Title: The Ubiquitous Bell Curve: What it does and doesn't tell us

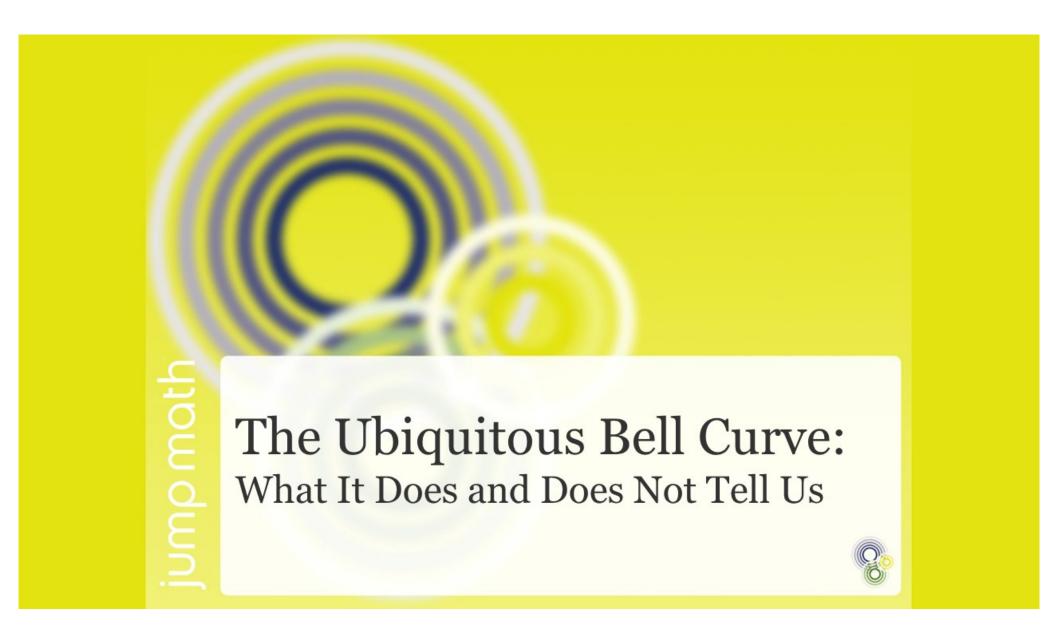
Date: Jun 02, 2010 07:00 PM

URL: http://www.pirsa.org/10060096

Abstract: The Bell Curve is an extremely beautiful and elegant mathematical object that turns up  $\hat{a}$ €" often in surprising ways  $\hat{a}$ €" in all spheres of human life. The Curve was first used by astronomers to correct errors in their observations, but it soon found important applications in the social and medical sciences in the eighteen hundreds. Some philosophers believe that a new kind of human being was created around this time largely due to the growth of statistical reasoning in the arts and sciences. Dr. Mighton will speak about the consequences of this new way of thinking about people, and further insights from his play called  $\hat{a}$ € $\hat{c}$ Risk $\hat{a}$ ۥ, in which he is dramatizing these ideas.

The Bell Curve also figures prominently in education as our school system is based on the implicit belief that there are natural, wide bell curves in achievement in students. In this lecture, Dr. Mighton will share evidence that this belief is false and he will describe how the arts and sciences, and society in general, might benefit if we rejected this belief.

