Core Skills Progression Map - Computing

2016-2017

 **The Music curriculum at St Finbar’s**

* Our computing curriculum is for all children.
* Our curriculum is a skills-based one; using knowledge and understanding of other subjects to develop their computing skills and ability to stay safe whne online.
* Our curriculum is progressive; building on previous years’ knowledge, understanding and skills.
* Our curriculum is organised into broad areas of learning and core skills; following the National Curriculum (2014)
* Digital literacy
* Information technology
* Computer science
* Online safety

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| Core skills | Year-group End-of-Year Epectations |
| N | R | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 |
| Digital literacy (DL) |  |  | Can show an awareness of how IT is used for communication beyond school.Can mention some of the ways inwhich IT is used to communicate beyond school. E.g. They might know that somepeople use social media such as Facebook,email, video calls or online greetings to sayhappy birthday to their friends. | Can show an awareness of how IT is used for a range of purposes beyond school.To name a number of purposes for which IT is usedbeyond school. To know that adults can share work and discuss ideas in online communities; that photos can be taken, edited and shared easily using digital technology.To know the web is made up of information shared by people.To understand people use email for a range of purposes and in a variety of contexts. | To decide whether a web page is relevant for a givenpurpose or question.Form a judgement about whether a web page is appropriate for finding out the answer to a question they have or fora given purpose.To use email and videoconferencing in class.When working as part of the class, the child can use emaileffectively and participate in a whole-class videoconference. | Can decide whether digital content is relevant for a given purpose or question.Can form a judgement about whether a webpage, such as a Wikipedia article, or other digital content is appropriate for finding out the answer to aquestion they have or for a given purpose.To work collaboratively with classmates on a shared wiki.To work collaboratively with their peers on a shared project, such as a class wiki, making usefulcontributions and providing feedback to others. | Can decide whether digital content is reliable and unbiased.Can discuss whether particular content (such as a web page,other children's pages or blog posts) is reliable and whether it has beenwritten from a neutral point of view. Be able to spot some examples of bias in digital content.To work collaboratively with classmates on a class website or blog.Can work productively and positively with others whendeveloping a shared website or contributing to a class blog. | Can form an opinion about the effectiveness of digital content.Taking into account the intended audience and purpose of the content.Can form a judgement as to, and provide reasons for, the extent to which they consider digital content to be effective. The content mightbe an app, media resources or marketing materials.Can use online tools to plan and carry out acollaborative project.To make use of an online tool to plan and carry out acollaborative project (such as developing an app). |
| Information technology (IT) |  |  | Use technology purposefully tocreate digital content.Use technology purposefully to store digital content.Use technology purposefully toretrieve digital content. | Use technology purposefully toorganise digital content.Use technology purposefully tomanipulate digital content | Use search technologies effectively.Use a variety of software toaccomplish given goals.Collect informationDesign and create content.Present information | Select a variety of software toaccomplish given goals.Select, use and combine internetServices.Analyse information.Evaluate information.Collect data and present data. | Combine a variety of software toaccomplish given goals.Select use and combine software ona range of digital devices.Analyse data.Evaluate data.Design and create systems | Undertake creative projects withchallenging goals.Use multiple applications[Work with] applications across arange of devices.Collect data. |
| Computer science (CS) |  |  | Understand what algorithms are.Create simple programs. | Understand that algorithms areimplemented as programs on digitaldevices.Understand that programs executeby following precise andunambiguous instructions.Debug simple programs.Use logical reasoning to predict thebehaviour of simple programs. | Write programs that accomplishspecific goals.Use sequence in programs.Work with various forms of input.Work with various forms of output. | Design programs that accomplishspecific goals.Design and create program.Debug programs that accomplishspecific goals.Use repetition in programs.Control or simulate physical systems.Use logical reasoning to detect andcorrect errors in programs.Understand how computer networkscan provide multiple services, such as the world wide web.Appreciate how search results are selected. | Solve problems by decomposingthem into smaller parts.Use selection in programs.Work with variables.Use logical reasoning to explain how some simple algorithms work.Use logical reasoning to detect and correct errors in algorithms.Understand computer networksincluding the internet.Appreciate how search results are ranked. | Use computational abstractions.Model state of real world problems.Use a programming language tosolve computational problems.Understand simple Boolean logic.Understand how numbers can berepresented in binary.Understand the hardwarecomponents that make up computer systems.Understand how text can berepresented digitally in the form of binary digits.Understand how pictures can berepresented digitally in the form of binary digits. |
| Online safety (OS) |  |  | Use technology safely.Keep personal information private.Recognise common uses ofinformation technology beyond school. | Use technology respectfully.Identify where to go for help andsupport when they have concerns about content or contact on theinternet or other online technologies. | Use technology responsibly.Identify a range of ways to reportconcerns about contact. | Understand the opportunitiescomputer networks offer forcommunication.Identify a range of ways to reportconcerns about content.Recognize acceptable / unacceptableBehaviour online.  | Understand the opportunitiescomputer networks offer forcollaboration.Be discerning in evaluating digitalContent. | Understand a range of ways to usetechnology respectfully.Recognise inappropriate content.Recognise inappropriate contact.Recognise inappropriate conduct.Know how to report concerns.Reuse digital artefacts for a given audience.Attend to usability of digital artefacts.Understand a range of ways to use technology safely. |