**Exploring teaching and learning in real and virtual worlds**
*Teaching and learning in the real world*

My name is Kieron Sheehy and I'm sort of responsible for the last block of the course, Block 4. My background is in Educational Psychology and teaching.

I had the opportunity several years ago to work at the Institute of Defectology in Moscow, which was originally set up by Vygotsky and it was at that point that I became very influenced by his thoughts and ideas. One of Vygotsky's key ideas was the social nature of knowledge, that knowledge is created is socially, not so much arising from within but developed within a culture and so that aspect is something that Harry Daniels, for example, has focused on in his work and showed how this can be applied positively to understanding and developing educational practice.

A key aspect of the Vygotskian theory is the use of tools and that doesn't just relate to what we might typically think of those physical tools and artefacts, but also things like language and concepts, they are tools with which we think and which we act with to create our world and, interestingly, also act to influence and change ourselves, so there's a two-way process there between the tools we use and how we use them, and how we are used by them.

Two of the concepts I think which Harry Daniels mentions when he's discussing Vygotsky's ideas are scaffolding and the nature of how language is used as a symbolic tool so that scaffolding, for example, with appropriate social support, a cultural support, children or any individual in fact, can operate at levels above that which they could operate on their own, and that is a fundamental process of learning, and by looking at that in detail we can help children to learn and understand the process of learning in greater detail.

In relation to scaffolding, a key concept is the zone of proximal development. The difference between what a child can achieve on their own or what they can do with support and guidance, and then what happens within that space and how we judge how much support, and the nature of the support that to give that child, and what is effective for that child.

Neil Mercer discusses an approach which he's helped developed called 'Thinking Together'. Now this is inspired by the work of Vygotsky in that it sees language as a tool with which children learn to think and which they use to operate on the world, and to interact with one another, and so it's the inherently social approach to teaching, and so he discusses how supporting the way in which children work in groups, and giving them the language skills to work within those groups, we can have a very positive impact upon the way those children develop, the way they, the abilities they have to think and problem solve.

So on the course we have filmed inside a classroom that's used this type of approach for teaching science, and how the class is set up, how the children are structured in their work, and sort of ground rules, that's supposedly a central feature of this approach, the ground rules which they use to guide their interactions with one another, and they have a quite a good understanding of the pupils of the type of language which is productive in solving problems, and that which isn't, and that alone is quite a useful tool for them to take with them across the rest of their studies.

Diane Rawlings talks a little bit about how she sets up such a class, and again she emphasises the importance of ground rules so that children have a basis in which to operate. Now in the course itself we actually critique the nature of having ground rules, and whether this is imposing a particular way of behaving on groups of children whom it isn't part of their, if you like, their cultural background, and we explore those arguments.

I suppose one of the criticisms you can make if you read the sort of Thinking Together approach is that children's learning might be seen as reduced almost entirely to talk, just by

talking and in using words they learn. Now there's a lot more to a child's life within the class than just words, and that aspect has been picked up on in the work of Maurice Galton we can see this in the SPRinG approach which he developed.

The SPRinG project can be seen as linking into the Vygotskian ideas about learning in that it has the social construction of knowledge at its heart so the children working in groups they're learning through dialogue with one another. Now the key thing here is it's a relationship approach. Maurice looked at the actual emotional aspects of the children working, say children in friendships groups with people they like, and that again it seems to hit upon a whole sphere of a child's life which is important to them in the class, and which has very positive outcomes for them.

The teachers themselves were involved in collaboration with Maurice and his colleagues in developing the approach, so it wasn't a top down model of development of this approach, it was in collaboration with classroom teachers building on their own practice, and that again is quite an interesting aspect to look at when we're thinking about how can we develop positive approaches to influencing children's learning and development, which aspects should we look at, and how should we put forward this research idea. Maurice has quite an interesting way of doing that and it's commented on very positively by those who took part in it.

The material is relevant to a broad range of interests I think, from people who may interests in psychology and want to explore Vygotsky's ideas in more depth, or who have a wish to understand how we can set up classrooms to work better. There are a lot of constraints in classroom practices today, I think Maurice Galton reflects on some of these, but even so there are opportunities to change classroom practice for the benefit of the teachers and the pupils.