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## jump math

## Pascal's Triangle

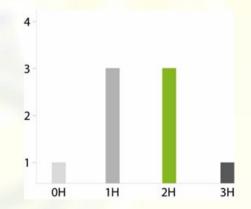
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Row 1 1 1
Row 2 1 2 1
Row 3 1 3 3 1
Row 4 1 4 6 4 1
Row 5 1 5 10 10 5 1
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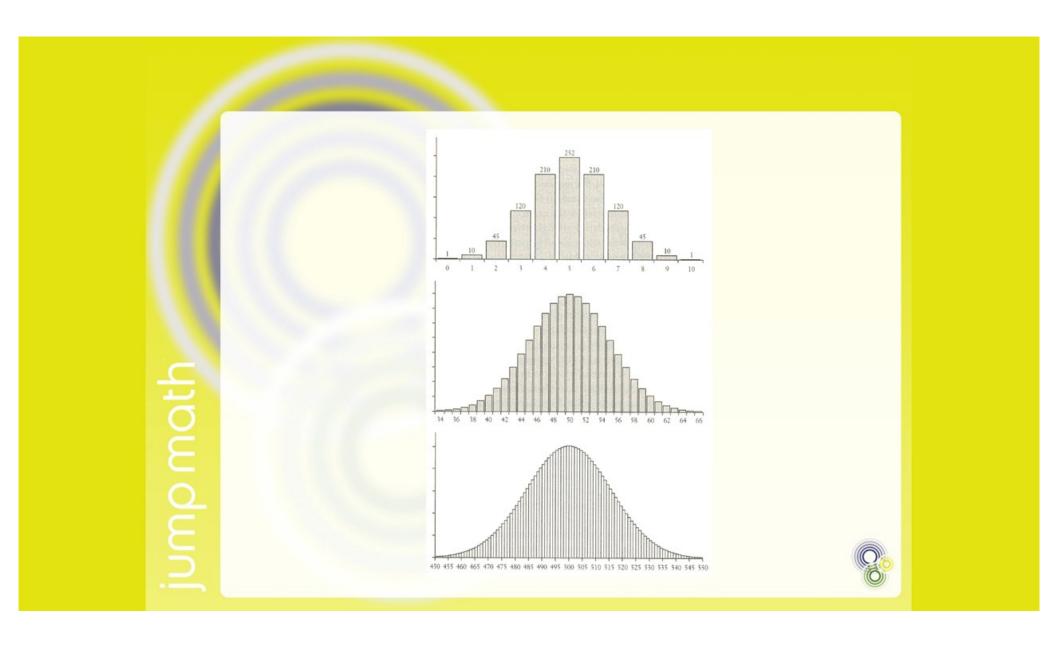
### **Tossing a Coin Three Times**

