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Does theory have any point?

Math. Sch. (Leicester) 39, No. 5, 2-9 (2010).

Summary: The article is just about the best overview I have come across of the influences educational theorists have had on mathematics teaching over the past half-century, ranging from the behaviourism of Skinner to the developmental psychology of Piaget and Vygotsky, around Bruner's spiral curriculum, touching on Dienes' hands-on approach and rising through the Van Hiele levels and beyond. What did these theorists have to say, and why, how has that impacted on our understanding of how children learn mathematics and what does it mean for the classroom? The author provides many an insight.

Classification: C30 D20 D40

Keywords: learning theories; theory of mathematics education; didactics of mathematics; history; behaviourism; mathematics and philosophy; mathematicians; Piaget; cognitive development; Vygotskyian theory; zone of proximal development; Bruner; spiral curriculum; Zoltan Paul Dienes; Van Hiele levels; implications for teaching; constructivism; multiple representations; modes of representation; sciences of education; pedagogy; theoretical models; theory building; research