Personalized Instruction Review Report

May 14, 2019

# Personalized Report for Sample2

## COPUS

Smith et. al (2013) developed a teaching observation procedure 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.

Observers attend a course mulitple times (50 minutes each) and used a COPUS form to mark behaviors in 2-minute intervals.



The protocol has 3 main parts as listed below:



When interpreting the data generated from COPUS, the activities listed above under “Students are Doing” and “Instructor is Doing” are collapsed into 8 categories (4 for students and 4 for faculty). For students:

* “Receiving” is indicated by the code “L”.
* “Working” is indicated by the codes “Ind,” “WG,” “OG,” “Prd,” and “TQ”.
* “Talking” is indicated by the codes “CG,” “AnQ,” “SQ,” “WC,” and “SP”.
* “Other” is indicated by the codes “W” and “O”.

For faculty:

* “Presenting” is indicated by the codes “Lec,” “RtW,” and “D/V”.
* “Guiding” is indicated by the codes “FUp,” “PQ,” “CQ,” “AnQ,” “MG,” and “1o1”.
* “Administrative” is indicated by the code “Adm”.
* “Other” is indicatd bye the codes “W” and “O”.

### Instructional Profiles

Based on Stains et. al (2018)’s research, analysis of COPUS observations results in three main categories (Instructional profiles) represented by 7 clusters as shown below.



# Your Results

Based on the observations conducted in ENGR 201 on 2/2/2019 and 3/2/2019, the data analysis resulted in the following:

### 1. Instructional Profiles

The first observed course session was classified as **3**, and the second was classified as **4**.

**Cluster 3** falls under Interactive Lectures. This mode of instruction supplements lectures with student-centered strategies. Cluster 3 might contain clicker questions that are sometimes associated with group work.

*Note.* Student activities are shown in blue/purple, and instructor activities are shown in red/orange. Darker shading indicates more activities from that category occurred during the 2-minutes period. Category components are given with the explanation of COPUS above.



**Cluster 4** falls under Interactive Lectures. This mode of instruction supplements lectures with student-centered strategies. Cluster 4 represents lectures with clicker questions and group work.



The next chart shows how your COPUS results compare to the results from all other instructors who were observed this semester.



### 2. Teaching Practices Inventory

This inventory can aid instructors and departments in reflecting on their teaching. It has been tested with several hundred university instructors in STEM fields. Inventory results can be used to gauge the extent of use of research-based teaching practices. Keep in mind that no single course is expected to incorporate all of the things listed in the TPI and there is no single formula for high-quality instruction.

This chart shows a high-level comparison of how your responses to the TPI compare to those of other faculty in the college. The scoring of the TPI gives more weight to practices that are shown by research to be more beneficial to student learning. The perimeter of the chart represents the maximum possible value for each category.



* For Information for Students, you scored 4 out of 6. Your practices in this area are likely benefitting students, but there are likely ways to expand what you are already doing.
* For Supporting Materials, you scored 3 out of 7. Your practices in this area are likely benefitting students, but there are likely ways to expand what you are already doing.
* For In-Class Activities, you scored 10 out of 20. Your practices in this area are likely benefitting students, but there are likely ways to expand what you are already doing.
* For Individual Student Responses, you scored 2 out of 6. This area presents an opportunity for improvement.
* For Assignments, you scored 5 out of 13. Your practices in this area are likely benefitting students, but there are likely ways to expand what you are already doing.
* For Feedback and Testing, you scored 9 out of 10. This is an area of strength for your teaching.
* For Other, you scored 3 out of 7. Your practices in this area are likely benefitting students, but there are likely ways to expand what you are already doing.
* For TA Training and Guidance, you scored 3 out of 6. Your practices in this area are likely benefitting students, but there are likely ways to expand what you are already doing.

## Recommendations

### COPUS



This chart shows the number of College of Engineering faculty whose observed course sessions were classified into each of the seven clusters. **Our goal is to have fewer than one third of courses sessions classified as a 1 or a 2.** Your observed course sessions were 3 and 4.

Based on these classifications, you seem to incorporate student interaction and activity into your courses. Good work! If you’re interested in trying new instructional techniques or expanding what you are already doing, the ECEC can help.

### TPI

**All of the practices highlighted in this section are evidence-based practices we strongly encourage instructors to use.** What follows is a comparison between what you reported and what other instructors in the College of Engineering have reported.

##### Information for Students

You indicated that you **do** provide students a list of topic-specific competencies students should achieve in the course. About **68.75%** of instructors in the college who have taken the TPI reported providing a list of topic-specific competencies.

##### Supporting Materials

You indicated that you **do** provide students with solutions to homework assignments. About **68.75%** of instructors in the college who have taken the TPI reported providing solutions to homework assignments.

You indicated that you **do not** provide students with worked examples of sample problems About **62.5%** of instructors in the college who have taken the TPI reported providing worked examples.

##### In-Class Activities

You indicated that you pause to ask students questions about **4-6 times** per class. On average, instructors in the college who have taken the TPI reported pausing to ask students questions about **4-6 times** per class.

You indicated that you have students discuss or solve problems in groups an average of **2-3 times** per class. On average, instructors in the college who have taken the TPI reported having students discuss or solve problems in groups **1 time**  per class.

You indicated that you **do** have students complete assignments or quizzes near or at the start of class over material they were to view before class. About **50%** of instructors in the college who have taken the TPI reported using this practice.

You indicated that on average you lecture **40-60%** of the class period. Instructors in the college who have taken the TPI reported lecturing **40-60%** of class periods.

##### Individual Student Responses

You indicated that you pose a question to students and then have them engage in discussion **1 time**  per class. On average, instructors in the college who have taken the TPI reported having students engage in discussion following a question **1 time**  per class.

##### Assignments

You indicated that you **do** assign graded homework at least every 2 weeks. About **93.75%** of instructors in the college who have taken the TPI reported assigning graded homework at least every 2 weeks.

##### Feedback and Testing

You indicated that you **do** let students see graded assignments and you **do** let students see graded quizzes/exams. Of the instructors in the college who have taken the TPI, **100%** reported letting students see graded assignments and **75%** reported letting them see graded quizzes/exams.

You indicated that you **do** let students see the answer keys for graded assignments and you **do not** let students see the answer keys for graded quizzes/exams. Of the instructors in the college who have taken the TPI, **75%** reported letting students see the answer keys for graded assignments and **37.5%** reported letting them see the answer keys for graded quizzes/exams.

##### Other

You indicated you **do not** use a consistent measure of learning that can be used to compare learning across sections and semesters. About **6.25%** of instructors in the college who have taken the TPI reported using a measure to comparing learning across sections and semesters.

You indicated that you **do** provide opportunities for students to self-evaluate their learning. About **43.75%** of instructors in the college who have taken the TPI reported providing opportunities for self-evaluation.

##### TA Training and Guidance

You indicated you **do not** have TAs for this course.

## Next Steps

#### Contact the ECEC:

Email us as engr-ecec@unl.edu or visit [the ECEC website](https://engineering.unl.edu/ecec/)

Our Instructional Designers can help you:

* incorporate more evidence-based strategies into your courses
* design, develop, implement, and evaluate new learning activities and innovative pedagogies
* integrate instructional technology into your teaching to enhancing learning

Our Learning Assessment Coordinator can:

* review your classroom assessment processes and provide recommendations
* teach you how to evaluate the quality of your classroom assessments
* help you develop new classroom assessments

Our ongoing faculty programs include:

* Learning by Design - learn the Backwards Design process as you develop or redevelop a course
* Teaching Evaluation - get feedback on your teaching and learn about how other instructors in the college approach teaching