

Integrating Technology Digital Basics Guide

By Rob Jenkins
Staci Johnson

Digital Basics Guide

WHY USE DIGITAL DEVICES?

Digital devices are increasingly part of American society. Digital literacy is needed to write letters, send e-mails, make purchases via the Internet, function in many jobs, and even vote. Digital programs provide organizational tools as well. These tools can help students study and keep track of information. Spreadsheets can calculate and do work in seconds that would take hours to do with pencil and paper or even with a calculator. Digital programs also provide literacy hints and help with spelling and grammar. Computer programs can store, sort, and manipulate with ease.

Although the principle purpose of ESL classes is not to teach technology but to teach English, using digital devices can enhance the learning process while giving students experience with technology that they will encounter in the real world as well as provide opportunities to develop needed critical thinking and academic skills.

Digital devices can be used in the following places:

Computer Enhanced Classrooms: Several computers/tablets are available in the classroom where traditional instruction also occurs.

Computer Lab: Computer labs can be accessed for short periods of time by the traditional classroom.

Classrooms with one computer and projection system: The suggestions can be used more as presentations and whole class activities.

BYOD: Classrooms where students provide their own devices such as laptops, tablets, and/or smart phones.

WHAT TYPES OF PROGRAMS ARE BEST TO USE?

The standard *Microsoft Suite* (*Word*, *Excel*, *Publisher*, *Access*) are all useful tools. Any word processing program like *Word* provides a place for students to record information, write sentences, paragraphs or extended essays, and to create graphs, charts, and items such as brochures or other interesting products. Most spreadsheet programs like *Excel* are also great for manipulating information and storing data. Publishing programs like *Publisher* are merely word processing programs with more frills and database programs like *Access* take data like the spreadsheet programs and provide a more appealing presentation.

For purposes of this guide and since using publishing and database programs require more expertise, we will limit our suggestions to word processing and spreadsheet examples.

HOW CAN ONE ORGANIZE DIGITAL LITERACY ACTIVITIES?

We would suggest a basic framework that follows the *Stand Out Approach*. That is, within an established context, prepare students to be successful in meaningful tasks and allow them to apply the new skill to their own lives.

A general guideline might be:

- 1) **Establish a context:** Be sure to provide a life-skill context with real-life tasks.
- 2) **Present the building blocks:** Give students vocabulary, grammar, pronunciation and other skills they will need to be successful.
- 3) **Meaningful Task:** Prepare students to do the task on the digital device by doing similar activities on paper first or give them the opportunity to plan what they will do.
- 4) **Clearly show students how to do the task:** This stage becomes less and less important as students learn to use the word processing and spreadsheet programs. The first times may take time and planning. Try to identify students who know the programs and pair them up with students who may need more personal help.
- 5) **Ask students in groups or pairs to do the activity:** Often the group aspect provides speaking opportunities as well as peer mentoring or coaching through the technology. **Note:** The activity is more about discovery and language practice than about using technology. *Never lose sight of the lesson objective!*

BASIC COMPUTER OPERATIONS

You may choose to teach students how to turn on and off computers, open folders, find folders, search for files, etc. as part of an introduction to the computer. Another approach would be to teach one or two operations at a time. For example, you might ask students to turn on the computers and turn them off as part of the computer activity that will follow, but you will open the program where they will work itself or find the template they will fill in. The next time you use computers to enhance instruction, you might teach them to open a program, and so on.

The following suggestions are designed as a type of continuum. Students will learn basic operations and in every unit will build on what they already know. The assumption in the progression that we offer is that students at the beginning of class know very little about computers. If this is not the case, we would suggest you create your own continuum based on student expertise. We have provided a worksheet at the end of this guide for that purpose.

TEACHING HINTS FOR COMPUTER USE

- ❑ Let students have control of the keyboard. Fight the temptation of doing the work for them to save time. Students learn better by doing and making attempts. If you must model using a student's keyboard, be sure to delete what you have done so the student can try for him- or herself.
- ❑ Have students work in teams and pairs to stimulate discussion, to support one another, and for peer mentoring purposes.
- ❑ Allow students to make mistakes. They will learn from the mistakes.
- ❑ Help students learn to solve their own problems and to help one another.

USING TEMPLATES

In the case of a lab or computer enhanced classroom, put a copies of template you create on each computer. Make sure all the files are "Read Only" by right clicking on each and choosing properties or information on a Mac. The "Read Only" feature will force students to save their work to another file name as would be done with "Save as". Contact [Rob Jenkins](#) for ready-made templates.

PERSONAL INFORMATION

Suggested Activities: Inputting Data

- 1) Purchase business card paper and teach students how to input data to create their own business cards. The paper will have instructions on how to do it. The program will allow you or your students to build a template that in reality is a table.
- 2) Create a class list with phone numbers and native countries. Create a template for this purpose. Allow students to go one at a time and add to the list in a spreadsheet program. Show them how pressing “tab” on the keyboard after putting in the entry will move them to the next part (next cell of the spreadsheet) of their entry. Also, students will learn that to edit an entry they either need to “double click” or “Enter” and exit the cell and retype the entire entry. Finally teach students how to use the “shift” key for uppercase. Some students will want to use the “Caps Lock”, but help them to see that the shift key is more efficient. After all students have inputted their data, show them how the data can be sorted by last name.
- 3) Use a Microsoft template
- 4) Use the Microsoft Mail Merge function to create address labels.

