

Constructivism and the Progress of Science Education

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Abstract

In contrast to traditional theories of science education, constructivism emerges as a new “paradigm.” This paper attempts to analyze the influences of constructivism on the progress of science education. Among a variety of constructivisms is that which Jean Piaget initiates to connect his epistemological constructivism with science education in his studies of children’s conceptions of nature, etc. Under Piaget’s influence, Thomas Kuhn reflects on the progress of science in terms of “paradigms,” or the revolutionary achievements of great scientists, in his work, *The Structure of Scientific Revolutions*. Through an analysis of the combined influences of Piaget and Kuhn, the author offers his own reflection on the contributions of constructivism to the progress of science education, particularly in the aspects of educational ends, children-centered points-of-view, teacher-student relationships, and the value of democracy.

Key Words: Constructivism, Piaget, Thomas Kuhn, scientific progress, progress of science education