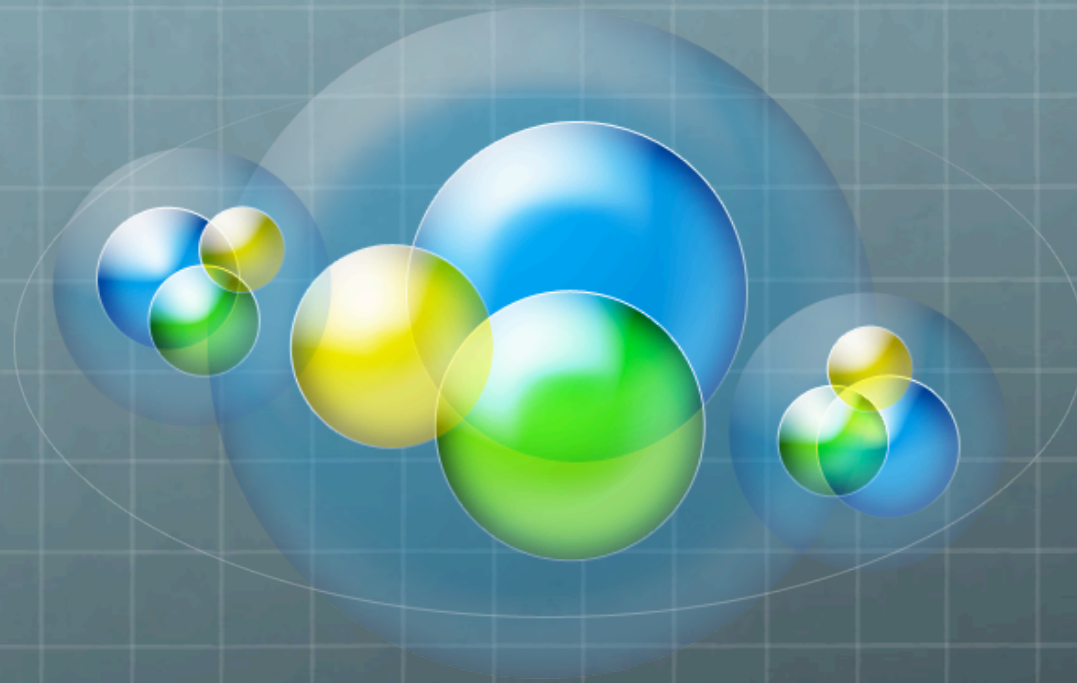


# Three Learning Theories

Constructivism  
Multiple Intelligences  
Self Efficacy



# Constructivism

Lev Vygotsky, Jerome Bruner

# Constructivism



Three important elements:

1. Learners construct new knowledge using what they already know
2. Learning is active
3. Learning is dialogic

# Implications for Teaching

- 🌐 Teaching is more than transmission of knowledge
- 🌐 Teachers must know the students' level of understanding, prior knowledge
- 🌐 Teachers must engage students in learning
- 🌐 Time is needed to actively build new knowledge

# Zone of Proximal Development (ZPD)

- 🌐 The difference between what a learner can do without help and what he or she can do with help

# Zone of Proximal Development

Requires scaffolding techniques

Learner is here

1, 2, 3 ...

$i$

$i+1$

24, 25, 26

Learner needs comprehensible input,  
which is here.







**What constructivist  
teachers do...**

# Encourage and accept student autonomy and initiative





- 🌐 Hilda Williams (1979) “The LEAST amount of learning is happening when the teacher is talking.”
- 🌐 James Moffett (1985) “(If) students do not find and choose the content of reading and writing for themselves, they ... never learn to make the decisions that lie at the heart of composing and comprehending... “



# Use raw data, primary sources, manipulative, interactive and physical materials

-  Field trips
-  Sequencing
-  On-line materials
-  Experiments
-  Classifying
-  Graphs and charts

**Use terms that describe the objective,  
(ex. classify, analyze, predict,  
interpret, etc.)**

-  **Develop a discourse community that actively uses the language of your content area**
-  **Ex: Predict- book activity**
-  **Ex: Analyze- examine a sample**
-  **Ex: Classify- what is your favorite thing?**

# Allow student thinking to guide lessons; continue lessons based on students' responses

- 🌐 Teacher needs to know subject well
- 🌐 Teacher needs to welcome in-depth questions
  - 🌐 (ex. Amber and DNA)
- 🌐 Teacher needs to be able to change directions in a lesson to answer questions and clear up misunderstandings.

