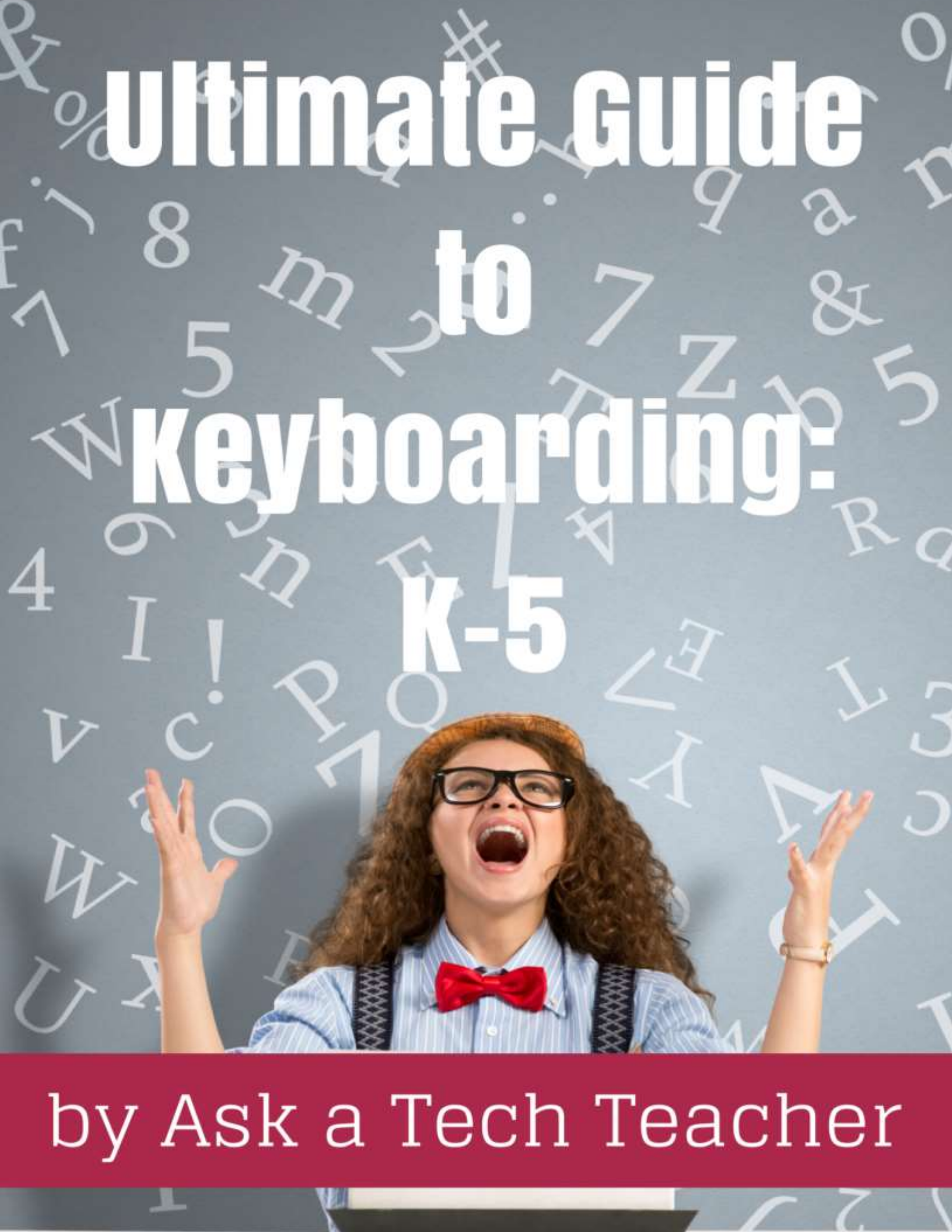
Ultimate Guide to Keyboarding: K-5



by Ask a Tech Teacher

ULTIMATE GUIDE TO KEYBOARDING IN THE CLASSROOM

K-5 Curriculum

by Ask a Tech Teacher©

Second Edition 2014
Part of the Structured Learning Technology for the Classroom series
Visit the companion website http://askatechteacher.com for more K-8 keyboarding resources

To receive free tech tips, email admin@structuredlearning.net with message "Subscribe to Weekly Tips"

ALL MATERIAL IN THIS BOOK IS PROTECTED BY THE INTELLECTUAL PROPERTY LAWS OF THE USA.

No part of this work can be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, Web distribution or information storage and retrieval systems—without the prior written permission of the publisher

For permission to use material from this text or product, email:
info@structuredlearning.net

ISBN 978-0-9893690-7-7
Printed in the United States of America

Table of Contents

Introduction

- Overview of Keyboarding
- Who Needs This Book
- Big Idea of This Book
- How to Use This Book
- Equipment Needs
- What Goes Well With Curriculum
- Assessments
- Research
- Why Learn Keyboarding
- Common Core Alignment
- Body/Hand Position
- Finger Exercises
- Problem-solving and Keyboarding
- Templates
- Looking for Student Workbooks
- Looking for Student Video Course

Kindergarten

- Overview
- Month 1
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 2
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 3
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 4
- Month 5
- Month 6
- Month 7
- Month 8
- Month 9
- Checklist

1st Grade

- Overview
- Month 1
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 2
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 3
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 4
- Month 5
- Month 6
- Month 7
- Month 8
- Month 9
- Checklist

2nd Grade

- Overview
- Month 1
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 2
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 3
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 4
- Month 5
- Month 6
- Month 7
- Month 8
- Month 9
- Checklist

3rd Grade

- Overview
- Month 1
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 2
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 3
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 4
- Month 5
- Month 6
- Month 7
- Month 8
- Month 9
- Checklist

4th Grade

- Overview
- Month 1
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 2
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 3
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 4
- Month 5
- Month 6
- Month 7
- Month 8
- Month 9
- Checklist

5th Grade

- Overview
- Month 1
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 2
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 3
  - Week One
  - Week Two
  - Week Three
  - Week Four
- Month 4
- Month 5
- Month 6
- Month 7
- Month 8
- Month 9
- Checklist

