Please write down your definition of the word, MOUNTAIN, include images you think of when you hear this word.
“A land mass that projects well above its surroundings; higher than a hill.”

http://wordnetweb.princeton.edu/perl/webwn?s=mountain
Constructivist Approaches to Education: Fostering Student Construction of Knowledge

Chloe Ruff
Jennifer Snyder
Britta Petrich
Virginia Tech
Constructivism:

- Knowledge actively constructed by an individual or social group; meaning is shaped by individual or social experiences.
CONSTRUCTIVISM

INDIVIDUAL

- Piaget, Von Glaserfeld

- “The assumption that knowledge, no matter how it is defined, is in the heads of persons, and that the thinking subject has no alternative but to construct what he or she knows on the basis of his or her own experience” (Philips, 2000, p. 10).

SOCIAL

- Vygotsky, Dewey, Bruner

- Knowledge is a result of the “role played by the vast cultural repertoire of artifacts, ideas, assumptions, concepts, and practices which the individual inherits or is born into” (Philips, 2000, p. 11).
## Constructivism

### Individual

- Motivation is intrinsic. Learners set their own goals and motivate themselves to learn.

- Learning is more about personal development and the construction of knowledge within the framework of the individual’s mind.

### Social

- Collaborative learning is facilitated and guided by the teacher. Group work.

- Motivation is intrinsic and extrinsic. Learning goals and motives are determined both by learners and extrinsic rewards provided by community.
Learning is an **active** process. You are not passively absorbing information, but actively constructing meaning.
# Scholars Who Influenced Constructivism

<table>
<thead>
<tr>
<th>Key Scholar</th>
<th>Time Period</th>
<th>Expertise</th>
<th>Contribution</th>
<th>Known For</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Dewey</td>
<td>Early 1900s</td>
<td>Philosopher, psychologist, educational reformer</td>
<td>Epistemology, Logic</td>
<td>Educational progressivism</td>
</tr>
<tr>
<td>Jean Piaget</td>
<td>1900s</td>
<td>Cognitive development</td>
<td>Individual Constructivism</td>
<td>Cognitive development</td>
</tr>
<tr>
<td>Lev Vygotsky</td>
<td>Early 1900s</td>
<td>Cultural-historical psychology</td>
<td>Psychology of play; Social constructivism</td>
<td>Zone of Proximal Development</td>
</tr>
<tr>
<td>Jerome Bruner</td>
<td>Mid-late 1900s</td>
<td>Cognitive and educational psychology</td>
<td>Social constructivism</td>
<td>“The Narrative Construction of Reality”</td>
</tr>
</tbody>
</table>
Five Principles of Constructivism

• Teachers should:
  – “Seek and value students’ points of view”
  – Create classroom activities that “challenge student’s suppositions”
  – Create relevance for their lessons
  – Build their lessons around “primary concepts” and “big ideas”
  – Assess students “in the context of daily teaching”
    • (Brooks & Brooks, 1999, p. ix – x)
Constructivist teaching strategies

• Discovery learning
  – Guided discovery
• Inquiry learning
• Problem based learning
• Discussion
• Cooperative learning groups
• Among others...
Contrasting examples

• Ben Stein in *Ferris Buehler’s Day Off*

• Robin Williams in *Dead Poets Society*
What kind of teacher do you want to be?

• Chloe Ruff: cruff7@vt.edu
• Jennifer Snyder: snyderjd@vt.edu

Britta Petrich: brlong@vt.edu