



CARSTAIRS PRIMARY SCHOOL

Numeracy & Maths Position Statement

August 2022

Rationale

Our pupils are growing and learning in a fast paced, ever-changing society. The Scottish Government's purpose of sustainable economic growth has a direct impact on the teaching and learning experiences our pupils encounter. Our school needs to provide our pupils with the skills they need to contribute effectively in society, allowing them to achieve high levels of success in their daily lives and in the world of work.

We at Carstairs Primary agree with Donaldson (2010) who propounds that: '...young people need to develop a broad range of mathematical and numeracy skills..... To maximise their life chances, young people need the confidence to recognise when and how to apply their skills in a range of situations, some of which are predictable and others which are new to them.' Unpredictability is the main predictable factor in the current climate and as such, Skills Development Scotland (2018) highlight that: 'We are moving into the fourth industrial revolution, driven by technological disrupters.....Technological and societal disruptions are coming at us thick and fast.....Scotland's citizens need not only the capacity to cope with change but to thrive in it.'

The final report of the Making Maths Count Group (Transforming Scotland into a Maths Positive Nation, 2016) highlights clearly amongst its recommendations, the need to promote the value of maths as an essential skill for every career and to actively tackle 'maths anxiety', also recognised as a need by OECD. The need for this as a core focus is further highlighted by the Maths Attitudes Survey (Winning Scotland, 2018), where 46% of 12,000 children surveyed highlighted feeling nervous or anxious about maths.

With maths being a core component of STEM (Science, Technologies, Engineering and Maths) based subjects and careers, and with significant growth in STEM themes in society, it is imperative that we ensure that we do all we can to fully open as many doors for our learners as possible. It is imperative that we harness the potential to be gained from real life contexts, committing fully to ensuring that any notions of 'natural' or 'innate' abilities in numeracy and maths are suitably challenged, with positive attitudes, confidence and fluency in maths being promoted at all levels.

We are committed to providing our learners with the tools necessary to allow them to function effectively in society and achieve, in excess of, the minimum standards required to

function in a modern society. Families continue to be under significant, and unequal, pressures as we emerge and begin to recover from the global Covid-19 pandemic, with economic pressures continuing to grow. Our learners' attitudes towards, and skill levels in, numeracy and mathematics have a core role to play in their future destinations in the world of work. We, in partnership with our families, need to equip our learners with the confidence to recognise and fulfil their potential and as such, developing high quality numeracy and mathematical skills, is a very high priority for all in Carstairs.

In realising this vision for all of our learners, Carstairs Primary School fully endorses Curriculum for Excellence Numeracy Across Learning and Numeracy and Mathematics Principles and Practice (CfE, 2009) and aims to ensure that all Curriculum for Excellence Numeracy and Mathematics Experiences and Outcomes, pertinent to the age and stage of our learners, are fully addressed. All staff are responsible for Numeracy within Curriculum for Excellence.

Aims

Carstairs Primary School aims to:

- Provide high quality teaching and learning that fosters positive and enthusiastic attitudes towards numeracy and mathematics.
- Fully address all Curriculum for Excellence Numeracy and Mathematics Experiences and Outcomes from Early to Second level (and beyond, as required), taking full account of the National Numeracy and Progression Framework (2016) and Benchmarks (2017).
- Build confidence in our learners in applying their numeracy and mathematics learning in real life contexts.
- Seek and provide opportunities to extend numeracy and mathematics skills across the curriculum, raising awareness of the relevance of this learning in all curricular areas.
- Differentiate appropriately to meet the needs of all learners, providing choice and working with all relevant partners, as appropriate.
- Provide progressive, broad, coherent and deep learning experiences that are relevant, challenging and enjoyable.
- Fully embrace practical and play based approaches to learning, where appropriate.

- Harness real life contexts for learning, including use of the outdoors and digital technologies, to inspire motivation in our learners, actively promoting STEM and skills for life and work.
- Minimise the poverty related attainment gap in numeracy and maths, promoting equity for all.
- Develop numeracy and mathematics skills that enable our learners to function responsibly in everyday life and contribute effectively in society.

Aims into Action: Responsibilities

Teaching Staff

Self Evaluation

In Carstairs Primary School, we recognise and value the benefits of rigorous personal, as well as whole school level, self evaluation in informing continued improvement. All teachers are actively encouraged to reflect on their own daily practice in order to help ensure that optimum high quality teaching and learning is maximised. Engagement with How Good Is Our School 4 Quality Indicators is promoted regularly at whole school level throughout the school year and through our school's quality assurance processes.

