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## Symposium on Educational Dialogue

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Some recent trends in cognitive science suggest a growing interest in the role of dialogue in learning. Reflecting the theme of interdisciplinarity, this symposium brings together eminent researchers from quite different perspectives. Each will present a summary of their theoretical and methodological approach to the area of educational dialogue and their views on the essential questions raised for cognitive science.

### James Gee

Over the last few years, there has been a major focus on learning through talk, activity, and interaction, rather than through overt instruction. Within this focus, it is often assumed, that talk, interaction, and activity are virtually signs of learning. However, in areas like science education, it has been traditional to pay little attention to language, as opposed to *reasoning* and *content*. Using data from elementary-school science classrooms, I will discuss, from sociocognitive perspectives, ways in which language and interaction can fail to be efficacious in constructivist classrooms, creating conditions under which students who already know come to know more and students who know little come to know less. I will formulate a notion of *lucid* language and argue that only such language can possibly be efficacious in classrooms.

Professor James Paul Gee is the Tashia Morgridge Professor of Reading at the University of Wisconsin at Madison. He is the author of several books including *Social Linguistics and Literacies*, Second Edition (1996) and *The New Work Order* (1996). He has published widely in various areas of linguistics and education.

### Keith Stenning

Education is a particularly difficult kind of communication involving a student and teacher communicating across a conceptual gulf. Because of this gulf, we claim that educational dialogue is best theorised in terms of argument. Traditionally, argument has been analysed using logic, a

framework for the assurance of communication across misalignment of goals or concepts. Conceptual gulfs in the classic 'hard cases' of educational communication share the property that the abstract nature of the concepts involved means that they cannot be distinguished from competing 'naive concepts' by simply learning to sort concrete objects, but have to be distinguished by the part inferential transformations play in the dialogue between student and teacher. The role that external and internal representations play in this process, and the patterns of social and epistemic authority which dominate the communication are at the heart of understanding educational dialogue.

Professor Keith Stenning is Director of the Human Communication Research Centre at the University of Edinburgh. His background is in psychology and philosophy. Most recently, he has developed a theory of the contrasts between sentential and diagrammatic semantics and of the impact of 'modalities' of information presentation on students' learning.

### James Voss

The classroom study of history emphasises learning from texts and lectures as well as from instruction that may focus on particular themes or movements. Our research has shown that the writing of historical arguments, especially when the subject matter comes from multiple sources, produces better understanding than when writing narratives. In this paper we discuss how narrative can be used as a form of argument, and how culturally based narratives are able to influence understanding. Instructionally, this means that understanding of particular issues will be enhanced when students are aware of alternative narratives.

James F. Voss is Professor of Psychology and of Political Science and also a Senior Scientist and former Associate Director of the Learning Research and Development Center at the University of Pittsburgh. His work has included the solving of ill-structured problems and reasoning in history and the social sciences.