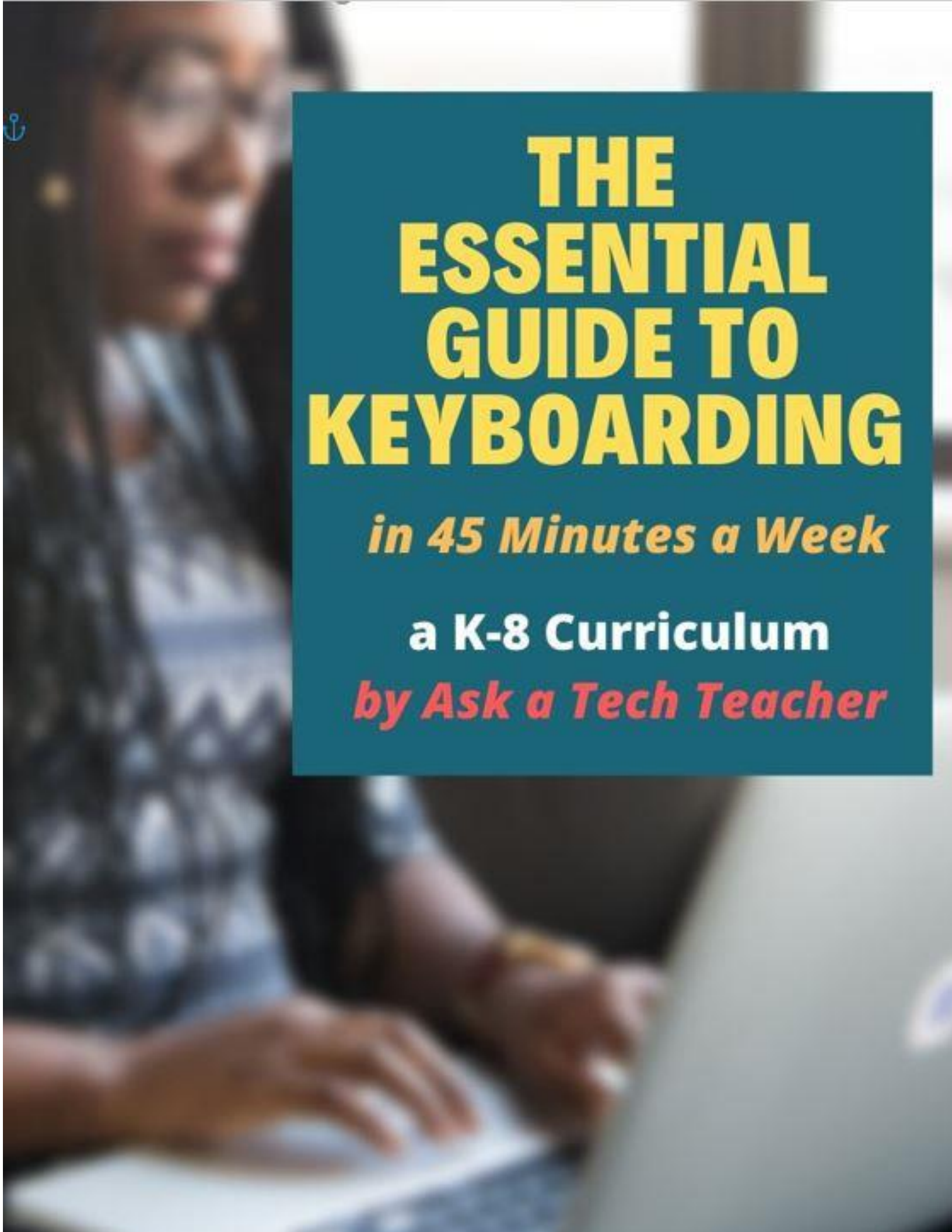

THE ESSENTIAL GUIDE TO KEYBOARDING

in 45 Minutes a Week

a K-8 Curriculum

by Ask a Tech Teacher

THE ESSENTIAL GUIDE TO TEACHING KEYBOARDING

In 45 Minutes a Week

A K-8 Curriculum

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2019

Part of the Structured Learning Technology for the Classroom series
Visit the companion website at Ask a Tech Teacher for more resources to teach technology to K-8

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Introduction

You may think it impossible to find a keyboarding curriculum that creates accomplished typists from the skimpy forty-five minutes a week you can devote to keyboarding. You teach what you can, but it always seems to be the same lessons—hands on home row, good posture, eyes on copy. You wonder if it's making a difference.

Every year, you promise it will go better and then it doesn't. You're thinking of giving up. You have lots of friends who hunt-and-peck as adults and are doing fine. Does it even matter if students learn to touch type?

Yes, it matters, and there is a way to teach them—that works. It requires a plan, faithfully executed, with your eye relentlessly on the goal, but if you commit to that, it works. K-8 students have the finger dexterity—they play piano and the like quite well—to type, just not the knowledge. Research also tells us that children who learn to keyboard improve academically (Wood and Freeman 1931; Erickson 1959). It makes sense that it should be one of school's essential skills.

In *The Essential Guide to Keyboarding in 45 Minutes a Week: K-8 Curriculum*, one grade at a time, I'll share a keyboard curriculum that I've seen work on thousands of students. You'll find directions on what to do, how and when, using mostly free resources. The biggest cost is the price of this short textbook. Consider this the keyboarding version of Strunk and White's Elements of Style.

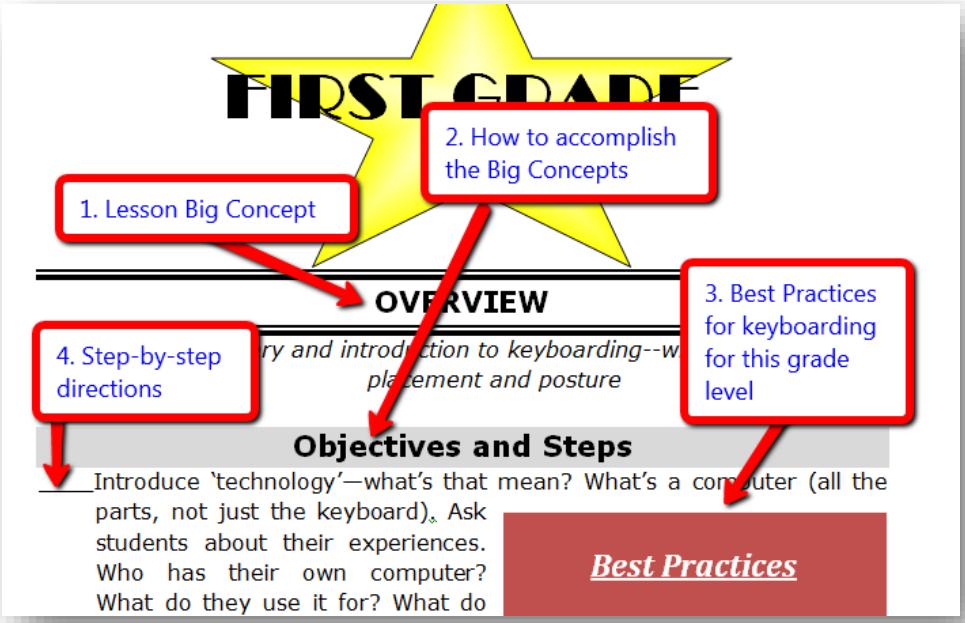
Objectives

The overarching objective of keyboarding is to **facilitate communication of ideas**. That means first, students must type fast enough to exceed the speed of their handwriting, and second, they must keep up with their thoughts. Done as described in this book, the former will occur around fourth grade and the latter around seventh or eighth.

