Handwriting / Keyboarding Rates

This document contains information from various sources on handwriting and/or keyboarding rates.

Copying speed – provides a basis of comparison for motor speed. There is a ceiling for handwriting, because as speed increases, legibility decreases.

Composition speed – will be lower than copying speed.

Amundson, 1995

Grade Level	Average WPM – copying using **handwriting**
1	5
2	6
3	7
4	8
5	10
6	12
7	14
8	16

Amundson, S. J. (1995). *Evaluation tool of children's handwriting*. O.T. Kids, P. O. Box 1118, Homer, Alaska 99603.

Graham, Beringer, Weintraub & Schafer, 1998

Students instructed to write as fast as they could without making errors.

Grade Level	Average WPM – copying using **handwriting**
1	4
2	7
3	10
4	13
5	15
6	17
7	20
8	23
9	24

Graham, S., Berninger, V., Weintraub, N., & Schafer, W. (1998) Development of handwriting speed and legibility in grades 109. *Journal of Educational Research*, 92(1), 42-52.

Findenque, Smith and Sullivan, 1986

Grade Level	Average WPM – copying using **handwriting**
4-6	7-10

Concluded that ability to type 10 wpm allows children to use word processing at a rate commensurate with handwriting speed.

Findenque, A., Smith, M. & Sullivan, G. (1986). Keyboarding: The issues today. *Proceedings of the 5th Annual Extending the Human Mind Conference*. University of Oregon.

Pisha, 1993

There is a ceiling to **handwriting** speed because as speed increases legibility decreases.

Pisha, B. (1993). *Rates of development of keyboarding skills in elementary aged children with and without learning disabilities*. Retrieved August 23, 2003, from www.cast.org

Graham, 1990

Grade Level	Average WPM – composition using **handwriting**
4	4-5
5	9

Graham, S. (1990). The role of production factors in learning disabled students' compositions. *Journal of Educational Psychology*. *82*, 781-791.

Pisha, 1993

Grade Level	Average WPM – copying using **handwriting**	Average WPM – copying using **handwriting** (SPED students)
3 – 4	12 - 14	0 - 3
5 – 6		7 - 12

Factors for success:
• Keyboarding experience
(i.e. use computers to do homework) a significant factor shows higher baselines and developed keyboarding skills faster.
• Age
older students (grades 5, 6) progress faster than younger students (grades 3, 4)

Handwriting ability NOT a factor in learning to keyboard

Recommends that keyboarding be introduced in latter half of elementary school, once children have had sufficient time to develop manuscript handwriting.

Pisha, B. (1993). *Rates of development of keyboarding skills in elementary aged children with and without learning disabilities*. Retrieved August 23, 2003, from www.cast.org

Foulds, 1980

Age	Average WPM – composition using **keyboarding** Experienced typists	Average WPM – composition using **keyboarding** Inexperienced typists
Adults	18.1	10.2

Keyboarding rates (copying) should be commensurate with handwriting rates to avoid frustration.

Foulds, R. A. (1980). Communication rates for nonspeech expression as a function of manual tasks and linguistic constraints. *Proceedings of the International Conference on Rehabilitation Engineering*. Toronto.

Graham, Harris, MacArthur and Schwartz, 1991

Grade Level	Average WPM – composition using **keyboarding** Experienced typists
5-6	6

Graham, S., Harris, R.K., MacArthur, C., & Schwartz, S. (1991). Writing and writing instruction for students with learning disabilities: Review of a research program. *Learning Disability Quarterly*. *14*, 89-114.

Nicholson, Bridgette

Age/Grade Level	Recommended **Keyboarding** Speed (WPM)
3 – lower	No expectations. Focus on accuracy and technique only.
4	14
5	17
6	20
7	25
Teens	35-45
Adults – in jobs with a lot of keyboarding	35-50
Adults – secretaries/admin assistants	50-65

Nicholson, Bridgette. Custom Typing. Custom Solutions. Retrieved 11/27/04 from http://www.customtyping.com/cgi-bin/kb2/org-modify_users-modify_user.pl?speed_goal_help=1

How Fast Should my Students be Typing?
This is a common question that teachers of keyboarding have. There is, in fact, no set standard for how fast children and teens should be expected to type at a particular grade level. Some research, however, does provide insight into what goals schools around the country are setting. Here's what our research has found:

A 2002-2003 study by **Illinois school district U-46** notes that some researchers have suggested that 10-20 words per minute (WPM) is sufficient in the later elementary school years (3rd through 6th grade). However, the report also notes that some teachers named in research set their goals somewhat lower, at 3 WPM for 3rd graders and 7 WPM for 4th and 5th graders. Still others based their keyboarding goals on a student's handwriting speed: with a goal of being able to keyboard at 2-3 times the handwriting rate.

Buhler, **Kansas USD 313** also conducted research into this area. In their task force report, no requirements for keyboarding speed are presented until the 8th grade. At this point, students are expected to type at the rate of 30 WPM with high accuracy.

The **Utah State Office of Education has a detailed web site in which keyboarding speed requirements** are laid out very explicitly: 15 WPM in 3rd grade, 20 WPM in 4th grade, 25 WPM in 5th grade, and 27 WPM in 6th grade. All of this is with high accuracy. For 7-12 graders, this web site also presents a keyboarding course in which students are expected to type at 45 WPM with high accuracy by the end of the semester.

From http://www.customtyping.com/news/ct_schools/2005-05/index.htm

Honaker, 2003

Grade Level	Recommended Typing Speed (WPM)
6	9-14
7	11-16
8	13-18

Grade Level	Boys' Typing Speed (WPM)	Girls' Typing Speed (WPM)
5	8.5	10.5
8	17.7	18.9

Honaker, DeLana. (1999). Handwriting and Keyboarding Legibility/Speed of 5th-8th grade students, a pilot study. Unpublished manuscript. Retrieved 1/17/05 from www.otexchange.com (search – keyboarding).

Honaker, DeLana. (2003). Ready, Set Write! A Handwriting Development Program. *Down-to-Earth School Therapy Workshops*. Retrieved 1/17/05 from www.otexchange.com (search – keyboarding).

Keyboarding Rates – use of software/devices – school/homepractice (non research based) from QIAT listservs

• **Baseline competency (20 wpm)** for keyboarding in order to **use software/devices**.
I recommend a trial period of one semester to achieve rate. If the student is unable to achieve this baseline with concentrated effort and support, I do not recommend products that require keyboarding and move to other more intensive supported interventions.

• Usually recommend that students type **12-14 wpm before bringing in an AlphaSmart or something similar**. We usually write a goal so that the wpm rate can be monitored as the weeks go on. Because of the prerequisite 12-14 wpm I've found that team members are more likely to push the keyboarding practice and make it a daily activity.

Like you, I've also had parents who say they will have their child practice keyboarding at home, but fail to follow through. So, we usually write into the IEP that the student will practice at school and home. This tends to cover all the bases.

• At the school where I taught, students (and parents) knew that the "**computer competency" test** needed to be passed; I can't remember whether it was **12 wpm or 20 wpm** (and it may have been either, depending on the student). Some students were exempt from it, but didn't use keyboarding-required programs then; the perception was that the computer competency test was a door to privileges and a rite of passage, which was a good thing.

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