Table of Figures

Figure 1—How you use keyboarding 11
Figure 2—Layout of each lesson 13
Figure 3—Important keys 17
Figure 4—Blank keyboards (2) 17
Figure 5—Parts of the computer 18
Figure 6—Keyboard homework verification ..... **Error! Bookmark not defined.**
Figure 7—Keyboard homework—self-assessment ..... **Error! Bookmark not defined.**
Figure 8—Team Challenge—keyboarding ..... **Error! Bookmark not defined.**
Figure 9—Keyboarding position ..... **Error! Bookmark not defined.**
Figure 10—Keyboarding posture ..... **Error! Bookmark not defined.**
Figure 11a-11d—Keyboarding hand positions ..... **Error! Bookmark not defined.**
Figure 12a and 12b—Mouse hand position ..... **Error! Bookmark not defined.**
Figure 13—Common problems ..... **Error! Bookmark not defined.**
Figure 14—Problem-solving—hardware issues ..... **Error! Bookmark not defined.**
Figure 15—How to log in ..... **Error! Bookmark not defined.**
Figure 16—Program disappeared ..... **Error! Bookmark not defined.**
Figure 17—Common shortkeys ..... **Error! Bookmark not defined.**
Figure 18--Website parts ..... **Error! Bookmark not defined.**
Figure 19—Blank important keys template ..... **Error! Bookmark not defined.**
Figure 20—Blank keyboard template ..... **Error! Bookmark not defined.**
Figure 21—Team Challenge sample ..... **Error! Bookmark not defined.**
Figure 22—Hardware quiz template ..... **Error! Bookmark not defined.**
Figure 23--Mouse skills to draw ..... **Error! Bookmark not defined.**
Figure 24—Internet safety ..... **Error! Bookmark not defined.**
Figure 25--Drawing with mouse skills ..... **Error! Bookmark not defined.**
Figure 26—Brown Bear typing ..... **Error! Bookmark not defined.**
Figure 27—Type address into Google Earth ..... **Error! Bookmark not defined.**
Figure 28—Google Earth Street View guy ..... **Error! Bookmark not defined.**
Figure 29--Drawing and typing ..... **Error! Bookmark not defined.**
Figure 30—Geogreeting ..... **Error! Bookmark not defined.**
Figure 31—Keyboarding project for class ..... **Error! Bookmark not defined.**
Figure 32a and 32b—Typing site words ..... **Error! Bookmark not defined.**
Figure 33—Use Keyboarding to write letters ..... **Error! Bookmark not defined.**
Figure 34--Keyboarding supports class inquiry ..... **Error! Bookmark not defined.**
Figure 35--Typed puzzle piece in class project ..... **Error! Bookmark not defined.**
Figure 36a and 36b—PBL mouse and keyboard skills ..... **Error! Bookmark not defined.**
Figure 37—PBL—Typing a letter ..... **Error! Bookmark not defined.**
Figure 38--Draw using mouse skills ..... **Error! Bookmark not defined.**
Figure 39--Brown Bear typing ..... **Error! Bookmark not defined.**
Figure 40a and 40b—Type address into Google Earth ..... **Error! Bookmark not defined.**
Figure 41—Explore the community with Street View guy ..... **Error! Bookmark not defined.**
Figure 42a-c—Use pre-keyboarding skills in PBL ..... **Error! Bookmark not defined.**
Figure 43--Where did the program go? ..... **Error! Bookmark not defined.**
Figure 44--GeoGreeting ..... **Error! Bookmark not defined.**
Figure 45--Drawn and typed on iPad ..... **Error! Bookmark not defined.**
Figure 46—Type letters digitally ..... **Error! Bookmark not defined.**

Figure 47—Type in Google Earth ..... **Error! Bookmark not defined.**
Figure 48--Keyboarding for a decision matrix ..... **Error! Bookmark not defined.**
Figure 49a, 49b, 49c—Quick writes in software and web tools ..... **Error! Bookmark not defined.**
Figure 50a, 50b, 50c—Greeting cards typed digitally ..... **Error! Bookmark not defined.**
Figure 51--Use keyboarding in Storybird ..... **Error! Bookmark not defined.**
Figure 52—Website parts ..... **Error! Bookmark not defined.**
Figure 53—My Storymaker ..... **Error! Bookmark not defined.**
Figure 54—Photo talking ..... **Error! Bookmark not defined.**
Figure 55—Search online ..... **Error! Bookmark not defined.**
Figure 56--Keyboarding and word processing (PBL) ..... **Error! Bookmark not defined.**
Figure 57--Tackk, type and add images ..... **Error! Bookmark not defined.**
Figure 58--Problem: Program disappeared ..... **Error! Bookmark not defined.**
Figure 59—Keyboarding skills in word processing ..... **Error! Bookmark not defined.**
Figure 60a—Keyboard a story 60b—Report cover ..... **Error! Bookmark not defined.**
Figure 61—Keyboarding to write a story ..... **Error! Bookmark not defined.**
Figure 62a and 62b—Story typed with text tool —word processing, comic 30
Figure 63--Number square ..... **Error! Bookmark not defined.**
Figure 64a and 64b--Template--fill-in with keyboarding ..... **Error! Bookmark not defined.**
Figure 65a and 65b—Fill-in-the-blank template ..... **Error! Bookmark not defined.**
Figure 66—Certificate of Completion—thumbnail ..... **Error! Bookmark not defined.**
Figure 67a-d—Avatars ..... **Error! Bookmark not defined.**
Figure 68--Online typing speed test ..... **Error! Bookmark not defined.**
Figure 69--Sample typed story ..... **Error! Bookmark not defined.**
Figure 70--Create a table using keyboard skills ..... **Error! Bookmark not defined.**
Figure 71a and 71b—Keyboard a report ..... **Error! Bookmark not defined.**
Figure 72--Scientific Method ..... **Error! Bookmark not defined.**
Figure 73--Handwriting vs. Typing ..... **Error! Bookmark not defined.**
Figure 74a-c—PBL and keyboarding ..... **Error! Bookmark not defined.**
Figure 75a, 75b, 75c—Use keyboarding with other classes ..... **Error! Bookmark not defined.**
Figure 76—Note-taking in GAFE ..... **Error! Bookmark not defined.**
Figure 77—Team Challenge ..... **Error! Bookmark not defined.**
Figure 79--Word processing story ..... **Error! Bookmark not defined.**
Figure 80--Table ..... **Error! Bookmark not defined.**
Figure 81a (Publisher), 81b (BHL), 81c (My Storymaker) ..... **Error! Bookmark not defined.**
Figure 82--Scientific Method 33
Figure 84--Venn Diagram ..... **Error! Bookmark not defined.**
Figure 85--Visual organizer ..... **Error! Bookmark not defined.**
Figure 86--Type notes into template ..... **Error! Bookmark not defined.**
Figure 87—Note-taking in GAFE ..... **Error! Bookmark not defined.**
Figure 88—Team Challenge ..... **Error! Bookmark not defined.**
Figure 90--5th grade keyboarded story ..... **Error! Bookmark not defined.**
Figure 91--Trifold: Use keyboard skills ..... **Error! Bookmark not defined.**
Figure 92a in Canva and 92b in Muzy ..... **Error! Bookmark not defined.**
Figure 93--Newsletter ..... **Error! Bookmark not defined.**
Figure 94--Tagxedo ..... **Error! Bookmark not defined.**
Figure 95--Scientific Method ..... **Error! Bookmark not defined.**
Figure 97a-d—ASCII art—Lincoln and a robot ..... **Error! Bookmark not defined.**
Figure 98—Digital note-taking with GAFE 36
Figure 99a and 99b—Digital note-taking in Evernote and Notability 37

Introduction

You may think it impossible to find a keyboarding curriculum that creates accomplished typists from the skimpy amount of time you can devote to keyboarding. You do what you can, but wonder if it's making a difference. Every year, you promise it will go better and then it doesn't. You don't want to give up—research tells us children who learn keyboarding improve academically. It should be an essential skill.

But mid-way through every year, you think of giving up. You have lots of friends who hunt-and-peck as adults and do fine. Does it even matter if students learn to touch type?

Yes, it does. Don't take my word for it—observe the tech focus by nationally-recognized education standards like Common Core and ISTE.

There is a way to teach keyboarding that works. It requires a plan, faithfully executed, with your eye relentlessly on the goal, but if you commit to that, it works.

Overview of K-8 Keyboarding

K-1	*Introduce mouse skills, key placement, posture*
2nd	*Work on, key placement, posture, two-hand position*
3rd	*Reinforce basics. Work on accuracy and technique*
4-5	*Reinforce basics; continue accuracy, technique. Begin speed*
MS	*Touch typing*

In *The Ultimate Guide to Keyboarding*, we share a curriculum that's worked for thousands of students. You'll get directions on what to do, how and when, using mostly free resources.

Big Idea of This Book

Two criteria consistently mentioned in keyboarding research:

1. *Keyboarding instruction is most effective when spread out over several years and designed to build on prior knowledge. (Robinson 1992)*
2. *Once skills are taught, use them, reinforce and refine them (Adams, 1984; Wronkovich, 1998).*

What's that mean? 1) Expect age-appropriate skills, 2) Break practice up into bite-size pieces, 3) Vary lessons, 4) Infuse keyboarding into all classes.

That's it. We'll show you how.

Overview of the Keyboarding Journey

The overarching objective of keyboarding is to **facilitate communication**. That means 1) students must type fast enough to exceed the speed of their handwriting, and second, they must keep up with their thoughts. Follow this two-book curriculum and the former will occur around fourth grade, the latter in Middle School (Volume II of this curriculum).

