**Report from the sigma CETL for the Learning & Teaching Committee**

**October 2010**

**sigma,** the Centre for Excellence in the University-wide provision of mathematics and statistics support, was a joint initiative, led from Loughborough’s Mathematics Education Centre, with Coventry University’s Mathematics Support Centre.

There is plenty of evidence, and little doubt, that **sigma** has been one of the more successful CETL’s. The two universities worked very well throughout the five years to deliver exceptional mathematics and statistics facilities and services to our students. We worked in six key areas:

1. Provision of mathematics & statistics drop-in centres

2. Technology and innovation in mathematics teaching

3. Mathematics support of students with additional needs

4. Proactive teaching interventions aimed at low achieving or ‘at-risk’ student groups

5. Pedagogic research

6. Provision of a statistics advisory service for postgraduate students, final year project students, and some staff.

In each of these areas substantial achievements were made. These are described in detail in the final report to HEFCE which is available at

<http://www.sigma-cetl.ac.uk/index.php?section=112>

The impetus to pedagogic research provided by **sigma** provided the foundation for the Mathematics Education Centre’s first ever RAE return in 2007 when 7 staff were returned and a respectable outcome was achieved. From this foundation the Centre has now moved forward rapidly with four new academic staff appointments aimed at securing a further improvement in performance for the forthcoming REF.

A report celebrating the success of **sigma** – “*Celebrating success in mathematics and statistics support*” was published in the summer 2010 and has a preface from the two Vice-Chancellors. This is also available on-line at

<http://www.sigma-cetl.ac.uk/index.php?section=113>

**sigma** achieved a substantial amount of external dissemination and influence. This aspect of our work included but was not restricted to:

* part-funding and supporting the establishment of new mathematics support centres at the universities of Leeds, Bath and Sheffield; all three of these centres are success stories in their own right and have been absorbed into the teaching and learning infrastructure of those universities.
* establishment of hubs of mathematics support to better serve those working in the field. Hubs were established, funded by **sigma**, at the University of St Andrews for the Scottish Maths Support Network, and at the University of Bath for **sigma** south-west.
* In association with the Higher Education Academy, **sigma** has run Annual Conferences at Loughborough, Birmingham, Lancaster, and the Open University.

The five-year funding period ended in the Spring of 2010, and the final accounts were signed off with HEFCE in September.

**The future**

Funding for the CETL initiative has ceased and HEFCE made it clear that no continuation funding would be made available for any CETL. It was therefore decided that for inward facing activities cases would separately be made to the senior management of both universities in order that the internal work of **sigma** could continue. A positive outcome of this process has been that in both universities continuation funding was secured. The name of **sigma** has been dropped from the internal work and activity at Loughborough continues under the umbrella of the Mathematics Learning Support Centre and the Mathematics Education Centre under the Directorship of Dr Carol Robinson. Much more detail of the work of the Centre can be found in its Annual Report available at http://mec.lboro.ac.uk/pages/stakeholder.html

Planned Loughborough activities include:

* maintenance of the drop-in facilities in both W and A buildings
* the continuation of support for students with additional needs
* the continuation of the statistics advisory service

Staff in the Mathematics Education Centre, in addition to normal administrative, teaching and research work, are involved in a variety of internally and externally funded initiatives which will continue to improve the mathematics and statistics support we offer. For example, an on-line support facility for statistical methods, known as *stats tutor*, will be launched later this year as a pilot and the statistics professional development sessions will be captured using ReView. Through Elluminate, the Centre is running a pilot project offering remote statistics support to postgraduate and final year students at De Montfort, Sunderland and Birmingham City Universities.

As far as external **sigma** activity is concerned, the two host universities have secured funding of £300,000 over three years to develop this aspect further. Funded by the national HE STEM Programme, we have been commissioned to develop mathematics support within the Programme. There have been substantial achievements to-date including:

* part-funding of new mathematics support centres at the universities of York, Central Lancashire, Lincoln, London Metropolitan and Kent starting October 2010.
* Establishment of six regional hubs of mathematics support covering England and Wales. These are based in Leeds, Liverpool, University College Suffolk, Sheffield, Brunel and Loughborough/Coventry. Each hub offers local events on topics as diverse as technology in teaching, peer mentoring, evaluation of mathematics support centres.

Several smaller projects have been funded including offering support to students who have dyscalculia and who are studying at universities in the East Midlands area.

We believe that these achievements represent a significant contribution to student academic well-being at Loughborough and beyond, and to the University’s Strategic Plan - *Towards 2016* – which states explicitly that we will be known for our cross-campus mathematics and statistics support.

Tony Croft & Carol Robinson October 21, 2010