

The Faculty of IT and the Monash e-Research Centre present the following seminar - by visiting world-leading training expert, Dr Robert M. Panoff.

Friday 11 February, 2pm

**‘Computational Thinking Across the Curriculum:
The Power and the Peril’**

Dr Robert M. Panoff is the founder and Executive Director of ‘Shodor’ (<http://shodor.org/>) in the United States, and is currently visiting Monash training PhD students from all disciplines to apply ‘computational thinking’ to their research questions.

Shodor (<http://shodor.org/>) is a US resource for computational science for students and educators. - The online education tools such as Interactivate and the Computational Science Education Reference Desk (CSERD), a Pathway Portal of the National Science Digital Library (NSDL), help transform learning through computational thinking.

Time: 2 – 3pm

Location: Room 135, Bldg 26, Clayton Campus

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Abstract:

We will explore how technology enables dynamic representation in the sciences, arts, and humanities, giving us the opportunity to be more fully human as we seek new knowledge in service to society. Moving "beyond PowerPointness," we have the opportunity to demonstrate that effective use of computing really matters. Computing "matters" because quantitative reasoning, computational thinking, and multiscale modeling are the intellectual "heart and soul" of 21st Century science and therefore are the essential skills of the 21st Century workforce.

Computing "matters" because we can apply the power of interactive computing to reach a deeper understanding and of math and science and their role in understanding the world. We will explore a transformation in STEM (Science, Technology, Engineering, Mathematics) education, supported by interactive computing resources, promoting a dynamic encounter with our world through guided discovery. A world-class education requires world-class resources, and all computing, math and science teachers should be able to bring interactive modeling environments to their own teaching practice.

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(Visit: <http://www.monash.edu.au/eresearch/>)