The Power of Memory (*Moonwalking with Einstein*)
Open Your Class with This Today

Directions: Discuss with students the potential limits of short-term memory. Generally, individuals use George Miller's seven plus or minus two as a guideline, although recently this theory has come under some critique. Tell students that you are going to demonstrate the power of memory. Students can remember far more information than they might expect without even putting forth extreme amounts of energy.

Use the first PowerPoint to present pictures to students. Show each slide for 4 seconds before moving to the next slide. Ask students not to discuss the slides, write anything or make any comments about the images while they are displayed. Do not call attention to any of the slides as you go through the presentation. Next, complete another activity for 5-10 minutes to eliminate any recency effects. Ask students not to discuss the pictures after you move to the next task.

Once the 5-10 minutes have passed, use the second power point and ask students to identify the pictures they saw earlier. Have students number a sheet of paper 1-61. Once again, ask students not to comment as you move through the pictures. Display each picture (again for about 4 seconds) and ask students to identify the pictures that they have seen before **(Y)** and those that are new **(N).** After all, the pictures have been displayed, go through the slideshow again, and have students score the number they have correct, find the correct answers in the notes section of the PowerPoint.

Discussion: Students should do quite well on this task and will recall almost all of the pictures they have seen before as well as recognize those that are new. It is far easier to recognize information from a list than to recall that information. This activity should demonstrate that students can exceed George Miller's "magic number." It is possible to remember far more than seven plus or minus two pieces of information when the information is presented in this fashion. Improving memory depends on a self-fulfilling prophecy and using effective techniques to assist in the recollection of information. We often have an implicit memory for items that we cannot verbalize what we know; this activity demonstrates they are not gone from memory, only at times difficult to retrieve.

For other exercises of this sort, check out the following Blog by Joshua Foer
http://blog.artofmemory.com/moonwalking-with-einstein-joshua-foer-1745.html

Discussion Questions

1. Why was this task easier than anticipated?
2. What is the difference between recognition and recall?
3. How does this demonstration challenge the idea that we can only remember roughly seven pieces of information in short-term memory?
4. What techniques did you employ to help remember the photos?
5. How can memory tasks be self-fulfilling prophecies?