

# KEYNOTES



## **The Building Blocks of Early Mathematics**

What are the building blocks of mathematics? How important are they? Doug Clements answers these questions by summarizing recent research and development work. One effective instructional approach featured in all these is basing instruction on learning trajectories. This approach will be illustrated through a set of research projects using learning trajectories successfully.

*Professor Douglas Clements, University of Denver*



## **Progression in Play and Playful Learning**

Although there is much support for the value of play to children's learning and development, research shows us that teachers continue to struggle to integrate play into their practice. Often the balance between structured play and free play tips more towards the former when the priority is to achieve specific learning outcomes. Another concern is that play is left in the pre-school phase, in the transition towards more formal ways of teaching.

In this presentation, Elizabeth Wood will consider research that shows how important it is to maintain playfulness and creativity in learning and teaching. In order to do this, we need to understand progression in play - how play changes over time, and how playfulness contributes to learning dispositions that may have lifelong relevance.

*Professor Elizabeth Wood, Sheffield University*