THE INTERPLAY OF LANGUAGE AND THOUGHT

HOW DO I KNOW WHAT I THINK UNTIL I HEAR WHAT I SAY?

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"Language has the power to shape our consciousness: and it does so for each human child by providing the theory that he or she uses to interpret and manipulate their environment."
–Michael Halliday 2003

When you consider the students you deal with, or the people in your immediate environment, how might you describe:

1. Their general demographic or socio-economic circumstances

2. The level of sophistication of their language usage

3. The skillfulness of their thinking

Write one descriptive sentence about each.

THREE SIGNIFICANT FINDINGS FROM HOW PEOPLE LEARN

1. Students come to the classroom with preconceptions and misconceptions that can interfere with learning
2. To become competent in an area students must have factual knowledge and an organized context within which to place it
3. Metacognition enables students to take charge of their learning.

From "How People Learn", National Academy Press, Washington DC, 2000

Metacognition is the conscious application of an individual's thinking to their own thought processes with the specific intention of

    understanding,

    monitoring,

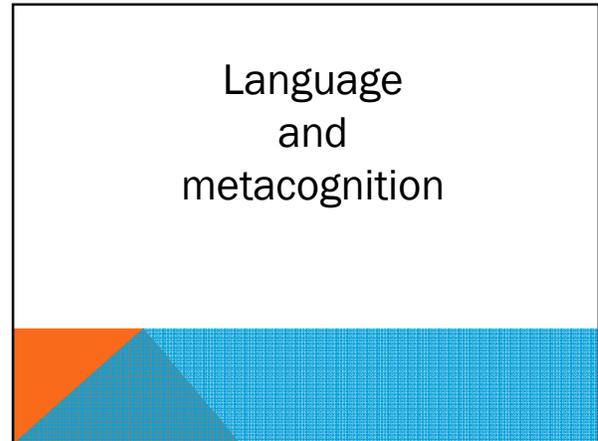   evaluating and

    regulating those processes.

A Metacognitive Problem

There are 3 separate, equal-size boxes and inside each box there are 2 separate small boxes. Inside each of the small boxes, there are 4 even smaller boxes. How many boxes are there all together?

Young children can think metacognitively.

Language
and
metacognition

Basil Bernstein- restricted and elaborated codes.

Elaborated Code:
    Formal
    Highly specific
    Nothing left to intimation or suggestion
    Complete sentences
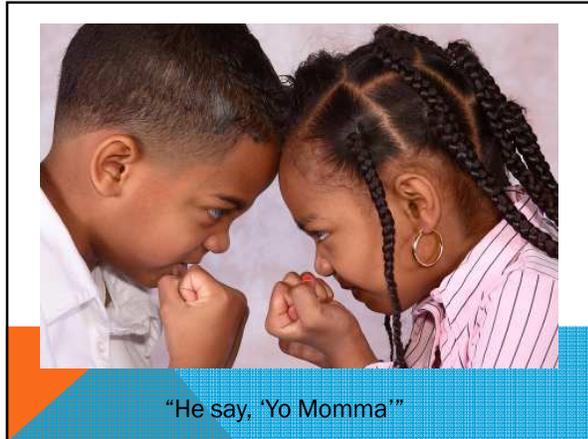   Carefully chosen words

Restricted Code:
    Shared knowledge/experience
    Implied meanings
    Non-verbal scaffolding

The linguistically competent person is able to SWITCH codes.
The linguistically disadvantaged person can not.
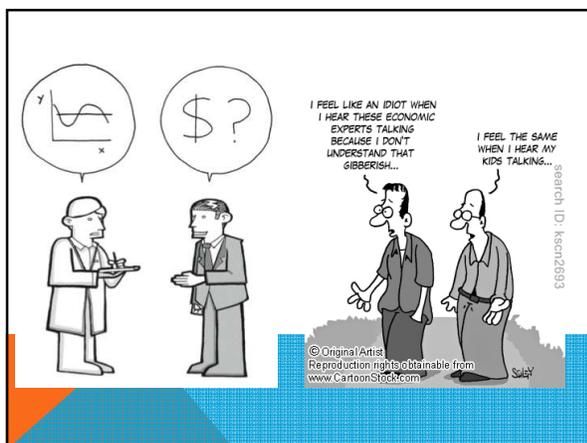
"He say, 'Yo Momma'"

Socio-economic implications

Bernstein was reluctant to tie codes to social class although he did argue that lower SES individuals tended to have only one code – restricted

Ruby Payne (2003) describes formal and casual registers, sees casual register as inferior and sees low SES kids less able to move into the formal register

When you consider your students do you see them readily switching codes to suit circumstances?

