Creating Effective Learning Spaces for Cognitive Development

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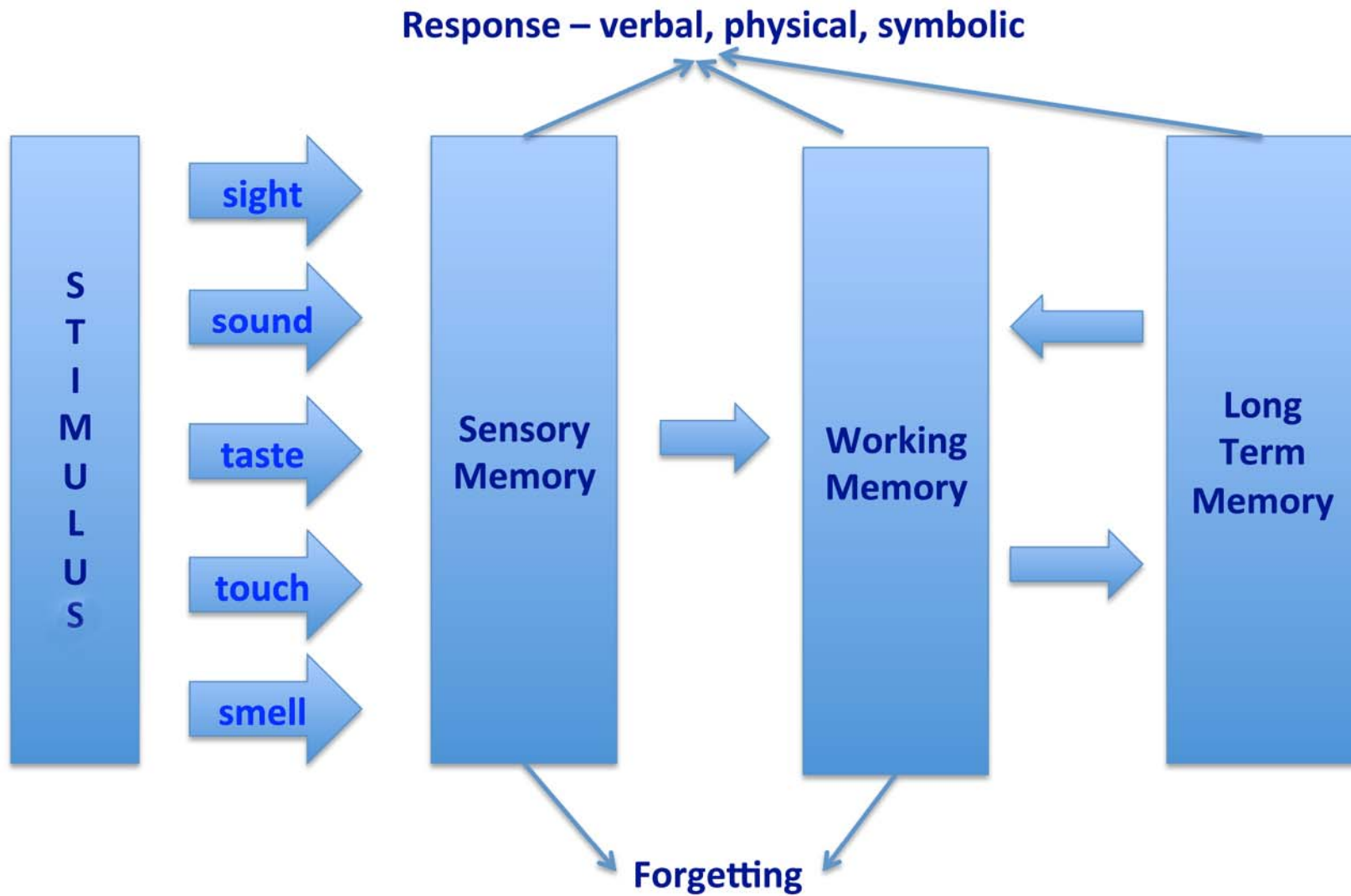
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Question 1

- **How many children did you see?**

Question 2

- **What type of activities were the children engaged in?**

How individuals process information and learn

Response – verbal, physical, symbolic

STIMULUS		Sensory Memory		Working Memory		Long Term Memory
	sight					
	sound					
	taste					
	touch					
	smell					

Forgetting

What must happen to *REMEMBER*?

