## Multitasking Mania!

**Lesson 11: Data Analysis**

**Problem Statement:**

Your task is to create both a computer-based task and non-computer-based task that helps employees evaluate the effectiveness of multitasking and helps them plan their work efficiently.

**Lesson Overview:**

Students will summarize their projects, analyze the data they gathered, draw conclusions about multitasking, and make recommendations to Company BleepBlorp.

**Learning objectives:**

* Analyze data gathered through multitasking experiment and draw conclusions

**Lesson standards (NGSS, CCSS, CTE):**

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| --- | --- |
| Computer Science (CTE) | |
| CTE 2-A-5-6 | Develop programs, both independently and collaboratively, that include sequences with nested loops and multiple branches. [Clarification: At this level, students may use block-based and/or text-based programming languages.] |
| Science (NGSS) | |
| MS-ETS1-1. | Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions. |
| MS-ETS1-2 | Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem. |

**Soft skills (21st Century Skills):**

* Technology literature
* Learning and Innovation
* Life and Career

**Locally and/or personally relevant for students:**

* Many students play video games and use apps that are built on programming
* Many current and future jobs require programming skills

**Connections to Career and Educational Pathways:**

* Introduction video from code.org (shown in Lesson 3) details career opportunities in programming

**Materials:**

* A copy of the Project Report for each student

**Lesson preparation:** N/A

**Time required:** 45 minutes

**Grouping of students for instruction:**

Students will be working with their same partner(s) from Lessons 8-10.

**Understanding the Problem**

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| **Teacher** | **Student** |
| Review the “Project Report” handout with the class. | Ask clarifying questions as needed about the report their will be completing about their project. |

**Exploring the Problem**

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| **Teacher** | **Student** |
| Support students as complete their project reports. | Complete the worksheet by summarizing projects, analyzing the data, drawing conclusions about multitasking, and making recommendations to Company BleepBlorp. |
| Lead the class is a discussion as they compare their results. | Look for trends across the various experiments conducted in class. |

**Accommodations:** As needed, assist students in completing the project report..

**Extensions:** N/A

**Assessment:** Project Report

Optional Multitasking Scratch Student Self-Rubric

**References/Resources:**N/A