Class Activities

# Chapter 1: Cognitive Psychology: History, Methods, and Paradigms

## 1. Investigating Research Methods in Cognitive Psychology

This activity is designed to help students understand how researchers study cognitive psychology. The goal is for students to learn how most research topics can be investigated using any number of methods, and that each method has its strengths and weaknesses.

First, divide students into small groups and give each group a sheet of paper listing a unique hypothesis. Then, ask the groups to discuss how they would test their hypothesis 1) experimentally, 2) quasi-experimentally, 3) using naturalistic observation, and 4) using clinical interviews. After the groups have brainstormed for about 10 minutes, ask them to present their hypothesis and methodological ideas to the class. The class can then discuss the strengths and weaknesses of each proposed method and debate which approach they believe is the most appropriate given the hypothesis.

## 2. Debate the Contribution of Nature and Nurture on Behavior

The purpose of this activity is to not only help students appreciate the history of cognitive psychology but also think about the relative contribution of our genes and our environment on cognitive function, as well as to familiarize them with how to obtain scholarly research.

Begin the activity by discussing how psychology dates back to ancient Greece, and how Aristotle and Plato differed in their beliefs on the origin of behavior. Next, divide the class into two groups: Team Aristotle and Team Plato. Have each group locate empirical journal articles that support their philosopher’s point of view on intelligence, language and addiction. During the next class period have Team Aristotle and Team Plato debate the role of experience and genes, respectively, with regard to each trait.

## 3. Connectionism

The purpose of this activity is for students to understand the connectionist view of cognition. Begin by dividing students into small groups. Then, give the students a word, such as “hat” and have them write the word in the center of scratch paper. Next, have the groups write three words associated with hat. Then, have them think of three words associated with those three words. The number of connections is up to you, but at least three, as described above, is required for optimal results.

Have each group present their model to the rest of the class. Discuss how the tangential words may seem to be completely unrelated to one another but that they are related through their connection with the word “hat.” I like to use this exercise to discuss the distribution of memory and how any of the tangential words can serve as a path to a memory so that the more distributed the memory is, the more routes one will be able to access the memory. I also like to describe that the more dots you have to connect, the better able you will be at interpreting the picture.