- **Attention to stimuli**
- **Action on stimuli**
- **Practice**
- **Application of information**
- **Retrieval**

Understanding of Cognitive Activity

- **Divergent thinking**
- **Creative thinking**
- **Recognizing parts and wholes**
- **Solving problems such as creating balance or stability**
- **Application of learning from one setting to another**
- **Making choices**
- **Process oriented activities**
- **Activities encouraging emergent skills**

Understanding of Cognitive Activity

Cycle of Change (Adapted from Senge et al 1999, page 46)

Enthusiasm

Willingness

Commitment

Personal Result

Personal Investment

Motivation

Enthusiasm, Willingness, Commitment –
Identify something already done well!

Build on what has been done well

- **If we wanted to integrate greater cognitive activity into this activity, what changes might we make?**
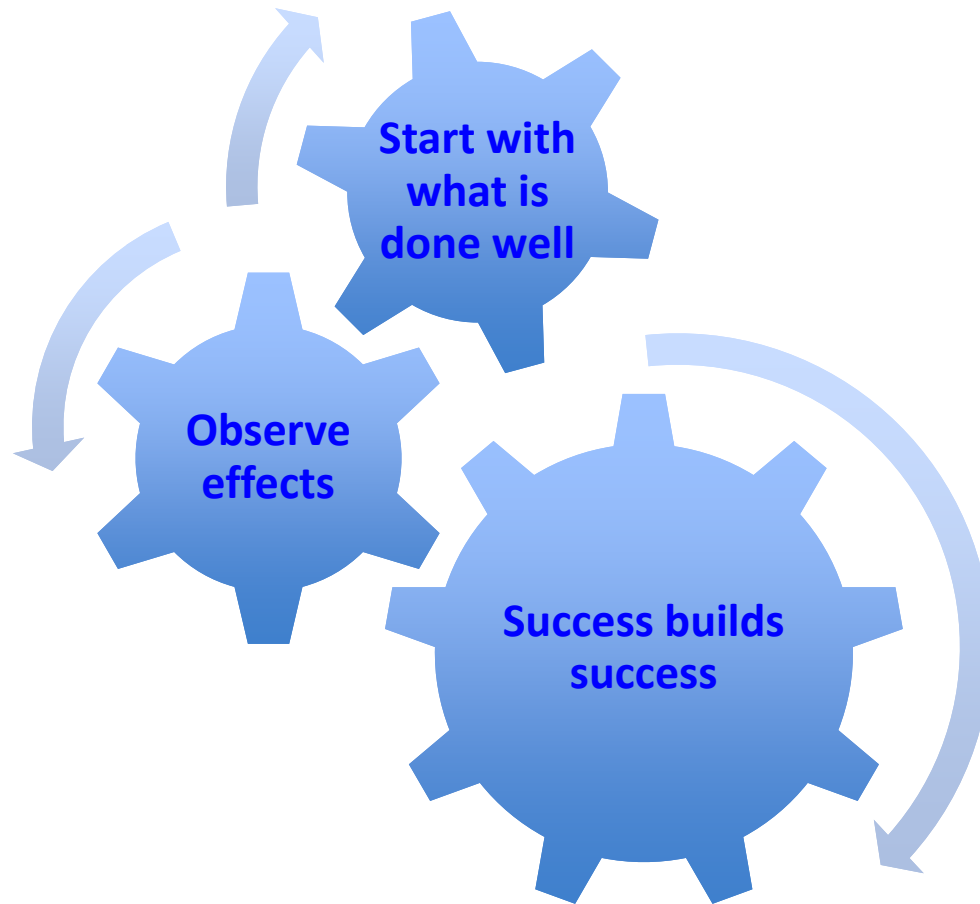
Personal Investment

Common questions asked by staff include:

- What's in it for me?
- Why change, it's already working.
- How much extra time will it take?
- How will this improve my teaching?
- What materials do we need and can we get them?
- What is the benefit to children?