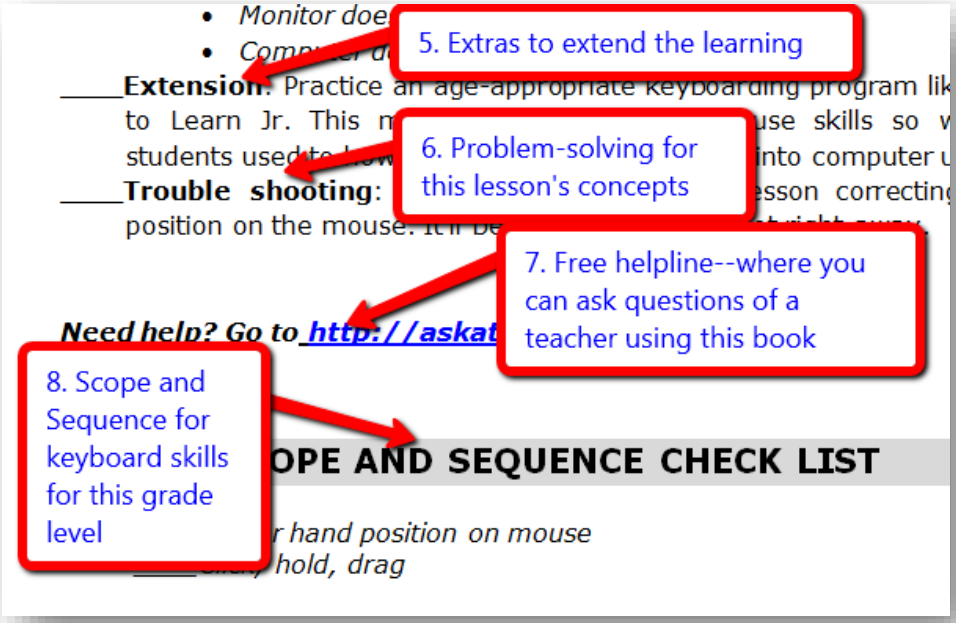
How to Use This Book

For each grade, the lesson organization is clear, with sections to address what you need to know to teach that grade level to keyboard.

At the **beginning** of each grade-level section:



At the **end** of each grade-level section:



1. ***Overview***—*overarching skills to be accomplished at this grade level.*
2. ***Objectives and Steps***—*practical strategies for achieving the lesson's essential goals with step-by-step guidelines to show evidence of accomplishment*
3. ***Best Practices***—*Essential items that scaffold comprehension of the big concepts*

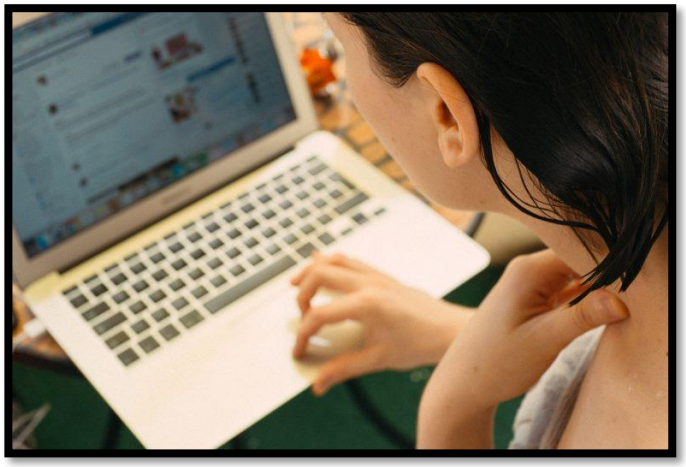
4. ***Step-by-step—****check off each objective as it is accomplished*
5. ***Extension****—Ideas to extend learning, vertically plan, and/or encourage student risk-taking (located at end of section)*
6. ***Troubleshooting****—how to problem-solve possible difficulties (located at end of section)*
7. ***Need Help****—a website that provides free help on this lesson from teachers who use the curriculum (located at end of section)*
8. ***Scope and Sequence****—checklist of skills to be accomplished at this grade-level. Be sure to complete all of them before moving onto the next grade level. The curriculum's success depends upon this simple commitment (after Objectives and Steps section)*

You'll find a lot of links in this book. Links die. If you find one that doesn't work, let us know. We will provide you with a replacement.

Research

If you're like many teachers I've talked to, you are asking yourself (or parents in your school are asking) the following questions before committing the time necessary for a comprehensive keyboarding program:

1. *Can elementary school children learn to keyboard?*
2. *What is the best age to begin keyboarding?*
3. *How important is it that the teacher be knowledgeable about typing?*
4. *Is it still important that students learn keyboarding?*



Here are the quick answers:

1. *Yes—emphatically*
2. *As soon as students use a computer*
3. *Extremely*
4. *Of course!*

Don't take my word for it. Read the research.

Can K-8 Children Learn to Keyboard?

An overview of research says **yes**, elementary- and middle school-age students are cognitively, emotionally, and physically capable of learning keyboarding skills. Just as with piano and violin (and any number of sports), their fine motor skills, mental processes, and physiologic development are mature enough for the demands of typing.

But let's dig deeper.

Developmentally, some researchers maintain keyboarding is too abstract for immature brains and too demanding of undeveloped fine motor skills to learn at a young age.

Let's look at that claim. In order for the skill of keyboarding to be mastered, one must be able to let fingers flow freely (Waner, Behymer, & McCrary, 1992), a concept backed by Bloom's idea of automaticity and discussed by Wronkovich (1998), who defines it as a "system of automatic habits corresponding to the system of tasks".

...only a small proportion of classroom teachers have any formal preparation for teaching keyboarding.
Sormunen, 1991

I agree--keyboarding requires this "system of automatic habits". Is that a reasonable expectation of the K-8 child?

Yes and no. To ask a kindergartner (or a first/second grader) to concentrate on what each finger is doing is unreasonable and not age-appropriate. However, it is just as unreasonable to NOT expect a sixth-eighth grader to be able to accomplish these.

The key is to introduce skills that are **age-appropriate**.

Best Age to Teach Keyboarding

Most researchers agree effective keyboarding isn't instinctual and should be begun **before bad habits are created**. But when does that happen? Is elementary school too early—or too late?

Research varies on this topic. Bartholome (1996) found that third grade is appropriate for touch keyboarding, but first and second graders can learn this skill as well if given adequate instruction. This conclusion was reinforced by Feutz (2001).

Children often develop their own inefficient hunt-and-peck systems that take longer, waste limited computer time, and develop habits that are difficult to change.
--Type to Learn 1986

On the opposite side is Erthal (2002) who found that third graders do not possess the manual dexterity required for keyboarding, and Hopkins (1998) who considered fourth grade an appropriate age for the commencement of formal keyboarding.

We are left with a mushy consensus among researchers that third-fifth grade is the appropriate time to begin keyboarding skills.

But fifth grade may be too late. Young children are in front of keyboards earlier than ever. In the absence of training, they will still learn, likely wrong. Therefore, logic dictates that **when students start to use computers to type, they should be taught correct keyboarding practices**. From

my experience, that's third grade with this caveat: Teach pre-keyboard skills kindergarten-second grade before beginning the focus on traditional skills of posture-speed-accuracy.

Importance of Teacher Knowledge

Sormunen's 1991 study found that classroom instructors were teaching keyboarding, but only 12% had any formal preparation in how to do that.

Condon's study (1989) found that educational administrators felt elementary teachers should be provided with sufficient training to teach keyboarding. McLean (1994) suggested that instruction can be supplied by teachers who have taken a keyboarding methods course, or a business education teacher who has had elementary learning methods, or a combination of both.

Consensus of most studies indicates that a "knowledgeable" teacher is critical to help students develop appropriate techniques, as well as provide motivation and reinforcement (Nieman, 1996; Erthal, 1998).