Here's an overview of K-5 keyboarding:

K-1	*Introduce mouse skills, keyboarding, key placement, posture*
2nd	*Work on keyboarding, key placement, posture, two-hand position*
3rd	*Reinforce basics. Work on accuracy and technique*
4-5	*Continue accuracy, technique. Begin work on speed*
MS	*Touch typing*

Lessons include lots of variety so you don't get bored. Here's a rundown of activities from kindergarten through eighth grade:

- *digital citizenship*
- *finger exercises*
- *homework (grades 3-8)*
- *keyboarding software*
- *keyboarding websites*
- *pre-keyboarding (K,1)*
- *problem solving*
- *progress—metric*
- *projects*
- *quiz*
- *shortkeys*
- *students meet expectations*

Look for the symbol in each section to see which activities are covered each week or month.

Why Learn Keyboarding

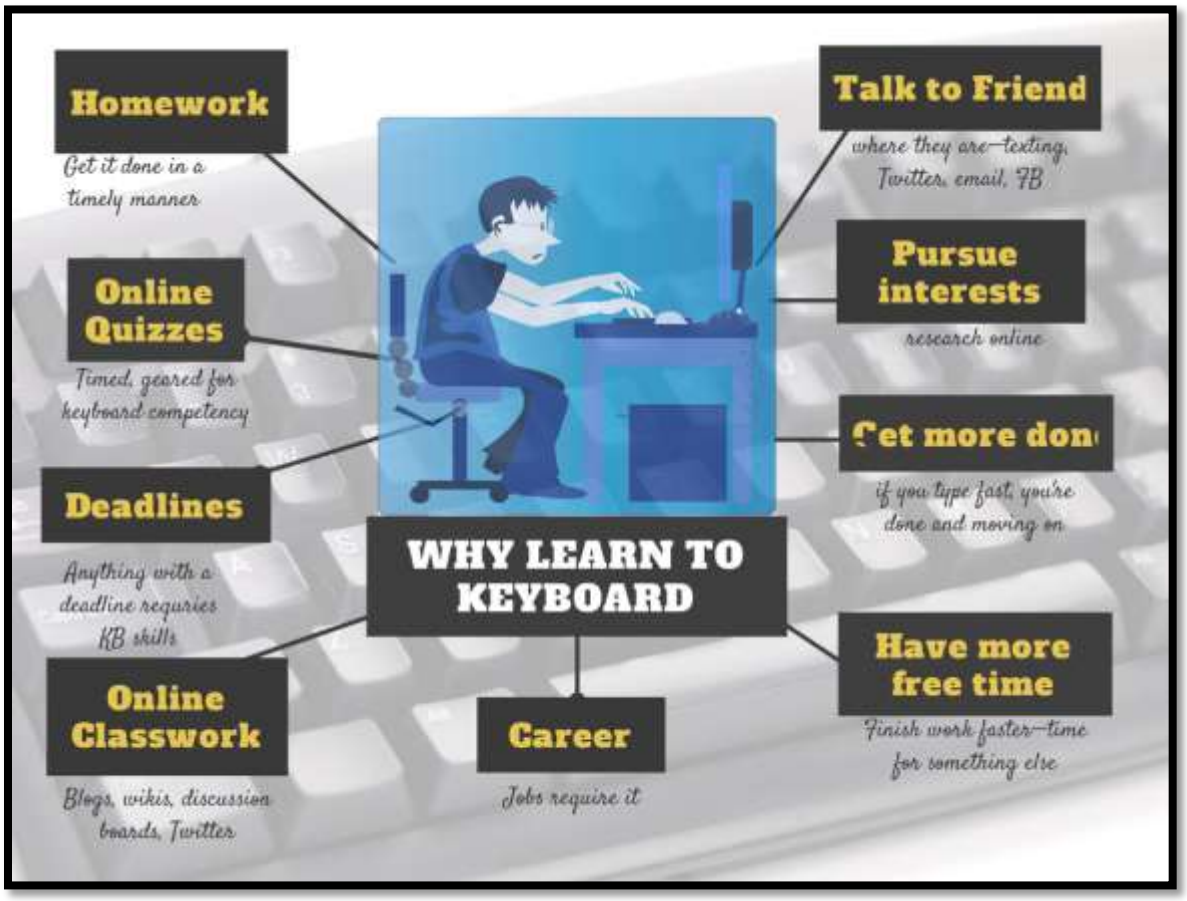
If you've ever seen a friend struggle to type a web address or a book report when they don't know where keys are, you know why you want to learn.

Here are more reasons (see Figure 1—some won't apply until college and/or career):

- *to get homework done in a timely manner*
- *to take online quizzes and tests (becoming more common every day)*
- *to complete online classwork—blogs, wikis, websites, discussion boards*
- *to finish timed work before the clock runs out*
- *to talk with friends—email, texting, Twitter, FB (college and career)*

- *to find out more about what interests you (research online)*
- *to do more in the 24 hours you get each day*
- *to have more free time for other stuff*
- *when you get a job, they'll expect you to know keyboarding (college and career)*

Figure 1—How you use keyboarding



Who Needs This Book

We know you. You are the Tech Specialist, Instructional Technologist, IT Coordinator, Technology Facilitator, Curriculum Specialist, Technology Director, Library Media Specialist—tasked with providing keyboarding skills to meet the challenge of a tech-infused curriculum.

Or you are the school administrator, expected to prepare students for online standardized tests. They practiced last year and it was challenging. You need to fix that.

Just as likely, you are the classroom teacher, a tech enthusiast with a goal to integrate the wonders of technology into lessons. You've seen it work. Others in your PLN do it. And especially now, you want technology to help meet standards like *…use technology strategically and capably… …use digital resources*. But often, technology seems an add-on to your overflowing educational day.

If you teach in a Common Core state, there are two foundational reasons keyboarding skills are essential:

- Common Core yearly assessments (i.e., PARCC, Smarter Balanced) expect an intermediate knowledge of keyboarding. For example (from PARCC, SPARCC Consortium, and schools taking the test):

  - *Change formatting*
  - *Click/tap*
  - *Constructed response (word limits)*
  - *Copy-paste*
  - *Drag-drop*
  - *Highlight*
  - *Keyboard with sufficient speed and accuracy to complete test on time*
  - *Manipulate graphs*
  - *Use navigation and answer tools*
  - *Plot points*
  - *Run simulations*
  - *Scroll*
  - *Select and drag or slide*
  - *Select area, object, text, multiple items*
  - *Solve tech problems quickly*
  - *Think-while-typing*
  - *Toggle between tabs*
  - *Type one-three pages at a sitting*
  - *Type with text editor*
  - *Unselect*
  - *Use calculator, protractor, ruler, video*

- Common Core expects the use of technology as a learning tool across all subjects. Keyboarding is fundamental to accomplishing that:

Building student competence and confidence with technology should be part of instruction. —PARCC Model Content Frameworks for ELA/Literacy

To achieve this means students type fast enough to keep up with their thoughts. Follow the lessons in this series and it'll happen.