Motivation to Change

Personal Result – measure change

- Photographs
- Documentations of children's activities
- Documentation of children's learning
- Emergent activities

- Before and after
- Personal portfolios
- Personal evaluations
- Reflective discussions
- Personal choices

Area set up by Adults – After 10 minutes of play

Children set up, maintained over a week
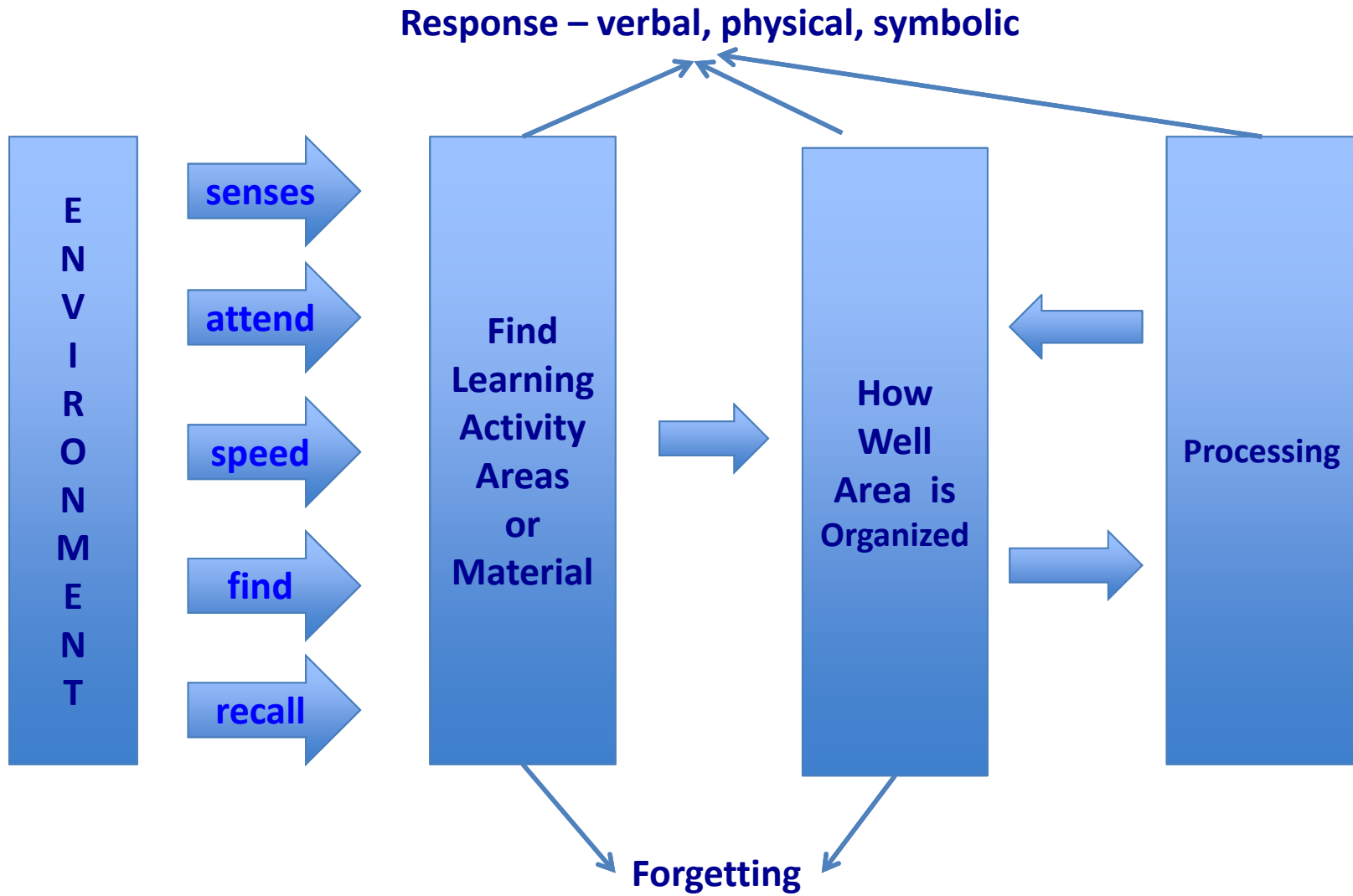
Acknowledge and Share Success

