The CDIO Network as a Framework for Student Mobility and Exchange

M. Murphy
University of Liverpool
G. Thomson
Aston University
P. Hermon
Queen's University Belfast

ABSTRACT

This workshop will be of interest to those wishing to extend and enhance the international mobility and study abroad opportunities for their students. Participation from those with course or programme management responsibility is particularly encouraged.

There is a large body of literature concluding that graduate employability is greatly enhanced by students spending a period of study in a foreign country. A recent review paper (Hackney 2012) presents a variety of beneficial personal development outcomes associated with undergraduate study abroad including increased maturity, self-confidence, tolerance of ambiguity, resilience, flexibility, open-mindedness, greater independence, and improved personal self-image. The outcomes related to professional development surround a deeper understanding and respect for global issues; more favourable attitudes towards other cultures; stronger intercultural communication skills; and better foreign language skills.

It is clear that international student mobility and study abroad are extremely important in undergraduate engineering education, but such exchanges can be very difficult to arrange and manage. Success depends in part on effective relationships between institutions and their staff; and also on some degree of alignment between programmes of study. The CDIO Initiative is a mature and active network of institutions that all share an ethos and approach to engineering education. The CDIO Initiative has been effective in many areas but it has not yet realised its potential as a framework for international student mobility.

This session will first share and review different approaches to student exchange and study abroad before exploring potential enhancements within the CDIO community. There will also be a "match-making" activity designed to facilitate new student exchange partnerships.

Hackney,K; Boggs,D; Borozan,A (2012) An Empirical Study of Student Willingness to Study Abroad; Journal of Teaching in International Business, v23 n2 p123-144

KEYWORDS

Student exchange, study abroad, international mobility, Standards: 2, 3, 7, 8

BIOGRAPHICAL INFORMATION

Matt Murphy has an undergraduate degree in metallurgy and a PhD in the additive manufacture of advanced engineering alloys. He is a Teaching and Scholarship Lecturer; Programme Director of Mechanical Engineering; and Study Abroad Coordinator in the School of Engineering at the University of Liverpool, UK. Matt has been an active participant in CDIO since 2005, and is currently co-Chair of the UK & Ireland region.

Gareth Thomson is Head of the Mechanical Engineering & Design subject group at Aston University. He leads the implementation of CDIO at Aston and is involved in a range of pedagogical initiatives. He is a senior fellow of the Higher Education Academy and a member of the Institution of Mechanical Engineers Academic Assessment Committee.

Paul Hermon is a Senior Lecturer (Education) in the School of Mechanical and Aerospace Engineering at Queen's University Belfast, is Programme Director for the Product Design Engineering degrees and international exchange coordinator within the School. Active within CDIO since 2005 he is currently Co-Chair of the UK & Ireland region.

Corresponding author

Dr. Matt Murphy
School of Engineering
University of Liverpool
Brownlow Hill
Liverpool L69 3GH
UK
murphym@liv.ac.uk



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