Common Core Alignment

As you read the Common Core standards, you realize technology is blended throughout as a tool students use to prepare for college and career. For example, read these from Common Core (truncated for easy reading):

- *Expect students to demonstrate sufficient command of **keyboarding** to type a minimum of one page [two by fifth grade, three by sixth] in a single sitting*
- *Expect students to **evaluate different media** (e.g., print or digital …)*
- *Expect students to **gather relevant information** from print and digital sources*
- *Expect students to integrate and evaluate **information presented in diverse media***
- *Expect students to **interpret information** presented visually, orally, or quantitatively (e.g., … Web pages)*
- *Expect students make **strategic use of digital media***
- *Expect students to use **glossaries or dictionaries, both print and digital** …*
- *Expect students to use information from **illustrations and words in print or digital** text*

> *Use of technology differentiates for student learning styles by providing an alternative method of achieving conceptual understanding, procedural skill and fluency, and applying this knowledge to authentic circumstances*
>
> *--CCSS*

- *Expect students to use a **variety of media** in communicating ideas*
- *Expect students to **use technology** and digital media strategically and capably*
- *Expect students to **use text features and search tools** to locate information*

Common Core standards are progressive–students transfer knowledge from one grade to the next and show evidence of learning by using. Every grade builds on earlier skills to achieve the Standards:

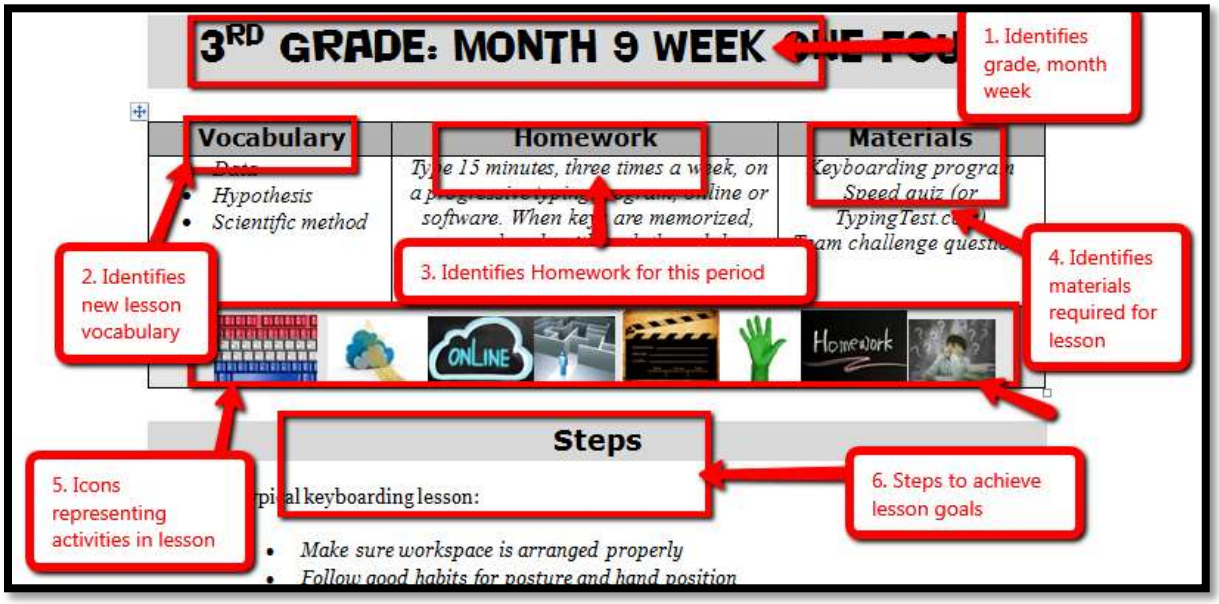
- *Kindergarten: CCSS.ELA-Literacy.W.K.6 … explore a variety of digital tools to produce and publish writing, including in collaboration with peers.*
- *First grade: CCSS.ELA-Literacy.W.1.6 …use a variety of digital tools to produce and publish writing, including in collaboration with peers.*
- *Second grade: CCSS.ELA-Literacy.W.2.6 …use a variety of digital tools to produce and publish writing, including in collaboration with peers.*
- *Third grade: CCSS.ELA-Literacy.W.3.6 … use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.*
- *Fourth grade: CCSS.ELA-Literacy.W.4.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing*
- *Fifth grade: CCSS.ELA-Literacy.W.5.6 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing*
- *Sixth-Eighth grade: CCSS.ELA-Literacy.W.6-8.6 Use technology to produce and publish writing*

How to Use This Book

This curriculum is part of the K-8 Keyboard system your school has selected to prepare students for keyboarding needs in an education environment. Each lesson is one-two pages (rarely longer) and takes 15 to 30 minutes, with an equal amount of home practice (3rd-8th grade only).

Here's how to decode each lesson (see Figure 2):

Figure 2—Layout of each lesson



1. ***Grade, month and week***—*identifies grade level, month, week (first three months)*
2. ***Vocabulary***—*new domain-specific vocabulary introduced in lesson*
3. ***Homework***—*homework students are expected to complete in the time frame—only applies to grades 3-8. In K-2, this section is for Trouble Shooting*
4. ***Materials—****identifies what programs, software, web tools, other items teacher will want prepared for lesson*
5. ***Activities***—*row of icons representing activities included in lesson. What each icon represents is included under 'Overview of the Keyboarding Journey'*
6. ***Steps***—*steps required for lesson*

Here are tips to get the most out of this curriculum:

- Lessons are device-neutral. It doesn't matter if you're a Mac or PC school or use laptops, desktops, tablets, or Chromebooks. Yes, you might have to make adjustments—but, you're a techie. No worries.
- Topics that relate to keyboarding at all grade levels are included in the beginning portion.
- All teachers share responsibility for student keyboarding. Good keyboarding habits are reinforced by everyone—including parents. Be sure others on the grade-level team understand the elements of keyboarding taught best by project-based learning.
- Every time students use the computer, remind them to set up their workspace correctly and have good posture (see pictures under the section, *Body/Hand Position*).
- Go through lessons in the order presented.
- Several times a month, do finger exercises to remind students that all of their fingers are strong and functional (see detail under *Finger Exercises*).
- Review digital citizenship best practices every time students go online. Make using the internet safely a habit, just as students are careful in their physical neighborhood.

Building student competence and confidence with technology should be part of instruction.

--PARCC Model Content Framework for ELA/Literacy

- Expect students to always try to solve techie problems themselves before requesting assistance. The older students are, the more this will happen if you let it. For example, hardware issues (i.e., headphones don't work, monitor doesn't work) can often be solved by kindergarteners once you've provided the tools for analyzing problems.
- Use keyboarding domain-specific vocabulary—especially words in the section, *Vocabulary,* as you teach. There is a lot of vocabulary in the early years and not so much later.
- Lessons use free software and web-based tools where possible. If you can't access one, email info@structuredlearning.net and a curriculum specialist will help you develop a work-around.
- Because each monthly and weekly group of activities may take place over multiple time periods, lessons include an underscore (_____) in front of parts. Check off (in the manner allowed by your digital reader) what you complete and proceed from there next time.
- As students finish each activity and/or skill, check it off on ***Ready to Move On*** at the month-end and the checklist at year-end. Don't go to a new month or year until all is completed.
- At every opportunity, use keyboarding in class projects. These will be assessed by class teacher.
- Students work at their own pace. They aren't pressured to keep up or forced to slow down. If they finish the year early, offer alternatives (fun keyboarding sites, do homework during keyboarding time, play Minecraft—you pick).

- There are lots of links in this ebook, but know this: **Links die.** If it doesn't work, try a different one (usually there are options) or contact Zeke.Rowe@StructuredLearning.net. He'll help.
- Every effort has been made to provide a written-out link to online resources for those using the print book. If you come across a link that you can't access, here's what to do:

    - *Google name. Some pop up right away*
    - *See if we've provided the link in another part of the book*
    - *Contact Zeke at Structured Learning--zeke.rowe@structuredlearning.net. You can even do this first. He'll find it—no worries.*

- Assessments include (see ***Assessments*** for detail):

    - Daily/weekly: Homework
    - Once each grading period: speed/accuracy quiz (grades 3-8)
    - Once each grading period: blank keyboard quizzes (grades 3-8)
    - End of year: Team Challenge—work with a group to see who knows the most, the fastest
    - Self-evaluation on a shared class spreadsheet, affirming completion of tasks. Provide a link (to shared Google spreadsheet or similar) to update.
    - Formative assessments during classtime

Students advancing through the grades are expected to meet each year's grade-specific standards, retain or further develop skills and understandings mastered in preceding grades...

