After successfully completing the second year of my mathematics and computing degree at Coventry University, I began my industrial placement year with sigma, the centre for excellence in teaching and learning in mathematics and statistics support. Before it had been confirmed that I had the project assistant job with sigma, I had chosen a dissertation on computer graphics.

One of sigma’s main aims was to use new emerging technologies to develop innovative teaching methods. With the increasing popularity of new high powered mobile technologies, such as iPods, iPads, laptops and smart phones, many students have access to a mobile device capable of accessing the internet or playing video clips anywhere. With more and more students wielding mobile devices, a new opportunity for education on-the-go has arrived. Mobile learning or m-learning is becoming a new frontier for education.

During the year I undertook a variety of different technical and administrative projects - most involved an element of education. Over the course of the placement I filmed, edited, compressed and starred in different video resources. These short video tutorials were compressed to a selection of different file types to be viewed on mobile phones, iPods or laptops. These videos were made available for download via mathcentre.ac.uk so students could watch them anywhere.

Mobile technologies make the internet readily available giving students the opportunity to connect to their university’s virtual learning environment (VLE) whenever and wherever. At sigma, I helped produce online tests for a selection of courses ranging from nursing to engineering. These online tests would be generated from a bank of questions, each involving randomised variables which reduced the chance of a student getting the same question. These variables meant the online tests were a re-usable m-learning resource.

I was asked to look into the possibility of creating an iPod application for the mathcentre website. With the increasing number of students owning an iPhone or an iPod touch, an application could be the next step in m-learning. After doing some preliminary research, I presented my results but the project has not yet developed.

Working with m-learning resources was one of the most interesting areas into which I gained insight during my placement year. I enjoyed working with new technologies and being able to see the end product. The numbers using the online tests grew as the year progressed. I enjoying using the sigma studio and during the year have gone from having no technical experience with video production to being a confident user of the software.

Towards the end of my placement, the Director of sigma at Coventry University asked if I would like to change my final year project to incorporate some of the ideas I learnt over the year. The new project would use the idea of m-learning and integrate some coding and mathematics. I decided to change my dissertation to ‘Mobile Technology for Mathematics Teaching and Learning’. During my dissertation I will focus on the mathematical aspects of m-learning, exploring the currently available resources and produce a proof-of-concept example for the iPad.