

MD Computing Curriculum

version 0.0

Rik Goldman

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Middle Division Computing Curriculum

Contents:

Preface

Problem

Rationale

Values

Keyboarding Objectives

To Do

- Sequence
- Divide
- consistency in punctuation and capitalization

Getting Started

Preassessment

Unit 1

Keyboarding

The student will:

- keep the backs of her hands parallel to the keyboard;
- orient her arms to maintain index, middle and ring fingers on their home keys and have both pinky fingers reach the shift keys without bending your wrist sideways;
- sit up straight;
- have the top of the monitor at eye level;
- position hands should be slightly lower than elbows;
- keep wrists straight;
- key the alphabetic and numeric keys by touch;
- develop best practice keyboarding techniques;
- key fluently, where fluency is defined as 25 words per minute;
- develop keyboarding accuracy.

Communicating

The student will:

Unit 2

- practice and demonstrate best-practice proofreading skills;
- apply proofreaders' marks;
- rely on proofreaders' marks to polish text.

Unit 2

Keyboarding

The student will:

- Key the numeric keys by touch;
- use the symbol keys correctly; [? reconsider]
- Apply correct number expression; [clarify]
- Apply proofreaders' marks.

Unit 3

Keyboarding

The student will:

- key fluently using best-practice keying techniques;
- key about forty words per minute with improved accuracy.

Document Design Skills

The student will:

- format memos, business letters, tables, and reports according to teacher-specified conventions;
- apply basic design skills to announcements, invitations, and newsletters;
- enhance documents with basic graphics.

Word Processing Skills

The student will:

- Develop and utilize word processing commands efficiently;
- Create, edit, and format documents effectively.

Communication Skills

The student will:

- review and improve basic communication skills; [make observable and measureable]
- compose simple documents given a choice of grade-level prompts;
- use software-based proofing tools effectively;
- proofread and edit text effectively.

Unit 4

Keyboarding

The student will:

- lay out interoffice memorandum;
- lay out block and modified block business letters;
- accurately type and print addresses on envelopes;
- work with tabs;
- improve keying speed and accuracy. [benchmark or objective?]

Unit 5

Keyboarding

The student will:

- create tables;
- change table structure;
- format tables;
- incorporate tables within documents;
- improve keying speed and accuracy. [benchmark needed]

Unit 6

Keyboarding

- format two-page reports with styles;
- insert cover page and number report pages;
- rely on section breaks and number pages appropriately;
- format academic report with citations and reference page;
- insert and edit footnotes or endnotes according to convention;
- insert a file into an existing document.

Unit 7

Keyboarding

The student will:

- learn to create and format graphics using a word processor;
- enhance documents strategically with graphics;
- create documents with columns and graphics;
- demonstrate increased keying speed and accuracy.

Unit 8

Keyboarding

The student will:

- review and edit memos and letters; [redundant?]
- review, edit, and format a report with tables and graphics;
- demonstrate increased keying speed and accuracy.

Keyboarding Lessons: Divergent Models from Reliable Sources

Resource: ByteBack

Lesson 1: Left Hand & Home Row

This lesson teaches the four left keys of the home row. Place your index finger on F, middle finger on D, ring finger on S, and pinky on A. Your thumb goes on the space bar. However, leave your right hand on the homerow as well to get used to having both hands on the keyboard.

This is your first lesson so go slow and try to get fewer than five errors and faster than 20 words per minute (WPM).

Spend a minute memorizing the finger positions, and then keep your eyes on the exercise and not on your hands. And don't forget good posture!

Go: <http://www.byteback.org/typing-lessons/lesson1.html>

Lesson 2: Right Hand & Home Row

This lesson teaches the right four keys of the home row. Your index finger goes on J, middle finger on K, ring finger on L, and pinky on ;. Again, leave both hands on the keyboard with your thumbs on the space bar.

Just like the first lesson, go slow and concentrate on accuracy! And no peeking at your fingers either!

Go: <http://www.byteback.org/typing-lessons/lesson2.html>

Lesson 3: Both Hands, Home Row

Now it's time to combine the first two lessons. Remember to keep your fingers on the home row. This is a large lesson, using almost an entire row of keys so go at your own pace.

Remember the work you did in the previous two lessons!

Go: <http://www.byteback.org/typing-lessons/lesson3.html>

Lesson 4: Home Row with G and H

This is the last lesson for the home row! The G and H keys are typed with the index finger on each hand and are the first "reaches" you will learn. G is typed by reaching the right index finger while H is typed with the left. Make sure to return your fingers when you are done with each reach, and try to move your other fingers as little as possible during another fingers' reach.

