

Learning support in STEM: Learning differences and teaching innovations conference

Thursday 12th January 2017

University of Sheffield

This one-day conference at The University of Sheffield brings together academics, practitioners, and students to discuss STEM innovations and learning support in higher education. This promises to be an exciting, cross-disciplinary event which will consider some of the issues surrounding STEM support and address how academic staff and practitioners can support students to reach their academic potential. Delegates will learn about the impact of a range of learning difficulties and how to improve their teaching practice to make it more inclusive as well as innovative methods for teaching and supporting STEM students.

Key note speakers:

[Clare Trott \(Loughborough University\): Providing successful maths support for students with dyscalculia and dyslexia](#)

Clare is a leading expert in providing maths support for students with dyscalculia or low maths confidence. She will talk about her experiences and the specific techniques and materials she uses with her students.

[Nicola Whitton \(Manchester Metropolitan University\): Playful learning: using games to enhance the student experience](#)

Nicola Whitton is a Professor of Professional Learning at the Education and Social Research Institute at Manchester Metropolitan University. She will discuss the practice and benefits of games and learning in higher education and will demonstrate that games can provide a flexible option to engage students with active learning environments in almost all disciplinary contexts.

[Amanda French: Academic writing in STEM](#)

Amanda is a senior researcher in academic writing and co-editor of the Journal for Learning Development in Higher Education (JLDHE). Her workshop will consider academic writing in STEM subjects; how it differs from humanities students and how to support students in developing writing skills in stem subjects.

Parallel workshops: Participants will be able to choose two of the following parallel workshops (one from each block):

Block	Speaker	Session information
1	Emma Cliffe (University of Bath)	SpLD and maths support – Bridging the gap Emma is one of only a few people who provide maths and SpLD support to students of STEM subjects and has developed a number of approaches to assist students with their STEM learning. Emma will use scenarios of actual queries and ‘best practice’ to engage discussion between the two specialisms about bridging the gap between the responses a member of either of the two groups could give independently.
1	Fay Short (University of Bangor)	Engaging students using a ‘House of learning’ Fay is deputy head of the School of Psychology at Bangor university and her work with the Higher Education Academy has focused on techniques for effective teaching and student support. This workshop will introduce the basic premise of the ‘House of Learning’ teaching model in story-telling form before outlining each structure with supporting research from pedagogy and psychology. Real-world examples of the model in action will be explored so participants will leave with practical ideas to their own teaching.

1	Helen Ball/ Karen Panich (Diversity and ability)	Using assistive technology with STEM students Assistive technology is technology that is used by people with disabilities to support them in communicating and learning. This workshop will demonstrate a variety of these apps and how they can be used to in an educational context to facilitate learning, and organisation and time management.
2	Dylan Griffiths (University of Bangor)	Using innovative resources to teach maths Dylan will discuss the use of manipulatives and other approaches when teaching students basic maths concepts.
2	Jill Aylott (Autism consultant)	Supporting students with Autism Jill will discuss the cognitive profile, learning needs and differences of autistic students and suggest approaches for effective 1:1 support.
2	Abby Osbourne (University of Bath)	Embedding inclusive learning within the curriculum Abby is a reasonable adjustments project manager at Bath university and will discuss working with academics to embed inclusive learning within the curriculum.

Posters: We are interested in displaying posters relating to this theme so if you would like to submit a poster please fill in the poster form [here](#).

Registration: The cost of the conference is £30 and includes lunch. Register for the conference [here](#). You will need to register with the University of Sheffield online shop and use the password **stem17** when prompted.

Learning development: This conference provides opportunities to engage in depth with the following dimensions of the UKPSF which is particularly important for those applying for HEA fellowship:

Areas of activity: A1, A2, A4, A5

Core knowledge: K2, K3, K4, K6

Professional values: V1, V2, V3, V4

For more information on the descriptors see:

https://www.heacademy.ac.uk/sites/default/files/downloads/ukpsf_2011_english.pdf