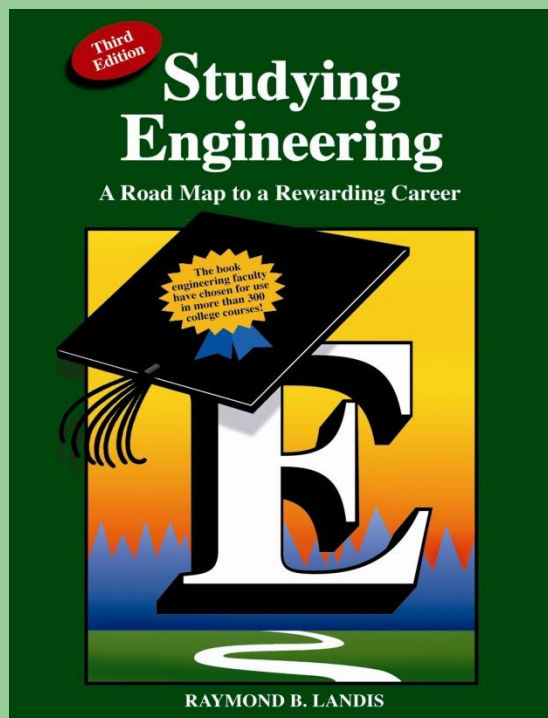


# Chapter 3

## *Understanding the Teaching/Learning Process*

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# Lecture Overview

- Benefits of understanding teaching process
- Teaching modes
- Alternative teaching modes

# Teaching Purpose

**The purpose of teaching is  
to convey knowledge**

# Benefits

Understanding of teaching process will

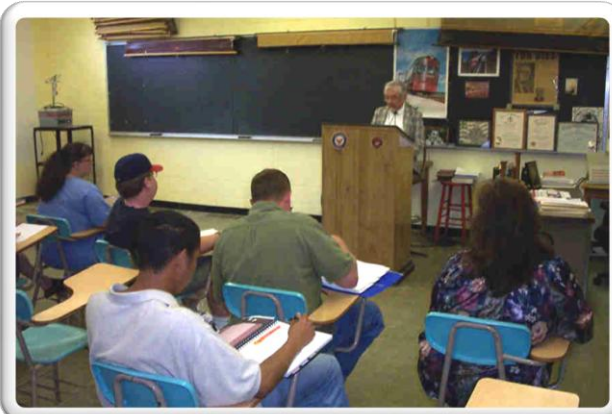
- Help you to improve quality of your learning process
- You will be teaching others
- You will be self-teaching through out your career
- Understanding the different ways of transmitting information is a useful skill

# Teaching Modes

## Teaching aspects

- Learning outcomes and course objectives
- Delivery of subject content
- Assignments
- Evaluating students' progress
- Feedback
- Resources

