

Learning Theories

A Guide to Common Theories in Education

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What are Learning Theories?

Learning theories describe the way people receive, process, and retain information. They seek to explain the way our brains acquire and store new information through our experiences and interactions with the world around us. They help us understand how people make mental models out of information in the acquisition of new knowledge.

Learning theories inform instructional design, helping us to apply theory to practice and create meaningful learning experiences for our students. There are three primary learning theories that currently shape instructional design: behaviorism, cognitivism, and constructivism.

Behaviourism

Learning and behaviour changes are acquired by linking stimuli and response

Cognitivism

Learning is internal and is a result of a student processing and organising new information

Constructivism

Knowledge is constructed by adapting new information based on previous experience



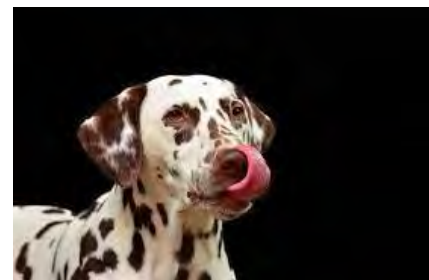
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What is Behaviorism?

Behaviorism focuses on the individual's interactions with the environment. As behaviors are positively or negatively reinforced, an individual's behavior changes to adapt. Behaviorists thus believe that we can modify behaviors through manipulating one's environment.

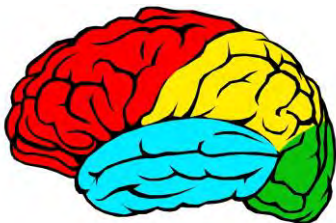
In education, this means an instructor-centered approach in which the learning environment acts on the learner to create desired stimulus-response scenarios. For example, breaking down a procedure into small parts and demonstrating it in increments until the learner demonstrates the desired behaviors.

A limitation with a behaviorist approach is dependency on the stimulus-response approach. If the applied stimulus fails to prompt the appropriate response, it can limit the learner's ability to learn as desired.



What is Cognitivism?

Cognitivism focuses on the mental processes of the brain, thinking of the learner as a data processor. It views learning as an internal process guided by the learners themselves.



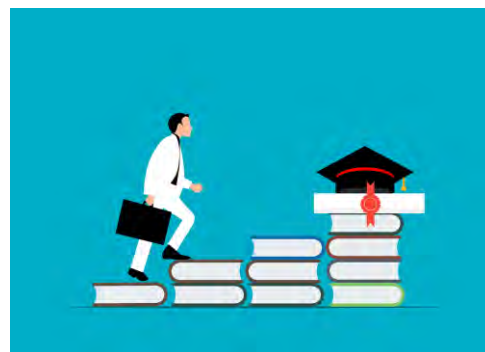
Cognitivism focuses on a series of mental activities that take place when individuals learn new information. This process is broken down into segments such as perception, executive processes, working memory, encoding, and long-term memory¹. Popular theories that come from cognitivism include Cognitive Load Theory and Self-Regulated Learning.

In education, this means working to transfer knowledge to the learner in the most efficient way possible to ease the load of processing and ensure encoding into long-term memory. This is a learner-centered approach, considering the individual's capabilities and the tasks required of them to learn new material.

What is Constructivism?

Constructivism focuses on reflection and active processing of new information. It is a learner-centered approach in which learners make sense of information by processing it in relation to prior knowledge to construct an interpretation².

Constructivist approaches require a more hands-on approach by the instructor, moving them from sharer of information to facilitator of interpretation. Creation of knowledge comes from a continuous dialogue between the instructor and learner, focusing on the learner's interpretation of the information as shaped by their interactions with others.



All learning theories have their limitations. However, each helps us better understand how people may learn and offer guidance on how to construct learning experiences. For more information or to work with an instructional designer, please contact us at educational_improvement@mcw.edu.

REFERENCES

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