--(from Common Core)

- When assessments are successfully passed, award the Certificate found under *Templates*.
- Encourage students (when age-appropriate for your student group) to set up **backchannel communication,** especially for Middle Schoolers since much of their keyboard learning is done outside the class. Encourage them to share lessons, ideas, and more.
- If you would like these lessons blended into an overarching K-8 tech curriculum, as part of a larger goal of teaching students technology skills, check out the K-8 technology curriculum (http://www.structuredlearning.net/book/k-8-tech-curriculum-set/).
- *If you're using the K-8 student eworkbooks, have one available each lesson so you see what students are reading. If you don't have them—that's fine. They are similar to any subject workbook--these lessons through the eyes of the student.*

Equipment Needs

This curriculum is platform-neutral and device-agnostic. It doesn't matter if you have PCs or Macs (or a Linux hybrid). It doesn't matter if they run off desktops or laptops or netbooks or Chromebooks.

No iPads, though, unless they have attached keyboards.

What Goes Well With This Curriculum?

- This keyboarding curriculum has **two volumes**—one for Lower grades (Elementary) and one for Middle School. If you don't have both and want them, check here.

- **Grades K-8 student eworkbooks**—for K-8 students. Require nominal guidance from teacher using this two-volume keyboard curriculum. Students use workbook materials to proceed at their own pace for the entire school year. Each is 70-90 pages, digital delivery. Free with class set of eworkbooks: this *Ultimate Guide to Keyboarding* and grades 3-8 student companion videos. *Note: If you purchased class-set of workbooks, we'll credit this teacher manual.*
- **Grades 3-8 student companion videos—**for students using the workbooks. Twelve videos, 1-2 per month, to support student learning through the eworkbooks. *Note: if you own a class-set of student eworkbooks, companion videos are free. If you purchased the videos first and then decided to add the class-set of student workbooks, we'll credit the price of the videos.*
- **Classroom posters—**decorate your classroom with keyboarding reminders.
- **Articles on keyboarding pedagogy—**most popular articles from *Ask a Tech Teacher* on keyboarding, how-tos and pedagogy.
- **K-8** tech skills curriculum—integrates keyboarding into a larger goal of learning tech skills.
- **K-5** tech curriculum companion wikis—while these focus on all tech skills, each lesson (32 per year per grade level) includes keyboarding. About 10-15 minutes. *Note: Free if you own the K-8 tech skills curriculum*
- **Summer immersion**—an intensive fifteen-day course of keyboarding done online over the summer. An hour a day, five days a week, three weeks. Fifteen videos. Great way for students to kick-start their next year keyboarding needs

How to Contact us

Email for purchase questions:	*zeke.rowe@structuredlearning.net*
Email for curriculum questions:	*askatechteacher@gmail.com*
Fax:	*949.630.0540*
Website:	*http://structuredlearning.net*
Blog:	*http://askatechteacher.com*
Twitter:	*@askatechteacher*

License

If you purchased this ebook, you have a single-user license. You are welcome to make copies of **individual pages.** To reproduce the **entire book** for a class, multiple teachers, school, or district, please contact the publisher for a multi-user license.

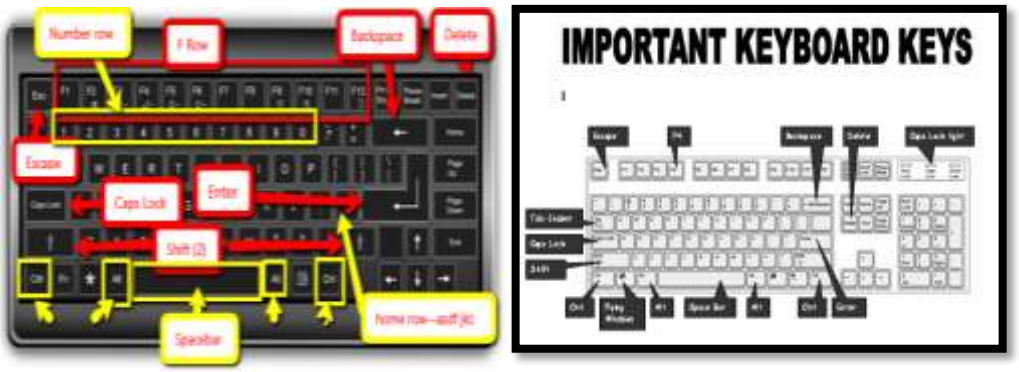
Assessments

A complete list of yearly assessments, alphabetized

Blank Keyboard Quizzes

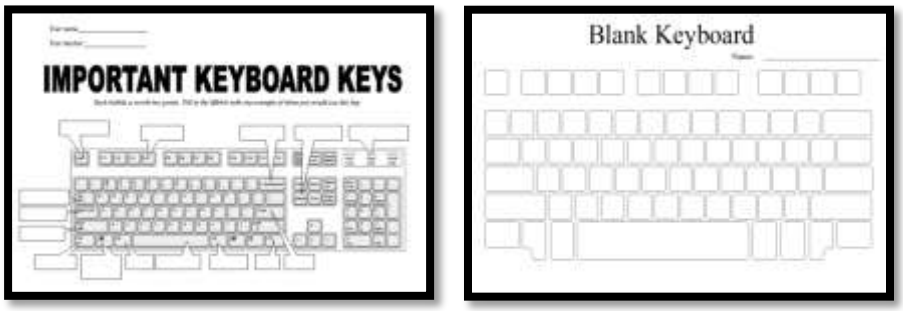
Grades 3-8, taken once a grading period. They focus on key placement. Students get five-fifteen minutes to fill in blank keys, depending upon grade level and your unique group. Here's a sample of important keys:

Figure 3—Important keys



Here's a sample of the two blank keyboard quizzes:

Figure 4—Blank keyboards (2)



See full-size examples in '*Templates*'.

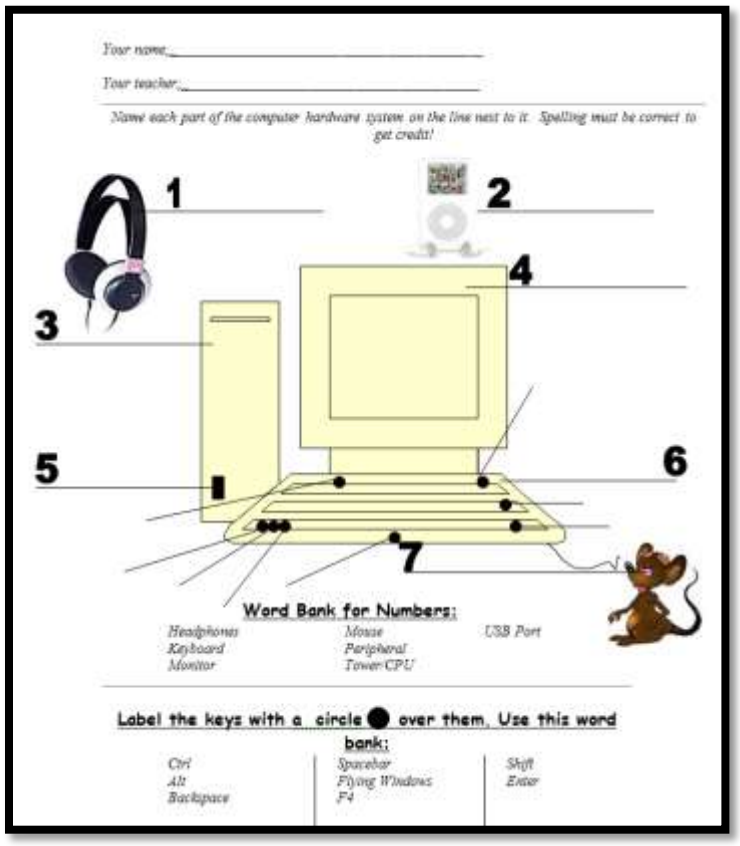
Formative

Grades K-8: As students practice, walk around and observe. Don't assess right/wrong, but progress, ability to adopt proper form, attention to work, and higher-order thinking skills.