# Ask students what they understand before telling them all about the new concept

- 🌐 Don't be a show off!
- 🌐 Ex: unconventional spelling by student
- 🌐 Allow students to change their minds

# Promote classroom dialogue--with the teacher and one another

- 🌐 Make your classroom a safe place
- 🌐 Set up opportunities for students to learn from each other
- 🌐 Ex: Literature Seminar
- 🌐 Ex: Elephant and the Blind Men (with a twist)
- 🌐 Ex: Up-close picture

## Ask open-ended questions of students and encourage students to ask questions

- 🌐 Examples of open-ended questions
- 🌐 Allow students to become experts
- 🌐 Jig saw activity
- 🌐 Ask questions before beginning writing (get a sense of audience needs)

# Ask students to explain their responses

- 🌐 Find out why they think that way
- 🌐 Give opportunities to process what they are learning
- 🌐 Let them explain so you can get a better context for their understanding
  - 🌐 “the subway”

## Provide experiences that have unexpected results

- 🌐 It is okay to be wrong
- 🌐 Compare what they thought would happen and what really happened.
- 🌐 Discuss why the results were different







# Allow wait time after posing questions

Most teachers wait 1 second or less for an answer to their question.

 Anyone?






## Waiting

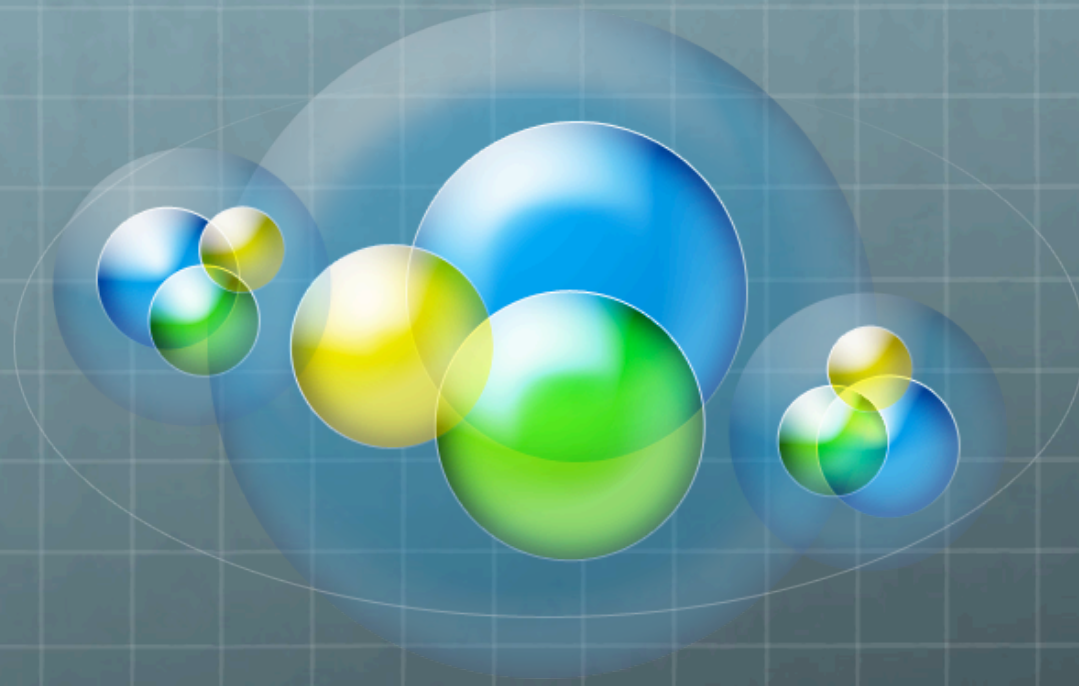
-  Gives students a chance to think
-  Gives more students the opportunity to answer
-  Helps pacing of the lesson
-  Encourage “minds on” activities (ex. white boards)

