

Mathematics and Numeracy Policy



Learning together in a changing world, creating success for all.

Trinity Fields is a Rights Respecting School, a Healthy School and an Inclusive School.

This policy should be read in conjunction with our pupil friendly and adult version of our “**Shared Values and Aims**”.

Trinity Fields is a Rights Respecting School

Trinity Fields is a Rights Respecting School and we are committed to the principles and values of the United Nations Convention on the Rights of the Child (UNCRC) across all areas of our work.

Trinity Fields is a school where pupils are at the heart of everything we do. As part of our aim to promote a happy and successful school we have successfully been awarded UNICEF’s “**Rights Respecting School Award**” (January 2017).

The ‘Rights Respecting School’ Award (RRSA) helps our pupils become more confident, caring and as independent as possible both in school and within the wider community. By learning about their rights our pupils, your children, also learn about the importance of respecting the rights of others, that is, their responsibilities.

Our pupils are encouraged wherever possible to reflect on how their behaviour and actions affect those around them, which allows us to build and maintain a positive and safe learning environment for all, both in the classroom and around the school site.

Refer to pupil friendly “**Pupil Participation**” policy and our whole school “**Pupil Participation**” policy for further details.

Trinity Fields is a Healthy School

We are also a Healthy School and we take responsibility for maintaining and promoting the health and wellbeing of the Trinity Fields team (pupils, parents/carers, staff, governors etc.). This includes teaching pupils about how to lead healthy lives and enabling both pupils and staff to take control over aspects of the school environment which influence their health.

Refer to “**Health and Well-being for Pupils**” policy and our whole school “**Health and Well-being**” policy for further details.

Trinity Fields is an Inclusive School (IQM Flagship School status)

We have demonstrated through national annual assessment that we have the capacity to play a strong leadership role in developing inclusion best practice across a network of schools; as well as being committed to extending those networks and publish classroom-based research.

Refer to “**Inclusion**” policy and to **IQM assessment reports** for further details.

Education in Wales: Our National Mission

Our work with pupils and their families will be developed building upon Wales’ National Mission. This national mission is ambitious, innovative and confident ensuring that we all take responsibility for all of our pupils to have equal opportunities to reach the highest possible standards.

Trinity Fields will continue to develop as a learning organisation to ensure it has the capacity to adapt to and explore a range of new approaches which results in improved outcomes and well-being for all of our pupils.

In order to realise our shared vision and approaches in delivering Wales’ transformational curriculum that will enable all of the pupils at Trinity Fields to make the progress commensurate with their individual needs we are committed to the 4 key enabling objectives, detailed in “**Education in Wales: Our national mission (2017)**”. These are:

- Developing a high-quality education profession.
- Inspirational leaders working collaboratively to raise standards.
- Strong and inclusive schools committed to excellent, equity and well-being.
- Robust assessment, evaluation and accountability arrangements supporting a self-improving system.

The core purposes and values that are associated with these prestigious national awards are encapsulated in our vision and aims:

“We believe that everyone at Trinity Fields is entitled to have access to the very best learning opportunities. These will be provided within a safe, caring and stimulating environment that will enable all learners to achieve their full potential through learning opportunities that meet their individual needs”.

Qualified for Life (2014) provides further endorsement of our commitment to being a Rights Respecting School by stating:

“learners are the heart of all that we do” and further “every child and young person benefits from personalised learning”.

Successful Futures (2015) states that:

“Each child and young person in Wales should be able to benefit from curriculum and assessment arrangements that will best meet their present needs and equip them for their future lives. Our children and young people only have a relatively short time at school. We must use that time judiciously and productively to help each one of them to grow as a capable, healthy, well-rounded individual who can thrive in the face of unknown future challenges”.

Successful Futures (2015) provides a clear rationale for pupils' learning in mathematics and numeracy. Mathematical development is a core subject; the teaching of this subject is paramount, concerned with pupils' ability to use, understand and enjoy mathematical concepts and knowledge. Mathematics is used to analyse and communicate information and ideas, as well as to tackle a range of practical tasks and real life problems. As a subject, mathematics is a vehicle through which to develop key skills and skills framework ideas.

