

For tutors: Mature students

Introduction

What defines a mature student can vary slightly from country to country however in the UK it is anyone who is aged 21 or over at the start of their higher education studies. Mature students are likely to have a variety of motivating factors for returning to education such as a desire to start a new career or an interest in advancing an existing one. Others may wish to take advantage of a second chance due to formal education not working out the first time around for a variety of reasons. Or students may wish to turn an interest/hobby into something more.

Mature students may have the following **strengths**:

- Mature students tend to adopt desirable approaches to learning i.e., deep level learning approaches as opposed to surface level approaches to learning.
- They can often relate learning in a formal setting to real world experiences.
- They are usually extremely motivated to succeed.
- They often have a greater tendency to avail of mathematics support services than their younger counterparts.

Impact on Mathematics

- They can be out of practice with formal mathematics education which can often result in a lack of confidence in this setting.
- If they are taking advantage of a 'second chance' or have entered higher education via a vocational route they may have studied less formal mathematics than their younger counterparts. They may have difficulties with the 'standard' pre-requisite maths skills for their course or with general numeracy.
- They may have high levels of anxiety or low confidence with mathematics.

Strategies to Help

- A. Start with what students know about a topic – even if knowledge is very basic.
- B. Use graphical, tabular and algebraic explanations where relevant.
- C. Be prepared to re-explain a concept in a different way or ask a fellow tutor to re-explain something if student does not grasp it straight away.
- D. Do not rush – allow plenty of time for reflection and attempts before intervening.
- E. Assure students that they are capable of being successful in formal mathematics – mature students often perform lower than their younger counterparts on entry to higher education but better on exit due in part to engaging with support services.
- F. Use real world examples of mathematics to explain key concepts.
- G. Do not use formal mathematics terminology that students may not be familiar with.
- H. Encourage students to ask questions and say if they are unsure of anything.
- I. Direct students to useful resources/workbooks for developing mathematics skills.
- J. Ensure that students understand that mistakes are part of the learning process.

Resources

- Mathcentre <https://www.mathcentre.ac.uk/>
- HELM <https://bathmash.github.io/HELM/>
- Khan Academy <https://www.khanacademy.org/>
- 'Head Start Maths' booklets <https://ulsites.ul.ie/cemtl/head-start-maths-workbooks>