Outline Invitation

The Aspire Centre for Excellence in Teaching and Learning (CETL) invites anybody who supports Higher Education students or new graduates to apply for short-term secondments, of up to ten days, to contribute to our programme of work.

The Aspire team aims to develop and share innovative approaches in:

- Student support for disability, study skills and mathematics
- Work-based learning
- Placement learning
- Learning using technology
- Transferable, professional skills development

Background

Aspire, Advancing Skills for Professionals in the Rural Economy (CETL), is based at Harper Adams University College in rural Shropshire, a small specialist HE college specialising in subjects with a land, rural economy or food focus. Students are taught academic subjects with applications to practical and work situations, including a year spent out on work placement. In the engineering department, for example, the college has agricultural and military machinery, off road tracks, fields and a soil hall, in which to demonstrate theory and test new approaches. Strong links with employers facilitate the placing of students for their work-based experience, student scholarships and sponsorship from employers, resulting in high graduate employment.

Whilst none of Harper Adams students study mathematics and statistics as their primary interests, all Harper students are required to study statistics and all Harper students meet basic maths in their courses and courses such as engineering have a high mathematical content. The college accepts students from a diverse range of academic backgrounds on entry, whilst most students have A Levels, only a minority of students have A Level mathematics.

Mathematics and numeracy support has been provided at Harper Adams since 2001 in response to student difficulties and past high failure rates. The support is offered at group support times for specific courses and modules, and also on an individual basis by appointment. The group support is generally offered weekly to support students taking modules such as engineering maths and research methods statistics, and is also arranged as one-off sessions to support mathematical topics, such as valuation.
in surveying, elasticity in economics, and drug dose calculations in veterinary nursing.

One of the strengths of Harper Adams is the small, friendly nature of the college and of the support provided. Students are known by name and their progress is monitored through their courses. Over the five years of mathematics support provision, improvements to student results and student confidence have shown that the investment in support has been worthwhile, both for the individuals supported and for the college.

Benefits of the **Aspire CETL for Mathematics Support To-date**

Support for mathematics and research methods statistics in the college has increased as a result of **Aspire** appointments to Professional Skills Co-ordinator and Research Project Tutor roles. These include resource and module developments for statistics and research methods teaching, support of students’ final year honours project statistics and analysis, and CPD for academic staff. Over the summer a suite of CPD statistics training has been made available to college academic staff, ranging in difficulty and including training on SPSS and Genstat computer packages. At Harper Adams many academic staff supervise final year student projects which are required to contain some statistical analysis and this CPD is enabling staff to keep up to date with the ever-evolving computer tools available.

Support has been given from the **Aspire** programme to pedagogic research into undergraduate students’ attitudes towards learning mathematics and statistics, with a Development Fellowship Award 2005/6 to Sarah Parsons, the Mathematics Support Tutor. Increased administrative assistance for maths support has also been provided through **Aspire** to streamline the process of diagnostic screening and follow-up action.

Links have been developed between the **Aspire** CETL and the **Sigma** Centre for Excellence in the University-wide provision of Mathematics and Statistics Support at Loughborough and Coventry Universities. **Sigma** staff have contributed to the Harper staff CPD by running some of the sessions; they have given advice on screening and support of dyscalculic students and pedagogic research. Dr. Tony Croft, **Sigma** CETL Director, was one of the guests at the official **Aspire** Centre opening in May 2006.

Harper Adams’ student population has relatively high levels of disability (primarily dyslexia). The learner support for dyslexic students has been highly successful and is a related part of the **Aspire** programme, with close links to maths support.

The **Aspire** Centre which opened recently (May 2006) provides a new base for the maths support and other learner support. See photograph below taken at the official opening of the **Aspire** Centre by HRH Princess Anne in May 2006. The **Aspire** CETL is also providing opportunities, such as the secondment scheme detailed below, to further develop student support, both internally at Harper Adams and externally in other institutions.