Purpose

This policy will provide information on the teaching and learning of mathematics and numeracy in Trinity Fields School. This policy delivers an overview of the principles, aims and practice of mathematical development and its purpose is to:

- Highlight the significance of mathematics and numeracy;
- Develop quality experiences for pupils aged 3-19, based upon their needs;
- Give direction and support for the different learning phases.

Mathematics and numeracy encompasses 4 areas:

- Using and Applying
- Number
- Shape, Space and Measure
- Data Handling



Mathematics and numeracy is one of the 6 areas of Learning and Experience (AoLE). The mathematics and numeracy AoLE is concerned with developing a good, lasting understanding of mathematical concepts and the confidence to use and apply numerical skills in everyday life. It includes experiences that enable our pupils to develop their broader numeracy and money skills by exploring relationships in quantities, space and data, and to apply them to real life situations.

Mathematics helps our pupils make sense of the world around them and to manage aspects of their lives. It also gives them skills they need to interpret and analyse information, solve problems and make informed decisions.

A table mapping the six AoLEs in “Successful Futures” will be found in **Appendix 1**. “Successful Futures” makes it explicit that the new curriculum and assessment arrangements in Wales will be fully inclusive and,

“easily understood by all, encompassing an entitlement to high-quality education for every child and young person and taking account of their views in the context of the United Nations Convention on the Rights of the Child (UNCRC), and those of parents, carers and wider society.”

Learning across the curriculum

As a school we are already beginning to move towards organising our curriculum provision and learning in line with “Successful Futures”. Our curriculum will be based on 4 key purposes as identified within “Successful Futures”, that is, to develop our pupils as:

- **ambitious**, capable learners, ready to learn throughout their lives;
- **enterprising**, creative contributors, ready to play a full part in life and work;
- **ethical**, informed citizens of Wales and the world;
- **healthy**, confident individuals, ready to lead fulfilling lives as valued members of society.

A summary diagram of the 4 core purposes of the new curriculum will be found in **Appendix 2**.

Cross curriculum responsibilities

Three cross curricular responsibilities will underpin all AoLEs: these are literacy, numeracy and digital competence. Expectations about pupil progression in these responsibilities are based upon the existing LNF and a new digital competence progression framework. For our pupils this will also include Routes to Literacy and Numeracy, as well as Routes to Digital Competence.

Literacy and Numeracy Framework (LNF)

Developing Literacy: Literacy (LNF) incorporates developing oracy, reading and writing across the curriculum.

Developing Numeracy: Numeracy (LNF) incorporates all aspects of developing numeracy across the curriculum.

Developing ICT skills and digital competence

Pupils develop their ICT and digital competence skills across the curriculum by finding, developing, creating and presenting information and ideas and by using a wide range of equipment and software. They also will develop a growing awareness of how to use digital technology to create, produce and share information and ideas. Pupils will have opportunities to develop skills to stay safe and identify the risks and benefits of using technology. In fieldwork, they use equipment to gather and organise information and select tools to enhance the presentation of their findings.

Full details will be found in the “Teaching, Learning and Curriculum” policy.

Implementation

The mathematics and numeracy curriculum at Trinity Fields School has been developed by staff to reflect the individual and often very complex needs of our pupils. The key priority is to ensure that

all pupils, irrespective of their abilities and needs make progress and have access to exciting and stimulating learning experiences throughout their time at school.

We have incorporated statutory and non-statutory guidance and adopted a broad range of principles to ensure that mathematics and numeracy is relevant to pupils' individual abilities and needs. Mathematics and numeracy is currently being reviewed to reflect the new curriculum and assessment arrangements in Wales that will be fully operational by 2022.



Mathematics and numeracy

On starting school, pupils may have differing levels of mathematical development. Teaching of mathematics is at its most effective when pupils are provided with opportunities to practise their skills in and outside the classroom environment. All activities in mathematics are balanced between formal learning and practical 'hands on' experiences.