Pace

Teaching staff in Carstairs are expected to set an appropriate pace of learning for all. Pupils should be provided with a stimulating learning environment, where learning intentions are regularly shared and reflected upon meaningfully. The importance of high quality interactions between pupil and teacher is fully acknowledged in Carstairs Primary School and all staff are encouraged to consistently promote a 'can do' ethos within their individual classrooms, where support and challenge is consistently provided, as required and where achievement and success are consistently striven for, and celebrated.

Planning For Success & Assessment For Learning

Teachers' day to day assessments should be used to inform the future learning. Scottish Heinemann Maths, TeeJay Maths and Big Maths are commonly used resources and support consistency of approach across our establishment, however all teachers are urged to recognise that while these provide lots of quality teaching materials and support a

consistency of approach, other innovative ideas, approaches and resources are welcome and should feature frequently in their daily practice. Planning reflects this flexibility, to best meet learners' needs and incorporates the fact that there are no ceilings on pupil learning – pace and planning is adjusted to suit pupil needs, achievement and attainment outcomes. Carstairs Primary School teachers recognise that for children's learning to be fully secure, foundations need to be solid and application of learning in different contexts essential.

All staff recognise the importance of quality record keeping, in order to help track and monitor children's progress. The importance of thorough planning, which takes full account of regular formative and summative assessment is imperative. All teachers are expected to keep useful records of children's learning. Progression and next steps should be evident.

All staff are expected to use a range of Assessment for Learning strategies and formative assessment approaches, along with regular summative assessments (eg, Check Ups, NAR bank equivalent, own summative assessments, Lanark Learning Community end of level summative assessments, SNSA, as and when appropriate) to make frequent judgements about pupils' learning and to inform their next steps in learning.

Learners in all classes should be provided with opportunities to engage in developing mental strategies daily, with outcomes closely monitored and acted upon, as required.

Staff are expected to participate in moderation activities with colleagues and to engage in quality dialogue to support school transitions, ensuring that children's progress can continue without unnecessary interruption or delay. All teachers are responsible for ensuring that: '.....numeracy skills developed from early years and beyond are revisited and refreshed throughout schooling.....teachers will plan to establish and consolidate children's fundamental numeracy skills.....so that young people develop a sound understanding of number.' (CfE, Numeracy Across Learning Principles and Practice, 2009). Recognition is given to the need to be mindful of a balance of proportionate coverage of both numeracy and maths, in keeping with Education Scotland (2019, What Is Working Well) advice.

Shared planning in support of quality moderation is actively encouraged. Staff participate in regular moderation activities with colleagues, both in school and across our Learning

Community. Staff are actively encouraged to participate in numeracy and maths networks beyond our establishment and Learning Community.

Staff strive to engage our learners fully in the assessment of their learning. High quality, timely, feedback and learning conversations are imperative, and expected, in order to help ensure our children clearly understand what is expected of them, what their strengths and areas for improvement are.

Assessment must be fully recognised in all classes as entirely integral to high quality teaching and learning. Teaching staff should skilfully analyse and interpret assessment at classroom level, to best inform day to day learning.

Meeting Learning Needs

Teaching staff are recognised as being best placed to understand the needs of their individual pupils. Staff are expected to communicate regularly with our SLT about children's progress and to highlight any concerns, verbally and through written records, where appropriate. Staff are expected to differentiate appropriately to ensure that the needs of all children are met.

Staff need to be aware of, and act upon, the different learning styles of their pupils and the use of active learning is fully endorsed and encouraged at all stages. This may range from imaginative play in P1 to solving real life problems, using mathematical skills in the later stages. We have no set 'one size fits all' formula for active learning in numeracy and mathematics in Carstairs Primary School: teachers are expected to develop numeracy and mathematical skills within well-judged contexts, as appropriate to the needs and interests of their learners.

Problem solving should be encouraged at every opportunity and staff are expected to engage learners regularly in opportunities to explain their thinking. Collaboration amongst learners in all classes is expected and should be encouraged by all teaching staff, where appropriate.

Homework and Pupil Learning Journeys

Teaching staff are expected to issue regular homework, connected to children's numeracy and maths learning. Homework tasks should be varied and stimulating. Homework should be regularly marked and feedback provided to children, timeously. As far as possible / appropriate, best use should be made of Google Classroom to support home learning.

