

Hatch Warren Junior School –Computing Curriculum

Our vision for Computing

At Hatch Warren Junior School we recognise that children are living in an ever increasing technological world and our aim is to help children thrive, adapt and develop knowledge and confidence in this area. Computing skills are taught and practised in isolation in the first instance so children are able to apply their skills across other subjects in the curriculum. We strive to equip children with the understanding, skills and knowledge in order to prepare children with the confidence to apply this to everyday situations once they leave primary school. Our purpose is to install a key understanding of how to keep themselves safe online, to become IT literate and to create programmes to aid tasks in everyday life. Children who have an increased awareness of the computing curriculum will develop and promote independence, initiative, creative thinking and increase their ability to problem solve. We facilitate this development by teaching and delivering rich and engaging computing lessons across the whole school, that allow children to be able to make their own informed judgements and consider the implications of their learning for work and home life – now and in the future.

Intent:

Develop a mastery of the following **skills**;

- Understand how to keep themselves and others safe online and how to interact with others online.
- When to use information technology for a purpose.
- Describe how to use algorithms and pieces of code.
- Confidently modify algorithms and pieces of code to serve a specific purpose.
- Explain information technology and computing processes.
- Create and problem solve to algorithms to aid with tasks that we are faced in everyday life
- Evaluate the effectiveness of programmes and software created.
- Develop collaboration and communication working with peers.

These skills will be developed through the use of PSHE, IT skills projects and the process of Use, Modify, and Create (UMC) leading to a progression of Predict, Run, Investigate, Modify, and Make (PRIMM)

Develop **knowledge** of...

- Digital citizenship (Internet safety)
- The use of information technology
- design, write and debug programs that accomplish specific goals

Through the specific study of...

- Digital citizenship
- Information technology including but not limited to; word processor, excel, PowerPoint, iMovie, book creator and pages
- Scratch
- Crumble boards
- HTML
- Java Script
- App based programmes

Develop an **understanding** of...

- How simple algorithms work and to detect and correct errors in algorithms and programmes.
- Understand computer networks including the internet and how they can provide multiple services.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
- recognise common uses of information technology beyond school

Implementation:

How do we help children commit this knowledge and these skills into their long term memory? What is our approach to the delivery of computing?

The following computing enquiry model illustrates the way in which computing science lessons are implemented across the school through lessons / units of work.

- Use prior or taught knowledge to create a programme that fulfils a specific need with
- Modify and debug parts of the programme that do not work
- (Independent)

Create

- Predict what an algorithm may do
- Why and how and will it achieve its purpose?
- (Group/pair)

Predict



Modify

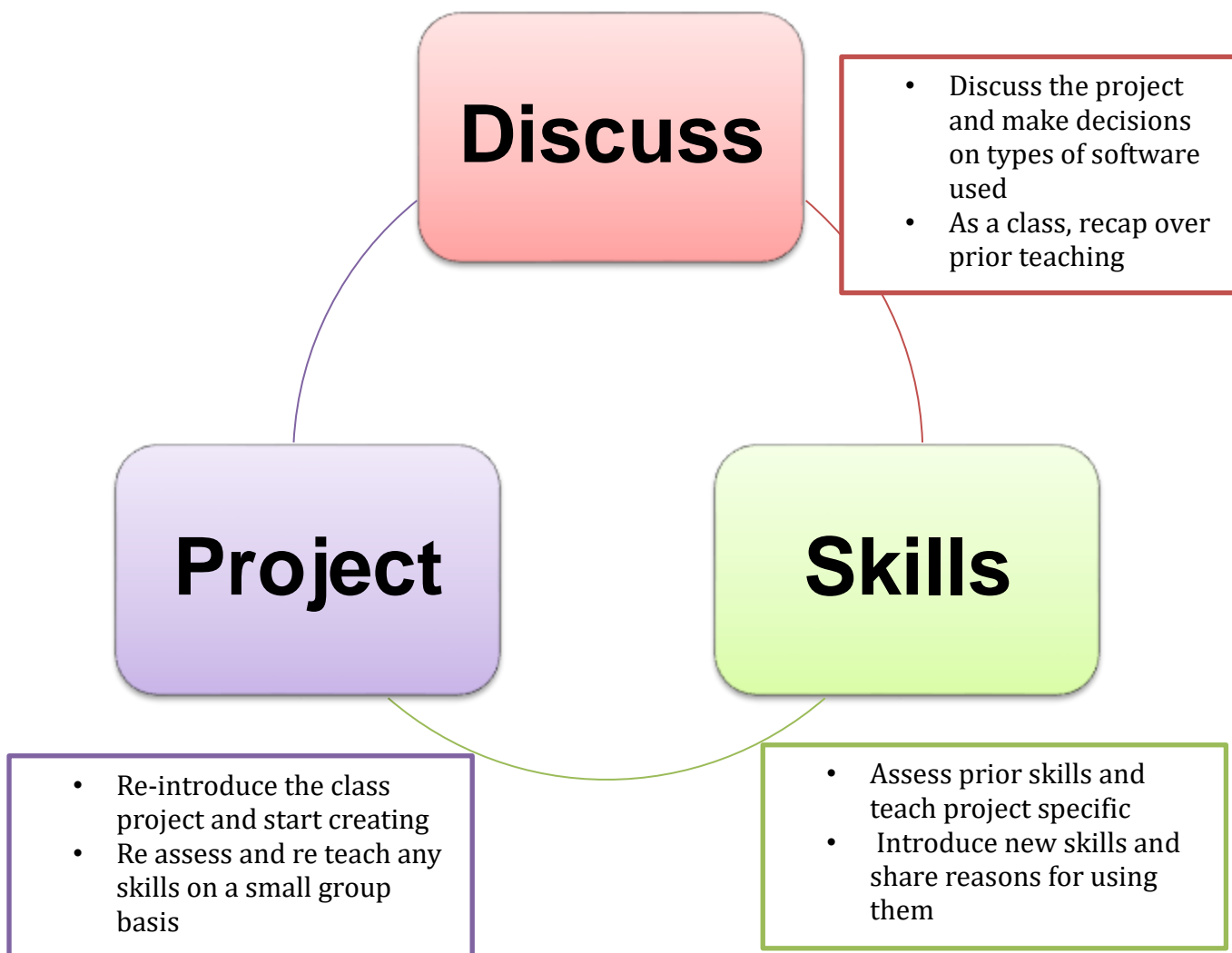


Use and investigate

- Take the pre written algorithm and modify parts of the code to achieve a different goal
- Test and run their new code
- Modify more code and debug and written algorithms
- (Independent/pair)

- Use (play) a pre written algorithm made by someone else to see what happens
- Discuss specific parts of the algorithm and explain what they will do
- Did anything happen that you were not expecting?
- (Group/pair)

The following computing enquiry model illustrates the way in which information technology lessons are implemented across the school through lessons / units of work.



The following computing enquiry model illustrates the way in which internet safety lessons are implemented across the school through lessons / units of work.

