

Course: *Business Communications and Applications*
Unit #: *Unit 3 - Data Analysis and Critical Thinking*

Year of Implementation: 2021-2022

Curriculum Team Members: *Megan Cashman - mcashman@lrhsd.org, Jessica Laverne - jlaverne@lrhsd.org, Melissa Dietz - mdietz@lrhsd.org, Kristina Foster - kfoster@lrhsd.org*

Stage One - Desired Results

Link(s) to New Jersey Student Learning Standards for this course:

{provide all applicable links to standards here}

<https://www.state.nj.us/education/cccs/2020/>

Unit Standards:

9.2.12.CAP.2 Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.

9.2.12.CAP.3 Investigate how continuing education contributes to one's career and personal growth.

9.4.2.IML.2 Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10).

9.4.5.CT.1 Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).

<https://www.state.nj.us/education/cccs/2020/2020%20NJSL-CLKS.pdf>

Transfer Goal: Students will be able to independently use their critical thinking and problem solving skills to effectively organize and analyze data using appropriate Microsoft Suite applications.

As aligned with LRHSD Long Term Learning Goal(s):

- utilize and integrate essential communication and technical skills significant to 21st century life, work, and community
- apply information technology to achieve an organization's business goal
- create authentic learning experiences to successfully transfer knowledge into real-world experiences preparing them for life and career
- use technology to extend creativity and/or improve problem-solving ability

Enduring Understandings

Students will understand that. . .

EU 1

- *spreadsheets are used in many facets of life.*

EU 2

- *database software is an extremely important tool*

Essential Questions

EU 1

- *How can spreadsheets be used in business and in everyday life?*
- *Why is it beneficial to use spreadsheets to organize, display, and analyze data?*
- *How is data effectively communicated?*

EU 2

- *When would you use a database to organize information?*
- *Why is it beneficial to use a database to organize and report information?*
- *How can one effectively use the tools available in a database to manage information?*
- *How can one effectively use the tools available in a database to generate reports?*

Knowledge

Students will know. . .

EU 1 (9.2.12.CAP.2 and 9.2.12.CAP.3)

- *key terms related to spreadsheets.*
- *Using formulas, charts and advanced features enhances the efficiency of analyzing data.*

Skills

Students will be able to. . .

EU 1 (9.2.12.CAP.2 and 9.2.12.CAP.3)

- *manage worksheets and workbooks.*
 - *import data into workbooks.*
 - *navigate within workbooks.*
 - *format worksheets and workbooks.*
 - *customize options and views.*
 - *configure content for collaboration.*
- *manage data cells and ranges.*
 - *manipulate data in worksheets.*
 - *format cells and ranges.*
 - *define and reference named ranges.*
 - *summarize data visually.*

EU 2 (9.2.12.CAP.2 and 9.2.12.CAP.3)

- *Microsoft Access is an effective analyzation tool using tables, queries, and reports*

- *manage tables and table data.*
 - *create and format tables.*
 - *modify tables.*
 - *filter and sort table data.*
- *perform operations by using formulas and functions.*
 - *insert references.*
 - *calculate and transform datas.*
 - *format and modify text.*
- *manage charts.*
 - *create charts.*
 - *modify charts.*
 - *format charts.*

EU 2 (9.2.12.CAP.2 and 9.2.12.CAP.3)

- *create and design a table.*
- *create and design a query.*
- *create and design a report.*
- *create a report from a query.*
- *apply filters and sort items within a table.*

Stage Two - Assessment

Recommended Performance Tasks:

- *The summer is coming to an end. The summer intern has done such a good job up to this point that the payroll manager has asked the intern to help in the accounting department. The payroll manager has asked the intern to generate an expense report comparing the expected budget figures vs. the actual budget figures for last month's company picnic. The intern will be given the budget figures for all costs involved to figure out if the company met its targeted budget. A visual display must also be generated detailing the exact individual costs associated with the picnic. The data and chart will be evaluated by the accounting department supervisor. (EU1)*
- *At the end of each summer, the President of Comp Tech Inc. hosts an employee appreciation picnic at the local park. The intern has been invited to participate in the planning of the picnic and are in charge of sending out the invitations. Currently, information for each employee is in a Word document as a table. The information in the table must be converted to a database for better efficiency and uses in the future. For the employee database, the intern must include the employee's first and last name, mailing address, and which department the employee works in. Once the database is created, the intern will then run a report that can be used when mailing out the invitations. (EU2)*

Other Evidence:

- *Teacher-generated projects in Excel using formatting and organization skills, formulas, functions, tables, and charts.*
- *Teacher-generated projects in Access using formatting and organization skills, queries, and reports.*

Stage Three - Instruction

Learning Plan: **Suggested Learning Activities to Include Differentiated Instruction and Interdisciplinary Connections:** Each learning activity listed must be accompanied by a learning goal of **A= Acquiring** basic knowledge and skills, **M= Making** meaning and/or a **T= Transfer**. {place A, M and/or T along with the applicable EU number in parentheses after each statement}

- *Create a budget in spreadsheet software (A, M, T - EU1)*
- *Calculate payroll in spreadsheet software (A, M, T - EU1)*
- *Analyze data & create a chart from spreadsheet data (M, T - EU1)*
- *Create database (A, M, T - EU2)*
- *Produce reports in database files (M, T - EU2)*