Students can be taught to explicitly switch codes between restricted/casual and elaborated/formal

Rebecca Wheeler (Code-Switching: Teaching Standard English in Urban Classrooms, 2006)

The vocabulary disadvantage

Louisa Cook Moates (2001)

Grade 1 linguistically disadvantaged child – 5000 words
Grade 1 linguistically advantaged child – 20,000 words

John Ratey (2001)

Professional parents – 2,100 words per hour
Working class parents – 1,200 words per hour
Welfare parents – 600 words per hour

The stresses of poverty

Day care 10:1 to 15:1

Language is mostly directive or organizational

Complex thought requires complex language

How far can you process an abstract concept without the use of language?

Empathy

30 seconds

We cannot rely on a narrow, privileged sector of the community for our future prosperity.

Social justice demands all children have the opportunity to become innovative, creative, independent learners and thinkers.

The development of metacognitive learners must begin with the development of language.

Time!

All students have to pass the same tests.

Disadvantaged kids typically get more drilling, more focus on tested curriculum, more rote learning, more test prep, fewer enrichment activities.

Test scores may rise.

BUT students do not become metacognitive learners.

Building vocabulary
Meaning grows out of experience

"cat"

Children in poverty have limited opportunities to develop vocabulary suited to the formal discourse of school

Books, newspapers
Self selected TV
Discussions
Experiences beyond community
Cultural opportunities

How can the school compensate?

Building vocabulary

6 exposures to a new word

Presented within a clear context

Attachment of visual images or symbols

Opportunities to elaborate on meaning

Opportunities to use word in new context

How might we add the word 'empathy' to our students' working vocabulary?

"the child who is treated as an interesting conversational partner and whose contributions are taken up and extended by his or her interlocutor is likely to gain greater confidence in his or her own ability to contribute to collaborative meaning making"
-- Gordon Wells, 2009

"The paradox is that children become smart by being treated as if they already are intelligent"
-- Arthur Costa, 2008

Making time for rich dialogue is not an optional extra, it is fundamental.
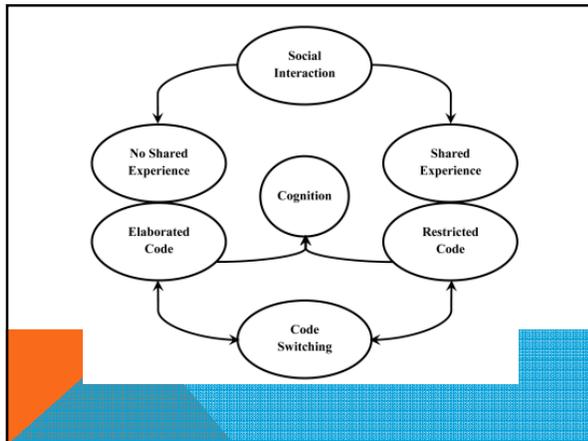
How People Learn

Condition 1
Uncover preconceptions
Make them explicit through the use of elaborated language

Condition 2
A cognitive structure within which to integrate new learning
Restricted code embedded in subjective contexts – unavailable to others
Thinking must be made explicit – elaborated

Condition 3
Metacognitive thinking
Must have the language to make thinking explicit - elaborated

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Moving from elaborated to restricted code in teaching new concepts

Uncover implied meanings to discover preconceptions

"energy"

Move from implied to specific

Teaching multiplication

1.Elaborated word story and real objects

"Look here. We have got two baskets and in each basket we have three apples."
Children look, talk, count, discuss concept of groups

2. Introduce restricted code and symbolism

Drawings of groups

3. Restricted code of mathematical symbols

Implied meanings of numerals, + and =

Evaluation

Learning goals need to be expressed in elaborated language

Rubrics must have clarity and be specific and explicit

Goal is knowledge + understanding

(division of fractions)

The effective teacher knows when to move from predominantly elaborated code to restricted code as a shared foundation of meanings is created.