3-2-2015

Guest Column: Applying Research on Learning: It's Never That Simple - by Dr. Marilla Svinicki, University of Texas

John Bird
Winthrop University, birdj@winthrop.edu

Teaching and Learning Center

Marilla D. Svinicki
University of Texas at Arlington, msvinicki@utexas.edu

Follow this and additional works at: https://digitalcommons.winthrop.edu/weeklyreader

Recommended Citation
Bird, John; Teaching and Learning Center; and Svinicki, Marilla D., "Guest Column: Applying Research on Learning: It's Never That Simple - by Dr. Marilla Svinicki, University of Texas" (2015). The Weekly Reader. 70.
https://digitalcommons.winthrop.edu/weeklyreader/70

This Book is brought to you for free and open access by the Teaching and Learning Center (TLC) at Digital Commons @ Winthrop University. It has been accepted for inclusion in The Weekly Reader by an authorized administrator of Digital Commons @ Winthrop University. For more information, please contact bramed@winthrop.edu.
Guest Column: Applying Research on Learning: It's Never That Simple—by Dr. Marilla Svinicki, University of Texas

This week’s column comes from Dr. Marilla Svinicki, a psychology professor at the University of Texas. Originally printed in the December 2014 issue, Volume 24, Number 1, of the National Teaching and Learning Forum, it was reprinted this week in Tomorrow’s Professor, the online newsletter from the Stanford Center for Teaching and Learning, a newsletter I heartily recommend for its timely articles and reviews of research on teaching and learning. Dr. Svinicki kindly gave me permission to reprint her short article, which follows:

In 2008, the Association of Psychological Sciences (the APS) and the American Psychological Association (APA) brought together a task force to build a bridge between the scientific study of how people learn and the educational practice of teachers. The task force created a list of twenty-five principles of learning that were based on solid research. The list was compiled by Graesser, Halpern, and Hakel in 2008 (Graesser, 2009). As a psychologist, I love the list, but it’s possible that people outside the field will either say, at best, "Well, that’s just common sense," or at worst, "Huh?" So I have decided to bring these ideas to you on an aperiodic basis to show how they really are meaningful for instruction, but not always simple to apply.

I’m starting with three principles that are especially worthwhile for helping students retain learning beyond the next exam. I’m quoting them from Graesser’s (2009) editorial:

1. **Spacing Effect.** Spaced schedules of studying and testing produce better long-term retention than a single study session or test.

2. **Generation Effect.** Learning is enhanced when learners produce answers compared to having them recognize answers.

3. **Feedback Effect.** Students benefit from feedback on their performance in a learning task, but the timing of the feedback depends on the task (206).

It sounds pretty simple. Students should study or practice with the material over time rather than a single cram session or a single exposure. We know that. But do they do it? And students get more out of active learning when it requires them to generate their own answer. We know that, too. And feedback is needed for learning to occur, but the feedback should be immediate—or should it? This is where the "it’s not that simple" title comes from. The difficulty is trying to combine these three research-based simple assertions into an instructional practice, but it’s not impossible.

Frequent practice would be good, but students are not likely to practice if left to their own devices. So, as teachers, should we be giving quizzes constantly in class? The assertion...
“Now for the more difficult principle of learning: the need for feedback. With all those practice activities, can an instructor avoid being overwhelmed by the need to give feedback? We can if we stop thinking about feedback as always detailed and personalized. In fact, sometimes one of the activities done in or out of class can be to have students apply the instructor’s feedback rubric to their own work or the work of classmates. In those instances they learn twice.”

Continued from page 1

doesn’t specify that these practice sessions have to be tests. Activities that are low stakes but provide practice with the concepts are probably even more effective than quizzes and can provide the variety of applications. They even can promote the generalization of concepts to new situations when learners see them being used in a range of applications. And if they are designed in a way that requires the learners to articulate their own solutions rather than pick out the correct solutions, they’ll satisfy one of the other assertions listed above, the Generation Effect. So it’s two for one: the Spacing Effect and the Generation Effect both endorse active practice during class time. In addition, the Generation Effect recommends that the practice revolve around having students apply what they’ve learned by creating their own responses to situations, which by the way is supported by another of the 25 principles, the rule of Multiple Examples. That assertion is that “an understanding of an abstract concept improves with multiple and varied examples."

