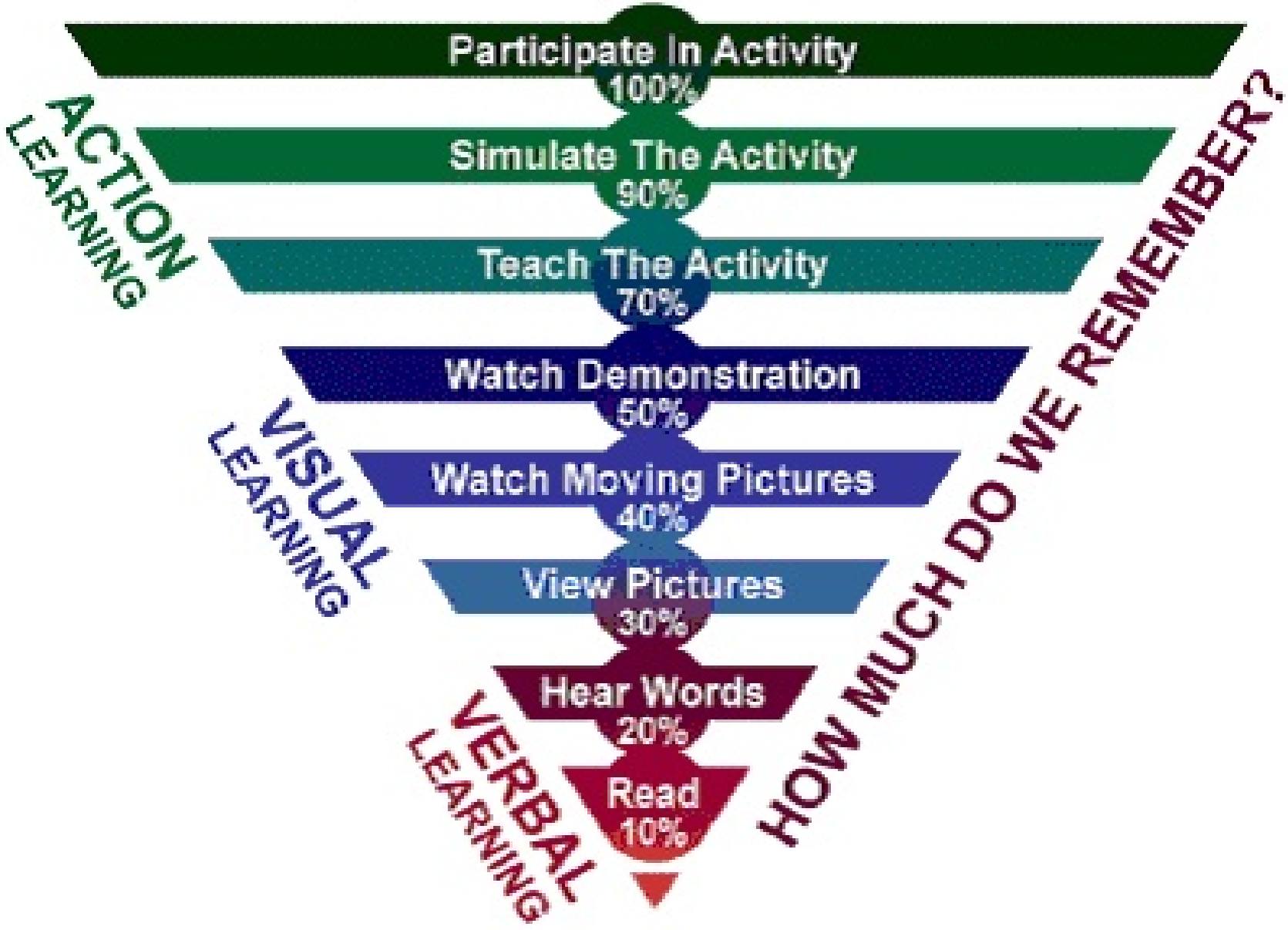
# Innovative Teaching Techniques


3 things I've Learned in School:
1. Texting without looking
2. Sleeping without getting caught
3. Teamwork on tests

# HOW DO WE LEARN?



# 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)/ Prepardy/ 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?