- **Staff share success**
  - **Bulletin board**
  - **Success book**
  - **Meetings**
  - **Documentation panels**
  - **Sharing sessions**
- **Can you think of any other strategies to use?**

Thinking and Learning and the Environment

Response – verbal, physical, symbolic

ENVIRONMENT

senses

attend

speed

find

recall

Find Learning Activity Areas or Material

How Well Area is Organized

Processing

Forgetting

Core Cognitive Activities as set by Organization of Environment

Labelling

Core Cognitive Activities as set by Organization of Environment

Logical

Providing Choices

Problem Solving

Familiar Settings and Realistic Materials
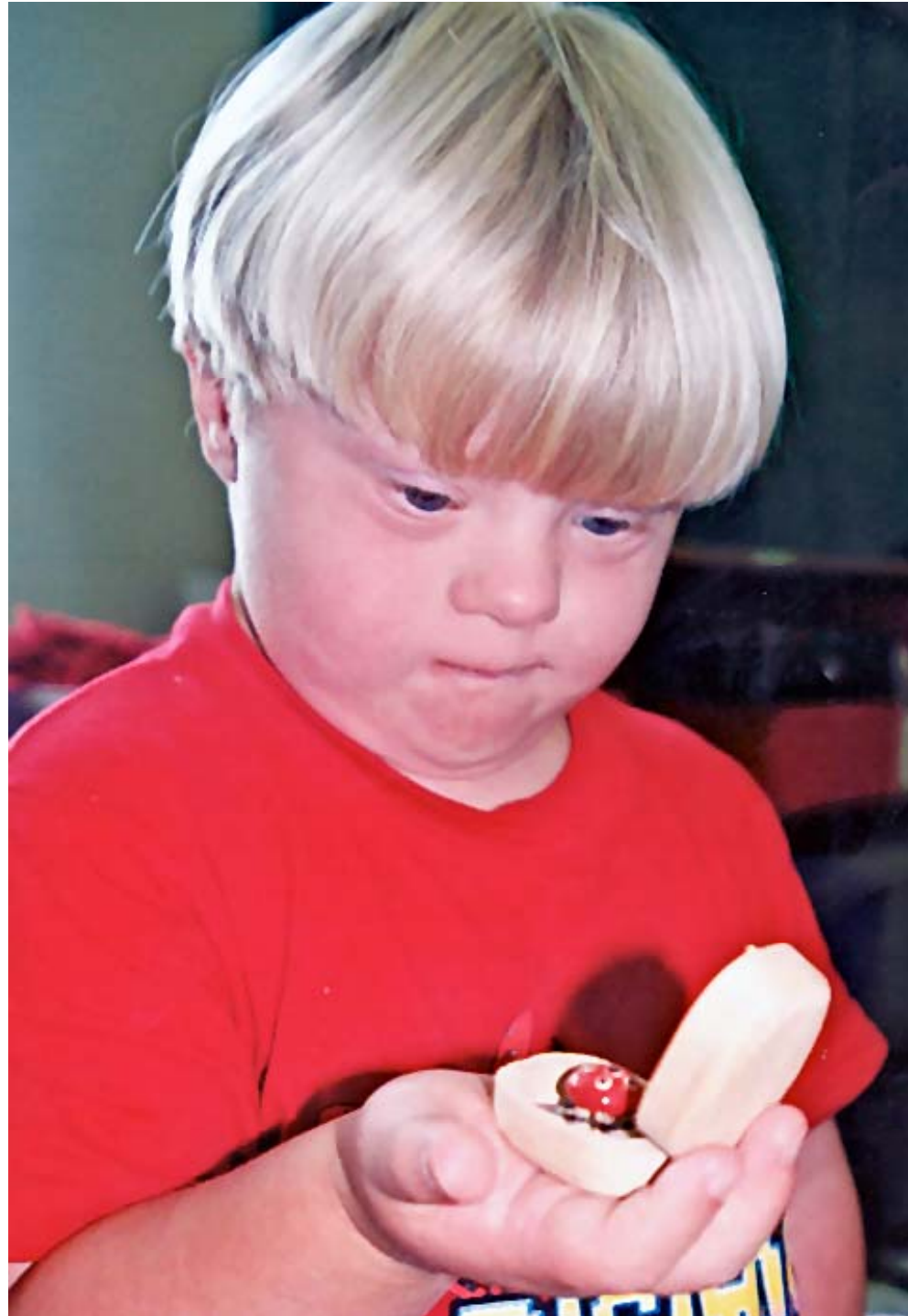
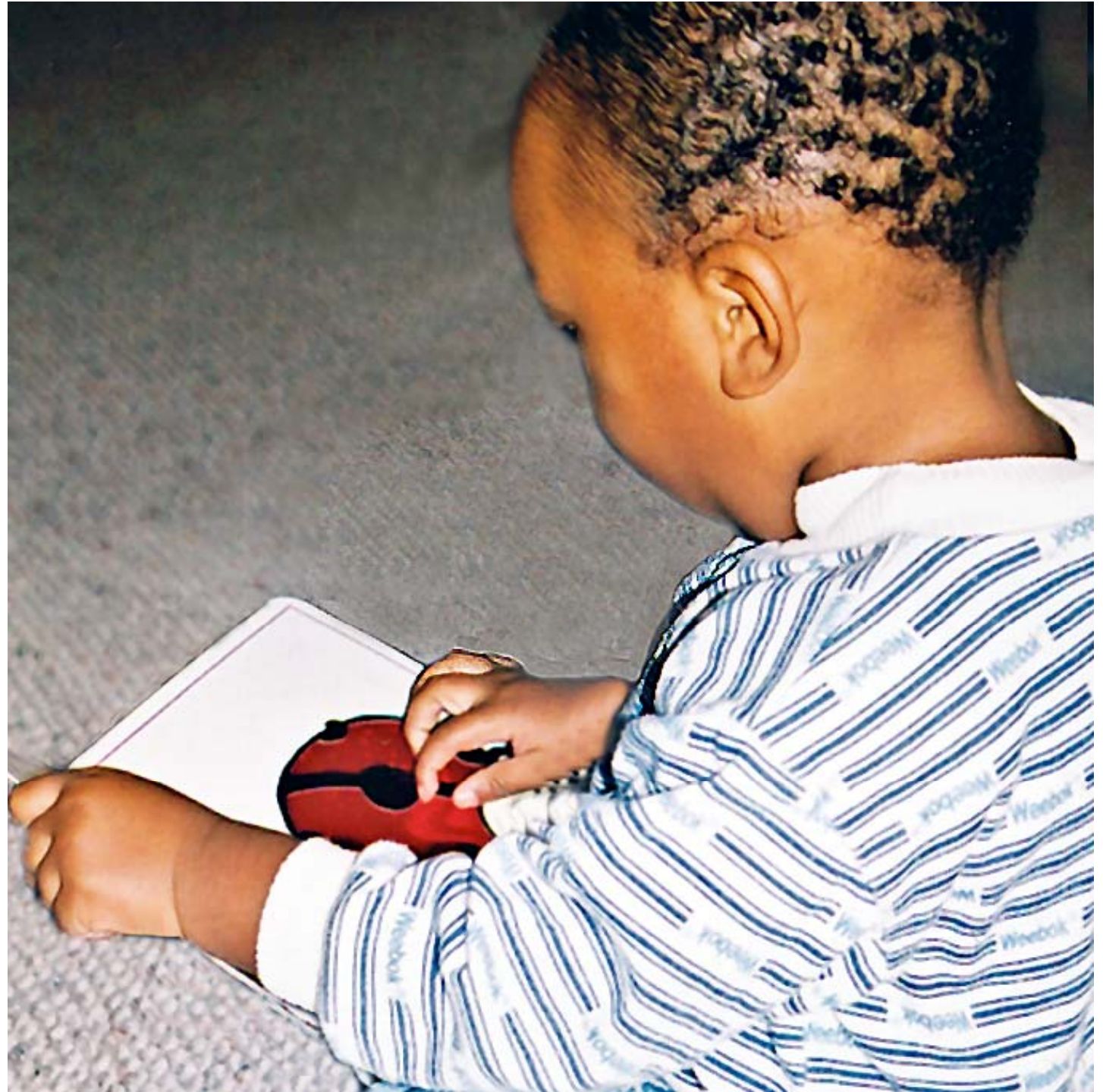# Familiar Settings and Realistic Materials

