment and learning effects of an extended science inquiry unit in an urban district. Madison: University of Wisconsin–Madison, Wisconsin Center for Educational Research.

Thanks to the National Science Foundation for providing support for work on the TDOP (DRL#0814724, DUE#1224624). Thanks to Amanda Oleson, Jana Bouwma-Gearhart, and other colleagues for providing assistance with this revision.