

INTEGRATING TECHNOLOGY IN THE WORKPLACE

TIES 2001

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INTEGRATING TECHNOLOGY IN THE WORKPLACE

Curriculum Unit Overview

SUMMARY

This module is designed to be used in any organization that has a need to integrate numerous software programs.

Since the workplace is constantly evolving and technology is constantly being changed, the need to expedite correspondence is in demand. This module would create awareness in students as to the practical applications of business software as they transition from school to work.

The recommended grade level would be 11th or 12th since a prerequisite would be a foundation in Beginning Keyboarding. Keyboarding skills are required in order to manipulate computer function. Required time to successfully complete this module would be six to ten hours.

BIG PICTURE

A great way to begin this module is to plan an activity that the class completes together to understand the concepts of charts and graphs.

- Poll students by a show of hands as to their favorite radio station.
- Using a chalkboard, organize data into a table and transfer the data into a graph.
- Students take rough data from chalkboard, open MS Excel application, and transfer data into a spreadsheet.
- Create a chart/graph using the data keyed into the spreadsheet.

The above steps are all teacher directed.

PREPARATION FOR THE UNIT

All materials are in place.

INTEGRATING TECHNOLOGY IN THE WORKPLACE

Curriculum Unit Summary

INFORMATION TECHNOLOGY	COMMUNICATIONS	TECHNICAL SKILLS
Students will develop the skills necessary to create graphs and charts using MS Excel.	Students will be able to work in teams to compile necessary data to complete graphs and charts.	Students will be able to analyze and interpret data from graphs and charts.
Students will be able to create databases using MS Access software.	Students will gather information to create the database.	Students will key data.
Students will learn to develop database and survey formatting using MS Access and MS Word.	Students will be able to compose and edit business surveys and revise spelling and grammatical errors.	Students will be able to integrate an MS Access document into a MS Word document.

TRANSFER ACTIVITY

Using the skills learned in this module, students will be able to continue to apply, enhance, update, and customize the company's database as new information is received and generate other tools (mailing lists, surveys, etc.) as needed.

SECTION ONE: Information Technology**ALT ONE: Creating Charts and Graphs using MS Excel****Summary**

The learning tasks will focus on the creation of charts and graphs as instruments to enhance productivity in the workplace.

Competencies

- Keyboarding skills
- Written communications
- Time management
- Teamwork
- Information processing

Time

2 hours +

Materials

- Computer
- Software (MS Excel) or other spreadsheet application
- Reference manual
- Handouts
- Overhead projector
- Transparency

Instructions: See Appendix One**Evaluation/Assessment of Student's Competency**

Using an overhead projector, show the solution to the activity. Students check their work and edit as necessary. Entertain questions and give answers as needed.

Closure

This activity demonstrates a means of collecting data and organizing it into a useful instrument.

Successful completion of this activity will lead to another form of collecting data, which is the creation of a database.

SECTION TWO: Communications

ALT TWO: Creating a Database using MS Access

Summary

This activity will introduce a database as a means to further enhance the organization of data.

Competencies

- Keyboarding skills
- Written communications
- Time management
- Information processing
- Organization skills
- Compiling information
- Reading
- Research skills

Time

2 hours +

Materials

- Computer
- Software (MS Access) or other database application
- Reference manual
- Handouts
- Telephone directory

Instructions

1. Students will be provided a telephone directory.
2. Each student is assigned an alphabetic section of the directory.
3. Each student will select 15 residents.
4. Using MS Access, create the format for the database using the following field names: Last name, Address, City, State, ZIP code, Phone number.
5. Refer to the ZIP code section of the telephone directory to locate correct ZIP codes for the residents.
6. Key the information into the corresponding fields of the database.
7. Key the page number and section used from the telephone directory at the end of database to identify sections used.

Evaluation/Assessment of Student's Competency

Using a hard copy of student's work, verify accuracy of information.

Closure

Upon verifying the accuracy of database, students are now ready to integrate the database into a survey that they will create and format using MS Word.

SECTION THREE: Technical Skills

ALT THREE: Merging a Database into a Word Document

Summary

This activity will further emphasize the correlation of gathering data and integrating the data into a useful survey instrument.

Competencies

- Keyboarding skills
- Written communications
- Time management
- Information processing
- Organization skills
- Compiling information
- Reading
- Formatting Skills

Time

1-2 hours

Materials

- Computer
- Software (MS Word) or other word processing application
- Reference manual
- Handouts
- Database from ALT Two
- Survey questions

Instructions

1. Open a blank document in MS Word
2. Re-create survey provided utilizing various tools and menus in MS Word
3. Retrieve database file (previous lesson).
4. Merge database file into Word document.

Evaluation/Assessment of Student's Competency

Evaluated completed survey on accuracy and formatting.

Closure

Using the skills learned in this module, student will be able to continue to apply, enhance, update, and customize a company's database as new information is received as well as generate mailing lists, surveys, envelopes, etc. as needed.