With the exception of P1, who will use a paper diary from August to October and move to online methods in term 2, all children and families from P2- P7 will have access to a Google Classroom online homework diary, for use as two-way home – school communication tool.

All children will set a minimum of one numeracy and / or maths target in their online learning journey per term, which will be evaluated by the teacher, by the learner and by the parent. The purpose of this being to keep progress dialogue open, share success, building and supporting motivation. (*Further detail on learning journeys and partnerships with parents can be found later in this document under 'Partnership Working – Connecting With Others'*).

Aims into Action: Responsibilities

Senior Leadership Team (SLT)

Tracking and monitoring

Supporting innovation and quality learning and teaching

Carstairs Primary School's SLT will track and monitor progress in numeracy and mathematics in all classes on a termly basis. Forward Plan reviews will be conducted three times per year and teaching staff provided with quality, constructive feedback and advice, in written and / or oral form. The SLT will engage in regular professional dialogue with staff about pupils' progress.

In addition to Forward Plan reviews, the SLT will monitor progress through jotter monitoring, classroom visits. Quality assurance approaches will be varied and in keeping with whole school improvement targets. The focus of any classroom visits will always be shared in advance, in line with South Lanarkshire Council guidance. The SLT will keep abreast of all new developments, policies and where possible, resources, in order to ensure that staff are kept well informed about good practice in Numeracy and Mathematics. The SLT will actively seek to develop teacher leadership at every opportunity and will provide guidance to staff

with all matters pertaining to the learning and teaching of Numeracy and Mathematics, where necessary.

Additional Support for Learning – GIRFEC and effective use of resources

While it is fully acknowledged that the classroom teacher should act as the first level of any Additional Support intervention, regular dialogue about children's progress with the SLT may mean that some learners require support additional to that provided by the class teacher, progressing further within a staged intervention framework.

Our Team is fully committed to Getting It Right For Every Child and as such, our SLT, will take steps to provide additional teacher time for those children in need, where staffing constraints allow. Timetables will be devised to derive best value from resources available, including school support assistant allocation, from non class contact PT time, from area cover teacher availability, from time available from our Clydesdale Specialist Support Teacher allocation and any other specialist services available. Timetables will be reviewed by our SLT, in dialogue with class teachers and school support assistants, termly, on a greatest need basis, with consideration having been given to ongoing learner assessment outcomes.

Our SLT will regularly review the resources available in the school stock and will take regular feedback from staff to ensure that the resources required to deliver high quality teaching and learning are provided, as far as possible. Our SLT will ensure that Support Staff are effectively deployed, where possible, to support children's Numeracy and Mathematics learning.

Continuous Lifelong Professional Learning

Carstairs Primary School's SLT will provide opportunities for staff to extend their skill and confidence in teaching Numeracy and Mathematics, through provision of quality CLPL experiences. Carstairs Primary SLT acknowledges the quality CLPL to be found in keeping the staff library well stocked, in providing time for staff to observe others' teaching practice, to engage in quality dialogue with other practitioners and to learn from each other and visitors to our establishment at in school in-service meetings.

In keeping with this, our SLT are committed to providing a variety of quality Numeracy and Mathematics CLPL experiences for staff, as appropriate. Where possible, South Lanarkshire CLPL training and / or training from other external sources, will be funded to support the needs of both teaching and school support staff. Our SLT are committed to facilitating time for sharing / cascading learning experiences within the Team, for example peer training on Catch Up Numeracy.

Whole School Self Evaluation

The SLT will remain fully committed to nurturing a positive, 'can do' climate and high quality team work in Carstairs Primary School, in order to maximise success in the learning and teaching of Numeracy and Mathematics.

The SLT will seek regular opportunities to give staff, pupils and parents a voice, to receive feedback about children's Numeracy and Mathematics learning, in order to further improve.

The SLT will lead rigorous self-evaluation of Numeracy and Mathematics within the school, based on HGIOS4 and Education Scotland (HMle) guidance.

The SLT will remain fully committed to the development of leadership at all levels and strengthening teacher leadership.

The SLT will seek opportunities for staff to engage with other establishments within the Learning Community and beyond, to share and moderate standards in Numeracy and Mathematics, and empower staff and learners to benefit from collaborative opportunities.

Partnership Working – Connecting With Others

We recognise and are wholeheartedly committed to the significant advantages that our learners can gain through high quality Business Partnerships and from opportunities to learn from the wider workforce. Our Team are committed to strong, quality relationships with local businesses and companies linked with our community and beyond, to support real life learning for our children.

