Social Cognitive and Constructivist Views of Learning

Agenda

- "test"
- Constructivism Defined
- Vygotsky
- Situated Learning
- Applications

From last week:

- Write down the number you were supposed to forget....

- 742

Constructivism

- individual learner must actively "build" knowledge and skills

There are three basic forms of constructivism:

- Psychological/Individual

- Social Constructivism

- Social Constructionism (Sociological Constructivism)

Vygotsky
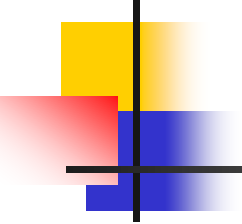# Social Constructivism

Culture is Key

Cognitive development depends on:

- interaction with people in one's world

    and

- Cultural tools provided to support thinking

What are examples of cultural tools?

- Real tools
  - Rulers
  - Computers
- Symbols
  - Numbers
  - <u>Language</u>
- Speech—the primary cultural tool
  - Private speech – self-talk
  - Inner speech – <u>thought</u>

For Vygotsky

- higher mental functions develop through social interactions

  - Cherie: Vygotsky's theory asserts that verbalization of learning by students in a social context leads to summary, clarification, and expansion, which reinforces and confirms understandings (Bershon, 1992).

- through interactions, children learn the habits of mind of their culture:

  - speech patterns

  - written language

  - and other symbolic knowledge

What is the ZONE OF PROXIMAL DEVELOPMENT?

The distance between what you can do on your own and what you can do with help from an adult (or more knowledgeable peer).

ZPD Activity

- http://www.youtube.com/watch?v=Kov2G0GouBw

Rock Paper Scissors

What beats….

Rock = Paper

Paper = Scissors

Scissors = Rock

Rock Paper Scissors Lizard Spock

What beats....

Rock = Paper, Spock

Paper = Scissors, Lizard

Scissors = Rock, Spock

Lizard = Scissors, Rock

Spock = Paper, Lizard

Connection to the ZPD?

Taken from: http://www.mrkeenan.com/

The ZPD

- **learning potential**

- **Tasks below the ZPD = <u>no new learning</u>.**

- **Tasks above the ZPD = <u>no meaningful learning.</u>**

THEREFORE

The job of the teacher is….

to provide activities within each student's ZPD.

Scaffolding

- Bruner's term for an action that supports a learner.

Examples:

- a glance/gesture,
- Modeling
- cueing
- thinking aloud
- asking questions

- Co-construction or joint construction (cooperative learning)

LANGUAGE

For Vygotsky language facilitates development.

Learning language could enhance thinking.
Thinking reflects language.

Piaget believed that language reflects thinking.

Piaget and Vygotsky

- Individual construction of knowledge
- Child as "solitary scientist"
- Development precedes learning

- Social construction of knowledge
- mediated by people and cultural tools
- Learning fosters development

Constructivism Examples/Extensions/Issues:

- Kaitlin: My students are much more attached to what we are learning about in the classroom if they understand why it is important. As well, they want to learn through real-life experiences and love problem-solving.

- Peter: I remember how odd it was for my professors to pose realistic problems through case studies and have us, the students, figure out and solve them. For me, it was a huge adjustment because most of my education up to that point followed more of a behaviourist approach to teaching and learning.

- Renuka: I remember learning about Vygotsky and Piaget's theories as a student teacher, but once I began my practice I followed the learning resources and recommendations of colleagues, which meant offering rewards for a desired behaviour .... I also taught at a traditional school that discouraged social and collaborative learning opportunities and encouraged the more idealist philosophy where the teacher directed learning and followed a lecture style. Parents also expressed how pleased they were to see worksheets, tests and to see rows and rows of textbooks on the shelves in the classroom.

Constructivism Examples/Extensions/Issues:

- Belinda: I would take this one step further and say that in my own learning I sometimes crave to be just lectured on a topic. I just want to shout "Just teach me! I don't want to work in a cooperative group! I don't want to experiment. I just want you, the teacher, to tell me how this works."