Importance of Learning Keyboarding

Many studies document the value of children learning proper typing technique (McKay, 1998; Owston, 1997; Bartholome, 1996; Bieman, 1996; Hoot, 1986). Rogers (2003) lists the following eight benefits:

> *Student writing develops faster through word processing because it facilitates the review and revision learning process.*
> *Zeitz, 2008*

1. *Improvement in language arts—reading, spelling, and writing*
2. *Improvement in efficiency using computers as writing, editing, and computing tools, thereby maximizing classroom time*
3. *Improvement in attitude toward writing—less frustration in looking for keys rather that entering information*
4. *Improvement in proper keyboarding techniques and use of the computer, thereby eliminating the formation of bad keyboarding habits for later word processing and computer applications*
5. *Improvement in motivating students toward doing schoolwork*
6. *Improvement in creative thought*
7. *Improvement in integrating keyboarding with all subject areas*
8. *Improvement in preparing all students for a technological society*

How to Teach Keyboarding in K-8

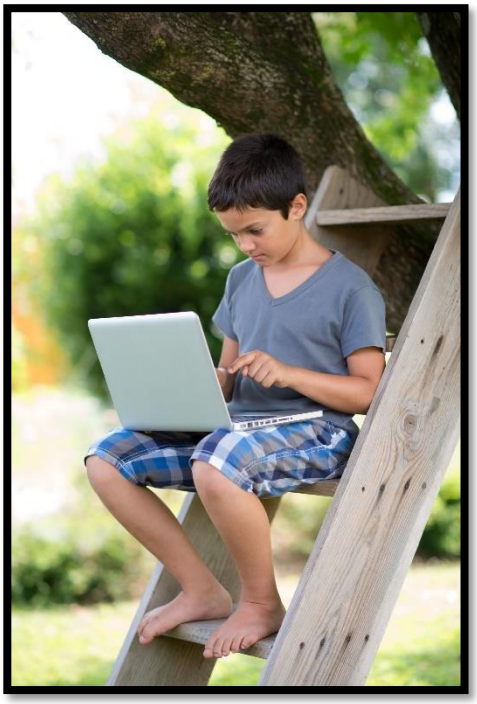
Two criteria are mentioned over and over in keyboarding research:

1. *Keyboarding instruction is most effective when spread out over several years and designed to build on the student's prior knowledge. (Robinson 1992)*

2. *Once skills are taught, it is important to use them, reinforce them and refine them (Adams, 1984; Wronkovich, 1998).*

I agree and have made these cornerstones to my curriculum for fifteen years. Here's an overview of my keyboarding focus for grades K-8:

K-1	*Introduce mouse skills and keyboarding while focusing on key placement and posture*
2nd	*Introduce keyboarding while focusing on key placement, posture, and two-hand position*
3rd	*Reinforce basics of key position, posture and hand position while beginning accuracy and technique*
4-5	*Reinforce key position, posture and hand position. Continue work on accuracy and technique. Begin focus on speed with age-appropriate speed-and-accuracy goals*
6-8	*Work on all essential elements of keyboarding—technique, speed, and accuracy—with grade level goal of 35-45 wpm*



Class lessons must include lots of variety so no one gets bored with the mundanity of typing. Here's a rundown of the pieces I include (more detail later on how to incorporate them at each grade level):

- *Classroom keyboarding software*
- *Online keyboarding websites*
- *Age-appropriate use of hand covers (grades 2-8)*
- *Quarterly speed/accuracy quizzes (grades 3-8)*
- *Quarterly blank keyboarding quizzes (grades 3-8)*
- *Monthly homework (grades 3-8)*
- *Wall chart on those who meet/exceed grade level expectations*
- *Wall chart tracking student progress throughout the year*
- *Wall chart showing which students type faster than they can handwrite*
- *Wall charts on important keys, body position*
- *Grading based on student improvement, not conformity to class norms*

Body Position

Seat

Position chair facing keyboard about one hand's-width from the table with keyboard one inch off edge of table.

Head and eyes

Place monitor so eyes look straight ahead with neck straight, not bent too far forward or back.

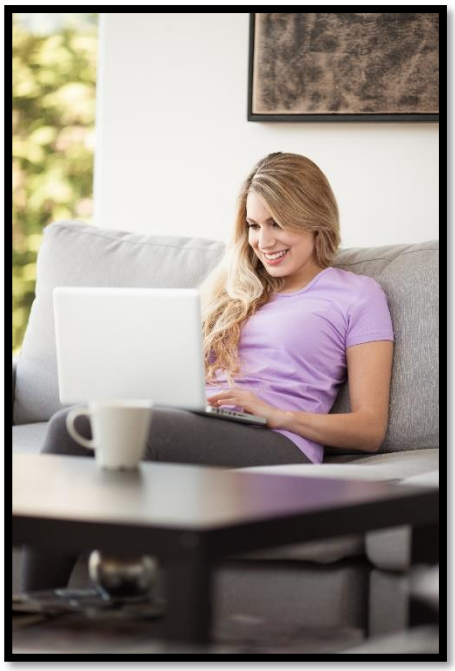
Body and Hands

Sit straight with elbows tucked against sides. Keep body natural, easy and relaxed with feet on the floor slightly apart. Keep fingers curved over keys, resting on home row.

Questions You May Have

In my class, keyboarding is the most-asked-about topic with parents. On my blog (Ask a Tech Teacher), keyboarding posts are read thrice as often as any other topic. Based on research (see above) and my experience teaching thousands of students, here are answers to some of the critical questions:

Why learn keyboarding?



If you've ever seen a third grader struggle to type a web address into the computer or type a book report when they don't know where the keys are, you know they should have started keyboarding earlier.

That's the first reason. There are more:

- *to communicate ideas*
- *to find out more about what interests them*
- *to offset a learning disability that interferes with writing–i.e., dysgraphia*

When should children learn keyboarding?

Today's children interact with keyboards from an early age and as a result are in danger of learning bad habits if they aren't taught early rather than late. In short, students should learn to keyboard:

- *when teachers expect projects that require keyboarding*
- *when a child's interests dictate a demand for typing*
- *when students are expected to use classroom computers*
- *by fourth grade: A trained fourth grader can write and type at the same speed*

What are some of keyboarding's developmental considerations?

In a macro sense, correct keyboarding takes into account cognitive maturity, fine motor skills and age-appropriateness of skills taught.

These three factors are constantly considered and adapted for in these lessons.

How do I (Ask a Tech Teacher) teach keyboarding?

I teach pre-keyboarding skills like posture, hand position, mouse skills, key placement, before starting technique. I make all lessons age-appropriate:

- *Kindergarten is about mouse skills, getting hands on the keyboard and learning good posture*
- *First grade is about getting hands on the correct side of the keyboard and forming good habits*
- *Second grade is about understanding that fingers type different keys--and good posture*
- *Third grade starts touch typing–use the right finger for the right key, make good posture a habit*
- *Fourth grade is about memorizing key placement, keeping eyes on the screen, and posture*
- *Fifth-eighth grade is about speed and accuracy*

I teach finger exercises to show students that they have eight fingers, that all of them work, that some are stronger than others.

I teach key placement first, using age-appropriate programs and a blank keyboard exercise for olders

I teach touch typing starting no sooner than third grade. I get serious about key memorization in fourth grade.

I teach shortkeys at all grade levels. Students feel good when they can zip out a shortkey instead of struggling with an awkward combination of keys.

I keep it fun

What about keyboard homework?

You'll see it in grades three-five.

Why is keyboarding a 'hot topic' with parents?

- Kids want to use the computer; parents want them outside playing
- Teachers are asking for computer projects
- The child sees something on the computer and wants to go there

Will keyboarding replace cursive writing?

- Not until input devices are more available–but why not?

What are good online sites to practice keyboarding?

Start with these:

1. **Big Brown Bear typing** (http://www.bigbrownbear.co.uk/keyboard/) great for grades kindergarten, first
2. **Typing.com**–a log-in allows you to track progress
3. **TypingTest.com**--see if you're improving
4. **ABCYa Keyboard challenge**—adapted to grade level

For many more options, visit Ask a Tech Teacher on the web.

How do I fix a broken keyboard?

You sit down to type that long project with the imminent deadline, and nothing happens. The cursor blinks… and blinks… and blinks… but goes nowhere. What do you do?

