Introducing the Mathematical Sciences
HE Curriculum Innovation Project

Peter Rowlett
MSOR Network
University of Birmingham
p.rowlett@bham.ac.uk

The MSOR Network is operating the HE Curriculum Innovation Project as part of the Mathematical Sciences Strand of the National HE STEM Programme. This aims to facilitate and support innovation within mathematical sciences course delivery and design.

I am the HE Curriculum Innovation Advisor for the Project and my work is broadly in three areas:

- Mathematical Sciences HE Curriculum Innovation Funding, and by the time this issue of Connections arrives we will be processing applications to the second funding call, announced via the MSOR Network website and via email in October;
- Research into current practice and sector priorities, and in January we will be running a high-level Summit on mathematics curriculum to inform this process; and,
- Dissemination and staff development; look out for upcoming workshops as part of this Project on the website.

In the first call for funding six projects were funded and here I describe two that seem relevant to this issue of Connections and address progression and assessment practice.

Supporting progression in mathematics education
Project leader: Dr James Hind, Nottingham Trent University

At Nottingham Trent University, James Hind received funding for a project which looks to aide progression of mathematics undergraduate students onto PGCE courses by making available a final year project in mathematics education. Two final year project students are visiting a local secondary school, observing lessons and learning to prepare material they will deliver as part of a school visit to the University. This project helps establish an approach for students who want to develop their teaching skills and helps the university develop an outreach relationship with a local school.

Development and integration of computer-aided assessment of discrete mathematics
Project leader: Dr Martin Greenhow, Brunel University

At Brunel University, Martin Greenhow received funding to extend and exploit a computer-aided assessment system. A bank of questions on elementary discrete mathematics produced in Questionmark Perception (QMP) version 3 will be translated into the latest version QMP 5, 'future-proofed' and made portable to other CAA systems and ordinary web pages. Use of QMP 5 will enable the option for mobile delivery and this will be explored. The questions chosen are central to the Brunel Foundations of IT programme that seeks to widen participation in STEM. This bank of representative questions will be used to identify and solve programming issues as a precursor to translation of the entire Mathletics database.