LOtC and the new National Curriculum

With a strong emphasis on spelling and grammar, times tables and long division, the new National Curriculum has been heralded as a return to high standards and rigour as we strive to catch up with the world’s top ranking nations in terms of educational performance.

However, there is no doubt that the quality of teaching in schools, more than the content of the curriculum itself, is going the make the most difference to our young people. This is why it is essential that the National Curriculum draft programmes of study maximise the opportunities to learn outside the classroom for all pupils.

The draft programmes of study for primary maths, English and science are very detailed, but the government promises for other key stages and subjects to give teachers more space and flexibility to design their lessons by focusing only on the essential knowledge to be taught in each subject. We have taken an in depth look at the National Curriculum to identify the opportunities for LOtC which specifically link to the learning outcomes for maths and English. We will look at all of the programmes of study in coming issues of the CLOtC members’ newsletter.

A broad and balanced curriculum

At the core of the curriculum in England is the statement that every state-funded school must offer a curriculum which is balanced and broadly based and which:

- promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society, and
- prepares pupils at the school for the opportunities, responsibilities and experiences of later life.

The contribution of learning outside the classroom in the above areas is widely acknowledged. Taking learning outside the classroom enables pupils to apply what they have learnt inside the classroom in a real world context and equips them with skills (communication skills, team working, problem solving and risk management to name just a few) they will need for real life and employment. The benefits in terms of physical and mental health, expanding the horizons of young people and changing their environmental behaviours and attitudes are also well evidenced.

As Ofsted stated in response to the Education Committee Third Special Report “Transforming Education Outside the Classroom” in October 2010:

“Inspectors are required to take account of the extent to which a broad and balanced curriculum is designed and modified to meet the needs of individuals and groups of pupils, and the design, range and depth of the curriculum from the pupils’ perspective. Clearly, a curriculum is only likely to have these qualities or attributes if it provides substantial opportunities for pupils to learn outside the classroom.”
It should also be noted that the draft framework document states that the National Curriculum is just one element in the education of every child, adding that:

“There is time and space in the school day and in each week, term and year to range beyond the National Curriculum specifications. The National Curriculum provides an outline of core knowledge around which teachers can develop exciting and stimulating lessons.”

In reviewing the draft programmes of study, it is clear that learning outside the classroom can add value to teaching and learning across all areas of the curriculum. Apart from a couple of areas for concern which we will be campaigning against (see the end of this article) the only limitation where LOtC is concerned is our own imaginations!

**The draft programme of study for English**

“The overarching aim for English in the National Curriculum is to promote high standards of literacy by equipping pupils with a strong command of the written and spoken word, and to develop their love of literature through widespread reading for enjoyment.”

There is a strong emphasis on promoting high standards of literacy, a stronger command of the written and spoken word and strengthening the teaching of phonics, but this does not mean that opportunities for learning outside the classroom are in any way diminished. LOtC can enhance the teaching of even the driest of concepts and can ensure the engagement and enjoyment of pupils.

Elements of the programme of study and where LOtC can add value include:

**Reading**

- **Develop a love of literature.** Opportunities to see plays performed on stage, dramatise literature and experience the settings or historical contexts of texts will make literature more accessible and meaningful.

- **Word reading.** LOtC can offer pupils alternative ways to practice their phonics skills - for example a phonics hunt in the school grounds where pupils must find phonemes and graphemes needed to construct words or sentences.

- **Comprehension.** The draft programme of study for English states that good comprehension draws on linguistic knowledge (in particular of vocabulary and grammar) and on knowledge of the world. Although the document does not specifically acknowledge the value of LOtC in ensuring a good knowledge of the world to aid comprehension, the ability to draw on real life experiences of settings and situations will enable children to comprehend both fiction and non-fiction texts much more readily than simply discussion and will also enhance children’s enjoyment of reading. Teachers should be encouraged to ensure children have a wide base of experience to draw on when reading, in particular where a child’s experience base may be limited in one or more areas. A simple example of this would be inner city children who have no experience of the countryside, or children from rural areas who have no experience of a busy city setting.

- **The role of role play in enhancing comprehension at KS1.** The draft programme of study for year 2 highlights the value of role-play and other drama techniques in helping pupils to identify with and explore characters, extend their understanding and try out the language they have listened to. Use local venues and natural spaces (theatres, historic settings or the
local woodland) to create novel and atmospheric locations for role play – especially if the setting is relevant to the text.

- **Comprehension at key stage 2.** The value of reading, re-reading, and rehearsing poems and plays for presentation and performance is written into the programme of study as a useful method of giving pupils opportunities to discuss language and extend their interest in the meaning and origin of words. These activities also provide them with an incentive to find out what expression is required, so feeding into comprehension.