Before you go buy a new keyboard, try these:

- *Is the keyboard's power light on? If it is, check your screen. Is there something that's preventing you from typing? Maybe a dialogue box that wants an answer? If the light isn't on, continue down this list*
- *Check the plugs. Maybe the cord that connects the keyboard to the computer is loose or fell out.*
- *Reboot. Sometimes the stuff in the computer's boot-up sequence that makes the keyboard work gets lost. Restart your computer so it can re-establish itself.*
- *Do you eat at your keyboard? Doesn't everyone? I say this next solution hesitantly: Bang on the keys. Sometimes they get food between them and get stuck. If that doesn't work, turn the keyboard over and see what falls out.*

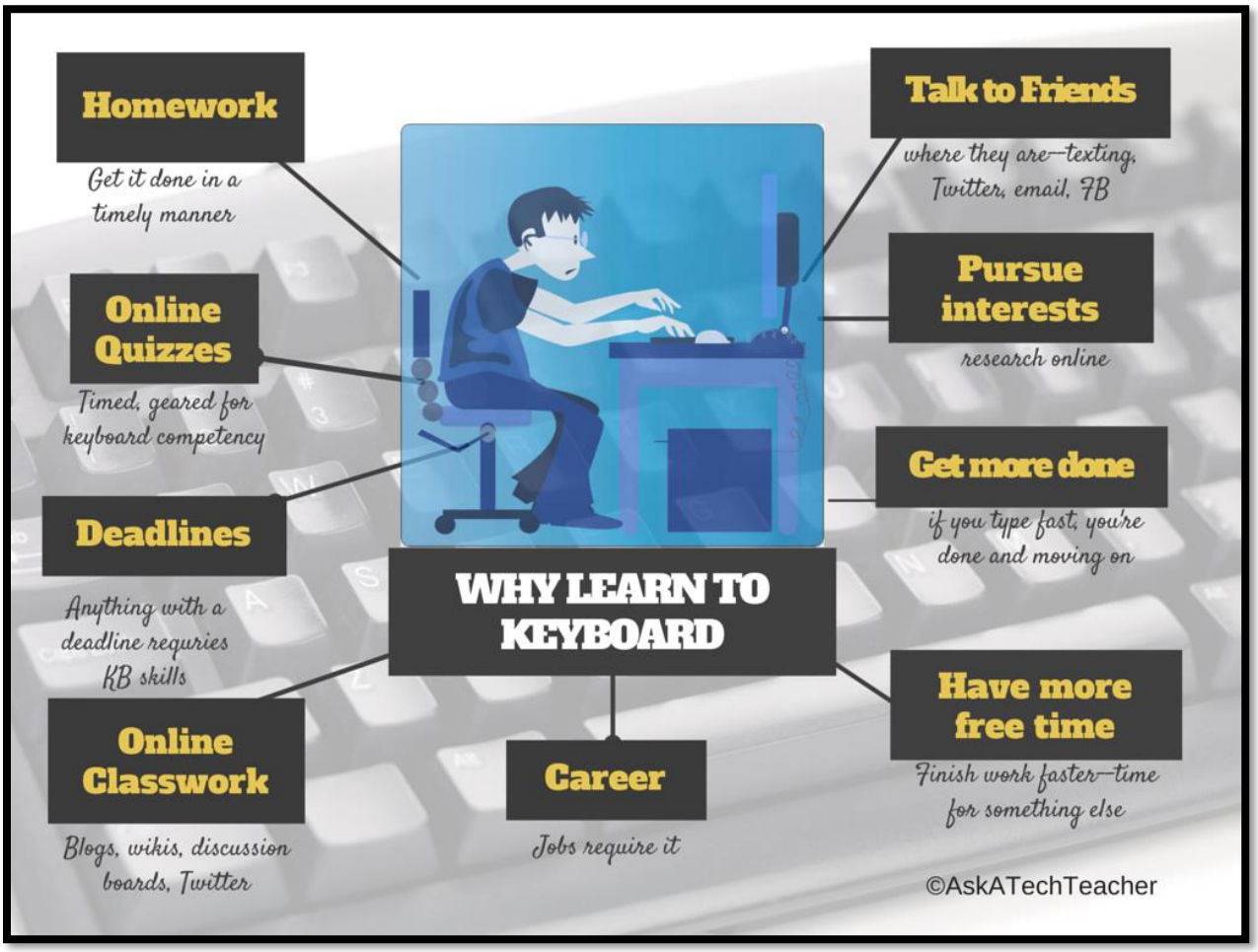
None of those work? Throw the darn thing out the window and buy a new one. They don't cost much anymore.

About the Authors

Ask a Tech Teacher *is an award-winning resource* ***blog*** *run by a group of technology teachers. It offers oodles of free lesson plans, pedagogical conversation, website reviews and more. Its newsletters and website articles are read by thousands every day, including teachers, homeschoolers, and anyone serious about finding the best way to maneuver the minefields of technology in education.*

Jacqui Murray *(editor and lead Ask a Tech Teacher blogger) has been teaching K-18 technology for 30 years. She is the editor/author of over a hundred tech ed resources including a K-12 technology curriculum, K-8 keyboard curriculum, K-8 Digital Citizenship curriculum. She is an adjunct professor in tech ed, Master Teacher, webmaster for four blogs, an Amazon Vine Voice, CSTA presentation reviewer, freelance journalist on tech ed topics, and a weekly contributor to both NEA Today. You can find her resources at Structured Learning.*

Why Learn Keyboarding?
Here are good reasons:



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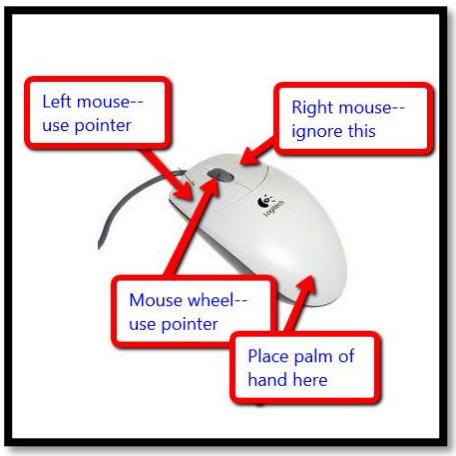
Second Grade Keyboarding

SECOND GRADE

OVERVIEW

Introduction to keyboarding with focus on key placement, posture, and two-hand position

Objectives and Steps



____Keyboarding is a cumulative skill. What can be effectively learned in one grade depends heavily upon what is learned in earlier years. If hunt 'n peck habits become ingrained, it's difficult to develop keyboarding competence when it matters in later years.

____Take one class session to review mouse skills—how to hold the mouse, single and double-clicks, scrolling, hand position with palm at bottom and thumb on left side. Grab a few mouse websites from Kindergarten and First Grade (refer back to those units in this book) and let students run through them as reminders.

____During the first keyboard class of the year, tour the keyboard. Review:

- *Caps lock and shift—what's the difference?*
- *Backspace and delete—what's the difference?*
- *Tab—what's this used for?*
- *Home row—why is this row more important that the others?*
- *Top row with numbers*
- *Numeric keypad—works for numbers if NumLock invoked*

- *Ctrl, Alt keys—share some uses of these two keys (Alt+F4 to exit a program; Ctrl+Alt+Del to log-onto the computer)*

____Start with finger warm-ups. These show students that they have eight fingers, that all of them work, that some are stronger than others.

____Gather students on the class rug and do finger exercises to encourage use of all fingers. They are discussed in detail under 'Kindergarten'. Here are examples:





____Do these exercises a couple times a month for about five minutes before starting keyboard practice.

____Have students sit at keyboard using proper posture:

- *Back straight, feet flat, body centered in front of keyboard one hand's width from table*
- *Elbows close to sides*
- *Fingers slightly curved*
- *Hands on their own side of the keyboard*

____Walk around the classroom (have parent helpers assist to make this go faster) and check to be sure all key points are followed.

____No later than **Month #2** (it may take a bit to get through technology start-up), begin a progressive program of typing,

such as purchased software like Type to Learn or a free online keyboarding program like Typing.com or Brown Bear Learn to Type (http://bigbrownbear.co.uk/learntotype/).

____The goal for second grade is to reinforce skills learned last year and begin a focus on using all fingers.

- *Keep thumb on space bar*
- *Keep pointers anchored to f and j*
- *Play keyboard like a piano (or violin, or guitar, or recorder). You'd never use pointer for all keys*
- *Move fingers, not hands*
- *Don't use caps lock for capitals! Use shift.*

____Remind students they have eight fingers and two thumbs—not just two pointers that hunt and peck.

____Don't discuss speed. Focus on posture, hand position, use of all fingers. These will eventually allow for speedy, accurate typing.

____As students practice typing, anecdotally observe their posture for key points mentioned earlier in this unit. If possible, have parent helpers there to assist. Help them correct deficiencies. Take a moment to explain if need be.

____Typing is best learned in projects that collaborate with classroom learning and require the use of keyboarding. No later than **Month #3**, begin a series of project-based typing activities using KidPix or free alternatives like TuxPaint.org. These will provide an authentic framework for learning typing as they integrate typing into classroom inquiry. These can be short reports, a letter, a story—pick one that works for your school environment.