Hardware

Grades 2-5: These are parts of the computer system that should be familiar to students. This assessment is taken early in the year for olders and late in the year for youngers. They are the first pieces students will be able to troubleshoot as they keyboard:

Figure 5—Parts of the computer



See *Templates* for a blank you can use to test student knowledge.

PORTIONS DELETED ON PURPOSE

Research

If you're like many teachers I've talked to, you ask yourself (or parents in your school ask) 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. *Is it still important that students learn keyboarding?*
4. *Is handwriting or keyboarding faster?*
5. *How important is it that the teacher be knowledgeable about typing?*

Here are the quick answers:

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

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.

> *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*

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 keyboarding to be mastered, one must 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".

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

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 accomplish these.

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

Best Age to Teach Keyboarding

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

Most researchers agree effective keyboarding isn't instinctual and should begin **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 third grade is appropriate for touch keyboarding, but first/second graders can learn this skill with adequate instruction, a conclusion reinforced by Feutz (2001). Erthal (2002) found third graders do not possess the manual dexterity for keyboarding, and Hopkins (1998) considered fourth grade appropriate to commence formal keyboarding.

We are left with a mushy consensus among researchers of third-fifth grade as 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 learn correct keyboarding practices**. With this caveat: Teach pre-keyboard skills before focusing on traditional skills.

PORTIONS DELETED ON PURPOSE

About the Publisher

Structured Learning *is the premier provider of technology resources to the education community including curricula, how-to guides, survival kits, theme-based lesson plans, Common Core materials, webinars, seminars, mentoring, coaching, posters, professional development, and one-of-a-kind online help—all to fulfill the tech demands of the 21st century classroom. Materials are classroom-tested, teacher-approved with easy-to-understand directions supported by online materials, websites, blogs, and wikis. Whether you are a new teacher wanting to do it right or a veteran educator looking for updated materials,* ***Structured Learning*** *and its team of technology teachers is here to assist.*

About the Authors

Ask a Tech Teacher *is a group of technology teachers who run an award-winning resource blog where they provide free materials, advice, lesson plans, pedagogic conversation, website reviews, and more to all who drop by. The free newsletters and website articles help thousands of teachers, homeschoolers, and those serious about finding the best way to maneuver the minefields of technology in education.*

Jacqui Murray *(editor and lead Ask a Tech Teacher) is the editor of a technology curriculum for K-eighth grade, and creator of dozens of resources for infusing tech into classroom curriculum. She is webmaster for six blogs, an Amazon Vine Voice book reviewer, a columnist for Examiner.com, weekly contributor to TeachHUB, CAEP reviewer, and Editorial Review Board member for Journal for Computing Teachers. Her technology articles have appeared in hundreds of online newspapers and magazines.*

Templates

PORTIONS DELETED ON PURPOSE

Certificate of Achievement

THIS ACKNOWLEDGES THAT

_____

HAS SUCCESSFULLY COMPLETED 9 MONTHS OF INTENSIVE KEYBOARDING STUDY:

- Introduction to home row
- Introduction to QWERTY row
- Introduction to lower row
- Practice with hands covered
- Digital citizenship when online
- Blank keyboard quiz (6)
- Online keyboarding
- Use of keyboarding in projects
- Introduction to word processing
- Keyboarding and online web tools

_____

Authorized signature

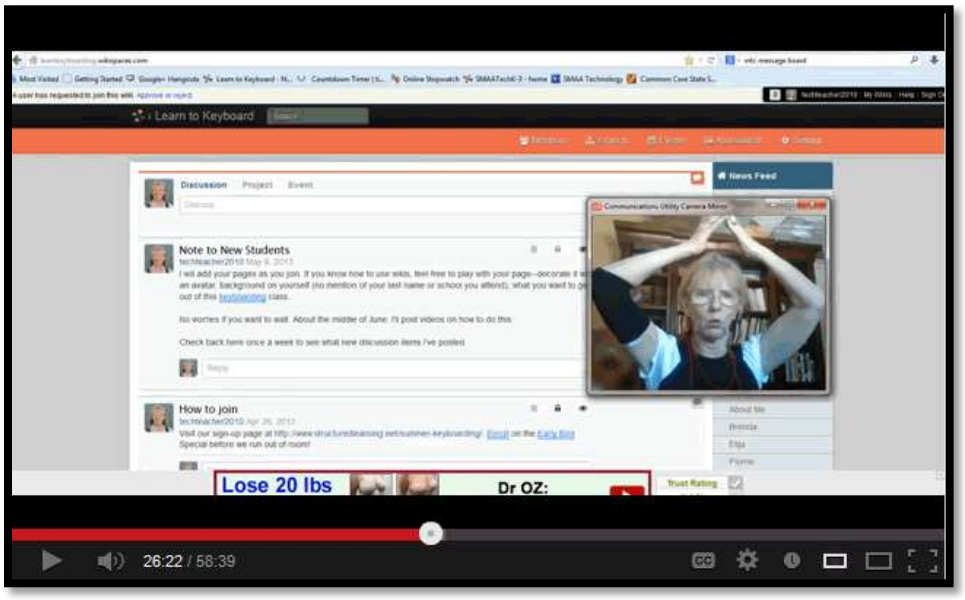
Looking for Student Workbooks

Click here

Looking for Student Video Course

Click here

15-hour Immersive Course
Stand-alone 3-week program

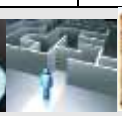


9-month Extended Program
Companion to student eworkbooks

PORTIONS DELETED ON PURPOSE

1ST GRADE: MONTH 1 WEEK THREE

Vocabulary	Trouble-shooting	Materials
○ *Alt* ○ *Ctrl* ○ *Home row* ○ *Number row*	*Encourage students to solve their own problems. Review problems they know how to solve*	*Mouse websites* *List of familiar keys* *1st grade year-end checklist*



Steps

_____In a typical keyboarding lesson:

- *Make sure workspace is arranged properly*
- *Follow good habits for posture and hand position*
- *Keyboard assigned keys 10-15 minutes using preferred programs (software or online)*
- *Several times a month: use keyboarding in class projects*
- *Several times a month: complete finger exercises*
- *Every time students use the internet: discuss how to do that safely*
- *Throughout lessons, remind students to use shortkeys*
- *Throughout lessons, students attempt to solve problems before asking for help*

_____Review how to log on and off (with help) of the computer.
_____Tour the keys students are familiar with on the keyboard. See if they can find all in 12 seconds working in pairs.
_____Review website parts.
_____Practice mouse skills on the following websites (if link doesn't work, try another— internet links don't last long):

Mouse Click Skills	*http://www.primaryresources.co.uk/online/touchcirc.swf*
Mouse movement	*http://bomomo.com/*
Mouse practice	*http://www.seniornet.org/howto/mouseexercises/mousepractice.html*

_____Collaborate with other grade-level teachers in using this skill authentically in their classroom.
_____As you visit these websites remember to use the internet safely:

- *stay in the digital neighborhood*
- *do not give out your personal information*
- *Avoid ads*
- *Be a good digital citizen*