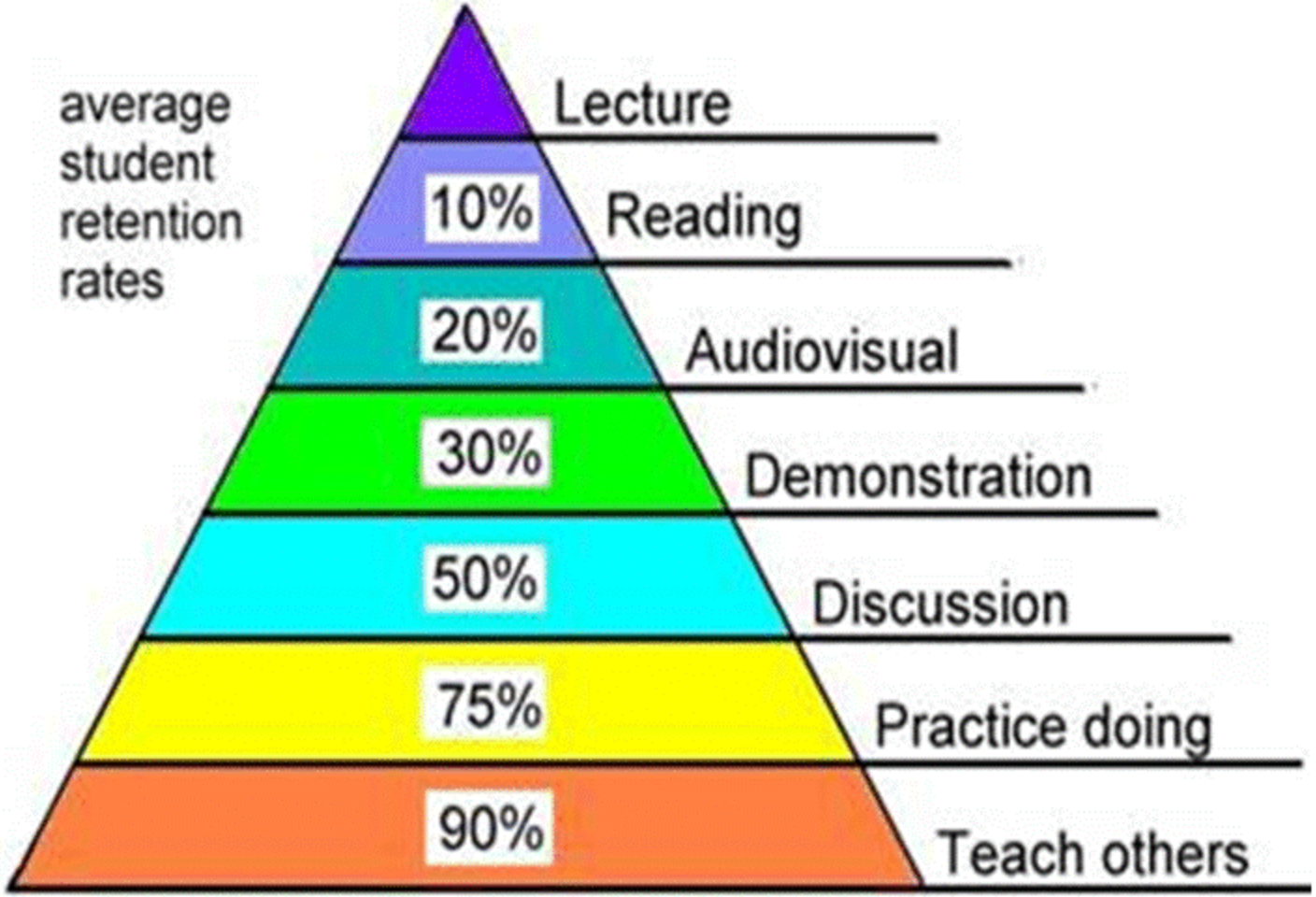
- Bedside teaching
- Case conferences
- Didactics
- Chalk talks
- Techno geek
- Simulation/ Role playing
- Small group discussion
- Games
- EBM/ articles
- Other