____Start with programs introduced in Kindergarten, reinforced in First Grade. By now, they should be a comfortable approach to ramping up typing requirements. Pick differentiated projects that integrate technology AND require a nominal amount of typing. In second grade, this includes full sentences with good grammar and spelling. See the end of unit for examples (courtesy of the Structured Learning Second Grade Technology Curriculum).

____By **Month #4,** introduce students to the word processing program used in your class (MS Word or Google Docs). Explain this is a program used throughout school. Ask them how many have sisters, parents who use it. What have they seen them do with it?

Best Practices

- *In general, students should learn to type as fast as they need to for classwork. In second grade, there's no need for speed. It's about good habits*
- *Review good mouse skills*
- *Begin to use all fingers when typing*
- *Every time students type, use good posture, proper hand position. Create good habits.*
- *Teach typing with project-based lessons*
- *Work on age-appropriate keyboard shortkeys*

____Before beginning, review the layout of the opening screen—the typing canvas, ribbons, cursor. Review some of the ways typing in this word processing program is different from typing in KidPix.

- *typing begins where cursor is*
- *students don't push return at the end of a line (Word goes to the next line for you with what is called 'word wrap')*
- *Show-hide tool can be used to view returns, tabs, and spaces*

____Start with a heading (name, teacher, date).

____Change font to 48; type two-three sentences, each starting with capital letter and end with a period. Push the spacebar after every period and/or comma.

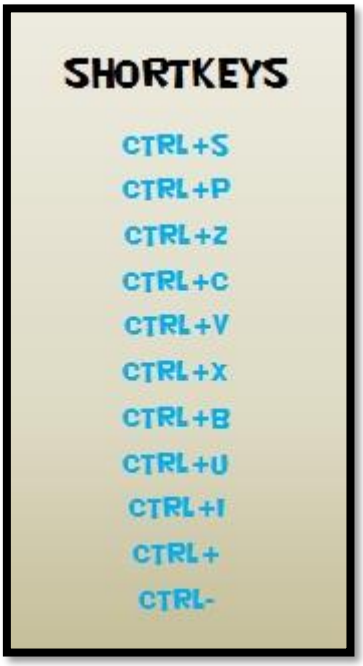
____Correct red (spell-check) and green (grammar) squiggly lines

____Feel free to add borders, images, WordArt, font colors and formatting (see example at end of unit). Punching all those letters in is hard and deserves a reward. Decorating is the fun part for young typists.

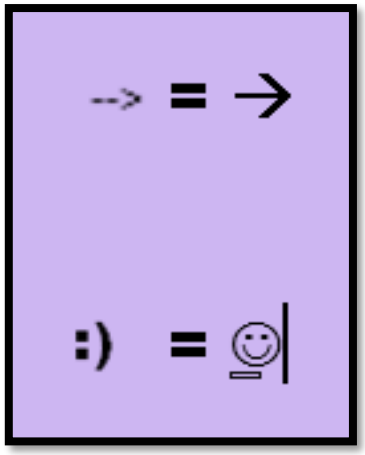
____Complete a word processing project (using the program of your choice) approximately **every two months**.

____**Throughout the year**, mix the use of progressive typing programs with game-type of programs. See "Online Keyboarding Programs for Second Graders" at the end of this lesson for ideas.

____**Consistently throughout the year**, introduce and reinforce the use of keyboard shortcuts (see "Shortkeys Second Graders Love" on next pages for age-appropriate shortkeys). These are quick two-key macros that accomplish commonly-performed tasks. For example:



- *When unable to exit a program, expect students to try Alt+F4 before requesting assistance*
- *When saving, have students Ctrl+S*
- *When printing, have students Ctrl+P*
- *When needing to undo an action, Ctrl+Z (see poster at end of this lesson)*
- *When copying something, Ctrl+C*
- *When pasting something, Ctrl+V (Ask students why not Ctrl+P?)*
- *When adding a date, Shift+Alt+D*



Students love to show off their techie-ness by using these and teaching them to others. See inset for two favorites.

____**Toward the end of the year** when students are comfortable with key placement, cover their hands with a cloth and start over on the keyboard, one row at a time. Explain that in fourth and fifth grade, they type most of the time with hands covered. They love this—-see it as a badge of honor to type with hands hidden. By the end of the year, home row is memorized, probably the QWERTY row and maybe even the lower row. It feels hard at first and quickly becomes easier.

____Keep keyboarding fun, but make sure students develop good habits. They'll need these when speed and accuracy become important.

____A typical keyboarding lesson for 2nd grade looks like this:

- Devote 10-15 minutes of the week's 45-minutes to keyboarding. Leave the rest to support classroom units of inquiry with projects that require typing (as noted earlier in this lesson)
- Mix up the 10-15 minutes with the following:
    - Keyboarding software practice
    - Online keyboarding websites
    - Finger practice
- Throughout all lessons, remind students of shortkeys that can accomplish oft-repeated activities like copy, paste, print, save, undo, etc.

____**Extension**: Every time the class does an operation that can be performed with a shortkey, ask students who knows the shortkey for that function. For example, when inserting the date, ask who knows what the shortkey for that function is.

____**Extension:** Any time students type, remind them that's the right time to focus on correct posture and hand position—nut just during keyboard practice time.

____**Troubleshooting:** Students can't use the right fingers on the right keys (as is asked for in the programs). *Remind students they don't need to worry about this until next year.*

Need help? Go to our resource blog, Ask a Tech Teacher.

SCOPE AND SEQUENCE CHECK LIST

Mouse

_____*Proper hand position on mouse*
_____*Click, hold, drag, double-click,*
_____*Use of left and right button*
_____*Use mouse wheel to scroll down pages*

Problem-solving

_____*Double click doesn't work--push enter*
_____*Volume doesn't work—check plugs*
_____*Monitor doesn't work—check power*
_____*Computer doesn't work—check power*
_____*Where's my program—check the taskbar*

Posture

_____*Keyboard one inch off edge of table*
_____*Correct posture--legs in front, body in front, elbows at sides*
_____*Feet flat on the floor*
_____*Body straight, centered, one hand's width from table edge*
_____*Hands curled over homerow (not flat)*

Keyboarding

_____*Use proper log-on/log-off procedures.*
_____*Demonstrate proper care and handling of keyboard, mouse*
_____*Find period, escape, tab,*
_____*Find Shift key and Caps lock key*
_____*Understand difference between backspace, delete*
_____*Understand purpose of cursor in typing*
_____*Use thumb to key space bar*
_____*Rest fingers on home row keys*
_____*Use both hands on keyboard, on their own sides*
_____*Learn seven basic keyboard shortcuts (Alt+F4, Esc, Ctrl+Z, Ctrl+P, Ctrl+S, Ctrl+C, Ctrl+V)*
_____*Use lab software and internet-based sites for keyboarding*
_____*Key in full sentences with proper grammar*
_____*Key paragraphs with tab to indent*

Shortkeys Second Graders Love

Can't find the tool? Use a shortkey:

Maximize window	Double click title bar
Quick Exit	Alt+F4
Date and Time	Shift+Alt+D = Date Shift+Alt+T = Time
Show taskbar	WK (Windows key)
Shows desktop	WK+M

Ctrl Key Combinations

CTRL+C: Copy	CTRL+K: Add hyperlink
CTRL+X: Cut	CTRL+E: Center align
CTRL+V: Paste	CTRL+L: Left align
CTRL+Z: Undo	CTRL+R: Right align
CTRL+B: Bold	CTRL+ : Zoom in
CTRL+U: Underline	Internet
CTRL+I: Italic	CTRL- : Zoom out
CTRL+P: Print	Internet

Fun Keyboard Shortcuts:

<+=+> = ⇔ —+> = → :+) = ☺

Add Your Favorite:

