Class Activities

# Chapter 4: Attention: Deploying Cognitive Resources

## 1. Replicate the Dichotic Listening Task

For this activity, you’ll need to recruit three volunteers. One volunteer will be the listener who will be seated facing the class. The other two volunteers will be the readers who will be seated facing the listener on either side. Give the two readers an excerpt from the local news. Each reader should have a different excerpt, but both should have approximately the same word count. Tell the listener to try their best to listen to both stories simultaneously. While each story is being read, either distributed a handout to the class with a transcript of each, or put a transcript of both on an overhead for all but the listener to see. Once the readers complete reading their stories, ask the student what one of the reader’s story was about. Then, ask the listener what the other story was about. If the activity works, the listener should only be able to recall the content of one of the stories, and perhaps bits and pieces of the other.

## 2. Divided Attention

Nearly everyone has some sort of electronic device, and most of those who do tend to use it while doing other things. As I work on this activity, I have my phone to my right and I am texting back and forth with my son about dinner. Obviously, I can multitask these two things fairly easy, switching between texting and typing. However, other tasks require much more cognitive demand, and when done simultaneously, can be disastrous. So as not to potentially harm your students, this activity will demonstrate how limited our cognitive resources by having students complete arithmetic problems while playing a game on their smartphone.

First, divide students into pairs and ask the pairs to designate one person the tester. Then, give the other student, the learner, a set of five arithmetic problems (Handout 4-1). When you say “start”, have the tester read aloud each problem to the learner. Have the tester record how long it takes the learner to complete all five problems, and then score the problems for accuracy. Now, have the students change roles, but this time have the learner pull up their favorite game on their smartphone to play while completing the problems. Again, have the tester read aloud five math problems (Handout 4-2) to the learner while recording how long it takes the learner to complete the problems and assess accuracy. The activity should demonstrate that even when performing relatively easy tasks, they become difficult to do when our attention is divided.

## 3. Priming

For this activity, you’ll need to recruit two confederates. Teaching assistants or graduate assistants would be perfect. Begin the class by announcing that they are going to do an exercise to demonstrate how important attention is in performing tasks that require cognitive function. Divide the class into two groups and tell them that graduate assistants will be arriving shortly to lead each group. The assistants should intentionally be around 5 minutes late. During the 5 minutes, engage the class in small talk, specifically about the graduate students. Questions should be along the lines of “have you met [student 1]? She’s really great. Her thesis is coming along really well. It’s not like her to be late. [student 2] is coming, too. Have you met her? She’s probably why they’re not here yet. She really needs to her act together if she wants to continue in the program.” After about 5 minutes have the confederates arrive looking as if they’ve rushed to the classroom. Randomly assign each confederate to group. Tell the class that each group will compete to complete a simple Sudoku puzzle. When you say begin, have each confederate say the following to their group “Who knows how to play Sudoku?” Have her designate the first person to affirm knowledge of the puzzle as the leader. Once one group finishes the puzzle, give everyone a five-item Likert questionnaire (Handout 4-3) to assess his/her satisfaction with the exercise. If priming has occurred, the students who had the “good” graduate assistant should rate the exercise more favorable than the students who had the “bad graduate assistant.”

Also, at the end of this exercise be sure to debrief the students, so they know that both graduate students are wonderful students in good standing!

Handout 4-1

1. 86 + 64 =
2. 86 + 16 =
3. 52 + 71 =
4. 82 + 39 =
5. 50 + 62 =

***Key:*** 150, 102, 123, 121, 112

Handout 4-2

1. 14 + 23 =
2. 92 + 35 =
3. 91 + 71 =
4. 52 + 97 =
5. 76 + 14 =

***Key:*** 37, 127, 162, 149, 90

Handout 4-3

How much did you like the Sudoku exercise?

1 2 3 4 5

Strongly Disliked Disliked Neither Liked Liked Strongly Liked

nor Disliked