

Keynote Address III:

“Connecting with the learning brain”

Speaker: Dr. Martin Westwell

From before we are born, our neurons are connecting together in ways that will help determine how we think and behave in later life. These connections continue to form until we are around four years old when we have more connections between neurons than at any other time in our lives. As we develop further, unused connections die away and new experiences that we have caused connections to form, reform, strengthen and weaken. The unique pattern of connections that each of us holds at any given time makes us who we are.

This plasticity, the ability to modify the connections between brain cells, is thought to be the basis for learning and helps us to understand how the foundations laid early on in life can profoundly affect future learning and behaviour.

We will explore how an appreciation of plasticity, and some of the other insights from the brain sciences, can inform our decision making in education policy and practice. We will go on to think about the future and how modern lifestyles and technologies are increasingly changing the minds of young people.