# Increasing Student Engagement

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# Outline

- Interesting Facts
- Engagement definition
- Millennial Students and Engagement
- Active Engagement and Motivation
- Scaffolding
- Feedback
- Methods for increasing student engagement
- Practices for maximizing academic engaged time

# Interesting Facts

(S. Sayko and S. Turner)

- Students are not attentive to what is being said in a lecture 40% of the time.

- Students retain 70% of the information in the first ten minutes of a lecture but only 20% in the last ten minutes.

Meyer & Jones, 1993

- ***Think of your best teacher in the school years.***

- ***What was the secret of his class that made it attractive and you felt excited about it.***

# Student Engagement

http://ged578.pbworks.com/w/page/52714966/Promoting%20Engagement%20in%20Online%20Courses


IMAGE CREDIT: http://www.peopleinsight.co.uk/

**Faculty Perspective**

**Students Perspective**

# Engagement in Courses from Faculty Perspective

(Heller et al., 2010)

**Pedagogy:**

- ✓ Participation in discussions
- ✓ Asking questions by students
- ✓ Hand-on activities
- ✓ Working on problems
- ✓ Writing
- ✓ Doing research
- ✓ Time for reflection
- ✓ Presentation
- ✓ Present material without notes
- ✓ Application of formulas

**Materials:**

- ✓ Material is technically challenging
- ✓ Topics build on prior courses
- ✓ Relate material to actual projects

**Students:**

- ✓ Students spend lots of time on the topic
- ✓ Motivated to learn on their own
- ✓ Ask questions in class
- ✓ See important details in the assignments
- ✓ Want to learn more
- ✓ Discussion outside of class
- ✓ Paying attention

**Personal (i.e., faculty behaviour):**

- ✓ Demonstrate excitement
- ✓ Interaction with students
- ✓ Flexible instructor willing to change

# Engagement in Courses from Students Perspective

(Heller et al., 2010)

- Faculty involvement and interest in the material
- Participation of students in a project or doing additional work for the course.
- Professor's teaching style or their ability to express excitement for the discipline
- Components of the course (i.e., the labs, simulations, discussions, projects)


IMAGE CREDIT: http://www.peopleinsight.co.uk/

Faculty see engagement
in terms of learning outcomes.

Students see engagement
in terms of the input provided by
faculty.

***Engagement is both a process and an outcome (Heller et al., 2010).***

www.pinterest.com (For the love of teaching!)

*Faculty stimulate engagement by:*

- providing students with active learning experiences
- conveying excitement their subject
- providing opportunities for student-faculty interactions

*Students show their engagement by:*

- participating in class discussion
- research projects
- interacting with their professors and peers