Aims

Our staff team will work collaboratively to:

- raise standards and pupil achievement in mathematics and numeracy;
- make the teaching and learning of mathematics and numeracy fun, interactive and relevant to pupils' needs;
- make links and use guidance from the LNF;
- Relate mathematics and numeracy to real life situations, making learning more meaningful for pupils and helping to develop their confidence;
- develop personal qualities of self-reliance, self-discipline, independence, and the ability to work as part of a team;
- develop skills through a multi-sensory approach;
- provide a basis for an understanding of the world around us;
- prepare pupils for life outside school.

Objectives

Mathematics and numeracy is delivered in such a way to engage learners. To achieve our mathematics and numeracy aims we will:

- provide relevant training which gives staff the skills to use mathematics effectively and appropriately with pupils across the school and ability spectrum;
- provide a broad range of experiences in which pupils can practise and develop their mathematical skills;
- develop all teachers' knowledge of ways that mathematics and numeracy can be extended through imaginative and exciting opportunities in and beyond the classroom;

- create a whole school environment rich with pictures and photographs with a mathematical focus which are used to stimulate early numeracy skills;
- apply mathematical knowledge to solve various theoretical and everyday problems and to help with investigation work;
- provide opportunities for pupils to develop the skills necessary to collaborate in mathematical activities;
- match mathematics and numeracy resources, materials and context to pupils' age, ability interests and experience;
- provide opportunities for pupils to use and apply mathematical knowledge across the curriculum and to develop mathematical skills in other parts of the curriculum;
- develop pupils' ability and confidence to apply mathematics in practical everyday situations;
- provide opportunities for pupils to acquire and develop mathematical skills and knowledge in a way which encourages confidence, independence, satisfaction, and enjoyment of the subject;
- create opportunities to develop problem-solving skills, cognitive skills, and logical thinking;
- provide mathematical experiences that allow pupils to reach out, explore and develop their conceptual ability, awareness and understanding.

Resources

Staff are our most valuable resource, the number of support staff in each classroom is calculated on the total number of pupils, combined with the complexity of each pupil's learning needs. Staff are encouraged to attend training and feedback to colleagues through departmental meetings and Teach Meet sessions. A record of courses attended is kept by one of our Assistant Headteachers. Staff are encouraged to attend relevant courses to support the teaching of mathematics and numeracy within their department.

Teaching resources

Each class is equipped with suitable mathematics and numeracy materials to match the range of pupils' ability. In addition to materials and equipment kept in classrooms there is a central mathematics resource cupboard. Any resources needed to deliver contexts for learning are identified and kept in central resource cupboard. Each class has access to a resource bank of materials; CD Rom's, CD players, computers, cameras, video recorders and books are available for classes to use and will continue to be updated.

Role of teachers

All members of the teaching staff have a responsibility for the teaching of mathematics and numeracy and will need to ensure that their knowledge is updated as required.

Administration

- Ensure the school meets the statutory requirements for mathematics and numeracy.
- Complete an annual audit of resources and make this information available to staff.
- Manage an annual budget for mathematics and numeracy and place orders to keep resources up to date and in good condition.

- Liaise with the EAS team for mathematics and numeracy.
- Read current articles and share those which are relevant with staff.
- Monitor, complete, and review any mathematics and numeracy targets within the school development plan.

Professional learning

- Provide training for colleagues:
 - formally feeding back from courses attended and arranging training to meet the needs of the staff;
 - informally supporting staff requiring help on various issues;
 - Attend relevant courses and suggest some for other staff as their professional development needs are known.

Curriculum

- Draft curriculum documentation for mathematics and numeracy.
- Monitor and evaluate curriculum policy implementation.
- Monitor continuity of mathematics and numeracy teaching between classes.
- Ensure all staff deliver mathematics and numeracy through a multi-sensory approach.
- Collate evidence of mathematics and numeracy throughout the school.

All teachers will:

- Teach mathematics and numeracy in accordance with the National Curriculum Framework and Trinity Fields School Policy Statements, coverage, and Schemes of Work.
- Teach mathematics and numeracy skills in focussed sessions, as well as through other subjects.