Partnerships with Babcock International (STEM focus), Muirhall Energy (STEM focus), the Royal Bank of Scotland (Financial Education focus), ESD (Scottish Water) and ICE (Institute of Civil Engineering) are well established and continue to be of benefit to our learners.

Our SLT are committed to continuing to nurture these partnerships, along with actively seeking new external links and business partnership opportunities.

Aims into Action: Responsibilities

Parents / Carers

Carstairs Primary School recognises the vital role that Parents and Carers have to play in the development of children's skills and attitudes towards numeracy and maths. We recognise the core role that our establishment has to play in supporting and empowering our Parents and Carers, to support and empower our learners.

In order to do so, we are committed to:

- Upholding our open door policy and nurturing strong bonds and reciprocal dialogue with our families.
- Providing access to relevant guidance and support materials, in a variety of formats (verbal, written, digital).
- Providing opportunities for families to join in with children's class / school based learning (for example, class / school open mornings).
- Providing enjoyable, practical, hands on experiences for families to engage 1:1 with pupil learning and success strategies, where possible. This may include, for example, Families Connect style workshops and activities / class showcase events.
- Reporting to parents in written format twice yearly via an interim report in October and a full report in June, with both versions clearly outlining areas for improvement / next steps, as well as pupil strength.
- Engagement in face to face parental consultations twice yearly, prioritising discussion around any particular areas of need / next steps, in addition to celebrating strengths / achievements.
- Responding to queries about numeracy / maths as promptly as possible, in the most suitable format to support the enquiry (for example, if an online diary query could be better explained in discussion, we will call rather than respond electronically).
- Making best use of pupil Learning Journeys (new digital format) – with pupils, parents and staff collaborating to set and evaluate termly numeracy and / or mathematics targets, in support of fostering shared understanding, strong pupil efficacy and positive attitudes towards learning in numeracy and maths.

(See also our Parental Engagement Position Statement, devised by Parental Working Group)

We ask that our families support us to get the best impact the commitments shown above by:

- Actively engaging in warm, reciprocal and supportive partnerships and open dialogue with our staff.
- Ensuring that children are sufficiently supported to complete homework and keeping in contact with us, should this be problematic for any reason.
- Making best use of our home – school dairies to keep in dialogue about pupil learning in numeracy and maths, as appropriate (we request that diaries are signed once a week as a minimum expectation).
- Making best use of our school's open door policy – speaking directly with us about any queries about pupils' learning / learning experiences.
- Talking to children 1:1 about Learning Journey targets and progress.
- Talking to children about report cards / in person consultations, celebrating success and supporting next steps, where appropriate.
- Attending events that we offer, as far as possible.
- Responding to requests for feedback / send back returns timeously.

Aims into Action: Outcomes for Learners

The actions and commitments outlined are, we believe, necessary, to derive best outcomes for our learners. With strong and committed support from the wide range of adults that educate them, our learners stand the best chance of success but we must not omit the important role that our learners themselves have to play, guided appropriately by our Team.

Actively promoting the belief that mistakes are learning opportunities and nurturing children's abilities to explain thinking, breeding high levels of confidence is vital, with strong attention to learner motivation being a key driver to achieving well.

We are committed to supporting our children in being fully involved in the assessment of their learning, in high quality learning conversations and in developing a sound understanding of themselves as learners.

Fostering a learning climate in our classes and across our school that enables our learners to feel well supported and actively encouraged to ask questions, probe and be confident in sharing when any uncertainty is experienced, is essential, if our desired outcomes are to come to fruition.

A strong commitment to the development of learner agency underpins our Numeracy and Mathematics Position Statement, with high success rates for all learners, our overarching goal.

This position statement will be revised biennially and as and when self evaluation highlights that particular action is necessary.

References

Curriculum for Excellence (2009). Scottish Government.

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Curriculum for Excellence: Numeracy Across Learning Principles and Practice. Scottish Government.

Skills 4.0 – A Skills Model to Drive Scotland’s Future (2018). Skills Development Scotland.

Transforming Scotland into a Maths Positive Nation – Final Report of the Making Maths Count Group (2016). Scottish Government.

National Thematic Inspection – Numeracy and Mathematics. Multiplying Skills, Adding Value – Executive Summary (2019). Education Scotland.

Refreshed Curriculum for Excellence Narrative (2019)