MS EXCEL TRANSFER ACTIVITY

NOTE: All monetary values are formatted as Currency. Percentages are expressed to two decimal places. Column headings are in all caps and centered. Right align all amounts.

BUILD THE FOLLOWING WORK SHEET:

- I. Cell B1: Key the following heading for the work sheet—

JON'S BUDGET/PERSONAL EXPENSES

B3: Key THIS YEAR (TY)

C3: Key IAST YEAR (LY)

KEY THESE EXPENSES:

A4: Rent	B4: 9600	C4: 8400
A5: Food	B5: 2400	C5: 2150
A6: Utilities	B6: 1200	C6: 800
A7: Automobile	B7: 2200	C7: 1900
A8: Insurance	B8: 900	C8: 860
A9: Entertainment	B9: 1250	C9: 1100
A11: TOTALS		

Create a formula that will total Columns B and C in Cells B11 and C11.

In Cell D3 key the column heading AMT/INCREASE.

Create a formula in Cell D4 to compute the difference between the amounts in B4 and C4. Copy the formula from D4 to D5 through D11. Change column widths to 18. Key your initials and /WSI in Cell A20. (ex.--KR/WSI). Save the work sheet as **JBudget1**. Print the work sheet and cell formulas.

- II. Open **JBudget1**. In Cell E3 key column heading % INCREASE. In Cell E4 create a formula that will compute the percentage that the amount of the increase represents of this year's expenses. Hint: Figures in Columns B and D will be needed to accomplish the desired results. Copy the formula from E4 to E5 through E11. Move the heading of work sheet to C1 and format in BOLD.

In A20 after your initials, key /WS2. Save As **JBudget2**. Print the work sheet and cell formulas.

APPENDIX ONE: Instruction Sheet for Creating a Spreadsheet

The introductory activity is an entertaining way to introduce the concept of spreadsheets to the students. They are using familiar materials (Skittles) and they can *eat* their inventory when the assignment is completed.

This handout gives step-by-step instructions, which allows the instructor to circulate throughout the classroom to observe and give assistance as needed.

APPENDIX ONE CONT.**DIRECTIONS:**

1. Enter the heading in A1 and the subheading in A2.
2. Widen column A to 21 characters.
3. Open your SKITTLES and pick four colors. Enter the colors as headings in row 4.
4. Now, enter your name in A5. Enter the number of each color of SKITTLES in the row of the color. Remember to choose only four (4) colors. (For example: If you chose RED in Column B and you have 4 RED SKITTLES, key a **4** in B5.)
5. Now, visit three other classmates and see how many SKITTLES they have and enter their data (under the color that you chose) in your spreadsheet.
6. Use the Function Wizard on the Formula Bar to complete your workbook.
7. Center align all column headings.
8. Bold the heading in A1.
9. Key your name in cell A16 and proofread your work.
10. Save the workbook as SKITTLES. Print the spreadsheet and turn in.
11. LAST, **EAT** your SKITTLES and **ENJOY!**

	A	B	C	D	E
1	SKITTLES				
2	Inventory Exercise				
3					
4		(Color)	(Color)	(Color)	(Color)
5	YOUR NAME				
6	(Name)				
7	(Name)				
8	(Name)				
9					
10	TOTALS				
11	AVERAGE				
12	COUNT				
13	MINIMUM				
14	MAXIMUM				
15					
16					

APPENDIX TWO: Merging a database into a Word document

The students will use this handout to re-create the survey that is to be merged with the database.

APPENDIX TWO

CUSTOMER SATISFACTION SURVEY

The purpose of this survey is to collect information from you to assist us in improving the quality of services that we provide to our clients.

PLEASE FILL OUT THE INFORMATION IN THE FORM AS REQUESTED.

- We would like to know how satisfied you are/were with our company. Please rate our effectiveness in providing access to the following services:**

Services	Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	Did not use
PROVIDED MENTORING OPPORTUNITIES						
FACILITATED PEER-TO-PEER NETWORKING						
ASSISTED IN DEVELOPING A STRATEGIC BUSINESS PLAN						
PROVIDED LEGAL ASSISTANCE AS NEEDED						
INFORMED ABOUT FINANCING OPTIONS						
SUGGESTED MARKETING STRATEGIES						
INTRODUCED INFORMATION TECHNOLOGY RESOURCES						
RECOMMENDED SPACE SOLUTIONS						
INTRODUCED PROFESSIONAL DEVELOPMENT OPTIONS						
ADDRESSED WORKFORCE DEVELOPMENT NEEDS						

- How did you hear about our company?**

- Tell us what you liked best about your experience with our company.**

- Tell us what you liked least about your experience with our company.**

- What suggestions can you offer for improving the quality of services provided by our company?**

- What was your interaction with our company?**

- _____ **Monthly events**
- _____ **Contacted for information**
- _____ **Contacted to become a service provider**
- _____ **Sought help with business plan/development (first-touch)**
- _____ **Other**

***Please specify:** _____

Name/Company _____

Address _____

E-mail address _____

PLEASE RETURN THIS SURVEY IN THE ENVELOPE PROVIDED.

