

Pathway to Inquiry Based Science Education (IBSE) EU 7th Framework Project

Discovering and Promoting Inquiry in the Sciences through Computational Thinking.

Date: Monday, February 13th and Tuesday, 14th February, 2012

Time: 9am - 3.30pm.

Venue: C214 Computer Lab, Henry Grattan Building, Dublin City University

A 2 day workshop on Computational Thinking in the Sciences. The workshop is organised by the Pathway project team based in Education Studies, Dublin City University. This workshop will be in collaboration with teachers from the Shodor Education Foundation, North Carolina, USA.

In the workshop, we will explore how advances in interactive, dynamic computing enable new visualizations in math, biology, physics and chemistry. Moving beyond Power Pointlessness, we have the opportunity to demonstrate that effective use of computing really matters if we are to improve education and research in the sciences. Computing matters because quantitative reasoning, computational thinking, and multi scale modelling 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 of math and science and their role in understanding the world.

Monday 13th February 2012: Introducing Computational Thinking in Science Education through Web-based Resources

Tuesday 14th February 2012: Introducing Computational Thinking in Science Education though Modelling Activities

Please email <u>margaret.farren@dcu.ie</u> to reserve a place on the workshop and for workshop timetable.

Pathway Co-ordinator: Margaret Farren

Pathway Team: Yvonne Crotty, James Lovatt, Martin Owen, Conor Sullivan, Peter

Tiernan and Paul van Kampen.

DCU Campus Map: http://www.dcu.ie/images/campus_map.pdf