Intentional Messaging

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Which image best represents how you are feeling about the upcoming semester?

1

2

3

4

5

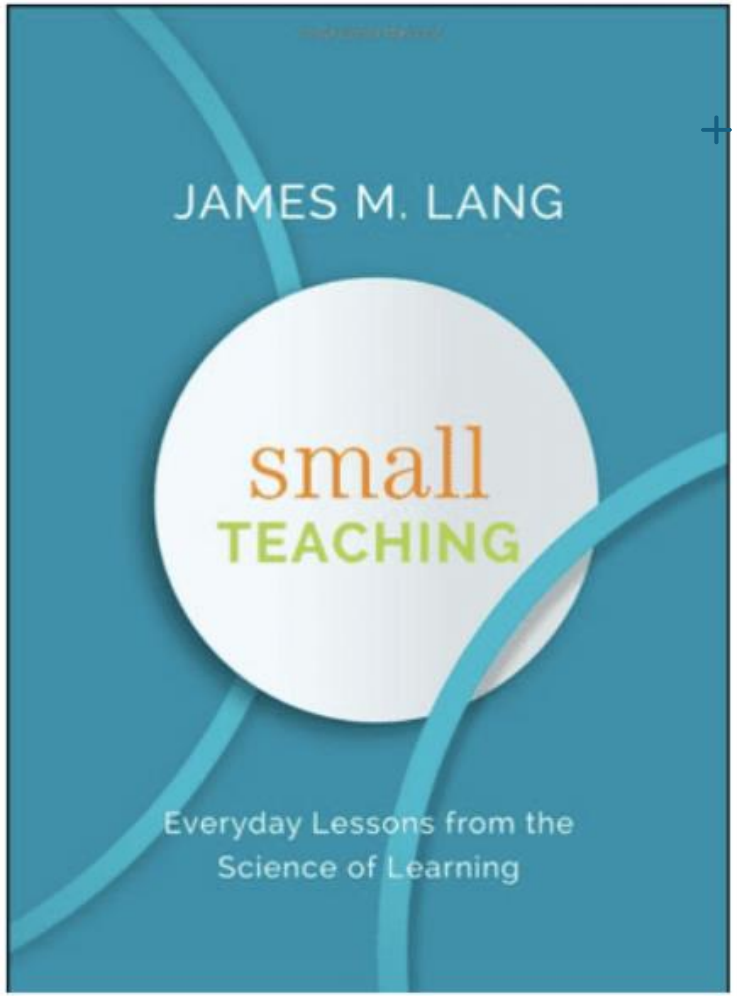
We are in this Together

- Everything we are sharing, we got from our collaborations, discussions, and work to use evidence-based teaching practices in our course
  - We have read several books which overlap– so not specifically citing the sources for our specific examples
  - And we have modified a bit to fit our class, our teaching, and our assessment style.

- **Please use** if you like anything and modify to meet your teaching and your classes. Folder in Symposium Materials.
  - And if you have something we might like- please share!

Background: Small Changes Learning Community

- Originally inspired by James Lang's *Small Teaching: Everyday lessons from the science of learning*
- Meet 6 times a semester (every other week)
- "Read" a book looking for ways to fine tune what we do.



Background: *10 to 25*

- Ideas for motivating young people
- Mentor's Mindset
  - High Standards
  - Support to meet those standards
  - Believe they can grow and develop
  - Constructive Criticism
- Purpose and Belonging a big part
  - Social status motivating - though broadly defined
- Communication needs work
  - Age difference can cause misinterpretations, so say what and why, don't assume.
  - "Boring, but important"
  - Questions useful- lead with them.
- Examples were individual or "normal-sized" classes for the most part.

Background: The “Course” for Sarah

Fundamentals Of Chemistry

CHE 110

Subject: Chemistry **Credit Hours:** 4.00

Course Description: Introductory survey of fundamental concepts, laws, and theories of chemical science and their application to common chemical systems. May not be taken under the P/NP option.

