Flexible learning has become a familiar phrase in UK Higher Education. It can mean different things to different people and organisations. For example, HEFCE focuses on extended or accelerated study [http://www.hefce.ac.uk/learning/flexible/]. For others, the focus is on providing students with access to open learning materials that will help them to ‘own’ their learning. Flexibility in approach like this particularly supports the widening participation agenda. The mathematics and statistics support championed by sigma provides students with a range of flexible learning options to support their studies throughout their university careers. Although CETL funding ended in July 2010, sigma’s outreach work is continuing as part of the National HE STEM programme. sigma continues to provide support and advice to those involved in the provision of mathematics and statistics support across the UK and beyond.

Through the provision of face-to-face mathematics and statistics support, universities are offering students the option of seeking help and support at times that suit them, with staff who are empathetic and supportive. Face-to-face support is offered in a number of ways, depending on what suits a particular institution – it can be as in a drop-in centre, 1:1 appointments or as a peripatetic service in various campus locations. Support is usually provided from the start of the academic year and students are strongly encouraged to seek support at the earliest opportunity. In terms of mathematics support, students can use the provision as often as they require and often in the case of dedicated centres use the location as a quiet study room, requesting help as and when needed. The number of 1:1 appointments for statistics support available to a single student may be limited due to demand.

Pilot projects are underway to develop additional methods of offering support. In particular, a National HE STEM programme funded pilot project is currently offering statistics support online, via a web conferencing tool called Elluminate®. The support is being offered to three universities which do not currently provide statistics support for their final year project and postgraduate students. It has also been used to support distance learning and part-time students who find it difficult to access the face-to-face appointments on campus. Early indications show that this online provision is proving popular. Plans are being developed to use this system to pilot mathematics support to part-time day release engineering students enabling them to access support from their place of work or home locations.

Flexible learning also places a large emphasis on open and electronic learning resources. sigma continues to support and develop the www.mathcentre.ac.uk website, which houses hundreds of resources in a variety of formats, such as self study guides; test yourself diagnostics and exercises; video tutorials; iPod and 3G...
mobile phone downloads; and case studies. Resources are available on-line, and may be printed or downloaded. These resources are freely available to any user and provide the mathematical underpinning for a wide range of courses and levels, for post-16 level mathematics. The site is designed to allow the user to pick and choose topic-specific help as and when they need it. Its sister site www.mathcentre.ac.uk offers video tutorials and interactive exercises to guide the user through a programme of study in 7 key subject areas, starting with the basic building blocks and working through to higher level concepts. Both mathcentre and mathtutor are extremely popular resources across the world and allow the user to work through the resources at their own pace, pausing, rewinding, testing and exploring until they feel comfortable that they have grasped the concept. sigma is working with the mathematics community to continue to add new resources to the site. In addition, a new sister site, www.statstutor.ac.uk is currently under development and should be launched in early September 2011.