

Brain Based Learning

The Office of
**Adjunct Faculty &
Academic Support
Programs**

Adjunct Faculty Academic Calendar

February:

3 Last Day to Withdraw with a 25% refund and “W” grade

16 State of the University
Address Performing Arts
Theatre 4:00 PM

Workshops:

1 Teaching Table: Applying the
Formula for Motivation
12:00 PM Emeriti Room

3 Feedback and Grading
Practices that Motivate
Students
11:30 AM SE 222

7 Canvas Open Session
10:00 AM Z115

24 Lecture Capture: Echo 360
1:00 PM Z115

For a complete list of workshops offered for the Fall/Winter Semesters please visit svsu.edu/workshops

Register for these and other workshops at: svsu.edu/workshops

The last two decades have witnessed/uncovered many techniques that can deepen learning although these techniques have remained largely unknown outside certain scientific circles. In the past few years, many articles and books have been written on the subject and there has been much media surrounding the findings (for example, Carey, 2014, Doyle & Zakrajsek, 2013 and Oakley, 2014). Findings that might help you help your students become better learners.

- Learning is now known to cause a physical change in the brain. To effect this change, the more a student engages in the learning, through listening, talking, writing, thinking, etc., the deeper the learning will be. Such involves practice which means that the more a student practices, the stronger the area of knowledge will be.
- For learning to occur, students need to understand that they must “prep” their brain. The human brain uses 25 to 30% of the body’s energy and a brain that is starving will work less efficiently. Brains that are well fed with proteins and lots of water, function better than those which are starved.
- Research has also shown that sleep is essential to learning. Everyone needs at least 7.5-9 hours of sleep nightly. While sleeping, memories are made and unwanted information is pruned. So it is best to review all valuable new learning right before sleep so that the memories become stable.
- Even though all exercise is good, thirty minutes of daily aerobic exercise is the best thing anyone can do to improve learning. BDNF, a protein that is released during exercise makes it easier for the brain to learn. As well, neurochemicals like serotonin, dopamine, and norepinephrine are released in greater quantities during exercise boosting the brain’s ability to focus and concentrate (Doyle and Zakrajsek, 2013).
- The more a learner employs her senses in the learning process, the better the learning. Senses like smell, vision and touch all work to develop new neural pathways, increase recall, and cement new ideas. The Amygdala is the brain’s center for emotions, motivation and emotional behavior. When senses are combined with learning, these are stored in the Amygdala thereby helping with recall.
- To truly have good recall, it is essential to try to retrieve information in a variety of settings. Once your students have read their assignment, they should close the book, pause, and then recall what they have just read. To further reinforce this learning, your students should remove themselves from their current space to a different space and then pause and recall. The more your students do this, the more they will have deep learning.

These are just a few of the ideas that are found in the literature.

References:

- Carey, B. (2014). *How We Learn, the Surprising Truth about When, Where, and Why this Happens*. New York: Random House.
- Doyle, T. & R. Zakrajsek (2013). *The New Science of Learning, How to Learn in Harmony With Your Brain*. Sterling, VA.: Stylus.
- Oakley, B. (2014). *A Mind for Numbers, How to Excel at Math and Science*. New York: Penguin.

The 3rd Annual Teaching and Learning Symposium

The 3rd Annual Symposium sponsored by the Center for Academic Innovation will be held on Friday, February 17th from 8:30-4:00 in the Curtiss Banquet Room A. This year’s guest speaker is Todd Zakrajsek, Associate Director of the Faculty Development Fellowship at North Carolina University. He will give a talk on Active vs. Passive Learning followed by the facilitation of a workshop related to the same topic. During the afternoon, faculty will present their research findings. Contact Debbi at dabearej@svsu.edu or call her at 964-2622 to RSVP to this valuable event. Alternatively, look for a Punchbowl invite coming to your mailbox!

Prescription Drug Coupons

If you are having difficulty affording the cost of prescription drugs, due to a lack of health insurance or a high deductible amount, you may want to check out a website called GoodRx (www.goodrx.com). This site asks you to enter the drug you need and the quantity prescribed. You can then compare the varying prices at local pharmacies. Once you select a pharmacy, you will receive a coupon for the quoted price. Take that coupon with your prescription to the selected pharmacy for your discounted price. There is also an app that you can download for the coupons as well. Savings may be as much as 80% off the price, depending on the drug.

Osher Lifelong Learning Institute Teaching Opportunities

If you are looking for more teaching opportunities, consider contacting the Osher Lifelong Learning Institute (OLLI). OLLI at Saginaw Valley State University, is part of a national network of institutes dedicated to providing meaningful, non-credit, educational classes and activities for members who are over 50 years of age. SVSU's OLLI is the oldest such institute in the state.

OLLI courses usually range from one to five, 2 hour sessions, one day a week. While courses may utilize books and other materials, OLLI members join the Institute to learn for the sake of learning, so assessments/exams are unnecessary.

OLLI provides a great opportunity for faculty to test innovative teaching techniques in a short-term, small class environment with a population of engaged students. It is also the chance to teach something you truly love- whether it be in your field of expertise or one of your favorite hobbies. The considerably shorter length spent teaching OLLI classes compared to regular university courses allows instructors to really go-in depth on a very narrow topic.

For more information about OLLI please go to www.svsu.edu/olli or call them at 964-4475.

Student Motivation and Faculty Feedback

Feedback on student papers, assignments, and exams usually happen after the fact and should contain information which determines a student's efforts in reaching particular curriculum goals. As a result, feedback should be part of the learning process. Researchers have determined that feedback can have cognitive and affective, as well as, motivational dimensions. Cognitive feedback is understood as information given by a teacher regarding a student's performance. This information impacts future student performance. Affective feedback promotes the relationships between faculty members and their students. Both cognitive and affective feedback can result in motivation. If a faculty member wants a correct answer, the motivated student will strive to find the correct answer. If a faculty member wants critical thought, the motivated student will work to think critically. Problem is that feedback doesn't always go well and might result in students becoming unmotivated. If you are interested in learning novel ways to supply your students with motivational feedback, a workshop is being held on Friday, February 3rd at 11:30 in Science East 222. Of course a light lunch will be served and you will be compensated \$25 for attending. To register go to www.svsu.edu/workshops.