Transactional teaching and learning theory

Leif Östman
Uppsala university
Learning

**Constructivistic research** (Piaget): all learning starts from what one already knows ...: knowledge, skills, values, etc.

**Socio-cultural research** (Vygostsky): what you learn depends on the learning situation, what is offered, etc.
A pragmatist learning theory

William James
John Dewey
The Trajectory of learning

Short learning loop

Long learning loop

Habit

Human

Surrounding world

Disturbance

Problematic situation

Consolidation or enrichment of the habit

Solving the problem with the help of existing habit

Re-creation of the habit

New habit

Inquiry

Defining the problem

Experimentation

Solution: new knowledge, skills, values…

(Östman, Van Poeck & Öhman 2019)
Disturbance and a Problematic situation

Different kinds of **disturbances:**

- Practical: the hammer becomes broken
- Aesthetical: How to make a shadow in a painting
- Cognitive: what is the difference between weather and climate?
- Ethical: I don’t have time to bike ...
- ...
Learning

Earlier experiences:, knowledge, values, etc.

-- GAP --

New situation: phenomena, events

For example: in understanding, intelligibility ...
Learning = To bridge the gap

Earlier experiences: knowledge, values, etc

New situation: phenomena, events

Relation

= to use once earlier experience to make the new situation intelligible = to create a relation between once earlier experience and the new situation
No bridging = no learning
An example
Lena: Do they have any antennae?

Malin: No, they usually do though, don’t they? In cartoon films they usually have antennae.

Malin: Okay, if you put it like this: in all cartoon films I’ve seen, then bumblebees always have antennae.

Lena: Yes, they do.

Malin: An artist whose picture I’ve got. In her painting the bumblebee have got antennae. And she’s one of those that make perfect representations.
Lena: Do they have any antennae?

Malin: No, they usually do though, don’t they? In cartoon films they usually have antennae.

Malin: Okay, if you put it like this: in all cartoon films I’ve seen, then bumblebees always have antennae.

Lena: Yes, they do.

Malin: An artist whose picture I’ve got. In her painting the bumblebee have got antennae. And she’s one of those that make perfect representations.
Lena: **Do they have any antennae?**

Malin: No, they usually do though, don’t they? In *cartoon films* they usually have antennae.

Malin: Okay, if you put it like this: in all *cartoon films* I’ve seen, then *bumblebees* always have antennae.

Lena: Yes, they do.

Malin: An artist whose *picture* I’ve got. In her painting the bumblebee have got antennae. And she’s one of those that make *perfect representations*. 
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Malin: Okay, if you put it like this: in all cartoon films I’ve seen, then bumblebees always have antennae.

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Malin: An artist whose picture I’ve got. In her painting the bumblebee have got antennae. And she’s one of those that make perfect representations.
Learning a habit

To habitually:

1. focus on the right object: to stage a relevant environment out of the surrounding world (to find an ingredient list on the product)

2. To do something with this environment (comparing products) – inquiry – in order to achieve an expected outcome (to buy the most eco-friendly product)
Teacher moves

Interventions of the teacher that has desirable consequences regarding:

• Students staging of a relevant environment out of the surrounding world – *Moves that makes the students to set a relevant scene*

• Student doing something with the environment – *Moves that makes students to stage a relevant inquiry*
Gustav: This is the most boring experiment I’ve done in a long time, look nothing happens, it barely dissolves

*Teacher: Well then, write that down*

*Gustav: It barely dissolves ((Gustav looks at the teacher))*

*Teacher: Mmm*

Gustav: Now it says, now we shall take 20 grams more then …
### Teacher moves

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- **Epistemological moves** *(Lidar, Lundqvist & Östman 2006)*
- **Political moves** *(Van Poeck & Östman 2018)*
- **Ethical moves** *(Van Poeck, Östman & Öhman 2018)*

*(Östman, Van Poeck & Öhman 2019)*
Thanks for your attention!