# Learning How to Learn

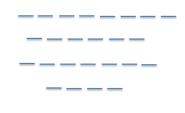
Tammy Fitting, MSU-Moorhead, Mathematics Learning Center Director fittingta@mnstate.edu, web.mnstate.edu/fitting

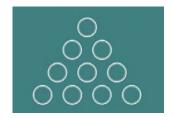
Students understanding how to learn helps develop productive habits. This can help them become active, responsible and accountable participants in the learning process. Building upon past discussions connecting neuroscience with education, we will discuss focus mode vs. diffuse mode, avoiding an illusion of competence, dealing with procrastination, and overcoming anxiety.

### Topics Include:

- Focus Mode vs. Diffuse Mode
- Avoiding Illusions of Competence
- Overcoming Procrastination
- Dealing with Anxiety









# Minnesota State University Moorhead Developmental Mathematics' Study Cycle Class meets 4 (or 5) days per week; 2 'lecture' days + 2 (or 3) 'lab' days.

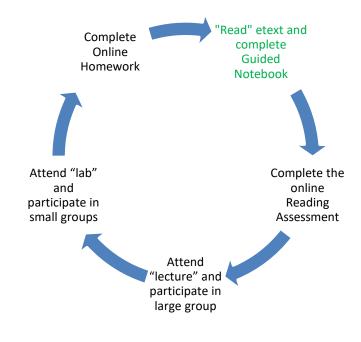
MSU-Moorhead Developmental Mathematics Options

MDEV090 Elementary Algebra (4 days/week)

MDEV090A Elementary Algebra + supplementary Wednesdays for arithmetic/review (5 days/week, new Fall 2015)

MDEV099 Intermediate Algebra (4 days/week)

MDEV095 Elementary/Intermediate Algebra (5 days/week)



The following is a partial list of the resources which have inspired the process for me over the past years of developing, revising, and improving the components of the study cycle for developmental mathematics courses. For more information, see <a href="web.mnstate.edu/fitting">web.mnstate.edu/fitting</a>.

#### 2014 – 2015 Understanding the physical change in the brain as it learns

- Sousa, David (2011). How the Brain Learns. Thousand Oaks: Corwin, A SAGE Company.
- Willis, Judy (2006). Research-Based Strategies to Ignite Student Learning: Insights from a Neurologist and Classroom Teacher. Alexandria: Association for Supervision and Curriculum Development (ASCD).
- Willis, Judy (2007). *Brain-Friendly Strategies for the Inclusion Classroom*. Alexandria: Association for Supervision and Curriculum Development (ASCD).

#### 2015 – 2016 Utilizing neuroscience research to refine the details of each element of the study cycle

- Brown, P. C. (2014). *Make It Stick: The Science of Successful Learning.* Campbridge, Massachusetts: The Belknap Press of Harvard University Press.
- National Research Council. (2000). *How People Learn: Brain, Mind, Experience and School.* Washington, D.C.: National Academy Press.

## 2016 – 2017 Going beyond the study cycle for students facing the hurdles of frustration, procrastination and anxiety

- Oakley, Barbara. (2014) A Mind for Numbers: How to Excel at Math and Science (Even if you Flunked Algebra). Penguin Group (USA)
- Prittman and Karle. (2015) Rewire Your Anxious Brain, New Harbiner Publications, Inc.

#### 2017- 2018 Activities to help develop self-regulation

- Lang, James, (2016) Small Teaching: Everyday Lessons from the Science of Learning, Jossey-Bass
- Nilson, Linda, (2013) Creating Self-Regulated Learners: Strategies to Strengthen Students' Self-Awareness and Learning Skills, Stylus Publishing, LLC.