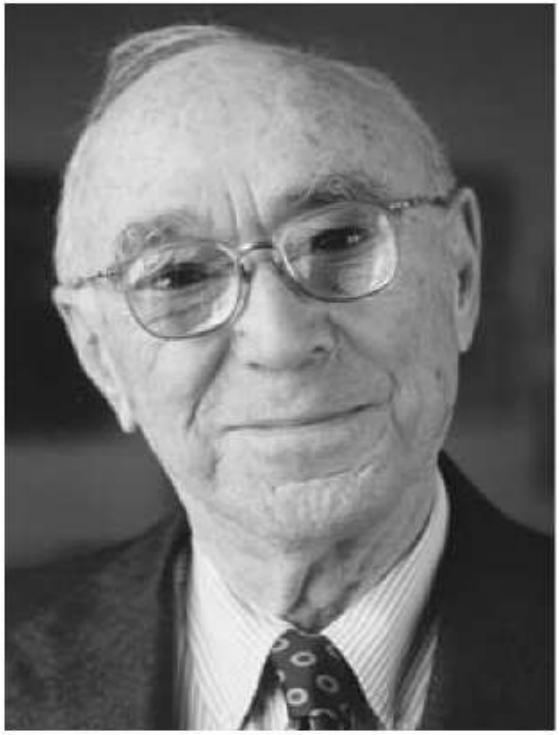
JEROME BRUNER

DISCOVERY LEARNING MODEL

JERMONE BRUNER



- Bruner is an American psychologist who has made great strides in the human cognitive psychology field in addition to the cognitive learning theory.
- At the age of 100, he's a senior research fellow at New York University School of Law and still teaches courses.
- Bruner is widely known for his early research on sense and perception as active processes rather than passive
- He's also well known for his discovery learning model which implies that students construct their own knowledge for themselves.

BRUNER'S ROLE IN DEVELOPMENTAL AND EDUCATIONAL PSYCHOLOGY

- In 1967, Bruner turned his attention to the subject of developmental psychology and studied the way children learn – believed that learning is supposed to be *active*.
- Coined the term "scaffolding" to describe the way children often build on the information they have already mastered.
- In 1966, Bruner proposed three modes of representation for learning (these integrate into one another):
  - enactive representation (action-based), iconic representation (image-based), and symbolic representation (language-based).
- Introduced "The Discovery Learning Model"
  - Encourages learners to build on past experiences and knowledge, use their intuition, imagination and creativity, and search for new information to discover facts, correlations and new truths.
  - Learning does not equal absorbing what was said or read, but actively seeking for answers and solutions.

DISCOVERY LEARNING MODEL

The Discovery Learning Model integrates the following five principles:

Principle 1: *Problem Solving*

Instructors should guide and motivate learners to seek for solutions by combining existing and newly acquired information and then simplifying knowledge. Learners take an active role and establish broader applications for skills through activities that encourage risks, problem-solving and probing.
Ex. Understanding how to simplify difficult concepts in subjects as mathematics or English

Principle 2: *Learner Management*

Instructors should allow participants to work either alone or with others, and learn at their own pace. This learning strategy is the exact opposite of a static sequencing of lessons and activities, which relieves stress and makes them feel they own learning.
Ex. Learning how to work alone and in groups – to see how their learning skills grow

LEARNING MODEL PRINCIPLES

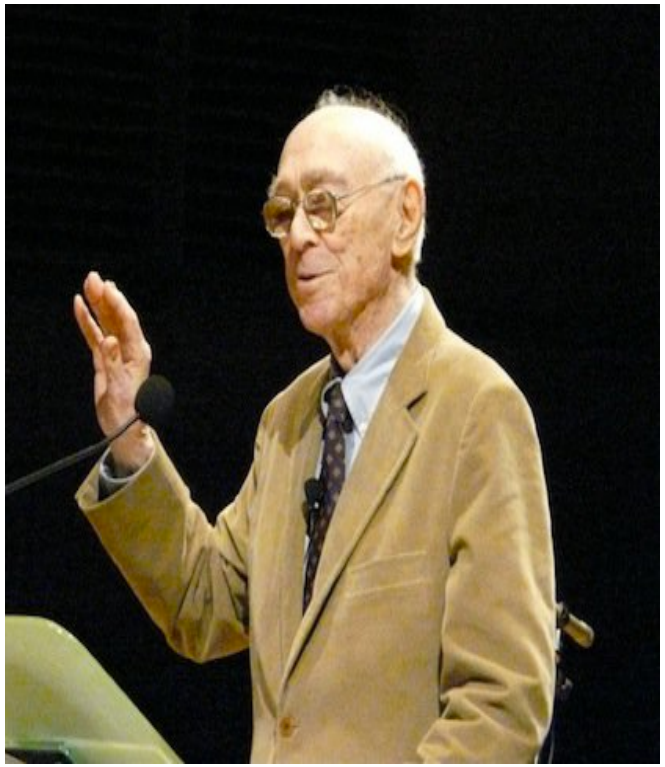
Principle 3: *Integrating and Connecting*

Instructors should teach learners how to combine prior knowledge with new, and encourage them to connect to the real world. Familiar scenarios become the basis of new information, encouraging learners to extend what they know and invent something new.
Ex. Solving an issue with a friend – learning how to reconcile arguments

Principle 4: *Information Analysis and Interpretation*

Discovery learning is process-oriented and not content-oriented, and is based on the assumption that learning is not a mere set of facts. Learners in fact learn to analyze and interpret the acquired information, rather than memorize the correct answer.
Ex. Completing a projects v. preparing for tests

LEARNING MODEL PRINCIPLES



Principle 5: Failure and Feedback

Learning doesn't only occur when we find the right answers. It also occurs through failure. Discovery learning does not focus on finding the right end result, but the new things we discover in the process. And it's the instructor's responsibility to provide feedback, since without it learning is incomplete.

Ex. Making mistakes on classwork or homework assignments

IMPLEMENTING IN THE CLASSROOM

Discovery learning model objective: learners reach the end result on their own.

- The discovery learning educational sessions should be well-designed, highly experiential and interactive.
- Instructors should use stories, games, visual aids and other attention-grabbing techniques that will build curiosity and interest, and lead learners in new ways of thinking, acting and reflecting.
- By exploring and manipulating situations, struggling with questions and controversies, or by performing experiments, learners are more likely to remember concepts and newly acquired knowledge.

DLM has a few drawbacks to its structure:

- It needs a solid framework- there's a continual seek for answers
- It shouldn't be used as a main instruction method, because it has limitations in practice and might produce inadequate education.