# Provide time for students to construct relationships and create metaphors

- 🌐 Teacher's role is to structure activities so that they allow students to discover relationships
- 🌐 Metaphors allow people to view realities in a different way.
  - 🌐 Ex. Team teaching is two sides of a coin—without both it has no value

# Nurture students' natural curiosity through discovery learning

-  Encourages active engagement
-  Promotes motivation
-  Promotes independence
-  Promotes responsibility
-  Develops problem-solving skills



# Multiple Intelligences

Howard Gardner

# Multiple Intelligences

 Linguistic

 Interpersonal

 Logical/Mathematical


 Intrapersonal

 Spatial

 Musical

 Bodily-Kinesthetic

 Naturalist

 Which two intelligences are most valued in school settings?

 Linguistic

 Logical/mathematical

 **What are ways to tap into students' other intelligences?**

# Spatial Intelligence?



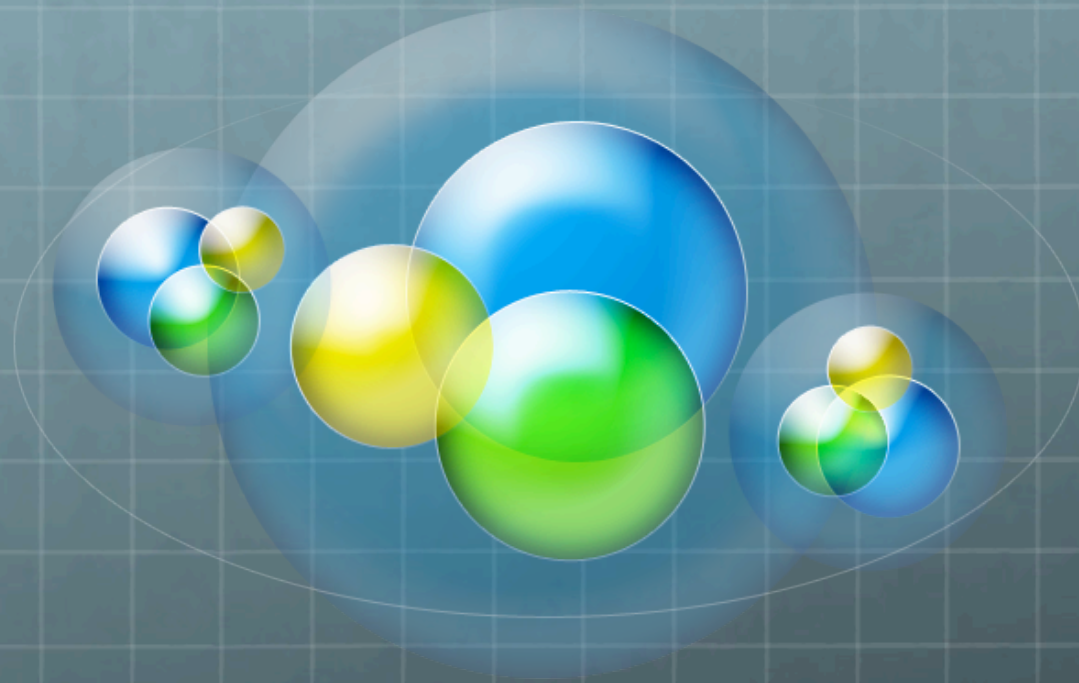
# Bodily-Kinesthetic Intelligence?

# Musical Intelligence?

# Interpersonal Intelligence?

# Intrapersonal Intelligence?

# Naturalist Intelligence?



# Self Efficacy

Albert Bandura

# Self Efficacy

Increased  
Self  
efficacy

+

Enhanced  
intrinsic  
motivation

=

Ability to:



# Ability to:

 Sustain levels of motivation

 Maintain persistence

 Develop problem solving skills



# Implications for teaching

- 🌐 **Maintain a supportive learning environment**
- 🌐 **Give students status and recognition**
- 🌐 **Recognize effort and improvement**
- 🌐 **Use goals and sub-goals**
- 🌐 **Create meaningful bonds between teacher and student and among students**