# One Size Fits All…or does it?

# Millenial 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



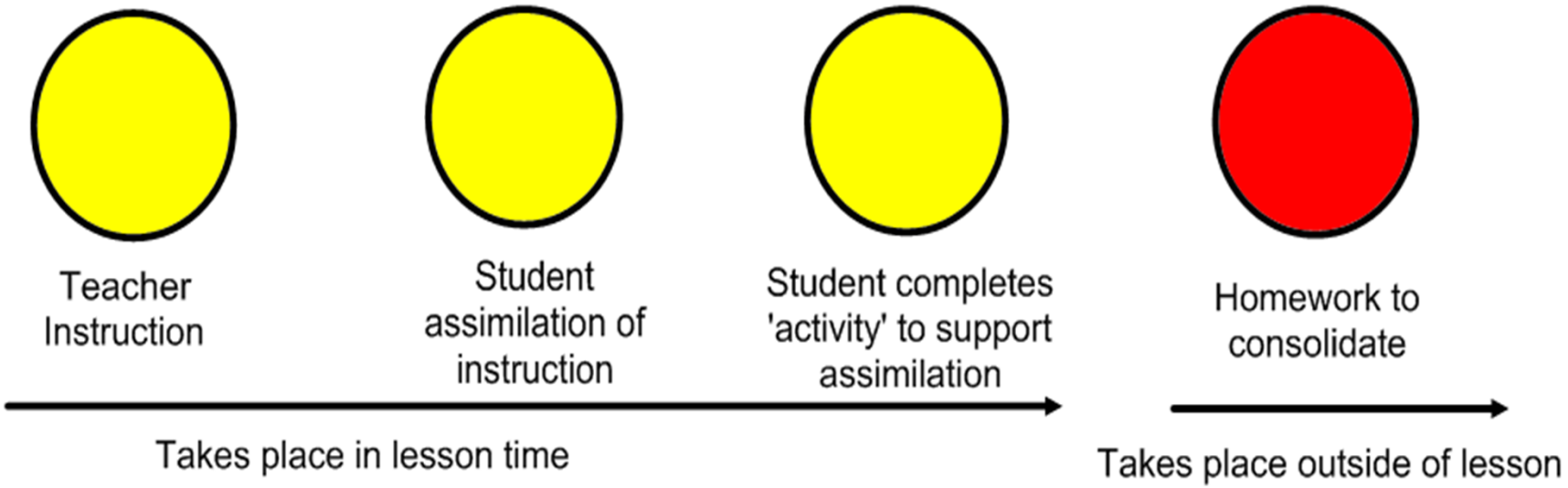

Source: National Training Laboratories, Bethel, Maine

# Teaching Techniques:
# The Flipped Classroom

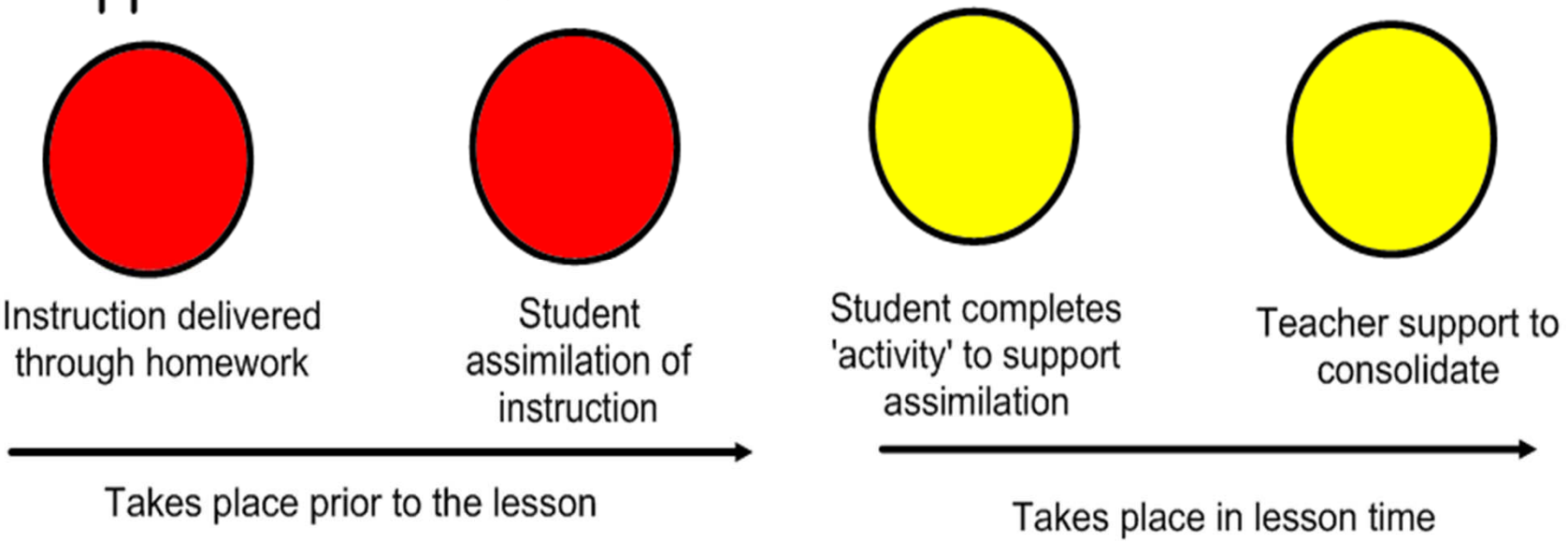
# FLIPPING THE CLASSROOM

How Will You Reverse Instruction?

# Traditional Model




# Flipped Classroom Model



# Flipped VS Traditional

## Flipped

Teacher instructs lesson at home (video / podcast / book/ website)

Students work in class.

- Deeper understanding of concepts, applications, and connections to content are made.
- Students receive support as needed.