Process Oriented

Problem-Solving Skills

Evoke
Curiosity

Evoke Curiosity

Transfer Skills

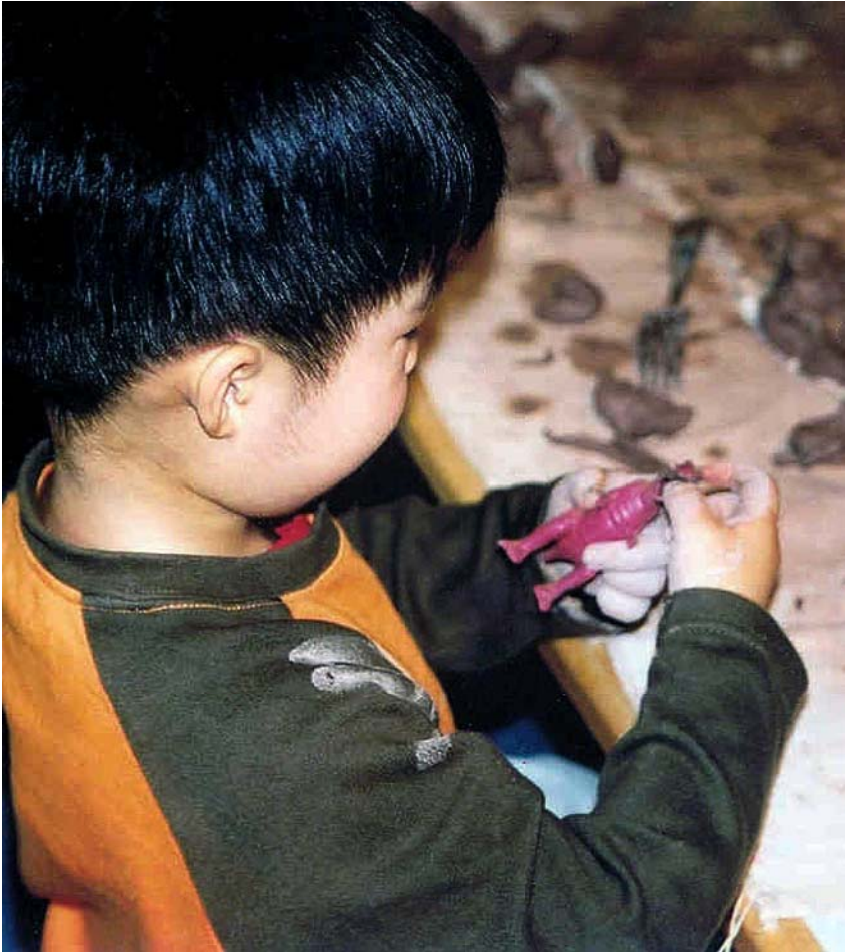# Mobility of Materials

Proximity of Learning Areas

Open-Ended

Parts and Wholes

Match, Sort, Label

Teachable Moments

References

- Crowther, I. (2011). Smart Environments. Lifelong Learn Inc.: Edmonton, Alberta.

- http://lifelonglearn.com

- Senge, P.; Kleiner, A.; Roberts, C.; Ross, R.; Roth, G.; Smith, B. (1999). *The Dance of Change.* Doubleday: New York

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