# Teaching Modes



**Small Lectures**



**Large Lectures**

**MODES**

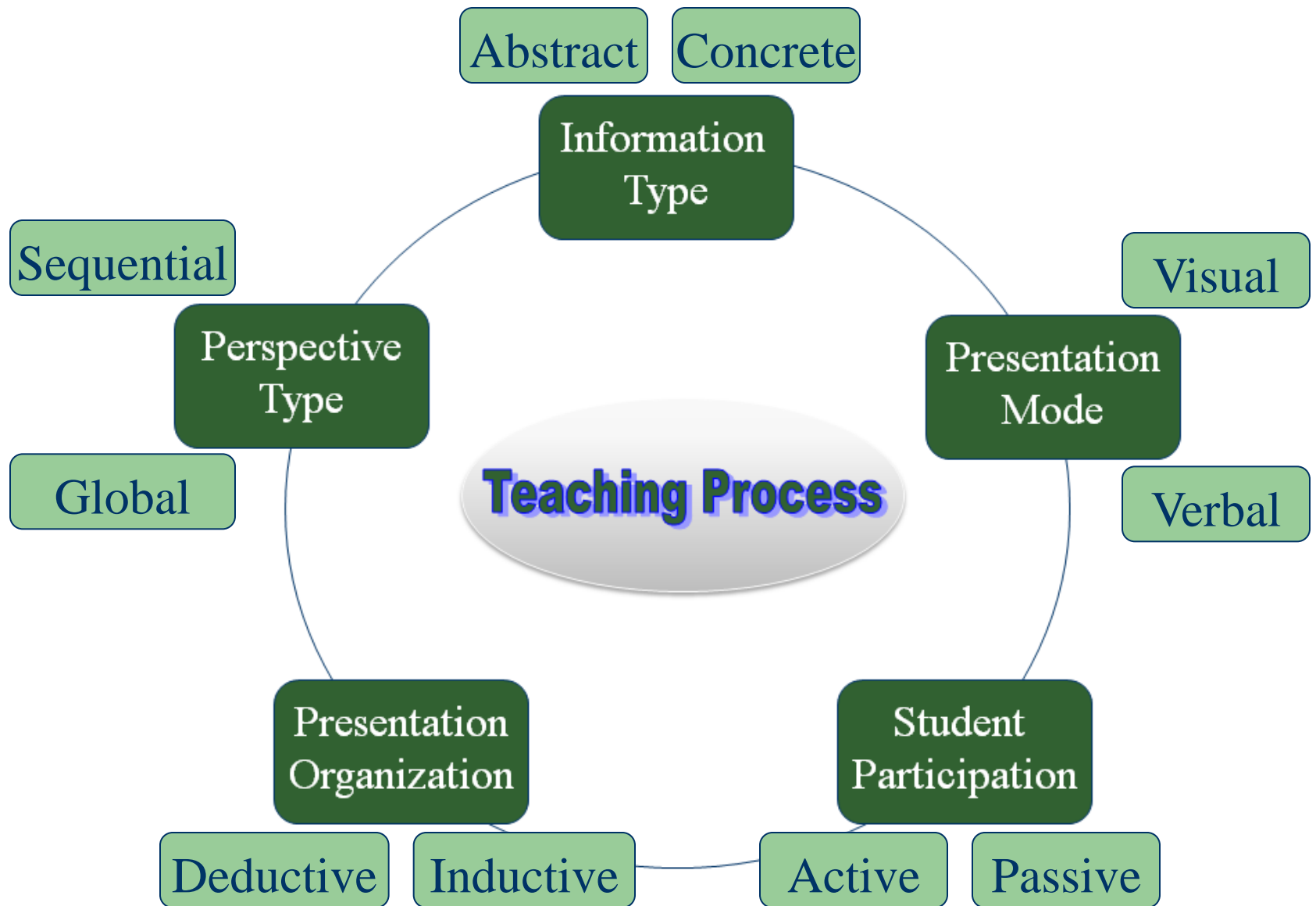


**One-on-one tutoring**



**Discussions**

# Teaching Styles



# Teaching Strategies

## Teaching Strategies

- Brainstorming
- Questioning for understanding
- Discussion
- Scanning for understanding
- Motivating and making associations with previously learned material
- Using visual aid



## Why Lectures?

# Teaching Modes

**Do not have a book  
Do not know how to read**

**Has a book  
Knows how to read**



# Teaching Modes

Easy access to books  
Easy to follow textbooks



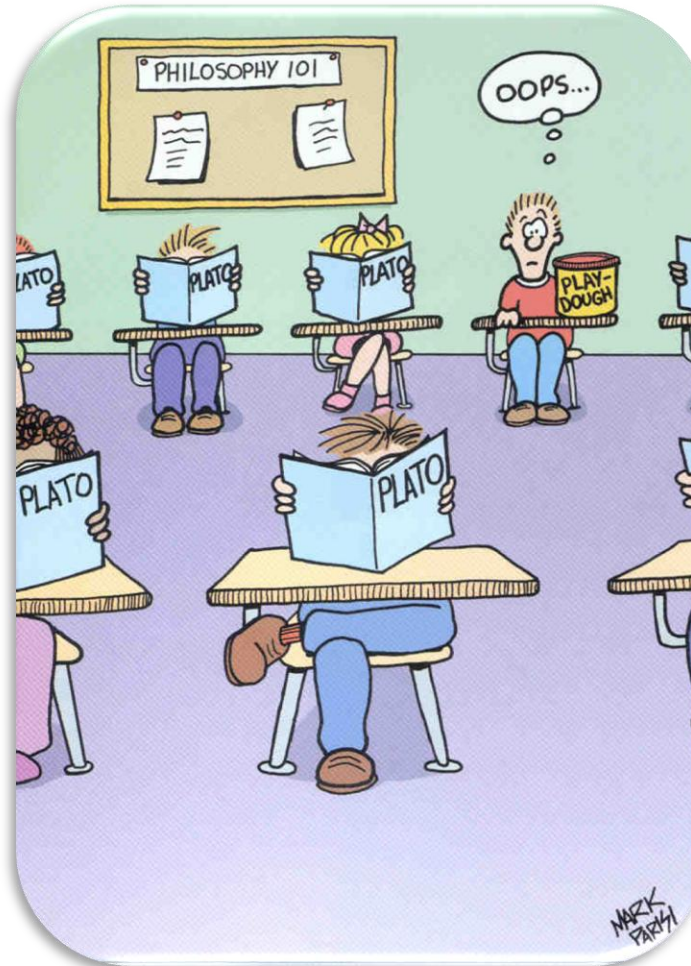
Online resources



**MODERN  
WORLD**

# Teaching Modes

After 12 years of learning to read in secondary school



# Teaching Modes

**Do we just assume that college students can't read?**



# Teaching Modes

## What are pros and cons of lectures?

### Advantages

1. New perspectives
2. Ask questions
3. Visuals
4. Less distractions
5. Meeting with students is easier
6. Understanding technical material is easier

