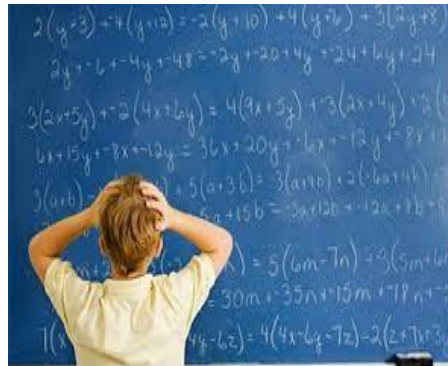


## Cognitive Science Research as a Foundation for Science and Mathematics Diagnostic Assessments



**Professor  
Stella Vosniadou**

School of Education

The Flinders University  
of South Australia

Recent advances in cognitive science research show that there is an order and sequence in the knowledge acquisition process, a *learning progression*, which usually starts with students' naïve ideas based on everyday experience and develops over time in recognizable steps and identifiable clusters of concepts. Although it would be wrong to assume a single or universal progression in science or mathematics, there are nevertheless important regularities in the development of student thinking over time when examining specific areas of science and mathematics learning, making the concept of learning progression particularly useful.

In this presentation, Professor Stella Vosniadou will describe how the results of this type of cognitive science research can be used as a basis for the design of new assessment tools that do not simply discriminate among students but can describe what students know and can do as they develop their knowledge and expertise.

**When:** Tuesday 24 March 2015, 7.00 - 8:30pm  
**Where:** ACER Adelaide Office  
186B Pulteney Street, Adelaide SA 5000  
(Nearest Parking: Flinders Street; Roper Street Car Parks)  
**Register:** [Juliet.Young-Thornton@acer.edu.au](mailto:Juliet.Young-Thornton@acer.edu.au)  
or (08) 8206 8600

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