

Cognitivism

Nick Wright

Rani Waymon

Amanda Rutherford

Mental Search

I'm Feeling Lucky

Cognitivism



- I. Definition and Learning
- II. History and Contributors
- III. Application to Instructional Design

What is Cognitivism?

Cognitivism is a way of both teaching and learning in which the focus is what is going on in the mind.

As opposed to behaviorism which focuses on stimulus and response, Cognitivism focuses on ones ability to recall information that has been stored in memory.

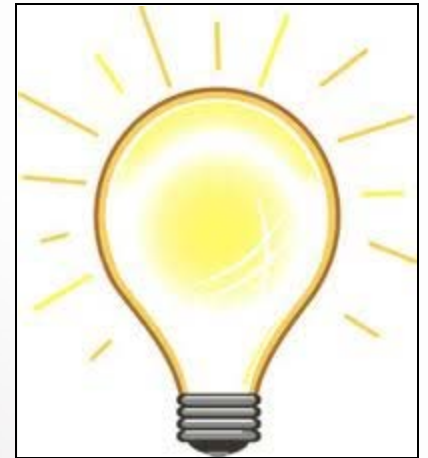


How does one learn under Cognitivism?

Learning occurs when knowledge changes from raw data to organized information.

Learning is influenced by several factors:

- Environmental conditions
- Instructional definitions
- Demonstrations
- Examples and non examples



Transfer occurs when a learner realizes how to apply the organized information in their mind to different situations

Memory's role in Cognitivism

Memory under the cognitive theory is very similar to that of a computer or database.

- Data is input
- The data then becomes organized
- The data becomes readily available when it is recalled



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Here is a brief history of Cognitivism.

1950

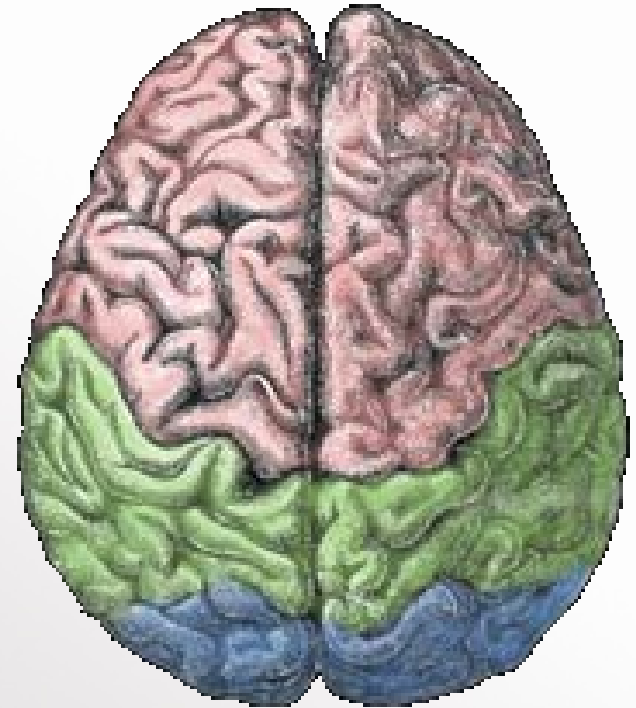
- Scientists and researchers criticize the simplicity of behaviorism

1960's

- The behaviourist perspective could not easily explain why people attempt to organize and make sense of the information they learn.

1970-1990

- Cognitivism compared to computation



Here are a few contributors to the field of Cognitivism.

Jean Piaget- coined the term “schema”

Kurt Lewin- learning is an effect of information being reorganized in your brain

Robert Gagne - information processing theory

Benjamin Bloom - domains of learning

R.C. Anderson - applied and developed the idea of schema

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How can Cognitivism be applied to Instructional Design?

Cognitive theory says that information is stored in the brain in schema, or small chunks of information therefore the approach to instructional design is to divide the instruction material into relatable groups.

Things that make logical sense to us are easier to remember.

Instructional design using the Cognitive Theory puts a large emphasis on active involvement.

The following principles are some common characteristics of cognitive theory within instructional design:

- Use of hierarchical analysis
- Emphasis on structuring, organizing, and sequencing information
- Creation of learning environments that allow and encourage students to make connections.

Here are a few examples of applied theory.

Making knowledge meaningful and helping learners organize and relate new information.

Instructional material that goes back and draws on previous knowledge and references previously learned knowledge—it builds on itself.

Use of familiar procedure to put unfamiliar information together.

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Summary

- Cognitivism focuses on ones ability to recall information that has been stored in memory
- It follows behaviorism and focuses on the organization of information in the mind
- It calls for teaching that follows some logical pattern

Questions?

The End