- I’m going to temper that endorsement just slightly to say that some of the practice time in class is worth practicing the type of questions that will be found on the exams. This will improve the way students prepare for the exams because they know what to expect, and when those expectations are met, students are more likely to feel they are being evaluated fairly. That type of practice also tends to reduce student anxiety before and during the exam, and research also shows that while a little anxiety is OK, too much is detrimental to learning and performance.

Now for the more difficult principle of learning: the need for feedback. With all those practice activities, can an instructor avoid being overwhelmed by the need to give feedback? We can if we stop thinking about feedback as always detailed and personalized. In fact, sometimes one of the activities done in or out of class can be to have students apply the instructor’s feedback rubric to their own work or the work of classmates. In those instances they learn twice. That reduces one possible source of too much work for the instructor and contributes to student learning. In addition, spending class time reviewing the activities with the class as a whole using good examples of the responses students make is a very good use of the instructor’s skills and knowledge. Also, if the responses being reviewed are low stakes, like students get credit for attempting to answer, not just for “correct” answers, their anxiety is reduced again and their focus shifts from “did I get it right?” to “how can I do this better?”

So there are ways of taking the various assertions about learning based on research and coordinating them into instructional options. I hope this little exercise in coordinating research has been informative and helpful. I’ll continue looking at the 25 principles and discussing how they apply in future columns. In the meantime, give it a try and see if it fits your situation. It’s not simple, but few things involving learning and teaching are.

Reference

E-mail: Marilla Svinicki (msvinicki@utexas.edu)
Thanks For Helping Make the Teaching and Learning Center Work!

Winthrop’s Teaching and Learning Center offers a wide variety of sessions each year for faculty and staff, on teaching, technology, professional development, and personal development. From leading class discussion to mastering the Smart podium to tenure and promotion to cooking soufflés, the TLC tries to make sure that all faculty and staff receive the kinds of professional and personal development that will make them better teachers, administrators, and employees.

To offer this programming, the TLC depends on the talent, expertise, and generosity of our faculty and staff. We do not have a big budget to bring in outside speakers and experts. Even so, we are able to offer engaging, timely, and valuable sessions every year on a variety of topics. We thank those who have offered their time and talent in past years.

We also thank those of you who have attended TLC sessions. Your time is valuable, and we appreciate you taking some of it to enrich yourself through professional and personal development.

A Service From the TLC: Teaching Consultation

The TLC for several years has been offering a service: teaching consultation. At the instructor’s request, I (or another agreed-upon person) will visit your class to observe and consult with you afterwards about your successes and challenges. This consultation has nothing to do with the tenure and promotion process, and no reports will be made to department chairs or deans (unless you so request). The invitation to the consultant can only come from the instructor, not from a dean or chair or any other person. All conversations will be private and confidential. If you don’t want me to visit your class and observe your teaching, we could just meet and talk about your teaching. If I am not available to visit your class because of my schedule, I will find a qualified person to do the consulting. So please let me know if you would like to invite me into your class or for a consultation. Call or email me (803) 323-3679 or birdj@winthrop.edu.

Go2Knowledge—Learning On Demand!

Go2Knowledge is a website that offers a variety of video presentations on faculty and staff professional development. You will find presentations by nationally-known experts in seven categories: At-Risk Populations, Campus Safety, Organizational Development, Student Success, Teaching and Learning, Technology, and Open Educational Resources. Within each category, you will find a number of excellent and informative videos. The Office of Academic Affairs has provided us a one-year subscription to this service.

People often tell the TLC that they would like to go to sessions, but they don’t have the time or they can’t at the times sessions are offered. With Go2Knowledge, you can attend sessions on demand, anywhere, 24/7. The TLC will also have frequent Go2Knowledge Groups, where we meet to discuss a presentation. Log in here: http://www.go2knowledge.org/winthrop

See you there!