An Introduction to Constructivism
Two types of constructivism:

- **Social Constructivism** – public bodies of knowledge are social constructs. Knowledge takes its form based on things like politics, values, power and status struggles, religion, and economics (sociology!).

- **Psychological Constructivism** – a set of views about how individuals learn and how teachers should teach them. Knowledge is made, not acquired, and learners construct their own understanding.

IMPORTANT: DO NOT confuse social learning theories with social constructivism! They fall under psychological constructivism.
Constructivism in Education is…

- Mediated by tools
- A belief that knowledge does not come from the subject or the object, but from their unity

“We construct our own understandings of the world in which we live”
Proponents of Constructivism

- Descartes: “cogito, ergo sum”
- Kant and Piaget: aspects of knowledge of our physical universe are internally constructed (examples: time and space!)
- Dewey: scientific method
- Vygotsky: brings social influences into psychological constructivism. Language shapes learning; Culture is significant in learning.

Learning is an active process!
Constructivist Learning Theory

- Learning begins with what the student brings to the table (knowledge, attitudes, interests)
- Learning results from the interaction between these characteristics and experience: we construct understanding from the inside

✓ General pedagogy mixes constructivist and non-constructivist techniques
Six Central Tenants of Constructivism

1. We cannot know an objective reality.

2. Knowledge is subjective.

3. Knowledge of two people can be said to be “taken-as-shared” to the extent that their constructions seem to function in the same way in given situations (Cobb, 1991).

4. Knowledge is constructed through the process of adapting to the events and ideas one experiences (Fosnot, 1996; von Glaserfeld, 1996).

5. The construction of knowledge is significantly influenced by one’s environment and by the symbols and materials one uses or has ready access to (Fosnot, 1996).

6. “Readiness to learn” has a different meaning for cognitive constructivists.
The Traditional vs. Constructivist Classroom

**traditional**
- Strict adherence to curriculum is highly valued
- Students primarily work alone
- Teachers seek the correct answer to validate student learning

**constructivist**
- Pursuit of student questions is highly valued
- Students primarily work in groups
- Teachers seek student’s perspective; helps shape future lessons
## Some Differences Between Traditional and Constructivist Classrooms

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<thead>
<tr>
<th>Traditional Approach</th>
<th>Constructivist Approach</th>
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<tr>
<td>The primary emphasis is on developing basic skills and building understanding from the “bottom up.”</td>
<td>The primary emphasis is on the “big ideas” and developing understanding from the “top down.”</td>
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<td>Classroom activities are usually based on textbooks and workbooks.</td>
<td>Classroom activities are usually based on primary data sources and manipulation of materials.</td>
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<td>Students are viewed as passive recipients of information supplied by the teacher-expert.</td>
<td>Students are viewed as active knowledge seekers, creating their own personal understandings of information.</td>
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<td>Teachers are viewed as experts, providing information to students on predetermined topics.</td>
<td>Teachers are viewed as guides for learning, assisting as students develop and answer their own questions on topics and/or activities of interest to the student.</td>
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<td>A limited number of correct answers exist and are accepted.</td>
<td>Students’ hypotheses, questions, and views are accepted and used to guide further learning.</td>
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<td>Students often work individually on teacher-developed assignments.</td>
<td>Students often work collaboratively on projects of their own design.</td>
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<td>Assessment is usually done separately from instruction, often taking the form of objective tests.</td>
<td>Assessment is usually incorporated into the learning process, often taking the form of teacher observations, student performances or exhibitions of projects, and/or student self-assessments.</td>
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Source: Adapted from J. G, Brooks & M. G. Brooks, 1993.
The 5 Principles of a Constructivist Pedagogy

1. Posing problems of emerging relevance to learners
2. Structuring learning around primary concepts
3. Seeking and valuing students’ points-of-view
4. Adapting curriculum to address students’ suppositions
5. Assessing student learning in the context of teaching

(According to Brooks, *The Case for Constructivist Classrooms*)
The bottom line…

Constructivism builds on knowledge previously gained by the learner and furthers learning by constructing learning through interior mental processes!