## Traditional

Teacher instructs

Students take notes

Students follow guided instruction

Teacher gives assessment

Students have homework

# 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

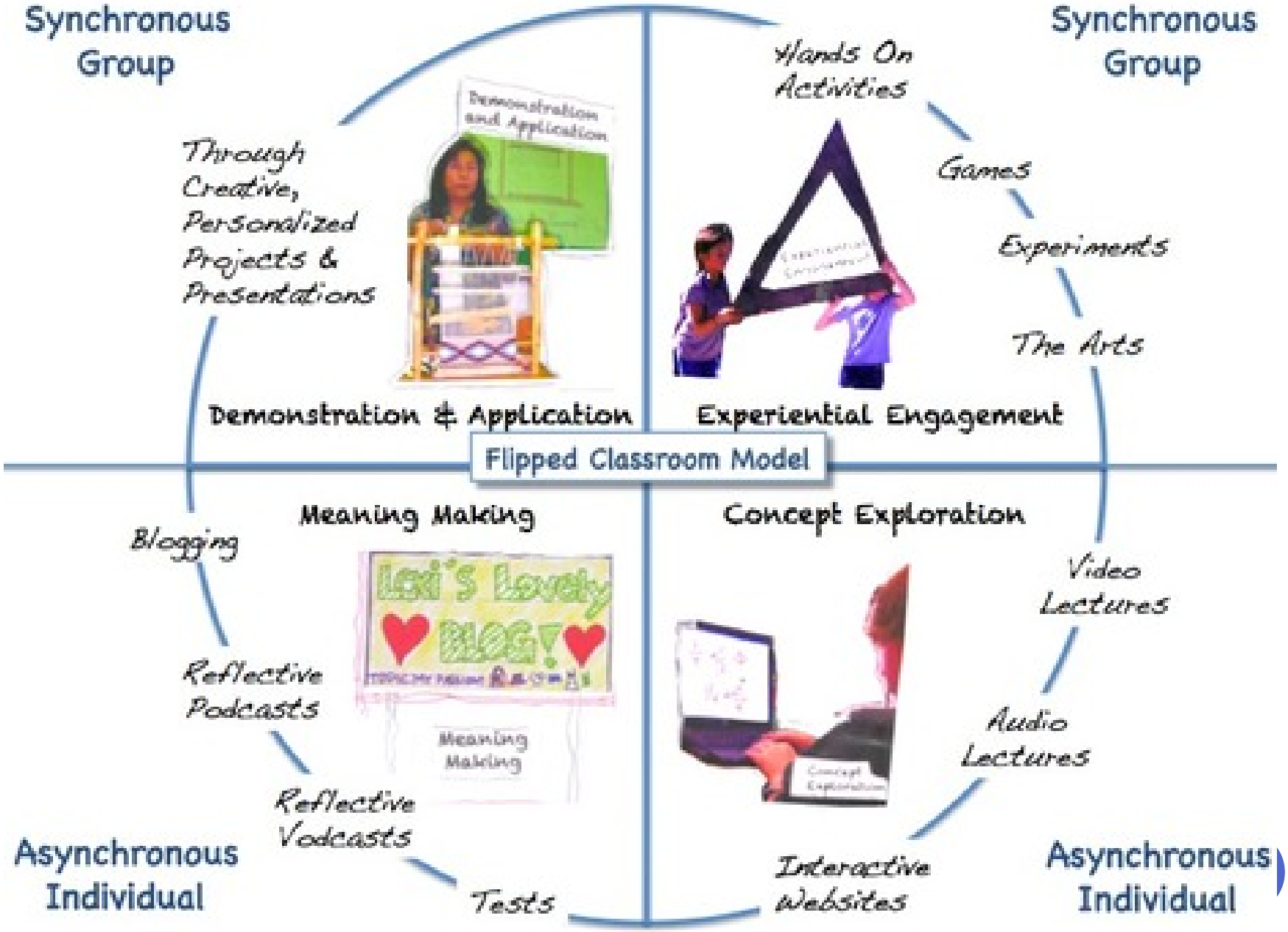
# KHAN ACADEMY


- 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


Synchronous Group
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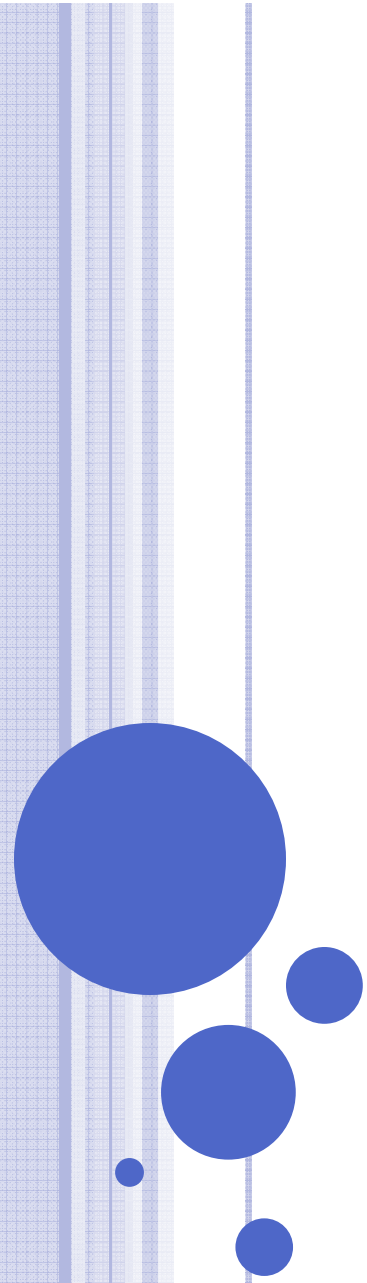
Through Creative, Personalized Projects & Presentations
Demonstration and Application
Hands On Activities
Games
Experiments
The Arts
Demonstration & Application
Experiential Engagement
Flipped Classroom Model
Meaning Making
Concept Exploration
Blogging
Reflective Podcasts
Reflective Vodcasts
Tests
Video Lectures
Audio Lectures
Interactive Websites
Asynchronous Individual
Asynchronous Individual

