

Meaningful Learning

Internal and External Conditions

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John Dewey (“A technical definition of education”):

“It is that reconstruction or reorganization of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience.”

(Democracy and Education, 1916, p. 76)

Meaningful learning is a process in which the learner reorganizes his understandings and lays foundations for deeper understandings.

Or...

Meaningful learning is a process in which the learner lends new meaning to his mental contents – concepts, ideas, insights, attitudes, positions – that were learnt in the past, and opens paths for learning of more complex contents in the future.

Or...

Meaningful learning is a mental activity that happens in the present and reconstructs the learning that happened in the past and will happen in the future.

Your turn...

**Try to recall an experience of
meaningful learning: What were the
conditions that enabled it?**

ML = Involvement + Understanding

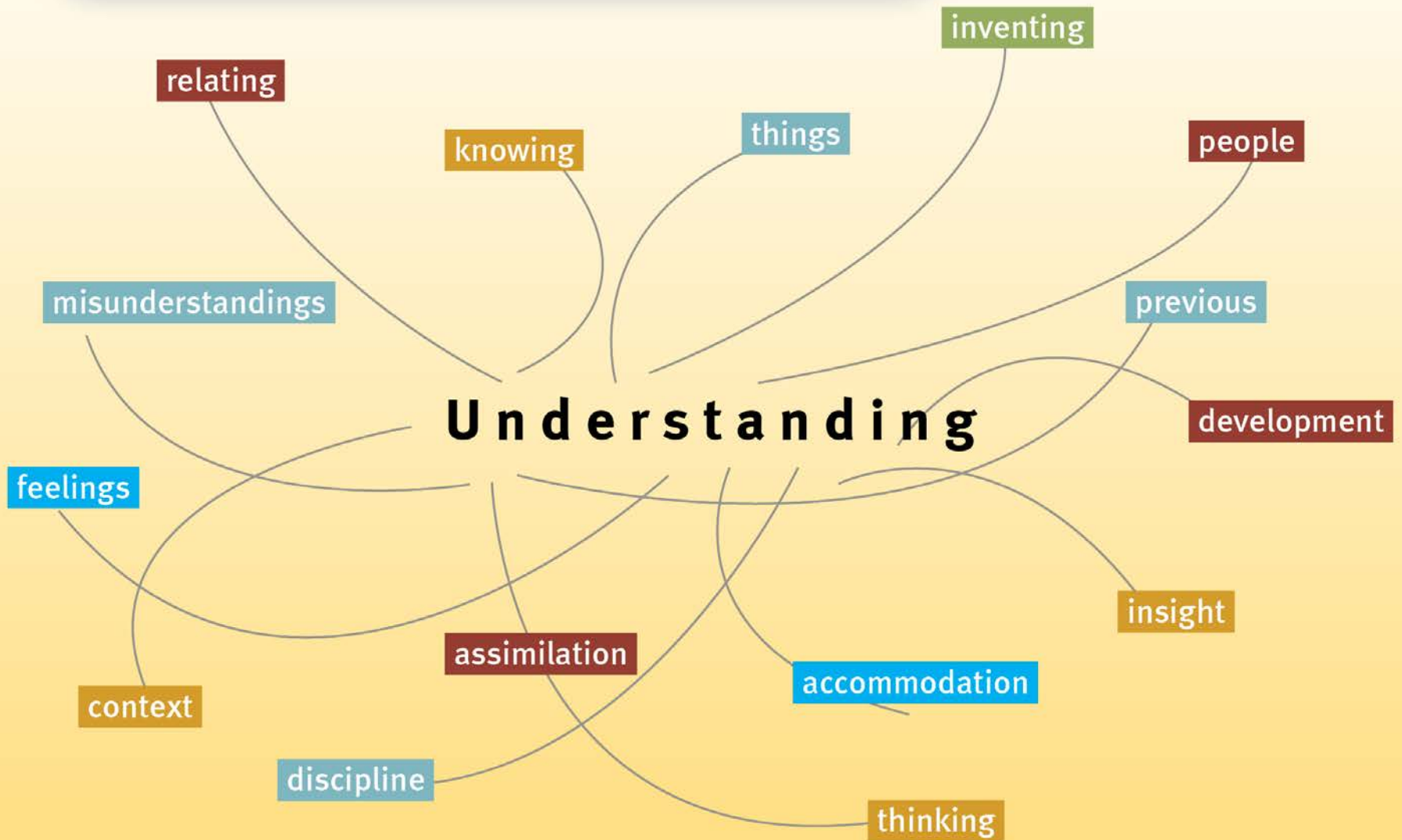
Ego involvement \neq Task involvement

(Extrinsic motivation \neq Intrinsic motivation)

Understanding as a conceptual net: Understanding is *adequate* and *systematic* relationships between phenomena or concepts.

