

MatRIC-khdm International Workshop on Support for Students in Mathematics in the First Year of University Studies

Workshop, 13 – 14 June 2019, Leibniz University Hannover

Thursday 13 June

9:00	Welcome and aims of the workshop (Frode Rønning, Reinhard Hochmuth, Rolf Biehler)
9:15	Presentation of MatRIC (Simon Goodchild)
9:35	Presentation of khdm & WiGeMath (Reinhard Hochmuth, Rolf Biehler)
9:55	Discussion
10:15	Coffee
10:45	Michael Grove, School of Mathematics, University of Birmingham, UK Solving the mathematics problem through solving problems? ¹⁾
11.45	Lunch
13.00	Pre-University Bridging Courses
	13:00-13:20 Ida Maria Landgärds (MatRIC, University of Agder)
	13:20-13:40 Elisa Lankeit (WiGeMath, University of Paderborn)
	13:40-14:00 Coffee
	14:00-15:00 Parallel small working groups
	15:00-15:20 Presentation and Discussion of Results
15:20	Coffee
15:45	Support Centres
	15:45-16:05 Duncan Lawson (Coventry University, UK)
	16:05-16:25 Mirco Schürmann (WiGeMath, University of Paderborn)
	16:25-16:45 Coffee
	16:45-17:45 Parallel small working groups
	17:45-18:00 Presentation and Discussion of Results
19.00	Dinner

Friday 14 June

- 8:30** **Ciarán Mac an Bhaird, Department of Mathematics and Statistics, Maynooth University, Ireland:**
Mathematics Support Centres: Best practice in provision and research ²⁾
- 9:30** **Coffee**
- 9:45** **Innovative Courses in the first year of study & further Support Measures**
9:45-10:05 Hans Kristian Nilsen & Thomas Gjesteland (MatRIC, University of Agder)
10:05-10:25 Christiane Kuklinski (WiGeMath, Leibniz University)
10:25-10:45 Coffee
10:45-11:45 Parallel small working groups
11:45-12:00 Presentation and Discussion of Results
- 12:00** **Lunch**
- 13:15** **Final Discussion about Research Perspectives**
- 14:00** **The End**

¹⁾ **Solving the mathematics problem through solving problems?**

Michael Grove, School of Mathematics, University of Birmingham

(<https://www.birmingham.ac.uk/staff/profiles/math/grove-michael.aspx>)

Over the last two decades there has been considerable work within the higher education sector in supporting students with their learning of mathematics as they make the transition to higher education study. Whilst such mathematics learning support remains a vital and valuable part of the support offer within institutions, there is growing evidence that despite it not being implemented with them specifically in mind, specialist mathematics students are increasingly accessing this support and using it in different ways. This talk will (briefly) introduce recent research evidence in support of this claim, and discuss its implications, but more broadly it will explore how we can help specialist mathematics students, that is single or joint honours students, during their studies to become better problem solvers and more independent learners. In doing so, not only will research evidence be drawn upon, but the talk will also include case studies of current practice from the School of Mathematics at the University of Birmingham.

²⁾ **Mathematics Support Centres: Best practice in provision and research**

Ciarán Mac an Bhaird, Department of Mathematics and Statistics, Maynooth University, Ireland

(<https://www.maynoothuniversity.ie/people/ciar-n-mac-bhaird>)

This talk will start with a brief overview of the development and growth of Mathematics Learning Support (MLS) over the past few decades. In particular, I will consider the extensive resources that are available to those who want to establish or further develop MLS. We will also look at collaborative communities that foster best practice in MLS provision through training and workshops, special interest groups, conferences and published research.

The main focus of my talk will be an overview of the range of research that is conducted by members of the MLS community. This can be qualitative and or quantitative in nature, and carried out locally in an institution by one or two individuals, or regionally, nationally and internationally by larger groups of researchers. Understandably, there are a significant number of papers which consider the immediate effectiveness of MLS, especially through student retention and progression, and through the student experience of MLS. Increasingly however, research is branching out into related areas and we will discuss where delegates can find out more about current research. If time allows, I will consider several of my own projects in this area including: reasons for student (non)engagement; structured and accredited training of teaching staff; staff awareness of student accessibility issues; the provision of online resources; using the history of mathematics in teaching; and the evaluation of technology-enhanced resources.