Computing Policy

Mission

Nurturing ambition through living faith.

Vision

Our Academy delivers a purposeful curriculum through its living Christian faith. We nurture ambition in all our learners in order for them to become positive citizens of tomorrow.

Bible

'Let us not love with words or speech alone but with actions and truth.'

John 3:18

Document Purpose

This policy reflects the values, philosophy and Mission Statement of Darwen St James Primary Academy in relation to Computing. It is consistent with the Academy's agreed aims and objectives and sets out a framework within which teaching and support staff can operate.

Audience

This document is intended to give a clear outline of the Academy's approach about Computing to all staff, governors and parents. It is also intended for the use of the School's Advisory Service when assisting the development of the Academy's curriculum and for any authorised inspector. Copies of this document are provided for all teaching staff and are available when necessary to support staff and members of the Academy's Governing Body. A copy of this document is available for the use of parents.

What do we mean by Computing?

'A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.' Excerpt from the 2014 National Curriculum Computing Programme of Study. At Darwen St James we use a range of technology. This includes:

- communication tools
- interactive screens
- sound recorders
- Micro:bits
- digital cameras
- remote control toys

- sensing and control equipment
- Chromebooks
- Specific subject related software and online content.

These resources may be used to teach Computing skills and capabilities or to provide access to or enhance the wider curriculum.

Why Computing?

Computing is now an integral part of life for our children and young people. There is conclusive evidence that effective use of ICT raises attainment and enhances learning and teaching. We aim to ensure that the pupils at Darwen St James receive an education which takes account of the relevance of computing in our society. Through following the progression of skills and capabilities, our children will be able to use a variety of technology confidently and effectively. They will also learn to apply the knowledge and skills they have acquired across other curricular areas.

Aims and Objectives

We aim to ensure all pupils have access to a robust and challenging computing curriculum that takes account of the wide range of skills, experience and prior learning our children bring with them by:

- Developing skills, knowledge and capability through systematic, appropriately challenging activities.
- Developing the skills and knowledge necessary to achieve the Foundation Stage early learning goals in the Area of Learning and Development, Understanding of the World - Technology.
- Providing opportunities to use technology in a variety of curricular areas. Fostering positive attitudes towards technology and modelling effective use of digital resources and equipment.
- Promoting excellence and enjoyment through the innovative and effective use of technology to support teaching and learning.
- Ensuring all pupils and staff have an understanding of online safety at a level appropriate to their age or role, including the risk of online bullying, radicalisation and extremist behaviour.

The Computing Curriculum

Technology is used as a tool to enhance learning and creativity throughout the whole curriculum and to support wider school priorities.

The Educational Importance of the Internet

- The purpose of Internet use in school is to raise educational standards, to promote pupil achievement, to support the professional work of staff and to enhance the school's management information and business administration systems.

- Internet use is a part of the statutory curriculum and a necessary tool for staff and pupils.
- The Internet can provide both a stimulating and proven way of enhancing teaching and learning across the school.
- Internet access is an entitlement for pupils who show a responsible and mature approach to its use.
- The Internet is an essential element in 21st century life for education, business and social interaction. The school has a duty to provide pupils with quality Internet access as part of their learning experience.

The Educational Benefits of using the Internet

Identified benefits of using the Internet in education include:
- Access to world-wide educational resources including museums and art galleries.
- Inclusion in government initiatives .
- Educational and cultural exchanges between pupils world-wide.
- Cultural, vocational, social and leisure use in libraries, clubs and at home.
- Access to experts in many fields for pupils and staff.
- Staff professional development through access to national developments, educational materials and good curriculum practice.
- Communication with support services, professional associations and colleagues.
- Improved access to technical support including remote management of networks.
- Exchange of curriculum and administration data with the LA and DfE.
- Mentoring pupils and providing peer support for them and teachers.

Recording and assessment of Computing

Our Purple Mash Scheme ensures that computing objectives are taught explicitly and allows the subject co-ordinator to monitor computing coverage. A topic overview document indicates where elements of the computing curriculum are being taught. Where computing resources are used to support other subject areas, this is included in planning.

Early Years Foundation Stage

Opportunities for the use of computing have been carefully planned in sequence, building on the 3 prime areas of learning and incorporating a range of different skills, including algorithms, coding and operating basic computing equipment

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Key Stages 1 and 2

Our scheme of work, Purple Mash, contains the skills and capabilities, suggested experiences and assessment resources that have been developed to take account of the

National Curriculum, to ensure an appropriate level of challenge and breadth of access to equipment and resources. Purple Mash is based around;

- Digital Literacy
- Computer Science
- Information Technology

Access to the Curriculum

A Chromebook, a Laptop and a Smartboard is available in each classroom to ensure easy access and integration into general work. In addition to this, each key stage has access to thirty Chromebooks to support cross curriculum work and computing where appropriate.

All children are given access to a range of other technology, e.g. digital cameras, sound recorders, microphones, Micro:bits and Beebots. The use of technology in the world around us is reflected where appropriate in the Foundation Stage and key stage 1 role play areas.

