

Promising Practices

Online Assessment and Typing Instruction

Students' computer skills are increasingly important in the classroom as well as in preparation for college and career. This year the eighth and eleventh grade TCAP Writing Assessment will be administered online. As districts prepare for this and future online PARCC assessments, there has been an increasing focus on computer and typing skills required.

Basic computer skills necessary for success include:

- Word processing skills
 - Typing efficiently
 - o Basic editing tools such as copy, cut, paste or highlight
- Familiarity with navigating the computer screen
 - o Using the scroll bar, positioned horizontally or vertically, to view additional content
 - o Using arrows or other cues to advance to a new page or return to a previous page
- Ability to click and use drag-and-drop features to select or manipulate screen images or text

Typing Instruction

Typing is a basic 21st century skill. Research suggests that formal typing instruction should begin in grades 3-5. At this time, students have the motor skills necessary and will have formed few bad habits. "Touch typing allows us to write without thinking about how we are writing, freeing us to focus on what we are writing, on our ideas. Touch typing is an example of cognitive automaticity, the ability to do things without conscious attention or awareness" (Trubek, 2011). Touch typing is the skill of typing without looking at the keys. Although technology is changing rapidly, research suggests that home row key, touch typing instruction remains the fastest technique for typing.

Research has shown that handwriting in upper elementary (grades 3-5) for copying text averages 10 to 12 words per minute. In order for typing to be preferable, students should be typing at a comparable rate with high levels of accuracy. At this point, typing is just as efficient for students as handwriting. Words per minute are often faster for students in copying tasks than in composing for both handwriting and typing. Mastery of touch typing the home row keys is an accomplishment listed in the current 1st grade Computer Technology: Literacy and Usage standards. Typing is a skill that requires repetition and practice to improve. As students get older, their typing speed and accuracy should increase. The Computer Technology: Literacy and Usage standards state that in 7th grade students should be "applying the touch system of keying the alpha, numeric, and symbols keys at a rate of 20 net words per minute". Although not all careers have a set words per minute requirement, many jobs involve at least some typing. A minimum requirement of 35 words per minute is in place for multiple career options such as an emergency dispatcher.



There are many different approaches to incorporating typing instruction into the curriculum. For example, schools may incorporate instructional software to teach basic skills and typing class projects or reports. Research suggests that students acquire typing skills best through the combination of explicit instruction and incorporation throughout the curriculum. The foundation for proficient typing can be created in 20-30 minute instructional sessions. Typing speed and accuracy are increased and reinforced through repeated practice and authentic use.

The list of programs, as well as program information, on the following pages was compiled from a survey of Tennessee districts. Blank cells indicate that no information was provided in that category. **The Tennessee Department of Education does not endorse or recommend the purchase of any specific product.** Schools and districts are best positioned to review programs and determine what would work best for their specific needs.

Typing Programs Used in Tennessee Districts

Program used by districts	Cost	Trial	Gr.	Advantages reported by districts	Challenges reported by districts	Other information reported by districts
Dance Mat Typing	Free		K-5	 Targets beginning typists Animation and music included to make program fun and engaging Good pacing Web-based 	 Geared toward young students No record of progress Cannot start in the middle of a stage 	Includes twelve stages - each typically taking 10-20 minutes to complete
Edu Type	Varies	90 day free	9-12	 Offers graphical explanations Provides games incentives for timed typing Web-based 	 Students cannot access the program if the internet is down Program seems to work best in Safari 	
Edu Type Jr.	Varies	90 day free	K-5	 Teacher login to allow for tracking student progress Ability to personalize typing program Home access available for students 		Sessions occur at least three times a week for twenty minutes. Many students are in a keyboarding class at least once a week for forty-five minutes.
<u>Folio</u>	Varies			District is just beginning use of this program.		Students write to prompts and are provided with online scores.
Gradpoint - Microtype	Varies		6-8	District is just beginning use of this program.		Virtual typing course
Keyboarding for Kids	Varies	60 day free		 Starts by teaching home row keys and adds one letter a time Teacher sets word per minute and accuracy goals Manager functions allow teacher to track student progress and set times when student can access Web-based 		64 lessons, each with four lines to master

Typing Instructor for Kids Typing Pal	Varies Varies	6-8	 Individual student progress reports Limited amount of skill customization Measurable outcomes Rubrics to assess student progress User friendly for administrator, teacher, and student 		Used 45 minute elective typing class for middle school students
Typing Master	Varies	3-12	 Good customer support experience Includes sessions on numeric and special symbol keys Import function allows for quick creation of student logins and passwords Student can access at home Web-based 	 Company is responsive, but time differences sometimes causes challenges Set up can be time consuming (set length of lesson, speed goal, and locking backspace) Word content is advanced for younger students 	Most students receive 1-2 sessions of computer time per week. This program is used for about 10-20 minutes per session. Middle school instruction is more frequent.
Typing Web	Free	3-8	 Data provided through reports Positive student feedback After meeting a goal, students can play games requiring accuracy and speed Teacher can monitor progress from any laptop 	Limited access for students outside school hours	Third grade uses this program in a lab setting for one hour a week in activity rotation. Other students will have 30 minutes weekly. Many 8 th grade students using this program type more than 30 words per minute.