Lesson 7. Constructivist models: toward a significate and self-regulated learning (SRL).

Learning, Development and Personality.

2nd Part: Educational Psychology

"Constructivism not only acknowledges the uniqueness and complexity of the learner, but actually encourages, utilizes and rewards it as an integral part of the learning process"

(Wertsch 1997)

¿What is Constructivism?

- Constructivism is a theory about how people learn.

- It says that people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences.

- When we encounter something new, we have to reconcile it **with our previous ideas and experience**, maybe changing what we believe, or maybe discarding the new information as irrelevant.

- We are **active creators of our own knowledge**.

Cosntructivism in the Classroom

- **Constructivist teachers** encourage students to constantly **assess** how the activity is helping them gain understanding.
- By questioning themselves and their strategies, students in the constructivist classroom ideally become **"expert learners."**
- This gives them ever-broadening tools to keep learning. The students learn **HOW TO LEARN.**

Putting constructivism into practice...

- Groups of students in a science class are discussing a problem in physics. Though the teacher knows the "answer" to the problem, he **focuses on helping students restate their questions** in useful ways. He **prompts each student to reflect on and examine his or her current knowledge**. When one of the students comes up with the relevant concept, the teacher seizes upon it, and indicates to the group that this might be a fruitful way for them to explore. They **design and perform** relevant experiments. Afterward, the **students and teacher talk about what they have learned**, and **how their performance helped (or did not help)** them to better understand the concept.

Learning process focused on teachers
vs
Learning process focused on students

- Constructivism does not dismiss the active role of the teacher or the value of expert knowledge.

- Constructivism modifies that role, so that **teachers help students to construct knowledge rather than to reproduce a series of facts.**

- The constructivist teacher provides tools such as problem-solving and inquiry-based learning activities with which students formulate and test their ideas, draw conclusions and inferences, and pool and convey their knowledge in a collaborative learning environment.

- Constructivism transforms the student **from a passive recipient of information to an active participant** in the learning process.

"I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!"

¿What is Self-Regulated Learning - SRL?

- Nowadays, one of the most important constructivist approaches to learning is The Self-Regulated Learning Theory:

"Self-regulation is not a mental ability or an academic performance skill; rather it is the self-directive process by which learners transform their mental abilities into academic skills."

Zimmerman, B.J. (2002). Becoming a self-regulated learner: An overview.*Theory Into Practice,* 41 (2), 64-70.

