

How Jerome Bruner Transformed Psychological Science

June 14, 2016



Legendary APS William James Fellow Jerome Bruner passed away at the age of 100 on June 5, 2016. His groundbreaking contributions to cognitive, educational, and perceptual psychology have had transformative effects on the field as a whole, as well as effects on fields such as anthropology, neuroscience, and linguistics. Often considered a founder of the cognitive revolution, many of Bruner's ideas seem almost intuitive now, but at the time, they challenged the basic principles of scholarship and education. Bruner pushed for teaching children fundamental structure over simple facts and advocated for educating children on any subject material at any stage in development as long as it was taught effectively and with gradually increasing difficulty.

In his seminal research, Bruner established the three modes of knowledge acquisition: enactive or action-based learning, iconic or image-based learning, and symbolic or language-based learning. In contrast to Jean Piaget's developmental theory, Bruner's theory allowed for the various stages and types of learning to co-occur, develop simultaneously, and translate into each other rather than denoting rigid chronological time points for the beginning and ending of developmental stages. In 1960, Bruner published *The Process of Education*, in which he made the principal argument that students are active learners in the education process, constructing their own knowledge as they grow rather than simply being imparted knowledge from teachers and professors. He developed the concept of discovery learning, or the constructivist approach, to explain a student's active component in the learning process.

Bruner's research also emphasized the social nature of learning and effectively established the term "scaffolding" in the literature alongside David Wood and Gail Ross. That concept takes into account the social components of the teacher-student environment and explains the fundamental practices of tutoring and teaching.

Finally, Bruner's research emphasized the importance of language in development and argued that infants are intelligent and active problem solvers with the intellectual abilities of adults, and that by learning language, children can code stimuli and develop a complex and flexible cognition that enables

them to develop their understanding of the world around them.

To see a 2013 interview with Jerome Bruner on his legacy as a psychological scientist, visit his “[Inside the Psychologist’s Studio](#)” session. And look for a collection of remembrances in an upcoming issue of the *Observer*.