After this lesson, you will have learned an entire row of the keyboard!

Go: <http://www.byteback.org/typing-lessons/lesson4.html>

Lesson 5: E and I

So that you can quickly begin typing many words, it's time to learn some more vowels! I and E are typed by reaching the middle finger of each hand to the top row.

Remember to return to home row position after each reach!

Go: <http://www.byteback.org/typing-lessons/lesson5.html>

Lesson 6: R and U

When typing, your index fingers do the most work. Now we will learn two more reaches for your index fingers. R and U are typed by reaching the index finger of each hand up to the top row. Always return your fingers to the correct home row positions.

Now you know over half the letters!

Go: <http://www.byteback.org/typing-lessons/lesson6.html>

Lesson 7: T and Y

Continuing with the index fingers, it is time to learn T and Y. T and Y are typed by reaching the index fingers up to the top row. Now you will know enough letters to spell a wide variety of words.

Remember, you can repeat lessons as many times as you want and even return to old lessons to review!

Go: <http://www.byteback.org/typing-lessons/lesson7.html>

Lesson 8: B and N

It's time to move down to the bottom row. B and N are typed with the index finger of each hand. Remember to return your fingers to the correct home row position. Now only one reach remains for the index fingers.

Accuracy first!

Go: <http://www.byteback.org/typing-lessons/lesson8.html>

Lesson 9: V and M

Now its time to learn the last reaches for your index fingers. To type V and M, reach your index finger down, remembering to replace your fingers on the home row after each reach.

Keep up the good work!

Go: <http://www.byteback.org/typing-lessons/lesson9.html>

Lesson 10: W and O

Go: <http://www.byteback.org/typing-lessons/lesson10.html>

Lesson 11: Q and P

Here we will finish the top row! P and Q are typed with the pinky of each hand. The pinky is often one of the hardest fingers to use, so take your time and make sure you are comfortable using both, because P is a commonly used letter!

Make sure you are using all the correct reaches!

Go: <http://www.byteback.org/typing-lessons/lesson11.html>

Lesson 12: C and Comma (,)

Lesson 13: Z, X, and Period (.)

This is an important lesson because C is a very common letter and the comma (,) is your first punctuation mark. The C and , are typed by curling the middle fingers down to the bottom row of keys.

C is one of the hardest reaches to learn. Doing this will be awkward at first, so make sure you are comfortable with C and comma before you move on!

Go: <http://www.byteback.org/typing-lessons/lesson12.html>

Lesson 13: Z, X, and Period (.)

This may be the hardest lesson because you are working with uncommon letters. This makes it even more important, however, because you will not get as much practice with them! Z is typed by curling the left pinky down a row, X is typed by curling the left ring finger down a row, and period is typed with the right ring finger.

Take your time and concentrate on using the correct reaches! This exercise may be slower than many of the earlier ones.

Go: <http://www.byteback.org/typing-lessons/lesson13.html>

Lesson 14: The Shift Key

Letters are important, but to actually type, it is important to know the shift key! The shift key, a type of "modifier" key, capitalizes letters or shifts a key to its secondary symbol.

To use the shift key, hold the shift key down with the pinky of the opposite hand of the letter you are typing. Make sure that when you type the letter down, the shift key is held down. Make sure to release the shift key before typing another key!

Make sure you practice using both shift keys!

Go: <http://www.byteback.org/typing-lessons/lesson14.html>

Lesson 15: ? and !

You can already punctuate your sentences, but now it's time to add some expression. Exclamation point and the question mark are the secondary uses of their keys, meaning that you must hold the shift key while typing them. For ! hold the shift key with your right pinky while reaching up to the 1(!) key in the number row with your left pinky. To type ? hold shift with the left pinky while reaching down to the /(?) key with your right pinky.

Once you master these, you're ready for the final test!

Fun Fact: An exclamation point followed by a question mark is technically called an "interrobang." It looks like this: . A reverse and upside-down interrobang is called a "gnaborretni" ("interrobang" backwards).

Go: <http://www.byteback.org/typing-lessons/lesson15.html>

Final Assessment

You have now completed all 15 lessons and are ready for the final test! However, you can still take the Advanced Lessons to learn more punctuation, symbols, and numbers, or use the Extra Exercises for more practice. The more you type, the more your speed and accuracy will improve! Additionally, you'll find more tests, exercises, lessons, and even games on the Resources page.

Congratulations!