- Simon: A question that I hear a lot from fellow constructivist colleagues is one that surrounds the assessment of learning. Since students construct knowledge for themselves differently, they find it difficult to assess students without resorting to a set of objectives or achievement indicators – that would be too behaviourist.

Social Constructionism (Sociological Constructivism)

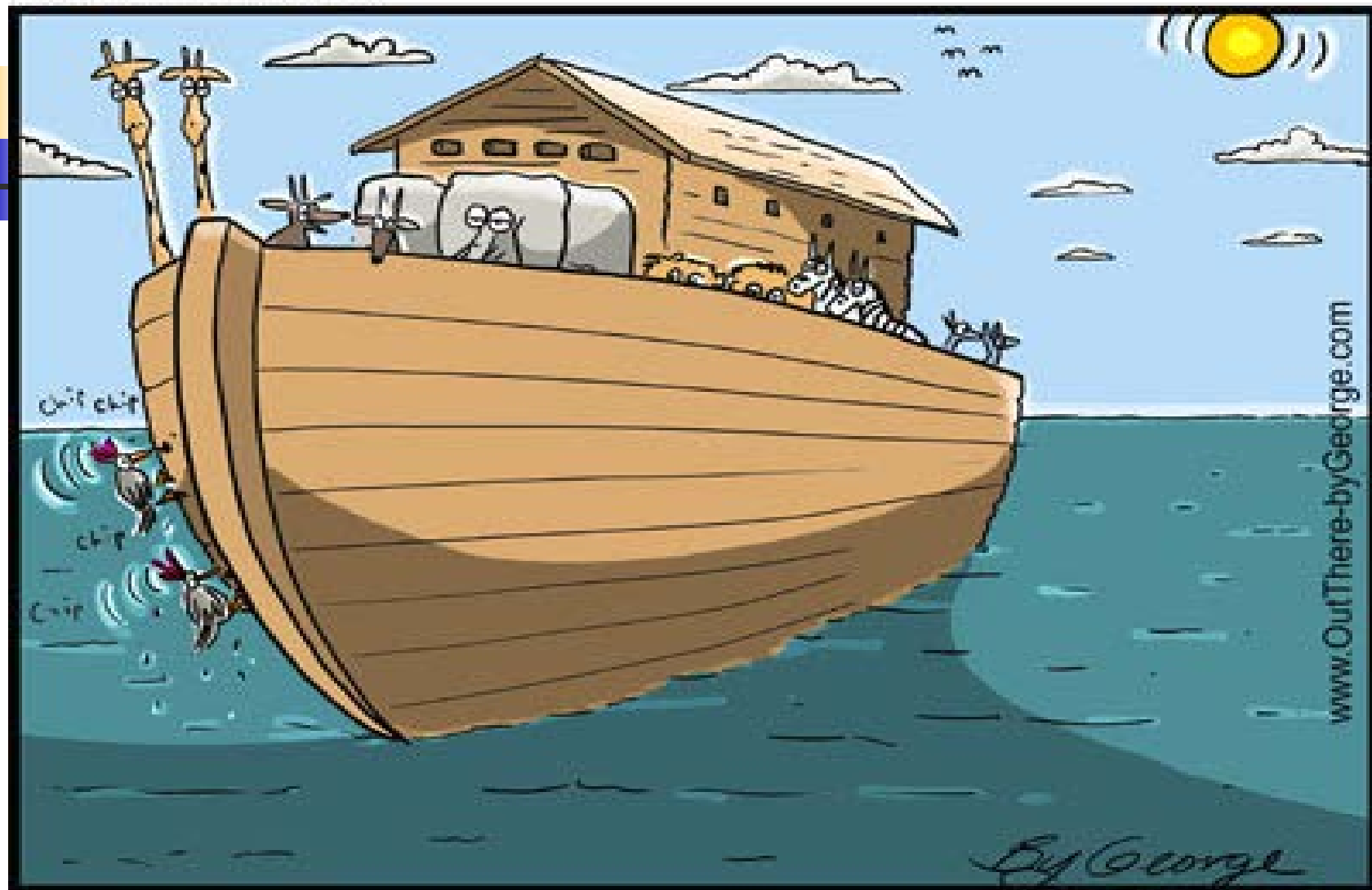- Focuses on public knowledge (knowledge in a society)

Situated Learning

- **Situated learning** is a model of learning first proposed by Jean Lave and Etienne Wenger.

