Research

- There is no research on how fast students can learn to type without explicit keyboarding instruction.

- However, there IS research regarding how much time students need to spend in direct keyboarding instruction to see growth.
The majority of research recommends a minimum of 30 min. a day, 5 days a week, for 4 weeks, beginning in 3rd grade.

Keyboarding is a psycho-motor athletic ability. It requires daily practice to develop (Zeitz, 2014).
Continuing practice to reinforce keyboarding skills is necessary beyond the initial keyboarding instruction as “keyboarding skills improve little or abate without consistent reinforcement” (Elementary/Middle School Keyboarding Strategies Guide, 1992).
American Business Educators Association Goals for keyboarding speeds:

<table>
<thead>
<tr>
<th>Grade</th>
<th>WPM</th>
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<tbody>
<tr>
<td>3rd</td>
<td>8-10</td>
</tr>
<tr>
<td>4th</td>
<td>10-20</td>
</tr>
<tr>
<td>5th</td>
<td>20-25</td>
</tr>
<tr>
<td>6th</td>
<td>25-30</td>
</tr>
<tr>
<td>7th</td>
<td>35 with 95% accuracy</td>
</tr>
<tr>
<td>8th</td>
<td>40 with 95% accuracy</td>
</tr>
</tbody>
</table>

According to Crews (2006), typing speeds based upon hours of practice:

<table>
<thead>
<tr>
<th>Hours</th>
<th>WPM</th>
</tr>
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<tbody>
<tr>
<td>15 - 18 hours</td>
<td>10 - 15 wpm</td>
</tr>
<tr>
<td>30 - 35 hours</td>
<td>25 - 30 wpm</td>
</tr>
<tr>
<td>45 - 60 hours</td>
<td>30 - 40 wpm</td>
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</tbody>
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There is no universally accepted standard for how fast students should type at different ages.
The Goal

- In Adams 12 Five Star Schools, our goal is for students to be able to compose text on a keyboard without being hindered by the technology.

- Ideally, students should be able to type 1 word per minute faster than they can handwritten.

- Students in 4th - 6th grade can handwrite 7 - 10 wpm if copying, 10 - 19 if **composing** (Crews, 2006).
Generative Typing

- CMAS & PARCC will require students to compose responses at the keyboard, which is generative typing. The majority of typing software involves transcription keyboarding (copying provided text).

- It is important to give students the opportunity to practice generative typing so that they can transfer the skills they learn through a transcription method and be successful on the CMAS & PARCC (Cooper, 1983).
Additional Benefits

Teaching students to keyboard will have benefits beyond improved test scores on the CMAS & PARCC. According to research, the benefits of increased keyboarding skills include:

- Improvement in language arts (Cooper, 1983; Wetzel, 1985; Wood & Freeman, 1932; Erickson, 1960; Nieman, 1996)
- Improved quality of writing (Owsten and Wideman, 1997; Bangert-Drowns, 1993; Goldberg, Russell, & Cook, 2003)
- Greater enthusiasm about using the computer for writing (Wetzel, 1985; Texas Guidelines, 1987)
● Improvement in spelling (Hoot, 1986)
● Improvement in reading comprehension (Hoot, 1986; Wronkovich, 1998).
● Improvement in composition speed, pride in work, and motivation (Nieman, 1996).
● Additional research has shown that “student writing develops faster through word processing because it facilitates the review and revision learning process. Efficient keyboarding skills allow students to emphasize concept development instead of focusing on key location” (Zeitz, 2014).
3rd Grade - CCSS.ELA-LITERACY.W.3.6
With guidance and support from adults, **use technology to produce and publish writing (using keyboarding skills)** as well as to interact and collaborate with others.

4th Grade - CCSS.ELA-LITERACY.W.4.6
With some guidance and support from adults, **use technology, including the Internet, to produce and publish writing** as well as to interact and collaborate with others; **demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.**

5th Grade - CCSS.ELA-LITERACY.W.5.6
With some guidance and support from adults, **use technology, including the Internet, to produce and publish writing** as well as to interact and collaborate with others; **demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.**

6th Grade - CCSS.ELA-LITERACY.W.6.6
**Use technology, including the Internet, to produce and publish writing** as well as to interact and collaborate with others; **demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.**
Recommendations

- Assess and record student typing speeds at the beginning and end of the year using a 1 minute assessment from typingtest.com.

- Consider comparing student typing speeds to assessment results to see if there’s any correlation.
Recommendations

Spend 30 minutes a day, 5 days a week, for 4 weeks on explicit keyboarding instruction using either:

- **Dance Mat Typing**
- **Typing Club**
- **Typing Web**

Click here to view a comparison chart of these 3 Apps/Sites.
Recommendations

Give students plenty of opportunities for generative typing. Some ideas/suggestions:

- Daily 10 min. writing warm-ups - depending on technology access in your classroom, allow some students to use computers to type responses. Make it a station, rotate who uses the devices each day, etc.
- Have students submit constructed responses via a Google Form.
- Give students opportunities to participate in online discussions using tools such as Edmodo or Schoology.
- Allow students to write all drafts of a writing assignment in Google Docs. (Rather than having them create a final copy only).
Other Suggestions

Other suggestions:

- After School Keyboarding Club
- Lunch Bunch/Recess keyboarding opportunities
- At home keyboarding practice with incentives