# Millennial students and Engagement

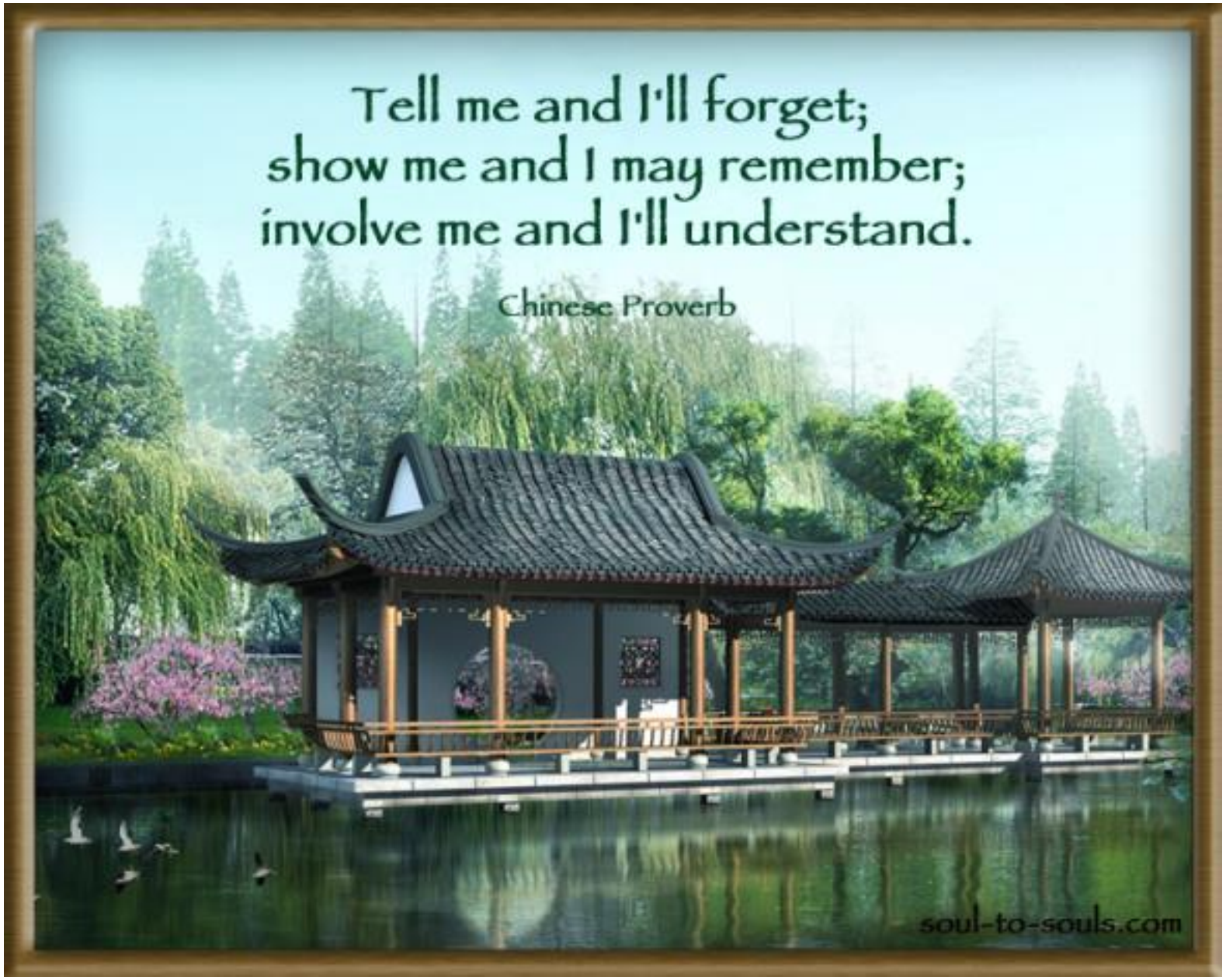
(Students entering college after the year 2000 are called millennial students.)


Students nowadays are spending lots of time on activities such as surfing web sites, talking and texting on their cell phones, interacting on Facebook and …, which people in the past had almost no access (A.P. McGlynn, 2008).

# Millennial students and Engagement

(A.P. McGlynn, 2008)

- To engage and motivate these students we need to create path of how they learn and how we teach.
- The first step to get their attention is to ask them turn off their cellphone.
- Ask students questions to help them reflect on their goals and check the assumptions they make.
- Work and play in groups.
- They want to learn things that are relevant to their lives and can make a difference in their world.
- Experiential learning


Tell me and I'll forget;
show me and I may remember;
involve me and I'll understand.
Chinese Proverb
soul-to-souls.com

## Millennial students and Engagement

(A.P. McGlynn, 2008)

- Create a learner-centered classroom (shift from seeing the classroom a teacher-driven and content-centered to seeing the classroom as student-centered and process-driven).
- Teach them to question the assumptions underlying what they read and hear.
- Teach them to analyze data from multiple perspectives and see issues from a variety of view points.