- It suggests that all learning is contextual, embedded in a social and physical environment.

"Anyone seen Noah...looks like we've got an issue with the woodpeckers"

Situated Learning Con't

- That is, learning involves a process of engagement in a community of practice.

- What is a community of practice?

A community of practice involves:

- social learning
- common interest in a subject or problem
- collaboration over time to..
  - share ideas,
  - find solutions
  - building innovations.

It is here that ideas are judged as useful or true.

Communities of practice are everywhere...

CoP

- Initially people learn at the periphery. As they become more competent they move more to the 'centre' of the particular community.

  - Peter: However, by the end of the program I was able to articulate with confidence my thinking and ideals around learning and teaching because I had constructed the knowledge myself through the guidance of my professors.

CoP

- Initially people learn at the periphery. As they become more competent they move more to the 'centre' of the particular community.

- Thus we become active participants in the *practices* of communities and construct *identities* in relation to these communities

Moving to centre....

- BC's Refreshed Curriculum:

- **Amy:** The BC curriculum documents written by the government state that the focus of the curriculum is on the "active engagement of the students". ...Therefore, it is clear here that the government's intention was to promote a constructivist view of learning.

- **Joti:** Having to implement the new curriculum is definitely a motivating factor for teachers to modify their instructional strategies. As teachers are shifting towards behaviourism and constructivism models of teaching (whether they realize it or not), they are beginning to take a student-centered approach by giving their students the opportunity and responsibility of constructing their own knowledge.
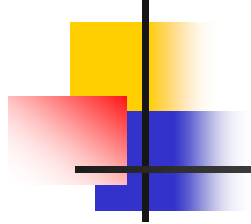
Teaching and Technology

- **Angela:** With today's new technologies, it is possible to still develop a relationship without face to face classrooms. Students and teachers can collaborate to create powerful learning experiences.

- An example?

http://www.youtube.com/watch?v=dk60sYrU2RU

Do students need teachers to learn?

- Oli: I think no matter what approach I use, and no matter what approach a teacher uses, when the teaching comes from the heart, it's good teaching.
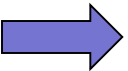
In the classroom teachers:

- Use **active** techniques (authentic tasks e.g., experiments, real-world problem solving) to create knowledge
- Get students to reflect on and talk about what they are doing and how their understanding is changing.
- See social participation as important part of class
- Give students the tools to support learning

Teacher's Role:

