The handout demonstrates ways instructors can implement more active-learning practices to their teaching based on their COPUS results. As illustrated in the table below, there are 12 individual instructor COPUS codes (Smith et al., 2013) that can be collapsed into four categories: *Presenting, Guiding, Administering,* and *Other* (Smith et al., 2014). There are 13 individual student COPUS codes, which can also be collapsed into four categories: *Receiving, Working and Talking, Assessment,* and *Other* (Kranzfelder et al., 2019). The *Guiding* and *Working and Talking* categories in green best represent student-centered practices; and hence represent optimal codes which facilitate student engagement and learning (Alkhouri et al., 2021). Based on our experience as observers, we paired each instructor code with one or more of the student codes to guide the implementation of more active-learning practices.

|  |  |  |  |
| --- | --- | --- | --- |
| **Instructor Collapsed Code** | **Instructor Code** | **Student Code** | **Student Collapsed Code** |
|  Lecturer with solid fill**Presenting** | Lecturing (Lec) | Listening (L) | School boy with solid fill**Receiving** |
| Real-time Writing (RtW) | Listening (L) |
| Demo/Video (D/V) | Listening (L) |
| Boardroom with solid fill**Guiding** | Predicting (Prd) | Group brainstorm with solid fill**Working & Talking** |
| Posing Questions (PQ) | Answering Question (AnQ) |
| Answering Question (AnQ) | Student Question (SQ) |
| Follow-up (FUp) | Answering Question (AnQ), Whole Class Discussion (WC) |
| Moving and Guiding (MG) | Group Clicker Question (CG), Group Worksheet (WG), Other Group Work (OG) |
| One-on-One (1o1) | Group Clicker Question (CG), Group Worksheet (WG), Other Group Work (OG) |
| Clicker Question (CQ) | Individual Thinking (Ind), Group Clicker Question (CG) |
| Clipboard Checked with solid fill**Administering** | Administering (Adm) | Listening (L) | Clipboard Mixed with solid fill**Assessment** |
| Test or Quiz (TQ) |
| Badge Question Mark with solid fill**Other** | Other (O) | Other (O), Waiting (W) | Badge Question Mark with solid fill**Other** |
| Waiting (W) | Other (O), Waiting (W) |

To learn more about the COPUS code descriptions and SATAL’s coding criteria, please visit our “Frequently Asked Questions” handout [here](https://docs.google.com/document/d/1MXpTnoGhBPz0q20GFJ88boaCn3gjVzx1/edit?usp=sharing&ouid=103569734314132705963&rtpof=true&sd=true).

1. **How can I, as an instructor, encourage more active learning in my class, and hence add more COPUS codes to my report?**

Below is an example of how you can turn a teacher-centered activity into a student-centered activity using active learning practices and facilitating more student interaction.

****

1. **How do I shift from a *Presenting* to a *Guiding* codes?**

The following pie charts with COPUS results illustrate two examples of instructor behaviors.

|  |  |
| --- | --- |
| This bar graph is an example of a teacher-centered class session, illustrating mainly *Presenting* teaching practices (Lecturing, Real-time Writing). | This bar graph is an example of a student-centered class session illustrating majority of *Guiding* teachingpractices (Follow-up, Posing Questions, Clicker Question, Answering Question, Moving and Guiding, One-on-One).  |

While there is not a guaranteed combination of COPUS codes that will ensure student learning, studies suggest that active learning activities encourage student engagement (Aji & Khan, 2019). To move the teacher-centered instructor towards student-centered practices, the instructor can incorporate more *Guiding* practices. For example, instead of just Lecturing (Lec) and Real-time Writing (RtW), they can ask students a question to discuss the question in groups. This gives the instructor an opportunity to walk throughout the classroom during student discussion (MG), spend one-on-one time with students (1o1), and follow-up (FUp) with a class discussion (WC) after groups decide on the answer.

Refer to our [CDOP handout](https://ucmerced.box.com/s/ph5pf7iocfk4z4t9i8arougj9c4y5c3r) to learn more about interactive student-student questioning examples during whole class discussions or one-on-one time.

1. **How do I shift students’ codes from *Receiving* to *Working and Talking*?**

The following COPUS results illustrate two examples of student behaviors, which correlate with the instructor behaviors above.

|  |  |
| --- | --- |
| This pie chart is an example of the student behaviors in a teacher-centered instruction, illustrating mainly *Receiving* practices (Listening).  | This pie chart is an example of the student behaviors of a student-centered instructor, illustrating mainly *Working and Talking* practices (Individual thinking, Other group activity, Answering Questions, Asking Questions, Whole class Discussions. |

The student-centered classroom offers many opportunities for students to be involved in the class session, such as discussing with their peers, individually answering questions, and participating in whole class discussions. Again, incorporating these activities is not a guarantee that students will become more engaged in the class session, but rather provide them a chance to do so. To move a teacher-centered instructor toward student-centered practices, we recommend incorporating more codes from the *Working and Talking* category. For example, instead of studentsl listening to the instructor for the entire class period, instructors could create opportunities for students to have discussions (WC), ask and answer questions (AnQ, SQ), and share their ideas with their peers (OG, CG, WG).

1. **How do I introduce more codes in the *Guiding* and *Working and Talking* Category**

Below are some classroom activities we have observed in classrooms paired with the possible COPUS codes that could go with it.

|  |  |  |
| --- | --- | --- |
| **Activity** | **Instructor COPUS Code** | **Student COPUS Code** |
| [Think-Pair-Share](https://www.cmu.edu/teaching/designteach/diversityequityinclusion/activelearning/index.html) | 1. Posing Question (PQ) | 1.Individual Thinking (Ind)2.Other Group Work (OG) 3.Whole Class Discussion (WC)4.Answering Question (AnQ)5.Student Question (SQ) |
| [Clicker Question](https://www.cmu.edu/teaching/clickers/) | 1. Clicker Question (CQ) 2. Follow-up (FUp) | 1.Individual Thinking (Ind)2.Group Clicker Question (CG) 3.Whole Class Discussion (WC)4.Answering Question (AnQ)5.Student Question (SQ) |
| [Exit Ticket](https://www.theteachertoolkit.com/index.php/tool/exit-ticket) | 1. Posing Question (PQ) | 1.Individual Thinking (Ind) |
| [Student Presentation](https://intranet.ecu.edu.au/learning/curriculum-design/teaching-strategies/student-presentations) | 1. Follow-up (FUp) | 1. Student Presentation (SP)2. Listening (L)3. Whole Class Discussion (WC)4. Answering Question (AnQ)5. Student Question (SQ)  |

The key to remembering and succeeding at building a habit is to focus on adding just one code at a time and practice it; choose one activity you are currently doing from Figure 1, anchor a new one code to that activity, and repeat until it becomes a habit, like driving or brushing your teeth. Once it becomes a habit, incorporate another code and repeat the process to build stackable habits and, thus, expand your COPUS codes and active learning implementation in your classroom.

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