Prerequisites: Not for credit if earned credit in CHE 141

IAI Gen Ed Category: IAI-PS

ISU Gen Ed Category: Natural Science Alternatives [NSA]

IAI GenEd GenEd

Background: The “Course” for Liesel

Financial Accounting

ACC 131

Subject: Accounting **Credit Hours:** 3.00

Course Description: Introduction to financial accounting. Examines the nature of accounting, basic accounting concepts, financial statements, accrual basis of accounting, the accounting cycle, monetary assets, inventories, fixed assets, current and noncurrent liabilities, and owner’s equity.

Prerequisites: Completion of 12 hours

IAI Major Category: Managerial Accounting [BUS]

Intentional Messaging- What we did.

Some Truths

What is it like to learn in this class?
Learning is not 100%s and A's. If those are your scores, you are in the wrong class. Questions that once seemed impossible will feel manageable.

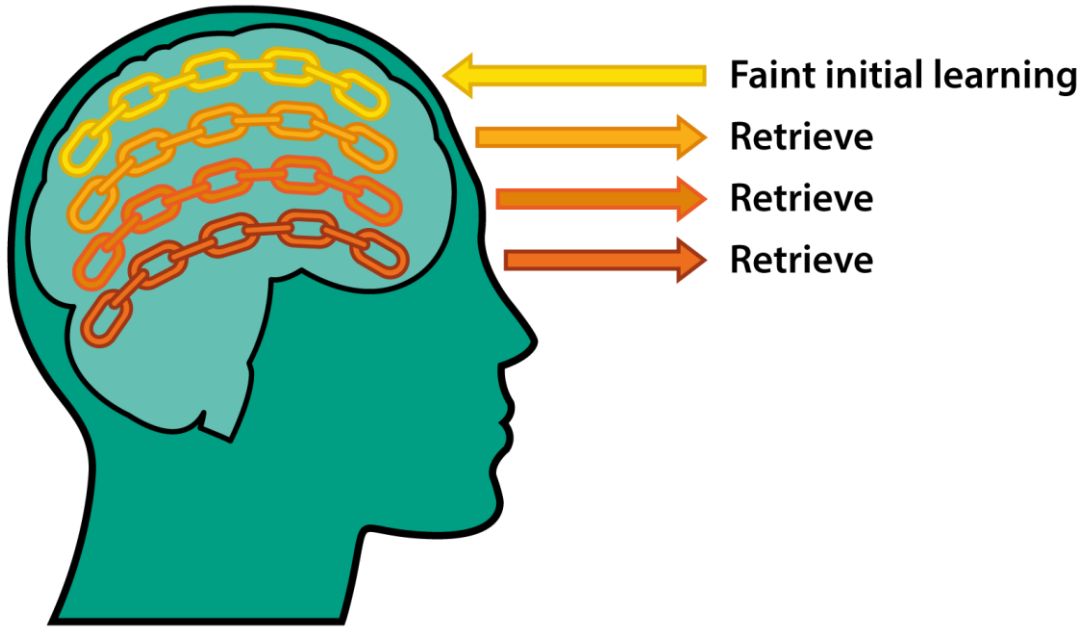
What is the meaning of struggle in this class?
Everyone makes mistakes in this class (even me), and we will use them as teachable moments.

Can I ask questions?
Everyone has that same question but is too scared to ask. Be the courageous one.

Why do we have to repeat our work so much?
Recall is the best way to learn. Analyzing your mistakes is an important step to make sure they don't happen again.

What do my exam scores mean?
Exams are checkpoints in time. They are not your future. You are more than a number.

Retrieval Method Strengthens Links in Long Term Memory



- Bringing information to mind from your memory
- Close your book and notes away and try! Then check.

FAIL! = First Attempt In Learning

MISTAKES AND CHALLENGES ARE THE BEST TIME FOR YOUR BRAIN TO LEARN

You want to be struggling and finding work hard!

When you make a mistake and struggle, your brain grows!

