TQA Education Day

Instructional Strategies
Tuesday, September 30, 12:30-3:00PM
Overview

• Review of ADED 6487 Assignments
  • “Critical analysis of instructional design” project
  • Ideas for “Analysis of an Instructional Technique” project
  • Ideas for Instructional Design project
  • Class participation
  • Final reflective exam

• The Active Learning Classroom
  • Presentation and self-assessment

• Unit 4 Discussion
  • Instructional Strategy Development
  • The Flipped Classroom
Critical Analysis of Instructional Design

- Pick a course you are familiar with
- Find out how that course was developed
- Compare what was done with the process described in the textbook (pages 6-8).
Analysis of an Instructional Technique Assignment

- Pick a technique:
  - Group Learning
    - Peer tutoring/teaching
    - Team projects
    - Learning communities
  - Experiential Learning
    - Case studies
    - Problem-based learning
    - Games, simulations, role-playing
    - Field experience
  - Other Techniques
    - Lecture
    - Discussion (student or instructor-led)
    - Writing or journaling
Instructional Design Project

• Use guidelines presented in syllabus OR guidelines for a MedEd Portal submission.

• Develop a unit of instruction OR an activity that can be done in 20 minutes to an hour.
  • Unit of instruction – follow guidelines in syllabus
  • Activity – follow guidelines from MedEd Portal

• Activity: Consider your own project. What might be the topic? What might it look like?
  • Share your ideas in small groups and gather feedback on them
Class Participation

• Be sure you are logging on to discussion board and participating during each unit.
• Post your comments on questions posed.
• Respond to your colleagues’ postings.
• Check to see if people are responding to your posting.
Final Exam

- Reflective in nature
- Fairly short (2-3 pages of written response expected)
- Dates are firm
  - Exam is available Monday, December 8
  - Exam is due by NOON on Monday, December 13
Questions or Comments about Coursework?
The Active Learning Classroom

Steve Schmidt
Teachers of Quality Academy Meeting
September 29-30
Presentation Overview

• What is active learning?

• Why is it effective?

• Making the transformation to active learning
Question to Discuss

• Consider a memorable incident when you learned something as a student in a classroom.
  • What were the circumstances?
  • What did you learn that made the incident memorable?
Memorable Learning Experiences

• How many of the incidents you just discussed involved you sitting passively, listening to a lecture or talk?
• How many of the incidents you just discussed involved you doing something or being involved in some type of learning activity?
Active Learning Defined

• Rather than being a passive recipient of information, the active learner puts knowledge to use.

• Active learning helps students to think at a higher level, taking learning beyond memorization and recall toward active thinking, learning and engagement

Source: Queens University
Active Learning

- When learners are actively involved in the classroom, they are engaged and thinking.

- Engagement and thought help learning to occur.
Approaches to Learning

• Active learning
  • Projects, discussions, case studies, debates, presentations, hands-on experiences, simulations

• Passive learning
  • Lecture
What Happens During Passive Learning

• Instructors speak at a rate of 100-200 words per minute.

• Students hear about 50-100 words per minute.

• The average student is attentive about 40 percent of the time.
What Happens During Passive Learning - continued

- Students retain about 70 percent of what they hear in the first 10 minutes of class.

- Student concentration during lectures begins to decline after about 10-15 minutes.

- Students retain about 20 percent of what they hear in the last 10 minutes of class.
What Happens During Passive Learning - continued

- Study of a psychology course
  - Some students took the course
  - Some did not take the course but did complete course readings

- Students who took the course performed only eight percent better than those that did not.
What Happens During Passive Learning - continued

• The use of visual aids during a lecture, like pictures, charts or diagrams, increases retention between 14-38 percent.
Keeping learners active is key to their learning!
Active Learning - Misconceptions

• Is active learning just fun and games?

• Is active learning a waste of time?

• Is active learning a fad or “the approach of the moment”?

