INNOVATIVE
TEACHING
TECHNIQUES
3 things I’ve Learned in School:

1. Texting without looking
2. Sleeping without getting caught
3. Teamwork on tests
HOW DO WE LEARN?

- Participate In Activity: 100%
- Simulate The Activity: 90%
- Teach The Activity: 70%
- Watch Demonstration: 50%
- Watch Moving Pictures: 40%
- View Pictures: 30%
- Hear Words: 20%
- Read: 10%

ACTION LEARNING
VISUAL LEARNING
VERBAL LEARNING

HOW MUCH DO WE REMEMBER?
TEACHING: UAB PEDIATRICS

- Morning Report – Case Conference
- QOD - Interactive
- Outpatient Morning Report Case Conference
- Bedside – Case Conference, Didactic, Interactive
- Journal Club – Flipped Classroom
- Noon Conference – Didactics/ Interactive (TP)/ Prepared/ Workshops
- Grand Rounds - Didactics
- Simulation – Case Conf, Role Playing, Flipped Classroom
- Procedures - Hands On (Workshop, Sim, EKGs, etc)
- Morning Report, EBM Sr Talk Being the Teacher
- Computer training – Hands on
- PREP Questions, Mole, PEM - Self-study
- QI - Self-study, Workshop, Didactics
- PALS – Flipped Classroom
HOW DO EACH OF YOU LEARN BEST?
1. Reading/ Self study
2. Didactic lecture
3. Case based conf
4. Discussion
5. Simulation/ Role playing
6. Hands on
7. Technology based
8. Teaching
If < 35 yo,
How do each of you learn best?

1. Reading/ Self study
2. Didactic lecture
3. Case based conf
4. Discussion
5. Simulation/ Role playing
6. Hands on
7. Technology based
8. Teaching
IF > 35 YO,
HOW DO EACH OF YOU LEARN BEST?
1. Reading/ Self study
2. Didactic lecture
3. Case based conf
4. Discussion
5. Simulation/ Role playing
6. Hands on
7. Technology based
8. Teaching
Which one best describes your main teaching style?

- Bedside teaching
- Case conferences
- Didactics
- Chalk talks
- Techno geek
- Simulation/Role playing
- Small group discussion
- Games
- EBM/articles
- Other
One size fits all…or does it?
MILLENNIAL LEARNERS

- Research based variety, multimedia, team
- Relevance got into, apply, outcomes
- Rationale want the why? Why important?
- Relaxed interaction
- Rapport extremely relational, fun
Learning Pyramid

average student retention rates

10% Lecture
20% Reading
30% Audiovisual
50% Demonstration
75% Discussion
90% Practice doing
Teach others

Source: National Training Laboratories, Bethel, Maine
Teaching Techniques: The Flipped Classroom
FLIPPING THE CLASSROOM
How Will You Reverse Instruction?
Traditional Model:
- Teacher Instruction
- Student assimilation of instruction
- Student completes 'activity' to support assimilation
- Homework to consolidate
  - Takes place in lesson time
  - Takes place outside of lesson

Flipped Classroom Model:
- Instruction delivered through homework
- Student assimilation of instruction
- Student completes 'activity' to support assimilation
- Teacher support to consolidate
  - Takes place prior to the lesson
  - Takes place in lesson time
<table>
<thead>
<tr>
<th>Flipped</th>
<th>Traditional</th>
</tr>
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<tbody>
<tr>
<td>Teacher instructs lesson at home (video / podcast / book / website)</td>
<td>Teacher instructs</td>
</tr>
<tr>
<td>Students work in class.</td>
<td>Students take notes</td>
</tr>
<tr>
<td>• Deeper understanding of concepts, applications, and connections to content are made.</td>
<td>Students follow guided instruction</td>
</tr>
<tr>
<td>• Students receive support as needed.</td>
<td>Teacher gives assessment</td>
</tr>
<tr>
<td></td>
<td>Students have homework</td>
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</tbody>
</table>
TECHNOLOGY

- http://www.youtube.com/watch?v=iQWvc6qhTds (penguins)

- http://scopeblog.stanford.edu/2012/10/03/using-the-flipped-classroom-model-to-re-imagine-medical-education/ (Sal Khan)

- http://flippedemclassroom.wordpress.com/2013/07/21/approach-to-abdo-pain/ (simple teaching)

- http://www.youtube.com/watch?v=0G-u1Q-Sb_c (LPs)

- http://prezi.com/-vbtn0xnnyzx/my-flipped-classroom
Khan and Prober: Three-step road map:

- First, identify a core curriculum—concepts/lessons--taught through short, focused video clips.
- Second, change static lectures into interactive sessions where students practice curriculum;
- Third, students explore passions early on in their medical school careers—research to public health to global health

“Meet the learner where they are”
That’s the future model
FLIPPED CLASSROOM ACTIVITIES

- Problem solving
- Game base learning
- Small group discussion
- Team based learning
- Debates
Barriers to Flipped Classroom

- Faculty buy-in
- Priorities – faculty and students
- Faculty time to create pre-work
- Student time to do pre-work
- Different learning levels
- Technology know-how, accessibility
GAMES

PEOPLE PLAY
GAMES PEOPLE PLAY...

- Deal or No Deal
- Family Feud
- Wheel of Fortune
- Hollywood Squares
- Smarter than a 5th Grader
- Jeopardy
- Password
- Who wants to be a Millionaire

http://www.ircsd.org/webpages/dyoung/game_templates.cfm
JUST IN TIME TEACHING
JiTT

- Focuses on improving student learning through the use of brief web-based questions
- Can meet students' actual learning needs
- Delivered before or during a teaching session
- Responses reviewed by instructor, used to develop activities to address gaps
- Allow instructors to gather information quickly about concept/understanding
- Real time feedback – teacher and student
“I appreciate the text, Kate, but next time you can just raise your hand.”
WHY JITT?

- Improves learning
- Increases teaching efficiency/ effectiveness
- Incorporates research-based knowledge about effective teaching
- Improves preparation for class (teacher, student)
- Motivates learners
- Promotes continual formative assessment by both teachers and students
- Targets learning gaps through activities
**JITT:**  [HTTP://PACHYDERM.CDL.EDU/ELIXR-STORIES/SERC-GEOSCIENCE/](HTTP://PACHYDERM.CDL.EDU/ELIXR-STORIES/SERC-GEOSCIENCE/)

- **PUSH:** push Qs to students
  - Twitter (2006)
  - Email (1993)
  - apps
- **SHARE:** relational
  - Wikis (2005)
  - Dropbox (2007)
  - Facebook (2004)
  - On-line articles/ videos

- Upfront needs assessment/ gaps
- Instant feedback
MORE THAN A LECTURE...
I am going try something I learned about today…

1. Definitely
2. Possibly
3. Maybe, maybe not
4. No way
5. Why change?
6. Already knew about all of this.
GOOD TEACHERS

❤️ TEACH

GREAT TEACHERS

INSPIRE