**Rolling Programme of outcomes and themes**

**Computing – Key Stage 4**

All modules are linked to appropriate H levels. These modules also have links to the KS1 and KS2 subject aims from within the three areas of computing (Computer science - CS, information technology - IT and digital literacy - DL) – see below. These areas are highlighted within this rolling programme.

Where appropriate, links to WJEC accreditation have also been highlighted in the module plans.

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|  | **Autumn** | | **Spring** | | **Summer** | |
|  | Theme | Outcomes | Theme | Outcomes | Theme | Outcomes |
| **Year A**  **19-20** | Understanding the world – finding information through the internet  IT, DL | **Encounter / Experience (H1-3)**  All students will: use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will:  Be supported to search for and save information about a specific topic. Be supported to present their information to others. Be supported to understand that some information sources are more useful than others.  **Develop / Apply (H8 and above)**  A few students will be able to:  Be able to use online resources safely and independently. Search for, and save, specific information, and present their information to others with limited (or no) support. Begin to understand that some information sources are more useful than others. | Friendship and Community – Games  DL | **Encounter / Experience (H1-3)**  All students will: use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will take turns with less support and be able to wait with less support.  **Develop / Apply (H8 and above)**  A few students will be able to play games with less support. | Physical and health –Food  CS, IT | **Encounter / Experience (H1-3)**  All students will: use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will: take turns with less support, begin to make choices using technology (eg. choosing healthy food from a selection) and put items in the correct order (eg. from the food song – do you like broccoli ice cream)  **Develop / Apply (H8 and above)**  Use technology to make a list of ingredients for a healthy snack. Follow a list of instructions to make a healthy snack. |
| **Year B**  **20-21** | Understanding the world – finding information through the internet  IT, DL | **Encounter / Experience (H1-3)**  All students will: use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will:  Be supported to search for and save information about a specific topic. Be supported to present their information to others. Be supported to understand that some information sources are more useful than others.  **Develop / Apply (H8 and above)**  A few students will be able to:  Be able to use online resources safely and independently. Search for, and save, specific information, and present their information to others with limited (or no) support. Begin to understand that some information sources are more useful than others. | Life skills – computing in the community  DL, IT | **Encounter / Experience (H1-3)**  All students will: use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward.  **Explore / Experiment (H4-7)**  Some students will:  Have found computing equipment in a variety of environments (such as classroom, around school, in local community). With support, using computing equipment in familiar settings.  **Develop / Apply (H8 and above)**  A few students will be able to:  Be able to find and use a computing equipment in a variety of settings. Save and use images, or sounds, of computing to present their finds to other, in a variety of ways (such as PowerPoint presentation, movie, choose it maker activity, etc.). | Communication  IT, DL | **Encounter / Experience (H1-3)**  All students will: use computing equipment safely, use technology to generate a visual and/or auditory effect, make something happen using technology, anticipate a reaction, be supported to take their turn, expect an outcome and repeat an action for a specific reward. Work with staff to develop my understanding of what I like*.*  **Explore / Experiment (H4-7)**  Some students will:  Have an understanding of what I like and do not like. With support prepare and present a multimedia talk on a topic that I like.  **Develop / Apply (H8 and above)**  A few students will be able to:  Prepare and present a multimedia talk on a topic that I like independently |

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| **KS1** | | **KS2** |
| CS | Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions  Create and debug simple programs  Use logical reasoning to predict the behaviour of simple programs | Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts  Use sequence, selection, and repetition in programs; work with variables and various forms of input and output  Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs  Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web  Appreciate how [search] results are selected and ranked |
| IT | Use technology purposefully to create, organise, store, manipulate and retrieve digital content | Use search technologies effectively  Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information |
| DL | Recognise common uses of information technology beyond school  Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies | Understand the opportunities [networks] offer for communication and collaboration  Be discerning in evaluating digital content  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact |