## **Cultural Influences on Cognitive Development**

### **Guided Participation**

Adults in all cultures guide children's participation in culturally valued activities.

This refers not only to interactions in which adults explicitly instruct children, but also interactions in which adults or other skilled members of the community (e.g., older siblings) participate with children in everyday, routine activities.

# An Example of Culturally Based Differences in Guided Participation

Children in cultures where they are typically segregated from adults (cities in Utah & Turkey) vs those in which they are integrated into adult activities (small villages in Guatemala & India):

- in segregated communities, adults give more explicit instruction, manage motivation by using praise and other incentives
- in integrated communities, children take greater responsibility for social interactions, attempt to join in. Adults are encouraging and often provide nonverbal demonstrations

# An Example of Culturally Based Differences in Attention Management

Mayan mothers with extensive formal schooling vs those who received little formal schooling and their children:

- Schooled moms were more likely to approach joint problem solving by suggesting a "division of labor" approach
- Schooled moms were more likely to direct the children in what to do
- Schooling prompts a hierarchical social framework

## **Cultural Influences on Cognitive Development**

Children's Collaborative Styles

Cultural norms also influence children's collaborative styles and outcomes.

### **Example:**

- collaborative problem solving, Navajo vs Euro-American children, values of cooperation and autonomy vs speed
- key finding: the Navajo children spent more time planning in the board game maze they were learning about, thus made fewer errors

# **Educational Implications of Sociocultural Theories**

### Dynamic Assessment

Children's knowledge should be assessed in terms of what they can learn from social interaction rather than their unaided level of performance.

A child's potential of learning with assistance vs. skills already learned ("yesterday's development")

## An Example of Dynamic Assessment

**Phase One:** How many hints do children need to solve letter completion problems?

<u>Phase Two</u>: How well do the children do in solving more challenging letter completion problems?

e.g., U C T D S E R F ?

<u>Findings</u>: Children who needed fewer hints with the simple problems, did better with the difficult problems. This result unrelated to IQ.

# **Educational Implications of Sociocultural Theories**

Fostering Communities of Learning

Create variations in expertise across children, so that children have opportunities to learn from one another.

Make social interaction among the children essential in order for the children to complete their work.

# An Example of a FCL Classroom Activity

- > "Big Idea" animal-habitat interdependence
- > Small groups researching subtopics: defense mechanisms, predator-prey relations reproductive strategies, communication, etc.
- > Share expertise in small group interactions, one expert from each subtopic
- ➤ All students do a project that brings together the information from different topics

# **Educational Implications of Sociocultural Theories**

### Cognitive Apprenticeship

The goal of cognitive apprenticeship is to help students learn the cognitive "processes that experts use to handle complex tasks" through guided experience on intellectual tasks.

Takes place within a formal instructional setting - a school, a training program, a computer simulation

## An Example of Cognitive Apprenticeship

### Teaching students how to summarize.

Sample Text: Crows have another gift. They are great mimics. They can learn to talk and imitate animal sounds. Some have been known to learn 100 words, and even whole phrases. They can imitate the squawk of a chicken, the whine of a dog, or the meow of a cat."

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## An Example of Cognitive Apprenticeship

#### **Interaction Between Teacher and Students:**

<u>T</u>: Mary, why don't you summarize first? Remember, just tell me the most important parts.

<u>S1</u>: Crows have a hundred words they can learn by imitation. They can imitate chickens, the whine of a dog, and cats.

T: Okay, we can shorten that summary a bit.

<u>S2</u>: You could say they imitate other animals.

T: Oh! Good one! There's a list there. Mary, did you notice that? It says they can imitate the squawk of a chicken, the whine of a dog or the meow of a cat; and you can call that "animal sounds."