• Does active learning require a lot of time?
Active Learning is Not New

I hear, and I forget
I see, and I remember
I do, and I understand

Confucius, 551-479BC
Active Learning Must Be Planned

“Active learning doesn’t just happen; it occurs in the classroom when the teacher creates a learning environment that makes it more likely to occur”

Active Learning – Specific Benefits

- Increased content knowledge/retention of information taught in class
- Improved critical thinking and problem-solving abilities
- Improved communication and interpersonal skills
- Increased enthusiasm for learning
Learning for Future Learning
Goals of the Master Adaptive Learner

• Instructional
  • How do we engender learning in medical school that INCREASES future learning?
• Assessment
  • How do we measure this competency?
Master Adaptive Learner Conceptual Model

For discussion during session:
Developing and assessing master adaptive learners

- Senses a gap between what is and what should/could be
- Incorporates what was learned into practice
- Working-Learning Environment
- Tries out what was learned
- Recognizes an opportunity to learn
- Searches for resources for learning
- Engages in learning

Coaching

- Goal-Setting
- Self-efficacy
- Motivation
- Learning Preferences
- Epistemology
- Learning Strategies

Self-monitoring
- External Feedback
- Self-assessment

Synthesis
- Attribution
- Deliberate Processing

Learner
Challenges

• Active learning takes more time in the classroom

• Active learning takes preparation and planning before class

• Activities can be difficult to implement in large classes

• Instructors may find lack of materials or equipment needed to develop activities
Challenges - Continued

• Change in tradition

• Instructors like to talk

• Students are comfortable as passive learners

• There are risks associated with changing these roles
Can Any Class Be Active?

- Courses on any subject can be transformed from passive to active learning environments

- There are some things that help the process of transforming to active learning
Implementation of Active Learning Requirements

• Organizational support

• Knowledgeable instructors

• Prepared students

• Appropriate classroom facilities
Organizational Support

- The extent to which the organization values and supports active learning
  - Culture
  - Organization Structure
  - Technology/Classroom infrastructure
  - Mission and Vision
Prepared Instructors

- Passive classroom
  - Lecture
  - Homework review
- Active classroom
  - One or more activities going on in the classroom
  - Instructor manages the activities and guides students, when needed
Prepared Instructors

- Instructor competencies
  - Decision making
  - Activity development
  - Facilitation
  - Mentoring and coaching
  - Evaluation
Activity Development

- Level(s) of learners in class
- Learning goals for the session
- Course content
- Time available
- Physical constraints (classroom and materials)
- Evaluation plan
Additional Considerations

• An instructor may have learners at several different levels in one classroom.
• For each activity, an plan for evaluating student performance should be developed.
Characteristics of Successful Active Learners

- Open minded about active learning
- Willing to take risks and try new things with regard to their learning
- Able to learn from colleagues as well as from instructors
- Willing to engage and participate in the classroom
Characteristics of Successful Active Learners - continued

- Critically think and analyze
- Able to reflect on the activity
- Communicate with the instructor or colleagues when they run into difficulties
The Active Learning Classroom – Physical Space

- Flexible learning spaces
  - Movable chairs and desks

- Accommodation for subject-related tools
  - Labs, experiments, tools for practice

- Accommodation for many types of technology
  - Outlets, connectivity, storage space
Summary – Keys to Success

• Organizational support

• Knowledgeable instructors

• Prepared students

• Appropriate classroom facilities
Moving to Active Learning

- Have infrastructure in place
- Be proactive and prepare
- Minimize risk
- Start small
- Set modest expectations
Comments or Questions?

Thank you for attending!
Unit 4 Content: Flipped Classrooms

• Instructional strategy development (Traditional model)
  • Pre-instructional activities
  • Content presentation
  • Learner participation/activities
  • Assessment
  • Follow-up/student homework

• Instructional strategy development (Flipped classroom)
  • Pre-instructional activities
  • Content presentation
  • Learner participation/activities
  • Assessment
  • Follow-up/student prep for next session
Flipped Classrooms - Continued

- Another way of flipping the classroom (flipping roles)
  - Traditional classroom
    - Instructor lectures
    - Students listen/take notes
    - Students study topics presented and do homework
  - Flipped classroom
    - Students do pre-work before face-to-face class
    - Students participate in active learning activities
      - Present topics
      - Lead discussion of key points
      - Demonstrate procedures
    - Instructor evaluates student performance
Unit 4 Content: Sharing Instructional Strategies

• Do you share your strategies with your students?

• Why or why not?
Questions for Discussion

• Do you share your instructional strategies with your students?

• What has been your experience with a flipped classroom?

• How can your classroom be “flipped”? 