### Disadvantages

1. Video learning- can re-read
2. Commute to lecture takes lots of time
3. Lost in the group- teacher continues w/o you
4. Learning at your own pace
5. Time convenience
6. Hard to follow teacher

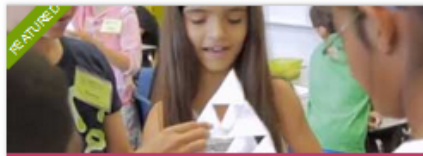
# Alternative Modes

## Online available resources



Search Khan Academy

Examples: photosynthesis, Napoleon, Geithner Plan, algebra



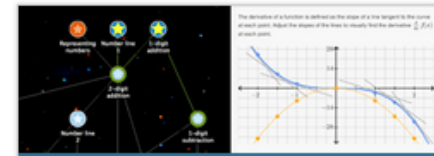
### Discovery Lab summer camp

Sign up for the Khan Academy summer camp in Northern California.



### What is information theory?

Brit Cruise takes a journey from ancient signal fires to today's internet.



### Practice your math skills

Practice your math skills from addition to calculus and everything in between.

### BROWSE OUR LIBRARY

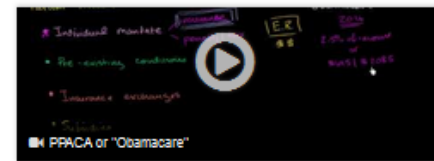
#### Math

Arithmetic and pre-algebra	Calculus	Linear algebra
Algebra	Probability and statistics	Applied math
Geometry	Differential equations	Recreational mathematics
Trigonometry and precalculus		

#### Science & Economics

Biology	Finance and capital markets	Healthcare and medicine
Chemistry	Microeconomics	LeBron asks

### NEW & NOTEWORTHY



# Alternative Modes

## Online available resources

Hi, Elena | products ▾ | new courses | support ▾ | my account ▾ | log out

lynda.com<sup>®</sup> | subject ▾ | software ▾ | author ▾ | my courses ▾ | What would you like to learn?  search

### Video

Learn about videography and motion graphics, including tutorials on storyboarding, color correction, lighting, and video editing in After Effects, Premiere Pro, iMovie, and Final Cut Pro.

Bruce Heavin

✉ [f](#) [t](#) [+](#)

- Motion Graphics (66)
- Video Editing (57)
- Visual Effects (44)
- Compositing (23)
- Filmmaking (14)
- DVD Authoring (11)
- Color Correction (10)
- Shooting Video (9)
- Web Video (9)
- Video Delivery (8)
- Post Production (7)
- Audio for Video (6)
- Documentaries (5)
- DSLR Video (5)

[▶ show more](#)

### Skill level

- Beginner (107)
- Intermediate (129)
- Advanced (2)
- Appropriate for all (60)

### Software

editor's picks | most popular courses | documentaries

Premiere Pro CS6 Essential Training

298 courses

Final Cut Pro X Essential Training - Mozilla Firefox

Go to a Website

Ch. Introduction | Now playing: Welcome

share movie

00:00:10 / 00:01:00

volume

CC

auto-play chapter off

movie time code

player prefs maximize

complete human-interest story.

site feedback



# Group Work



**MICROSOFT SURFACE**



**iPHONE**



**TABLET**

- Choose one of the given technologically-innovative devices (or think up your own example)
- Think about how this device can be used to improve teaching
- Present your ideas to the class

# Teaching Modes

## What are pros and cons of lectures?

### Advantages

1. Lectures are as effective as any other learning activity to get facts across

### Disadvantages

1. Lecture is less effective at promoting thinking than discussion, individual study, reading, etc.
2. Attention tends to drop off during any single task over a long time
3. Many lectures overburden students' information processing capacities: no understanding

# Teaching Modes

## Why is there so much lecturing going on?

2.1.1 We are ignorant of the evidence about the effectiveness of lectures

2.1.2 We are ignorant of alternatives to lectures.

2.2.1 Alternatives to lectures may appear to involve more work

2.2.2 Changes take time to introduce

2.3.1 There is a shortage of books

2.3.2 There is a shortage of other learning resources

2.4 Our attitudes obstruct change - we use lectures as a coping strategy

2.5 There are institutional constraints which support lecturing:

2.5.1 in the way teaching hours are counted;

2.5.2 in the relationship between individual courses

2.6 Course validation and other external forces often support lecturing

2.7 We don't know how to design courses