



CAMBRIDGE ASSESSMENT

Going beyond the syllabus: views from teachers and students of A level mathematics

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Paper presented at the British Educational Research Association annual conference, University of London Institute of Education, September 2011.

Abstract

We explored teachers' views and students' experiences of going beyond the syllabus in A level Mathematics. Four questions were addressed:

1. Are students enjoying their A level Mathematics courses?
2. To what extent do A level Mathematics students undertake extra activities?
3. What are A level Mathematics teachers' views on teaching beyond the syllabus?
4. Are there any links between teachers' views and the performances of their students in A level Mathematics?

Questionnaires were sent to teachers and students in a sample of 200 schools/colleges. The sample represented the wider A level population for a popular A level mathematics course in terms of social deprivation, academic achievement and school/college type, as measured by indicators derived using data from the National Pupil Database. Teachers were asked for their views on the necessity, importance, and uses of teaching beyond the syllabus. Students were asked about the extra reading and other activities they undertook.

20% of schools/colleges responded, returning 47 teacher questionnaires and 299 student questionnaires. Most students were enjoying their courses, and over half claimed to undertake extra activities. Although a few teachers thought teaching beyond the syllabus was unimportant and unnecessary, over 70% felt it should be undertaken if time allowed. Teaching efficacy was measured by comparing each teacher's students' Mathematics results with those students' results in other A level subjects. Significantly more teachers with relatively high Mathematics results than with relatively low results believed teaching beyond the syllabus strengthens and expands students' existing knowledge and adds interest to the course.