- Encourage students to constantly assess how the activity is helping them gain understanding.
- Guide them to question themselves and their strategies
- Help students to become "expert learners"
- Create a classroom environment where the students learn HOW TO LEARN.
- Not....
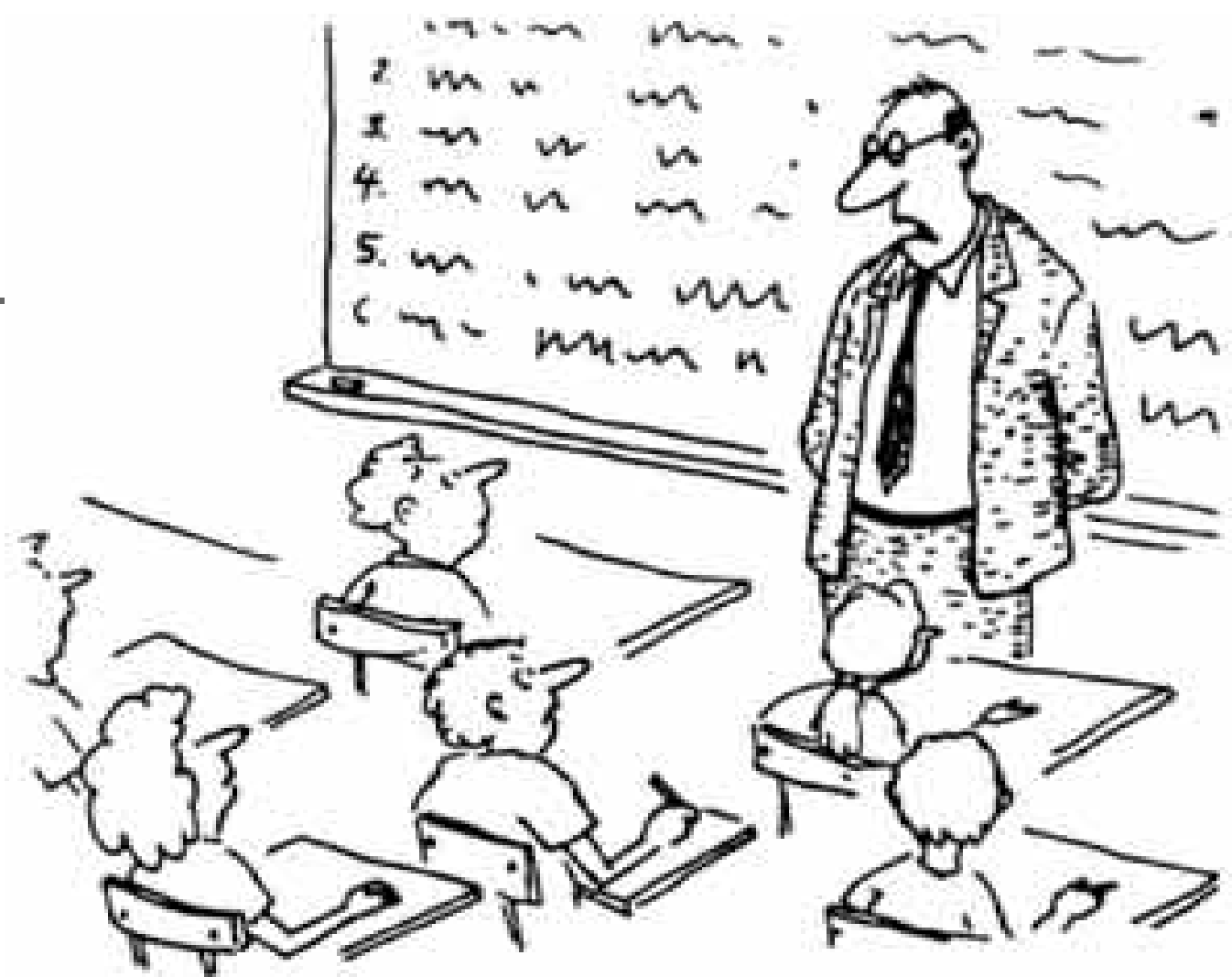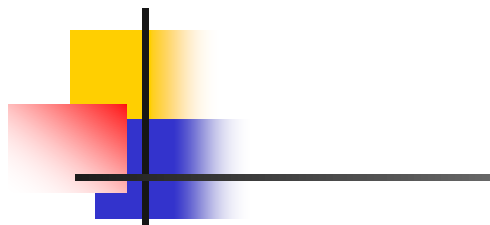
"I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!"

CMap

- ...create a detailed concept map of all the theories and perspectives that we learn about in the course. This assignment is designed to help you keep everything organized and to make sure that you have an <u>explicit understanding of how you think all of the theories are linked together</u>.

- On October 12, you will develop your first concept map, based on the content covered to that point.

- For this first submission, I will look at your concept maps and provide you with suggestions and things to think about with respect to your concept map.

- Please submit your concept map as a PDF to our Blog site—note that any links you have included will not be available in this format so if you include these know that they are for your use only.

- It is also recommended that you save a copy of your map on your own computer (as a back-up).

Next Class

- The self-guided slides for the online session will be posted in the slides portion of the blog by Wednesday.

- After you have completed the facilitation slides/activities then go through my slides/activities.

- Your reading responses are due as usual (by Saturday) and your first Cmap is due before class on Wednesday.

Wrap-up

- Scripted Cooperation
  - One person defines constructivism and notes the three different kinds (and the differences between these)
  - Partner listens for errors/omissions and adds to what has been said
  - Both can now check notes