

From Neuroscience to the (lassroom

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Neuroscience in the Classroom – What's on the Menu?

Abstract:

Educational neuroscience aspires to undertake research relevant to improving educational practice. There are several processes that might be pursued in attempts to transfer scientific knowledge about learning to the classroom. These all lie at different points along a classic push-pull scale of design, with interventions "pushed" by new scientific insights at one end, and activities "pulled" by educational demand at the other. At the "push" end are the possibility of new interventions from scientific insights closest to application in the classroom, and these are briefly reviewed. At the "pull" end are the most pressing educational needs, one of which is to develop a language and understanding of those practices already known to be effective, so contributing to insightful communication and application of high quality teaching. This raises some interesting questions: To what extent should researchers in this area address and make themselves relevant to current educational perspectives, current issues, contexts, aims/motivations and opinions, and to what extent should they focus on the realization and application of fundamental scientific research? Is change more likely through developing new novel interventions or through seeking and promoting a scientific understanding of current effective teaching practices, so enabling better adaptation and implementation of these practices?

About:

Paul Howard-Jones is Professor of Neuroscience and Education at the Graduate School of Education, University of Bristol, where he leads the MSc (Education) pathway in Neuroscience and Education. Recent research has focused on games-based learning. Prior to his research career, he was a secondary school teacher, then a trainer of teachers and inspector of schools. He was a member of the UK's Royal Society 2011 working group on Neuroscience and Education and authored one of the first text books in this area (*Introducing Neuroeducational Research*). His new book *A Brief History of Your Learning Brain* will be published in 2017 by Routledge.