

Learning Progressions as Tool for Curriculum Development: Lessons from the Inquiry Project

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—(2012). In A. Alonzo & A. Gotwals (Eds.), *Learning Progressions in Science*. Alonzo, A.C., & Gotwals, A.W. (Eds.) Rotterdam, The Netherlands: Sense Publishers.

Summary

Cognitively-based curricula may take into account research on students' difficulties with a particular topic (e.g., weight and density, inertia, the role of environment in natural selection) or domain-general learning principles (e.g., the importance of revisiting basic ideas across grades). Learning progressions (LPs) integrate and enrich those approaches by organizing students' beliefs around core ideas in that domain, giving a rich characterization of what makes students' initial ideas profoundly different from those of scientists, and specifying how to revisit those ideas within and across grades so that young children's ideas can be progressively elaborated on and reconceptualized toward genuine scientific understanding.

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