## Millennial students and Engagement

(A.P. McGlynn, 2008)

- Teach students the skills to be able to find information and evaluate validity of that information.
- More visualizations, simulations, games and role playing.
- The traditional lecture does not work with these students.
- Use internet video clips and interactive Web sites.
- Praise them along with constructive feedback

# Activity

- Every one has a pen and paper.
- Record on your sheet the 2 key ideas you want to remember from this workshop.
- Then make ball out of the sheets and throw them in the bag.
- Now everybody can have one ball and a key idea that is interesting to another student in the room.

# Active Engagement and Motivation

(S. Sayko and S. Turner)

- Factors affecting the development of motivation:
  - Level of challenge offered by tasks and materials
  - Quality and timing of feedback to students about their work
  - Supports and scaffolds available to learners
  - Students' interest in tasks and content
  - Nature of the learning context
- Intrinsically motivated students tend to persist longer, work harder, actively apply strategies, and retain key information more consistently.

# Scaffolding

(S. Sayko and S. Turner)

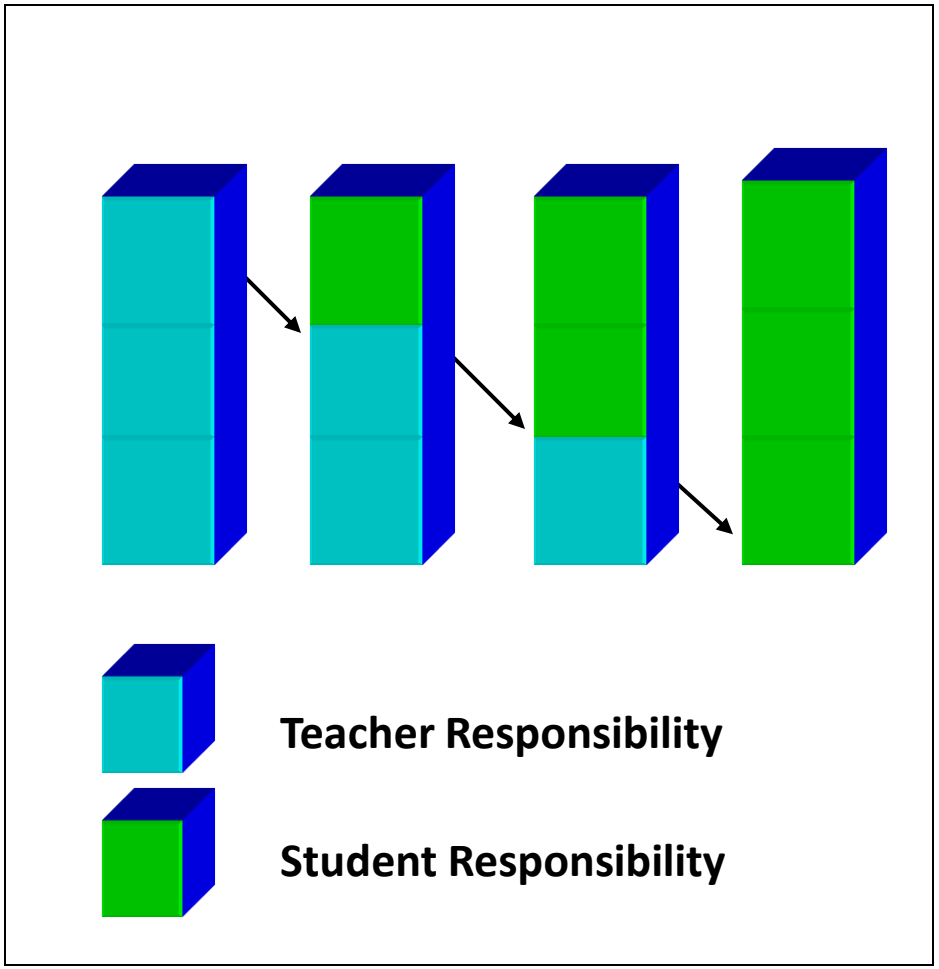
Temporary devices and procedures used by teachers to support students as they learn strategies.


http://www.economist.com/news/technology-quarterly/21573056-biomedical-technology-tiny-forms-scaffolding-combining-biological-and-synthetic

- Anticipate student errors.
- Conduct teacher guided practice.
- Provide feedback.
- Fade scaffolds whenever it is appropriate.