Three Heads	Two Heads	One Head	No Heads
ннн	ТНН	нтт	TTT
	нтн	THT	
	ннт	TTH	

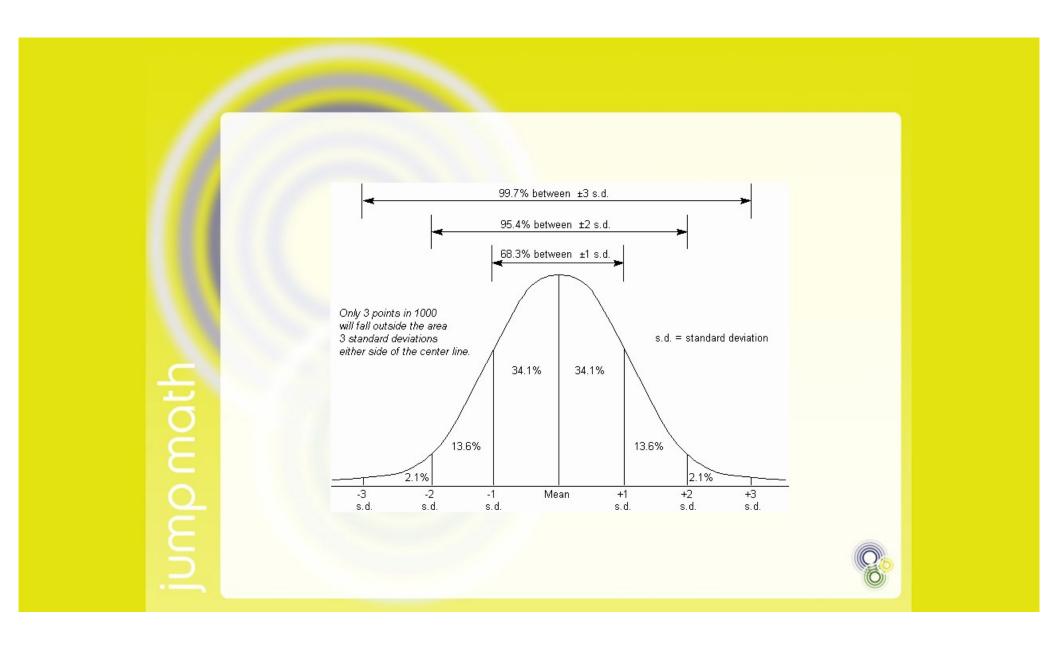
jump math



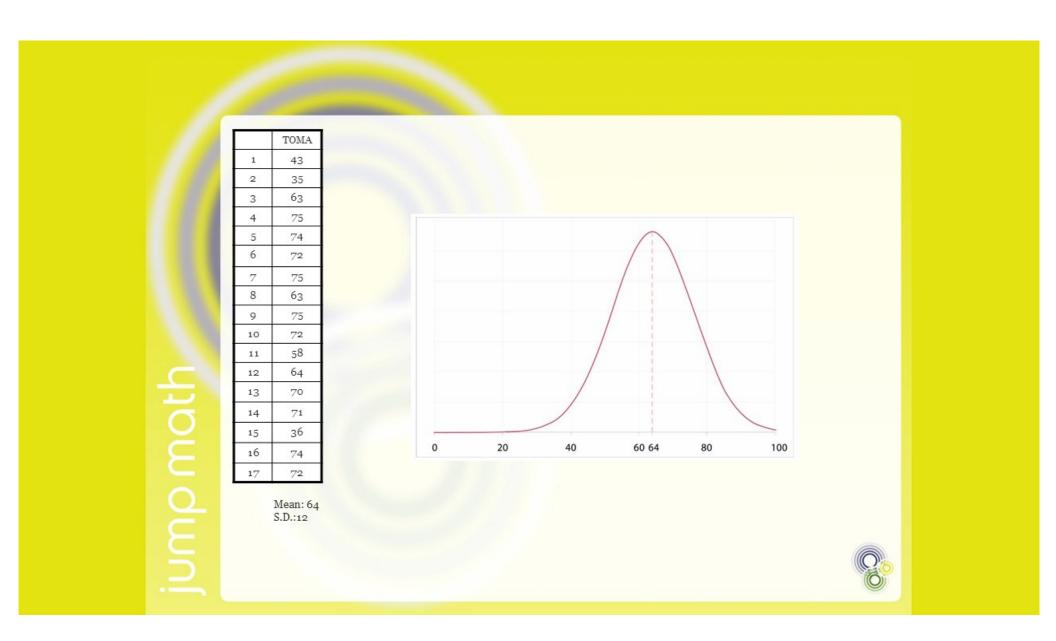