**Summary of Harper Adams Mathematics Support and Intended Developments**

The current provision of mathematics support at Harper Adams includes:

- Help available for mathematics, statistics, general numeracy, and thesis research design, data manipulation, presentation and analysis;
- Individual and small group support;
- Pen, paper and calculator methods;
- Help with computer packages: Excel, Mathcad, Genstat and SPSS;
- Diagnostic screening and follow-up;
- Research into student attitudes towards learning mathematics and statistics, including student self-confidence in their mathematical abilities.

The areas which are intended for development include:

- Extended provision of paper resources;
- Extended provision of on-line resources;
- Screening for dyscalculia and support of dyscalculic students;
- Further / wider pedagogic research into student attitudes and implications for curriculum design, delivery and support.

**Contact Aspire to Discuss Secondment Plans**

Colleagues, external to Harper Adams, who work within any of the **Aspire** themes, or related areas, and who are interested in finding more about the **Aspire** programme, are warmly invited to contact us for an informal discussion. Our
website [www.harper-adams.ac.uk/aspire](http://www.harper-adams.ac.uk/aspire) also provides an outline of current work within each of the five Aspire themes.

If, having discussed mutual areas of interest with Aspire contributors, colleagues would like to work alongside us on a specific project, we are pleased to be able to offer funded fellowships to assist joint work to enable colleagues from different institutions to share good practice and develop it further. Secondments can be negotiated to suit the participants and the proposed project, and need not be undertaken over consecutive days.

“Up to nine Aspire Secondment Fellowship Awards, to a maximum £1500, are available for 2006/7.”

**Award Details**

Up to nine Aspire Secondment Fellowship Awards, to a maximum £1500, are available for 2006/7.

Within the maximum award of £1500, fellows may claim:

- £100 per day as a contribution towards their time, paid on submission of an evaluative report outlining how they have developed and incorporated innovative practice, in either their own institution or at Harper Adams, based on the joint work;
- up to £500 to cover reasonable travel and subsistence costs, upon production of receipts.

The evaluative reports will be published through our website. It is anticipated that secondment fellowship projects will form the basis of further publication.

Successful Secondment Fellows will be provided with access to work space and IT facilities within the Aspire Centre, whilst working on development projects with other Aspire contributors. All fellows will be designated a key team member who they will work alongside, in addition to receiving a brief induction into the available facilities. Fellows will also be given assistance to arrange overnight accommodation, as necessary. It is anticipated that at least half of the seconded period will be based within the Aspire Centre, to support the sharing of good practice and new developments between colleagues.

**How to Apply**

Applicants who would like to work within the Aspire programme should submit an expression of interest which details the following:

- Experience in the area of work in which they would like to develop and share new approaches (guideline: 300 words and a curriculum vitae);
- An outline of their aims, any anticipated outputs (resources, processes etc) and potential benefits to students, tutors or employers (guideline: 300 words);
- An indicative schedule, outlining how they would like to work alongside other named Aspire contributors, across any of the five themes, the proposed start and completion dates of their programme, including evaluation of any new initiative(s);
- An indicative breakdown of how funds would be used within the guidelines above;
- Their name and contact details, to include full postal address, e-mail address and telephone number;
- A covering letter from their line manager, indicating their support for the applicant to participate in the Aspire programme;

There is no deadline date for applications. Applicants will be notified whether they have been awarded a fellowship within six weeks of application.

**Contact Details**

Sarah Parsons  
Learning Support Tutor for Mathematics and Senior Lecturer  
For further information on the mathematics support programme and research into student attitudes towards mathematics  
E-mail: sjparsons@harper-adams.ac.uk  
Tel: 01952 915448 (direct) 01952 820280 (college)

Helen Hammond  
Professional Skills Co-ordinator and Research Project Tutor  
For further information on research skills development and the professional scholarship programme  
E-mail: hhammond@harper-adams.ac.uk  
Tel: 01952 915343 (direct), 01952 820280 (college)

Dr. Abigail Hind  
Aspire Director  
For general information on the secondment scheme  
E-mail: amhind@harper-adams.ac.uk  
Tel: 01952 915369 (direct), 01952 820280 (college)

Postal address:  
Harper Adams University College, Edgmond, Newport, Shropshire, TF10 8NB