Planning, monitoring and delivering the curriculum

Arrangements for planning

All pupils have an Individual Education Plan (IEP) written by the class teacher each term. In the "Exploration and Play Skills", mathematics and numeracy section, a summary of the pupils' level in terms of their mathematics and numeracy skills can be found. From this and their PIVATS assessment scores an annual aim is written and from this a specific objective is set for each term. Three very specific targets are then set, (which are monitored and assessed on a daily basis) from this termly objective.

A scheme of work and coverage map indicates the work to be covered each year by each class. The school ethos is that all pupils access the National Curriculum or our school devised pre-levels. However, it must be accepted that our learners will not always follow the National Curriculum Programme of Study within the relevant Key Stage.

Foundation Phase (3-7)

Our policy on mathematics and numeracy within this age range is set out in a separate document and is reviewed annually by the governing body.

School Curriculum (7-14)

A mathematics and numeracy Scheme of Work is being developed. Trinity Fields Curriculum Planning Policy in conjunction with the Foundation Phase Framework, the National Skills Curriculum Framework for mathematics and numeracy at Key Stages 2-4 and the Equals SLD and PMLD documentation; these will provide class teachers with an outline of the work that needs to be covered. It will also ensure continuity between each year group. The LNF document will also inform planning and the new Schemes of Work.

14-19 Learning Pathways

Our policy on mathematics and numeracy development within this age range is set out in a separate document and is reviewed annually by the governing body.

Arrangement for monitoring of the delivery of the curriculum

The Deputy Headteacher is responsible for maintaining an overview of the whole curriculum. The AoLE leads are responsible for monitoring the coverage and achievement levels within the established framework. Strategies for this include discussion with teachers, moderation of mathematics and numeracy assessment and observation of lessons throughout the school.

Additionally, the Assistant Headteachers and Deputy Headteacher monitor the termly IEPs and thus the content of aims and objectives for Exploration and Play Skills, mathematics and numeracy development.

The quality of teaching and learning is evaluated on a termly basis, using the Excellence in Teaching (ETF) framework.

Full details will be found in the “Self-evaluation, Monitoring and Development Planning” policy.

Assessment

Our procedures for assessment, recording and reporting is in line with whole school procedures, which take account of statutory requirements and examples of good practice. Assessment will be both formative and summative.

All pupils are baseline assessed during the first 2 weeks of entry on a range of assessment profiles. These may include: Routes for Learning, PIVATS, LNF tracker as well as informal assessments including communication and initial reading screening tests. All pupils are reassessed every May, where the Salford reading screening test is also completed (where appropriate). Assessment also takes place through IEP targets and their review in October, February and May.

Evidence of progress is kept in pupils' Records of Achievement. Practical work is recorded in photographic form with annotation that is kept in workbooks. Video evidence is kept of practical

work on the pupil files of the school's 'O' drive. IEP evidence is recorded in pupils' IEP files. Moderation takes place both within school and across schools for LNF, DCF, Routes for Learning and P levels.

Our whole school assessment policy and procedures will require further amendments and additions in line with the new curriculum and assessment processes that will become embedded into all school in line with the recommendations within Successful Futures.

Full details will be found in the "Assessment, Recording and Reporting" policy.

Health and safety

It is the responsibility of staff and where appropriate, pupils to be aware of the health and safety issues that are relevant to this curriculum area. These need to be considered with regards to the environment and the types of equipment are used so that foreseeable risk can be amended. A risk assessment is to be completed when pupils are taken out of school on an educational visit and appropriate measures are taken to ensure the pupils' safety. Our policy on Educational Visits is set out in a separate document and is reviewed annually by the governing body.

It is fundamental to this subject that the pupils develop a sense of safety for themselves, others, tools and equipment and a respect of their surroundings. Any specific issue relating to health and safety which need immediate attentions should be brought to the attention of the Headteacher and health and safety officer. To reduce risks, pupils only have access to non-toxic pens, pencils and paints at school. All ICT equipment has an annual safety check.

