

Cognitive, research ad learning theory

[Education](#), [Learning](#)



The diversity in classrooms today challenges teachers to develop cultural and social competencies together with keeping current with the developing theories in learning and education. For example, in Avram Noam Chomsky's study of the language development, which can be extended to the process of learning any body of knowledge, he points out that language can not be learned by conditioning or stimuli alone (Sylwester, 2005).

This suggests that need to develop associations regarding the meaning and concept of objects: for a child to learn that the earth is the third planet from the sun, the concept of ordinal order must first be established. Thus, Jean Piaget suggest that learning programs should be student centered to support the individual cognitive capacity and methodology (Gardner, 2006).

The case of presented by Maria Testoni's sixth-grade class reflects this challenge: the diversity in learning styles, academic skills and ethnicity as well as their work habits, behaviors and levels of participation requires the development of approaches unique to the child (Griffin et al, 2003).

However, in reality, there are significant constraints in doing so in terms of resources, expertise and time. Thus, there is a need for teachers to strategize their methods. In Maria's case, one approach is to utilize a cognitive perspective for the learning theories that will serve as the foundation of her strategies.

1. What factors are influencing students' assimilation and accommodation?
2. What are the commonalities and contrasts of students' schema or context?

3. What are the modalities of methods of accommodation?
4. How can mental processes of learning be mapped?
5. Are there typologies to characterize the population based on individual characteristic of students?
6. Can the cognitive evaluation of students provide insights to current behavior and performance in class?

In the use of cognitive theory and research and learning theory, Maria's focus will be in understanding the mental processes of her students.

Cognition, suggests that there is learning occurs through the process of generative development (Cronin& Mandich, 2004). In using this as a leaning theory, Maria will have to consider the existing competencies of her students and the curriculum she is creating for them.

This will then consider observed behavior become secondary in the evaluation (Sylwester, 2005). The approach can limit behavioral factors in the assessment which can be extraneous to evaluate. Thus, the process of cognition is considered to influence behavior rather than behavior influencing the level of cognition (Griffin et al, 2003).

In general, cognition and its related learning perspectives reject the majority of behaviorist views on the process of learning (Cronin& Mandich, 2004). They highlight that learning goes beyond the stimuli-response process and depends more on the individual's cognitive processes. As Maria proceeds with the assessment, she will see the significance of the cognition in her students' performance in class.

In conclusion, insights regarding the manner by which individual students create their network of concept relationships can allow Maria to create exercises of lectures that will subscribe to students' needs. In doing so, the cognition process of the child only has to assimilate information rather than accommodate it. At the same time, if the cognitive methods of students have varies highly, the same insights on concept relationship networks can also be used to reinforce accommodation of knowledge.

References

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