



THOMAS ESTLEY COMMUNITY COLLEGE

Numeracy Policy 2018

Reviewed by	Summary of changes	Date
Adam Hutchinson	No changes other than formatting	February 2018

Numeracy is a proficiency, which is developed mainly in mathematics but also in other subjects. The implementation and promotion of the Numeracy Policy is the responsibility of all staff. It is more than an ability to do basic arithmetic. It involves developing confidence and competence with numbers and measures. It requires an understanding of the number system, a repertoire of mathematical techniques, and an inclination and ability to solve quantitative or spatial problems in a range of contexts. Numeracy also demands understanding of the ways in which data are gathered by counting and measuring, and presented in graphs, diagrams, charts and tables.

Thomas Estley Community College is committed to raising the standards of numeracy for all of its students; we want our students to be confident and capable in the use of numeracy to support their learning in all areas of the curriculum and to acquire the skills necessary to help achieve success in further education, employment and adult life.

1. We intend that all of our students should:

- Have a sense of the size of a number and where it fits into the number system.
- Be able to use strategies successfully to solve number related problems mentally.
- Apply an appropriate method to help solve a problem, e.g. mental, oral and written methods.
- Make sense of number problems and identify and use the required operations to solve them.
- Restrict their reliance on using a calculator and use them only when it is appropriate to do so.
- Develop their skills in estimation and approximation and have strategies for checking the reasonableness of their answers.
- Be able to explain their methods and reasoning using consistent language and mathematical terminology.
- Be able to make and use sensible estimates of a range of measures in everyday situations.
- Be able to interpret, explain and make predictions from information given in graphs, charts and tables.
- Improve their general problem solving skills.
- Be able to use these numeracy skills to support their learning across the curriculum.

2. The Use of Calculators

- Students should have the required skills to use the basic facilities of a calculator effectively, for example, the order in which keys are used the use of the constant and memory facilities etc.
- Students preferably become familiar with their own calculator, for example, how it handles the input of multi step calculations.
- The school expects each student to bring and use their own calculator, suitable for use in external examinations.
- Students should be encouraged to estimate the approximate answer first and then use the calculator to check the reasonableness of their answer.
- Students need to interpret calculator answers sensibly.
- Calculators may be used when working with real data, possibly involving very large, small or decimal numbers, which might otherwise restrict their progress in a lesson.
- In all areas of the curriculum the use of calculators can be encouraged where they enhance the learning taking place, however, it is important that students do not develop a reliance on the use of a calculator to solve problems where mental and/or written methods can be used.

3. Written Calculations

Students should be encouraged to see mathematics as both a written and spoken language. Teachers should support and guide students through the following important stages:

- Developing the use of pictures and a mixture of words and symbols to represent numerical activities;
- Using standard symbols and conventions;
- Use of jottings to aid a mental strategy;
- Use of pencil and paper procedures;
- Use of a calculator.

The long-term aim is for students to be able to select an efficient method of their choice (whether this be mental, written or using a calculator) that is appropriate for a given task. They will do this by always asking themselves:

- 'Can I do this in my head?'
- 'Can I do this in my head using drawings or jottings?'
- 'Do I need to use a pencil and paper procedure?'
- 'Do I need a calculator?'

Please see written examples for addition, subtraction, multiplication and division.

4. Monitoring and Evaluation

The Numeracy Policy will be monitored and reviewed through:

- Departmental Improvement Plans
- Lesson observations
- Sampling of students' work
- Discussion with staff, parents and governors
- Reviewing planning
- Analysing assessment data
- Student Voice

Equality Monitoring

Thomas Estley Community College's commitment to equality and diversity means that this policy, via an Equality Impact Assessment, has been screened in relation to the use of gender-neutral language, recognition of the needs of disabled people, promotion of the positive duty in relation to race, age, disability and avoidance of stereotypes.

Based on the Equality Impact Assessment findings, this policy is judged to be of low impact against the equality strands of Race, Gender, Religion, Disability Sexual Orientation and Age. A copy of the Equality Impact Assessment of this policy is available from the Principal's PA.

This Policy is available in alternative formats on request. If you think we can improve the fairness of this Policy, please contact the individual who has responsibility for its update.

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Initial Equality Impact Assessment

Name/s of policy, procedure, or practice:	
Date of impact assessment:	
Is this a proposed or existing policy, procedure or practice?	
Is this model LA policy, procedure or practice for local adoption?	Yes / In Part / No / Don't Know
What are the overall aim/s or purpose of the policy, procedure or practice?	To ensure a fair
Who is intended to benefit from the policy, procedure or practice?	All students

Equality Strand	Does the policy/ procedure/provision (including access to facilities) or proposed plan have an adverse or positive impact on people from these key equality groups?	If adverse impact, are there any changes or reasonable adjustments which could be made to the policy/procedure/ provision or proposals which would minimise any adverse impact identified? Please describe.	Areas for review/actions taken (with timescales and name of person responsible)
Race	No		
Gender	No		
Religion/Belief	No		
Disability	No		
Sexual Orientation	No		
Age	No		
Social Inclusion	No		
Community Cohesion	No		

Based on the impact assessment findings, and the reasonable adjustments in place, this policy is judged to be of **high/medium/low** impact against the above equality strands. (Delete as appropriate).

Initial Assessment undertaken by:(Signed)

Copies circulated to P Bates for impact assessment file to include any actions in appropriate plans.

If high or medium judgement made, the monitoring sub-committee must consult appropriate equality group to gather appropriate monitoring data/consult on redrafting/consult on additional appropriate reasonable adjustments.