- **Reading critically at key stage 3.** Pupils are required to study setting, plot, characterisation and the effects of these and understand the ways that great dramatists make their works effective on stage. In order to do this pupils must have a broad experience base which can be gained during regular learning outside the classroom activities and must have the opportunity to see their key texts performed on stage.

- **Studying 2 authors in depth each year at key stage 3.** This presents many opportunities to investigate the historical, cultural and moral context of literature. Making the most of relevant LOTC opportunities can greatly enhance pupils’ understanding of context and therefore the themes of texts.

**Writing**

- **Composition (articulating ideas and structuring them in speech and writing).** Writing is intrinsically harder than reading and many groups of pupils find writing a difficult skill to acquire. Making writing fun and motivating pupils to want to write is an important strategy. LOTC can inspire writing with new ideas and experiences. This is illustrated in the case of Rush ey Mead School who took 26 Year 9 boys to Leicester Outdoor Pursuits Centre. The aim of the visit was to use an LOTC experience to engage the boys in creative writing. The boys completed two challenges and then wrote descriptively about what they did and the way they felt, then returned to school for two further sessions drafting their creative writing pieces, with 36% exceeding their working level at their first attempt. 23 out of the 26 boys (88%) thought that the trip helped them to improve their writing.

- **Drama and role play.** To quote directly from the draft programme of study “Drama and role play can contribute to the quality of pupils’ writing by providing opportunities for pupils to develop and order their ideas by playing roles and improvising scenes in various settings.”

- **Writing for a range of real purposes and audiences.** Real life learning experiences can provide a wide variety of opportunities to practice writing for real life scenarios and audiences and these can be planned into LOTC activities.

- **Writing in narratives, creating settings, characters, plot and atmosphere.** In order to do so effectively, a wide base of experience and knowledge of the world is vital, therefore regular opportunities to experience the world beyond the classroom will greatly enhance pupils’ ability in this area.

- **Mastery of language.** Pupils’ confidence, enjoyment and mastery of language should be extended through exposure to different kinds of texts which can be accessed through LOTC activities, for example, visiting a local newspaper to develop journalism skills, or exploring the guides and information leaflets available at historic houses and other attractions.

- **Handwriting.** Pupils can practise letter formation in a number of novel ways outside including using sand, chalks and paints on both a large and small scale or in novel ways such as using moss paint (see lesson idea in this issue of the members’ newsletter).
- **Spelling.** In a fun variation on the dreaded spelling test have a spelling race in the playground with the first team to spell ten words correctly winning the race.

**The spoken word**

- **Use discussion in order to learn.** Practical activities and learning through doing in all subject areas will create opportunities for pupils to use discussion in order to learn, elaborate and explain clearly their understanding and ideas.

- **Competency in the arts of speaking and listening.** LOtC activities also create opportunities for pupils to use speaking and listening skills in a real life setting, including making formal presentations during a visit or afterwards or participating in debate regarding ideas and concepts investigated during a visit.

- **Confidence and competence in spoken English.** Teachers should ensure the continual development of pupils’ confidence and competence in spoken language. Some children find it hard to speak out in the classroom setting and for these children learning outside the classroom in different environments, where they feel able to be more vocal and where they feel enthused and excited, can help them to overcome their shyness. There are many examples where LOtC represents a breakthrough in the willingness of a child to communicate with teachers and peers, and this change is often transferred back into the classroom environment.

- **Rehearsing and performing play scripts and poetry.** This can be used as a focus for discussion about language use and meaning, using intonation, tone, volume and action to add impact.

**The draft programme of study for mathematics**

The draft programme of study for maths states that a high-quality mathematics education provides a foundation for understanding the world, the ability to reason mathematically and a sense of enjoyment and curiosity about the subject.

There is a distinct emphasis not just on knowledge gained, but on the application of that knowledge. By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. Practical and hands on learning experiences are key to enabling children to apply the knowledge gained inside the classroom to real life contexts and helping them to understand how they can use their knowledge to solve practical problems. In this way learning outside the classroom can add value to the teaching of mathematics, increasing enjoyment of the subject and enabling pupils to achieve a greater depth of understanding.

Children learn in different ways, and using a variety of indoor and outdoor environments will help make maths fun and exciting and enable children who do not thrive inside the classroom to enjoy the subject and achieve.

The environment around us – in the school grounds, natural spaces, buildings and the urban environment are full of mathematical features - shapes, angles, dimensions to be measured and
distances estimated and calculated. The following are a range of activity suggestions which support the learning outcomes set out in the draft programme of study:

**Key stage 1**

- **Number and place value.** Collect 100 objects – e.g. pine cones, acorns, conkers in a woodland and arrange them in groups of twos, fives or tens. Arrange the objects in number shapes to ‘write’ a variety of numbers up to 100 in digit and word format - 56 and fifty six, etc.