_____Look at 1st Grade Checklist and see what you can check off.

PORTIONS DELETED ON PURPOSE

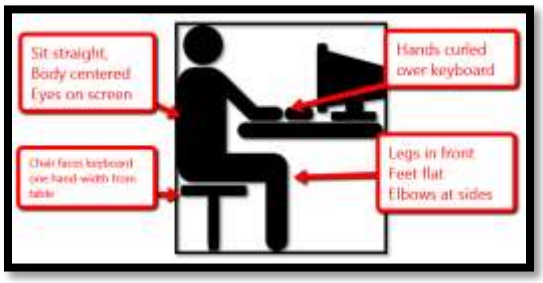
2ND GRADE: MONTH 7 WEEK ONE-FOUR

Vocabulary	Trouble-shooting	Materials
• *Home row* • *Touch typing*	*Encourage students to solve their own problems. Review problems they know how to solve*	*Online keyboarding program or software* *Cloths to type with hands covered*

Steps

_____In a typical keyboarding lesson:

- *Arrange workspace properly*
- *Follow good habits for posture and hand position*
- *Use shortkeys where possible*
- *Attempt to solve problems before seeking help*
- *Use domain-specific terminology*
- *Remind students to keep their month- and year-end checklist of skills up to date*
- *Several times a month: use keyboarding in class projects*
- *Several times a month: complete finger exercises*
- *Every time students use the internet: discuss how to do that safely*



_____As a class, go over Home Row keys—*asdfghjkl*. Say them five times and use hand motions to show where they are on the keyboard. Why? Explain that fourth and fifth graders type with hands covered—called Touch Typing. It sounds hard—and is at first—but quickly becomes easier.

_____By year end, 2nd graders will have memorized the letter keys.

_____Practice 10-15 minutes on Type to Learn, Typing Web, TuxTyping, Typing Club (or similar). Google for addresses if necessary. Some are free, some require a fee. Some are used online; some downloaded.

_____Several times during month, when students are comfortable with key placement, cover hands with a light cloth and start keyboard exercises over.

_____Type a story, a short report, student thoughts, in a tool that requires text (Figure 62a is a word processing program and 62b is a comic creator).

_____Edit with backspace/delete to make project look as good as possible.

_____Unfortunately, it is outside the scope of this curriculum to teach word processing skills. You can find that information in the *Second Grade tech curriculum* (http://www.structuredlearning.net/book/2nd-grade-tech-textbook/).

Figure 6a and b—Story typed with text tool —word processing, comic

_____Remind students to use good keyboarding to complete this project and others that blend tech skills with class learning.
_____Collaborate with grade-level teachers in using this skill authentically in their classroom.
_____Save to student personal digital portfolio.

Check off completed items throughout month. By the end, everything should be done.

READY TO MOVE ON THIS MONTH

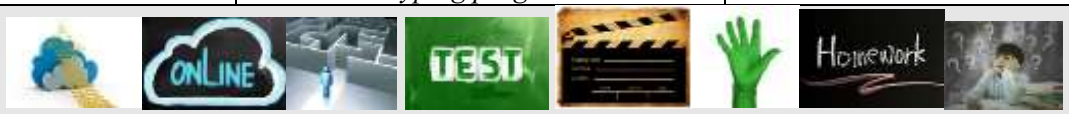
If student is ready for Month 8, here's what they accomplished:

_____*use the correct words when discussing keyboarding*
_____*know how to sit at a computer and set up work area*
_____*typed 10-15 minutes every week*
_____*type home row keys without looking*
_____*practiced with hands covered several times*
_____*When students have a problem, they try to solve it themselves*
_____*know how to log on the computer*
_____*save to digital portfolio.*
_____*practiced finger exercises twice during the month*
_____*know how to use the internet safely.*
_____*typed a project that support class discussion*
_____*updated the 2nd grade checklist*

PORTIONS DELETED ON PURPOSE

4TH GRADE: MONTH 6 WEEK ONE-FOUR

Vocabulary	Homework	Materials
Scientific Method	*Type 15 minutes, three times a week, hands covered, on a progressive typing program*	*Progressive typing program* *Scientific Method*



Steps

_____In a typical keyboarding lesson:

- *Arrange workspace properly; follow good habits for posture and hand position*
- *Use shortkeys where possible*
- *Attempt to solve problems before seeking help*
- *Use domain-specific terminology*
- *Keep month- and year-end skills checklist up to date*
- *Use keyboarding in class projects*
- *Complete finger exercises*
- *Use internet safely*

_____Continue Type to Learn, Typing Web or Typing Club. Google for addresses.
_____See inset for hand look students strive for.
_____This month: Assess **typing vs. handwriting speed**. Do students remember results last year—most handwrote faster than they typed?
_____Discuss whether students think this changed and how they reached their conclusions. You will likely get opinions on both sides.
_____Discuss the Scientific Method, its steps, its applicability to general problem solving (such as this issue). Now follow these steps:

Note about Figure 82: The scientific method varies when discussing elementary grades. Talk to your science teacher and adapt this experiment to the one s/he uses.

- **Ask a question**: Is handwriting or keyboarding faster?
- **Do background research:** Discuss with classmates. How did they reach their conclusions? What were last year's results?
- **Construct a hypothesis:** State an informed opinion, maybe: *Fourth graders in Mr. X's class handwrite faster than they type.*
- **Test hypothesis**: Do an experiment. Handwrite the speed quiz students took for the same length of time they typed it (three-five minutes).

- **Analyze data:** Students compare their handwriting speed to typing speed. Which is faster? Ask classmates what their data shows. Why does student think some typed faster and others slower? Or the reverse? What problems were faced handwriting for three-five minutes:
    - *Pencil lead broke*
    - *Eraser gone*
    - *Hands got tired*
    - *It got boring*
- **Draw conclusions**: What can be concluded based on all results?
- **Communicate results:** Share this information with other teachers, parents, school admin.

_____Repeat same process with a prompt. Mentally organize thoughts as a five-paragraph essay (or your school's version of that)—1) introduction, 2-4) one paragraph per point, 5) conclusion. Take one minute to think through these guidelines, then write from memory.

_____Is it harder to think while typing? Did results change?

_____Discuss results as a class: Why do students think some type faster and others slower? (In my classes, fourth graders typed as fast as they handwrote—approx. 18wpm).

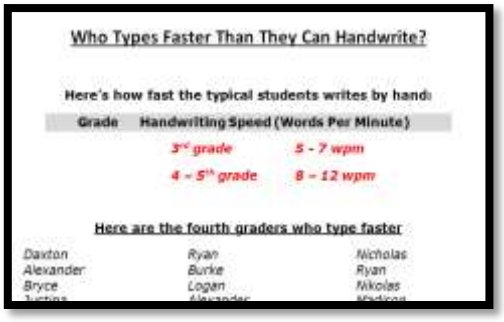
_____Students will offer lots of reasons for slower typing (they're new to typing, don't do it much, got distracted).

_____If possible, share results from 5-8th. What grade do students consistently type faster than they handwrite? Are students surprised by the answer? If appropriate, ask if students think social networks like Facebook and Twitter have an impact on speed.

