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Lessons for mathematics higher education from 25 years of mathematics support

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INDRUM KEYNOTE PRESENTATION

The scale and scope of mathematics support within UK universities have grown significantly since the 1990s. Mathematics support has evolved from a ‘cottage industry’ initiated by enthusiasts into a main-line student support provision overseen by institutional senior managers. Over this 25+ year period, the importance of the mathematical sciences in other disciplines has similarly boomed. No longer is it just engineering and physics undergraduates who need to acquire highly developed mathematical skills. Today geographers, bioscientists, sociologists and political scientists (to name but a few) have to be more skilled than ever before with understanding mathematical and statistical models and methods, particularly if they are to be able to access the international research literature and compete in the international employment market. Just as in the 1980s and 1990s, the Engineering Council produced reports warning of ‘the mathematics problem’, so in the 2000s and 2010s, the British Council and Royal Society of Arts have done the same. This presentation will outline how mathematics support has developed throughout the UK to meet this increasing demand.

Whilst the initial impetus for mathematics support came from a desire to improve the mathematical learning of students from other disciplines, it is an indisputable fact that a significant proportion of the users of mathematics support has been, and remains, mathematics undergraduates. This gives us cause to reflect: why is mathematics support so attractive to mathematics undergraduates? To answer this question, we explore the views of mathematics undergraduate students as expressed through the National Student Survey and in focus groups and individual interviews. The views the students express shed light on the reasons why many of them find mathematics support to be an attractive resource to support their learning.