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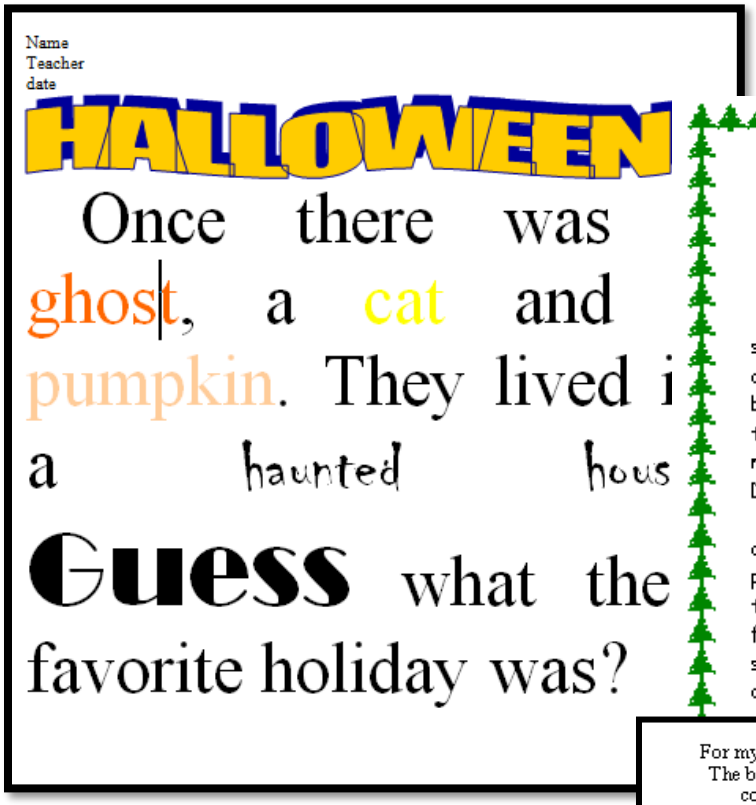
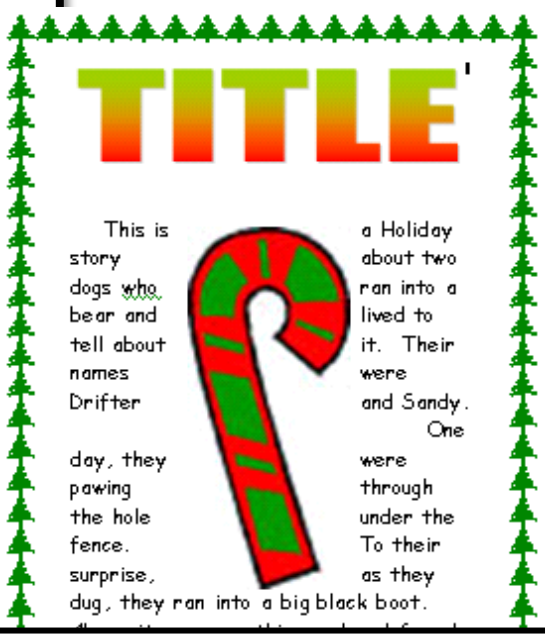
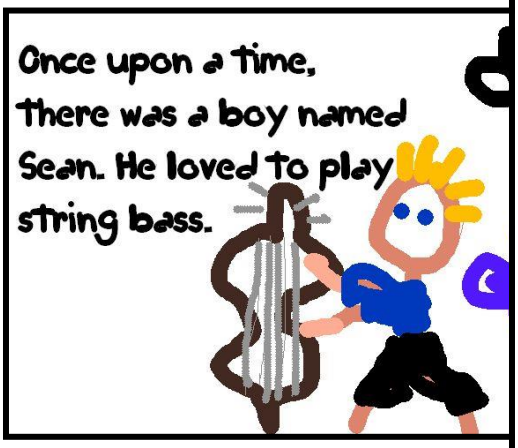
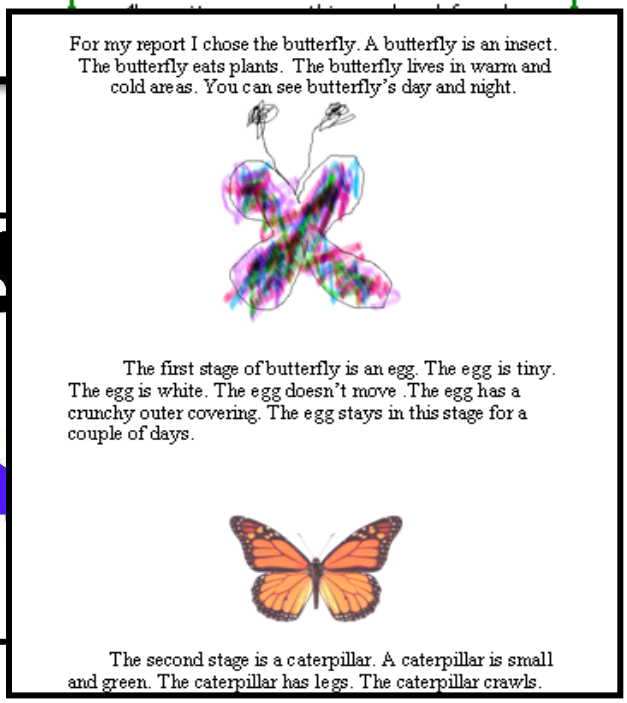
Second Grade Typing Projects

courtesy of the Structured Learning Second Grade Technology Curriculum



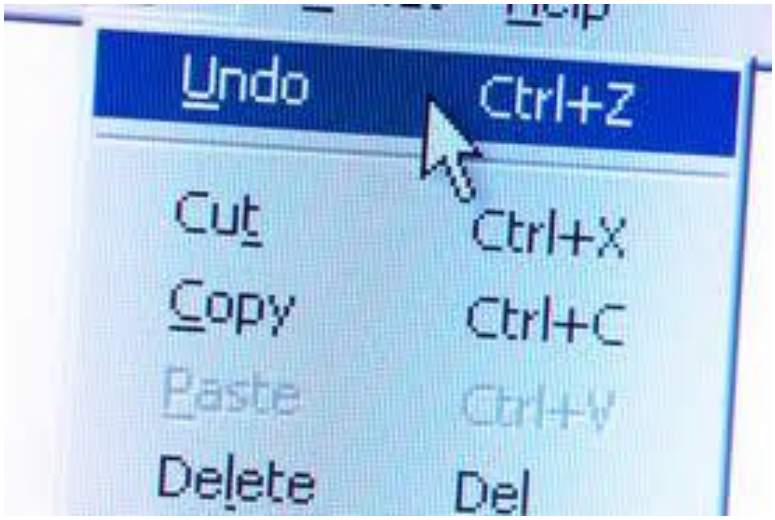






Put this sign on your walls to help with Windows basics:

UNDO



is your Friend

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Fifth Grade Keyboarding

FIFTH GRADE

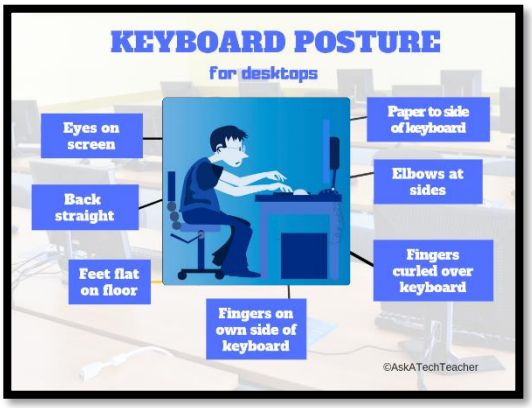
OVERVIEW

Reinforce key position, posture and hand position. Continue with accuracy and technique. Begin work on speed with grade level goal of 30 wpm

Objectives and Steps

____Keyboarding is a cumulative skill. What can be learned in one grade depends upon what is learned earlier. If hunt 'n peck habits are ingrained, it's difficult to develop keyboarding competence later.

____During the first keyboard class of the year, tour the keyboard. Review:



- *Backspace and delete—what's the difference?*
- *Tab—what's this used for?*
- *F row—what are these used for?*
- *Windows key—what's a use of it?*
- *Right-mouse key—who knows where that is?*
- *What's the tilde for?*
- *What are the bracket keys for?*
- *Home row, QWERTY row, lower row*
- *Numeric keypad—works for numbers if NumLock invoked*
- *Ctrl, Alt keys—what are some shortkeys that include these*

____Basics to remember during fifth grade are:

- *Keep hands on home row*
- *Use correct posture and keyboarding skills for all typing (keyboard practice and practical applications)*

- *Sit straight, shoulders back, head up, body centered in front of keyboard and one hands-width from table, feet flat on ground*
- *Keep elbows close to sides*
- *Have fingers slightly curved*
- *Use thumb for spacebar*
- *Place keyboard one inch from table edge*

- *Focus on touch typing*
- *Keep copy to side of keyboard, eyes on copy or screen—NOT keyboard*
- *Key with a steady even pace*
- *Use keyboard shortcuts (i.e., Ctrl+B, Shift+Alt+D)*

Best Practices

- *Students should learn to type as fast as they need to for classwork. Set a goal of 30wpm—exceeding the speed most students handwrite*
- *Focus on speed and accuracy while using good keyboarding habits*
- *Use shortkeys wherever possible*
- *Cover keys when practicing*

____Fifth graders focus on touch typing which requires memorizing keys. Once students know key placement, speed and accuracy will come (don't worry if it doesn't happen this year. Keep working at it. It'll come).