# Gradual Release of Responsibility Model

**J. I. Rotgans and H. G. Schmidt (2011)**



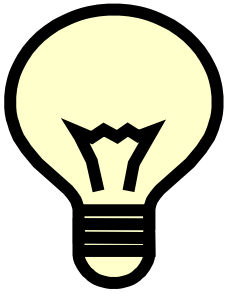

This graphic is based on work by Pearson and Gallagher (1983). In a later study, Fielding and Pearson (1994) identified four components of instruction that follow the path of the gradual release of responsibility model (S. Sayko and S. Turner):

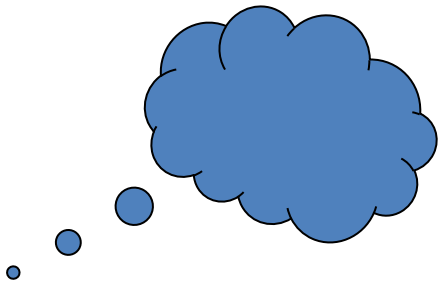
1. **Teacher Modeling**
2. **Guided Practice**
3. **Independent Practice**
4. **Application.**

# Types of Scaffolding

(S. Sayko and S. Turner)

- Prompts: specific devices that students can refer to for assistance while working on the larger task (e.g., graphic organizers, cue cards, checklists).





- Think Alouds: teacher's direct modeling of the strategy that enables students to begin experiencing the strategy as a true set of behaviors/actions that can be learned to use to their advantage.


https://www.jobsrmine.com/blog/threading-the-thin-line-between-feedback-and-criticism

Feedback is not praise, blame, approval, or disapproval.
That is what evaluation is – placing value.

Feedback is value neutral.
It describes what you did and did not do in terms of your goal.
Corrective Feedback is crucial; it is highly specific, descriptive, timely and ongoing.

# Methods for increasing student engagement

(S. Sayko and S. Turner)

- Teach them Using Sentence Frames
- Randomizing
- Student to Student discussion
- Teach students what to say instead of “I don’t know!”
- Well structured activities linked to desired outcome
- Meaningful content focused activities

# Sentence frames

- **Math** – “I know this triangle is a _____ triangle because _____. There are several ways to find _____, including _____.”
- **Science** – “The _____ of a cell is important because _____. If I add _____ to the mixture, the result will likely be _____.”
- **Computers** – “If my antivirus software shows the error _____, I know _____. In the EXCEL if I want to _____ I need to use the function _____.”
- **Business** – “One action that may be taken to increase profits in a business is _____. Taking this action increases profits because _____.”

# Randomizing


It's not just about equity, but paying attention. It's about the mental rehearsal that occurs in your head when you think you might be called on.

# What to say instead of “I don’t know!”

- “May I have more information please?”
- “Could you please repeat the question?”
- “May I have more time please?”
- “Where could I find more information?”
- “May I please ask a friend for help?”

