Beginning Excel for Visual Representation and Data Analysis

Descriptor

Learn the basics of Microsoft Excel 2013/2016 by learning ways to increase productivity and maximize visual representation and data analysis in the classroom. This training is designed for learners who are new to excel. Goals for this session are: learn basic terminology, data entry, data analysis, explanation of basic excel tools, and basic formatting tasks. Participants of this session will be able to create a basic spreadsheet and format it using the basic tools of excel.

Bell Work

- After logging into computer, go to START> PROGRAMS and open Excel.
 **NOTE: if you do not see an Excel 2016 icon in the list, look for Microsoft Office 2013 folder.
- Review the objectives and page one in the training packet

Objectives

- Become familiar with terminology and tools.
- Create a simple workbook
- Add columns, rows, and pages
- Explore the formatting options within a sheet or workbook
- Create and explore formulas, sorting, and filtering
- Add and edit borders within a worksheet
- Create a simple chart

Success Criteria

- Participants can explain common basic excel vocabulary terms (spreadsheet, workbook, worksheet, cell, cell name, merge cell, border lines, gridlines, sorting, filtering)
- Participants can create a workbook.
- Participants can add data to excel spreadsheet.
- Participants can use basic text formatting in spreadsheet (i.e. color, font type, size, bold, italicize, underline).
- Participants can add new and adjust column/row widths and heights.
- Participants can adjust margins and page orientation (I.e. to fit data in printable document).
- Participants can merge cells (i.e. to create headings for data table).
- Participants can change the cell color.
- Participants can add border lines.
- Participants can use the sorting and filtering functions
- Participants can use the AVERAGE formula to find the average of a column or row.
- Participants can create a simple chart

TEAM Rubric	PLC
 Instructional Plans, Use of Data 	 What is it we want our students to learn?

Standards • CCSS Math, CCSS ELA, and Literacy/Science/Technolo gy	 How will we know if each student has learned it? How will we respond when some students do not learn it? How can we extend and enrich the learning for students who have demonstrated proficiency?
Digital Citizenship • Internet Safety https://www.commonsensemedia.org/privacy-and-internet-safety	ISTE Standard for Students: collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making
Digital Citizenship Component: Privacy	ISTE Standards for Teachers: model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

Excel Basics

- 1. **Terminology and Basic Navigation of the Excel Program:** Pages 1-4 of Excel Task Sheet (20 minutes)
 - a. typing specific data in cells (using data from Excel Task Sheet pg 2)
 - b. changing cell size using the data that was just entered
 - c. making text bold using the data that was just entered
 - d. merging and centering using the data that was just entered
- 2. Formulas: Page 4-5 of Excel Task Sheet (15 minutes)
 - a. "average" formula will be used with test scores in row 3
 - b. copy formula for remaining students
- 3. Adding: Columns, Rows, Pages 6-8 in Excel Task Sheet (10 minutes) We will use existing spreadsheet from tasks 1 & 2 for this task as well.
- 4. **Copying & Pasting:** Pages 8-9 in Excel Task Sheet (15 minutes) In this task, we will learn how to copy data from another Excel spreadsheet and paste into your new spreadsheet.

 *Before the session, share the "Fake Homeroom" spreadsheet with the participants. Use

teacher apps or other location

- 5. **Sorting:** Page 9-10 in Excel Task Sheet (10 minutes)
- 6. **Formatting:** Page 11-16 in Excel Task Sheet (10 minutes)
- 7. Charts & Graphs: Page 17-19
- 8. Discuss Classroom Applications
- 9. Share School Templates (optional)

Closure: (5 minutes)

- How will you be able to use this in your classroom?
- Is there anything else you would like to know about Excel?
- How can I come and help you further in your classroom?

Evaluation: (5 minutes) complete online PD evaluation