____Start **Month #1** with five minutes of finger warm-ups. These show students they have eight fingers, all work, some are stronger than others. Finger exercises encourage use of all fingers. They are discussed in detail under 'Kindergarten'. Here are examples:





____As in fourth grade, work on one keyboard row at a time, one per month, using Dance Mat Typing. Yes, you remember they did this in fourth grade (and third grade). It takes repetition to memorize key placement. Here's a schedule for **Months #1, #2, and #3**:

- *first month: home row*
- *second month: QWERTY row*
- *third month: lower row*

____Students practice 10-15 minutes during class time and 45 minutes per week as homework on this schedule of one row per month (see homework at end of Third Grade Unit).

____During the first keyboarding session of the year, walk around and check to be sure all key posture points are followed (see above).

____Typing is best learned in projects that collaborate with classroom learning and require the use of keyboarding. No later than **Month #2**, begin a series of project-based typing using a word processing program like MS Word or Google Docs, or a desktop publishing program like Canva for education or Publisher. Try to integrate the projects into classroom units. These can be short reports, magazines, trifolds, a story—pick one that works for your school environment. Reinforce use of enter key to end paragraphs, word-wrap to go to next line, tab to indent, cursor placement to insert objects. See the end of this unit for examples (courtesy of the Structured Learning Fifth Grade Technology Curriculum).

____**Each grading period**, students take a blank keyboard quiz (see end of Fourth Grade unit for example) to test knowledge of key placement. Give them ten-fifteen minutes. They can work in pairs and must retake until they pass. This works—I often see students memorizing key placement so they can pass the next time. This knowledge quickly translates to improved speed and accuracy.

____**Each grading period,** students take a keyboard quiz to determine speed and accuracy (see sample under Third Grade unit. Or, use a few pages from a book students are reading.) As students take this quiz, anecdotally notice who is using all fingers and correct posture. Those that aren't, lose points.

____After the quiz, allow one minute to correct spelling errors by right-clicking on the red squiggly lines (discuss green and blue squiggles, but skip them. My experience is they are as likely to be wrong as right).

____The first yearly quiz is a benchmark. The rest are graded on improvement:

- *20% improvement* *10/10*

- *10-20% improvement* *9/10*
- *1-10% improvement* *8/10*
- *No improvement* *7/10*
- *Slowed down* *6/10*

____Grade level standards are:

5th Grade:	*30 wpm*	*7th Grade:*	*40 wpm*
6th Grade:	*35wpm*	*8th Grade:*	*45 wpm*

____Post a list of students who reached the grade level standard. You may decide to give them an award—something that works for your school. In my classes, students get a free dress pass (we are a uniform school), which is quite exciting for them.

____**Month #4,** after finishing a month on each of three rows, have students practice the simplest form of touch typing by mastering two-letter words. This will be difficult at first, and then fun—like a game. Help them stick with it through impossible to challenging to huzzah.

____**Month #5,** students switch to Type to Learn (installed software) or Typing.com (online—free) for class-time practice and homework. Students should have all keys memorized so cover their hands with a cloth any time they are practicing keyboarding (not during projects requiring keyboarding). They'll be surprised at first that it's so much more difficult when they can't see their fingers. They'll argue that they know where the keys are, just not with their hands covered, and they'll finally capitulate when they see classmates doing fine.

____**Consistently throughout the year,** reinforce the use of keyboard shortcuts (see a list under the Third Grade unit). These are quick macros that accomplish commonly-performed tasks. For example:

- *When unable to exit a program, expect students to try Alt+F4 before requesting assistance*
- *When saving, have students Ctrl+S*
- *When printing, have students Ctrl+P*
- *When undoing an action, students Ctrl+Z before giving up*
- *When copying something, Ctrl+C*
- *When pasting something, Ctrl+V (why not Ctrl+P?)*

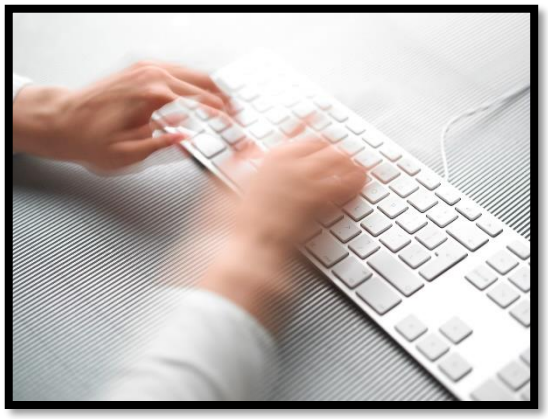
CTRL+C:	Copy
CTRL+X:	Cut
CTRL+V:	Paste
CTRL+CC:	activate clipboard
CTRL+Z:	Undo
CTRL+P:	Print
CTRL+K:	Add hyperlink
CTRL+E:	Center align
CTRL+L:	Left align
CTRL+R:	Right align
CTRL+B/U/I:	Bold
CTRL+U	Underline
CTRL+I	Italic
Shift+Alt+D/T:	Date/Time
CTRL+or-:	Zoom in/out www
Alt+F4	Quick Exit

- *When enlarging a window, double click the title bar*
- *When unable to close a program, Alt+F4*
- *When toggling between two windows (say, for research), Alt+Tab*
- *When entering date, Shift+Alt+D*
- *When the taskbar disappears (some pesky student hid it), push the Windows key*
- *When indenting in a list, use Tab and Shift+tab*

Students love to show off their techie-ness with these.

____Somewhere around **Month #6,** test students to determine who can type faster than they can handwrite. Do this by circling back on science class and the scientific method:

- Do students remember this experiment from last year? What were the results? Remind them—last year, students were evenly split—some typed faster, some handwrote faster (or, whatever your results were).
- Discuss whether students think this has changed. Ask students to share thoughts on how they reached their conclusion. You are likely to get opinions on both sides of this discussion. If not, prod students with logic for both.
- Suggest running an experiment similar to last year's to see which is faster for fifth graders—handwriting or typing.
- Discuss the Scientific Method, its various steps, its applicability to general problem solving (such as this issue), and then develop a hypothesis for keyboarding vs. handwriting, maybe: *Fifth grade students in Ms. K's class can handwrite faster than they type.*
- Have them hand-copy the typing quiz they took earlier in the trimester for 3 minutes.

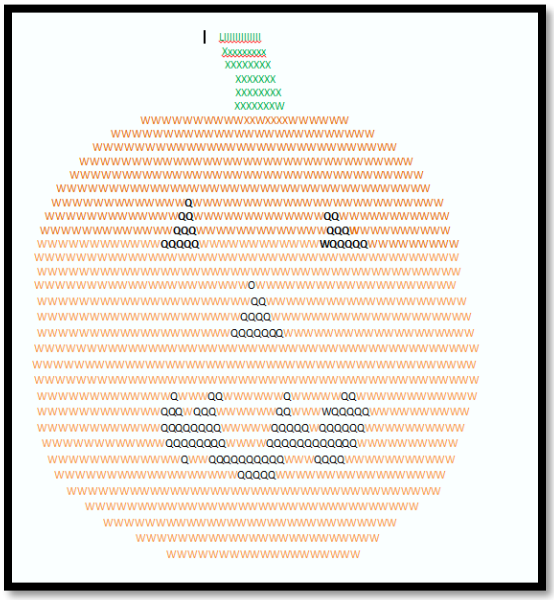


- Analyze the results: Compare their handwriting speed to typing speed.
- Discuss results: Why do students think some students type faster and others slower? (In my classes, fifth graders consistently typed faster than they handwrote--approx. 20 wpm vs. 24 wpm. Discussion was heated and enthusiastic on reasons).
- Students will offer lots of reasons for slower typing, but key in on one that suggests students don't usually type from copy (quite valid, don't you think?).
- Give students a prompt and one minute to collect their thoughts. Remind them how they construct a five-paragraph essay (or use your school's writing guidelines)—1) introduction, 2-4) one paragraph per point, 5) conclusion. Take one minute to think through the prompt with these guidelines in mind.
- What is the conclusion? Analyze results.