- **Addition and subtraction.** Have a number race. The teacher should read an addition or subtraction problem and the children must run to collect the right number from cards arranged around the playing field, local park or soft play area. The complexity of the questions can be tailored to different key stages.

- **Multiplication and division.** Using groups of acorns or similar natural objects, solve multiplication and division problems. How many groups of 2 acorns will you need to feed 8 hungry squirrels 1 acorn each? The naughty squirrel ate half of the acorns; show me how many are left.

- **Fractions.** In the forest school area, supervise children using tools to divide sticks or twigs into halves and quarters, thirds etc. Get the children to draw pictures of the divided sticks, using labels to indicate the 1/3 section and the 2/3 section, etc.

- **Measures.** Test out a range of containers to see which hold the most water and to estimate how many volumes of one are needed to fill another. Use ms/cms to measure the height of sunflowers. Give children a selection of coins and task them with purchasing an item from the local shop, selecting coins to add up to the closest value and working out how much change they will get back.

- **Shapes.** Go on a shape hunt to find 2D and 3D objects hidden in the school grounds: cylindrical dustbins, hexagonal paving slabs and cuboid planters.

- **Geometry: position, direction, motion.** In the school grounds, park or other open space get children to work in pairs to direct each other from A to B, instructing each other to make x number of steps and make half, quarter and three quarter turns to travel.

- **Data.** In a museum count the number of items in a category and record the results in a simple table, sorted by quantity.

**Key stage 2**

- **Number, place value and rounding.** Make a baking soda volcano and countdown to eruption, counting backwards through zero to include negative numbers.

- **Multiplication and division.** To consolidate the teaching of times tables, ask students to design a course on a traversing wall. Chalk questions (e.g. 6 x 3) on the foot positions and answers (e.g. 18) on the hand holds. This lesson idea and others can be found on the Learning through Landscapes Scotland website [http://www.ltl.org.uk/scotland/about-more.php](http://www.ltl.org.uk/scotland/about-more.php)

- **Measures.** Measure the perimeter of 2D flower beds or paving slabs in the park or school grounds (extend learning by recording in cms and ms). Run a flower stall selling posies for Mothers’ Day and add and subtract amounts of money to calculate the correct change.
During a visit to a historic house, make a simple diary of the day, recording times from an analogue clock using roman numerals (extend learning by converting to digital 24 hour format).

- **Geometry: properties of shapes.** Explore and record the variety of angles that exist in nature. In an art gallery, search for 2D shapes in the pictures then make 3D representations of the shapes in clay in the studio or back at school.

- **Geometry: position, direction, motion.** Draw a giant grid in chalk on the playground and get students to use coordinates to place themselves on the grid.

- Solve problems using multiplication, division, addition and subtraction, using fractions and decimal equivalents, using LOtC visits to provide the real life contexts.

- **Data.** Use a bus or train timetable to plan the transport for an LOtC visit.

- Use algebra to calculate a missing dimension of a room (e.g. height)

**Key stage 3**

- **Algebra.** Use algebra to solve real life problems related to LOtC activities, to enhance understanding of how it is useful in the world of employment.

- **Ratio, proportion and rate of change.** During adventurous activities solve problems relating to distance and speed.

- **Geometry and measures.** Study a natural object or feature, applying concepts including angles, producing and interpreting scale drawings, identifying face, edge and vertex properties of: cubes, cuboids, prisms, cylinders, pyramids, cones and spheres.

- Conduct probability experiments on the archery range, recording and describing the outcomes.

- **Statistics.** Identify appropriate questions, data collection, presentation, analysis and interpretation to conduct exploratory data analysis during a geography field trip.

**CLOtC’s response to the National Curriculum consultation**

There is no doubt that there are many opportunities for learning outside the classroom in the draft programmes of study, but we are committed to ensuring that the National Curriculum draft programmes of study maximise the opportunities for LOtC for all pupils. For this reason, it is essential that the content of the draft programmes of study does not inadvertently limit these opportunities.

We share the concerns of the Historical Association that the history draft programmes of study are heavily prescriptive, narrow in focus and do not have enough emphasis on the skills of history. We also share the concerns of the Group for Education in Museums (GEM) that the prescriptive content and emphasis on chronology rather than how individuals in the past lived may impact on visits to museums and historic houses. Read the article in our February CLOtC newsletter for details.

We are currently preparing our response to the National Curriculum consultation in order to ensure the opportunities for LOtC in the National Curriculum programmes of study are maximised across all subject areas. If you have any comments you would like us to consider including please email elaine.skates@lotc.org.uk.