Zimmerman´s SRL Model

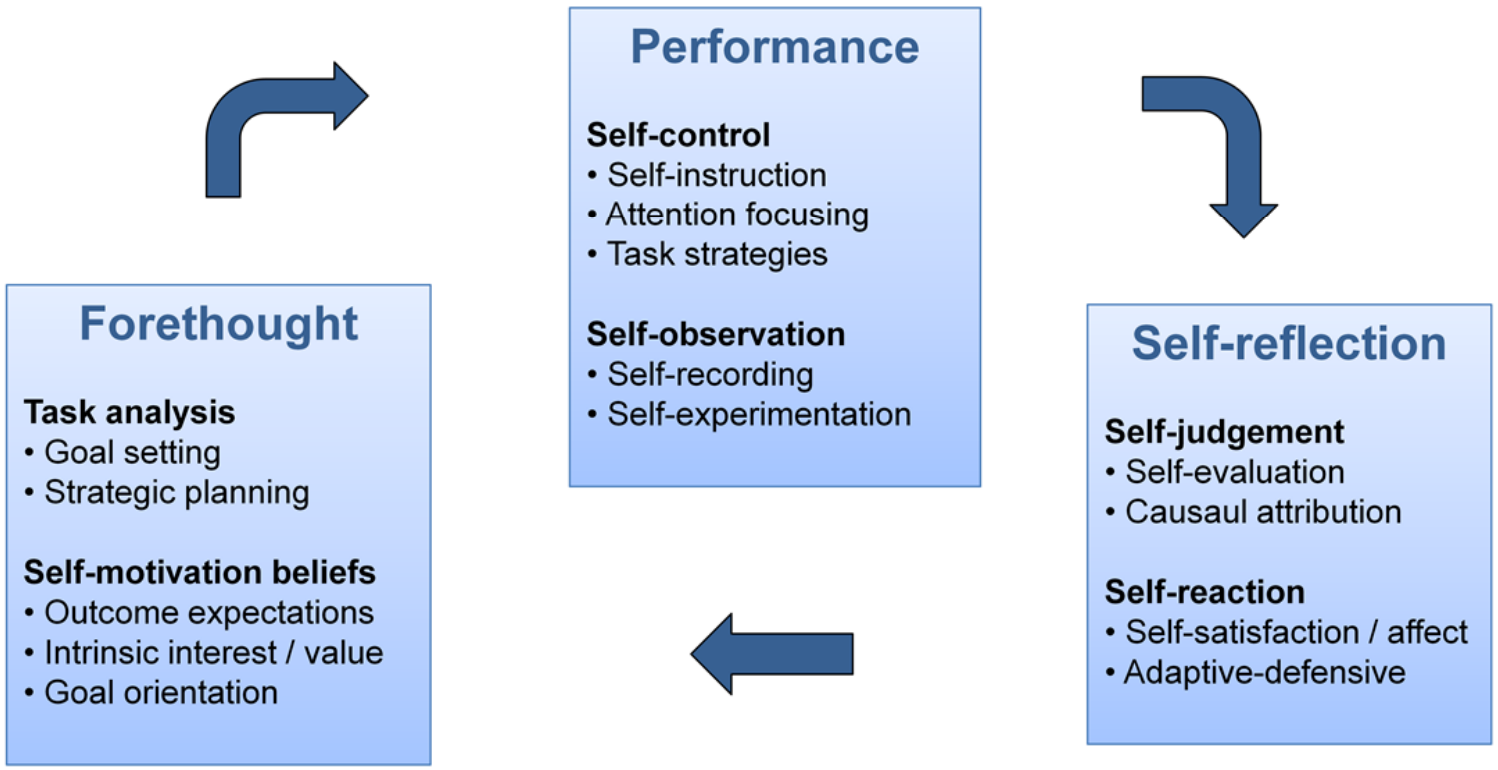
- Zimmerman suggested that self-regulated learning process better with three stages:
  - Forethought,learners' preparing work before performance on their studying.
  - Volitional control, which is also called "performance control", occurs in the learning process. It involves learners attention and willpower.
  - Self-reflection,happens in the final stage when learners review their performance toward final goals. At the same time, focusing on their learning strategies during the process is also efficient for their final outcomes.

Zimmerman´s SRL Model

- Two research findings are highlighted:
  - self-regulation of learning involves more than detailed knowledge of a skill
  - it involves the self-awareness, self-motivation, and behavioral skill to implement that knowledge appropriately

SRL Learning Process

Self-regulated learning (Zimmerman & Campillo, 2003)



SRL from the social cognitive perspective

- Self-regulation from the social cognitive perspective looks at the triadic interaction among the **person** (e.g., beliefs about success), his or her **behavior** (e.g., engaging in a task), and the **environment** (e.g., feedback from a teacher).
- Zimmerman specified three important characteristics of self-regulated learning:
  - **self-observation** (monitoring one's activities); seen as the most important of these processes
  - **self-judgment** (self-evaluation of one's performance)
  - **self-reactions** (reactions to performance outcomes)

SRL strategies in practice I

- **Self-Assessment:** fosters planning, assess what skills the learner has and what skills are needed. Allows students to internalize standards of learning so they can regulate their own learning.

- **Wrapper Activity:** activity based on pre-existing learning or assessment task. This can be done as a homework assignment. Consist of self-assessment questions to complete before completing homework and then after completion of homework. This will allow the learner to draw their own conclusions about the learning process.

SRL strategies in practice II

- **Think Aloud:** This involves the teacher describing their thought process in solving a problem.

- **Questioning:** Following new material, student develop questions about the material.

- **Reciprocal Teaching**: the learner teaches new material to fellow learners.

SRL strategies in practice III

- Other tasks that promote self-regulated learning are authentic assessments, autonomy-based assignments, and portfolios.
- These strategies are **student-centered and inquiry based**, which cause students to gradually become more autonomous, creating an environment of self-regulated learning.
- Students do not simply need to know the strategies, but **they need to realize the importance of utilizing them** in order to experience academic success.


CLASS, ALL YEAR LONG, I'VE TAUGHT EACH OF YOU TO LEARN AT YOUR OWN PACE IN YOUR OWN PERSONAL STYLE.
I'VE SET GOALS FOR EACH OF YOU, INDIVIDUALLY, TO HELP YOU REACH YOUR OWN UNIQUE POTENTIAL. AND NOW THE RESULTS OF THAT WILL BE MEASURED.
WITH A STANDARDIZED TEST.
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