Note: There are many ways to edit and to do other operations. Only teach students one way per activity.

* To access the Microsoft templates and wizards, open *Word*, click *File-new*, find templates on your computer.

OUR CLASS

Suggested Activities: Inputting Data, Saving, and Printing *or* Copying and Pasting

- 1) Ask students to input their schedules into a template you create for this purpose. You will need to teach a few activities they can put into the cells. You could instead use a spreadsheet where students use drop down menus to choose activities. Show students how to use the *save as* function to save the file for themselves and also show them how to print their information.
- 2) Create a template for students in groups to make an inventory of items in the classroom. Teach them how to print out their completed sheets and to compare the information with other groups. **Optional:** Depending on the technical abilities of the group, you might choose to show students how to “right click” to correct misspelling and/or you could show them how to sort alphabetically using the sort icon on the toolbar.
- 3) This activity is the same as #1 above except now, you ask students to input data from a word bank by copying and pasting.

Note: There are many ways to cut and paste. Only teach students one way per activity.

FOOD

Suggested Activities: Changing Font Size and Styles *or* Sorting Data

- 1) Create an advertisement as a template. Students are asked to change a food advertisement from 14 font, Times Roman to different sizes and styles. Ask students to first read the advertisement and then attempt the activity. Then have students create their own advertisement from a blank template. In this activity you would teach:
 - Bold
 - Italics
 - Underline
 - Font size
 - Font style
 - Left/Right justify

Note: If you believe this is too much for your individual students, do some of the operations for them before giving them the template to work on.

- 2) Have students use an Excel worksheet to make shopping lists. Show students how to sort data.

CLOTHING

Suggested Activities: Changing Font Size and Styles, Copy and Paste *or* Sort Data

- 1) Create an advertisement as a template. Students are asked to change clothing advertisement from 14 font, Times Roman to different sizes and styles. Ask students to first read the advertisement and then attempt the activity. Then have students create their own advertisement from a blank template. In this activity you would review:
 - Bold
 - Italics
 - Underline
 - Font size
 - Font style
 - Left/Right justify
 - Students can also add clipart or copy and paste it.

Note: If you believe this is too much for your students, do some of the operations for them before giving them the template to work on.

- 2) Create a template with an Excel worksheet for sorting an inventory list. Show students how to sort data using the data sort menu. Students are asked to sort by quantity, size, color, and price.

COMMUNITY

Suggested Activities: Writing a Paragraph *or* Sorting

- 1) Ask students to copy the formatting on an existing paragraph. Then ask students to rewrite the paragraph from scratch. You will need to show them how to tab to indent and how to skip a line. Students will also need to learn that the computer will go to the next line when there is no more room and they shouldn't hit the **Enter** key unless they want to skip a line. Show students how there is one space between words. Depending on their level, you may want to teach the grammar (green line) hints and the spelling (red line) hints. Then have students write their own paragraphs and make their own formatting choices.

HEALTH

Suggested Activities: Writing a Paragraph *or* Designing a Bar Graph

- 1) Have students copy the formatting on an existing paragraph. Then ask students to rewrite the paragraph from scratch. You will need to show them how to tab to indent and how to skip a line. Students will also need to learn that the computer will go to the next line when there is no more room and they shouldn't hit the **Enter** key unless they want to skip a line. Show students how there is one space between words. Depending on their level, you may want to teach the grammar (green line) hints and the spelling (red line) hints.
- 2) Create an Excel worksheet where students are asked to input information about their health habits. Then they are asked to make a graph. The instructions explain how to make a simple graph. Depending on the level, you may choose to show students how to add other features to the graph or make a pie graph.

WORK

Suggested Activities: Writing a Paragraph and Inserting Clipart *or* Designing a Bar Graph

- 1) Have students copy the formatting on an existing paragraph and insert clipart. Ask them to click on the picture and show them how it fits on the page. Then ask students to rewrite the paragraph from scratch and insert a new picture. Teach students how to choose clipart that is descriptive of their jobs. Of course, students without jobs would write about school and their role as students.

Note: You may choose to only teach students the most basic clipart manipulation. The most basic is to insert and to resize. Most clipart from a bank inserts and can't be moved or manipulated more; however, you may choose to show students how to change the general formatting of clipart. The extra operations students can learn include:

- Changing brightness
 - Making grey scale
 - Making a frame around it
 - Moving it behind text, in front of text, around text, etc.
 - Adding other shapes and designs or other clipart to it, etc.
- 2) On an Excel spreadsheet, students are asked to create a pie graph of annual pay for different jobs. Provide them the data. If you wish to extend this activity, you might show students how to add other information to the chart or make a different kind of chart with the same information. You might also show them how the chart can be copied into a Word document.

WORK

Suggested Activities: Creating or Totaling Data

- 1) Ask students to make the table. After they create the table, ask them to do the activity by adding page numbers and vocabulary. Teach the students to insert a table of three columns and 6 rows. Show them how to pull the bottom line down and then balance the row heights. Also, students may want to know how to center data horizontally and vertically. The best way to teach all these operations is to show them first how to access the table ribbon.
- 2) Create an Excel spreadsheet where students input and total the prices. Also show them how to assign all the cells with numbers with \$ signs.

