



Computing Curriculum Delivery Document

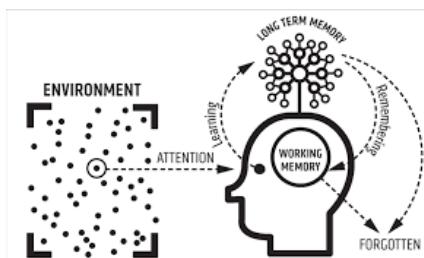
Intent	We have created a comprehensive progression document for staff to follow to best embed and cover every element of the computing curriculum. The knowledge/skills statements build year on year to deepen the understanding of our learners. All staff are aware of their year group expectations, and what comes prior/next in order to maximise pupil progress. In order to reduce teacher workload for non-specialist staff, we use the 'Twinkl' unit of work from Year 1 to Year 6 to meet the aims of the National Curriculum in the form of a long-term plan as well as planned iPad sessions that expand learners knowledge. In addition to the core teaching of computing skills, further opportunities to utilise technology are carefully planned into the wider curriculum to ensure children recognise how technology can enhance their schooling e.g. using word processing in English, using spreadsheets in science and using online platforms to record, and reflect upon, their work. To provide early experiences of technology, children within the Early Years Foundation stage are provided with opportunities to handle technology purposefully such as using BeeBots and tablets as an early opportunity for programming and the iPads/interactive whiteboard to capture and display their learning. As children progress into Key Stage 1, weekly lessons are timetabled which allow children to explore the computing curriculum from the 'Twinkl' unit of work. This introduces them to a more formal approach to the curriculum that introduces them to the three strands of computing: digital literacy, computer science and information technology.
Implementation	At Gawthorpe Community Academy, we feel the majority of computing should be embedded across the curriculum. Each week, we aim to provide, an 'Explicit Computer Science' lesson or 'A Tinkering Session'. The computer science part of the computing curriculum will often, but not always, need a more explicit approach, but that is not to say it can't be embedded across the curriculum. A 'tinkering session' looks at introducing a new app or tool and giving children opportunity to experiment and familiarise themselves with the different elements and tools before it can be applied in a more focused approach across the curriculum. For example: If a class were covering Victorian's in Year 6 and exploring how the Victorian era was a time of huge industrial change, I could set the children the task of creating a video explaining this. First, the children may want to research some more information about the industrial revolution. This would involve covering some Digital Literacy: Managing Online Information: - • I can use search technologies effectively. • I can explain how search engines work and how results are selected and ranked. • I can demonstrate the strategies I would apply to be discerning in evaluating digital content. • I can describe how some online information can be opinion and can offer examples. If the pupils were to then create a video using an app such as Adobe Spark Video to demonstrate their learning, they would be covering some of the Information Technology: Video Creation - • I can create videos using a range of media - green screen, animations, film and image. If the pupils were to then upload or publish their work on a blog or platform such as Seesaw, we would also be covering this objective from Information Technology: Word Processing objectives - • I can publish my documents online regularly and discuss the audience and purpose of my content. Even though this would be a History lesson, we would be covering a large variety of computing objectives therefore if we need to spend more time on other subjects that week, we are still covering computing without having a timetabled computing session. This is the way we want computing delivered in our school, embedded to allow learning to be more accessible and allow learners to be more creative in demonstrating their learning.



Impact	We encourage our children to enjoy the curriculum we deliver. We want learners to appreciate the impact computing has on their learning, development and well-being. Finding the right balance with technology is key to an effective education and a healthy life-style. At Gawthorpe, we feel the way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond. We encourage regular discussions between staff and pupils to embed and understand this. The way pupils share and publish their work will best show the impact of our curriculum. We also look for evidence through reviewing pupil's knowledge and skills digitally through Seesaw and observing learning regularly. Progress of our computing curriculum is demonstrated through outcomes.
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How do we ensure that knowledge gained is transferred from working memory into long term memory?

Staff in school have based their strategies on **Rosenshine's principles** in action (bridging research and classroom practice):



Principles identified	What do we expect to see in our Computing lessons?
Daily review	Academic or subject vocabulary that has been taught will be modelled throughout daily teaching and contact time, in both computing and wider curriculum lessons
Questioning	Questions help students practice new information and connect new material to their prior learning. The teacher would question children around the specific knowledge and vocabulary they have been using in this and other modules.
Sequence, models and concepts	Expert teachers / peer models identified in the learning would exemplify the specific skills / knowledge required for the task. Where teachers are not confident to provide expert models, this is looked at in the regular Computing subject skills audit organised by the Computing leader.
Stages of practice	Successful teachers spend more time guiding students' practice of new material. It will be forgotten unless time is given for rehearsal. We revisit tasks over and over again, allowing children lots of chance to practise. This is always guided and supported by expert teaching. Students should have the opportunity to practise regularly and independently to transfer the knowledge into their long-term memory. Further, we ensure that the appropriate equipment is available throughout the wider curriculum for children to utilise their computing skills in horizontally linked subjects.