(J. Dewey: “To grasp the meaning of a thing, an event, or a situation is to see it in its *relations* to other things.”
How We Think, 1933, p. 137)

THE INTERNAL CONDITIONS FOR MEANINGFUL LEARNING



Understanding as performance:

To present knowledge	To think on and with knowledge	To criticize and create knowledge
To express knowledge in your own words	To analyze and synthesize knowledge	To give reasons and justify knowledge
To explain knowledge	To apply knowledge	To expose contradictions and tensions in knowledge
To suggest interpretations of knowledge	To suggest example, metaphor, analogy, comparison	To question knowledge
To extract the essence of knowledge	To generalize from detailed knowledge	To reveal basic assumptions of knowledge
To represent knowledge in various ways	To contextualize knowledge	To formulate counter-knowledge
To present perspectives on knowledge	To predict on the basis of knowledge	To create knowledge on the basis of knowledge

Your turn...

**Perform understanding
performances on “understanding
as a conceptual net”**

Your turn...

What are the external conditions that enable the internal conditions (involvement + understanding) for meaningful learning?

The dimensions of the educational environment

Curriculum

Assessment

Climate

Teaching

Organization

Physical Structure

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Big ideas are worth understanding

Big (and great) ideas are rich in . . .

—> **Meaning** – explain a lot;

—> **Values** – shape moral sensitivity;

—> **Motivation** – drive learning (resonating and undermining);

—> **Culture** – stem from cultural tradition and develop it;

—> **Presence** – relevant to our life;

—> **Doing** – impact our behavior.

The dimensions of the educational environment

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School subject and discipline

The organization of knowledge	School subject	Discipline
Characteristics		
The aim	Transmitting knowledge	Creating knowledge
The preferred academic performance	Final examinations	Research work
The structure of questions	Closed questions	Open questions
The sources of knowledge	Secondary sources	Primary sources
The rules of knowledge choice	Choose the basic agreed-upon knowledge	Choose the areas of uncertainty and disputes
The deployment of knowledge	More topics in more school subjects	Fewer topics in fewer disciplines
The quality of knowledge	Pre-disciplinary; fragile knowledge	Disciplinary knowledge
The picture of knowledge	Reflection of reality	Improving the reflection of reality



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Realm of meaning

The organization of knowledge	Realm of meaning
Characteristics	
The aim	Understanding big ideas; motivation for deepening understanding
The preferred academic performance	A based understanding project
The structure of questions	Big questions derived from big ideas
The sources of knowledge	Primary and secondary
The rules of knowledge choice	Criteria of big ideas
The deployment of knowledge	Limited ideas in limited realms of meaning
The quality of knowledge	Understood, flexible, meaningful
The picture of knowledge	Relative but reasoned; a story that works



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In preparation for a lesson,
through the lesson, after the lesson

1. Formulate a very big idea and divide it into big ideas.
2. Derive from the very big idea a very big question and divide it to big questions.
3. Build your lesson on big idea/s and big question/s – resonate and undermine.
4. Anticipate before the lesson and capture during the lesson typical misunderstandings and treat them systematically.
5. Guide the student to demonstrate understanding performances.
6. Produce a climate of seeking understandings in the classroom.



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Assessment of ML

—> Formative

—> Informative

—> Mediative

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The guiding principle:
design the school organization on
the basis of the nature of learning
and not on the basis of the nature
of (traditional) teaching

The dimensions of the educational environment

Curriculum

→ Democratic

Teaching

Assessment

→ Dialogic

Organization

Climate

→ Supportive

Physical
Structure

→ Trustful

The dimensions of the educational environment

Curriculum

Teaching

Assessment

Organization

Climate

**Physical
Structure**

→ Enabling and promoting
understanding

→ Digital equipment

Your turn...

Discuss the internal and external conditions for meaningful learning

Yoram Harpaz

Teaching and Learning in a Community of Thinking

The Third Model

 Springer

Thank You!

Questions? Comments?

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