Kerr: Technology lesson - 2014

CP Physics –

Rational:

Digital production of graphs and data tables is an important skill for students moving on in the sciences as well as many other academic areas. Most students lacked experience using spreadsheet and graphing programs such as Excel and Google Spreadsheet. (Previous to this lesson, students worked on sharing documents in Google docs with lab partners so that multiple people could all contribute to the same lab document.)

Before the Lesson:

Students performed a data collection lab (demonstrating the relations hip between constant velocity, distance and time).

The Lesson:

In class, each student had a Chrome book.

We went through:

- Creating a spreadsheet in Google Docs,
- Creation of Data Tables including:
  - Alignment,
  - Number Formatting,
  - Bolding and
  - Bordering to enhance presentation
- Data entry including use of formulas and shortcuts
- Creation of Graphs including:
  - Titles,
  - Axes Labels and
  - Boundaries,
  - Fitting Curves and Best Fit Lines
- Discussion included pros and cons of using Excel vs. Google Spreadsheet.

Final Product:

Students produced various tables and graphs for their lab report.

Assessment of Lesson:

For the following lab students were given the option of creating graphs and tables by hand or digitally. Approximately half used the technology to create their lab with good results overall. Future labs will require digital production of graphs.