Lesson 8 – Project – Healthy Eating Quiz Machine

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| The Big Picture – Why Is This Relevant? | Learning Objectives |
| * Healthy eating and exercise are an important part of children lives. This project asks a young child to create a healthy eating quiz that asks students questions and then provides some form of feedback to them. | * Develop the code * Test the code * Develop the display |
| Engagement – How Can I Engage Learners? | Assessment for Learning |
| * Introduce the project and set the scene * You could ask learners to make a list of healthy and unhealthy foods * It may be useful for learners to take an online quiz and see what type of questions are asked | **Expected Progress:**   * Learners create a healthy eating quiz * Learners provide some feedback   **Good Progress:**   * Learners use selection to enable child to input different responses * Learners build a suitable display for the quiz   **Exceptional Progress:**   * Learners use images in the quiz * Learners use variables to keep track of the child’s responses * Learners program feedback based on the responses given by the child |
| Key Concepts | Key Words |
| * Programming the quiz, * Using variables * Inputs and storing data * Developing the program * Testing the program | * Variables * Lists * Functions * Event handling * Buttons * Selection * Strings * Storing data in variables * Using the pins * Responses * loops |
| Differentiation | Resources |
| Learners will benefit by being placed into groups with the required skills set for the project. For example, programming, ideas, design of the display, fast at typing.  This will ensure that all groups have the opportunity to meet the requirements of the project  Teacher can also share solutions for the project as starting points for some groups | * Lesson 8 ppt * Lesson 8 Activity Sheet * Planning Sheet * Teacher Example Python code * 1 micro:bit per learner * 1 USB cable to connect the micro:bit to a PC * A PC * Access to <https://python.microbit.org/v/3> * Arts and crafts |
| Lesson Flow | |
| * Starter – Learners recap the scenario from last lesson and discuss what they did * Teacher to recap the project and hand out the Learner’s Planning Sheets * Learners should focus on developing the program code of the quiz * Learned can use the Activity Sheets from the previous lessons to support the development of the program code * Teacher to support students and groups as required * Learners may be working in groups so one team can work on the program code and others could be creating the display box * The display box could be set as a Homework task if lesson time runs out. * Teacher to refer to the Success Criteria section in the activity brief as possible ways to create a solution for the project * Teacher can also refer to Stretch Task for more able groups * Learners should be testing the program as they develop it, however teacher should direct groups towards the end of the lesson to test the code and record any errors on their design sheet * Plenary – students discuss answers to questions | |
| Making | |
| * A suitable display box | |