

Science College 2012

“Brain - Machine - Society: Exploring LEARNING”

This topic encloses a number of related issues from education, philosophy, neurosciences, psychology and history, like

‘Foundations of learning’, ‘Learning from history’, ‘Limits of learning’, ‘Learning through and about technology’, ‘Neurosciences... New perspectives on Learning?’, ‘Learning in the digital Age’, ‘Learning between Cognition, Experience and Body Memory’, ‘Machine learning’, ‘Cognitive mistakes and learning’.

The interdisciplinary discussion with experts from different disciplines on current scientific findings and debates should facilitate a revised understanding of LEARNING.

July 2, 2012 (whole day), Veranstaltungszentrum Mensa

Tentative Schedule

	Registration
9.00 – 9.15 am	Welcome by the Dean of the RUB RS
9.15-12.30 am	<p>Chair: Prof. Dr. Sen Cheng RUB 2 Keynote Lectures (45 min. + discuss.)</p> <p>A neuroscientific approach to understanding the mechanisms of learning Prof. Dr. Denise Manahan-Vaughan, Department of Neurophysiology, RUB</p> <p>How scientists make discoveries: Mistakes, errors and the unexpected Prof. Dr. Kevin N. Dunbar, Department of Human Development and Quantitative Methodology, U Maryland</p>
	Lunch

1.30 – 4.30 pm	<p>Parallel Workshops</p> <p>1. Learning as self regulated process Prof. Dr. Joachim Wirth, Department of Learning and Instruction, RUB</p> <p>2. Concept acquisition and the problem of induction Prof. Dr. Markus Werning, Chair of Philosophy of Language and Cognition, RUB</p> <p>3. Learning in history!? Prof. Dr. Wolfgang Hasberg, Historical Institute, Didactics of History, U Köln</p> <p>4. Advances in the modeling of biological learning Prof. Dr. Sen Cheng, Mercator Research Group 'Structure of Memory', RUB</p> <p>5. What does learning mean for machines? Prof. Dr. Tobias Glasmachers, Department of Neuroinformatics RUB</p> <p>6. Learning under stress Prof. Dr. Oliver T. Wolf, Department of Cognitive Psychology, RUB</p> <p>7. Analogy and Causal Thinking as the Engines of Human Learning Prof. Dr. Kevin N. Dunbar, Department of Human Development and Quantitative Methodology, U Maryland</p>
4.30 – 5.15 pm	<p>Presentation of the results of the Workshops</p>
5.30 – 6.30 pm	<p>Evening Talk Limits and Resources of the Brain in Learning Prof. Dr. Niels Birbaumer, Institute of Medical Psychology and Behavioral Neurobiology U Tübingen</p>
From 6.30 pm	<p>Dinner</p>