Full details will be found in the "Health and Safety" policy.

Additional learning needs (ALN)

Staff recognise that all of our pupils need to be able to show what they have achieved, by whatever means appropriate. Our curriculum entitlement statement within the "**Teaching, Learning and Curriculum**" policy (page 4) outlines a range of approaches to support our pupils in accessing all aspects of the mathematics and numeracy curriculum; it should therefore be possible to deliver mathematics and numeracy ensuring appropriate access and maintaining challenging and exciting activities. In providing for the needs of our pupils, we will select materials and approaches appropriate for pupils' individual abilities and needs whilst ensuring the balance and access is retained.

We recognise that all of our pupils are individuals and as such can be seen as having unique needs, abilities or talents that all have to be met in order that they reach their full potential.

Full details will be found in the school's "Additional Learning Needs" policy.

Parent/carer links

Parents/carers are vital partners in developing our learners mathematics and numeracy skills. The termly IEPs give a clear guide to parents/carers which skills their child needs to develop. Parents' evening occur termly and are a good opportunity to guide the parents/carers through the IEP and make further suggestions for support work at home. Parents are encouraged to complete shared reading activities and school reading books are sent home where appropriate. Some parents support the principle of more formal homework and encourage their children to complete activities sent home.

Equal opportunities

Legislation covering the protected characteristics including age, disability, gender, race, religion and belief and sexual orientation places a duty on the school towards present and prospective pupils to eliminate discrimination and harassment, to promote positive attitudes and equal opportunities and encourage participation in all areas of school life.

The new curriculum and assessment framework is for all pupils in Wales wherever they receive their education. "Successful Futures" (2015) recognises that:

"Special schools provide education for a wide range of learning needs and much of their existing good practice, including in assessment, is already in harmony with the Review's proposals. The four identified purposes of the curriculum apply to all children and young people. Similarly, the Progression Steps and Achievement Outcomes should also be relevant to all children and young people and will provide opportunities for a rich range of experiences".

We are committed to developing a sense of personal and cultural identity that is receptive and respectful towards others. In school we plan across the curriculum to develop the knowledge and understanding, skills, values and attitudes that enable our pupils to participate in our multi-ethnic society in Wales. We use approaches that support the ethnic and cultural identities of all pupils and reflect a range of perspectives, to engage pupils and prepare them for life as global citizens.

Full details will be found in our "Equalities" policy and in our Strategic Equalities Plan.

Implementing, monitoring and evaluating the policy

All staff will take responsibility to ensure the policy is implemented within their classroom/lessons. The effectiveness of the policy will be reviewed by the AoLE lead for mathematics and numeracy and will consider the following questions:

- Is current practice still reflected?
- Are the aims being achieved?
- Is there evidence to show breadth and balance in the curriculum?
- Is monitoring and planning effective?
- Is there evidence around school that demonstrates pupil achievement and enjoyment?

- Are resources effectively allocated?
- Is there evidence that teaching and learning is effective?

Full details will be found in the “Self-evaluation, monitoring and development planning” policy.

Policy review

In light of the ongoing and rapid curriculum and assessment developments as part of “Successful Futures” this policy will be reviewed on an annual basis to ensure that it reflects the progress towards the full implementation of the 2022 curriculum.

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|------------------------------------|--|---------------------------|
| Signed | | Headteacher |
| Signed | | Chair of Governors |
| Date of review: Autumn 2020 | | |

As a Rights Respecting School we are committed to embedding the principles and values of the United Nation Conventions for the Rights of the Child (UNCRC).

This policy enables our pupils to access and enjoy the following articles of the convention:

Article 12: Every child has the right to be heard.

Article 28: Every child has the right to an education.

Article 29: Education must develop every child’s personality, talents and abilities to the full.

Article 42: Every child has the right to know their rights.

Appendix 1: Areas of Learning and Experience

| Successful Futures - Areas of Learning and Experience | |
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Appendix 2: Four core purposes of the curriculum

