

Being Inclusive – the whole kit and caboodle

In the maths and statistics support environment

The **sigma** North East and Yorkshire Hub hosted a day conference on Being Inclusive – the Whole Kit and Caboodle (in the Maths and Statistics Support Environment) at The University of Sheffield on Monday 19 January 2015, starting at 10am and finishing at 4pm. The day was a combination of talks and activities and aimed to give the delegates an opportunity to consider their inclusive practice of maths and statistics support and learn ways of developing it further. It attracted 42 participants from 13 different Institutes.

The opening talk by Rod Nicolson set the scene for the day by defining maths anxiety and its devastating effects. Then highlighting how intervention can have the positive turnaround from anxiety to comfort and even happiness. The following talk by Clare Trott detailed the differences between dyslexia and dyscalculia and how it can relate to the interventions we may use. Bryan Coleman alerted us to the Equality Act 2010 and how it affects the Universities. Victoria Mann, Dylan Griffiths and Eleanor Machin presented as SpLD tutors on their approaches and methods they employ to help individual students. Bernadette Leckenby as a maths support tutor has worked with numerous students with SpLD and presented some tips and techniques she has developed.

This event has enabled a real possibility of engagement with SpLD students with more confidence and awareness. The event highlighted the positive outcomes of this engagement, of course there is scope for much more and I hope the momentum continues.

Full Programme

Speaker	Title
Chetna Patel - Video	Introduction: Being Inclusive - whole kit and caboodle - Presentation
As manager of the maths and statistics help Centre I am always looking for ways of improving our service to students and sharing good practice. This event is intended to further this and raise our aspirations.	
Rod Nicolson -Video	Maths Anxiety: The Assassin of Learning - Presentation
As a mathematician turned psychologist, specialising in learning abilities and disabilities, I want to highlight the catastrophic effects of stress on human learning. Maths-related stress leads to maths anxiety, which forces the learner onto 'fight, flight or freeze' habits rather than the necessary declarative learning circuits. I will also sketch out some ideas for alleviating the consequences of maths anxiety.	
Clare Trott- Video	Dyslexia and Dyscalculia: graphical differences - Presentation
This presentation will focus on dyscalculia and dyslexia. To successfully reach HE, students have had to develop their own successful coping strategies and overcome mathematical barriers such as: numeracy, statistics, money, time and mathematical anxiety. The presentation will explore graphical representation through the experiences of two exemplar case studies and highlight some fundamental differences between the preferred visual approach of a dyslexic student and the dyscalculic student who experienced far greater difficulties in this area. The central aim of the presentation will be to a clear demarcation between dyslexic and dyscalculic barriers and preferences.	
Bryan Coleman -	The Equality Act 2010 and Numbers and Trends at UoS - Presentation

Video	
The DDA is now part of the Equality Act 2010 talk about the relevance of the legislation and the rising numbers of students.	
Victoria Mann - Video	Dyscalculia: a brief introduction - Presentation
Dyscalculia is estimated to have a prevalence of 3-5% of the population and is defined as a condition that affects the ability to acquire mathematical skills. This presentation will provide an introduction to dyscalculia in higher education. It will discuss key concepts and how dyscalculia impacts students, for example, number concepts and relationships, and will discuss resources and strategies to support students in the maths element of their course.	
Emma Woodrow - Video	What counts? -Presentation List
A student's perspective on studying statistic at undergraduate and post graduate level.	
Dylan Griffiths - Video	Supporting Learners with SpLDs – The Basics - Presentation
This talk/workshop will focus on the barriers students face when performing basic calculations, and looking for methods to overcome these barriers. Difficulties can include understanding the question, multi-step problems, and multiplication/division involving the decimal point. If these barriers remain, all calculations which build on the methods cause additional problems.	
Eleanor Machin - Video	Using Visual Strengths in SpLD: Mind-Mapping for Maths - Presentation
This talk/workshop looks at Mind-Mapping as a tool in Mathematics Education. Considering the effects of SpLDs on the acquisition of arithmetic and mathematics and making use of student's visual strengths.	
Bernadette Leckenby - Video	Some tips and strategies to help students with maths learning difficulties prepare for numeracy tests -Presentation
Many students and particularly those with specific maths learning difficulties find non-calculator numeracy tests very stressful. These students need strategies to help master the specific skills/knowledge required for these tests. I will share some of the simple ideas which have proved helpful to students in the past, and in the workshop we will consider some specific scenarios and work together to suggest possible strategies and/or resources to support the student's learning.	
Parallel Workshops	
Clare Trott Dyslexia and Dyscalculia: graphical differences.	
Dylan Griffiths Supporting Learners with SpLDs – The Basics.	
Eleanor Machin Using Visual Strengths in SpLD: Mind-Mapping for Maths.	
Bernadette Leckenby Some tips and strategies to help students with maths learning difficulties.	
Chetna Patel – Video	Round-up - Presentation
Speakers Panel	Questions and Discussion

