

Today

I. Last Time

II. Learning Styles

III. Is There a Theory of How We Learn? Or What is the Cognitive Architecture of Learning?

IV. Wrap Up Carey's *How We Learn: You Snooze You Win* and The Foraging Brain

I.*Grit. Effort counts twice. Seeing things through. Passion: clear directed goal that spells out what you want to do for others.

*Goal hierarchies. Related to the idea of simplicity and to what's core.

*Perceptual Learning. PCM=Perceptual Comparison Machine.

II. Learning Styles

Are you convinced by Willingham's argument that learning styles shouldn't orient our teaching?

Convinced by the idea that the material should orient the mode of presentation.

Never fully believed in the learning styles idea. Asked myself often the question of how I fit into this way of looking at things.

I question the idea that we shouldn't tailor our teaching to the student.

For Hal, it's a big mistake not to take into account the backgrounds of a group of students.

The Willingham web article is more convincing than the YouTube videos. Much more important than a particular mode of presentation is that we extract the "semantic" or meaningful part of the material.

II. Learning Styles

Test this argument out on your family and friends.

In Kindergarten we often discuss what colors look like.

Connects to our discussion of Bayesian inference. Because such a large part of the population believes the model, you have to supply more evidence to convince them otherwise.

This is also an example of the “confirmation bias”. You are more disposed to take in evidence that supports what you already believe.

III. What was your first reaction to the “How Educational Theories Can Use Neuroscience Data”?

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Had to reread things several times. Liked the comparisons between the brain functions and the educational framework. The value of having your own mental representation for how the brain and the behavioral processes work.

This article really underscores for me how difficult it is to make a direct connection between the brain and our behavior when learning.

III. What was your first reaction to the “How Educational Theories Can Use Neuroscience Data”?

In our efforts to understand things, we often segment things into their parts, but this seems really insufficient in this context. \ \

Is There a Theory of How We Learn? Or What is the Cognitive Architecture of Learning?

No. I view this as a wonderful opportunity!

I think it is a great challenge to try to make a more cohesive and predictive theory or model for how we learn.

IV. Benedict Carey calls his conclusion “The Foraging Brain”

What is his picture trying to convey?

Our supposed enemies to learning, can, in fact, be quite helpful for our learning. We have to do more than highlighting and rereading, the difficulty of foraging captures the effort that we need to invest. Another facet, we have to find/forge/forage our own ways of learning.

Foraging as accepting what comes our way, as navigating the many demands/concerns that we have and fitting learning in where we can and in the ways that work.

I personally find the description of a “foraging brain” to really fall short of giving us a theory of learning.

Why does American schooling fall behind the schooling in other countries so often?

As a cognitive architecture, it makes sense that it has been achieved since it doesn't seem to have a home.