Beginning with the “Study, Study” Myth

The CTRE is Here for YOU

From the Director’s Desk

CTRE Calendar

Images: Ardelle Pate; Word bubbles;
Debunking the “Study, Study, Study” Myth

By Connie Malamed

Some people think that ramming information into their brain over and over again is the best way to learn it. That’s the equivalent of hitting your head with a hammer. Studying the same information over and over again has its limits. Newer research shows that the missing ingredient to many study routines is practice with retrieval (Karpicke, 2012).

What is retrieval?
Retrieval is the process of recovering knowledge and information from long-term memory, where it was encoded for just such a purpose. Retrieval is instigated by a retrieval cue, which is a query, experience or event that activates associated knowledge.

Importance of the Retrieval Cue
Retrieval cues are important because they are the key that unlocks the information. Imagine a newly graduated class of emergency medical workers. They all passed the test, but how many of them will be able to recall the specific knowledge required to handle a unique emergency situation? Only those who have the appropriately fine-tuned retrieval cues available can recover the necessary information.

How Retrieval Enhances Learning & Retention
A memory is reconstructed in the moment, depending on interactions of context, retrieval cues, and memory processes themselves. This flexibility gives us the ability to apply our knowledge to a variety of situations. It is this very act of reconstruction that makes retrieval so important. Retrieval appears to modify the memory in anticipation of how we might need it in the future. It seems to fine-tune the correspondence between cue and matching knowledge. Repeated retrieval may also limit the set of information that is sorted through to find an answer.

The Formula for Long-Term Retention
Retrieval-based learning appears to be an underused strategy for long-term retention. It involves repeatedly recalling information across multiple study and recall sessions. Interestingly, this technique does not appear to take more time than re-studying material. In one study of college students who were given a text to read, practicing retrieval one time doubled their long-term retention when compared to the group that simply read the text once with no recall. The group that practiced repeated retrieval increased retention to 80% (Karpicke, 2012; McDaniel, Howard, & Einstein, 2009).

Here are some strategies that learning experience designers can use to facilitate retrieval-based learning.

1. **Practice with real-world scenarios.** Studies show the importance of context in retrieval. When participants repeatedly retrieve knowledge in a testing environment, they perform better on the test. It makes sense then that if recovering and reconstructing knowledge is tied to context, increasing retrieval during a

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Debunking the “Study, Study, Study” Myth

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wide range of simulations or real-world scenarios should have a similar effect.

2. Provide multiple self-checks and exercises. Since repeated recall has been shown to increase long-term retention, provide multiple opportunities for learners to test themselves for critical information, even when they have proven they know the material. Of course, most learners would not bother with a second self-check activity unless they were informed about the effectiveness of retrieval-based learning.

3. Provide opportunities for group discussions. After a learning event, take advantage of discussions (either online or in-person) that facilitate the recall of critical knowledge. Do this with focused questioning.

This article is excerpted from The eLearning Coach, a resource for online and mobile learning.

The CTRE is Here for YOU

As the fall semester kicks into high gear, it’s worth knowing that the CTRE has your back. Below are just a few resources we invite all of you to take advantage of any time you need:

- The CTRE has dedicated areas that faculty can use for meetings, training, or just workspace away from the office. This includes our Learning and Instruction Zone and Faculty Technology Lounge.

- The CTRE’s grant program allows faculty to pursue their professional endeavors, including conference attendance, research materials, projects to engage students in innovative ways, and more. The next round of applications is due October 1.

- Our resident Moodle experts are on hand to assist faculty with online teaching, from training to troubleshooting to workshops, and everything in between. (Be sure to register for our Online Certification Training, beginning September 4!)

- Every week, the CTRE offers faculty professional development workshops, covering a wealth of different topics. You can stay up-to-date on the latest offerings by watching CTRE newsletters or visiting the “Events” page on our website at www.csu.edu/facdev. Don’t see a topic offered that you’re interested in? Suggest it!

- The CTRE holds institutional memberships in a number of regional and national organizations, such as FRN, SLATE, CAFDN, and CAAG, which faculty are encouraged to take advantage of. Stop by or visit our website if you’d like to learn more, or are interested in getting involved.

Building the Learning Community

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take place in the Library Sun Room. Faculty are welcome to attend for as much or as little as they wish, whether just one workshop or all four.

Breakfast will be served at 9:00 a.m., and lunch will be served at 12:15 p.m.

For more information or to RSVP for the event, contact James Kowalski at jkowalsk@csu.edu or x2498.

Images: Building blocks: Online Certification Training by CTRE; Faculty Technology Lounge by James Kowalski
## September 2012—CTRE Events

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<td>“Teaching with Technology: Applications to Make Teaching Easier” with Theodis Garth 12:00-2:00 / LIB 301</td>
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<td>“Teaching Face-to-Face, Blended, and Online, Week 1: Personal Stories” Faculty Webinar 11:00-12:00 / LIB 318</td>
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<td>“Do Easily Copied Internet Media in the Library Lead to Plagiarism?” with Dr. Gabriel Gomez 12:00-2:00 / LIB 301</td>
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<td>“Developing a Campus Honor Code” Faculty Webinar 12:00-1:30 / LIB 301</td>
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<td>“Building the Learning Community” All-Day Workshop Event with Dr. Tami Eggleston 9:00-4:00 / LIB Sun Room</td>
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<td>“Adjunct Faculty Orientation and Development” 8:00-3:00 LIB Sun Room</td>
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<td>“Understanding CSU Academic Policies” with Tenell Edingburg 12:00-2:00 / LIB 301</td>
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## From the Director’s Desk

**By Michael Sukowski**

Welcome to another academic year. The CTRE will be offering some exciting events and activities through our Building the Learning Community series.

The first event, on September 19, will be **“Putting the Pedagogical Horse Before the Technological Cart”** with Dr. Tami Eggleston, Associate Dean and Professor of Psychology at McKendree University. Dr. Eggleston’s sessions will cover learning styles and best practices, pedagogy, personalizing your face-to-face and online classroom, and the top 10 technologies to engage and inspire your students.

The second event, on November 28, will be **“Flip, Don’t Flop”** a daylong series of fast-paced high-energy presentations, discussions, and brainstorming sessions with longtime “flippers,” Dr. Michael Garver (Marketing) and Instructional Technologist, Brian A. Roberts of Central Michigan University. This dynamic duo was flipping the classroom long before it was a buzzword, and they are excited to share their story with you. Mike and Brian bring a solid balance of “teach” and “tech” into this event, with the ultimate goal being to significantly increase higher order learning in the classroom!

Watch CTRE newsletters for more information and registration.

Images: Building; Teaching technology; Tami Eggleston; Honor code; Blended learning;