_____Post students who type faster than they handwrite to class bulletin board (see Figure 83).

Figure 7--Scientific Method

Figure 8--Handwriting vs. keyboarding



READY TO MOVE ON THIS MONTH

If students are ready for Month 7, here's what they have accomplished:

_____*use keyboarding terms daily while keyboarding*
_____*sit at a computer and arrange workspace*
_____*know where important keys are on the keyboard*
_____*When student has a problem, s/he tries to solve it themselves*
_____*know basic parts of a computer*
_____*know parts of a website*

_____*are a good digital citizen*
_____*practiced keyboarding on DanceMat Typing several times*
_____*did finger exercises several times this month*
_____*submitted your keyboarding homework*
_____*updated 4th grade checklist*
_____*used keyboarding skills in class projects*

PORTIONS DELETED ON PURPOSE

5TH GRADE: MONTH 8 WEEK ONE-FOUR

Vocabulary	Homework	Materials
	Type 15 minutes, three times a week, on a progressive typing program, hands covered. The goal: type without looking at hands.	*Progressive typing program* *Digital Note-taking tool*

Steps

_____In a typical keyboarding lesson:

- *Make sure workspace is arranged properly; follow good habits for posture and hand position*
- *Several times a month: use keyboarding in class projects*
- *Several times a month: complete finger exercises*
- *Every time students use the internet: discuss how to do that safely*
- *Throughout lessons, remind students to attempt to solve problems before asking for help*
- *Remind students to self-assess using the spreadsheet you provided*
- *Remind students to keep their eyes on the screen, not on hands*
- *Once a month: Complete keyboarding self-assessment using shared Google Form through GAFE (if you have one) or another used in your school*

_____Type 10-15 minutes, hands covered, on Type to Learn, Typing Web, Typing Club or similar
_____Use keyboarding for digital note-taking. Figure 98 shows how this might be done in Google Apps, Figure 99a Evernote, Figure 99b Notability (for iPads),

Figure 9—Digital note-taking with GAFE

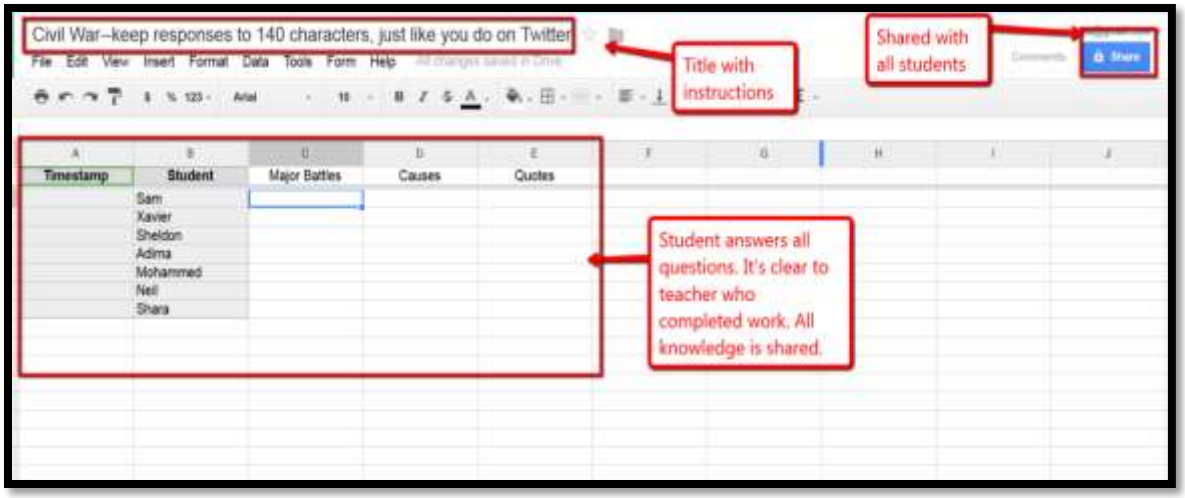
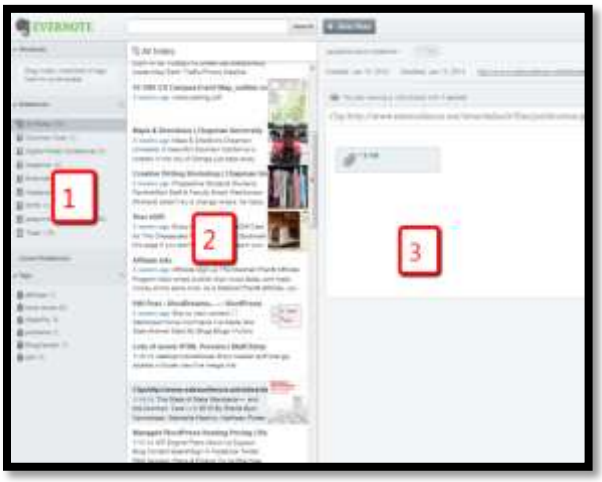


Figure 10a and 99b—Digital note-taking in Evernote and Notability



_____Other options:

- *NoodleTool*
  http://www.noodletool.com
- *OneNote*
  http://office.microsoft.com/en-us/onenote/
- *Note-ledge*
  https://itunes.apple.com/gb/app/noteledge-for-iphone-take/id540666751?mt=8

_____Unfortunately, teaching digital note-taking is outside this curriculum's scope. Find tech skills in 5th grade tech curriculum— http://www.structuredlearning.net/book/5th-grade-tech-textbook/.

_____Remind students to use good keyboarding to complete this project and others that blend tech with learning. Collaborate with grade-level teachers in using this skill authentically in their classroom.

_____You may ask students to self-assess monthly progress with a Google Apps form (see Assessments for example). Provide a link and they check off what they've done.

READY TO MOVE ON THIS MONTH

If student is ready for Month 9, here's what s/he has accomplished:

_____*use keyboarding terms daily*
_____*sit at a computer and arrange workspace correctly*
_____*When student has a problem, try to solve it themselves before asking for help*
_____*know the parts of a computer*
_____*are a good digital citizen*
_____*practiced keyboarding several times*
_____*did finger exercises several times*
_____*submitted homework as your teacher wanted*
_____*took notes during class using good keyboarding skills*
_____*updated 5th grade checklist*

checklist.

PORTIONS DELETED ON PURPOSE

To graduate from fifth grade keyboarding, you must have the following skills accomplished (this may be online):

Posture

_____*Legs in front, feet flat on floor, body in front, elbows at sides*
_____*Chair positioned facing keyboard one hand-width from table*
_____*Posture straight, body centered, eyes on screen*

Keyboarding Skills

_____*Reviewed mouse skills*
_____*Kept keyboard one inch off edge of table*
_____*Curled hands over keyboard (not flat), pointers on f and j*
_____*Used proper log-on/log-off procedures*
_____*Demonstrated proper care and handling of keyboard, mouse*
_____*Know location of important keys*
_____*Know difference between backspace and delete*
_____*Used right thumb to spacebar*
_____*Practiced keyboarding*
_____*Practiced finger exercises*
_____*Learned useful shortkeys (i.e., Ctrl+S, Ctrl+C)*
_____*Memorized all letter keys*
_____*Keyboard with hands covered—doesn't matter how successfully you typed, just that you tried*
_____*Evaluated your handwriting speed vs. keyboarding speed*
_____*Participated in Annual Team Challenge—Keyboarding*

Problem-solving Skills

_____*Can't exit a program*
_____*Can't find program*
_____*Computer doesn't work*
_____*Double click doesn't work-*
_____*Monitor doesn't work*

_____*Program disappeared*
_____*Volume doesn't work*
_____*Know parts of the computer*
_____*Know parts of a website*
_____*Know how to maximize window*
_____*Know how to show taskbar*

Internet:

_____*Know how to identify:*

- *Ads*
- *Digital neighborhood*
- *Links on page*
- *Scroll bars*
- *Search field*
- *Tabs on browser*
- *Website address*

Digital Citizenship

_____*Stayed in digital neighborhood when you used the internet*
_____*Practiced good digital citizenship skills*
_____*Did not give out personal information—ever*
_____*Safely used websites that discuss class topics (like math)*
_____*Avoided ads and understood their purpose*

Completed required projects:

_____***If using online video keyboarding course, you watched all required videos and completed all exercises***
_____*Improved keyboarding speed and accuracy over the year*
_____*Took 3 keyboard assessments. Score improved from beginning of year to end*
_____*Created an avatar*
_____*Use keyboarding to complete projects (one a month)*
_____*Finished monthly homework and submitted*

Products that go well with

***Ultimate Guide to Keyboarding in the Classroom*:**

- *Ultimate Guide to Keyboarding in the Classroom: Middle School*
- K-8 Student Workbooks
- Keyboarding video course: Grades 3-8
- Keyboarding classroom posters
- Keyboarding pedagogy: Hall of Fame articles

contact:

Zeke.Rowe@structuredlearning.net