— Jo Boaler

‘Weekly’ Questions

How will success in this class help you achieve your goals for the future?

How can the act of learning [accounting] even if not going to be an accountant help grow your brain?

What is one piece of evidence you have that your brain is growing and can grow?

Exam Instructions

- **Stress Can Be Enhancing / Challenge Mindset**
- Research indicates that anxiety/nervousness helps performance because our body releases hormones that are associated with better cognitive function.
- The nervous system releases energy needed to pump more oxygen to the brain.
  - A **racing heart rate** is your engine working hard to move the blood with oxygen where it needs to go (your brain).
  - **Breathing quickly** is your body's request for more oxygen.
  - **Sweating** is your body cooling itself during this process so you don't overheat. It's normal and how our ancestors survived.
- During the exam, remember that your body's responses to stress are helpful and normal. Please keep this perspective if you are feeling nervous.
- Harness the power of anxiety to overcome any challenge.

Post Exam Email

- 3 versions Above Average, Average, and Below Average
- Information on exam overall
- My views about learning, exam performance, and success in this course and beyond
- Resources available
- Sample in resource folder

‘Results’- Lower DFW Rates

Course	2024 (% D,F, or WX)	2025 (% D,F, or WX)
ACC 131	54.55% (N=220)	47.4% (N= 191)
CHE 110	25.0% (N =212)	20.4 % (N =211)

*Note: Individual Overall Grades or Exam grades- No statistical difference (t-test)

Survey- “Student Impression Scale"

- Some questions statistical difference, e.g. “Class time provided opportunities for me to frequently participate.”
  - Not large change in average and still in positive range
  - Anonymous (an error) so can’t tell individual change
  - (Whisenhunt et al., 2019)

In Class Question Answers

- How can the act of learning [accounting] if not going to be an [accountant] help grow your brain? (ACC, Chem)
  - Critical thinking/problem solving skills (13% , 51%)
  - Time management and organization (27%, 13%)
  - Real learning takes time (23%, 10%)

- How is this class helping you grow your brain for your future – make it stronger?
  - Ways of Learning, Skills (20%)
    - How to retain information (links, repetition)
    - Improve study skills
  - General Knowledge/Content (19%)
  - Transferable Skills (21%)
    - Time Management

Our Overall Thoughts

- Those that needed most might not be there.
- Learning slides helped us as instructors be consistent and explicit about why certain assignments and activities were done
- In Class Questions
  - Students highlighted transferable skills (critical thinking, time management)
  - Some responses were content specific
- Learning takes time and effort, but the payoff is worth it
- Reword a few questions:
  - What would “success” in this class look like for you, and how might the habits needed to achieve it help you in other areas of your life?

References/Resources (Linked when possible)

- Tanner, K. D. (2013). Structure matters: twenty-one teaching strategies to promote student engagement and cultivate classroom equity. *CBE—Life Sciences Education*, *12*(3), 322-331.
- Whisenhunt, B. L., Cathey, C., Visio, M. E., Hudson, D. L., Shoptaugh, C. F., & Rost, A. D. (2019). Strategies to address challenges with large classes: Can we exceed student expectations for large class experiences? Scholarship of Teaching and Learning in Psychology, 5(2), 121–127. https://doi.org/10.1037/stl0000135
- Sathy, V., & Hogan, K. A. (2022). *Inclusive teaching: Strategies for promoting equity in the college classroom*. West Virginia University Press.
- *Uncommon Science Teaching* by Oakley, Rogowsky, and Sejnowski
- *The Learning Scientists: Six Strategies for Effective Learning* by Yana Weinstein, Megan Smith, & Oliver Caviglioli is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.
  Based on a work at http://www.learningscientists.org.
- Yeager, D. (2024). *10 to 25: The Science of Motivating Young People*. Random House.
- Need something specific from the presentation: Sarah Boesdorfer, sbboesd@ilstu.edu

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Small Changes Colleagues

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Our Students