



Learnhigher

Outside of scheduled lectures and seminars it is important to support students in the area of Mathematics. This is especially true for students who are studying quantitative modules at undergraduate level who may not have completed an AS- or A-Level in Mathematics. Students usually struggle to bridge the gap between GCSE and Undergraduate Mathematics (see [Literature Review](#)).

Students need to be supported so that they can develop and enhance the necessary mathematical skills required for their course and be given opportunities to receive feedback on their learning.

The following pages contain resources that have been developed and exploited at Brunel University across a wide range of undergraduate courses and levels. These resources can be embedded within a module by academic staff or can be used independently by academic support staff or students.

Background information and relevant literature will be provided for each resource as well as details of how each resource has been used at Brunel University.

Small group workshop is one method that can be used to support students to develop skills and confidence in the area of Mathematics. Small group teaching not only promotes learning of the subject, since students are actively involved with the session (Griffiths, 2003; Newble & Cannon, 2000), but it also encourages students to develop interpersonal skills (Newble & Cannon, 2000). The small group sessions at Brunel University have been designed so that students are actively involved and encouraged to ask questions, which will help overcome any misconceptions they may have with the topic area (Biggs, 2003).

With the ever-increasing number of students entering Higher Education (HE) there is a pressing need to use alternative assessment methods which are as, or indeed more, effective than paper-based assessments. This increase in student numbers has made the process of providing students with formative feedback much more difficult. There are many methods that can be implemented into a course to provide formative assessments, such as peer-assessments, class-tests, self-assessments, etc. This section will look into the

use of Computer-Aided Assessments (CAA), which is a tool that has been used in HE for a considerable time.

There are also many resources online that have been developed to be used by students and staff. These resources are available for free and can either be used as additional material to distribute to students or integrated into a module.