- Post a list on the wall of students who type faster than they handwrite.
- Note: There is lots of variance in the steps of the scientific method when talking about elementary grades. Talk to your science teacher and adapt this experiment to the ones s/he uses.

____**Occasionally through the year**, have students use a program called TypingTest.com to see how their speed and accuracy is progressing. This is a fun site, one which you can encourage students to visit on their own.

____**Sometime during the year**, introduce students to ASCII art. ASCII art is that amazing computer drawing where keyboard letters become a picture (see inset). Done well, it never fails to impress friends with the student's consummate keyboarding skills.



____Here's a simple way to do this that every student can accomplish:

- *Add a watermark of a picture you like to MS Word, Google Docs, or another word processing program. A single image works best—one without a complicated background.*
- *Type over it with appropriate letters (if you're more patient than I, you can pick a variety of letters, numbers and symbols to provide more depth)*
- *Highlight the appropriate letters/symbols and change the color to fit the image*
- *Delete the watermark from the page. Now all that's left is the letters/numbers/symbols you type.*
- *How long did the inset take me? About twenty minutes.*

____It can be simple as seen in the inset or more sophisticated (see sample under Fifth Grade Typing Projects at end of this lesson). The first takes about one class. The second takes as long as the student wants.

____This ASCII art can support a classroom unit of inquiry, in place of any spot students would use a picture.

____Another example you'll see on the Fifth Grade Typing Projects page is Wordle. Follow the directions to create an image out of words and phrases.

____Use any project that keeps keyboarding fun while developing good habits.

____A typical keyboarding lesson for 5th grade looks like this:

- Devote 10-15 minutes of each 45-minute session to keyboarding practice, reviewing homework that's due and coming up. Leave the rest to supporting classroom units of inquiry with projects that require typing
- Mix up the 10-15 minutes with the following:
    - *Keyboarding software practice*
    - *Online keyboarding websites*
    - *Finger practice*
    - *Typing Tests*
- Throughout lessons, remind students of shortkeys that accomplish oft-repeated activities like copy, paste, print, save, undo.

____**Extension**: At the end of the year, have a Team Challenge. Go to the end of the Third Grade unit for questions I use. Break the class into teams. Ask a question from the list and give only three seconds to answer. They can answer verbally or with the correct finger. The focus is on speed—students must know the answers, not have to think about it.

____**Troubleshooting**: I can't type with hands covered. *Keep practicing.*

Notes

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_____.

SCOPE AND SEQUENCE

Problem-solving

_____*Double click doesn't work--push enter*
_____*Volume doesn't work—check plugs*
_____*Monitor doesn't work—check power*
_____*Keyboard doesn't work—check plugs, reboot*
_____*Computer doesn't work—check power*
_____*Difference between save and save-as*
_____*Browser doesn't work—try a different browser*

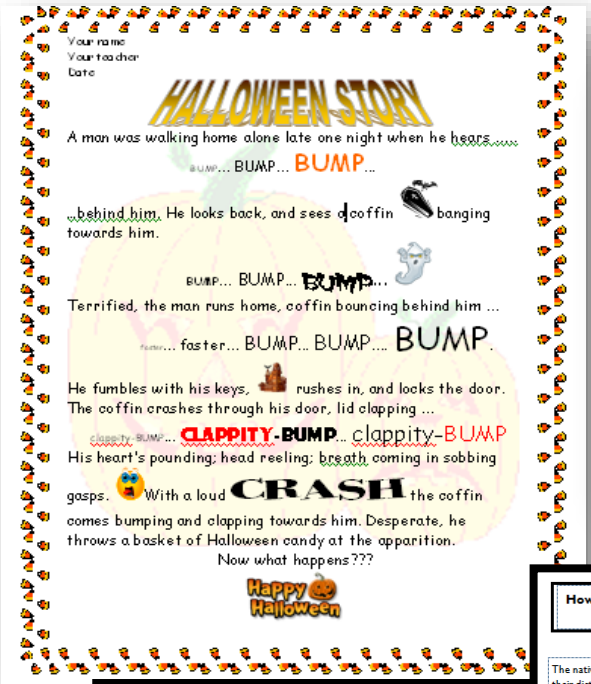
Posture

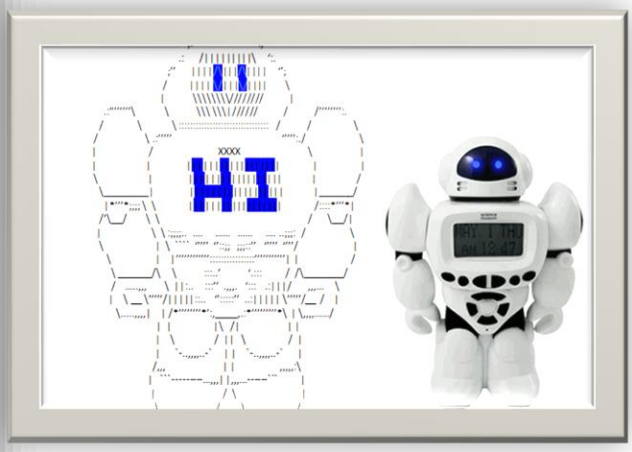
_____*Keyboard one inch off edge of table*
_____*Correct posture--legs in front, body in front, elbows at sides*
_____*Keep feet flat on the floor*
_____*Sit straight, body centered one hand's width from table*
_____*Hands curled over homerow (not flat)*
_____*Copy to the side of keyboard*

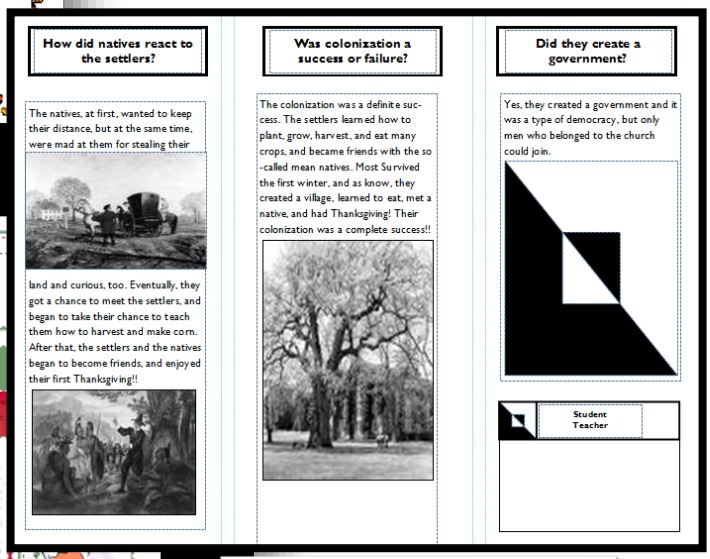
Keyboarding

_____*Use proper log-on/log-off procedures.*
_____*Demonstrate proper care and handling of keyboard*
_____*Understand difference between backspace, delete*
_____*Understand all keyboard keys*
_____*Rest fingers on home row keys, reach for other keys*
_____*Learn twenty basic keyboard shortcuts (Alt+F4, Esc, Ctrl+P, Ctrl+S, Ctrl+C, Ctrl+V, Ctrl+Alt+Del, double-click to enlarge window, Alt+Tab, Win key, Shift+tab, right mouse button key, ???)*
_____*Use lab software for keyboarding*
_____*Use internet-based sites for keyboarding*
_____*Key paragraphs with enter and tab*
_____*Set keyboard goal at 30 wpm*
_____*Touch type all keys*
_____*Keep eyes on copy most of the time*
_____*Touch type two- three- letter words with speed and accuracy*
_____*Compose at keyboard with ease*

FIFTH GRADE TYPING PROJECTS







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