



WINCHCOMBE SCHOOL

Numeracy Policy

Effective Date: January 2016

Review Date: November 2018

To be Reviewed: Awaiting confirmation

Review Committee: Curriculum

This Policy was reviewed and adopted by the Full Governing Body

Signature		Headteacher
Signature		Chair of Curriculum
Date		

'Numeracy is a proficiency which is developed mainly in mathematics but also in other subjects. It is more than an ability to do basic arithmetic. It involves developing confidence and competence with numbers and measures. It requires 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.'

(Framework for Teaching Mathematics – yrs 7 to 9 – DfES)

Numeracy has a bad press in this country compared to Literacy. Many adults freely admit to being unable to “do maths”. Confidence is a big issue and it will take a whole school approach to address this. We believe that by making and reinforcing the cross-curricular links in numeracy, students will see all staff as numerate, will realize the usefulness of mathematics in many contexts and will gain the confidence they need to apply these skills.

We believe that:

- Confidence in numeracy comes from seeing all staff prepared to engage with numbers in their subject area.
- Competence and fluency are developed through regular opportunities to use mathematics to solve problems/engage with data/provide evidence to support statements in many contexts.
- Students are motivated to use mathematics where they see it valued and where there is an expectation that numbers contribute to a solution.

Numeracy across the Curriculum is important because:

- Mathematics is a vital part of how we live. It drives advances in science and technology, decides policy in business and government, informs us about the world and helps us model change. We need to equip our students to be numerate if they are to play a full part in society.
- Mathematical problems require a type of logical thinking which is a valuable tool for reasoning.
- The communication of ideas through observation, discussion and written methods is an important part of learning.
- A fluency in numeracy builds confidence in students and enhances their self-esteem.
- Numeracy develops language skills due to its specialized vocabulary and coding.
- Mathematics develops spatial skills in conjunction with art and PE and geography.
- It develops appreciation of form and pattern.
- Everyday skills of reading scales, ordering amounts of materials etc are essential parts of participating in society.
- Budgeting and personal finance management are vital personal skills.

Across the school we intend to:

1. Identify all the existing uses of numeracy across the curriculum through a Numeracy Audit, interviews with staff, department INSET etc.
2. Make this data accessible and improve the cross-curricular links to all staff and encourage dialogue about where topics are best taught and how the mathematics department can support the learning and learn from other subject areas.
3. Embed the learning of mathematics through frequent, relevant use of skills to enhance and support learning in other subjects.
4. Have numeracy on the agenda at departmental meetings at least once a term.
5. Develop support materials and training for staff to improve their confidence in delivering numeracy. The **Calculation Guide** document shows how certain skills are taught in mathematics lessons.
6. Identify and make use of all relevant resources and training on developments in numeracy teaching.
7. Introduce real life numeracy lessons during tutor lessons on Friday week 2, every tutor group will receive one of these lessons. These lessons are to be delivered by the numeracy co-ordinator.
8. We feel it is important to involve parents in numeracy so every Monday after school we will run numeracy lessons for parents.
9. Introduce a house numeracy competition to be run on one of our house days to raise the profile of numeracy throughout the school.
10. Have a consistent method for multiplication and dividing across the school, this has been delivered at an inset on Monday 2nd July. We will also be following this up in a further inset.
11. Have an inset on how to teach negative numbers.
12. Have a coaching group for numeracy to ensure that numeracy is being delivered effectively across the curriculum.
13. Review this numeracy policy annually.

Implementation at whole-school level

Numeracy is a key component for making progress to a higher level in all subjects and so all staff need to promote its practice.

Roles and responsibilities:

- **Senior managers:** the Headteacher will lead and give a high profile to numeracy development and be responsible for monitoring progress across the school and assessing standards of students' numeracy.
- **Numeracy coordinator:** map numeracy across the curriculum, identify cross-curricular opportunities to deliver numeracy, and advise on developing the mathematics schemes of work to support this. Support subject staff and Heads of department in other areas in delivering numeracy and encourage the development of an increased use of numeracy to enhance learning. To continue to work with feeder schools in order to establish agreed approaches in the teaching of mathematics and promote the subject. In conjunction with the Deputy Headteacher, to work with feeder schools in the training of primary teachers, particularly the more able. To feedback progress to WS staff and the Head of Mathematics. To ensure implementation of the policy, focusing on the key priorities.
- **Mathematics department:** provides students with the knowledge, skills and understanding they need to calculate and be effective at applying numeracy skills. Play a key role in supporting the delivery of numeracy in other departments and in promoting the cross-curricular uses of numeracy.

- **SEN department:** provides targeted intervention to students working below Secondary Standard and support for students with EHCP's or SEN Support.
- **Librarian:** To ensure that the library has in stock, books in the popular science genre which promote mathematics in a more holistic way.
- **Heads of Department:** Ensure schemes of work have references to where numeracy is included and monitor its implementation across the department.
- **Teachers across the curriculum:** contribute to students' development of numeracy by using it to support their subject and taking opportunities to calculate/examine data/use mathematical vocabulary during lessons. Use the Calculation guide/advice from mathematics staff when teaching numeracy skills. Include numeracy in their feedback to students through marking etc by checking accuracy of work and setting targets that encourage the students to consider its use.
- **Parents:** encourage their children to use the range of strategies they have learnt to improve their levels of numeracy. Take a positive attitude to the necessity of being numerate to combat the cultural perception that it is "normal" to struggle with mathematics. Seek advice from classroom teachers, work with their children on mymaths.co.uk and use the VLE. Parents can also improve their numeracy skills by attending the after school numeracy classes run every Monday after school.
- **Students:** take increasing responsibility for recognizing their own numeracy needs and making improvements. Develop their investigative skills and inquisitive thinking.

Key Priorities Agreed for 2018/19

- Map the curriculum to discover where numeracy is taught and identify areas for development.
- Raise the profile of numeracy and embed as a whole-school responsibility.
- Work with the SEN department to find a more proactive form of intervention for those students who need extra help along the lines of the Fresh Start course.
- Introduce a house numeracy competition to raise the profile of numeracy.
- Introduction of a consistent method for multiplication and division to be used throughout the school.

Our school is committed to raising confidence and standards in numeracy in all its pupils through a coordinated approach.

Everyone involved with pupils in the classroom has a role to play in this process.