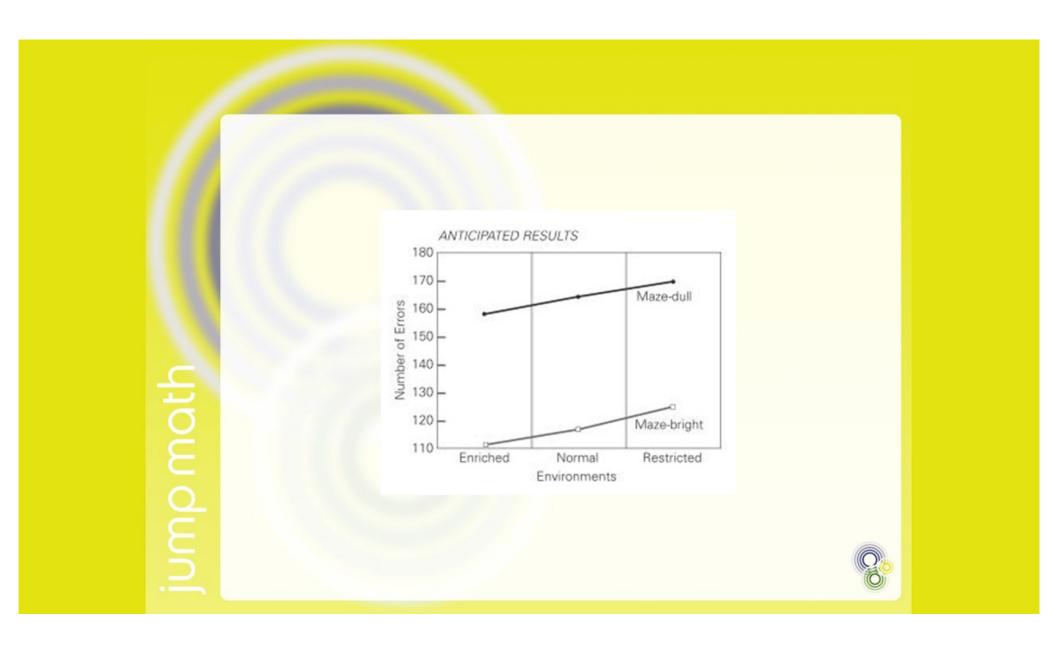


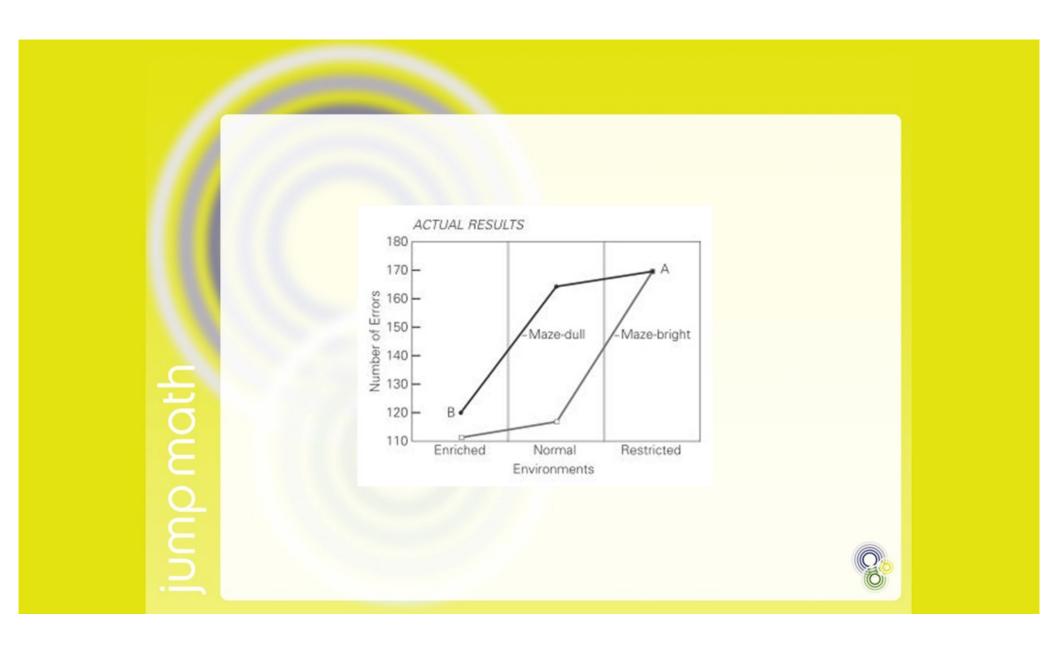
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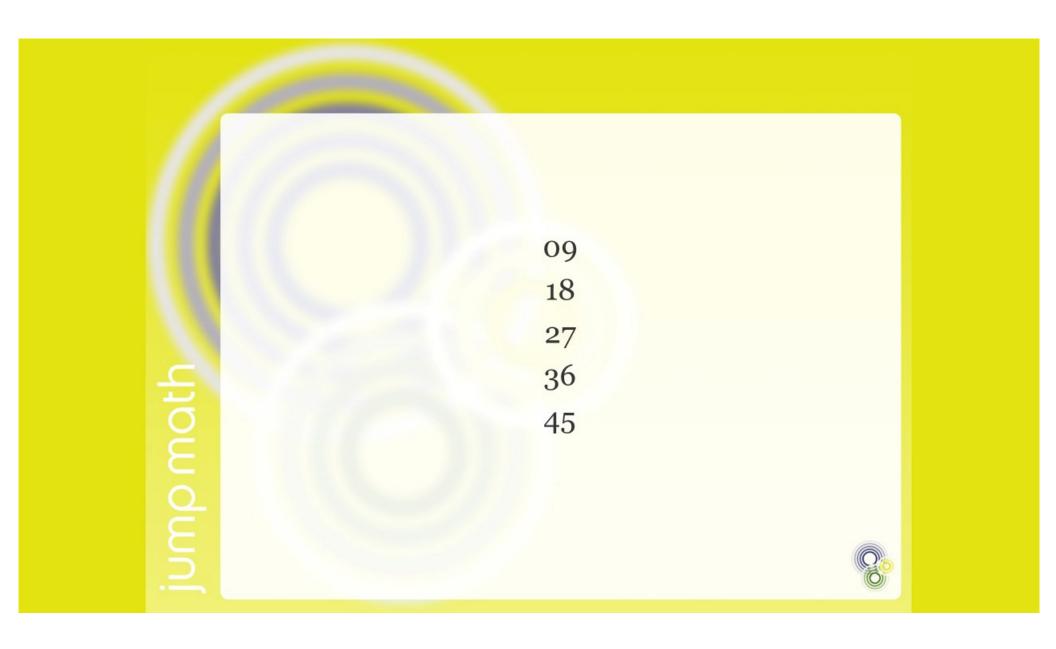


