



# Scholarly Teaching

## Doing What Works!

### The Power of Pausing: Teach Less to Increase Learning

Christine Harrington

As college faculty, we are often faced with intense curriculum and the need to “cover” a lot of material. This pressure often results in an increased reliance on lectures. While research has shown that the lecture can be very a very effective teaching method (Baeten, Dochy, & Struyven, 2013), there are several research-based strategies that increase learning via this method of teaching. In this brief article, we’ll focus on one very important strategy: pausing.

*Let’s review a couple of studies on this topic:*

In a study conducted by Ruhl, Hughes, and Schloss (1987), one group of students was given three 2 minute pauses during a lecture to review what was just learned. During this pause, students were asked to share and compare their notes with a classmate. The other group of students did not have any pauses built into the lecture. The students in the pause group were able to immediately recall more concepts learned (22.97) as compared to the students in the no pause group (16.63). The more impressive finding though is that the pause group (84.39) outperformed the non-pause group (76.28) on a test taken twelve days later. Thus six minutes of less teaching resulted in increased learning almost two weeks later.

This finding is consistent with the research conducted by Davis and Hult (1997). In their study, 79 students were randomly assigned to one of the following three conditions: write a summary, review your notes, or no pause. During a 21 minute video, students in the write a summary and review your notes groups had 2 four minute pauses while the no pause group just watched the video without any pauses. Not surprisingly, the no pause group performed the worst on a free recall test 12 days later. The written summary group performed the best, demonstrating the importance of written summaries. Written summaries were also found to be more effective than just thinking about the content in a study conducted by Drabick, Weisberg, Paul, and Bubier (2007). In this study, students in the writing condition outperformed the thinking condition on both factual and conceptual tasks.

### *Putting it into Practice:*

The research just reviewed illustrates how pausing increases learning. Consider pausing two or three times during every class period. When you pause, you can use a variety of techniques that will encourage students to process the information just learned.

- *Written Summaries* -As discussed in the research studies, you can ask students to summarize what they learned in their own words.
- *Share and Compare Notes* - You could also ask students to partner with a classmate and share and compare their notes. During this time, students can fill in any information gaps and can discuss the key concepts learned.
- *Highlight Important Points*- Another strategy is to ask students to use this time to highlight the main points in their notes and mark topics that they may need to further explore after class.
- *Five Paper Fast Pass*- Have students write down three main points just learned on an index card or piece of paper. Students can then quickly exchange papers five times. Students can then partner with a classmate to discuss the concepts on their cards.

After the brief processing time, you can ask students if they have any questions about the content just discussed. If you are on tight on time, you don't have to process the information, but you may want to consider collecting the index cards with key points or scanning their notebooks as a quick formative assessment technique that will help you know what concepts students found important. Building in opportunities to process information being learned will lead to improved academic performance!

### References:

- Baeten, M., Dochy, F., & Struyven, K. (2013). The effects of different learning environments on students' motivation for learning and their achievement. *British Journal of Educational Psychology, 83*(3), 484-501. doi:10.1111/j.2044-8279.2012.02076.x
- Davis, M., & Hult, R. E. (1997). Effects of writing summaries as a generative learning activity during note taking. *Teaching of Psychology, 24*(1), 47-49.
- Drabick, D. G., Weisberg, R., Paul, L., & Bubier, J. L. (2007). Keeping it short and sweet: Brief, ungraded writing assignments facilitate learning. *Teaching of Psychology, 34*(3), 172-176. doi:10.1080/00986280701498558
- Ruhl, K., C. Hughes, and P. Schloss, (1987). Using the pause procedure to enhance lecture recall," *Teacher Education and Special Education, 10*, 14–18.