

# Effective Practice Briefings

A series of audio conversations with national experts  
focusing on evidence based practice in education

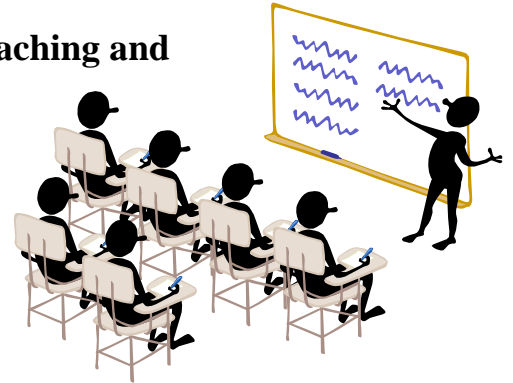
## How to Explain the Brain With Dr. Robert Sylwester

### Interview Outline

#### Part I

#### **Recent discoveries in neuroscience in context with teaching and learning and the basic human need for movement**

- Many school practices don't currently relate to how the brain learns
- Teachers have observed much of what neuroscience is showing
- Why do we even have a brain?
- Learning is more than getting the right answer on the test – the process and experience of learning make good brain sense



#### Part II

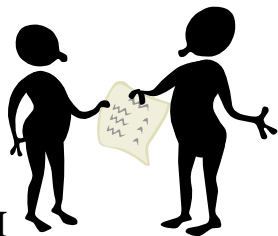
#### **Mirror Neurons and how they work**

- Learning
- The development of empathy

How to Explain the Brain  
Dr. Robert Sylwester  
Page 2

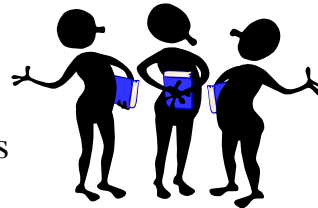
### **Mirror Neurons and how they work continued**

- Language acquisition
- Autism as a non-robust mirror neuron system



### **Part III** **How it all relates to teaching and learning**

- Mirror neurons tell us HOW we interact with kids and move through time with them is central to what they learn
- The importance of cooperative learning, particularly in middle and high school
- Learning and memory – assessing dangers and opportunities in our time space world
- How birth – 20 brain development relates to learning
- Providing opportunities to take measured risks
- The opportunity and responsibility to apply brain research in your classroom practice



*Produced by Dr. Shannon Simonelli, Center on Disability Studies,  
University of Hawai`i at Manoa [www.sig2.hawaii.edu](http://www.sig2.hawaii.edu)*