# Flipped Classroom Activities

- Problem solving
- Game base learning
- Small group discussion
- Team based learning
- Debates

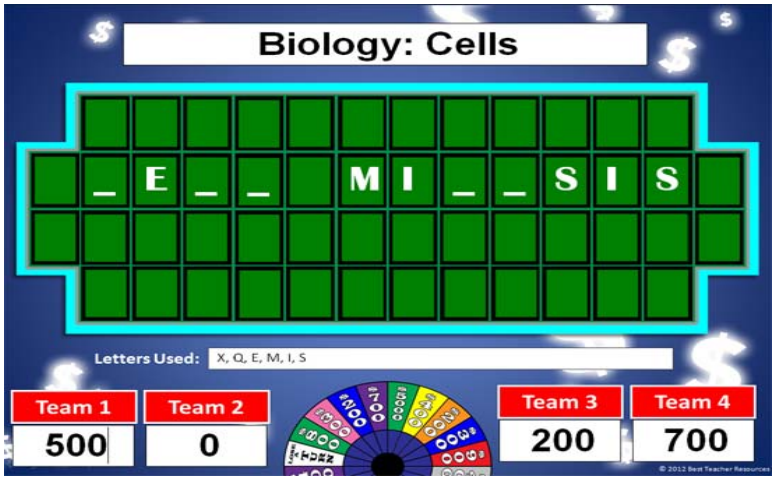
# Barriers to Flipped Classroom

- 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



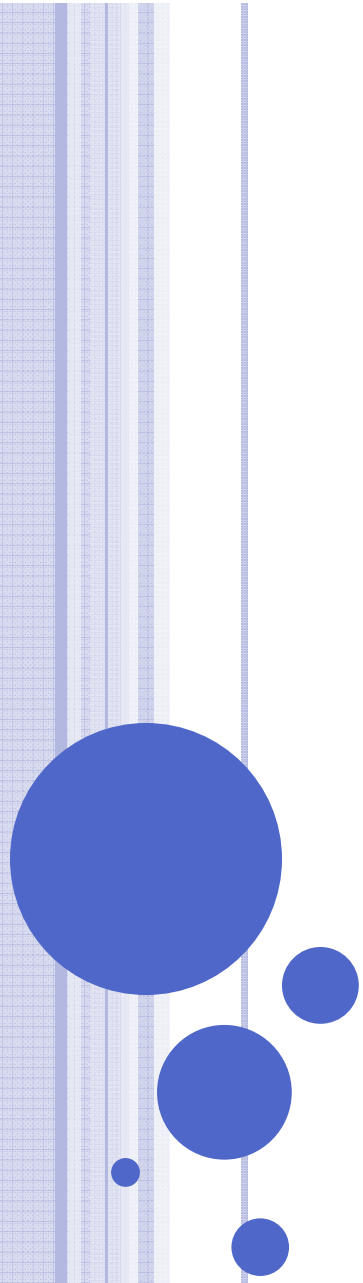
# Games People Play

# 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/

- 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