Go: <http://www.byteback.org/typing-lessons/test.html>

Resource: College Keyboarding

Module 1

The student will accurately key:

- Home Row, Space Bar, Enter, I
- E and N
- Left Shift, H, T, Period
- R, Right Shift, C, O
- W, Comma, B, P
- G, QQuestion Mark, X, U
- Q, M, V, Apostrophe
- Z, Y, Quotation Mark, Tab

Module 2

The student will accurately key:

- 1 and 8
- 5 and 0
- 2 and 7
- 4 and 9
- 3 and 6
- \$ and Hyphen, Number Expression
- Pound (#) and / (forward slash)
- Parenthesis and Backspace
- Ampersand and Colon
- Proofreaders' Marks
- Additional Symbols

Keyboarding Enrichment Resources

To Do

- Credit source
- Finish linking

Intro

This page contains links to other free, online typing resources that provide additional practice and fun.

Typing Lessons

- [Peter's Online Typing Course](#): Includes instructions, lessons, and practice exercises.
- [Senselang](#): Create your own lessons by pasting text into the lesson box.
- [Power Typing](#): Another site good for more practice.

Typing Games

- **Free Typing Games:** Includes many good typing games with 30 skill levels each. Focus on anything from homerow to the entire keyboard. Try "The Frogs Are Off Their Diet" for beginners or "Space Invaders" for more advanced typers.
- **Barracuda:** Another good game for beginners.
- **Typer Shark:** A flashy shockwave game, good for more advanced typers.

Typing Tests

The following tests are simple, easy to use, and provide accurate assessments of your typing ability, giving words per minute in addition to a number of other statistics.

- Typing Tutor
- Learn2Type
- Super Typing Wizard

Computer Systems

User Interface

The student will:

- navigate a graphical user interface desktop;
- use a mouse to point and left click;
- access context-sensitive menus by right clicking with a mouse;
- Launch an application;
- Search for programs and files;
- work with and manipulate multiple windows;
- Switch windows with a keyboard shortcut;
- Read, interpret, and use command buttons, menus, and dialog boxes;
- Access OS help tools;
- Shutdown a computer system according to best practice;

File Management

The student will:

- Diagram or describe the file system hierarchy;
- Identify and manipulate file and folder properties;
- Create and save a file from an application;
- Explore files and folders with the file system navigator; [Windows Explorer; Nautilus]
- Change file and folder views in the file system navigator;
- contrast save and save as;
- copy files;
- move and rename files;

- use drag and drop to copy or move files to locations;
- perform searches for files, folders, and applications using search parameters;
- delete and restore files;

Fundamental Web Literacy

The student will:

- differentiate the Web from the internet;
- browse the Web intentionally with multiple browsers;
- search the web with a single search engine using multiple strategies;
- View and navigate Web pages;
- Use tabbed browsing;
- Diagram or explain an URL's function and comonents;
- Use tabbed browsing;
- close unused tabs;
- identify and understand the status bar;
- save favorite Web pages;
- organize bookmarked pages hierarchically;
- Set a home page;
- set a default search engine;
- browse safely; [study skills?]
- block pop-ups;
- choose and install a broswer extension or plugin;
- view page source.

Computer Systems

The student will:

- compare and contrast computer system types.
- investigate data representation [compression, binary, aasci].
- Use best-practice password hygiene.

Hardware

- determine hardware specifications;
- articulate the function of RAM;
- contrast flash memory with RAM;
- understand secondary storage devices;
- identify secondary storage device interfaces;
- understand optical media;
- identify and examine input devices;

Software

- identify and examine output devices;
- label common input and output ports;

Software

The student will:

- articulate the functions of an operating system;
- identify system utilities;
- identify productivity software.
- List common components of an office suite.

Office Applications

Word Processor

Creating Documents

- Placeholder

Editing Documents

- Placeholder

Formatting Text

- Placeholder

Formatting Paragraphs

- Placeholder

Formatting Documents

- Placeholder

Spreadsheets

Working with Formulas and Functions

- Placeholder

Formatting a Worksheet

- Placeholder

Working with Charts

Presentations

- Placeholder

Presentations

Creating a Presentation

- Placeholder

Modifying a Presentation

- Placeholder

Inserting Objects into a Presentation

- Placeholder

Polishing a Presentation

- Placeholder

Application Integration

- Placeholder

Programming

- Placeholder

Anchor Texts

Computer Systems

Microsoft Office 2010 Illustrated Intoductory First Course. Beskeen, Cram, Duffy, Friedrichsen. Eisner Redding, 2010.

Keyboarding

- Placeholder

Software Applications

Microsoft Office 2010 Illustrated Intoductory First Course. Beskeen, Cram, Duffy, Friedrichsen. Eisner Redding, 2010.

Programming

Super Scratch Adventures

Indices and tables

- *genindex*
- *modindex*
- *search*