Student Engagement Through Active Learning Strategies
Who We Are

- Jim Sullivan
- Rachael Tipton
Active Learning Strategies

“Tell me and I forget, teach me and I remember, involve me and I learn.”

Ben Franklin
Why Should We Care?

- Engage Students
- Three Rs - Relevance, Relationships, Rigor
Benefits for Students

- Solve problems
- Research information
- Take responsibility
- Work in groups

Plus...
People generally remember...
(learning activities)

10% of what they read
20% of what they hear
30% of what they see
50% of what they see and hear
70% of what they say and write
90% of what they do.

Passive Learning

Active Learning

People are able to...
(learning outcomes)

Define, List, Describe, Explain
Demonstrate, Apply, Practice
Analyze, Define, Create, Evaluate
There are many active-learning strategies

- Some work better for a particular subject than others
- Active-learning activities don’t all look the same
- Activities can be short or long and have varying outcomes or objectives within or across different disciplines
What is a Flipped Classroom?
Key Elements

- Opportunity for students to gain exposure prior to class
- Incentive for students to prepare for class
- Mechanism to assess student understanding
- Opportunity for classroom questions and discussions
- In-class activities that focus on higher-level cognitive skills
How Does It Work?

Educational Technology uses Classroom Flip, which provides opportunity for Learning Through Activity. This influences The Learning Environment, which in turn influences Educational Technology.
Results

THE RESULTS

BEFORE THE FLIP

+50% of freshmen failed English

44% of freshmen failed math

736 discipline cases in one semester

AFTER THE FLIP

19% of freshmen failed English

13% of freshmen failed math

249 discipline cases in one semester
What Is Problem-Based Learning?

A student-centered pedagogy in which students learn about a subject through the experience of solving a problem.
Why Is It Scary?

- No right answer
- Different style of teaching
Creating Your Own Problem-Based Learning Activity

- Start with something you already have
- Ask industry partners for ideas
- Address the learning outcomes
- Consider prerequisite knowledge
- Determine materials
- Contextualize the problem
- TRY IT OUT, and adjust if needed
Learn by Doing

Put Into Groups
Listen to INSTRUCTIONS
Traditional

5 + 4 = 9
A PBL

$9 = ?$
Wrap-Up

What did you learn?

- Success of PBL depends on review of learning objectives
Resources
On Line

- cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/
- teachingtechnicians.org
- sites.google.com/site/pblscenariotaskforce2013/orientation/sample-scenarios
Questions