The computing subject leader is responsible for ensuring appropriate equipment and resources are available to fulfil the requirements of the national curriculum. Where support and/or specialist equipment is required to access the computing curriculum, it is provided where possible after consultation with the SEN Co-ordinator.

Equal Opportunities and Multiculturalism

At Darwen St James we believe all our children are entitled to benefit from equal access to computing regardless of race, gender, intellectual and physical ability. Classroom management will take into account such issues and computing materials free from bias will be positively sought. Computing has the potential to provide access to other curriculum areas for children with SEN and resources will be provided where appropriate.

Health and Safety

All electrical equipment is checked annually. Computers are placed carefully to ensure that Health and Safety regulations are complied with.

The co-ordinator will ensure that members of staff are informed of the aspects of the health and safety policy that relate specifically to computing The Computing Co-ordinator and the Head teacher responsible for health and safety policy will ensure they are aware of new issues and developments relating to health and safety and computing and update staff members as appropriate.

Teachers model appropriate uses of all equipment before children have access to it e.g. the correct way of using a mouse and keyboard.

The school's technician will ensure that all equipment is checked regularly to ensure it is safe.

Access to the Internet and email carries with it potential risk, because of the gravity of this risk we have separate e safety and computing Security /Acceptable Use policies. Please refer to this document for further guidance.

For further information on Internet safety visit these sites.

www.learningbwd.org.uk

http://www.childnet.com/

http://www.thinkuknow.co.uk/

http://www.swgfl.org.uk/

Roles and Responsibilities

 The role of the Computing Coordinator includes;

- Giving advice on purchasing, setting up and siting of curriculum equipment, in consultation with the Headteacher and technicians.
- In consultation with the Health and Safety Officer, ensure appropriate health and safety legislation and protocol are fulfilled regarding the siting and use of technology.
- Ensuring a rolling programme of replacement Reviewing, evaluating and purchasing of new resources and equipment for the computing curriculum.
- Supporting other subject co-ordinators in terms of the level of computing capability necessary to use resources.
- Maintaining their own skills and knowledge and those of other staff members through Identifying training needs and providing appropriate access to training.
- Updating, reviewing and disseminating the scheme of work. Updating, reviewing and disseminating the ICT policy document.
- Supporting in co-ordinating the repair, maintenance and introduction of new and existing hardware.
- Overseeing tech support.
- Organising access to computing curriculum resources.
- Seeking advice and support, where necessary, from appropriate sources Being a member of the Academy's online leadership team.

    The role of other curriculum subject leaders;

    - Keeping up to date with issues relating to the effective use of computing to support teaching and learning in their subject.
    - Providing or identifying appropriate software, online resources and equipment to support teaching and learning in their subject.
    - Ensuring that the use of computing resources and equipment will support teaching and learning, if it is identified in planning.

- Monitoring effective use of Computing to support teaching and learning in their subject.

Assessment and Recording of Pupils Progress

Summative assessment is used by teachers to identify each child's progress, determine what each child has learned and what should be the next stage in his/her learning at the end of each lesson. All 2Do tasks set on Purple Mash are given a judgement - emerging, expected and exceeding. Purple Mash uses this data to give an average judgement for each computing strand. This is checked at the end of each unit when the class teacher completes their formative assessment, and any discrepancies are discussed with the computing lead.

Examples of pupil work are stored on Purple Mash and used for moderation by the Computing coordinator. A selection of Computing work and photos are required to be kept as evidence within Purple Mash (much of this may be electronic, but may also contain evaluations, notes and plans from the children where appropriate.)

Staff Development

The Computing coordinator and head teacher are responsible for ensuring that staff are provided with training and support to ensure their skills in the use of computing equipment and knowledge of curriculum developments are kept up to date. Training needs are identified through a range of methods, including, performance management, discussions with staff and the monitoring of the teaching and learning of Computing.

Resources

An audit of both software and hardware is maintained by our computing technicians. Staff are informed when new resources are purchased and the necessary staff development is put into place to ensure they are used effectively.

The headteacher is ultimately responsible for ensuring all software and subscriptions are properly licensed.

The Academy management team is responsible for ensuring that a workable hardware replacement plan is in place and that equipment in need of repair is identified and the appropriate repairs or replacements carried out.

 Computing equipment is disposed of by our technical support and a certificate of disposal received where appropriate. Data security for equipment under repair or due for disposal is ensured as detailed in our computing security policy.

Presentation

Emphasis will be made to encourage pupils to take pride in the standard, quality and presentation of their work.

Expectations

At all times staff will expect and encourage pupils to produce work which fully reflects their abilities, and to take pride in the standards, quality and presentation of their work.

Review/Evaluation of This Policy

The policy will be reviewed by the Computing coordinator on an annual basis in consultation with the Headteacher, staff and the Governors. Acceptable Use Policy, computing scheme and assessment procedures will be reviewed and adapted to keep pace with curriculum developments and developments within computing technology.

Policy reviewed - September 2024