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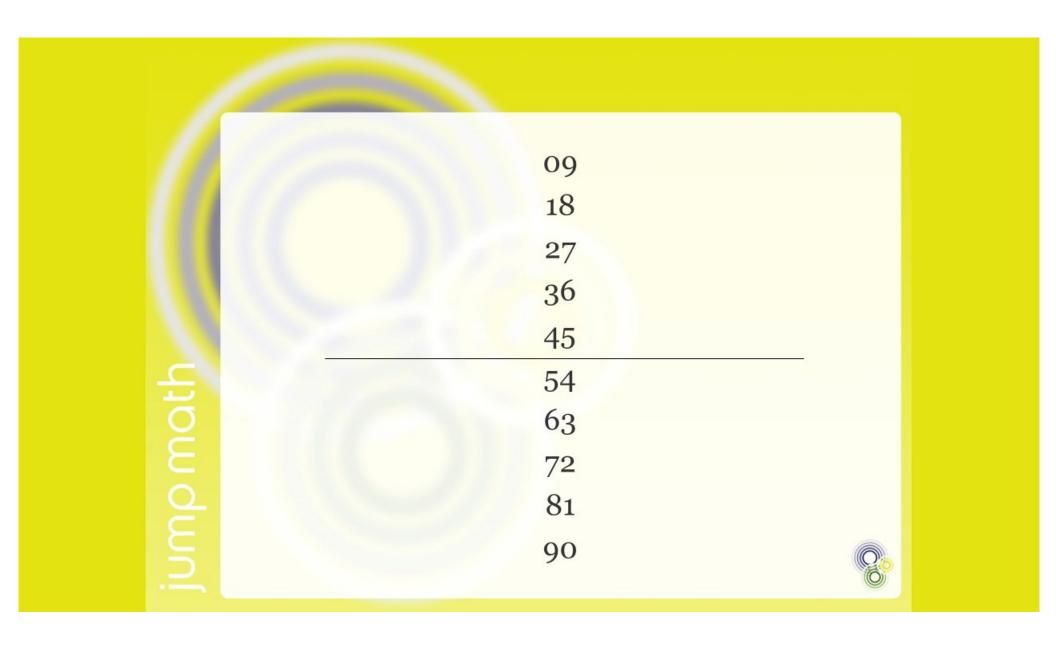
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# jump math

$$9 \times 1 = 09$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

$$9 \times 10 = 90$$





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