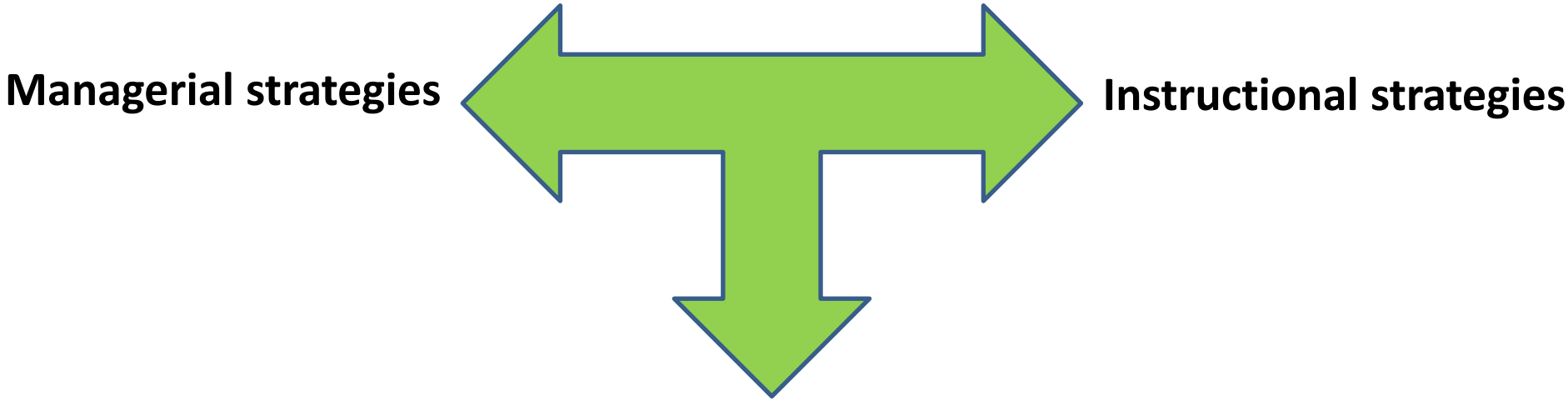
When you allow students to say “I don’t know,” you are telling them “you are not important and I know you can’t do this.”

# Discussion

- *I agree/I disagree/I also think…*

# Practices for maximizing academic engaged time

(M. Gettinger and M.J. Walter, 2012)



# Practices for maximizing academic engaged time

(M. Gettinger and M.J. Walter, 2012)

## Managerial strategies

- Monitor student behavior
- Minimize classroom disruptions and off-task behavior
- Reduce transition time
- Establish consistent and efficient classroom routines
- Decrease class size and learning group sizes

# Time Management

(S. Sayko and S. Turner)

- Processing Strategy (10:2 Theory): For every ten minutes of meaningful chunks of new information, students should be provided with two minutes to process the information.
- Slowing down the questioning pace can actually speed up the pace of learning. Pause for 3-5 seconds before calling on students to answer questions and before responding to their answers.

# Managing Interaction in the Classroom

(S. Sayko and S. Turner)

- How can I reduce the amount of teacher talk in my classroom?
- How often should interaction occur?
- How can we make our interactions more meaningful?
- How can I maintain control of my class when students are having discussions?
- How can I encourage and support elaborated student responses?

# Practices for maximizing academic engaged time

(M. Gettinger and M.J. Walter, 2012)

**Instructional strategies**

- Interactive teaching

✓ Focus on explicit learning objectives

Effective planning involves, first, developing
clear learning goals and objectives for the lesson.
Next, learning activities are designed to help students
achieve the goals and objectives.

✓ Facilitate active student responding by Good questions: clear, purposeful, brief

✓ Provide frequent feedback: detailed, accurate, and immediate, as well as encouraging and supportive

# Practices for maximizing academic engaged time

(M. Gettinger and M.J. Walter, 2012)

## Instructional strategies

- Instructional design

✓ Match instruction with students' abilities

✓ Use multiple teaching methods

✓ Deliver instruction at a quick, smooth, and efficient pace

✓ Ensure that students understand directions

# Practices for maximizing academic engaged time

(M. Gettinger and M.J. Walter, 2012)

## Student-mediated strategies

- Teach students to employ study strategies
- Incorporate self-monitoring procedures into the classroom
- Support students' self-management skills
- Establish consistent classroom routines and structure
- Have students set their own goals for learning
- Use homework effectively to enhance student learning

# Wrap-Up Activity

1. List the procedures you have used in your classroom.
2. Decide if they are Management or Instructional Routines.
3. Discuss with your neighbor how you taught these routines to your students.
4. Share it with the class.

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Thank you …

Any questions?